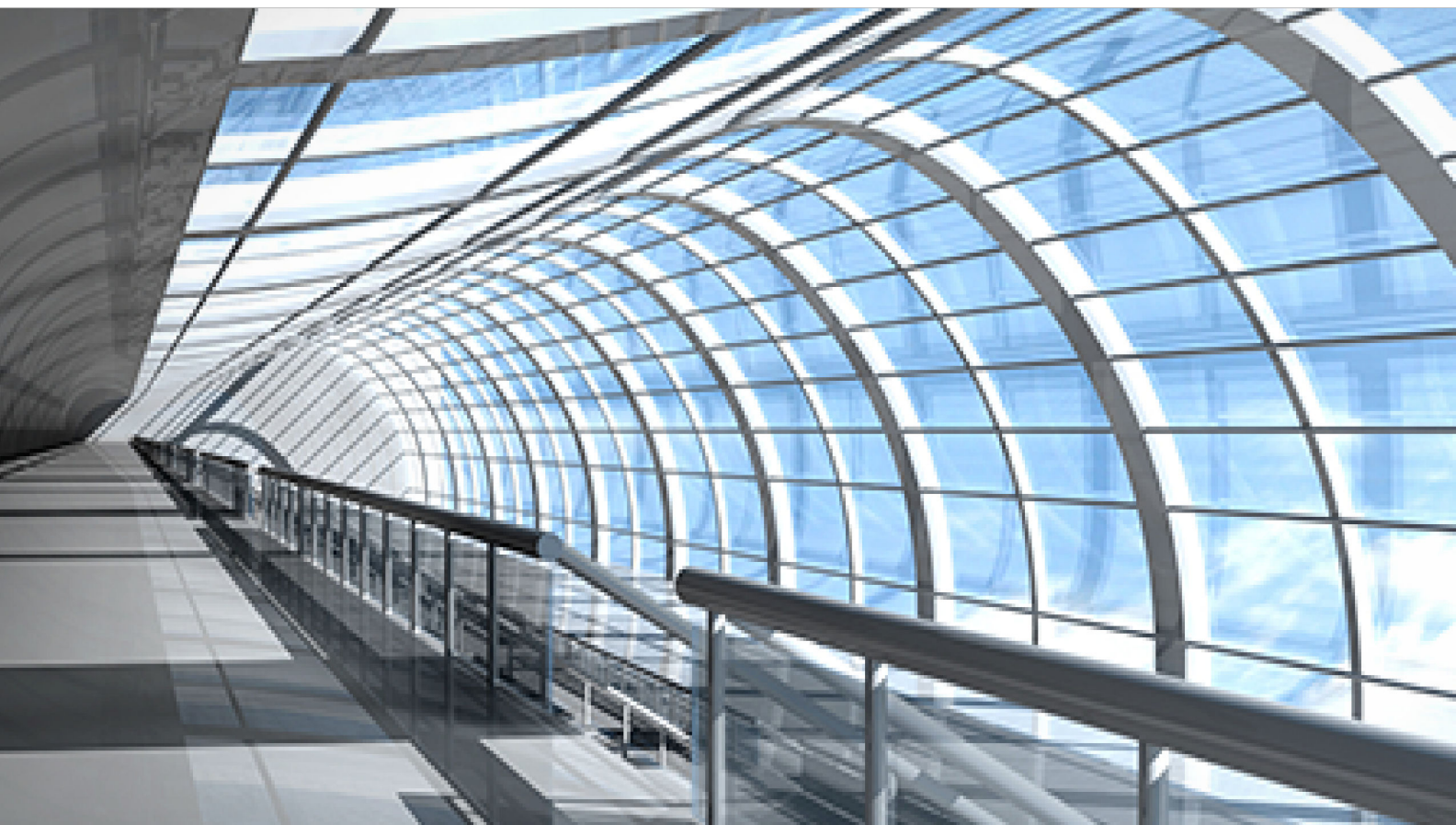


# ServiceNow Documentation

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You can find the most up-to-date technical documentation on the ServiceNow web site at:

<http://docs.servicenow.com>

The ServiceNow site also provides the latest product updates.

If you have comments about this documentation, submit your feedback to:

[docfeedback@servicenow.com](mailto:docfeedback@servicenow.com)

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# London release notes

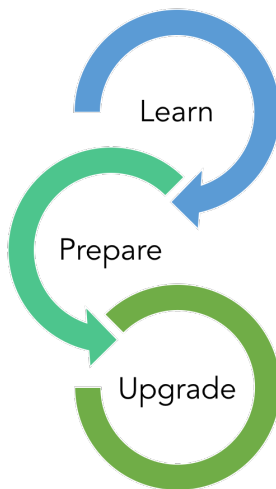
**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

The ServiceNow® London release contains new functionality and fixes to existing functionality. Patch releases and hotfixes provide problem fixes and are released on an as-needed schedule.

## Path to successful upgrades

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Learn - Find out what's new and changed in London

- [Release notes summaries for London features](#)
- [Features and changes by product](#)
- [Changes to plugins in the London release](#)
- [Browser support](#)
- [Accessibility and compliance](#)

Prepare - Choose your target version and prepare for your upgrade

- [Available versions \(London\)](#)
- [Upgrade and migration tasks by application or feature](#)

Upgrade - Review the upgrade process and upgrade your instance

- [Upgrade to London](#)
  - [Upgrade your instance](#)
  - [Upgrade planning checklist \(London\)](#)
-

# Features and changes by product

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Review the new features and changes in this release by product.

## New features and products in London

The London release includes new features and products.

- [Agile Development — Unified Backlog release notes](#)
- [Continual Improvement Management release notes](#)
- [Interaction Management release notes](#)
- [ITSM Virtual Agent release notes](#)
- [Scaled Agile Framework release notes](#)
- [Task Communications Management release notes](#)
- [Test Management 2.0 release notes](#)
- [Virtual Agent release notes](#)
- [Walk-up Experience release notes](#)

## Updated features and products

Other products were changed and updated in the London release. For more information, refer to the release notes topics, which are organized by product area.

- [Now Platform release notes](#)

The Now Platform® technology has new and updated features in the London release.

- [Application development release notes](#)

Application development has new and updated features in the London release.

- [Business Management release notes](#)

Business Management has new and updated features in the London release.

- [Customer Service Management release notes](#)

Customer Service Management has new and updated features in the London release.

- [Governance, Risk, and Compliance release notes](#)

Governance, Risk, and Compliance has new and updated features in the London release.

- [HR Service Delivery release notes](#)

ServiceNow® HR Service Delivery product enhancements and updates in the London release.

- [IT Operations Management release notes](#)

IT Operations Management has new and updated features in the London release.

- [IT Service Management release notes](#)

IT Service Management has new and updated features in the London release.

- [Performance Analytics and Reporting release notes](#)

Performance Analytics and Reporting have new and updated features in the London release.

- [Security Operations release notes](#)

Security Operations has new and updated features in the London release.

- [Software Asset Management release notes](#)

ServiceNow® Software Asset Management product enhancements and updates in the London release.

## Now Platform release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

The Now Platform® technology has new and updated features in the London release.

- [Accessibility release notes](#)

ServiceNow® platform accessibility enhancements and updates in the London release.

- [Agent Intelligence release notes](#)

ServiceNow® Agent Intelligence product enhancements and updates in the London release.

- [API release notes](#)

ServiceNow® API product enhancements and updates in the London release.

- [Automated Test Framework release notes](#)

ServiceNow® Automated Test Framework product enhancements and updates in the London release.

- [Assessments and Surveys release notes](#)

ServiceNow® Assessments and Surveys product enhancements and updates in the London release.

- [Authentication release notes](#)

ServiceNow® Authentication enhancements and updates in the London release.

- [Configuration Management Database \(CMDB\) release notes](#)

ServiceNow® Configuration Management Database (CMDB) product enhancements and updates in the London release.

- [Contextual search release notes](#)

ServiceNow® Contextual Search product enhancements and updates in the London release.

- [Embedded help release notes](#)

ServiceNow® Embedded help product enhancements and updates in the London release.

- [Edge Encryption release notes](#)

ServiceNow® Edge Encryption product enhancements and updates in the London release.

- [Field Administration release notes](#)

ServiceNow® Field Administration enhancements and updates in the London release.

- [Flow Designer release notes](#)

ServiceNow® Flow Designer product enhancements and updates in the London release.

- [Guided Tour Designer release notes](#)

ServiceNow® Guided Tour Designer product enhancements and updates in the London release.

- [Import and Export release notes](#)

ServiceNow® Import and Export product enhancements and updates in the London release.

- [IntegrationHub release notes](#)

ServiceNow® IntegrationHub product enhancements and updates in the London release.

- [Interaction Management release notes](#)

ServiceNow® Interaction Management is a new application in the London release.

- [Knowledge Management release notes](#)

ServiceNow® Knowledge Management product enhancements and updates in the London release.

- [MetricBase release notes](#)

ServiceNow® MetricBase product enhancements and updates in the London release.

- [MID Server release notes](#)

ServiceNow® MID Server product enhancements and updates in the London release.

- [Notifications release notes](#)

ServiceNow® platform notifications enhancements and updates in the London release.

- [Notify release notes](#)

ServiceNow® Notify product enhancements and updates in the London release.

- [Password Reset release notes](#)

ServiceNow® Password Reset product enhancements and updates in the London release.

- [Platform quality and performance release notes](#)

ServiceNow® Platform Quality and Performance product enhancements and updates in the London release.

- [Platform security release notes](#)

ServiceNow® platform security product enhancements and updates in the London release.

- [Search Administration release notes](#)

ServiceNow® Search Administration product enhancements and updates in the London release.

- [Service Portal release notes](#)

ServiceNow® Service Portal product enhancements and updates in the London release.

- [Subscription Management release notes](#)

ServiceNow® Subscription Management product enhancements and updates in the London release.

- [System upgrades release notes](#)

ServiceNow® System upgrades feature enhancements and updates in the London release.

- [Table administration release notes](#)

ServiceNow® Table administration product enhancements and updates in the London release.

- [Task Communications Management release notes](#)

ServiceNow® Task Communications Management is a new application in the London release.

- [Timeline Visualization release notes](#)

ServiceNow® Timeline Visualization product enhancements and updates in the London release.

- [UI release notes](#)

ServiceNow® UI enhancements and updates in the London release.

- [Virtual Agent release notes](#)

ServiceNow® Virtual Agent is a new feature in the London release.

- [Web services release notes](#)

ServiceNow® Web services product enhancements and updates in the London release.

- [Workflow release notes](#)

ServiceNow® Workflow product enhancements and updates in the London release.

#### Accessibility release notes

**Last updated:** October 02, 2018

**Last updated:** October 02, 2018

ServiceNow® platform accessibility enhancements and updates in the London release.

Accessibility has been improved throughout the platform in congruence with WCAG 2.0 level A standards to make the system more perceivable, operable, and understandable to all

users. Changes to accessibility that are feature-specific can be found in the documentation for that feature.

## New in the London release

### Enable accessible tooltips

Enable accessible tooltips on a form. When accessible tooltips are enabled, a tooltip icon appears next to fields on a form. When focus is on the icon, a tooltip appears describing the field and whether or not it is mandatory. Your users can enable this option from the General tab of the system settings menu. You can also enable this preference for your users by navigating to User Administration > User Preferences and searching for the preference `glide.ui.accessibility.accessible.tooltips` preference. Accessibility must be enabled for this user preference to apply.

### Slushbucket multi-select

Select multiple items in a slushbucket by pressing the spacebar to select each item. Use the arrow keys or the Tab key to navigate to the Add button to move items from one list to another.

### Open Card Details button on task cards

View more card details in a task board by using the Tab key to navigate to the Open Card Details button.

### Configure a Windows 64-bit host to use 32-bit NVDA with Java applications

The NVDA Assistive Technology screen reader is a 32-bit application that, when the Java Access bridge has been enabled, reads aloud Java applications built to support accessibility. If you encounter a problem using NVDA to access Java applications on a 64-bit Windows host, you must configure the Java Access bridge.

## Changed in this release

### Keyboard accessibility improvements

In live feed, use the Tab key to navigate to an avatar then press Enter to open the avatar popover. Use the Tab key to navigate through the popover and select additional elements.

## Activation information

Enable accessibility from the system settings option. For more information on system settings, see [System settings for the UI](#).

### Enable accessibility mode

Use the Tab key to navigate to every item on a page. Accessibility mode also enables the option to skip to different places on a page. Your users can enable this option individually on the General tab of the system settings menu. You can also enable this preference for your users by navigating to User Administration > User Preferences and searching for the preference `glide.ui.accessibility`.



## Browser requirements

Some keyboard shortcuts are browser-specific. See your specific browser documentation for more information.

### Agent Intelligence release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Agent Intelligence product enhancements and updates in the London release.

With Agent Intelligence, you can use machine-learning algorithms to set field values when you are creating a record. You can also train predictive models to automatically categorize and route work that is based on your past record-handling experience.

## New in the London release

### [Use Agent Intelligence for HR Service Delivery](#)

Use the default Agent Intelligence records as templates to create HR Service Delivery solutions.

### [Export trained solutions to production](#)

Refine and test your machine-learning (ML) solutions iteratively on a non-production instance, and then use update sets to export the changes to your production instance. By following this process, you reduce the risk of having to retrain solutions on your production instance.

### [Review increased support for solution class predictions](#)

Note that in the Kingston release, the system used the top 25 classes with the highest number of records when it built a solution. In this release, it uses the top 50 classes, increasing the amount of historical data it processes to predict the class confidently.

### [Copy a solution definition](#)

As you create separate solution definition records for each predictive model you want to support, you can copy a record and its configuration into a new form by clicking Copy Solution Definition from the context menu of the original record. Use the new record to make further solution updates without reconfiguring the entire solution definition.

### [Choose language processing for your solution definition](#)

As you create and train a solution definition, you can select the prime language of the dataset you are training. Your options include Dutch, English, French, German, Japanese, and Spanish, with English as the default.

## Review solution training tips

Review additional guidance for solution training, such as tips on conditions you may want to set on the data records you want to train and the recommended number of records for training a good solution.

## Review encryption support

Learn which types of data encryption are supported by Agent Intelligence.

## Test a solution prediction

After you train your ML solution, you can call on the Agent Intelligence API to make a solution prediction.

## Save your ML solutions during a system clone

When you request a clone of your instance, the system stores your trained solution components as attachment records. Adjust your `glide.platform_ml.clone_artifacts` system property to preserve these records during the system clone.

## Activation information

- Agent Intelligence is included in the following packages: ITSM Professional, CSM Professional, HR Professional, and HR Enterprise. When you subscribe to any of these packages, you can activate the Agent Intelligence plugins in your production instance using your administration rights. You can also request activation of these plugins on a non-production instance.
- If you are running your instance on an earlier version than Kingston Patch 2, such as Kingston Patch 0 or Kingston Patch 1, when you activate your plugins, you must update your scheduler URL property so it is compatible with Agent Intelligence. For activation instructions, see [Activate Agent Intelligence](#).

### API release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® API product enhancements and updates in the London release.

## New in the London release

### New scoped classes and additional methods to existing scoped classes

Class	Activated with	Methods
<a href="#">Client</a>	MetricBase	<code>deleteSeries()</code>
<a href="#">DiscoveryAPI</a>	Discovery	<code>discoverIpAddress()</code> , <code>reportCiIpAddressStatus()</code> , <code>reportCiStatus()</code>
<a href="#">Flow</a>	Flow Designer	<code>startAsync()</code>
<a href="#">GlideSecurityUtils</a>	Now Platform	<code>cleanURL()</code> , <code>enforceRelativeURL()</code> , <code>escapeScript()</code> , <code>isURLWhiteListed()</code>
<a href="#">GlideStringUtil</a>	Now Platform	<code>dotToUnderBar()</code> , <code>escapeAllQuotes()</code> , <code>escapeForHomePage()</code> , <code>escapeHTML()</code>

Class	Activated with	Methods
		escapeNonPrintable(), escapeQueryTermSeparator(), escapeTicks(), getHTMLValue(), getNumeric(), isBase64(), isEligibleSysID(), newLinesToBreaks(), normalizeWhiteSpace(), unescapeHTML()
<a href="#">GlideXMLUtil</a>	Now Platform	removeInvalidChars(), validateXML()
<a href="#">Interaction</a>	Interaction Management	create(), getInteraction(), transferToAgent(), transferToQueue(), accept()
<a href="#">InteractionQueue</a>	Interaction Management	get(), isAgentFor(), acceptNext()
<a href="#">Messaging</a>	Messaging Notification	send()
<a href="#">ReportCiStatusOutputJS</a>	Discovery	getCiOperationStatus(), getCmdBci(), getDiscoveryState(), getIpAddress(), getIssues(), getIssuesLink(), toJson()
<a href="#">SentimentAnalyser</a>	Sentiment Analysis	analyze(), analyzeWithLanguage(), analyzeMultiple(), analyzeMultipleWithLanguage(), getDefaultConnector(), getConnectorByName()
<a href="#">SPScriptedFacet</a>	Service Portal	addFacetItem()
<a href="#">SPScriptedFacetService</a>	Service Portal	createFacet(), createMultiChoiceFacet()
<a href="#">Subflow</a>	Flow Designer	startAsync()
<a href="#">TransformPart</a>	MetricBase	resample(), iqr()
<a href="#">UserCriteriaLoader</a>	User Criteria Scoped API	getAllUserCriteria(), getUserCriteria()

### New global APIs

Class	Activated with	Methods
<a href="#">BusinessServiceManager</a>	Now Platform	addCI(), addManualConnection(), migrateManualToApplicationService(), populateApplicationService(), removeCI(), removeManualConnection()
<a href="#">CMDBDuplicateTaskUtils</a>	Now Platform	createDuplicateTask()

### New client classes and additional methods for existing classes

Class	Activated with	Methods
<a href="#">GlideUIScripts</a>	Now Platform	getUIScript()

### New REST APIs

API	Activated with	Method
<a href="#">Application Service API</a>	Now Platform	<ul style="list-style-type: none"> <li>• <code>api/now/cmdB/app_service/create</code></li> <li>• <code>api/now/cmdB/app_service/{sys_id}/getContent</code></li> </ul>
<a href="#">Task Communication Management API</a>	Incident Management - Major Incident Management	<code>sn_comm_management/task_communication_management/communication_detail/{taskSysId}</code>

API	Activated with	Method
<a href="#">Major Incident Management API</a>	Incident Management - Major Incident Management	sn_major_inc_mgmt/mim/status/{incidentSysId}
<a href="#">Service Catalog API</a>	Now Platform	sn/sc/servicecatalog/variables/{sys_id}/display_value
<a href="#">Interaction API</a>	Interaction Management	/api/now/interaction

## Activation information

- **Discovery APIs:** Discovery is available as a separate subscription from the rest of the Now Platform and requires the Discovery (com.snc.discovery) plugin.
- **Flow Designer APIs:** Flow Designer is a Now Platform feature that is active by default.
- **Interaction Management APIs:** An administrator can activate the Interaction Logging, Routing, and Queueing plugin [com.glide.interaction] to access the functionality.
- **Major Incident Management API:** An administrator can activate the Incident Management - Major Incident Management plugin (com.snc.incident.mim) to access the functionality.
- **Messaging Notification APIs:** To activate notifications in messaging applications, request the Messaging Notification plugin (com.glide.notification.messaging) through the HI Customer Service system. This plugin activates related plugins if they are not already active. Integrations with third-party systems also require a separate IntegrationHub subscription.
- **MetricBase APIs:** The MetricBase product requires a separate subscription and must be activated by ServiceNow personnel.
- **SentimentAnalyser API:** An administrator can activate the Sentiment Analysis (com.snc.sentiment\_analysis) plugin to access the functionality.
- **Service Portal APIs:** Service Portal is a Now Platform feature that is active by default.
- **UserCriteriaLoader API:** Available with the User Criteria Scoped API plugin (com.glideapp.user\_criteria.scoped.api) that is active by default.

### Automated Test Framework release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Automated Test Framework product enhancements and updates in the London release.

With the Automated Test Framework (ATF), you create and run automated tests on your instance. When you upgrade or modify an instance, run these tests to confirm that the instance still works.

## London upgrade information

**Note:** Tests can be promoted to production instances, but the test execution property is disabled to prevent them from running on a production system. Run tests only on development, test, and other non-production instances. See [Enable or disable executing Automated Test Framework tests](#)

## New in the London release

### All steps configuration category

View all available test steps for all test categories in a single listing by using the All Steps option.

### Automated application navigator test steps

Create automated test steps to verify if the application menus or modules that you selected for testing are visible in the application navigator.

### Negative assert types for server step configurations

Designate whether a positive or negative test step result is a successful outcome when using certain types of server test steps.

### Screenshot timeout interval setting

Manage the timeout interval for test step screenshots. Set the Screenshot Timeout interval in the Screenshots Capture Mode section in Automated Test Framework Properties. The default for this setting is 60 seconds. If your screenshot timeout is longer than 60 seconds, the Client Test Runner does not take a screenshot capture. You can change this value as needed, but you should review performance settings and browser caches on affected client systems before increasing it.

### Whitelisted client errors

Add known client errors to the whitelist to allow tests and steps to continue running when a specific error occurs. Set the report level to specify what the Automated Test Framework does when the error occurs in future tests.

### Service catalog forms test steps

Write automated end-to-end tests for requester flows to validate catalog items in Service Portal. When you upgrade or modify an instance, run these tests to confirm that the instance still works as designed. The following test step configurations are available in the Automated Test Framework (ATF) for Service Catalog in Service Portal:

- Open a Catalog Item (SP)
- Open a Record Producer (SP)
- Set Variable Values (SP)
- Set Catalog Item Quantity (SP)
- Validate Variable Values (SP)
- Variable State Validation (SP)
- Validate Price and Recurring Price (SP)
- Add Item to Shopping Cart (SP)

- Order Catalog Item (SP)
- Submit Record Producer (SP)

---

**Note:** ATF for Service Catalog in Service Portal is not supported for order guides and multiple items in the cart.

---

### Service Portal forms test steps

Write automated tests to validate Service Portal forms. The following Automated Test Framework (ATF) test steps are available:

- Open a Service Portal form
- Set field values on a form
- Validate field values
- Validate field states
- Check UI action visibility
- Click a UI action
- Validate form submission

### Quick start sample tests

Use quick start sample tests in the Automated Test Framework to evaluate some common Customer Service Management (CSM) and Field Service Management (FSM) scenarios. To execute these tests, you can activate and then create copies of the desired tests. The sample tests can be run as single tests or as a test suite.

## Changed in this release

### Search for a catalog item test step category change

Moved the Search for a Catalog Item test step configuration from the Service Catalog category to the Server category.

## Activation information

Active by default. To use quick start sample tests, activate the Customer Service Management Demo Data plugin (com.snc.customerservice.demo).

### Assessments and Surveys release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Assessments and Surveys product enhancements and updates in the London release.

## New in the London release

### Image of a question in the survey notification email

Use the Sample Metric field of a survey to include one of its metrics as an image in the email or invitation sent to a survey user. When the survey user clicks the image in the email or while previewing the HTML body, the entire survey is available to be taken.

### User-defined parameter in a survey question

Use the Source Table field on a survey to specify a table whose field is used as a dynamic value for a question in a triggered survey.

Use the Source Field field for a metric to specify the source table field that appears as a dynamic value for the question in a triggered survey. When this field value is selected, a \${param} placeholder is added at the end of the question. You can move the placeholder to the relevant position.

When the survey instance or survey questions are generated, if the record table specified in the trigger condition matches the source table specified for the survey:

- The question with the dynamic value is included in the survey instance.
- The \${param} placeholder is replaced with the source field value.

This functionality is applicable in both the platform and survey designer.

### Sentiment analysis for a survey

Use sentiment analysis to determine whether user responses for a survey are considered positive, negative, or neutral. You can only include string type questions for this analysis. The survey responses to these questions are sent to the third-party platforms for analysis through the specified connector configurations.

### SentimentAnalyser API

Use the SentimentAnalyser API to perform sentiment analysis on a string value. To use this class in a scoped application, use the sn\_nlp\_sentiment namespace identifier.

### Show Benchmarks and Create Improvement Initiative related links

Use the Show Benchmarks related link for surveys, assessments, and quizzes, to open the Benchmarks Dashboard that provides visibility into your key performance indicators (KPIs) and trends.

---

**Note:**

- This related link is available only for users with the survey\_admin, assessment\_admin and survey\_reader roles, which have the bm\_viewer role.
  - You must opt in to Benchmarks to view the dashboard.
-

Use the Create Improvement Initiative related link for surveys and assessments to open the Improvement Initiative window. From this window, create an improvement initiative record that helps in improving the performance of the survey.

---

**Note:**

- This related link is available only for users with the survey\_admin and assessment\_admin role.
- Users with the survey\_reader role can only view the created improvement initiative records.

---

The Improvement Initiatives related list displays the improvement initiatives. This list is available only when there is at least one improvement initiative record.

### One Click survey

Select the One Click Survey check box to enable a One Click survey in Service Portal. This check box can be selected if the Pagination setting for Service Portal view is set to None. A One Click survey has no introduction page in Service Portal.

A kiosk survey is a One Click survey with only one question of any of the following types:

- Image Scale
- Choice
- Likert Scale
- Numeric Scale
- Yes/No

This functionality can be enabled in both the platform and survey designer.

### Net promoter score survey results in the survey scorecard

Use the question results in the survey scorecard, for net promoter score (NPS) template questions added to a survey, to display the aggregated NPS score with promoters, detractors, and passives.

### Public access of a survey from the survey designer configuration form

Use the Public Survey field to enable public access to the survey.

Use the Survey Publish URL field to view the survey URL that can be shared with users.

### Copy UI action in survey designer and quiz designer

Point to the menu icon on the header bar in a survey designer and click Copy Survey to copy a survey.

Point to the menu icon on the header bar in a quiz designer and click Copy Survey to copy a survey.



### Scope impact when editing a survey, assessment, or quiz

Edit a survey, assessment, or quiz that is in the same application scope of your current session.

---

**Note:** When you start editing a survey of the same scope, and then change the session scope in a different tab, you cannot edit the survey further.

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### UI action to migrate to New Survey Management

Select a legacy survey by navigating to Survey > Legacy Surveys > Masters, and click the Migrate to New Survey Management UI action in the title bar to migrate a legacy survey.

## Changed in this release

### Renamed the Migrate to Assessment related link

The Migrate to Assessment related link for legacy surveys is renamed as Migrate to New Survey Management.

### Save functionality on a Survey Designer configuration form

Click Save to save the current survey without changing its state.

## Activation information

Platform feature – active by default.

Activate the Continual Improvement Management plugin (com.sn\_cim) to enable the Create Improvement Initiative related link for surveys and assessments.

Activate the Sentiment Analysis (com.snc.sentiment\_analysis) plugin to enable the following modules:

- Sentiment Analysis > Sentiment Connector Configurations: Contains the connector configurations for sentiment analysis.
- Sentiment Analysis > Sentiment Analysis Properties: Contains the customization properties for the Sentiment Analysis module.
- Survey > Question Sentiment Results: Contains the sentiment analysis results for surveys.

### Authentication release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Authentication enhancements and updates in the London release.

## New in the London release

### Custom URL

If you want your ServiceNow instance to be accessible by a company-branded or custom URL, this feature enables this functionality. You can configure one or multiple custom URLs to your instance, and configure your custom URL to service portal mapping.

### OIDC for inbound API requests

ServiceNow can accept identity tokens generated by a third-party OIDC provider for inbound API calls. The identity tokens must be JSON Web Tokens (JWTs) issued by an OpenID.net certified OIDC provider after you configure a trust relationship with that provider. You can also automatically provision users based on the claims in the JWT token provided.

### Support Microsoft Teams (MS Teams) authentication

Your MS Teams user account can link to your ServiceNow user account to perform actions, such as pre-set conversations or notifications, through a conversational bot platform.

### Support outbound mutual authentication for OAuth endpoints

Adds support for mutual authentication when requesting an OAuth token. Mutual authentication enables client and server to identify and authenticate each other by using certificates.

## Changed in this release

### Added State parameter for OAuth request

Adds the system property `glide.oauth.state.parameter.required` to control the requirement of the State parameter in an OAuth request for Authorization code flow.

## Activation information

You can activate the Custom URL plugin (`com.snc.customurl`) if you have the admin role.

### Configuration Management Database (CMDB) release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Configuration Management Database (CMDB) product enhancements and updates in the London release.

With CMDB, you can build logical representations of assets, services, and the relationships between them that comprise the infrastructure of your organization. Details about these components are stored in the CMDB which you can use to monitor the infrastructure, helping ensure integrity, stability, and continuous service operation.

## New in the London release

### Duplicate CI Remediator

Reconcile duplicate CIs in your system by using a wizard that guides you through the reconciliation process. The wizard pages provide detailed information about the duplicate CIs, letting you choose which attributes, relationships, and related items to retain, and what to reconcile.

Use the [CMDBDuplicateTaskUtils](#) API to manually create a de-duplication task for duplicate CIs that the system is not configured to detect. You can then remediate those tasks using the Duplicate CI Remediator as you would remediate a system generated de-duplication task.

Get extra guidance through the remediation process from Embedded Help topics which are included with the Duplicate CI Remediator.

### CI Relationships Health

Use the 'Relationships not compliant with all relationship rules' report to see relationships that do not comply with any relationship governance rules, including suggested relationships and dependent relationship rules.

### Application Services

Use application services as a unified infrastructure for creating, maintaining, and managing services in the CMDB, Service Mapping, Event Management (if activated), and other ServiceNow applications. You can convert legacy business services to application services.

## Changed in this release

### CI Class Manager

- Labels and other elements in the user interface have been changed across the CI Class Manager for better clarity and helpfulness.
- [Suggested relationships](#) displays a diagram of all suggested relationships for the class and lets you add or delete suggested relationships for the class. All suggested relationships provided and used by Discovery, Service Mapping, and patterns, appear in the diagram (however, there is no notation of the source of a suggested relationship).
- Embedded help provides information and guidance for using the CI Class Manager.

### Tables added to the CMDB

The following tables are added, increasing the total number of CMDB tables to 700.

Class Label	Class Name
Package	cmdb_ci_os_packages
UNIX Cluster Node	cmdb_ci_unix_cluster_node
UNIX Cluster Resource	cmdb_ci_unix_cluster_resource

Class Label	Class Name
CMDB Duplicate Remediator Default Related item	cmdb_dedup_default_rel_item
Duplicate CI Remediation	cmdb_duplicate_ci_remediation
CMDB Relationship All Rules Health Results Affected CIs	cmdb_health_result_rel_all
CI Relation Attributes	cmdb_outage_ci_mtom
Application Service (Was part of another application in earlier releases)	cmdb_rel_attributes
Monitor Service (Was part of another application in earlier releases)	cmdb_ci_service_discovered
Service Group (Was part of another application in earlier releases)	cmdb_ci_service_auto
	cmdb_ci_service_group

## Activation information

Platform feature – active by default.

### Contextual search release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Contextual Search product enhancements and updates in the London release.

## New in the London release

### [Ordering a service catalog item](#)

When a service catalog item is ordered from an existing record, a link is added between the order item request and the parent record.

### [Searching action configurations list](#)

A new related list, Search Action Configurations, is added to the Table Configuration [cxs\_table\_config] and the Record Producer Configuration [cxs\_rp\_config] table. This related list is a replacement for the KB attachment field (Table Configurations only) and the Result action label and Result action value fields. Use this list to perform all the actions for the selected search context.

### [Attaching knowledge base article](#)

The system administrator now has the option (platform only) to allow ITIL or admin users to view the Attach button and attach knowledge base (KB) articles from the search results for a new record before the record is submitted. In earlier releases, the Attach button appeared only for an existing record. This simplifies the workflow. Earlier, the ITIL or admin user had to fill out required fields, save the record, and then re-expand the search results before the Attach button was made available.

The Show on new record field can be found within the Table Configuration > Search Action Configurations related list.  
By default, the Attach button is not available for a new record.

## Changed in this release

### KB attachment field

The KB attachment field in Table Configuration is moved to the Attachment type field in the Table Configuration > Search Action Configurations related list.  
The default for all new customers is Embed link to article so that a link to the article is used instead of embedding a copy of the whole article.  
When you upgrade, the KB attachment (Table Configurations only), Result action label, and Result action value fields are moved to the new Search Action Configurations related list.

## Removed in this release

- The KB attachment field in Table Configuration is no longer available.
- The Result action label and the Result action value field in Table Configuration and Record Producer Configuration are no longer available (platform only).
- The Order button no longer appears in search results for content items that are defined in the Service Catalog. Content items are not goods or services, which means that they cannot be ordered. In earlier releases, all Service Catalog items, including content items that appeared in the search results, had the Order button.

## Activation information

The Contextual Search plugin (com.snc.contextual\_search) is activated by default for upgrade and new customers.

### Embedded help release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Embedded help product enhancements and updates in the London release.

Embedded help provides targeted help content to a user in a UI page, based on their role. Some embedded help content comes with the base instance. Your organization can add or replace embedded help content.

## New in the London release

### Embedded help internationalization

Localize your embedded help content for a variety of languages to meet your global user needs.  
Write your embedded help content in a language of your choice and decide what languages to display by selecting a language in the sys\_embedded\_help\_queue table.

## Activation information

The Embedded Help (com.glide.embedded\_help) plugin is active by default for all new and upgraded instances.

## Additional requirements

Embedded help is only available in UI16. It is not compatible with UI15.

### Edge Encryption release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Edge Encryption product enhancements and updates in the London release.

## London upgrade information

When you upgrade from previous releases, you may encounter an issue during Edge Encryption proxy server upgrades because the proxy has not yet been upgraded to handle newly introduced request and response codes.

During the proxy upgrade, a message like the following may appear in the proxy logs:

**Error:**

```
2018-05-25 09:48:44,758 WARN Unexpected response code 555 from the ServiceNow instance "1
2018-05-25 09:48:44,784 ERROR Update stats received error code : 555 : ServiceNow instance
2018-05-25 09:48:49,862 WARN Unexpected response code 555 from the ServiceNow instance "1
```

The solution is to restart the proxy and then retry the proxy upgrade.

## New in the London release

### [CyberArk integration with the Edge proxy server](#)

Use CyberArk AIM (Application Identity Management) software with Edge Encryption.

Use CyberArk to store passwords in a centralized and secure digital vault to secure passwords that were previously stored in clear text and secured by file access, or that were previously encrypted via a second file.

### [SafeNet key versioning](#)

Use SafeNet key versioning with Edge Encryption.

Use SafeNet key versioning to simplify changing keys. Instead of creating a new alias for every new key, SafeNet key versioning keeps the same alias and increments the version.

### [Historical record encryption](#)

Encrypt historical records in the Audit table during mass encryption, mass decryption, and key rotation jobs. When encrypting historical records for a field in the Audit table, both new values and old values are encrypted.

### [Unbound Technology integration with the Edge proxy server](#)

Use the Unbound Technology (previously Dyadic Security) Key Management System.

### [Using a load balancer with the Edge proxy server](#)

You can use a load balancer to balance the load across the proxy servers in your Edge Encryption proxy setup. If the load balancer and proxy servers are using different ports, specify the host name and HTTPS port of the load balancer to enable users to view responses on their browser.

## Activation information

Active by default.

### Field Administration release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Field Administration enhancements and updates in the London release.

## New in the London release

### [Attach a file to a record](#)

Attach a file directly to a record by adding a file attachment field to the table. The file attachment field supports all file types.

## Activation information

Platform feature — active by default.

### Flow Designer release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Flow Designer product enhancements and updates in the London release.

Flow Designer is a Now Platform feature that enables rich process automation capabilities in a consolidated design environment. It enables process owners to use natural language to automate approvals, tasks, notifications, and record operations without having to code.

Use a single design environment to author flows and actions and manage flow executions. Lower the barrier for automation and accelerate development by creating an ecosystem of reusable content available to any flow. Reduce upgrade times and technical debt by replacing customized business logic with native Now Platform actions.

## New in the London release

### [Run a flow from a Service Catalog request](#)

Start a flow when a Service Catalog item is requested to automate the fulfillment process. To activate this feature, request the Flow Designer support for the Service Catalog plugin (com.glideapp.servicecatalog.flow\_designer) through the HI Customer Service system. This plugin activates related plugins if they are not already active.

### Run a flow from a MetricBase Trigger

Start a flow when a MetricBase trigger is met. MetricBase triggers track time series data and can monitor when a threshold is reached, when a trend is detected, or when a system stops reporting data.

### Add stages to a flow

Communicate the current stage of a request or flow with an end user.

### Create flow-specific Service Catalog variables

Create Service Catalog variables that are only available to a specific Service Catalog-triggered-flow. Flow-specific variables are available to catalog tasks and actions in the flow. To activate this feature, request the Flow Designer support for the Service Catalog plugin (com.glideapp.servicecatalog.flow\_designer) through the HI Customer Service system. This plugin activates related plugins if they are not already active.

### Create a catalog task in a flow

Use the Create Catalog Task action to create a record in the Catalog Task [sc\_task] table associated to a requested item in the Requested Items [sc\_req\_item] table. Adds the catalog task record as data to be used in the flow.

### Access Service Catalog variables in a flow

Use the Get Catalog Variables action to access Service Catalog variables as data pills in a flow.

### Create a subflow

Define a sequence of reusable actions that can be started from a flow, subflow, or script. Define inputs and outputs to pass data to and from the subflow.

### Call a flow from another flow or subflow

Enable the Show triggered flows option in the More Actions menu to select an activated flow and define the required inputs. Running a triggered flow ignores its trigger conditions and runs all actions.

### Define advanced options for inputs

Use advanced options to guide flow designers through adding and configuring an action or subflow in a flow. For example, create a choice input to provide flow designers with a pre-defined list of configuration options to choose from. Inputs provide advanced options based on their data type. All inputs have advanced options to add a hint or provide a default value.

### Call a flow from script

Run activated flows using the scriptable API.



### [Call a subflow from script](#)

Run activated subflows using the scriptable API.

### [View the calling source of a flow](#)

Use the execution details to determine what started a flow or subflow.

### [View activated flows for a table](#)

View flows with record-based triggers that run on a specific table.

## Changed in this release

### [Add more actions to a flow or subflow](#)

Set the maximum number of actions a flow or subflow can contain with the `sn_flow_designer.max_actions` system property. The default value changed from 20 to 50 actions.

### [Nest For Each flow logic blocks](#)

Add a For Each flow logic block inside of another to repeat an action over a series of records. However, avoid nested For Each loops that process many records. Nested loops may cause the flow to run until stopped by the flow transaction quota rule, which prevents flows from running longer than an hour. For more information about transaction quotas, see [Transaction quotas](#).

### [Improve flow creation](#)

Use Flow Designer interface enhancements to improve flow creation.

- Read flows faster with improved spacing between elements.
- Configure additional flow properties from the More Actions menu.
- Show or hide conditional logic by clicking a flow logic block.
- Annotate triggers and flow logic blocks to communicate flow functionality.
- Change the order of actions in a flow by dragging-and-dropping them.

## Activation information

- Platform feature – active by default.
- Running a flow from a Service Catalog item request requires a separate plugin that is inactive by default. To activate this feature, request the Flow Designer support for the Service Catalog plugin (`com.glideapp.servicecatalog.flow_designer`) through the HI Customer Service system. This plugin activates related plugins if they are not already active.

Guided Tour Designer release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Guided Tour Designer product enhancements and updates in the London release.

Create a guided tour so that your users can learn how to use a feature.

## London upgrade information

The Guided Tour Designer was first introduced in the Jakarta release with support for guided tours on the standard platform UI. For new instances created in Jakarta and beyond, guided tours are active by default. For instances originating from pre-Jakarta, guided tours are inactive by default. See [Activate guided tours](#) to enable the feature on your instance.

With the London release, you can also enable guided tours to run on Service Portal pages. When you upgrade your instance to London, the following results occur.

- For instances that are new in London, the Guided Tours for Service Portal feature is active by default.
- For pre-London instances that you upgrade to London, the Guided Tours for Service Portal feature is inactive by default.
- To run guided tours on Service Portal pages, ensure the `com.glide.guided_tours.enable` and `glide.sp.guided_tours.enable` properties are both set to True. See [Activate guided tours](#) to enable the feature on your instance.

## New in the London release

### [Create guided tours for Service Portal pages](#)

When you activate guided tours for Service Portal pages, you can begin creating your tour. Refer to the [what to do next guidelines for Service Portal callouts, pages, and branding](#).

### [Create introductions and conclusions for your guided tour steps](#)

Use introductions to help your users understand the task you describe in your instructions. Use conclusions to summarize what they have accomplished or learned by completing the instructions.

### [Leverage draft and published statuses as you create and revise your tour](#)

Use statuses to support your revision process and control tour visibility. See [Edit a guided tour](#).

### [Review Guided Tour Designer support](#)

Learn which applications and user interface elements that the Guided Tour Designer currently supports.

### [Review tour tips and examples](#)

See the revised guidelines for planning a guided tour including the new tips for callouts and testing your tours.

## Changed in this release

### Role change

In the Kingston release, the `sn_tourbuilder.tour_admin` role was used to administer guided tours. In this release, the `guided_tour_admin` role is used for this purpose.

## Additional requirements

The Guided Tour Designer is only available in UI16. The designer is not compatible with UI15. For more information, see [Activate UI16](#).

### Import and Export release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Import and Export product enhancements and updates in the London release.

## Changed in this release

### [File type data sources](#)

If the XML file used for an XML data source does not contain a field in the first 10 nodes, the field is ignored. To import the field and ensure it is not ignored, you can add the `glide.db.impex.XMLLoader.max.scan_nodes` system property with a value greater than or equal to the position of the node where the field is first encountered.

## Activation information

[File type data sources](#) is a platform feature that is active by default.

### IntegrationHub release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® IntegrationHub product enhancements and updates in the London release.

Automate integration tasks using ServiceNow-built components for Flow Designer, or develop custom integrations. Requires a separate subscription.

## New in the London release

### [Microsoft Azure AD spoke](#)

Manage users, security groups, and office groups. Apply licenses and provision users in Office 365.

### [Microsoft AD spoke](#)

Create, delete, and manage objects in Microsoft Active Directory, such as users, groups, and computers.

## Use integration steps to integrate with external systems

Enable custom actions to integrate with external systems by activating IntegrationHub, which adds integration steps to the Action Designer interface.

## Run integration steps through a MID Server

Run actions from a MID Server to access data from external applications, data sources, or services in your network.

## Run PowerShell commands in a flow

Run PowerShell scripts on remote machines from your ServiceNow instance through a MID Server.

## Select the format of a REST request

Specify the format of the request in the REST web service request step. Options include:

- Text: A request in JSON, XML, or other text format.
- Binary: A request in a binary file format.
- Multipart: A request consisting of multiple content types.
- Form URL-Encoded: A request in a URL-encoded query.

## Save a REST response as an attachment

Save the response to a REST web service request step as a record in the Attachment [sys\_attachment] table and specify the target record to which the attachment is associated.

## Run the REST step on a MID server

Define MID Server applications and capabilities to send a REST web service request through a MID Server. A MID Server is required to communicate with or move data between a ServiceNow instance and external applications, data sources, and services in your network.

## Select the Script step runtime environment

Select a scripting environment to run the step. Options include:

- Instance: The action step runs the script from instance. Select this option when the script needs access to the ServiceNow API or instance data. This is the default value.
- MID: The action step runs the script from the MID Server. Select this option when the script needs access to [MID Server script files](#) and APIs. Selecting this option displays the Select MID Server Using field.
- Vanilla (Core JavaScript): The action step runs the script from either the instance or MID Server. Select this option when the script only needs the core JavaScript APIs and not the ServiceNow API or instance data.

## Use connection-specific variables in an integration step

When using an integration step, you must establish a connection with an external system. Use a Connection & Credential alias instead of defining the connection inline. An alias enables you to update the connection details once without having to reconfigure every action. Any action step that uses an alias inherits the attributes associated with it. Flow Designer displays attributes as data pills that you can drag into your action step. For example, you can create a page size attribute that becomes a REST step query parameter.

## Activation information

The ServiceNow IntegrationHub Installer plugin (com.glide.hub.integrations) requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data and activates related plugins if they are not already active.

### Interaction Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Interaction Management is a new application in the London release.

Interactions represent a request for assistance through a given channel. Agents use interactions to record requests from different channels, such as walk-ups, chat conversations, or phone calls. Interaction Management provides a basic framework for other applications to be built on. With interactions, you can:

- Assign interactions to specific users
- Automatically assign interactions using assignment groups
- Control the routing for an interaction
- Follow the interaction history

## Interaction management features

### Interaction queues

Use interaction queues to direct questions and requests to assignment groups. You can also use interaction queues to define the default messages, schedule, and escalation path for each queue.

### Interaction connectors

Use interaction connectors to provide a framework for connecting an interaction to a communication channel, for example chat, walk-up, or a phone call.

## Activation information

An administrator can activate the Interaction Logging, Routing, and Queueing plugin [com.glide.interaction] to access the functionality.

For more information, see [Interaction Management](#).

### Knowledge Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Knowledge Management product enhancements and updates in the London release.

## New in the London release

### [Knowledge User Criteria Diagnostics](#)

Run user criteria diagnostics to view which users have what type of access to knowledge bases and articles.

### [Actionable Knowledge Feedback](#)

Manage high volumes of article feedback by enabling automatic task generation for negative feedback.

### [Improve knowledge search rankings using SEO](#)

Improve knowledge search results from external search engines like Google by using the content in an article template field to generate SEO tags for articles created using that template.

### [Knowledge blocks](#)

Simplify knowledge authoring for writers and knowledge consumptions for readers with reusable knowledge blocks, which can be inserted into knowledge articles and are secured by user criteria.

## Changed in this release

### [Pagination for Knowledge Service Portal](#)

Use pagination to navigate through knowledge base search results in the Knowledge Management Service Portal.

### [Knowledge article access in the Knowledge Service Portal](#)

Make knowledge articles visible to external or public users by enabling knowledge articles on the Knowledge Management Service Portal.

## Activation information

Activate the Knowledge Management Advanced plugin (com.snc.knowledge\_advanced) to enable advanced features for Knowledge Management. For more information on activating the plugin, see [Activate the Knowledge Management Advanced plugin](#)

Activate the Knowledge Management Service Portal plugin (com.snc.knowledge\_serviceportal) to use the Knowledge Management Service Portal. For more information on activating the plugin, see [Activate the Knowledge Management Service Portal plugin](#)

The Knowledge User Criteria Diagnostics feature is included in the Knowledge v3 plugin, which is enabled by default.

## MetricBase release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® MetricBase product enhancements and updates in the London release.

Use the MetricBase application to collect, retain, analyze, and visualize time series data on the Now Platform.

## London upgrade information

Legacy triggers are available only to upgraded instances. New activations of the MetricBase application do not include legacy triggers.

## New in the London release

### [Create a MetricBase band trigger](#)

Create a MetricBase band trigger to use with Flow Designer to detect when a metric value meets a certain threshold or is within a range.

### [Create a MetricBase linear predictor trigger](#)

Create a MetricBase linear predictor trigger to use with Flow Designer to detect when a metric value is expected to cross a specified threshold within a specified time with a specified confidence level.

### [Create a MetricBase gap trigger](#)

Create a MetricBase gap trigger to use with Flow Designer to detect when new metric values have not been stored for a metric for a specified period.

## Changed in this release

### [Create a legacy MetricBase trigger](#)

Create a trigger to run a script. The trigger is based on static thresholds you create. Data is checked when added to the MetricBase database. The legacy MetricBase trigger is deprecated and is unavailable for new instances, but is still available on instances upgraded from a previous release.

### [Create a legacy MetricBase trigger level](#)

Define levels or ranges for a trigger. The legacy MetricBase trigger level is deprecated and is unavailable for new instances, but is still available on instances upgraded from a previous release.

## Activation information

The MetricBase product requires a separate subscription and must be activated by ServiceNow personnel. A demonstration plugin with sample tables, metrics, triggers, and data is available. Be sure to request the MetricBase Demo plugin with the MetricBase product.

### MID Server release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® MID Server product enhancements and updates in the London release.

## London upgrade information

- There is a new process for accessing the [install.service-now.com](https://install.service-now.com) download site for MID Server upgrades. New ServiceNow instances handle all traffic from the download site, which eliminates the need for MID Server host machines to connect with [install.service-now.com](https://install.service-now.com). However, instances upgraded to the London release require their MID Servers to send their initial upgrade requests through [install.service-now.com](https://install.service-now.com). After the first upgrade, MID Servers can send subsequent auto-upgrade requests directly to the instance, when the `mid.download.through.instance` system property is set to true. For details, see [MID Server upgrade](#).
- The change to the Java Runtime Environment (JRE) installation procedure for new MID Servers does not affect upgrades of existing MID Servers. These MID Servers receive the supported JRE version when they upgrade.

For additional information about MID Server upgrades, see:

- [MID Server pre-upgrade check](#): Describes how the AutoUpgrade monitor tests the MID Server's ability to upgrade on your system before the actual upgrade.
- [Upgrade the MID Server manually](#): Describes how to upgrade your MID Servers manually.

## New in the London release

### [MID Server download and upgrade process](#)

For new instances, the MID Server host no longer communicates with [install.servicenow.com](https://install.servicenow.com) to download the installer or to request an auto-upgrade. Instead, the MID Server sends a request to the instance, which retrieves the file from the download server and makes it available to the MID Server.

### [Nmap installer download process](#)

New ServiceNow instances handle all download requests for Nmap from the MID Server. The MID Server host machine no longer requires a connection to [install.service-now.com](https://install.service-now.com) to download and install Nmap. The instance retrieves the requested package from the download site and makes it available to the MID Server.



### MID Server selection override filters

Write your own filter condition that overrides the normal MID Server selection criteria for an application. In this release, the platform provides an override condition for MID Server capability in Cloud Management.

### MID Server auto-upgrade

Use these properties to control MID Server auto-upgrades:

- `mid.download.through.instance`: Enables existing MID Servers to send auto-upgrade requests to the instance rather than upgrading directly through the MID Server host.
- `concurrent.dist.download`: Sets the maximum number of concurrent MID Server auto-upgrades permitted by the instance.

### MID Server duplicate name check

On startup, the MID Server verifies that its name is unique. If the name is not unique, the MID Server shuts down and creates a record in the MID Server Issue [`ecc_agent_issue`] table.

## Changed in this release

### Nmap error message for Service Mapping

If Service Mapping selects a MID Server for credential-less Discovery that does not have the Nmap capability, the dependency map displays the error message on the configuration item (CI) rather than in the MID Server log.

### Credential synchronization

You can control how customized reference fields on the Credential [`discovery_credentials`] table are synchronized with MID Servers.

### IP range auto-assignment

IP range auto-assignment was moved from MID Server Guided Setup to the [Discovery Quick Start](#) wizard. IP ranges are assigned automatically to MID Servers after subnet Discovery has identified the available ranges.

### Java Service Wrapper

The MID Server installer includes the Tanuki Software Java Service Wrapper, version 3.5.34.

### Flow designer memory control

The `mid.process_flow.log_listener.max_size` property sets the maximum size in bytes of memory available to save log messages for Flow Designer actions running on a MID Server.

## Removed in this release

The installation prerequisite for the Java Runtime Environment (JRE) has changed for new MID Servers. You must install the supported JRE manually on each MID Server host or verify that the correct version is already running. There is no change in the way the instance upgrades existing MID Servers to the supported JRE version. See [MID Server system requirements](#) for JRE version information.

## Activation information

Platform feature – active by default

### Notifications release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® platform notifications enhancements and updates in the London release.

## London upgrade information

If you are upgrading from a pre-Jakarta release and want to enable [randomized watermarks](#) in email notifications for upgraded instances, activate the Random Watermark Support plugin (com.glide.email.random\_watermark). This plugin includes system properties for managing a watermark transition period, during which the system recognizes both randomized watermarks and non-randomized watermarks in emails created before upgrading. For details, see [Notifications upgrade information](#).

## New in the London release

### [Notifications in messaging applications](#)

Enable users to receive their ServiceNow platform notifications in Slack or Microsoft Teams messaging applications. Use the Now Actions app to configure the messaging apps for your instance.

### [Email access restrictions](#)

Use the Email Access Restriction [email\_access\_restriction] table to define conditions that control read access to an email record generated by a notification containing sensitive information. These conditions are processed by the base system ACL for the Email [sys\_email] table. When you specify conditions to restrict access for a notification, the email records are visible only to users that match the conditions specified for the notification.

## Changed in this release

### [Search bar in notification preferences](#)

In UI16, the Notifications tab of the System Settings window includes a search bar. Use it to find a specific notification in your preferences or get a list of all your notifications in alphabetic order.

## Activation information

- Platform feature - active by default.
- To activate notifications in messaging applications, request the Messaging Notification plugin (com.glide.notification.messaging) through the HI Customer Service system. This plugin activates related plugins if they are not already active. Integrations with third-party systems also require a separate IntegrationHub subscription.
- [Notifications upgrade information](#)

Notifications upgrade information for the London release.

### Notifications upgrade information

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Notifications upgrade information for the London release.

## Randomized watermark support

After you upgrade to London from a pre-Jakarta release, you can activate the Random Watermark Support (com.glide.email.random\_watermark) plugin, introduced in Jakarta. This plugin enables randomized watermark generation for email notifications. The system generates all new outbound emails with the randomized watermark.

However, your instance may still need to process older inbound emails containing non-randomized watermarks sent before the Random Watermark Support plugin was activated. With the plugin, the system recognizes both randomized and non-randomized watermarks in inbound emails.

Random Watermark Support adds the following properties for controlling watermark generation:

- glide.email.watermark.generate\_random — Generates randomized watermarks only. This property is set to true when the plugin is activated. For non-randomized watermark generation, set this property to false.
- glide.email.watermark.parse\_restrictive — Determines the type of watermark generation in effect and processes watermarks accordingly. This property is set to false when the plugin is activated, so the system recognizes randomized and non-randomized watermarks.

To activate the plugin, navigate to System Definition > Plugins, and select Random Watermark Support.

## Before activating randomized watermark support

- Determine a watermark transition period during which the system must recognize both randomized and non-randomized watermarks. This transition period is the time needed for the system to process all outbound email replies containing non-randomized watermarks.
- Review the following items to determine if they parse watermarks and must be updated to handle randomized watermarks:
  - Inbound email actions
  - Business rules
  - Mail scripts or script includes

For example, if you have a mail script that uses non-randomized watermarks, consider revising the script so that it can handle the longer randomized watermark format, such as: MSG3846157\_aLJc130zDhCVuh3spXmt.

## After the watermark transition period ends

When outbound emails no longer contain non-randomized watermarks, change the watermark parsing behavior to recognize randomized watermarks. Set the `glide.email.watermark.parse_restrictive` property to true so that the system recognizes randomized watermarks only.

### Notify release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Notify product enhancements and updates in the London release.

## New in the London release

### Conference call management

Use these features to manage conference calls:

#### End conference call

The End Conference Call related link appears in the Incident Communication Plan Management form. After a conference call is initiated, users with the `ia_admin` role can choose to join or end a conference call.

#### Adding participants based on group

Added the Group field to the Notify Participant (`notify_participant`) table. The major incident manager or communication manager can use this field to add groups to a conference call. When a group is selected, the group member who is on-call at that time is added to the conference.

#### Conference call leader

You can have a conference call leader who can initiate and end the call as well as kick, mute, and unmute call participants. A conference call leader can be any user with the `ia_admin` role or a user with the `itil` role who is assigned to the incident communication plan or the incident communication task.

#### Group name of a participant

If a conference call participant is a member of only a single group, then that group name is stored in the `notify_participant` record. If a participant is a member of multiple groups, then a formatter containing all those groups is displayed on the `notify_participant` record.

## Changed in this release

### Conference call management

Changes to conference call management features:

#### Recommended and Selected lists for conference call management

The Recommended section no longer displays the frequently called participants as the frequent callers may not always be relevant for the incident. In the Selected section, the user who initiates the conference call is added.

#### Notify role inheritance

Users with the `itil` role inherit the `notify_view` role when the Incident Communications Management (`com.snc.iam`) and Notify (`com.snc.notify`) plugins are activated. The `notify_view` role lets these users view the Notify Conference Call Participant Session (`notify_participant_session`) table.

### Password Reset release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Password Reset product enhancements and updates in the London release.

The Password Reset application enables an end user to reset or change a password using a self-service process. Alternatively, your organization can implement a process that requires a service desk agent to reset passwords for end users.

## London upgrade information

Platform feature – upgraded by default.

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**Note:** The Password Reset application is not available during upgrade.

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## New in the London release

### Specify the style sheet to apply to end-user pages

Specify a custom style sheet using the `Style sheet to apply to end-user pages` during the password reset process. `property`. The Identify, Verify, and Reset pages use the specified style sheet. The following image shows the Identify page:

The screenshot shows the 'Identify' step of a password reset process. At the top, there are three tabs: 'Identify' (active), 'Verify', and 'Reset'. Below the tabs, there is a form with two main sections. The first section is labeled '\* Email address' and contains a text input field with the value 'able.tuter@example.com'. The second section is labeled '\* CAPTCHA' and contains a checkbox labeled 'I'm not a robot'. To the right of the checkbox is a reCAPTCHA logo and the text 'reCAPTCHA Privacy - Terms'. At the bottom right of the form is a blue 'Next' button.

### History policy for local credential store

Select the Enforce history policy check box to ensure that users do not reuse passwords. For example, you might configure the history policy to not allow the user to reuse any of the previous 10 passwords.

### History policy for Active Directory (AD) credential store

Select the Enforce history policy check box to enforce both of the following password reset policies:

- History policy (password reuse): Active Directory domains can be configured to include a history policy that ensures that users do not reuse passwords. For example, the history policy might be configured to not allow the user to reuse any of the previous 10 passwords when resetting a password.
- Maximum number of reset attempts: You can configure the maximum number of attempts to reset a password. A user who fails to reset the password (by failing password policies or the history policy) the specified number of times is blocked.

### Send reminders to enroll for Password Reset

You can automatically send messages that remind users to enroll in the Password Reset process. You specify the text of the message and can configure the messages to repeat at intervals.

### Redirect to the login page after password reset

You can specify the URL of the page that opens for users after they successfully reset their password — typically the login page. See the Post-reset URL property setting on [the Details tab of the Password Reset Processes form](#).

### Customize the UI for resetting passwords

You can specify UI macros that add a header or footer to the pages that end users work in while resetting a password (the Identify, Verify, and Reset pages).

ACMECORP Custom header

Identify Verify Reset

\* Username

Custom footer Next

Trust Acme to Deliver!

The process of configuring client proxy settings is significantly simplified

You configure all proxy settings as registry keys. Download the installer and PDF user guide for Password Reset Windows Application version 4.0 from the [Password Reset Windows Application \[KB0542328\] article](#) in the HI Knowledge Base.

## Changed in this release

### Default security questions in all supported languages

The base system provides a large set of default questions in all supported languages. Questions are presented to each user in the language that the user requested during login. Creating a custom English language question is a one-step process. To create a custom question in a non-English language, you can use either of the following options:

- Create a custom question in the non-English language.
- Create a custom English-language question plus one or more translations of the question into other languages.

### Installed with Password Reset

Tables, roles, business rules, scripts, and workflows have been added to the Password Reset application. Some items existed in earlier releases and are documented for the first time.

### Enroll for the Password Reset program on a mobile device

End users can enroll for most Password Reset programs on a mobile device. You cannot use a mobile device to enroll for a Password Reset process that uses the Google Authenticator verification.

### Security questions are presented randomly

For the Security Question verification process, questions are selected at random and are presented in random order.

## McAfee disk encryption support in the Password Reset Windows Application

You can enable McAfee MDE 7.2 on a Windows desktop computer to support the Password Reset Windows Application. Download the installer and PDF user guide from the [Password Reset Windows Application \[KB0542328\] article](#) in the HI Knowledge Base.

## User's preferred display language support in the Password Reset Windows Application

The Password Reset Windows Application supports the user's preferred display language. Download the installer and PDF user guide from the [Password Reset Windows Application \[KB0542328\] article](#) in the HI Knowledge Base.

## Activation information

- A simple version of the Password Reset application is active by default and includes example verifications. The base system enables connections only to the Local ServiceNow Instance credential store type. For details, see [Credential stores for Password Reset](#).
- To enable connections to Active Directory (AD) and Remote (SOAP) ServiceNow Instance credential store types, you must activate the Password Reset - Orchestration Add-on plugin. The plugin also activates the Password Reset Windows Application (com.glideapp.password\_reset\_desktop). No other components are installed. Orchestration is available as a separate subscription. See [Activate the Password Reset - Orchestration Add-on plugin](#).

## Platform quality and performance release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Platform Quality and Performance product enhancements and updates in the London release.

## New in the London release

### [Debug log displays invalid query script syntax conditions](#)

When Debug Log is enabled, the debug session displays information about invalid queries found in scripts. Common syntax errors, such as spelling mistakes and invalid field references, are flagged as invalid queries.

## Activation information

Active by default.

## Platform security release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® platform security product enhancements and updates in the London release.



## New in the London release

### Instance Security Dashboard (PA)

Use the Instance Security Dashboard (PA) to view the compliance effectiveness of your instance security controls, view security event monitoring metrics, and configure and maintain instance security settings.

### New security properties

Use new security features to prevent XXE attacks, as detailed in the [ServiceNow Instance Hardening \[KB0550654\]](#) article in the HI Knowledge Base.

## Changed in this release

### Delegated development and deployment

Delegated development allows designated users without the admin role to develop or deploy applications on the ServiceNow platform.

### Securing data in domain-separated instances

The London release includes changes to better secure your data in domain-separated instances. These changes may result in some data not appearing in reports or lists. Review your access controls for any field that no longer appears in reports or lists.

### Assigning admin and security\_admin roles

- To grant the admin role to a user, the granting user must also have the admin role. For example, a user with only the user\_admin role cannot grant the admin role to other users.
- To grant the security\_admin role to a user, the granting user must also have the security\_admin role and must elevate to the security\_admin role before granting the security\_admin role to other users. A user with only the admin role cannot grant the security\_admin role to other users.

### Adding users to admin and security\_admin groups

- Non-admin users cannot add a user to a group that contains the admin role.
- A user without the security\_admin role cannot add a user to a group that contains the security\_admin role.

## Removed in this release

- The Now Platform no longer supports creating new Triple DES keys for an Encryption Context, but continues to support previously-created Triple DES keys. Previously-created Triple DES keys are listed in the Encryption Contexts with a Type of 3DES.

## Activation information

The [Instance Security Dashboard \(PA\)](#) is active if the Performance Analytics - Instance Security Dashboard plugin (com.snc.pa.instance\_sec\_dash) is active.

[Delegated development and deployment](#) is a platform feature that is activated when Application Administration is selected in the application record.

### Search Administration release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Search Administration product enhancements and updates in the London release.

## New in the London release

### [Reindexing a table without impacting text search results](#)

You can reindex the text search for a parent or child table in a table hierarchy. In previous releases, the Regenerate Text Index related link in System Definition > Text Indexes purged the text search index for the selected table before rebuilding, resulting in impacted search results during regeneration.

Using online reindex, you can continue to perform text searches on a table while the regeneration takes place. This method does not purge the entire text search index, nor adversely impact search results while running. It is also useful when you only want to reindex part of a table hierarchy (for example, the sc\_cat\_item table under the sys\_metadata hierarchy).

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**Note:** The online reindex process automatically runs on the sys\_metadata table after the London upgrade completes, with no noticeable impact on search performance. If you must disable it, set the `glide.ts.reindex.sys_metadata.after.upgrade` system property to **false**. See [Available system properties](#).

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## Activation information

Platform feature - active by default.

### Service Portal release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Service Portal product enhancements and updates in the London release.

Service Portal is a portal framework that helps you build a mobile-friendly self-service experience.

## London upgrade information

- In new instances, search facets are enabled by default. If upgrading from a previous release, enable search facets by activating a record in the Page Route Maps [sp\_page\_route\_map] table. See [Enable search facets](#).
- Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must activate the Mobile and Service Portal version of the validation script to validate user input in the Service Portal. See [Activate Service Portal validation scripts](#).
- In new instances, guided tours in Service Portal are enabled by default. If upgrading from a previous release, you must enable the com.snc.guided\_tours.sp.enable system property to create a guided tour in Service Portal. See [Activate guided tours for Service Portal](#).

## New in the London release

### [Filter Service Portal search results using search facets](#)

Enable your end users to filter search results for a more meaningful result set. Create facets for simple or advanced search sources.

### [Paginate search results](#)

Limit the number of results that a search source displays at one time to improve performance. End users can load more results as needed.

### [Create Guided Tours for Service Portal](#)

Create a guided tour for a Service Portal page to guide users through the content step by step. In the base system, tours can only be manually launched from pages that use the SP Header Menu. Manually launched tours do not display on pages with custom header menus.

### [Set the duration that info and error messages persist](#)

Use the glide.service-portal.notification\_timeout.seconds system property to set the duration in seconds that error and info messages remain on the screen before they are auto-dismissed. If set to 0, messages do not auto-dismiss and require that a user close them. The default value is 5.

### [Test Service Portal forms using the Automated Test Framework](#)

Write automated tests to validate Service Portal forms. The following Automated Test Framework (ATF) test steps are available:

- Open a Service Portal form
- Set field values on a form
- Validate field values
- Validate field states
- Check UI action visibility

- Click a UI action
- Validate form submission

### Use validation scripts in Service Portal

Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must activate the Mobile and Service Portal version of the validation script to validate user input in the Service Portal. To use a validation or UI script in Service Portal, change the UI type to Mobile / Service Portal or All. See [Activate Service Portal validation scripts](#).

### Change the display style of the Announcements widget

Select the Use Display Style instance option to display each announcement in the widget according to the style defined in the announcement record. Before selecting this option, consider how the widget will display if multiple announcements in the widget use different styles.

## Changed in this release

### Announcements

The To field is no longer required when creating announcements. If the field is not defined, the announcement continues to display until it is deactivated.

### Search Page widget

The Faceted Search widget replaces the Search Page widget. Use the sp\_search page to enable users to filter search results using the Faceted Search widget. See [Enable search facets](#).

## Activation information

- Service Portal is active by default on new instances. For upgraded instances, activate the Service Portal for Enterprise Service Management plugin (com.glide.service-portal.esm) if you have the admin role. Activating the Service Portal plugin does not affect any existing Content Management System (CMS) configuration. For more information, see [Content Management and Service Portal](#).

### Subscription Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Subscription Management product enhancements and updates in the London release.

You use the Subscription Management application to review and manage how purchased subscriptions are used on your production instance. You can monitor usage of subscription applications to update subscription levels and to make informed decisions about subscription purchases.

## London upgrade information

Platform feature – upgraded by default.

## New in the London release

### [View the roles that are associated with a subscription](#)

The Application Roles related list on the Subscriptions page includes all roles that are loaded with the plugin for the application. The roles in the list (that are identified as Subscription roles) form a good basis for constructing a user set.

## Changed in this release

### [Subscription page lists only active subscriptions](#)

The Subscription page lists only subscriptions that are currently active (have not expired). To view expired subscriptions as well, set the list filter to All.

### [Admin role required to change Limit to purchased setting](#)

The Limit to purchased setting ensures that you do not exceed the purchased subscription limit while attempting to allocate users. The setting affects whether you can use the Allocate selected users button for users in the Pending state.

## Activation information

Platform feature – active by default.

### System upgrades release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® System upgrades feature enhancements and updates in the London release.

## New in the London release

### [Debug upgrade](#)

Diagnose and resolve issues you suspect may have resulted from the most recent upgrade by enabling upgrade debugging during a user session. Each transaction lists whether an artifact was skipped, customized by the customer, or modified by ServiceNow during the last family-to-family or patch version upgrade.

Debug Upgrade is a component of standard ServiceNow session debugging. You enable Debug Upgrade, process a transaction (for example, load a form), and then analyze the reported upgrade information.

## Changed in this release

### Inactive choices included in table definitions for applications and plugins

Before this release, inactive choice values (sys\_choice inactive attribute = true) were not included in table definitions when you published an application. For example, if a choice set contained Red, White, and Blue choices, but Blue was inactive, only Red and White would be included in the table definition.

In addition, ServiceNow plugins did not contain inactive choices in table definitions.

Starting in this release, table definitions include inactive choices when you publish applications. When you install or upgrade a published application, the inactive choices load into the client table. Two new system properties (com.snc.apps.publish.include\_inactive\_choices and glide.db.table.update\_inactive\_choices\_enabled), which by default, are set to true, control the behavior of publishing applications and the behavior of installing applications. ServiceNow plugins also include inactive choices in table definitions.

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**Note:** You can enable old behaviors for inactive choice table selections. Manually set the two system properties to false in the instance in which applications are published, and in the instance in which they are installed. See [Add a system property](#).

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## Activation information

Platform feature — active by default.

### Table administration release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Table administration product enhancements and updates in the London release.

## New in the London release

### Rollback and Delete recovery

Recover deleted records and roll back some actions.

## Activation information

Platform feature — active by default.

### Task Communications Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Task Communications Management is a new application in the London release.

## New in the London release

The Task Communications Management provides a framework for defining and handling a communication process for any entity that extends the Task table. It helps you to streamline a communication process by creating designated plans for effective communication during an event. It handles communication plans for any table that extends the Task table. It also provides the ability to setup designated communication plans, channels, templates, messages, and recipients for any task.

It reduces time to notify resolver groups and time to restore services with a pre-defined incident response and communication plan, increases customer satisfaction by proactive and subscription-based communication, improves collaboration and communication process by letting customers use the chat client they are collaborating in.

### Communication Plan

Define the stakeholders who should be informed, what information should be shared, when the information should be delivered, and the methods of communication.

### Communication Task

Specify the mode of communication (channel) and the frequency at which the communication must be carried out.

### Communication Contact

Define the recipients of a particular communication plan to determine the target audience involved in each communication task and the responsibilities they are expected to handle. Earlier, using contract management, you could only define users and groups. Now, you can also define a Recipient list. This functionality is provided by the Targeted Communications (com.sn\_publications) plugin. You can dynamically define the recipients of a particular communication plan using the recipient list.

### Communication Channel

Define a communication channel for each communication task to determine which mode of communication to use for the task when a plan is attached to an incident. There are three modes of communication available: email, SMS, and conference.

## Activation information

The Task Communications Management plugin (com.snc.task\_communication\_management) is not available for independent activation. Currently, the plugin is activated when you activate the Incident Communications Management plugin (com.snc.iam), the Incident Management - Major Incident Management plugin (com.snc.incident.mim), or Major Issue Management plugin (com.sn\_majorissue\_mgt).

For more information, see [Task Communications Management](#).

Timeline Visualization release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Timeline Visualization product enhancements and updates in the London release.

With a [timeline visualization](#), you can view your organization's activities over time. The visualization helps you assess the impact of future strategic and operational activities such as change requests and projects.

## Removed in this release

- The Timeline Visualization plugin is no longer dependent on the Project Management (com.snc.project\_management\_v3) plugin. Activating the Timeline Visualization plugin does not activate the Project Management plugin.
- Activating Timeline Visualization does not activate the CIO roadmap. You must activate the Project Portfolio Management (com.snc.financial\_planning\_pmo) plugin to use the CIO roadmap with timeline visualization.

## Activation information

Users with the admin role can [activate the Timeline Visualization](#) (com.snc.timeline\_visualization) plugin. To use CIO roadmap with timeline visualization, you must activate the Project Portfolio Management (com.snc.financial\_planning\_pmo) plugin.

### UI release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® UI enhancements and updates in the London release.

## London upgrade information

The List v3 plugin is no longer available for new deployments.

## Changed in this release

### List v3 support changes

Activating this plugin is not recommended if your organization has large or complex datasets, or if you are accustomed to the feature set and performance of List v2.

### Virtual Agent release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Virtual Agent is a new feature in the London release.

Virtual Agent is a conversational bot platform for providing user assistance through conversations within a messaging interface. Use Virtual Agent to build automated agents, also called bots, and design the conversations that your users can have with these bots to obtain information, make decisions, and perform common work tasks. During these conversations, your users can transfer to a live agent at any time for help, providing them a seamless support experience.



## Virtual Agent features

### Virtual Agent conversational interface

Enable your users to interact with a chatbot or live agent through various Virtual Agent interfaces:

- A web-based interface in Service Portal and in Apple iOS and Google Android environments.
- Messaging interfaces for third-party messaging applications, through integrations for Slack and Microsoft Teams.

### Virtual Agent Designer

Use Virtual Agent Designer to build bot conversations that assist your users with common work issues or self-service tasks. Virtual Agent Designer is a graphic tool for creating the dialog flows of bot conversations, called topics. In a topic, you define the dialog exchanged between a virtual agent and a user to resolve an issue or accomplish a specific goal.

Predefined topics are available for the ServiceNow® Customer Service Management, HR Service Delivery, and IT Service Management products.

### Live Agent support

Give your users the option to switch to a live agent for assistance during bot conversations. Virtual Agent is integrated with the Live Agent module for managing agent chat queues, including the chat interactions transferred from a virtual agent to a human agent.

## Activation information

To activate this feature, request the Virtual Agent (com.glide.cs.chatbot) plugin through the HI Customer Service system.

See [Virtual Agent](#) for more information.

### Web services release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Web services product enhancements and updates in the London release.

## New in the London release

### External user REST API security

Increase the security of sensitive data in your instance by preventing unauthorized external users from accessing scripted REST API resources.

### [Inbound REST API rate limiting](#)

Use rate limit rules to limit the number of inbound REST API requests processed per hour to prevent excessive use.

### [Install an ODBC driver patch](#)

Use ServiceNow patches to install incremental ODBC fixes that occur between major ODBC releases.

### [Support for custom request content types](#)

Added support for the following custom content types in scripted REST APIs:

- Custom user-defined content types, with the ability to safely parse custom content types to JavaScript objects
- **application/x-www-form-urlencoded** requests using standard request APIs

## Activation information

[External user REST API security](#) is a platform feature that is active by default if the REST APIs - Explicit Roles (com.glide.explicit\_roles) plugin is already active on that instance.

[Inbound REST API rate limiting](#) is a platform feature that is active by default.

[Install incremental ODBC fixes](#) does not require activation.

[Support for custom request content types](#) is a platform feature that is active by default.

### Workflow release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Workflow product enhancements and updates in the London release.

Workflow provides a drag-and-drop interface for automating multi-step processes across the platform. Each workflow consists of a sequence of activities, such as generating records, notifying users of pending approvals, or running scripts. The graphical Workflow Editor represents workflows visually as a type of flowchart. It shows activities as boxes labeled with information about that activity and transitions from one activity to the next as lines connecting the boxes.

## New in the London release

### [Display approvers in workflow stage fields](#)

Enable workflow stage fields to display approvers, change the number of approvers to display, or disable displaying approvers.

## Retain activity scratchpad values

View activity scratchpad values from the Workflow Activity History Scratchpad [wf\_history\_scratchpad] table. Workflow Activity History Scratchpad is also an embedded list in Workflow Activity History records.

## Activation information

Platform feature — active by default.

## Application development release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Application development has new and updated features in the London release.

- [Contextual development environment release notes](#)

ServiceNow® contextual development environment product enhancements and updates in the London release.

- [Delegated development and deployment release notes](#)

ServiceNow® delegated development and deployment product enhancements and updates in the London release.

### Contextual development environment release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® contextual development environment product enhancements and updates in the London release.

The Now Platform is a contextual development environment that identifies the scope of every artifact for an application, manages files, and prevents changes that violate application access settings. Within the contextual development environment, a developer can easily view and select applications, enforce application version standards, and proactively create policies that protect existing scripting.

## New in the London release

### Globally scoped applications file management

Move existing globally scoped metadata files between global applications, or remove files from the currently selected global application.

### Delete and uninstall globally scoped applications only if empty

Delete or uninstall globally scoped applications only if they are empty. If a globally scoped application has associated metadata files, you must first remove the metadata files and return them to the global scope, or move them to another global application.

## Scoped and global application rollbacks

Roll back installed scoped applications, including those applications in the global scope. When you do a rollback, you remove all code, table, and file updates that occurred in the initial installation. This rollback does not affect the global application record. To remove the global application record, you must instead perform an uninstall of the application.

## Extension points

Create and embed custom code hooks, called extension points, into scoped and global application base code. You can use extension points to designate where custom scripts can be called and then processed to extend base Now Platform functionality. Using extension points to integrate custom scripts eliminates the need to embed them directly into core application code, which prevents breakage of application upgrade paths.

## Restricted caller access privilege settings

Pre-approve or deny requests from application resources in a source scope that request access to target scope application resources. To restrict or approve access, you use Restricted Caller Access privilege settings, including:

- **Source-to-Scope** — Allows or denies access of a specific application resource in a source scope to all application resources in a target scope. For example, you can specify that a particular business rule in source Scope A can access all application resources, such as a table or Script Include, in target Scope B.
- **Scope to Target** — Allows or denies access of all application resources in a source scope to a specific application resource, such as a business rule, table, Script Include, or event, in a target scope. For example, you can specify that all application resources in source Scope A can access a Script Include in target Scope B.

## Changed in this release

### Enable global applications creation by default

Enable global applications creation by default. When creating a new application, the Start from global option is available by default without having to set the `glide.app.creator.global` system property to **true**.

## Activation information

To activate application restricted caller access, you activate the Scoped Application Restricted Caller Access plugin (`com.glide.scope.access.restricted_caller`).

### Delegated development and deployment release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® delegated development and deployment product enhancements and updates in the London release.

The development and deployment functions enable non-administrators to develop and deploy applications. As an application administrator, you can delegate development projects

to specific non-admin users. You can also assign roles that enable non-admin users to install or upgrade all applications in specific instances. By delegating these functions, you distribute the workload among multiple users and streamline the development and deployment workflow.

## New in the London release

### [Application-specific deployment permissions](#)

Assign a non-administrator user or group as a developer or deployment resource for a specific application. You can set permissions that designate what specific actions the assigned user can perform in the current instance.

For example, you might grant permissions that enable a user to upgrade the application, publish to the application repository and ServiceNow Store, but prevent publishing to an update set.

### [Instance-specific deployment user roles](#)

Assign roles that enable non-admin users to install or upgrade all applications in specific instances. You delegate these tasks by manually assigning specific user roles per instance. For example, you can assign user roles to Change Management personnel that allow them to perform application installations in non-production (development or QA) instances.

## Activation information

Active by default.

## Business Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Business Management has new and updated features in the London release.

- [Application Portfolio Management release notes](#)

ServiceNow® Application Portfolio Management product enhancements and updates in the London release.

- [Project Portfolio Management release notes](#)

ServiceNow® Project Portfolio Management product enhancements and updates in the London release.

- [Financial Management release notes](#)

ServiceNow® Financial Management product enhancements and updates in the London release.

- [Agile Development 2.0 release notes](#)

ServiceNow® Agile Development 2.0 product enhancements and updates in the London release.

- [Agile Development — Unified Backlog release notes](#)

ServiceNow® Agile Development — Unified Backlog is a new application in the London release.

- [Scaled Agile Framework release notes](#)

ServiceNow® Scaled Agile Framework is a new application in the London release.

- [Test Management 2.0 release notes](#)

ServiceNow® Test Management 2.0 is a new application in the London release.

- [Time Card Management release notes](#)

ServiceNow® Time Card product enhancements and updates in the London release.

## Application Portfolio Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Application Portfolio Management product enhancements and updates in the London release.

## New in the London release

### Capability Based Planning

- Create root-level, child, or edit capabilities as well as delete leaf capabilities with the Manage Relationships button in the Capability Based Planning map. Clicking Manage Relationship button converts the CBP screen to edit mode so that you can manage the relationship between the capabilities from within the capability map itself.
- Make strategic decisions using the details of the total investments made in demands and projects that are attached to each business capability in the CBP map. Capability based planning integrates with Project Portfolio Management to retrieve the project investment details and the total number of demands created for a business capability and business application.
- Organize your business capabilities according to your preference in the hierarchy of the CBP map using an ID. The levels of all capabilities in a hierarchy from the root level to the leaf level are assigned an ID called [Hierarchy ID](#). The hierarchy ID of a root capability is generated based on the order of the capability in the hierarchy. Order is an integer value automatically assigned to all root-level capabilities. However, the hierarchy ID of a non-root capability is generated based on the hierarchy ID of its parent. Hierarchy IDs are automatically generated, prefixed to the capability, and make the Capability based planning map more intuitive by arranging the capabilities.

The hierarchy ID is automatically updated whenever you add, update the parent, or delete capability. While adding or updating a capability within the hierarchy, the total number of levels is restricted to six in the hierarchy.

- Use the pagination option to display business applications attached to the business capability that you select on the left pane.
- Differentiate the project investments made at the business capabilities level from the business applications level in the Capability based planning with unique names. The

number of project investments made at the capabilities level is named as Total Project Investments and at the applications level as Project Investments.

## Technology Portfolio Management

- Search and filter applications using any attribute of the business application table in the TPM timeline view by clicking the filter icon. Use the condition builder to refine your search furthermore.
- Expand the business services and software models and you can distinguish the title from their respective details. The modified TPM timeline differentiates the titles of business services and software models in bold face separating them from the details.
- Click the hypertexts of business application, business service, and software models to navigate directly to their respective forms from the TPM timeline view.
- Assess the risk profile of a business application in the TPM timeline when you are reviewing the direct and indirect applications in the Capability based planning map. Click the Risk Profile icon of the business application in the Technology Risk view of the capability map to navigate to TPM timeline.

## Data integrity checks and data cleanup

Ensure data accuracy by [running the scripted audits and desired state audit](#). Running the audits helps you to know the gaps or missing information in the configuration data of business capability, business application, software models, and the life-cycle information.

The scripted and desired state audit results are posted on the [Notifications](#) section of the Application Portfolio Management home page. Click the notification to open the related tasks or the related data certification tasks.

IT business application owners, software model owners, and business capability owners are granted `sn_apm.apm_user` role. This is to help them to navigate to Compliance > My Follow On Tasks in the application navigation, address the notifications they have received, and update the data.

## Demand Creation within APM

Create a demand directly within APM rather than an idea. An idea is a thought about a possible course of action while a demand is a direct request for an action or response. Since a demand is action-oriented while ideas are not, creating an idea has been removed from Application Portfolio Management. Create and view demands in:

- The [bubble chart to achieve your application strategies](#).
- The [Application Portfolio Management portal](#) to achieve your goal.
- The [Technology Portfolio Management](#) (TPM) timeline for a business application.

You can also add a demand or a project to a business application in the timeline view page.

- The [Capability Based Planning map](#) for the selected capability and at the business application level.

In addition, you can:

- Associate the demands to any business capability or business application.
- View the consolidated number of demands created for the parent as well as its sub-capabilities.
- The [Demand form](#) when APM plugin is activated, with the mandatory Actions field capturing the course of action.

## Data Certification

Notify the task owners by email when a certification task is newly assigned, reassigned, or close to expiring. You can configure the setting to true and set the email notifications Active to enable the functionality.

## Business Relationship Management

Associate the business applications and capabilities to the business units and departments of your organizational structure. The organizational structure defines how the organizational activities are directed towards the achievement of organizational goals. Business Unit and Department data element fields are added to the Business Capability and Business Application forms.

## Changed in this release

### APM plugin modifications

The Application Portfolio Management [com.snc.apm] plugin is the base plugin for the application. However, three add-on plugins are available on subscription: analytics - compatible solution

- Performance Analytics - Content Pack - Application Portfolio Management [com.snc.pa.apm] plugin to view APM portals and dashboards.
- Performance Analytics - Content Pack - Application Portfolio Management and Change Management [com.snc.pa.apm.change\_request] plugin to access performance analytics metrics of business applications associated with Change requests.
- Application Portfolio Management, Performance Analytics, Performance Analytics - Content Pack - Problem Management [com.snc.pa.apm.problem] plugin to access performance analytics metrics of business applications associated with Problem management.

### Ideas Funnel replaced with Demands Column

The Ideas funnel in the Program Navigation page has been replaced with [Demands Column](#) to enable you to create demands directly as you identify opportunities.

### Usability changes

- In Capability based planning map, both Business Capability view and the Technology Risk view can display direct and indirect business applications that are related to the business capability.



## Removed in this release

Since idea is just a thought to a possible course of action whereas demand is more of an action for a request, the concept of creating an idea within Application Portfolio Management is removed. Creating Idea actions within the Application Portfolio Management module from the following portals has been removed:

- Application Portfolio Management Home.
- Bubble charts.
- Capability Based Planning map.
- Technology Portfolio Management timeline.
- New Idea form.
- Program Navigation page.

## Activation information

[Activate the Application Portfolio Management \(com.snc.apm\) plugin](#) if you have the admin role.

### Project Portfolio Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Project Portfolio Management product enhancements and updates in the London release.

[Project Portfolio Management](#) provides a simplified, team-oriented approach to Project Portfolio Management and IT development by combining several individual applications. It enables you to manage your demands, resources, portfolios and projects, and gives you full visibility from idea to execution. Agile management and test management help you improve productivity and service delivery.

## London upgrade information

- **Planning Console:** If you are upgrading, the Client side planning console functionality for project scheduling is disabled. To enable the functionality, you must:
  1. Set the project property Enable firing of Business Rules on save from Planning Console to false, if it was set to true before upgrade.
  2. Set the Enable Client Side Planning check box to true.

---

**Note:** If you do not have any custom business rules on the fields listed below, mark Fire BR on Save to false for these fields in planning console column configuration:

- State
  - Percent Complete
  - Actual start date
  - Actual end date
- 

- **Resource Management:** Changes made to allocated hours now update only allocated hours in the resource plan. Prior to this, it had updated the planned hours. Because of this change, if you have customizations around Planned or Allocated hours and cost on the resource plan or resource allocation, you need to alter these in the London release.
- **Demand Management:** On a demand form, the value for the new Assessment Required field is set to true for all existing demands on upgrade.

## New in the London release

### Resource Management

- [New UI for creating and managing resource plans](#): Search for resources and see results in the Resource Finder. Create resource plans in an intuitive grid interface. The grid interface also provides a detailed breakdown of resource plans on monthly and weekly time frame. You can edit the breakdown values inline. Clicking the Manage button in Resource Plan related list on project and demand forms opens the new resource plan creation interface.
- **Enhanced Resource Allocation Workbench**: Through Allocation Workbench, resource managers can create a personalized allocation board to view a category-wise list of their resources. You can review all requests in one place for your team in the grid interface. You can also see the available hours for requested users and allocate resources in the best possible way.
- [Complete](#) and [Cancel](#) resource plan actions for a closed project and demand: Closing a project or demand prompts the demand and project managers to complete or cancel the associated open resource plans. Project and demand budgets include only resources that are actually working on the project or demand.
- [Automatic update of cost plan from resource plan](#): The cost plan associated with a resource plan is automatically updated when the Planned cost in the resource plan is updated.
- The table Requested Allocation Daily [resource\_aggregate\_daily] stores requested hours at daily level.
- Use the Use budget reference rates to calculate the Resource requested/allocated cost (com.snc.resource\_management.use\_budget\_reference\_rates) property in the Resource Management properties to obtain accurate, period-specific planned costs when foreign currencies are involved.

If you are an upgrade customer, you may want to enable this property since it is by default set to No. Note that, the existing cost plans created from resource plans will not be recalculated.

### [Client side planning console](#)

Prevent time lags and build your project structure faster because you do not need to save every interaction in planning console in the cloud-based server. The option is enabled by default for new customers.

### [Investment Portal](#)

Create a personalized investment board and track your key projects and demands in terms of their cost, schedule, and scope. Investment Portal replaces the Project Status Portal that was introduced in the Jakarta release. For upgraded customers, Investment Portal co-exists with Project Status Portal. If you are a new user (and London is your first release), only Investment Portal is available.

## Project Management

- Create and manage the resource plans for a project and project tasks using the [Resources tab](#) in Project Workspace.
- Capture costs and benefits of a project using the [Financials tab](#) in Project Workspace. This tab provides a detailed breakdown of cost components of a project in a grid view. You can create a cost plan and benefit plan for the project. You can edit the breakdown values of a cost or benefit plan inline, making your editing faster and easier.
- Use the Actions related list on Project form to list the action items identified for the project. The same information is rolled up to a new section, Actions in the project status report.
- Copy an existing project status report including all fields into a new project status report using Copy option.
- **Project baseline:** In addition to a task baseline, you can also create a financial baseline for a project, which captures benefit and financial metric information (snapshot of cost plan, benefit plan, and project-level financial metrics) of the project.
- Determine if the time component in actual start and end dates should always be derived from the time in planned start and end dates respectively. Use the Derive time component from planned dates field on Project form to do this.
- Update planned end date of a manual project from actual start date and planned duration by using the Enable alter of planned date with Actual for Manual Project project property. The property is set to true for upgrade customers if you have a manual project before upgrade.
- Use the **Calculate Estimate at Completion** related link to populate the **Estimate at completion** field with the sum of actual costs from periods prior to the currently open forecast period, and future planned costs for the entire project.
- Project stakeholders are stored in a new Project Stakeholder [pm\_m2m\_project\_stakeholder] table.

## Planning Console

- Determine if the dates in the planning console should be displayed with or without time component by using the field Project schedule date format on Project form.
- Resize the grid and Gantt chart in planning console. Scroll bars are now available on each.
- You can visualize the baseline for milestones in planning console. Baseline visualization for milestone tasks was not available earlier.

## Demand Management

- **Reset a demand to Draft state:** Set a demand back to Draft state from any demand state. A demand can be set back to Draft state only until an artifact such as project, enhancement, defect, or change is created from the demand.
- Use the Assessment Required check box on [Demand form](#) to disable triggering assessment questionnaire to demand stakeholders. The field is set to True by default.

- **Demand baseline:** Create a financial baseline for a demand, which captures benefit and financial metric information (snapshot of cost plan, benefit plan, and demand-level financial metrics) of the demand.

## Project Financials

- Multi-currency support:
  - Project planned costs and planned benefits are always captured in the functional currency. Functional currency is obtained from the [glide.system.locale](#) property. For upgraded customers, the currency configured in the **com.glide.financial\_management.currency\_code** property is used to calculate the total planned cost, capital expenditure, and operating expenditure of the project.
  - Cost plans created in foreign currencies are converted to the functional currency using the exchange rates in the budget reference rates table.
  - Benefit plans created in foreign currencies are converted to the functional currency using the exchange rates in the budget reference rates table.
- Extend the duration of a cost plan by creating a cost plan breakdown record.

## Changed in this release

### Changes in Resource Management

- For a resource plan in Allocated state, changes made to allocated hours now update only allocated hours. Previously, it updated the planned hours. Any changes to the Resource Allocation now change only the Confirmed/Allocated cost and leave the Planned cost as the baseline.
- Change Allocation on Actuals Hours: Resource managers can now make allocation changes even if the resource plan has actual hours booked.
- The following fields on resource management forms are renamed:
  - Requested hours to Planned hours.
  - Allocated hours to Confirmed/Allocated hours.

### Changes in Project Management

- When you change the state of a project task to Closed complete, the Percent complete field is set to 100 and becomes read-only.
- Updating the project state from Closed to Work In Progress, Pending, or Open is not allowed. If you need to reopen a closed project, reopen an existing project task or add a new task to the project. This moves the project from Closed to Work in Progress state without affecting the other closed tasks.
- The planned start date is copied over to actual start date when the state of a project task changes to Work in Progress. And the planned end date is copied over to actual end date when the state of the task changes to Closed. The actual dates previously defaulted to the date and time when the state change happened.

- You can assign users with a time card user-role to a project task. However, a time card user can not modify the assigned project task.
- The Summary tab in project workspace is renamed Analytics.
- You can navigate to Project Workbench using Planning tab in Project Workspace. Previously, the Tracking tab in Project Workspace was used for opening a project in Project Workbench.

## Changes in Demand Management

- The Portfolio field on Stakeholder Register form is no longer mandatory.
- The Submit button on a demand record in Draft state is renamed as Submit Demand.
- The values in Score, Risk, and Value fields are recalculated when the metrics influencing these values such as cost plan, benefit plan, or resource plan are updated for a demand in Qualified or Approved state. The field values are recalculated only until an artifact such as project, enhancement, defect, or change is created from the demand.

## Removed in this release

- The Tracking tab in the Project Workspace is removed. The tab was used for opening the selected project in Project Workbench. You can now navigate to Project Workbench using the Planning tab in Project Workspace and selecting Project Workbench from the Planning Console selection arrow.
- The `com.glide.financial_management.currency_code` property, specific to the Financial Management application, is removed from the System Property `[sys_properties]` table. This property was earlier used as functional currency. Now, functional currency is derived from the `glide.system.locale` property.

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**Note:** For upgraded customers, functional currency is still derived from the `com.glide.financial_management.currency_code` property. If you have a value in this property, you may want to remove it so that all your financial plan conversions are reported in the same functional currency.

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- The Incomplete button on Demand form is removed. It is replaced with Reset to Draft button.

## Activation information

Users with the admin role can [activate the Project Portfolio Management](#) (`com.snc.financial_planning_pmo`) plugin.

## Additional requirements

Right-to-left languages in custom UI pages are not supported. Alternatively, you can use platform lists and forms.

## Browser requirements

If you are using Internet Explorer, version 11 or later (including Edge) is required to use all aspects of the workbenches.

## Accessibility information

In custom UI pages like Planning Console where Gantt chart is used, few exceptions such as date time picker and timeline task bars are not keyboard accessible.

### Financial Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Financial Management product enhancements and updates in the London release.

## New in the London release

### Prescriptive cost models

- Use either of the two preconfigured [prescriptive cost models](#), namely L1 – IT Shared Service Cost Model and L2 – IT Shared Service to Application Portfolio Cost Model that are available off-the-shelf for your financial modeling activities. Cloning is available for these prescriptive cost models.
- [Modify the cloned cost model by replacing the top segment](#) with a segment of your choice.

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**Note:** The segment that you use to replace must not be in use in the existing segment hierarchy.

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- [Map your financial data source to your cost model](#) for your financial modeling activities at the time of cloning.
- Enter a descriptive name, extending up to 80 characters, for the cost model to make it more meaningful in the Name field.

### Financial Modeling

- [Verify how the bucket amount was assigned](#) to a segment or an account by clicking the bucket name. A message displays the allocation method by which the bucket amount was distributed as well as the name of the segment or account to which the amount was assigned.
- Enable the [Account Scope check box](#) to execute the rollup script defined for each account at the segment level. You need not repeat similar rollup scripts for all the accounts under a segment. Instead use the FromAccountID of individual accounts and provide the rollup scripts.
- Track the money that fails to reach its target account or segment in the allocation setup stage of the Workbench. Use the logs to know the reasons why it failed to reach the target, and use the provided links to correct the errors and resolve the issue. [Missing money analysis](#) is an actionable, user friendly, and improved version of the allocation log functionality.

## Usability improvements

[Configure to display 5, 10, 15, 25, or 50 accounts on a page](#) out of the total number of accounts per segment. Display the selected number of accounts of a segment in the Allocation Setup page of the Workbench, Allocation Setup page of lighter workbench, and the Cost Lines Analysis page.

## Changed in this release

### Financial Modeling

Allocation log functionality has been changed to Missing money analysis. The error type and possible causes are stored as [Missing money logs](#).

### Financial Charging

Charge item is renamed as Statement item in the Financial Charging application.

### Financial Planning

Beginning with Kingston Patch 7, Financial Planning is only for [Portfolio Planning](#).

## Removed in this release

- Allocation logs in the Allocation Setup stage.
- The Financial Management costing dashboard of the Financial Modeling application.
- The term Charge Item from the Financial Charging application.
- The `com.glide.financial_management.currency_code` property, specific to the Financial Management application, is removed from the System Property `[sys_properties]` table. This property was earlier used as functional currency. Now, functional currency is derived from the `com.glide.system.locale` property.

For upgraded customers, functional currency is still derived from the `com.glide.financial_management.currency_code` property. If you have a value in this property, you may want to remove it so that all your financial plan conversions are reported in the same functional currency.

## Activation information

You can [activate the Financial Management Core \(com.snc.financial\\_management\) plugin](#) if you have the admin role.

## Additional requirements

Right-to-left languages in custom UI pages are not supported. Alternatively, you can use platform lists and forms.

### Agile Development 2.0 release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Agile Development 2.0 product enhancements and updates in the London release.

Develop software using agile methodologies with the Agile Development 2.0 application.

## New in the London release

### Sprint Tracking

Work with a List view in addition to Board view under the Sprint Tracking tab, which was formerly called as Sprint Board.

#### List view

Stories within the sprints are displayed in a List view. You can break down a story into scrum tasks. Track the number of scrum tasks pending for stories. When Test Management 2.0 is installed with Agile Development 2.0, you can handle the following testing procedures from the List view:

- create tests for stories within sprints.
- find what tests are to be run for the sprint.
- maintain multiple versions of a test.
- run a single version of a test at one time.
- view which version of test has been run.
- review the history of test results.

#### Triage Board

The Triage Board option is added to the Agile Board, Backlog tab. It is available only when Agile Development — Unified Backlog is installed. Triage Board helps you prioritize and sequence records of different task types in one backlog. It removes the overhead of converting records to stories.

## Changed in this release

### Home tab

The Home tab in Agile Board has been renamed to Analytics tab.

### Sprint Board tab

The Sprint Board tab is renamed to Sprint Tracking.

## Activation information

You can [activate Agile Development 2.0 \(com.snc.sdlc.agile.2.0\)](#) if you have the admin role.

Agile Development — Unified Backlog release notes

**Last updated:** July 26, 2018



**Last updated:** July 26, 2018

ServiceNow® Agile Development — Unified Backlog is a new application in the London release.

Agile Development — Unified Backlog helps to maintain a centralized backlog containing records of different task types, such as defects, problems, incident tasks, and stories. It:

- facilitates prioritizing and sequencing of different task type records in one location, saving you steps.
- removes the overhead of converting records to stories, saving you time.

Agile Development — Unified Backlog must be used along with Agile Development 2.0.

## Agile Development — Unified Backlog features

### Triage Board

Set up your own triage board by defining filter criteria and then view the records that are important to your product such as problems, incident tasks, defects, or change requests. For example, you can create one triage board for defects and another for incidents.

Records are dynamically updated in the triage boards. Add records to the Agile Board Backlog tab from any triage board and then sequence and prioritize records of any task type in a backlog.

## Activation information

You can [activate the Agile Development — Unified Backlog plugin \(com.snc.sdmc.agile.multi\\_task\)](#) if you have the admin role.

### Scaled Agile Framework release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Scaled Agile Framework is a new application in the London release.

Use SAFe to apply lean and agile principles to your organization. With SAFe, you can:

- manage the challenging task of developing and delivering software products in the shortest viable lead time.
- gain a broader, high-level perspective as well as governance across various levels in your organization.
- facilitate collaboration and streamline the planning and monitoring of activities across business units, departments, and teams.

## Scaled Agile Framework features

The London release offers the basic version of Scaled Agile Framework, called Essential SAFe. Since product managers and team members use SAFe in different ways and require different levels of access, Essential SAFe is implemented in two ways. Product managers can access the Agile Release Train (ART) level. Team members access the Team level. Access both these levels by navigating to Scaled Agile Framework (SAFe) > SAFe Board.

### For product managers

Plan and monitor activities across teams within your ART by accessing the ART level on an SAFe Board.

- manage your ART backlog at a centralized location.
- define a program increment and identify which features need to be completed within that program increment.
- perform big room planning.
- track all the features of your ART and view their transition from one state (lane) to another in a visual task board.

### For team members

Plan and monitor activities within your team by accessing the Team level on the SAFe Board.

- manage your team backlog at a centralized location.
- streamline your sprint planning and completion activities.
- track all the stories, and view their transition from one state (lane) to another in a visual task board.

### Domain separation

Extend data security to Scaled Agile Framework that supports domain separation at the Data-only level.

## Activation information

The [Scaled Agile Framework plugin \(com.snc.sdlc.safe\) plugin](#) requires a separate subscription and must be activated by ServiceNow personnel.

### Test Management 2.0 release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Test Management 2.0 is a new application in the London release.

Test Management helps you manage testing processes to deliver software products more efficiently and with fewer defects. It comprises two versions:

- Test Management: If you are an existing Test Management user on a release prior to London, you are using Test Management activated through the Test Management (com.snc.test\_mgmt) plugin.
- Test Management 2.0: If you are a new user, activate Test Management 2.0 because it provides enhanced testing capabilities as well as integration with Agile Development 2.0.

While Test Management covers user acceptance testing, it does not include some key data model structures like test versions, test runs, or test results. In addition, you cannot structure test plans in Test Management. Test Management 2.0 includes data model structures that

match industry standards. It is integrated with the Agile Development 2.0 product, adding agile development to testing capabilities. In the London release, Test Management co-exists with Test Management 2.0. If you are a new user, you should activate Test Management 2.0 to benefit from added capabilities even if you are not using Agile Development 2.0.

## Test Management 2.0 features

### Test version

Create and maintain multiple versions of a test through a simpler, more intuitive user interface.

### Test set creation

Create a test set to group related tests.

### Test relation

Associate a test with multiple test sets, test plans, and test cycles.

### Test plan creation

Create a test plan describing how a product or a feature is to be tested, and the time frame in which the test plan must be run. You can further segment a test plan into test cycles, test cycles into test execution sets, and specify a time range for the test execution.

### Test runs

- Run a single version of a test at one time.
- View which version of test has been run.
- Review the history of test results.

### Agile Development capabilities

When the Agile Development 2.0 product is installed with Test Management 2.0, you can manage testing procedures from the **Agile Development 2.0 > Agile Board**, Sprint Tracking tab.

## Activation information

You can [activate Test Management 2.0 \(com.snc.sdlc.test\\_management\)](#) if you have an admin role.

### Time Card Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Time Card product enhancements and updates in the London release.

Use the [Time Card Management](#) application to report and track time for your assigned tasks. Time Card Management works with the Task table to record time worked on projects, incidents, problems, and change requests.

## New in the London release

### [Log time for your resources](#)

Log time and submit the time sheet of your resources from Time Sheet Portal. This option is available for user managers.

#### Notification for rejected time sheets

Navigate to rejected time sheets by clicking the new notification icon. The icon is in the header of [Time Sheet Portal](#).

#### Approve button for user manager

Approve a time sheet by using the new Approve button in Time Sheet Portal. The button is available only for a user manager.

#### Group tasks

View the task cards for your assignment group by using the Group Tasks tab in Time Sheet Portal.

#### Calendar to switch time sheet

Access the calendar to switch between time sheets. The calendar is available in the header of Time Sheet Portal.

#### Inline edit of Project time category and Rate type

Add information about the project time category and the rate time for your time cards in the new columns – Project time category and Rate type. The editable columns are available in the Logged Time Cards section of Time Sheet Portal.

#### Approval date and time on time card

See when the time card state changes to Approved by using the Approved on field. The field is not on the form by default.

## Changed in this release

### Renamed Worker Portal

Worker Portal is renamed as Time Sheet Portal.

## Redesigned user interface

The user interface for Time Sheet Portal has been redesigned to provide you with a better navigation and user experience.

## Removed in this release

- The Quick Add option on the task cards in Time Sheet Portal has been removed. You can use the Add to Time Sheet option to add time cards for a task card.

## Activation information

You can [activate the Time card management](#) (com.snc.time\_card) plugin if you have the admin role.

Time Card also gets activated as part of the [Project Portfolio Suite with Financials](#) (com.snc.financial\_planning\_pmo) plugin.

# Customer Service Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Customer Service Management has new and updated features in the London release.

- [Customer Service Management release notes](#)

ServiceNow® Customer Service Management product enhancements and updates in the London release.

- [Field Service Management release notes](#)

ServiceNow® Field Service Management product enhancements and updates in the London release.

- [Communities release notes](#)

ServiceNow® Communities product enhancements and updates in the London release.

## Customer Service Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Customer Service Management product enhancements and updates in the London release.

## New in the London release

### [Guided Setup for Customer Service Management](#)

Follow step-by-step instructions to configure Customer Service Management on your ServiceNow instance. Perform structured configuration activities and monitor your progress.

### Major issue management

Proactively identify customers impacted by an issue, provide issue-specific information to these customers, and manage the resolution process.

### Domain separation

Use the domain separation feature to map customer accounts to individual domains. Account entities, such as contacts and cases, reside in the same domain as the account. Domain visibility rules enable users to maintain account and contact relationships.

### Adding a resolution code while resolving a case

Add a resolution code while resolving a case to capture information on how the case was resolved.

### Reporting a knowledge gap

Report a knowledge gap if you cannot find relevant articles that could help resolve a case.

### Dashboard word cloud

In the Customer Service Manager and Customer Service Executive dashboards, view a word cloud made up of keywords that are frequently used in the short descriptions of open cases. Select a word in the cloud to view additional related words, related cases, and the frequency trend of keywords.

### Customer Service manager role

Use this customer role to manage the cases for an account and any related child accounts.

### Effective dates for special handling notes

Make special handling notes effective immediately or at a later time.

### Contact local time and time zone on the Case form

Change a contact's time zone that is listed on the Case form to the local time zone.

### Global case hand-off

Hand off a case to your global support team.

### Social URL field on the Social Log form

Open the social conversation in a new tab by clicking the URL in this field.

### Internal user watch list

Set up an internal watch list so that internal users receive a notification when work notes are added to a case.

## Case deflection with knowledge and community content

Search for and add relevant information from knowledge articles and solved community questions and blogs to the Case form.

## Virtual Agent chatbot topics

Use the predefined Customer Service Virtual Agent topics (chatbot conversations) to help your customers complete common self-service tasks, such as creating a case or checking the status of a case.

## Quick start sample tests

Use quick start sample tests in the Automated Test Framework to evaluate some common Customer Service Management scenarios. To execute these tests, you can activate and then create copies of the desired tests. The sample tests can be run as single tests or as a test suite.

# Changed in this release

## Mandatory skills

Use this feature to identify skills that are required for customer service cases. Then, rank and assign agents with those required skills to work on the cases.

## Targeted communications recipients lists

Create recipients lists by running scripts or uploading files in addition to using a condition builder. Create a recipients list of type Account that can be used by the Major Issue Management application to create child cases for a major case.

## Chat enhancements

Use Virtual Agent to create or use predefined chatbot conversations for your users. The customer always has the option of switching to a live agent.

## Viewing dashboard reports

Use the Performance Analytics administrator (pa\_admin) and viewer (pa\_viewer) roles to view the Customer Service executive, manager, and agent dashboards.

# Activation information

You can activate the Customer Service Management plugin (com.sn\_customerservice) if you have the admin role. This plugin includes demo data and activates related plugins if they are not already active.

Field Service Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Field Service Management product enhancements and updates in the London release.

## New in the London release

### [Guided setup for Field Service Management](#)

Follow step-by-step instructions to configure Field Service Management on your ServiceNow instance. Perform structured configuration activities and monitor your progress.

### [Domain separation](#)

Use the domain separation feature to map companies to individual domains. Work orders and work order tasks created for a company reside in the company domain.

### [Quick start sample tests](#)

Use quick start sample tests in the Automated Test Framework to evaluate some common Field Service Management (FSM) scenarios. To execute these tests, you can activate and then create copies of the desired tests. The sample tests can be run as single tests or as a test suite.

## Changed in this release

### [Team calendar enhancements](#)

Search for individual or multiple team members in the calendar by first or last name.

### [Mandatory skills](#)

Use this feature to identify skills that are required for work orders and work order tasks. Then, rank and assign technicians with those required skills to work on the tasks.

## Activation information

The Field Service Management (com.snc.work\_management) plugin is available as a separate subscription. This plugin activates related plugins if they are not already active.

### Communities release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Communities product enhancements and updates in the London release.

## New in the London release

### [Guided Setup for Communities](#)

Follow step-by-step instructions to configure Communities on your ServiceNow, Inc. instance. Perform structured configuration activities and monitor your progress.



## Changed in this release

### Content posting from your community homepage

Create a question, blog, video, document, or event from your homepage.

### Forum view

View up to eight forums on your community homepage. To find the forum that you are interested in, see the Forums list page and search for the forum you require.

### Activity feed

View the most recent activity for all content by looking at the activity feed. Only the most recent activity is listed per content item in the activity feed. All activities for each content item are grouped.

### Community logs

See what your community members are searching for and viewing by looking at the community logs.

### Community feedback and bookmarks tables

See the content that is getting the most feedback or bookmarks by members of your community. To view this information, go to the feedback and bookmark tables in the navigation filter view.

### Case deflection with community content

View community-related search results for questions and blogs in the Customer Service Management Case form and in the Customer Service Management Service Portal Case form.

## Activation information

Communities is only available for customers who are licensed for Customer Services Management. To activate Communities, activate the Customer Communities plugin (com.sn\_customer\_communities).

To implement knowledge harvesting, activate the Knowledge Management Service Portal plugin (com.snc.knowledge\_serviceportal).

## Governance, Risk, and Compliance release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Governance, Risk, and Compliance has new and updated features in the London release.

The GRC product offering includes:

- Policy and Compliance Management
- Risk Management
- Audit Management
- Vendor Risk Management
- [Vendor Risk Management release notes](#)

ServiceNow® Vendor Risk Management product enhancements and updates in the London release.

## Vendor Risk Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Vendor Risk Management product enhancements and updates in the London release.

## New in the London release

### [Vendor Tiering](#)

Determine your vendor's risk tiering score through the vendor tiering assessments workflow. Vendor risk managers route these assessments to internal assessors. The results are calculated against the default tiering scale. The vendor risk tiering score categorizes the potential risk posed by that vendor. Changes in the vendor tier can automatically generate a vendor risk assessment helping vendor risk managers determine the right assessment for the vendor based on the tier.

### [Security Score Integration](#)

Measure and monitor the security posture of a vendor, using third-party score providers, such as BitSight Technologies and SecurityScorecard, Inc. Vendor risk managers use these scores, or other internal metrics, to determine the potential risk of vendors. Each provider has different score ranges that are normalized through the Security Score Integration for determining security scores on a common scale. Changes in the security score can automatically generate a vendor risk assessment to reduce this vendor's risk exposure.

## Activation information

The GRC: Vendor Risk Management (com.sn\_vdr\_risk\_asmt) plugin is available as a separate subscription.

## Browser Requirements

Google Chrome 63 and later.

## HR Service Delivery release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® HR Service Delivery product enhancements and updates in the London release.

HR Service Delivery improves the employee service experience by automating HR interactions and providing a single platform for all HR services. HR Service Delivery is an integrated suite of applications designed to create a consumer-like service experience, while increasing HR productivity. Whether it is a simple request for information, or a multi-departmental process like onboarding, employees have a single place for all their service needs.

## London upgrade information

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**Note:** When upgrading from Istanbul, HR document templates have a new field. The Document type field helps to filter a list of document templates that appear on the HR case form. HR criteria works with this field to further narrow the list of document templates you want available for an HR case. Because Istanbul did not have this field, you must create new or select an existing document type for your document templates. See [Document Types](#).

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## New in the London release

### Case and Knowledge Management

The Case and Knowledge Management application allows you to standardize the documentation, interaction, and fulfillment of employee inquiries and requests, improving HR efficiency and making it easier for employees to get the services they need.

#### [Auto-case categorization for HR case management](#)

You can use Agent Intelligence with HR Service Delivery to train a predictive model to act as an HR agent to automatically categorize HR cases based on your past record data. Auto-case categorization allows for a faster response time and better case resolution for employees.

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**Note:** This feature is only available with the HR Professional and HR Enterprise packages.

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#### [Knowledge blocks for HR knowledge management](#)

You can use knowledge blocks with HR Service Delivery to simplify knowledge authoring for writers and knowledge consumption for readers. Knowledge blocks are reusable pieces of content secured by user criteria that you can add to knowledge articles in a knowledge base.

#### [Encryption Support for HR and Employee Document Management](#)

HR Service Delivery and Employee Document Management provides encryption support to secure sensitive information. Encryption support secures specific fields in HR or employee documents to prevent unauthorized users from viewing or downloading.

#### [Edge Encryption for HR and Employee Document Management](#)

HR Service Delivery and Employee Document Management provides edge encryption to secure sensitive information. Edge encryption provides direct control over your data

security. Encryption and key management are performed on your intranet between your browser and your ServiceNow instance.

### HR Synonym Dictionary

HR Service Delivery provides a synonym dictionary that helps expand text searches with additional keywords and can be customized to better match their business and terminology.

The HR Synonym Dictionary loads automatically when you check the Load demo data box and activate the Human Resources Scoped App: Core [com.sn\_hr\_core] plugin.

### Employee Service Center

The Employee Service Center application provides a single place for employees to quickly and easily get all the HR services they need.

### Content Delivery and Content Automation — Campaigns

Content Automation takes information from Content Delivery to provide automated communication to specific audiences for a specific time in the form of a campaign. A campaign can be a targeted message with tasks like Open Enrollment for Benefits. Content Delivery provides information for a campaign like mass email or links to videos, events, or external web sites. Content Delivery can also provide static information like calendars or banners for your service portal or Employee Service Center.

### Virtual agent conversations for HR

Virtual agent conversations for HR use pre-defined dialog to automatically chat with employees who are requesting HR services. VA is programmed to understand the intent of an employee to handle repeatable requests. Virtual Agent is a platform feature that when paired with HR Service Delivery is integrated within the HR UI. It provides automated dialog for general HR inquiries, pay discrepancies, request for leave of absence, or updates to your HR profile.

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**Note:** This feature is only available with the HR Professional and HR Enterprise packages.

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### Employee Document Management

The Employee Document Management application provides electronic storage and filing of employee documents. Security policies determine who can view and access employee documents. Retention policies determine how long employee documents should be retained and reduces compliance risks.

### HR Integrations

The HR Integrations application allows you to integrate with third-party HR management systems to synchronize employee profiles and with third-party background check systems to request background checks.

### Integrating with the Accurate Background service

The preconfigured Accurate integration uses REST services to request background checks through the Accurate service. You can use the preconfigured integration as-is or customize it to meet your needs.

## Integrating with the Sterling Talent Solutions service

The preconfigured Sterling integration uses REST services to request background checks through the Sterling service. You can use the preconfigured integration as-is or customize it to meet your needs.

## Changed in this release

### Case and Knowledge Management

#### Response templates for HR case management

This feature, previously known as templated snippets, was renamed to response templates. You can also now configure response templates from HR Administration > Response Template Configuration.

### Employee Service Center

#### Create content for Content Delivery

Content for your service portal or Employee Service Center is configured from Content Delivery. Previously, content was configured under HR Administration > Service Portal > Content Types.

- Two categories have been added to identify content:
  - Portal Content
  - Notification Content
- Manage Content was changed to Portal Content.
- Link Content was added to define URLs for information and videos.
- Manage Audiences was added to define who can view the content.
- Schedule Content was added to define date ranges that content is available and the widget instance.
- Content Type and Organization Chart were moved under Configurations.

## HR Integrations

UI updates were made to several forms and lists in the HR Integrations application.

## Removed in this release

- The HR Workday Integration plugin (com.sn\_hr\_wday) was removed.

## Activation information

HR Service Delivery is available as a separate subscription. You can activate one or more of the following plugins:

- Case and Knowledge Management plugin (com.sn\_hr\_core)

- Employee Service Center plugin (com.sn\_hr\_service\_portal)
- Enterprise Onboarding and Transitions plugin (com.sn\_hr\_lifecycle\_events)

If you are integrating HR Service Delivery with a third-party HR management system or background check system, the HR Integrations plugin (com.sn\_hr\_integrations) is automatically activated with the Case and Knowledge Management plugin (com.sn\_hr\_core) to assist you in the integrations process.

If you are subscribed to both HR Service Delivery and Performance Analytics, you can activate one or more of the following content packs:

- Performance Analytics - Content Pack - Human Resources Scoped App [com.sn\_hr\_pa]
- Performance Analytics - Content Pack - Human Resources Lifecycle Events Scoped App [com.sn\_hr\_lifecycle\_pa]

If you are migrating from the legacy (non-scoped) version to the scoped version of HR Service Delivery, you can activate the HR Migration plugin (com.sn\_hr\_migration) to assist you in the migration process.

If you are subscribed to both HR Service Delivery and Facilities Service Management, activate the Facilities Move Management plugin (com.snc.facilities\_service\_automation.move) first. Activating the Facilities Move Management plugin first ensures that the building map appears in the Employee Service Center.

## IT Operations Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

IT Operations Management has new and updated features in the London release.

- [Cloud Management release notes](#)

ServiceNow® Cloud Management product enhancements and updates in the London release.

- [Discovery release notes](#)

ServiceNow® Discovery product enhancements and updates in the London release.

- [Event Management release notes](#)

ServiceNow® Event Management product enhancements and updates in the London release.

- [Operational Intelligence release notes](#)

ServiceNow® Operational Intelligence product enhancements and updates in the London release.

- [Service Mapping release notes](#)

ServiceNow® Service Mapping product enhancements and updates in the London release.

Cloud Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Cloud Management product enhancements and updates in the London release.

## London upgrade information

If you are upgrading, to the current release, from a release prior to Jakarta with the cloud plugins (com.snc.azure, com.snc.aws, and orchestration.vmware) activated on your instance and you decide to activate the Cloud Management plugin (com.snc.cloud.mgmt), then the cloud plugins activated prior to Jakarta may not work correctly. Do not use the cloud plugins (com.snc.azure, com.snc.aws, and orchestration.vmware) because they are deprecated. You must migrate all configurations, discovery schedules, and catalog items to the post-Jakarta Cloud Management plugin (com.snc.cloud.mgmt).

## New in the London release

### [Scoped application for content delivery](#)

Using the standard Cloud Management entities, create scoped applications and publish them on a regular cadence to the ServiceNow Store. Create scoped applications using the ServiceNow Studio to support new cloud providers and configuration management providers.

### [Move Cloud Management content across environments](#)

Move content, created in the Cloud Management application, from one environment to the other using ServiceNow Update Sets. Content entities such as blueprints, resource blocks, and cloud APIs, along with their dependencies, can be moved across environments.

## Activation information

The Cloud Management (com.snc.cloud.mgmt) plugin requires a separate subscription. You must [request activation](#) from ServiceNow personnel.

### Discovery release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Discovery product enhancements and updates in the London release.

## New in the London release

### [Discovery Quick Start](#)

Use the Discovery Quick Start interactive wizard to guide you through Discovery configuration.

### [Error resolution after Discovery](#)

Fix errors that can occur after you run Discovery by following the recommended actions provided in Discovery Home.

## Support for AWS Organizations

Assign a cloud service account as a master account to have it correspond to an Amazon Web Services (AWS) Organization account. Discovery can then recognize an Amazon Web Services (AWS) Organization account and automatically create member service accounts in the instance.

## HTTP classification

Use HTTP classification to find devices (not applications) via the HTTP protocol. HTTP is prioritized last behind WMI, SSH, and SNMP. An HTTP classifier is provided by default to find [F5 load balancers](#) via REST.

## Pattern updates

Use the new and updated patterns that enable Discovery to find new types of Configuration Items (CIs), such as Oracle database clusters, Red Hat clusters, and F5 load balancer clusters.

## Discovery APIs

The Discovery API plugin provides two new API classes for this release:

- [DiscoveryAPI - Scoped](#): This class contains methods that perform the following actions:
  - Launch a quick discovery of a single IPv4 address.
  - Return summaries of previously launched Discovery statuses for a single CI or for all scanned CIs.
  - Return a summary of a CIs discovery status given the specific Discovery status sys\_id and IPv4 address.
- [ReportCiStatusOutputJS](#): The methods in this class are getters that return specific object properties for the DiscoveryAPI reportCiIpAddressStatus method and then convert the information into a JSON string.

## Layer 2 discovery data

Use the `glide.discovery.sensors.forwardingtable.ssh` property to update the way Discovery performs Layer 2 discovery with VLANs. To instruct Discovery to launch the Switch — MAC Table SSH probe, which populates additional Layer 2 data, add and set this property to **true**. The property is **false** by default.

## Shazzam JSON encoding for IP ranges

Use the `glide.discovery.shazzam_ranges_json` property to use JSON, instead of XML, to encode the IP ranges for the Shazzam probe. Set this property to **true** to reduce the size of input payloads when discovering several IP ranges. For upgrades, add the property. This property is set to **true** by default for new instances.



## Credential synchronization

Use these properties to address performance issues that might occur during credential synchronization on several MID Servers:

- **com.snc.credentials\_user\_fields:** Includes all customized fields in credential synchronization. Set this property to **false** if you do not want to include the fields that you added to credential forms. This property is set to **true** by default.
- **com.snc.credentials\_recursion\_depth:** Tells the credential synchronization mechanism the number of tables that should be traversed when collecting fields from reference tables. Lower this number if you are experiencing performance issues and you have customized credential forms that include reference fields to tables that also have reference fields. This property is set to **3** by default.

Add these properties to the System Properties [sys\_properties] table. If you do not add these properties, the system uses the default value.

## Changed in this release

### AWS event and Azure alert processing

If an event occurs on a database in your AWS or Azure cloud, or on a Web Server in your Azure cloud, the event triggers the horizontal discovery process using a pattern to update the CMDB. In previous releases, the event did not trigger the discovery process.

### NetScaler load balancer discovery

New probes populate network path information for Citrix NetScaler load balancers to enable support for Service Mapping.

### IP range auto-assignment

Use Discovery Quick Start, rather than MID Server Guided Setup, to perform IP range auto-assignment after subnet discovery.

## Activation information

Discovery is available as a separate subscription from the rest of the Now Platform and requires the Discovery (com.snc.discovery) plugin.

### Event Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Event Management product enhancements and updates in the London release.

Event Management helps you to identify health issues across the datacenter on a single management console. It provides alert aggregation and root cause analysis (RCA) for discovered services, application services, and automated alert groups.

## London upgrade information

The upgrade process moves your instance to a new ServiceNow release version. Upgrading and patching your instance requires planning, testing, and validation. To ensure a safe and effective upgrade, create upgrade plans and test your upgrade on non-production instances before upgrading your production instance.

## New in the London release





### Alert management rules

Create alert management rules that respond to alerts. The alert management rule actions are integrated with [Flow Designer](#), which enables you to use subflows to resolve the cause of the alert. Several subflows are provided with the base instance. Other responses and actions that alert management rules provide are to open an incident, knowledge base (KB), open any kind of task, launch remediation action, and so on.

You can continue to use existing alert action rules, but you cannot modify them. You cannot create new alert action rules. You can migrate alert action rules to alert management rules.

### Priority group

Use the priority group to see which alerts to take care of first. The priority group is available in alert lists in the Dashboard, Alert Console, and All Alerts pages. The four priority group categories are:

Priority group	Icon	Description
Urgent		Highest level of priority. Attend to this alert ahead of other alerts, even those alerts that might have a higher severity.
High		High level of priority. Attend to this alert ahead of the lower priority group values.
Moderate		Moderate level of priority.
Low		Lowest priority level.

### Contextual search in alerts

Use contextual search to search for and attach a KB article from within an alert. The KB article can provide more information about the alert.

### Overall Event Count

Use the Overall Event Count field in the Alert [em\_alert] table to track how many events are bound to the alert. The counter is increased every time an event is bound to the alert. The count value is kept even after the actual event has been purged. Primary alerts are updated, based on their secondary alerts. The primary alert is the parent of the secondary child alerts. The actual number of events, primary plus secondary, that affected the alert is displayed.

## Alert Insight

Use Alert Insight data analysis to provide insight to key related records for the current Configuration Item (CI), similar CIs, and related CIs. You can use Alert Insight to expose the probable root cause of the alert. With Alert Insight, you can see information from similar alerts, incidents, problems, and change requests on the same CI, similar CIs, and other CIs. In the alert form, the Alert Insight data is available under Repeated Alerts, Similar Alerts, CI Incidents, CI Change Requests, CI Problems, Related Incidents, Related Change Requests, and Related Problems.

## Application services

Use application services to organize, maintain, and monitor services in your organization. An application service is a set of interconnected applications and hosts that are configured to offer a service to the organization. Application services can be internal or customer-facing. Application services replace manual services. You can no longer create manual services but you can continue to use them. You can also update or convert these existing manual services to application services. For more information, see [Convert manual services to application services](#).

## Configure event collection from Hewlett-Packard Network Node Manager i

Configure the HP Network Node Manager i (NNMi) connector instance to receive events while monitoring your network resources.

## Configure event collection from VMware vCenter Server

Configure the VMware vCenter Server (vCenter) connector instance to receive events from your VMware vSphere environment.

## Activation information

Event Management is available as a separate subscription from the rest of the Now Platform and requires the Event Management (com.glideapp.itom.snac) plugin.

For more information, see [Event Management](#).

## Operational Intelligence release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Operational Intelligence product enhancements and updates in the London release.

Operational Intelligence enhances Event Management by providing alert data analysis and reports. Operational Intelligence captures raw metric data that various data sources such as SolarWinds server and Nagios server, collect. Then, based on analysis of historical threshold data, Operational Intelligence indicates anomalous behavior which events may not capture. Operational Intelligence generates anomaly alerts which can be promoted to regular system alerts and appear on the Alert Console and service health dashboard.

Use Operational Intelligence to identify and prevent potential service outages and to access other statistical scores.

## New in the London release

### Anomaly Alert Dashboard

Use a central location to view important reports about anomaly alerts and promoted alerts, in relation to Event Management alerts. For example, the '% Daily Alerts are Promoted Anomalies' report, displays the percentage of newly promoted alerts in relation to the overall new Event Management alerts, for a time period.

### Metric connectors

Collect metrics using connector definitions for the following systems:

- SolarWinds server
- Zabbix server
- Nagios server

### Advanced Insights Explorer

Query metric data for configuration items (CIs) for which metric data is collected. CIs for the query can be from different sources such as application services, relationships, or a list of anomalous CIs. Query results are displayed in charts which let you further understand system behavior.

### Anomaly Model Testing

Use an anomaly model to test anomaly detection for a small set of specific CIs and metrics, before actually enabling anomaly detection for those CIs and metrics. Model testing simulates anomaly detection using actual metric data. You can then view the results in the Insights Explorer which is pre-loaded with the test results. You can compare anomaly test scores and the computed bounds to the results of actual anomaly detection.

## Changed in this release

### Operational Intelligence MID Server

- The Operational Intelligence MID Server application supports the ALL setting.
- It is not required that the Operational Intelligence MID Server be a dedicated MID Server.

### Insights Explorer

Insights Explorer provides:

- Host name: If available for a CI, appears underneath the CI name.
- Related CIs: Ability to add related CIs to be explored in Insights Explorer.
- Advanced search: Narrow down the search for CIs to a specific class or to other specific CI attribute filters.

## Anomaly Map

Anomaly Map provides:

- **Host name:** If available for a CI, appears underneath the CI name.
- **Advanced search:** Narrow down the search for CIs, to a specific class or to other specific property values.

## Anomaly detection

- **Change Detection:** When incoming data clusters around a new value, using the current control bounds and statistical model, Operational Intelligence detects this clustering as a value change and adjusts the statistical model so that most incoming data is again within the control bounds. The time it takes the Learner to adjust the statistical models to accommodate a permanent change in incoming metric data, is improved.

Change detection is useful when, for example, cores or memory are added to the server, which impact the baselines.

- **Classification of data with a gap:** Improved classification of a seasonal model when there is a gap in the metric data. An improved analysis of the data before and after the gap makes it easier to identify seasonality in the data despite the gap. Also, less data points after the gap are needed to correctly identify a seasonal model.

## Terminology

The following terms have changed:

Function	Current Term	Legacy term
Metrics visualization	Insights Explorer	Metric Explorer
MID Server capability	Metrics	ITOA Metrics
Metric extension	Operational Intelligence Metrics Context	Operational Intelligence Manager Context
MID Server extension	Operational Intelligence Metrics	ITOA MetricExtension

## Activation information

The Operational Intelligence plugin (com.snc.sa.metric) requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data and activates related plugins if they are not already active.

## Service Mapping release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Service Mapping product enhancements and updates in the London release.

## New in the London release

### Copy patterns from one instance to another

Create an update set containing new or modified patterns with their related items.

### Application services

Use application services to create, maintain, and manage services in a unified way in Service Mapping, the CMDB, and other ServiceNow applications. Application services replace business services.

### Use patterns on Store

On top of hosts and applications supported by default, you can discover additional hosts and applications by deploying patterns available on Store. New patterns are regularly published on Store outside major product releases.

## Changed in this release

Gray-out of configuration items (CIs) and segments in application service maps

These changes make the feature more intuitive:

- The CIs and map segments are not grayed out during rediscovery. A CI is grayed out only if Service Mapping failed to discover the CI itself or all connections leading to the CI.
- If a CI has more than one connection, the CI is not grayed out if at least one of its upstream connections is properly discovered.

For an example of how to use this feature for troubleshooting maps, see [Fix errors in individual business service maps](#).

### Improved Debug session functionality

This enhancement improves the user experience of customizing patterns in Debug mode. The debug session does not end when users navigate between sections within the same pattern.

SSH protocol alignment between Discovery and Service Mapping

In fresh install deployments, patterns use the same SSH library that Discovery probes use.

PowerShell and PowerShell Remoting Usage

In fresh install deployments, MID Servers use PowerShell or PowerShell Remoting instead of WMI (Windows Management Instrumentation) Collector service to connect to Windows servers for top-down discovery. WMI Collector service is used as a failover.

## Improved errors categorization

Service Mapping and Discovery categorize errors in a unified way. Both applications group errors by root cause in addition to error code.

Business Services navigation item renamed to Application services

The navigation item under Service Mapping > Services is renamed from Business Services to Application Services.

For an example of the new navigation path, see [Fix errors in individual application services using discovery messages](#).

The following user interface screens refer to application services as business services: Business Service Group Responsibilities, Approve, Service Mapping Properties, and Service Map Planner.

## Removed in this release

- The Service Map Planner module is deprecated.

Fresh install deployments do not have the Service Map Planner module. The Service Mapping Home screen and the application service form provide capabilities you can use for planning. For more information, see the [New features replacing Service Planner in Service Mapping \[KB0689681\]](#) article in the HI Knowledge Base.

If you used this feature prior to upgrading, the Service Map Planner module is not removed from upgraded deployments.

## Activation information

Service Mapping is available as a separate subscription and requires activation by ServiceNow personnel. The following plugins are activated automatically when Service Mapping (com.snc.service-mapping) is activated: Discovery (com.snc.discovery), Pattern Designer (com.snc.pattern.designer), Cloud Management Core (com.snc.cloud.core), Performance Analytics - Content Pack - Service Mapping (com.snc.service-mapping.pa.content), and Event Management and Service Mapping Core (com.snc.service-watch). The Event Management and Service Mapping Core (com.snc.service-watch) plugin is different from the Event Management plugin (com.glideapp.itom.snac).

## Accessibility information

Service Mapping supports Web Content Accessibility Guidelines (WCAG) 2.0 level A for all tasks performed on service maps in the View and Edit modes. User interface elements have enhancements that make them accessible to screen readers. Service Mapping offers text alternatives for the following UI elements:

- Map elements
- Business service list
- Business service and CI Properties pane
- The More Options menu
- The timeline area
- Pattern Designer elements like step tree

For information on operating Service Mapping using keyboard shortcuts, see [Keyboard shortcuts for operating Service Mapping in accessibility mode](#).

## IT Service Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

IT Service Management has new and updated features in the London release.

- [Asset Management release notes](#)

ServiceNow® Asset Management product enhancements and updates in the London release.

- [Benchmarks release notes](#)

ServiceNow® Benchmarks product enhancements and updates in the London release.

- [Change Management release notes](#)

ServiceNow Change Management product enhancements and updates in the London release.

- [Continual Improvement Management release notes](#)

ServiceNow® Continual Improvement Management (CIM) is a new application in the London release.

- [Incident Communications Management release notes](#)

ServiceNow® Incident Communications Management product enhancements and updates in the London release.

- [Incident Management release notes](#)

ServiceNow® Incident Management product enhancements and updates in the London release.

- [ITSM Virtual Agent release notes](#)

ServiceNow® ITSM Virtual Agent is a new application in the London release.

- [Problem Management release notes](#)

ServiceNow® Problem Management product enhancements and updates in the London release.

- [Service Level Management release notes](#)

ServiceNow Service Level Management product enhancements and updates in the London release.

- [Service Catalog release notes](#)

ServiceNow® Service Catalog product enhancements and updates in the London release.

- [Walk-up Experience release notes](#)

ServiceNow® Walk-up Experience is a new application in the London release.



## Asset Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Asset Management product enhancements and updates in the London release.

## London upgrade information

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**Warning:** If you upgrade to Software Asset Management Foundation plugin (com.snc.sams) from Software Asset Management plugin (com.snc.software\_asset\_management), you cannot revert back to Software Asset Management plugin (com.snc.software\_asset\_management).

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## New in the London release

### Two contract fields added to the Contract Management form

Create a relationship between contracts using two contract fields. Specify the contract number assigned by the vendor in the Contract number field. Reference a parent contract using a lookup list in the Parent contract field, or create a new parent contract.

## Changed in this release

### Approval History related list replaced the Approval History tab on the Contract Management form

Track the approval history of a contract using a related list instead of the contract approval history journal. All approvers are listed in the Approval History related list.

## Removed in this release

The Approval History tab has been removed from the Contract Management form, and was replaced by the Approval History related list.

## Activation information

The Software Asset Management Foundation (com.snc.sams) plugin must be activated by ServiceNow personnel. This plugin includes demo data. See [Request Software Asset Management Foundation plugin](#).

## Benchmarks release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Benchmarks product enhancements and updates in the London release.

The Benchmarks application gives you instant visibility into your key performance indicators (KPIs) and trends, as well as comparative insight relative to industry averages of your peers. You can contrast the performance of your organization with recognized industry standards, and view a side-by-side comparison of performance with global benchmarks.

## New in the London release

### Security Operations KPIs

Use Security Incident Response KPIs listed in the Security Operations category. There are three Security Incident Response KPIs provided.

### Recommendations integration with Continual Improvement Management

Create a [Continual Improvement Management](#) (CIM) improvement initiative based on a Benchmarks recommendation.

### Manual upload and download of scores using scheduled jobs

Manually upload or download Benchmarks scores on demand at any time of the month.

## Changed in this release

### Email notification change

Email notifications are sent to the Benchmarks admin role only. Notifications include monthly global score availability, historical data recalculation, and KPI updates.

## Activation information

Active by default. However, you must opt in to the Benchmarks program to participate.

### Change Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow Change Management product enhancements and updates in the London release.

## New in the London release

### Change Schedules

Introduced a new Change Schedules scoped application. All upgrading users who have used the legacy Change Schedules application are encouraged to adopt the new application and disable the legacy application. The new Change Schedule application includes:

- A change schedule overview page where you can find schedules filtered in three different categories.
- A change schedule definition record type where you can define an unlimited number of change schedules which include related definitions allowing the display of related change tasks.
- Style rules that can be defined from:

- The Style Rules table [chg\_soc\_style\_rule]. Style rules defined in the table are rules that are applied to every schedule for all users.
- The Change Schedule definitions or Change schedules user interface. Style rules defined here are applied to that schedule for all users.
- New tables included:
  - chg\_soc\_definition\_core
  - chg\_soc\_definition
  - chg\_soc\_definition\_child
  - chg\_soc\_style\_rule
  - chg\_soc\_definition\_style\_rule
  - chg\_soc\_def\_child\_style\_rule

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**Note:** All the tables extend the Style Rule Core table [chg\_soc\_style\_rule\_core].

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- New Role: sn\_chg\_soc.change\_soc\_admin: Any user who possesses this role has full administrative rights to the Change Schedules application.

### Change Advisory Board (CAB) workbench

**New Demote action:** A Demote action is added to the Current Agenda Item widget to enable CAB managers to move the current agenda item to the bottom of the Pending

Agenda Items widget so the item can be discussed later.

**New Restore action:** Added Restore to the Pending Agenda Items widget. This action is available in the All Agenda Items filter and enables CAB managers to restore an agenda item that was previously skipped.

### Blackout and Maintenance Schedules

A new Source list is added to the Blackout Schedules and Maintenance Schedules forms. From the Source list, you can select the source of the blackout schedule, which includes Business Service, Change Request, and CI Class options. When one of these three values is selected, the condition builder at the bottom of the form is updated to that source.

- You can define blackout schedules and maintenance schedules against Business Services. Conflict Detection identifies potential scheduling conflicts for any CI that supports that business service.

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**Note:** This feature requires that your business services be migrated to the Application Service introduced as part of the Unified Service Model.

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### Change Management integration with Discovery

Integrated Change Management with Discovery allows users who own ServiceNowDiscovery to update the ServiceNow Change Management Database (CMDB) by leveraging Discovery as an inherent part of their change management process. Discovery can be performed on any configuration item with an IP address. When Discovery is activated, [three new properties](#) are added to the Change Properties application providing

complete control of how discovery is initiated and what state values can be initiated, either automatically or manually.

**Business rule:** The business rule, Trigger Auto Discovery, triggers Discovery when the `com.snc.change_request.auto.discovery` property is activated on the state transitions specified in the `com.snc.change_request.disco.auto.state` property.

**UI action:** A new UI action, Initiate Discovery, is available to trigger discovery when the `com.snc.change_request.auto.discovery` property is activated on the state transitions specified in the `com.snc.change_request.disco.manual.state` property.

## Change Management integration with Software Asset Management (SAM)

Change Management is integrated with ServiceNow Software Asset Management (SAM) providing insight into the potential cost implication of changes to processing resources (CPU & CPU Core) for software licensed by processor.

If you want to activate the Change management - License Change Projections plugin (`com.sn_samp_change`), you must request assistance from ServiceNow personnel. In addition to activating SAM, you must also activate the Change management - License Change Projections plugin (`com.sn_samp_change`) to benefit from this feature.

When a change to a CPU of a CI or CPU core resources is done using either Propose Change or Mass Update CI, the proposed change is captured in XML and passed to SAM when the change request transitions from New > Assess (Normal type) or from New > Authorize (Emergency type). SAM runs a calculation for the CIs in scope for the change and when the results are returned to Change Management, a summary result is displayed in a new form section called License change projection. To view a CI by CI breakdown of the license change projection, the License Change Projections related list must be manually added to the Change Request form.

As part of the Change management - License Change Projections plugin (`com.sn_samp_change`), the `[samp_software_change_projection]` and the `[samp_ci_projection_summary]` tables are populated when the projection job is executed. The `[samp_software_change_projection]` table captures the projections for all affected CIs, whereby the `[samp_ci_projection_summary]` table summarizes those projections per CI. The `[samp_ci_projection_summary]` table is referenced in the License change projections related list.

## Changed in this release

### Change Request Approval Records

Enhanced the approval summarizer in approval records associated with a change request to include additional information from the change request record.

### Refresh Impacted Services

The Refresh Impacted Services option was only available for the Change Request table. In this release, this option is also available for tables that extend the task table. The list of these tables is driven by the `com.snc.task.refresh_impacted_services` property. This option populates the Impacted Services or Impacted CIs related list based on the primary CI, that is, the CI that you specify in the Configuration Item reference field on the Change Request form.

## Activation information

To view the Change Schedules page, you must activate the Change Management - Change Schedule plugin (`com.snc.change_management.soc`).

For more information, see [Change Advisory Board \(CAB\) workbench](#).

## Continual Improvement Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Continual Improvement Management (CIM) is a new application in the London release.

Continual Improvement Management is used to implement service, process, and function improvements. An improvement initiative contains goals to measure success, and phases that contain tasks with specific actions to complete the improvement.

Continual Improvement Management is a simple CI (continual improvement) process used to manage improvements in your organization, from identification to value realization, based on the PDCA (plan-do-check-act) cycle model. Because the CIM process model is generic and agnostic to the improvement methodology used in your organization, any organization can benefit from using Continual Improvement Management.

## Continual Improvement Management features

### [Improvement Register](#)

View, prioritize, and track improvement initiatives, related tasks, and phases from a single Improvement Register list that includes all open and closed improvement initiatives.

### [Integration with ITSM and ITBM applications](#)

Link new and existing records from ITSM and ITBM applications to CIM improvement initiatives on the base system with one click.

ITSM applications integrated with CIM include ServiceNow Benchmarks (recommendations), Survey Management (survey), Coaching Loops (coaching opportunity), Problem Management (problem), and Incident Management (incident). ITBM applications integrated with CIM include Agile Development (story), Demand Management (demand), and Project Management (project) products.

### [Continuous monitoring and embedded analytics using Performance Analytics](#)

Trend analysis, forecasting, spotlight-based ranking, and KPI-based goal setting using Performance Analytics.

### [Continual Improvement Workbench](#)

Monitor, plan, approve, and review improvement initiative backlog using the CIM Workbench card-based layout. The CIM Workbench is easy to read, and supports drag-and-drop functionality.

### [Continual Improvements dashboard](#)

View business improvements achieved from improvement initiatives using the Continual Improvements dashboard reports and lists. Use the dashboard to determine how the improvements are helping your company.

## Alignment with company strategic objectives

Align improvement initiatives with existing company or business unit level strategic objectives to ensure coordination with company goals.

## Support for domain separation

Define separate improvement initiatives for specific domains.

## Activation information

The Continual Improvement Management (com.sn\_cim) plugin requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data and activates related plugins if they are not already active. The Continual Improvement Management application is available with the ITSM Professional subscription only. Please contact your account manager for more information.

See [Continual Improvement Management](#) for more information.

## Incident Communications Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Incident Communications Management product enhancements and updates in the London release.

## New in the London release

### Incident Communications Management

Renamed Incident Alert Management as Incident Communications Management.  
Renamed Incident Alert as Incident Communication Plan.  
Renamed Incident Alert Tasks as Incident Communication Tasks.  
Renamed My Alerts as My Communication Alerts.  
Renamed the Incident Alert Management plugin (com.snc.iam) as the Incident Communications Management plugin.

## Changed in this release

### Incident Communications Management

A new state model for incident communication plan is introduced. This state model is available only for new users. The new state model has three states: Open, Closed, and

Canceled

Conference call notification: When you initiate a conference call, an email or Slack

notification is sent to the participants.

Roles: Users with the major\_incident\_manager and communication\_manager roles can edit

a plan that is attached to a major incident.

Table: The Incident Communication Plan table extends from the Communication plan table.

The Incident communication tasks table extends the Communication tasks table so that the

incident communication plan inherits any future enhancements made to the communication

object.

Incident Communication Plan form:

- Updated, added, or removed the following fields:

- Details section is renamed as Notes.

- Comments is renamed as Actions taken.
- Updated related lists to match the communication plan related lists:
  - Incident communication tasks
  - Users
  - Contacts
  - Recipient lists

Communication and Conference: Introduced new sections – Communication and Conference on the form. Using the Communication section, you can send email or SMS updates to the participants of the conference call for that communication plan. Using the Conference section, you can initiate, join, or end a conference call. These sections are added to make it easy for users to directly take actions related to any type of communication or conference instead of opening the incident communication task from the form and then taking the appropriate action. The UI actions Kick, Mute, and Unmute on the notify\_participant record are available for users with the major\_incident\_manager and communication\_manager roles who also have the ia\_admin role. Added the Group field to the Notify Participant [notify\_participant] table. If a user is added to a conference call, the following things can happen:

- If the user is a member of only a single group, then that group value appears in the notify\_participant entry.
- If the user is a member of multiple groups, then a formatter containing all the groups is displayed on the notify\_participant record.

#### Incident Communication Task

- You can initiate a conference call at the task level. Under Related links, the Initiate Conference Call related link appears.
- The Incident Communication task state changes with the progress of the communication channel.
- Incident Communication Task form: In the related lists, the Communication and Conference tabs are added.

## Removed in this release

- Incident Communication Plan form: Removed the Activity and Post Incident Review sections.
- Conference call participants: The participants who are fetched frequently in a conference call option is no longer a part of the recommended list in the conference call participant dialog.
- UI action: Disabled the UI action View PIR Report.
- Incident Communication Task form: Removed the Send SMS UI Action.

## Activation information

The Incident Communications Management plugin (com.snc.iam) must be activated by new customers. For more information, see [Activate Incident Communications Management](#).

## Incident Management release notes

**Last updated:** July 26, 2018**Last updated:** July 26, 2018

ServiceNow® Incident Management product enhancements and updates in the London release.

## New in the London release

### Incident management properties

Use the Close open Incident Tasks when Incident is closed or canceled property to close open incident tasks when the incident is closed or canceled.  
 Use the Close open Incident Communication Plans when Incident is closed or canceled property to close open incident communication plans when the incident is closed or canceled.  
 Use the Close open Incident Communication Tasks when an Incident Communication Plan is closed or canceled property to close open incident communication tasks when an incident communication plan is closed or canceled.  
 Use the Enable auto closure of incidents based on Resolution date. Setting this to 'No' will make auto closure to run based on the Updated date property to auto-close incidents based on the resolution date of the incident instead of the last updated date.

---

**Note:** The property is set to true only for new customers. Existing customers must manually set the property to true.

---

### Create standard change from Incident

Introduced a new UI action Create Standard Change to create a standard change request from an incident which redirects the user to the Standard Change Catalog. Previously, only a normal or emergency change request could be created from an incident.

### Parent child synchronization in Incident

If an incident has child incidents, the following occurs:

- If an ITIL user reopens the parent incident, the parent incident and child incidents reopen. Both the parent and the child incident state are set to In Progress.
- If an ESS user reopens the parent incident, the parent incident state is set to In Progress, but the child incidents are not reopened.

When an ITIL or an ESS user adds a child, the child incident state is set to In Progress. When the parent incident is resolved, the child incident state also changes to Resolved.

### Create request from Incident form using record producer

Click Create Request from the context menu on the Incident form and select a record producer to create the request. The new task created (for example, new Incident or Problem or Change) is associated with the parent incident record. To achieve this action, you must add the following script in the script block of the record producer:

```
var incRPUtil = new LinkRecordProducerToIncident();
incRPUtil.linkRecordProducerToParentIncident(RP.getParameterValue('sysparm_req_parent'),
```



## Refresh Impacted Services

Introduced a new UI action Refresh Impacted Services on the context menu of the Incident form to populate impacted services based on the primary Configuration Item (CI) specified on the task record. The system property `com.snc.task.refresh_impacted_services` is introduced where you can mention all the task tables where you need this UI action. This property is applicable for both new and existing customers.

## Major incident management

Added a new Demote Major Incident UI option to the context menu of the Incident form. After a major incident candidate is promoted as a major incident and the major incident state changes to Accepted, a major incident manager can decide to demote a major incident by clicking Demote Major Incident.

Automatic closure of Major Incidents: Close a major incident automatically based on the system property Enable auto closure of incidents based on Resolution date. Setting this to 'No' will make auto closure to run based on the Updated date.

Associate multiple incidents with a major incident: Associate one or more incidents with a major incident using the Actions menu.

Reject multiple major incident candidates: Reject one or more major incident candidates using the Actions menu.

Major incident assignment: Assign a major incident to a group at the time of proposal and promotion based on the value of the Major Incident Management Group (`sys_id`) to whom the Major Incident should be re-assigned on promotion to 'Major Incident' property (`sn_major_inc_mgmt_major_incident_management_group`).

New fields added: Added the fields Proposed by and Proposed. When a major incident state is proposed, the fields Proposed by and Proposed capture the user who proposed the incident as a major incident candidate and the time when the incident was proposed. Similarly, when a major incident state is accepted, the fields Promoted by and Promoted capture the user who promoted the incident as a major incident and the time when the incident was promoted.

Major incident management process guidance: Added a new guided setup category for major incident management.

Major incident management workbench: Provides a single pane view designed for the major incident manager, communications manager, and resolver groups to manage the major incident process by aggregating and providing actionable information. The MIM workbench is integrated with the Task Communications Management flow and enhanced to include the Communications overview and the Post Incident report.

## Conference call management

Notify role inheritance: The itil role inherits the `notify_view` role when the Incident Communications Management (`com.snc.iam`) and the Notify (`com.snc.notify`) plugins are activated, enabling an itil user to view the Notify Conference Call Participant Session table (`notify_participant_session`).

End conference call: A new End Conference Call related link appears on the Incident Communication Plan Management form. After a conference call is initiated, a user with the `ia_admin` role has the option to join or end a conference call, whereas a user with the itil role can only join a conference call.

Recommended and Selected list: The Recommended section no longer displays the frequently called participants because the frequent callers may not always be relevant for the incident. In the Selected section, the user who initiates the conference call is added.

Adding participants based on group: Added the Group field to the Notify Participant [`notify_participant`] table that enables the major incident manager or the communication manager to involve groups in a conference call. When a group is selected, the person who is on-call in that group is then added to the conference.

The user or the host who initiates the conference call is automatically added to the list of participants.

Conference call leader: You can have a conference call leader for a conference call. The leader can initiate and end a conference call as well as kick, mute, and unmute participants on a conference call. A conference call leader can be any user with the `ia_admin` role or the

itil user to whom the Incident Communication Plan or the Incident Communication Task is assigned to.

Group name of a participant: If a user is added to a conference call and the user is a member of only a single group, then that group name is stored in the notify\_participant record. If the user is a member of multiple groups, then a formatter containing all those groups is displayed on the notify\_participant record.

### Dependency view for Business Services

ITIL users can see the Business Service Management (BSM) map or dependency view for a business service on the Incident, Problem, and Change request form.

---

**Note:** Currently, the Business Service field does not appear on the Change request form, but the user can add the field by clicking the Additional options menu icon and navigating to Configure > Form Layout.

---

## Changed in this release

### Major incident management

The major incident manager is responsible for a major incident when a child incident is promoted. Currently, even though the incident is promoted to a major incident, a caller has access to resolve or reopen the major incident. Starting this release, an ESS user is unable to resolve, reopen, or close a major incident even if the user is the caller.

The ESS user is prompted to enter work notes and the business impact at the time of major incident proposal and promotion.

Rejection notification: The ESS user is prompted to enter the rejection reason while rejecting a major incident candidate. The rejection notification is then sent to the user that the incident is assigned to and the user who proposed the incident as a major incident candidate.

## Removed in this release

- The Show "Create Incident" link property is removed from the Incident Management Properties UI because this field is related to Knowledge Management.
- The URL used for the "Create Incident" link property is removed from the Incident Management Properties UI because this field is related to Knowledge Management.

## Activation information

The Incident Management - Core plugin (com.snc.incident\_management) is available by default in new instances but it is not available on upgrade. Customers upgrading from Geneva or earlier versions must request the plugin.

### ITSM Virtual Agent release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® ITSM Virtual Agent is a new application in the London release.

ITSM Virtual Agent includes several predefined chatbot conversations designed to help your IT users complete common tasks, such as password reset and creating an incident.

## ITSM Virtual Agent features

### ITSM Virtual Agent conversations

Use the predefined ITSM Virtual Agent chatbot conversations to help your users resolve common IT-related tasks, such as ordering an item, checking IT ticket status, resetting a password, discovering outages, or opening an IT ticket.

## Activation information

[Virtual Agent](#) must be activated before you can use the ITSM Virtual Agent chatbot topics.

To activate this feature, request the Virtual Agent plugin (com.glide.cs.chatbot) through the HI Customer Service system.

You must have the admin role to activate the ITSM Virtual Agent Conversations plugin (com.snc.itsm.virtualagent) to access the predefined ITSM Virtual Agent topics.

For more information, see [ITSM Virtual Agent](#).

### Problem Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Problem Management product enhancements and updates in the London release.

## New in the London release

### Dependency view for Business Services

ITIL users are now able to see the BSM map or dependency view for a business service on the Incident, Problem and Change request forms.

---

**Note:** Currently the Business Service field is not on the Change request form but user can add the field by opening the form context menu and selecting Configure > Form Layout.

---

## Activation information

The Problem Management plugin (com.snc.problem) is activated by default for new and upgrade customers.

### Service Level Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow Service Level Management product enhancements and updates in the London release.

## New in the London release

### SLA Breakdown Definitions

Added a feature called SLA breakdowns. When activated and configured, you can generate breakdown data for each task SLA record by the Assignment group and the Assigned to field, capturing every user and group that owned the related task, the order they owned it, the amount of time and percentage of SLA duration their ownership consumed, and whether the SLA was breached while they owned the task. SLA breakdowns helps identify which users or groups helped to achieve an SLA or identify users and groups who most contributed to an SLA breach.

Defined a single breakdown definition for new customers. The definition is known as Incident SLAs by Assignment and has SLA definitions "Priority 1 Resolution (1 hour)" and "Priority 2 Resolution (8 hour)" associated with the definition. Upgrading customers must enable the SLA Breakdowns plugin (com.snc.sla.breakdowns). Once the plugin is activated, upgrading customers have a single breakdown definition defined called Incident SLAs by Assignment. This breakdown definition does not have any SLA definitions associated with it, by default. Upgrading customers must associate the SLA definitions that they want to track breakdown definitions for. Ensure that you have the London versions of the script includes TaskSLAController and RepairTaskSLAController before activating the SLA Breakdowns plugin (com.snc.sla.breakdowns) to ensure that breakdown data is generated correctly. If you have ever customized either of these two script includes, you must incorporate all customizations into the London versions of these files from the most recent upgrade. Added a table cleanup job sla\_breakdown\_by\_assignment. This job automatically removes any breakdown data (records) that are older than one year.

### New SLA Overview Homepage

Deprecated and replaced the SLA homepage with an all new SLA Overview dashboard. This new dashboard can be found by navigating to Service Level Management > Overview or Self-Service > Dashboards. This dashboard is enabled by default for new customers. Upgrading customers must enable the com.snc.sla.overview plugin to activate this new dashboard.

### New Performance Analytics Dashboard

Added a new Performance Analytics dashboard called SLA Overview (Premium). To enable this dashboard, the plugin (com.snc.pa.sla.overview) must be activated.

### New Task SLA Field Styles

Added field styles to the Task SLA list view, replacing the legacy colored dots with a bar graph which is colored based on the amount of SLA duration that has elapsed. SLAs with 50% or less duration are displayed as green, SLAs between 50-75% SLA duration are displayed as yellow, SLAs with 75-100% duration are displayed as orange, and any SLA marked as breached displays a red bar.

## Activation information

The SLA Breakdowns plugin (com.snc.sla.breakdowns) is activated by default for new customers. Upgrading customers must activate the plugin to install the SLA breakdowns feature.

## Service Catalog release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Service Catalog product enhancements and updates in the London release.

Service Catalog provides a requestor view of available service and product offerings provided by departments within the organization.

## London upgrade information

Before upgrading, you should be aware of changes made to the underlying Service Catalog data model. These changes affect the way that you implement multiple service catalogs. For details, see [Upgrade to multiple service catalogs](#). If you are upgrading from a version prior to the Fuji release, see [Migrate cart layouts](#).

## New in the London release

### [Multi-row variable set](#)

Use a multi-row variable set to capture variable data in a table layout while submitting a catalog item request for a group of entities.

---

**Note:** This variable set is also available in Service Portal.

---

### [Automated test framework for Service Catalog in Service Portal](#)

Write automated end-to-end tests for requester flows to validate catalog items in Service Portal. When you upgrade or modify an instance, run these tests to confirm that the instance still works as designed. The following test step configurations are available in the Automated Test Framework (ATF) for Service Catalog in Service Portal:

- Open a Catalog Item (SP)
- Open a Record Producer (SP)
- Set Variable Values (SP)
- Set Catalog Item Quantity (SP)
- Validate Variable Values (SP)
- Variable State Validation (SP)
- Validate Price and Recurring Price (SP)
- Add Item to Shopping Cart (SP)
- Order Catalog Item (SP)
- Submit Record Producer (SP)

---

**Note:** ATF for Service Catalog in Service Portal is not supported for order guides and multiple items in the cart.

---

## Checkout Shopping Cart ATF test step configuration

Use the Checkout Shopping Cart server test step configuration to test the submission of a shopping cart in the Now Platform and Service Portal.

## Assert type for the Search for a Catalog Item ATF test step configuration

Use the Assert Type field in the Search for a Catalog Item test step configuration to specify the condition for the success of the test step.

## Create Request UI action

Create a catalog request from other flows to join the Service Catalogflow. By default, this UI action is available from the incident flow, where you can create a request, and associate the request with the incident. You cannot add items to the wish list or save a record producer in these flows.

When you create a request from an incident, the caller of the incident is automatically set as the Requested For user for both the one-step and two-step checkout. If the two-step checkout is enabled, the fulfiller can change the Requested For user.

---

**Note:** The Best Practice - Incident Resolution Workflow plugin (com.snc.bestpractice.incident) should be active for creating a request from an incident.

---

Associate a record producer request with the parent table record by retrieving the sysparm\_parent\_sys\_id and sysparm\_parent\_table parameters from the URL using the RP.getParameterValue() method in the Script field of the record producer.

## Request Parent Mapping submodule

Use the Request Parent Mapping submodule to add the mapping configuration for associating a request with any parent table record. Only the admin and catalog\_admin roles have access to this submodule.

By default, the request mapping configuration is available for the Incident [incident] table.

## Service Catalog parameters

Use the following Service Catalog parameters to link the parent record to the child record when using the catalog experience, that is, when a catalog is launched from a parent record (for example, incident).

- sysparm\_parent\_sys\_id
- sysparm\_parent\_table
- sysparm\_view

## Variable SQL Debugger

Use the Variable SQL Debugger to analyze the impact of the variable setup of a catalog item on its runtime performance, and identify the issues, if any. You can review the processing time of the catalog item and its variables based on the triggered SQL queries.

### Permission tab for a variable

Use the Permission tab while creating a variable to specify the read, write, and create roles of the variable.

If no role is specified in this tab for the read, write, or create actions, all users who can access the catalog item can perform these actions irrespective of their role. For example, if no role is specified for the Write roles field, all users who can access the catalog item can edit the variable value in the variable editor.

If you are upgrading to London and the catalog item form has been customized, the Permission tab is not visible until you revert the customization.

### Decryption support for a masked variable

Decrypt and encrypt the values of a masked variable using the Show and Hide buttons. These buttons are not available for a fulfiller (itil) without the `catalog_view_masked` role. However, the requester always has access to these buttons and the variable value on records submitted by the requester. The decryption support is also applicable in Service Portal.

### Order for a catalog UI policy action

Use the Order field for a catalog UI policy action to specify the sequence in which the UI policy action is evaluated. The order is evaluated from the lowest value to the highest value. This order is also applicable in Service Portal.

### Post-processing script for a record producer

Use the Post insert script field on a record producer form to include scripts that operate on the submitted record, after the record is inserted in the associated table.

---

**Note:** Post insert script overrides the target record values and record producer template values.

---

### Clear a variable value using a catalog UI policy action

Select the Clear the variable value check box on a catalog UI policy action to clear the variable value. The selection is also applicable in Service Portal.

### Auto-population of names for variables and variable sets

The Internal name field for a variable set is auto-populated based on the Title field for all variable types except break, container split, and container end.

The Name field for a variable is auto-populated based on the Question field for all variable types except break, container split, and container end.

### Server-side scripting support for variables of a variable set

Use the Internal Name field of a variable set to access its variables that are set on the target record. You can access the variable value of the target record in a script using:

```
gr.variables.variable_set_name.variable_name
```

For example, consider a variable set with the internal name **vset** and the variable **single**. Access the variable value of the target record in a script using:

```
gr.variables.vset.single
```

### Ability to access variables for task records

Use scripts to access variables of task records using the following access points:

- `gr.variables`: Gets GlideElementVariable of variables and variable sets associated with a GlideRecord.
- `gr.variables.getVariableValues()`: Gets the name value pair of variables associated with a GlideRecord.
- `gr.variables.getElements()`: Gets GlideElementVariable for variables within a GlideRecord.
- `gr.variables.<var_name>.getQuestion()`: Returns the Question object of each GlideElementVariable.

### Support for a record producer variable mapped to an encrypted field

If the record producer variable is mapped to an encrypted field of a target table, then this variable value is not stored in Question Answer [question\_answer] table. So, this variable value is also not available in the variable editor of the target record.

If the record producer variable is masked and encrypted, and mapped to an encrypted field of a target table:

- The variable value is not stored in Question Answer [question\_answer] table.
- The decrypted value of the variable is copied to the encrypted field of the target record.

### UserCriteriaLoader API

Use the UserCriteriaLoader API to get the user criteria associated with a specific user, or a user associated with a specific linkTable. To use this class in a scoped application, use the `sn_uc` namespace identifier.

### New method for the Service Catalog REST API

Use the following method to get the display value of the specified variable.

```
POST /sn/sc/servicecatalog/variables/{sys_id}/display_value
```

## Changed in this release

### Category change for the Search for a Catalog Item ATF test step configuration

Moved the Search for a Catalog Item test step configuration from the Service Catalog category to the Server category.



## Choice direction of a variable question in Service Portal

The Choice direction field value of a Lookup multiple choice variable question is applicable in Service Portal.

## Default quantity choice

The default quantity choices are 1-10. These values are configured under System Definition > Choice Lists for the Item [sc\_cart\_item] table and the quantity element.

## My Request Filter condition

The default filter condition is updated to display the active requests opened by or requested for the current user by navigating to Self-Service > My Requests.

## Modifications to a variable set

- Variable set is elevated as a first-class citizen in Service Catalog. Like variables, a variable set has read, write, and create roles. If roles are provided for a variable set, the roles are applicable for the variables within the set. Roles of an individual variable are overridden by the roles of the variable set.
- The Name field of a variable set is deprecated and replaced with the Title field.
- A catalog item cannot have two variable sets with the same internal name.
- A catalog item cannot have a variable set and a variable with the same name.

## Modifications to the Service Portal API

The result for \$sp.getCatalogItem() API has changed to:

```
{
  ..
  _fields: {
    name: '<name>'
    variable_name: 'IO:<sys_id>'
  }
}
```

Prior to the London release, the result was as follows:

```
{
  ..
  _fields: {
    name: 'IO:<sys_id>'
    variable_name: '<name>'
  }
}
```

## Removed in this release

- Removed sc\_cat\_item\_producer from the exclusion list of the glide.sc.item.order\_guide\_exclusion property.

## Activation information

Active by default.

### Walk-up Experience release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Walk-up Experience is a new application in the London release.

Walk-up Experience enables your IT organization to set up a contact channel to support both online check-in and onsite check-in to a pre-established walk-up service center. Walk-up Experience is for anyone who would prefer to meet face-to-face with an experienced IT technician in a welcoming and supportive environment.

## Walk-up Experience features

### Domain separation

Use the domain separation feature to define which end users can access each location queue. Work within a domain-separated environment when addressing interaction tickets associated with a location queue. Access management and administration configurations residing in the walk-up location queue records. These configurations are available to the respective domain managers and admins. Reuse portal pages across different service portals designed and configured for separate domains.

### Requester experience

Check into a walk-up queue and submit issues or requests online from a laptop, tablet, or mobile device. Participate in customer-satisfaction surveys both onsite at the walk-up location and via email. Receive push and email notifications regarding walk-up interaction creation and assignment.

### Customization and configuration

Configure the Walk-up Experience application to meet your specific requirements. You can decide when to send notifications to users, establish physical queue locations and operating schedules, integrate with CSAT surveys, and associate stockrooms with queue locations. Customize the Walk-up Experience portal with your own unique branding and logo.

### Fulfiller experience

Manage all aspects of a Walk-up Experience location and its interaction demand. View assigned walk-up locations, interactions, and associated stockrooms used for walk-up fulfillment.

### Stockroom and inventory management

Create stockrooms and assign assets and groups specifically for your Walk-up Experience location.

View and access stockrooms to provide commonly requested hardware and software assets to walk-up queue guests.  
Monitor inventory and alert asset and inventory managers when additional consumables are needed.

### Dashboard and reporting

View basic high-level reporting on incident and request types, record volume, average wait and service times, assignments by technician and location, and more.  
Oversee and gain analytical knowledge about the walk-up location operations and report performance data to upper management.

## Activation information

You can activate the Walk-up Experience plugin (com.snc.walkup) if you have the admin role. This plugin includes demo data.

For more information, see [Walk-up Experience](#).

## Performance Analytics and Reporting release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Performance Analytics and Reporting have new and updated features in the London release.

- [Performance Analytics release notes](#)

ServiceNow® Performance Analytics product enhancements and updates in the London release.

- [Reporting release notes](#)

ServiceNow® Reporting product enhancements and updates in the London release.

- [Dashboards release notes](#)

ServiceNow® Dashboards product enhancements and updates in the London release.

### Performance Analytics release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Performance Analytics product enhancements and updates in the London release.

## New in the London release

### Dependency Assessment Tree View

View, analyze, and edit your performance analytics components including widgets, indicators, and breakdowns, from a single view. By viewing the hierarchy of components and the relationships between them, you can see immediately who is impacted by a change and what the effects of your changes are.

## Breakdown Management

Track breakdowns back to indicator sources and configure the breakdown matrix using an intuitive UI.

## Breakdown Matrix Management

Collect and manage two-breakdown combinations for automated indicators in a new UI.

## Changed in this release

### Spotlight

- Changed Spotlight job scheduling so it is set for each Spotlight group. You no longer have a single job for all Spotlight groups. See [Create a Spotlight group](#).
- Changed score retention. Only the most recent Spotlight scores are available. New Spotlight scores overwrite older scores. The first time you run a Spotlight job after upgrading to this version of ServiceNow®, any existing Spotlight scores are deleted.
- Provided Spotlight logs to help in debugging. See [Spotlight logs](#).
- Automated the creation and maintenance of database views that join Spotlight group and facts tables. See [Viewing Spotlight data](#).
- Provided on-the-fly Interactive Analysis to examine the results of Spotlight evaluations. See [Spotlight interactive analysis](#).

### Text analytics

Added the ability to search for phrases, not only individual words, in indicator text fields.

### Analytics diagnostics

Added the ability to run all active, applicable diagnostics for one indicator. Previously, you could only run one diagnostic for all applicable records, or all diagnostics for all applicable records.

### Performance Analytics data forecasts

Added the Random Forest method for time series, which creates a multitude of decision trees based on the historical data and then outputs the mean prediction of the trees. Also added 95% confidence intervals to forecasting on time series widgets, and upper and lower bounds for forecast values.

## Removed in this release

- Spotlight: The previous scheduled job, which was run for all Spotlight groups at once, has been removed and replaced with scheduled jobs set for each Spotlight group.

## Activation information

Platform feature — Complimentary Performance Analytics for Incident Management is active by default.

- Full Performance Analytics functionality requires a separate subscription. For more information, see [Get licensed Performance Analytics](#).

### Reporting release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Reporting product enhancements and updates in the London release.

## New in the London release

### [New dot-walking component](#)

Report on extended table fields more easily with reworked dot-walking functionality.

### [Report\\_view access control](#)

Restrict views of content derived from a table or views of reports with aggregated data grouped by a field specified in the ACL. Prevents users from seeing unauthorized data.

### [New report\\_user role](#)

Assign this user role to provide access to reporting functionality and creating reports, but not sharing them.

### [Interactive filter enhancements](#)

Apply filters to database views as well as to all tables in a hierarchy.

## Changed in this release

### Report type search

When you create a report, the Report type choice list automatically populates when you enter text. For example, if you type **pivot**, only Pivot table and Multilevel pivot table report types are shown.

### Favorites filtering in the [Reports list](#)

When you view the Reports list, Favorites filtering is on by default. Click the Favorites filtering button to display all reports.

### [Remove the old Report Builder UI](#)

The admin can remove the old Report Builder and restrict users to the new Report Designer UI for creating and editing reports.

## Plotting nil vs. null data in time series reports

When creating or editing time series reports that contain multiple datasets, you can choose to have time points with missing data plotted as gaps rather than as zero values. For more information about creating time series reports that use line visualizations, see [Report types and creation details](#).

## Activation information

- Platform feature – active by default.

### Dashboards release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Dashboards product enhancements and updates in the London release.

## London upgrade information

- Responsive dashboards are enabled by default on new instances. On upgrading instances, responsive canvas must be [enabled by an administrator](#).

## New in the London release

### Responsive dashboard enhancements

Functionality for sharing dashboards improved. The default message that is sent when you share a dashboard is clearer. Dashboard sharing uses standard platform notifications, so you can modify default email notification content and styling. In addition, you can personalize the message or choose not to send the invitation email at all when, for example, you share a dashboard regularly. For more information, see [Share a responsive dashboard](#). Dashboard styling and visualization options improved, including the ability to hide widget headers and change the colors of the dashboard background, widget header, and widget title. For more information, see [Configure widget layouts](#).

### [Dashboard\\_admin role added](#)

Users with the dashboard\_admin role have full view, edit, delete, and share privileges on all dashboards in the instance, including inactive dashboards.

### Dashboard Tab Management

The application checks if a tab is linked to another dashboard when a user tries to delete it. Users can no longer edit or delete tabs that they do not own. Deleting a dashboard also deletes related tabs if they are not used anywhere else. For more information, see [Manage responsive dashboards](#).

### [Dashboards Overview enhancements](#)

- The sysparm\_group parameter added so that users can pre-select the dashboard group in the URL of the Dashboards Overview. For more information, see [Dashboard group URL parameter](#).

- Tooltips with explanations and field names added to the elements of each card in the Dashboards Overview.
- Dashboard group picker added to Dashboards Overview.
- Inactive dashboards are only visible on the Dashboard Overview page and in the dashboard picker to the dashboard owner and to administrators.
- [Dashboards upgrade information](#)

Dashboards upgrade information for the London release.

#### Dashboards upgrade information

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Dashboards upgrade information for the London release.

## Enable Responsive Dashboards

To use Responsive Dashboards, both the Responsive Dashboards and Responsive Canvas plugins need to be active.

- If Responsive Canvas was enabled in Helsinki, Istanbul, or Jakarta, Responsive Dashboards functionality is enabled on upgrade to London. After upgrade all dashboards are responsive, including dashboards that were not responsive during Helsinki. All users on your instance can create, edit, and share dashboards.
- If Responsive Canvas was not enabled in Helsinki, Istanbul, or Jakarta, Responsive Dashboards functionality is not enabled on upgrade to London. The plugins are activated by default, but the `glide.cms.enable.responsive_grid_layout` system property is set to false. To enable Responsive Dashboards, set this property to true.

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**Note:** If the `glide.cms.enable.responsive_grid_layout` does not exist or if it exists and is set to true, Responsive Dashboards functionality is enabled.

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If you are upgrading from a release prior to Helsinki, Responsive Dashboards functionality is not enabled on upgrade to London. The plugins are activated by default, but the `glide.cms.enable.responsive_grid_layout` system property is set to false. To enable Responsive Dashboards, set this property to true.

## Review dashboard layouts after enabling Responsive Canvas

- During conversion to Responsive Canvas, the layout of dashboards may slightly change. Highly customized dashboards may have significant changes, such as different widget layouts. After upgrading, review each dashboard for changes and adjust the layout as necessary on the drag-and-drop canvas.

## Dashboard versions of homepages after enabling Responsive Canvas

- If you have Responsive Canvas enabled, you will be prompted to convert your homepages to responsive dashboards. During conversion to Responsive Canvas, the layout of dashboards may slightly change. Highly customized dashboards may have significant

changes, such as different widget layouts. After upgrading, review each dashboard for changes and adjust the layout as necessary on the drag-and-drop canvas.

## Migration of permissions

- For releases prior to Istanbul, Performance Analytics roles were required to view and edit dashboards. Starting in Istanbul, dashboards use a new permissions system and Performance Analytics roles are no longer required to view or edit dashboards. To ensure access to existing dashboards remains the same after migration, the `pa_viewer`, `pa_admin`, and `pa_power_user` roles are added to a dashboard or its group during migration to the London permissions.

These roles are typically added directly to the dashboards they apply to. However, when no role permissions are defined for the dashboard or the group a dashboard belongs to, the `pa_viewer` view permissions is applied to the dashboard group. (`pa_power_user` and `pa_admin` roles are still applied to the dashboard.)

Additionally, during the upgrade all existing dashboards are configured to require the `pa_viewer` role to view with the Restrict to role field on the dashboard properties form. This restriction provides an extra layer of security.

### Related Topics

- [Upgrade hour instance](#)
- [Enable responsive dashboards](#)

## Security Operations release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Security Operations has new and updated features in the London release.

- [Security Incident Response release notes](#)

ServiceNow® Security Incident Response product enhancements and updates in the London release.

- [Vulnerability Response release notes](#)

ServiceNow® Vulnerability Response product enhancements and updates in the London release.

- [Configuration Compliance release notes](#)

ServiceNow® Configuration Compliance product enhancements and updates in the London release.

### Security Incident Response release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Security Incident Response product enhancements and updates in the London release.



With Security Incident Response (SIR), manage the life cycle of your security incidents end-to-end from initial analysis to containment, eradication, and recovery. Security Incident Response enables you to get a comprehensive understanding of incident response procedures performed by your analysts over time and understand trends and bottlenecks in those procedures with analytic-driven dashboards and reporting.

Built-in integrations with third-party cyber security solutions and partner-developed integrations from the ServiceNow Store enable security automation and orchestration for efficient and accurate incident response.

## New in the London release

### Setup Assistant

Walk through the Security Incident Response setup process in a simple, step-by-step fashion. The Setup Assistant helps you discover which capabilities of Security Incident Response require configuration, identify what permissions are required to configure them, and learn what settings are recommended for your environment. Setup Assistant helps you deploy Security Incident Response quickly and efficiently.

### Security Analyst Workspace

Use the tile-based Security Analyst Workspace to easily and efficiently perform day-to-day security analysis work. The customizable interface includes a peek feature for quickly browsing key incident details, and tools for rapidly transitioning from investigation to containment tasks.

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**Note:** To activate this feature, request the Security Incident Response UI plugin (com.app\_secops\_ui) through the HI Customer Service system.

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### Security Analyst Playbook

Resolve certain types of security threats in a step-by-step manner using the Built-in Security Analyst Playbooks. For example, an analyst can use the playbook to resolve phishing attacks and threats caused by malicious code activity.

## Changed in this release

### User-Reported Phishing Enhancements

The User-Reported Phishing feature, introduced in the Kingston release, has been enhanced to receive forwarded phishing mail submissions. Alert employees can forward suspicious mails from any device (including mobile phones) to their ServiceNow instance mailbox to automatically generate a phishing security incident for the Security Operations Center to work on.

### Domain Separation Support for Integrations

All existing and future integrations are domain separated, enabling Managed Security Service Providers to provide domain-separated implementations of integrations, such as threat lookup, observable enrichment, and sighting search on a per-user basis. Domain separation removes any limitations on using one common implementation of an integration for all users.

## Activation information

Activate the Security Incident Response (com.snc.security\_incident) plugin and configure it based on the needs of your organization using Setup Assistant. This plugin is available as a separate subscription.

### Vulnerability Response release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Vulnerability Response product enhancements and updates in the London release.

The Vulnerability Response application in Security Operations prioritizes vulnerable items and adds business context to help security determine whether business critical systems are at risk. Using the CMDB, Vulnerability Response can easily identify dependencies across systems and quickly assess the business impact of changes or downtime. Vulnerability Response provides a comprehensive view of all vulnerabilities affecting a given service, as well as, the current state of all vulnerabilities affecting the organization.

## London upgrade information

For releases prior to Kingston, during upgrade the Vulnerable Item table is reparented to improve performance. If you have large numbers of vulnerable items, the upgrade process may take additional time. No special handling is needed, however, you should stop any Vulnerability Response activities prior to upgrade and record your vulnerable item count. Once complete, verify that your pre- and post-upgrade vulnerable item counts match each other. For more information on the impact of reparenting, see the [Upgrade impact of reparenting change in the Kingston release \[KB0680550\]](#) article in the HI Knowledge Base. For information on the upgrade impact to existing instances, see the [Vulnerability Response: FAQ for Kingston Upgrade \[KB0680543\]](#) article in the HI Knowledge Base. This information does not apply if you upgrade from Kingston to this release. For Kingston release information, see [Kingston Vulnerability Response release notes](#).

To reduce upgrade time, if you have Qualys or a third-party integration installed, delete all attachments on your integration data sources. You can find the attachments by navigating to System Import Sets > Administration > Data Sources and searching by integration. See [Manage attachments](#) for more information.

Application administration is not enabled, by default, in Vulnerability Response for upgrades. If you have added custom tables that rely on inherited ACLs, you must recreate the ACLs on that custom table. If you added custom roles or custom ACLs, and you enable Application administration, retest those roles and ACLs after upgrading. Ensure the assignable by attribute on the roles is set correctly to enable access to application administration.

**Note:** Once enabled, Application administration cannot be disabled.

Existing CI Identifier Rules are disabled by default but not removed. They appear in Security Operations > CI Lookup Rules. To reenabling, open a rule and enter values for Source and Source field, select the Active check box, and click Submit.

When upgrading from a version prior to Kingston, the Vulnerable Items by Remediation Target Status report does not appear in the Vulnerability Response Overview and must be added manually.

## New in the London release

### Setup Assistant

Use Setup Assistant to walk you through the Vulnerability Response setup process in a simple, step-by-step fashion. Setup Assistant helps you discover which capabilities of Vulnerability Response require configuration, identify what permissions are required to configure them, and learn what settings are recommended for your environment. Setup Assistant helps you deploy Vulnerability Response quickly and efficiently.

### CI Lookup Rules

Configure the tables and fields within the CMDB that are used to look up existing Configuration Items when importing Vulnerable Items with CI Identifier Rules. They are also used for other Security Operations integration use cases. Rules are extensible to accommodate attribution and data that may be unique to a customer environment.

### Multi-source Qualys vulnerability integration support

Provide a unified view into the vulnerability exposure of your organization, using the Vulnerability Response multi-source support for the Qualys Cloud Platform. Multiple vulnerability assessment application deployments, and even multiple deployments from the same vulnerability assessment vendor, often occur after mergers and acquisitions.

Multi-source support enables you to integrate multiple Qualys Cloud Platform deployments into a single instance of Vulnerability Response. Assets identified by multiple Qualys deployments and their vulnerabilities are consolidated and reconciled with your CMDB. This consolidation happens even when scan processes overlap between the multiple deployments. Qualys vulnerability integration Knowledge Base records are normalized across deployments, ensuring that instances of the same vulnerability across deployments are treated as the same vulnerability.

### Discovered Items

Understand how hosts, discovered in your vulnerability assessment application, correspond to configuration items (CIs) in your CMDB using the Discovered Items feature. You can see how vulnerability instances from your vulnerability assessment application are de-duplicated when imported. For each host represented in each of your vulnerability assessment applications, a discovered item is created. The discovered item is then associated with its corresponding CI in the CMDB. Host information from your vulnerability assessment application is saved in the discovered item, which can aid in reclassifying the associated CI, as needed. The default listing for Discovered Items is unmatched CIs.

### Vulnerability Rollup Calculator

Use the risk score of vulnerable items to roll up the risk score at the Vulnerability group level.

### Risk Score enhancements

See how to use the interface to create a calculator using sample risk calculators, provided with the base system. These calculators are disabled by default.

## New Reason added to the Closed state

Added Fixed with Exceptions to the Vulnerability Group Closed state. This choice handles the case where not all vulnerable items are fixed, but the remediation specialist is finished working with that group.

## System property: `sn_vul.impacted_services.limit`

Sets a limit on the number of vulnerable item records the scheduled job retrieves when calculating impacted services. Located in `sys_properties.list`.

## Changed in this release

### Reasons list for deferrals

The reasons for a deferral have changed and increased in number.

- Awaiting maintenance window
- False positive
- Fix unavailable
- Risk accepted
- Mitigating control in place
- Other

## Removed in this release

- **Vulnerability Configuration module:** Replaced by Setup Assistant.
- **CI Identifier Rules:** Removed in favor of CI Lookup Rules.
- **Closed state Fixed reason:** Removed the Fixed reason. You are not able to change the vulnerability group state manually to Closed/Fixed. The vulnerability group state changes automatically to Closed/Fixed when all the vulnerable item states are changed to Closed/Fixed.

## Activation information

Activate the Vulnerability Response (`com.snc.vulnerability`) plugin and configure it based on the needs of your organization using Setup Assistant. This plugin is available as a separate subscription.

### Configuration Compliance release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Configuration Compliance product enhancements and updates in the London release.

Configuration Compliance is a Secure Configuration Assessment (SCA) application that exposes your most high-impact, configuration-related security vulnerabilities. Configuration Compliance aggregates scan results from integration with scanning applications, such as Qualys Cloud Platform. You can prioritize configuration compliance issues using the

Configuration Management Database (CMDB). Configuration Compliance tightly integrates with the IT change management process to remediate non-compliant configurations.

## New in the London release

### [Multi-source support in Qualys](#)

If you have multiple deployments of the Qualys Cloud Platform application, you can add an integration for each deployment. Data sourced from each deployment is identified and available in a single instance of Configuration Compliance.

## Activation information

Activate the Configuration Compliance [com.snc.vulc] plugin and configure it based on the needs of your organization. This plugin is available as a separate subscription.

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**Note:** Configuration Compliance can process scan data from various sources. The Qualys Cloud Platform plugin for Vulnerability Response has been extended to import Qualys PC content and scan results into ServiceNow Configuration Compliance. Plugins that support other configuration scanning applications, such as those from Tenable, Rapid7, and TripWire, may exist. See the ServiceNow Store for available plugins or consult your scanning application representative, for availability.

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## Software Asset Management release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

ServiceNow® Software Asset Management product enhancements and updates in the London release.

The Software Asset Management application lets you manage your software assets by automatically normalizing, reconciling, and reclaiming software assets.

## London upgrade information

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**Warning:** If you upgrade to Software Asset Management (com.snc.samp) plugin from Software Asset Management plugin (com.snc.software\_asset\_management), you cannot revert back to Software Asset Management plugin (com.snc.software\_asset\_management).

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## New in the London release

### [Adobe Cloud License Management publisher pack](#)

Use the Adobe Cloud License Management publisher pack for enhanced discovery of Adobe subscriptions to determine license compliance. The Adobe User Management API is used for integration with Adobe Creative, Experience, and Document Cloud for normalization and reconciliation. Discovery sources include ServiceNow Discovery,

Microsoft SCCM, and other third party discovery sources that can integrate as a data source in the ServiceNow CMDB.

[Adobe Cloud dashboard](#) using Performance Analytics is activated with this publisher pack to forecast cloud license cost and consumption.

### [Citrix publisher pack](#)

Use Citrix publisher pack for reconciliation and optimization of Citrix products, such as XenApp and XenDesktop, to determine license compliance. Optimization includes license usage for concurrent users as well as per device, per processor, and per user. ServiceNow Discovery identifies applications deployed in your Citrix farm from the Citrix Delivery Controller using OData APIs.

[Citrix dashboard](#) using Performance Analytics is activated with this publisher pack for compliance and cost optimization.

### [Software lifecycle content included in the Software Library](#)

Identify risk of software installed throughout your environment using software lifecycle content, such as general availability and end-of-life dates, provided as part of the Software Library. Software lifecycle content is also useful for [Technology Portfolio Management](#) (ITBM) to perform application rationalization.

### [Automated software entitlement import](#)

Streamline the process of importing software license entitlements into the Software Asset Management application using a Microsoft Excel spreadsheet. Critical validation is performed during the import, such as identification of errors and duplicates, to ensure the data is accurate and complete. Validation records are included in the Entitlement Import Error list.

### [License Change Projection](#)

[Integrate Change Management with Software Asset Management](#) to automatically calculate the impact of software license costs within Change Management when a change is proposed.

### [License Position report](#)

Use the License Position report to view compliance details for each software model in a single list. The License Position report makes your license position easy to understand from reconciliation output.

### [On-premise customer support](#)

Upload Software Library content to your on-premise environment from a zip file to take full advantage of the Software Library in Software Asset Management. On-premise customers can participate in the Software Asset Management Content Service by exporting custom content to contribute to the improvement of the normalization service. Exported data includes custom content, such as discovery models not fully normalized, and custom part numbers.

### Updated dashboards using Performance Analytics to trend KPIs for SAM

Leverage native ServiceNow platform capabilities to trend Microsoft, Oracle, IBM, VMware, and Citrix software cost and compliance key performance indicators (KPIs) over time. You can also customize your own KPIs to track progress toward your software asset goals.

### IBM publisher pack enhancement

Automate reconciliation of IBM products, including complex server licensing scenarios, using IBM publisher pack. Integration with IBM BigFix Inventory discovery application is used to measure subcapacity and full-capacity license compliance for PVU and RVU license metrics.

### Oracle publisher pack enhancement

Set the Oracle reconciliation property for a VMware vCenter cluster so that all processors on every ESX server are considered when determining license compliance. [Oracle options usage data](#) is also collected.

### Normalization suggestions

Evaluate suggestions to normalize discovery models which were previously manually normalized incorrectly. Suggestions are automatically identified if an error exists after new normalization content is delivered to your instance via the Content Library. Suggestions can be either accepted, which updates the Discovery Model to the correct values, or rejected, which leaves the manually normalized values.

## Changed in this release

Unused rights have been renamed to rights available.

## Activation information

The Software Asset Management Professional (com.snc.samp) plugin requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data. Depending on your environment, you may choose to request one or more related plugins which also must be activated by ServiceNow personnel. See [Request Software Asset Management](#).

For the Software Asset Management (com.snc.software\_asset\_management) plugin and Software Asset Management Foundation (com.snc.sams) plugin features of Asset Management, see [ITSM Software Asset Management](#).

## Release notes summaries for London features

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Consolidated release notes information for new and updated London features.

## Learn about specific themes for multiple London products

In the London family, ServiceNow features and products were introduced or updated. Every new or updated feature and product has its own individual release notes topic, which includes information such as upgrade tasks, new features, changed features, browser requirements, and other specifications. These product-specific release notes are listed in [Features and changes by product](#).

To help users look over different classes of information at a glance, each release notes section has its own summary topic. For example, the [Browser requirements for all London features and products](#) aggregates all browser requirements for features that were introduced or updated in London.

- [Upgrade information for all London features and products](#)

Cumulative release notes summary on upgrade information for London features and products.

- [New features and products in London](#)

Cumulative release notes summary on new London features and products.

- [Changes to London features and products](#)

Cumulative release notes summary on changes to London features and products.

- [Removed features and products in London](#)

Cumulative release notes summary on features that were removed from London features and products.

- [Activation information for all London features and products](#)

Cumulative release notes summary on activation information for London features and products.

- [Browser requirements for all London features and products](#)

Cumulative release notes summary on browser requirements for London features and products.

- [Accessibility information for all London features and products](#)

Cumulative release notes summary on accessibility information for London features and products.

- [Additional requirements for all London features and products](#)

Cumulative release notes summary on additional requirements for London features and products.

## Upgrade information for all London features and products

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018

Cumulative release notes summary on upgrade information for London features and products.



## Upgrade and migration information

Before you upgrade to London, review the upgrade information for any products you may have. Some products require you to complete specific tasks before you upgrade.

Application or feature	Details
Asset Management	<p><b>Warning:</b> If you upgrade to Software Asset Management Foundation plugin (com.snc.sams) from Software Asset Management plugin (com.snc.software_asset_management), you cannot revert back to Software Asset Management plugin (com.snc.software_asset_management).</p>
Automated Test Framework	<p><b>Note:</b> Tests can be promoted to production instances, but the test execution property is disabled to prevent them from running on a production system. Run tests only on development, test, and other non-production instances. See <a href="#">Enable or disable executing Automated Test Framework tests</a></p>
Cloud Management	<p>If you are upgrading, to the current release, from a release prior to Jakarta with the cloud plugins (com.snc.azure, com.snc.aws, and orchestration.vmware) activated on your instance and you decide to activate the Cloud Management plugin (com.snc.cloud.mgmt), then the cloud plugins activated prior to Jakarta may not work correctly. Do not use the cloud plugins (com.snc.azure, com.snc.aws, and orchestration.vmware) because they are deprecated. You must migrate all configurations, discovery schedules, and catalog items to the post-Jakarta Cloud Management plugin (com.snc.cloud.mgmt).</p>
Dashboards	<ul style="list-style-type: none"> <li>Responsive dashboards are enabled by default on new instances. On upgrading instances, responsive canvas must be <a href="#">enabled by an administrator</a>.</li> </ul>
Edge Encryption	<p>When you upgrade from previous releases, you may encounter an issue during Edge Encryption proxy server upgrades because the proxy has not yet been upgraded to handle newly introduced request and response codes.</p> <p>During the proxy upgrade, a message like the following may appear in the proxy logs:</p> <pre>Error: 2018-05-25 09:48:44,758 WARN Unexpected response code 555 from the ServiceNow 2018-05-25 09:48:44,784 ERROR Update stats received error code : 555 : ServiceNow 2018-05-25 09:48:49,862 WARN Unexpected response code 555 from the ServiceNow</pre> <p>The solution is to restart the proxy and then retry the proxy upgrade.</p>
Event Management	<p>The upgrade process moves your instance to a new ServiceNow release version. Upgrading and patching your instance requires planning, testing, and validation. To ensure a safe and effective upgrade, create upgrade</p>

Application or feature	Details
Guided Tour Designer	<p>plans and test your upgrade on non-production instances before upgrading your production instance.</p> <p>The Guided Tour Designer was first introduced in the Jakarta release with support for guided tours on the standard platform UI. For new instances created in Jakarta and beyond, guided tours are active by default. For instances originating from pre-Jakarta, guided tours are inactive by default. See <a href="#">Activate guided tours</a> to enable the feature on your instance.</p> <p>With the London release, you can also enable guided tours to run on Service Portal pages. When you upgrade your instance to London, the following results occur.</p> <ul style="list-style-type: none"> <li>• For instances that are new in London, the Guided Tours for Service Portal feature is active by default.</li> <li>• For pre-London instances that you upgrade to London, the Guided Tours for Service Portal feature is inactive by default.</li> <li>• To run guided tours on Service Portal pages, ensure the <code>com.glide.guided_tours.enable</code> and <code>glide.sp.guided_tours.enable</code> properties are both set to True. See <a href="#">Activate guided tours</a> to enable the feature on your instance.</li> </ul>
HR Service Delivery	<hr/> <p><b>Note:</b> When upgrading from Istanbul, HR document templates have a new field. The Document type field helps to filter a list of document templates that appear on the HR case form. HR criteria works with this field to further narrow the list of document templates you want available for an HR case. Because Istanbul did not have this field, you must create new or select an existing document type for your document templates. See <a href="#">Document Types</a>.</p> <hr/>
MetricBase	<p>Legacy triggers are available only to upgraded instances. New activations of the MetricBase application do not include legacy triggers.</p>
MID Server	<ul style="list-style-type: none"> <li>• There is a new process for accessing the <code>install.service-now.com</code> download site for MID Server upgrades. New ServiceNow instances handle all traffic from the download site, which eliminates the need for MID Server host machines to connect with <code>install.service-now.com</code>. However, instances upgraded to the London release require their MID Servers to send their initial upgrade requests through <code>install.service-now.com</code>. After the first upgrade, MID Servers can send subsequent auto-upgrade requests directly to the instance, when the <code>mid.download.through.instance</code> system property is set to true. For details, see <a href="#">MID Server upgrade</a>.</li> <li>• The change to the Java Runtime Environment (JRE) installation procedure for new MID Servers does not affect upgrades of existing MID Servers. These MID Servers receive the supported JRE version when they upgrade.</li> </ul> <p>For additional information about MID Server upgrades, see:</p> <ul style="list-style-type: none"> <li>• <a href="#">MID Server pre-upgrade check</a>: Describes how the AutoUpgrade monitor tests the MID Server's ability to upgrade on your system before the actual upgrade.</li> </ul>

Application or feature	Details
	<ul style="list-style-type: none"> <li>• <a href="#">Upgrade the MID Server manually</a>: Describes how to upgrade your MID Servers manually.</li> </ul>
Notifications	<p>If you are upgrading from a pre-Jakarta release and want to enable <a href="#">randomized watermarks</a> in email notifications for upgraded instances, activate the Random Watermark Support plugin (com.glide.email.random_watermark). This plugin includes system properties for managing a watermark transition period, during which the system recognizes both randomized watermarks and non-randomized watermarks in emails created before upgrading. For details, see <a href="#">Notifications upgrade information</a>.</p>
Password Reset	<p>Platform feature – upgraded by default.</p> <hr/> <p><b>Note:</b> The Password Reset application is not available during upgrade.</p> <hr/>
Project Portfolio Management	<ul style="list-style-type: none"> <li>• Planning Console: If you are upgrading, the Client side planning console functionality for project scheduling is disabled. To enable the functionality, you must:             <ol style="list-style-type: none"> <li>1. Set the project property Enable firing of Business Rules on save from Planning Console to false, if it was set to true before upgrade.</li> <li>2. Set the Enable Client Side Planning check box to true.</li> </ol> </li> </ul> <hr/> <p><b>Note:</b> If you do not have any custom business rules on the fields listed below, mark Fire BR on Save to false for these fields in planning console column configuration:</p> <ul style="list-style-type: none"> <li>– State</li> <li>– Percent Complete</li> <li>– Actual start date</li> <li>– Actual end date</li> </ul> <hr/> <ul style="list-style-type: none"> <li>• Resource Management: Changes made to allocated hours now update only allocated hours in the resource plan. Prior to this, it had updated the planned hours. Because of this change, if you have customizations around Planned or Allocated hours and cost on the resource plan or resource allocation, you need to alter these in the London release.</li> <li>• Demand Management: On a demand form, the value for the new Assessment Required field is set to true for all existing demands on upgrade.</li> </ul>
Security Incident Response	<p>After you have completed the upgrade from Jakarta or Kingston to London, navigate to System DefinitionFix Scripts, activate and run the Update integrations to multi domain fix script to allow certain integrations to have multiple configurations defined. For example, if you have multiple Splunk instances, you can create connections and queries that run Sighting Searches across multiple Splunk instances. After the fix script has run, return to System DefinitionFix Scripts and deactivate it. It is important that the script not be allowed to run more than one time.</p>
Service Catalog	<p>Before upgrading, you should be aware of changes made to the underlyingService Catalog data model. These changes affect the way that you implement multiple service catalogs. For details, see <a href="#">Upgrade to</a></p>

Application or feature	Details
	<a href="#">multiple service catalogs</a> . If you are upgrading from a version prior to the Fuji release, see <a href="#">Migrate cart layouts</a> .
Security Incident Response	If you have completed an upgrade from Jakarta or Kingston to London, navigate to System Definition > Fix Scripts, run the Update integrations to multi domain fix script to allow certain integrations to have multiple configurations defined. For example, if you have multiple Splunk instances, you can create connections and queries that run Sighting Searches across multiple Splunk instances. After the fix script has run, return to System Definition > Fix Scripts and deactivate the fix script. It is important that the script not be allowed to run more than one time.
Service Portal	<ul style="list-style-type: none"> <li>• In new instances, search facets are enabled by default. If upgrading from a previous release, enable search facets by activating a record in the Page Route Maps [sp_page_route_map] table. See <a href="#">Enable search facets</a>.</li> <li>• Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must activate the Mobile and Service Portal version of the validation script to validate user input in the Service Portal. See <a href="#">Activate Service Portal validation scripts</a>.</li> <li>• In new instances, guided tours in Service Portal are enabled by default. If upgrading from a previous release, you must enable the com.snc.guided_tours.sp.enable system property to create a guided tour in Service Portal. See <a href="#">Activate guided tours for Service Portal</a>.</li> </ul>
Software Asset Management	<hr/> <b>Warning:</b> If you upgrade to Software Asset Management (com.snc.samp) plugin from Software Asset Management plugin (com.snc.software_asset_management), you cannot revert back to Software Asset Management plugin (com.snc.software_asset_management). <hr/>
Subscription Management	Platform feature – upgraded by default.
UI	The List v3 plugin is no longer available for new deployments.
Vulnerability Response	<p>For releases prior to Kingston, during upgrade the Vulnerable Item table is reparented to improve performance. If you have large numbers of vulnerable items, the upgrade process may take additional time. No special handling is needed, however, you should stop any Vulnerability Response activities prior to upgrade and record your vulnerable item count. Once complete, verify that your pre- and post-upgrade vulnerable item counts match each other. For more information on the impact of reparenting, see the <a href="#">Upgrade impact of reparenting change in the Kingston release [KB0680550]</a> article in the HI Knowledge Base. For information on the upgrade impact to existing instances, see the <a href="#">Vulnerability Response: FAQ for Kingston Upgrade [KB0680543]</a> article in the HI Knowledge Base. This information does not apply if you upgrade from Kingston to this release. For Kingston release information, see <a href="#">Kingston Vulnerability Response release notes</a>.</p> <p>To reduce upgrade time, if you have Qualys or a third-party integration installed, delete all attachments on your integration data sources. You can</p>

Application or feature	Details
	<p>find the attachments by navigating to System Import Sets &gt; Administration &gt; Data Sources and searching by integration. See <a href="#">Manage attachments</a> for more information.</p> <p>Application administration is not enabled, by default, in Vulnerability Response for upgrades. If you have added custom tables that rely on inherited ACLs, you must recreate the ACLs on that custom table. If you added custom roles or custom ACLs, and you enable Application administration, retest those roles and ACLs after upgrading. Ensure the assignable by attribute on the roles is set correctly to enable access to application administration.</p> <hr/> <p><b>Note:</b> Once enabled, Application administration cannot be disabled.</p> <hr/> <p>Existing CI Identifier Rules are disabled by default but not removed. They appear in Security Operations &gt; CI Lookup Rules. To reenable, open a rule and enter values for Source and Source field, select the Active check box, and click Submit.</p> <p>When upgrading from a version prior to Kingston, the Vulnerable Items by Remediation Target Status report does not appear in the Vulnerability Response Overview and must be added manually.</p>

## New features and products in London

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018

Cumulative release notes summary on new London features and products.

### New features

New products were introduced in London, and additional features were added to existing ServiceNow products.

Application or feature	Details
Accessibility	<p><a href="#">Enable accessible tooltips</a></p> <p>Enable accessible tooltips on a form. When accessible tooltips are enabled, a tooltip icon appears next to fields on a form. When focus is on the icon, a tooltip appears describing the field and whether or not it is mandatory. Your users can enable this option from the General tab of the system settings menu. You can also enable this preference for your users by navigating to User Administration &gt; User Preferences and searching for the preference glide.ui.accessibility.accessible.tooltips preference. Accessibility must be enabled for this user preference to apply.</p> <p><a href="#">Slushbucket multi-select</a></p> <p>Select multiple items in a slushbucket by pressing the spacebar to select each item. Use the arrow keys or the Tab key to navigate to the Add button to move items from one list to another.</p>

Application or feature	Details
	<p data-bbox="467 212 932 237"><a href="#">Open Card Details button on task cards</a></p> <p data-bbox="467 279 1350 333">View more card details in a task board by using the Tab key to navigate to the Open Card Details button.</p> <p data-bbox="467 375 1214 430"><a href="#">Configure a Windows 64-bit host to use 32-bit NVDA with Java applications</a></p> <p data-bbox="467 472 1345 613">The NVDA Assistive Technology screen reader is a 32-bit application that, when the Java Access bridge has been enabled, reads aloud Java applications built to support accessibility. If you encounter a problem using NVDA to access Java applications on a 64-bit Windows host, you must configure the Java Access bridge.</p>
Agent Intelligence	<p data-bbox="467 699 1010 724"><a href="#">Use Agent Intelligence for HR Service Delivery</a></p> <p data-bbox="467 766 1286 821">Use the default Agent Intelligence records as templates to create HR Service Delivery solutions.</p> <p data-bbox="467 863 916 888"><a href="#">Export trained solutions to production</a></p> <p data-bbox="467 930 1350 1043">Refine and test your machine-learning (ML) solutions iteratively on a non-production instance, and then use update sets to export the changes to your production instance. By following this process, you reduce the risk of having to retrain solutions on your production instance.</p> <p data-bbox="467 1085 1115 1110"><a href="#">Review increased support for solution class predictions</a></p> <p data-bbox="467 1152 1345 1266">Note that in the Kingston release, the system used the top 25 classes with the highest number of records when it built a solution. In this release, it uses the top 50 classes, increasing the amount of historical data it processes to predict the class confidently.</p> <p data-bbox="467 1308 766 1333"><a href="#">Copy a solution definition</a></p> <p data-bbox="467 1375 1334 1516">As you create separate solution definition records for each predictive model you want to support, you can copy a record and its configuration into a new form by clicking Copy Solution Definition from the context menu of the original record. Use the new record to make further solution updates without reconfiguring the entire solution definition.</p> <p data-bbox="467 1558 1125 1583"><a href="#">Choose language processing for your solution definition</a></p> <p data-bbox="467 1625 1294 1738">As you create and train a solution definition, you can select the prime language of the dataset you are training. Your options include Dutch, English, French, German, Japanese, and Spanish, with English as the default.</p> <p data-bbox="467 1780 798 1806"><a href="#">Review solution training tips</a></p> <p data-bbox="467 1848 1358 1932">Review additional guidance for solution training, such as tips on conditions you may want to set on the data records you want to train and the recommended number of records for training a good solution.</p>

Application or feature	Details
	<a href="#">Review encryption support</a> <p>Learn which types of data encryption are supported by Agent Intelligence.</p> <p><a href="#">Test a solution prediction</a></p> <p>After you train your ML solution, you can call on the Agent Intelligence API to make a solution prediction.</p> <p><a href="#">Save your ML solutions during a system clone</a></p> <p>When you request a clone of your instance, the system stores your trained solution components as attachment records. Adjust your <code>glide.platform_ml.clone_artifacts</code> system property to preserve these records during the system clone.</p>

## Agile Development 2.0

### Sprint Tracking

Work with a List view in addition to Board view under the Sprint Tracking tab, which was formerly called as Sprint Board.

#### List view

Stories within the sprints are displayed in a List view. You can break down a story into scrum tasks. Track the number of scrum tasks pending for stories. When Test Management 2.0 is installed with Agile Development 2.0, you can handle the following testing procedures from the List view:

- create tests for stories within sprints.
- find what tests are to be run for the sprint.
- maintain multiple versions of a test.
- run a single version of a test at one time.
- view which version of test has been run.
- review the history of test results.

### Triage Board

The Triage Board option is added to the Agile Board, Backlog tab. It is available only when Agile Development – Unified Backlog is installed. Triage Board helps you prioritize and sequence records of different task types in one backlog. It removes the overhead of converting records to stories.

## API

### New scoped classes and additional methods to existing scoped classes

Class	Activated with	Methods
<a href="#">Client</a>	MetricBase	<code>deleteSeries()</code>

Application or feature	Details		
	Class	Activated with	Methods
	<a href="#">DiscoveryAPI</a>	Discovery	discoverIpAddress(), reportCilpAddressStatus(), reportCiStatus()
	<a href="#">Flow</a>	Flow Designer	startAsync()
	<a href="#">GlideSecurityUtils</a>	Now Platform	cleanURL(), enforceRelativeURL(), escapeScript(), isURLWhiteListed()
	<a href="#">GlideStringUtil</a>	Now Platform	dotToUnderBar(), escapeAllQuotes(), escapeForHomePage(), escapeHTML(), escapeNonPrintable(), escapeQueryTermSeparator(), escapeTicks(), getHTMLValue(), getNumeric(), isBase64(), isEligibleSysID(), newLinesToBreaks(), normalizeWhiteSpace(), unescapeHTML()
	<a href="#">GlideXMLUtil</a>	Now Platform	removeInvalidChars(), validateXML()
	<a href="#">Interaction</a>	Interaction Management	create(), getInteraction(), transferToAgent(), transferToQueue(), accept()
	<a href="#">InteractionQueue</a>	Interaction Management	get(), isAgentFor(), acceptNext()
	<a href="#">Messaging</a>	Messaging Notification	send()
	<a href="#">ReportCiStatusOutput</a>	Discovery	getCiOperationStatus(), getCmdbCI(), getDiscoveryState(), getIpAddress(), getIssues(), getIssuesLink(), toJson()
	<a href="#">SentimentAnalyser</a>	Sentiment Analysis	analyze(), analyzeWithLanguage(), analyzeMultiple(), analyzeMultipleWithLanguage(), getDefaultConnector(), getConnectorByName()
	<a href="#">SPScriptedFacet</a>	Service Portal	addFacetItem()
	<a href="#">SPScriptedFacetService</a>	Service Portal	createFacet(), createMultiChoiceFacet()
	<a href="#">Subflow</a>	Flow Designer	startAsync()
	<a href="#">TransformPart</a>	MetricBase	resample(), iqr()
	<a href="#">UserCriteriaLoader</a>	User Criteria Scoped API	getAllUserCriteria(), getUserCriteria()



Application or feature	Details
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API

**New global APIs**

Class	Activated with	Methods
<a href="#">BusinessServiceManager</a>	Now Platform	addCI(), addManualConnection(), migrateManualToApplicationService(), populateApplicationService(), removeCI(), removeManualConnection()
<a href="#">CMDBDuplicateTask</a>	Now Platform	createDuplicateTask()

API

**New client classes and additional methods for existing classes**

Class	Activated with	Methods
<a href="#">GlideUIScripts</a>	Now Platform	getUIScript()

API

**New REST APIs**

API	Activated with	Method
<a href="#">Application Service API</a>	Now Platform	<ul style="list-style-type: none"> <li>• <code>api/now/cmdm/app_service/create</code></li> <li>• <code>api/now/cmdm/app_service/{sys_id}/getContent</code></li> </ul>
<a href="#">Task Communication Management API</a>	Incident Management - Major Incident Management	<code>sn_comm_management/task_communication_management/communication_detail/{taskSysId}</code>
<a href="#">Major Incident Management API</a>	Incident Management - Major Incident Management	<code>sn_major_inc_mgmt/mim/status/{incidentSysId}</code>
<a href="#">Service Catalog API</a>	Now Platform	<code>sn/sc/servicecatalog/variables/{sys_id}/display_value</code>
<a href="#">Interaction API</a>	Interaction Management	<code>/api/now/interaction</code>

Application Portfolio Management

**Capability Based Planning**

- Create root-level, child, or edit capabilities as well as delete leaf capabilities with the Manage Relationships button in the Capability Based Planning map. Clicking Manage Relationship button converts the CBP screen to edit mode so that you can manage the relationship between the capabilities from within the capability map itself.
- Make strategic decisions using the details of the total investments made in demands and projects that are attached to each business capability in the CBP map. Capability based planning integrates with Project Portfolio

Application or feature	Details
	<p>Management to retrieve the project investment details and the total number of demands created for a business capability and business application.</p> <ul style="list-style-type: none"> <li>Organize your business capabilities according to your preference in the hierarchy of the CBP map using an ID. The levels of all capabilities in a hierarchy from the root level to the leaf level are assigned an ID called <a href="#">Hierarchy ID</a>. The hierarchy ID of a root capability is generated based on the order of the capability in the hierarchy. Order is an integer value automatically assigned to all root-level capabilities. However, the hierarchy ID of a non-root capability is generated based on the hierarchy ID of its parent. Hierarchy IDs are automatically generated, prefixed to the capability, and make the Capability based planning map more intuitive by arranging the capabilities. The hierarchy ID is automatically updated whenever you add, update the parent, or delete capability. While adding or updating a capability within the hierarchy, the total number of levels is restricted to six in the hierarchy.</li> <li>Use the pagination option to display business applications attached to the business capability that you select on the left pane.</li> <li>Differentiate the project investments made at the business capabilities level from the business applications level in the Capability based planning with unique names. The number of project investments made at the capabilities level is named as Total Project Investments and at the applications level as Project Investments.</li> </ul>

### Technology Portfolio Management

- Search and filter applications using any attribute of the business application table in the TPM timeline view by clicking the filter icon. Use the condition builder to refine your search furthermore.
- Expand the business services and software models and you can distinguish the title from their respective details. The modified TPM timeline differentiates the titles of business services and software models in bold face separating them from the details.
- Click the hypertexts of business application, business service, and software models to navigate directly to their respective forms from the TPM timeline view.
- Assess the risk profile of a business application in the TPM timeline when you are reviewing the direct and indirect applications in the Capability based planning map. Click the Risk Profile icon of the business application in the Technology Risk view of the capability map to navigate to TPM timeline.

### Data integrity checks and data cleanup

Ensure data accuracy by [running the scripted audits and desired state audit](#). Running the audits helps you to know the gaps or missing information in the configuration data of business capability, business application, software models, and the life-cycle information. The scripted and desired state audit results are posted on the [Notifications](#) section of the Application Portfolio Management home page. Click the notification to open the related tasks or the related data certification tasks.

Application or feature	Details
	IT business application owners, software model owners, and business capability owners are granted sn_apm.apm_user role. This is to help them to navigate to Compliance > My Follow On Tasks in the application navigation, address the notifications they have received, and update the data.

#### Demand Creation within APM

Create a demand directly within APM rather than an idea. An idea is a thought about a possible course of action while a demand is a direct request for an action or response. Since a demand is action-oriented while ideas are not, creating an idea has been removed from Application Portfolio Management. Create and view demands in:

- The [bubble chart to achieve your application strategies](#).
- The [Application Portfolio Management portal](#) to achieve your goal.
- The [Technology Portfolio Management](#) (TPM) timeline for a business application.  
You can also add a demand or a project to a business application in the timeline view page.
- The [Capability Based Planning map](#) for the selected capability and at the business application level.  
In addition, you can:
  - Associate the demands to any business capability or business application.
  - View the consolidated number of demands created for the parent as well as its sub-capabilities.
- The [Demand form](#) when APM plugin is activated, with the mandatory Actions field capturing the course of action.

#### Data Certification

Notify the task owners by email when a certification task is newly assigned, reassigned, or close to expiring. You can configure the setting to true and set the email notifications Active to enable the functionality.

#### Business Relationship Management

Associate the business applications and capabilities to the business units and departments of your organizational structure. The organizational structure defines how the organizational activities are directed towards the achievement of organizational goals. Business Unit and Department data element fields are added to the Business Capability and Business Application forms.

#### Assessments and Surveys

##### [Image of a question in the survey notification email](#)

Use the Sample Metric field of a survey to include one of its metrics as an image in the email or invitation sent to a survey user. When the survey user clicks the image in the email or while previewing the HTML body, the entire survey is available to be taken.

Application or feature	Details
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#### [User-defined parameter in a survey question](#)

Use the Source Table field on a survey to specify a table whose field is used as a dynamic value for a question in a triggered survey. Use the Source Field field for a metric to specify the source table field that appears as a dynamic value for the question in a triggered survey. When this field value is selected, a `${param}` placeholder is added at the end of the question. You can move the placeholder to the relevant position.

When the survey instance or survey questions are generated, if the record table specified in the trigger condition matches the source table specified for the survey:

- The question with the dynamic value is included in the survey instance.
- The `${param}` placeholder is replaced with the source field value.

This functionality is applicable in both the platform and survey designer.

#### [Sentiment analysis for a survey](#)

Use sentiment analysis to determine whether user responses for a survey are considered positive, negative, or neutral. You can only include string type questions for this analysis. The survey responses to these questions are sent to the third-party platforms for analysis through the specified connector configurations.

#### [SentimentAnalyser API](#)

Use the SentimentAnalyser API to perform sentiment analysis on a string value. To use this class in a scoped application, use the `sn_nlp_sentiment` namespace identifier.

#### [Show Benchmarks and Create Improvement Initiative related links](#)

Use the Show Benchmarks related link for surveys, assessments, and quizzes, to open the Benchmarks Dashboard that provides visibility into your key performance indicators (KPIs) and trends.

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#### **Note:**

- This related link is available only for users with the `survey_admin`, `assessment_admin` and `survey_reader` roles, which have the `bm_viewer` role.
- You must opt in to Benchmarks to view the dashboard.

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Use the Create Improvement Initiative related link for surveys and assessments to open the Improvement Initiative window. From this window, create an improvement initiative record that helps in improving the performance of the survey.

Application or feature	Details
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**Note:**

- This related link is available only for users with the survey\_admin and assessment\_admin role.
- Users with the survey\_reader role can only view the created improvement initiative records.

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The Improvement Initiatives related list displays the improvement initiatives. This list is available only when there is at least one improvement initiative record.

[One Click survey](#)

Select the One Click Survey check box to enable a One Click survey in Service Portal. This check box can be selected if the Pagination setting for Service Portal view is set to None. A One Click survey has no introduction page in Service Portal.

A kiosk survey is a One Click survey with only one question of any of the following types:

- Image Scale
- Choice
- Likert Scale
- Numeric Scale
- Yes/No

This functionality can be enabled in both the platform and survey designer.

[Net promoter score survey results in the survey scorecard](#)

Use the question results in the survey scorecard, for net promoter score (NPS) template questions added to a survey, to display the aggregated NPS score with promoters, detractors, and passives.

[Public access of a survey from the survey designer configuration form](#)

Use the Public Survey field to enable public access to the survey.  
Use the Survey Publish URL field to view the survey URL that can be shared with users.

[Copy UI action in survey designer and quiz designer](#)

Point to the menu icon on the header bar in a survey designer and click Copy Survey to copy a survey.  
Point to the menu icon on the header bar in a quiz designer and click Copy Survey to copy a survey.

Application or feature	Details
	<p><a href="#">Scope impact when editing a survey, assessment, or quiz</a></p> <p>Edit a survey, assessment, or quiz that is in the same application scope of your current session.</p> <hr/> <p><b>Note:</b> When you start editing a survey of the same scope, and then change the session scope in a different tab, you cannot edit the survey further.</p> <hr/> <p><a href="#">UI action to migrate to New Survey Management</a></p> <p>Select a legacy survey by navigating to Survey &gt; Legacy Surveys &gt; Masters, and click the Migrate to New Survey Management UI action in the title bar to migrate a legacy survey.</p>
Asset Management	<p><a href="#">Two contract fields added to the Contract Management form</a></p> <p>Create a relationship between contracts using two contract fields. Specify the contract number assigned by the vendor in the Contract number field. Reference a parent contract using a lookup list in the Parent contract field, or create a new parent contract.</p>
Authentication	<p><a href="#">Custom URL</a></p> <p>If you want your ServiceNow instance to be accessible by a company-branded or custom URL, this feature enables this functionality. You can configure one or multiple custom URLs to your instance, and configure your custom URL to service portal mapping.</p> <p><a href="#">OIDC for inbound API requests</a></p> <p>ServiceNow can accept identity tokens generated by a third-party OIDC provider for inbound API calls. The identity tokens must be JSON Web Tokens (JWTs) issued by an OpenID.net certified OIDC provider after you configure a trust relationship with that provider. You can also automatically provision users based on the claims in the JWT token provided.</p> <p><a href="#">Support Microsoft Teams (MS Teams) authentication</a></p> <p>Your MS Teams user account can link to your ServiceNow user account to perform actions, such as pre-set conversations or notifications, through a conversational bot platform.</p> <p><a href="#">Support outbound mutual authentication for OAuth endpoints</a></p> <p>Adds support for mutual authentication when requesting an OAuth token. Mutual authentication enables client and server to identify and authenticate each other by using certificates.</p>

Application or feature	Details
Automated Test Framework	<p><a href="#">All steps configuration category</a></p> <p>View all available test steps for all test categories in a single listing by using the All Steps option.</p> <p><a href="#">Automated application navigator test steps</a></p> <p>Create automated test steps to verify if the application menus or modules that you selected for testing are visible in the application navigator.</p> <p><a href="#">Negative assert types for server step configurations</a></p> <p>Designate whether a positive or negative test step result is a successful outcome when using certain types of server test steps.</p> <p><a href="#">Screenshot timeout interval setting</a></p> <p>Manage the timeout interval for test step screenshots. Set the Screenshot Timeout interval in the Screenshots Capture Mode section in Automated Test Framework Properties. The default for this setting is 60 seconds. If your screenshot timeout is longer than 60 seconds, the Client Test Runner does not take a screenshot capture. You can change this value as needed, but you should review performance settings and browser caches on affected client systems before increasing it.</p> <p><a href="#">Whitelisted client errors</a></p> <p>Add known client errors to the whitelist to allow tests and steps to continue running when a specific error occurs. Set the report level to specify what the Automated Test Framework does when the error occurs in future tests.</p> <p><a href="#">Service catalog forms test steps</a></p> <p>Write automated end-to-end tests for requester flows to validate catalog items in Service Portal. When you upgrade or modify an instance, run these tests to confirm that the instance still works as designed. The following test step configurations are available in the Automated Test Framework (ATF) for Service Catalog in Service Portal:</p> <ul style="list-style-type: none"> <li>• Open a Catalog Item (SP)</li> <li>• Open a Record Producer (SP)</li> <li>• Set Variable Values (SP)</li> <li>• Set Catalog Item Quantity (SP)</li> <li>• Validate Variable Values (SP)</li> <li>• Variable State Validation (SP)</li> <li>• Validate Price and Recurring Price (SP)</li> <li>• Add Item to Shopping Cart (SP)</li> <li>• Order Catalog Item (SP)</li> </ul>

Application or feature	Details
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- Submit Record Producer (SP)

**Note:** ATF for Service Catalog in Service Portal is not supported for order guides and multiple items in the cart.

#### Service Portal forms test steps

Write automated tests to validate Service Portal forms. The following Automated Test Framework (ATF) test steps are available:

- Open a Service Portal form
- Set field values on a form
- Validate field values
- Validate field states
- Check UI action visibility
- Click a UI action
- Validate form submission

#### Quick start sample tests

Use quick start sample tests in the Automated Test Framework to evaluate some common Customer Service Management (CSM) and Field Service Management (FSM) scenarios. To execute these tests, you can activate and then create copies of the desired tests. The sample tests can be run as single tests or as a test suite.

### Benchmarks

#### Security Operations KPIs

Use Security Incident Response KPIs listed in the Security Operations category. There are three Security Incident Response KPIs provided.

#### Recommendations integration with Continual Improvement Management

Create a [Continual Improvement Management](#) (CIM) improvement initiative based on a Benchmarks recommendation.

#### Manual upload and download of scores using scheduled jobs

Manually upload or download Benchmarks scores on demand at any time of the month.

### Change Management

#### Change Schedules

Introduced a new Change Schedules scoped application. All upgrading users who have used the legacy Change Schedules application are



Application or feature	Details
	<p>encouraged to adopt the new application and disable the legacy application. The new Change Schedule application includes:</p> <ul style="list-style-type: none"> <li>• A change schedule overview page where you can find schedules filtered in three different categories.</li> <li>• A change schedule definition record type where you can define an unlimited number of change schedules which include related definitions allowing the display of related change tasks.</li> <li>• Style rules that can be defined from: <ul style="list-style-type: none"> <li>– The Style Rules table [chg_soc_style_rule]. Style rules defined in the table are rules that are applied to every schedule for all users.</li> <li>– The Change Schedule definitions or Change schedules user interface. Style rules defined here are applied to that schedule for all users.</li> </ul> </li> <li>• New tables included: <ul style="list-style-type: none"> <li>– chg_soc_definition_core</li> <li>– chg_soc_definition</li> <li>– chg_soc_definition_child</li> <li>– chg_soc_style_rule</li> <li>– chg_soc_definition_style_rule</li> <li>– chg_soc_def_child_style_rule</li> </ul> </li> </ul> <hr/> <p><b>Note:</b> All the tables extend the Style Rule Core table [chg_soc_style_rule_core].</p> <hr/> <ul style="list-style-type: none"> <li>• New Role: sn_chg_soc.change_soc_admin: Any user who possesses this role has full administrative rights to the Change Schedules application.</li> </ul>

### Change Advisory Board (CAB) workbench

**New Demote action:** A Demote action is added to the Current Agenda Item widget to enable CAB managers to move the current agenda item to the bottom of the Pending Agenda Items widget so the item can be discussed later.

**New Restore action:** Added Restore to the Pending Agenda Items widget. This action is available in the All Agenda Items filter and enables CAB managers to restore an agenda item that was previously skipped.

### Blackout and Maintenance Schedules

A new Source list is added to the Blackout Schedules and Maintenance Schedules forms. From the Source list, you can select the source of the blackout schedule, which includes Business Service, Change Request, and CI Class options. When one of these three values is selected, the condition builder at the bottom of the form is updated to that source.

- You can define blackout schedules and maintenance schedules against Business Services. Conflict Detection identifies potential scheduling conflicts for any CI that supports that business service.

Application or feature	Details
	<p><b>Note:</b> This feature requires that your business services be migrated to the Application Service introduced as part of the Unified Service Model.</p>

### Change Management integration with Discovery

Integrated Change Management with Discovery allows users who own ServiceNowDiscovery to update the ServiceNow Change Management Database (CMDB) by leveraging Discovery as an inherent part of their change management process. Discovery can be performed on any configuration item with an IP address. When Discovery is activated, [three new properties](#) are added to the Change Properties application providing complete control of how discovery is initiated and what state values can be initiated, either automatically or manually. The Business Rule, Trigger Auto Discovery, triggers Discovery when the `com.snc.change_request.auto.discovery` property is activated on the state transitions specified in the `com.snc.change_request.disco.auto.state.property` action. A new UI action, Initiate Discovery, is available to trigger discovery when the `com.snc.change_request.auto.discovery` property is activated on the state transitions specified in the `com.snc.change_request.disco.manual.state.property`.

### Change Management integration with Software Asset Management (SAM)

Change Management is integrated with ServiceNow Software Asset Management (SAM) providing insight into the potential cost implication of changes to processing resources (CPU & CPU Core) for software licensed by processor. If you want to activate the Change management - License Change Projections plugin (`com.sn_samp_change`), you must request assistance from ServiceNow personnel. In addition to activating SAM, you must also activate the Change management - License Change Projections plugin (`com.sn_samp_change`) to benefit from this feature. When a change to a CPU or a CI or CPU core resources is done using either Propose Change or Mass Update CI, the proposed change is captured in XML and passed to SAM when the change request transitions from New > Assess (Normal type) or from New > Authorize (Emergency type). SAM runs a calculation for the CIs in scope for the change and when the results are returned to Change Management, a summary result is displayed in a new form section called License change projection. To view a CI by CI breakdown of the license change projection, the License Change Projections related list must be manually added to the Change Request form. As part of the Change management - License Change Projections plugin (`com.sn_samp_change`), the `[samp_software_change_projection]` and the `[samp_ci_projection_summary]` tables are populated when the projection job is executed. The `[samp_software_change_projection]` table captures the projections for all affected CIs, whereby the `[samp_ci_projection_summary]` table summarizes those projections per CI. The `[samp_ci_projection_summary]` table is referenced in the License change projections related list.

### Cloud Management

#### Scoped application for content delivery

Using the standard Cloud Management entities, create scoped applications and publish them on a regular cadence to the ServiceNow Store. Create scoped applications using the ServiceNow Studio to support new cloud providers and configuration management providers.

Application or feature	Details
Communities	<a href="#">Move Cloud Management content across environments</a>
	<p>Move content, created in the Cloud Management application, from one environment to the other using ServiceNow Update Sets. Content entities such as blueprints, resource blocks, and cloud APIs, along with their dependencies, can be moved across environments.</p>
Configuration Compliance	<a href="#">Guided Setup for Communities</a>
	<p>Follow step-by-step instructions to configure Communities on your ServiceNow, Inc. instance. Perform structured configuration activities and monitor your progress.</p>
Contextual development environment	<a href="#">Multi-source support in Qualys</a>
	<p>If you have multiple deployments of the Qualys Cloud Platform application, you can add an integration for each deployment. Data sourced from each deployment is identified and available in a single instance of Configuration Compliance.</p>
	<a href="#">Globally scoped applications file management</a>
	<p>Move existing globally scoped metadata files between global applications, or remove files from the currently selected global application.</p>
	<a href="#">Delete and uninstall globally scoped applications only if empty</a>
	<p>Delete or uninstall globally scoped applications only if they are empty. If a globally scoped application has associated metadata files, you must first remove the metadata files and return them to the global scope, or move them to another global application.</p>
	<a href="#">Scoped and global application rollbacks</a>
	<p>Roll back installed scoped applications, including those applications in the global scope. When you do a rollback, you remove all code, table, and file updates that occurred in the initial installation. This rollback does not affect the global application record. To remove the global application record, you must instead perform an uninstall of the application.</p>
	<a href="#">Extension points</a>
	<p>Create and embed custom code hooks, called extension points, into scoped and global application base code. You can use extension points to designate where custom scripts can be called and then processed to extend base Now Platform functionality. Using extension points to integrate custom scripts eliminates the need to embed them directly into core application code, which prevents breakage of application upgrade paths.</p>

Application or feature	Details
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#### [Restricted caller access privilege settings](#)

Pre-approve or deny requests from application resources in a source scope that request access to target scope application resources. To restrict or approve access, you use Restricted Caller Access privilege settings, including:

- **Source-to-Scope** — Allows or denies access of a specific application resource in a source scope to all application resources in a target scope. For example, you can specify that a particular business rule in source Scope A can access all application resources, such as a table or Script Include, in target Scope B.
- **Scope to Target** — Allows or denies access of all application resources in a source scope to a specific application resource, such as a business rule, table, Script Include, or event, in a target scope. For example, you can specify that all application resources in source Scope A can access a Script Include in target Scope B.

#### Contextual search

#### [Ordering a service catalog item](#)

When a service catalog item is ordered from an existing record, a link is added between the order item request and the parent record.

#### [Searching action configurations list](#)

A new related list, Search Action Configurations, is added to the Table Configuration [cxs\_table\_config] and the Record Producer Configuration [cxs\_rp\_config] table. This related list is a replacement for the KB attachment field (Table Configurations only) and the Result action label and Result action value fields. Use this list to perform all the actions for the selected search context.

#### [Attaching knowledge base article](#)

The system administrator now has the option (platform only) to allow ITIL or admin users to view the Attach button and attach knowledge base (KB) articles from the search results for a new record before the record is submitted. In earlier releases, the Attach button appeared only for an existing record. This simplifies the workflow. Earlier, the ITIL or admin user had to fill out required fields, save the record, and then re-expand the search results before the Attach button was made available. The Show on new record field can be found within the Table Configuration > Search Action Configurations related list. By default, the Attach button is not available for a new record.

#### Customer Service Management

#### [Guided Setup for Customer Service Management](#)

Follow step-by-step instructions to configure Customer Service Management on your ServiceNow instance. Perform structured configuration activities and monitor your progress.

Application or feature	Details
	<p><a href="#">Major issue management</a></p> <p>Proactively identify customers impacted by an issue, provide issue-specific information to these customers, and manage the resolution process.</p> <p><a href="#">Domain separation</a></p> <p>Use the domain separation feature to map customer accounts to individual domains. Account entities, such as contacts and cases, reside in the same domain as the account. Domain visibility rules enable users to maintain account and contact relationships.</p> <p><a href="#">Adding a resolution code while resolving a case</a></p> <p>Add a resolution code while resolving a case to capture information on how the case was resolved.</p> <p><a href="#">Reporting a knowledge gap</a></p> <p>Report a knowledge gap if you cannot find relevant articles that could help resolve a case.</p> <p><a href="#">Dashboard word cloud</a></p> <p>In the Customer Service Manager and Customer Service Executive dashboards, view a word cloud made up of keywords that are frequently used in the short descriptions of open cases. Select a word in the cloud to view additional related words, related cases, and the frequency trend of keywords.</p> <p><a href="#">Customer Service manager role</a></p> <p>Use this customer role to manage the cases for an account and any related child accounts.</p> <p><a href="#">Effective dates for special handling notes</a></p> <p>Make special handling notes effective immediately or at a later time.</p> <p><a href="#">Contact local time and time zone on the Case form</a></p> <p>Change a contact's time zone that is listed on the Case form to the local time zone.</p> <p><a href="#">Global case hand-off</a></p> <p>Hand off a case to your global support team.</p> <p><a href="#">Social URL field on the Social Log form</a></p> <p>Open the social conversation in a new tab by clicking the URL in this field.</p>

Application or feature	Details
	<p><a href="#">Internal user watch list</a></p> <p>Set up an internal watch list so that internal users receive a notification when work notes are added to a case.</p> <p><a href="#">Case deflection with knowledge and community content</a></p> <p>Search for and add relevant information from knowledge articles and solved community questions and blogs to the Case form.</p> <p><a href="#">Virtual Agent chatbot topics</a></p> <p>Use the predefined Customer Service Virtual Agent topics (chatbot conversations) to help your customers complete common self-service tasks, such as creating a case or checking the status of a case.</p> <p><a href="#">Quick start sample tests</a></p> <p>Use quick start sample tests in the Automated Test Framework to evaluate some common Customer Service Management scenarios. To execute these tests, you can activate and then create copies of the desired tests. The sample tests can be run as single tests or as a test suite.</p>

## Dashboards

### Responsive dashboard enhancements

Functionality for sharing dashboards improved. The default message that is sent when you share a dashboard is clearer. Dashboard sharing uses standard platform notifications, so you can modify default email notification content and styling. In addition, you can personalize the message or choose not to send the invitation email at all when, for example, you share a dashboard regularly. For more information, see [Share a responsive dashboard](#).

Dashboard styling and visualization options improved, including the ability to hide widget headers and change the colors of the dashboard background, widget header, and widget title. For more information, see [Configure widget layouts](#).

### Dashboard\_admin role added

Users with the dashboard\_admin role have full view, edit, delete, and share privileges on all dashboards in the instance, including inactive dashboards.

### Dashboard Tab Management

The application checks if a tab is linked to another dashboard when a user tries to delete it. Users can no longer edit or delete tabs that they do not own. Deleting a dashboard also deletes related tabs if they are not used anywhere else. For more information, see [Manage responsive dashboards](#).

### Dashboards Overview enhancements

- The sysparm\_group parameter added so that users can pre-select the dashboard group in the URL of the Dashboards Overview. For more information, see [Dashboard group URL parameter](#).

Application or feature	Details
	<ul style="list-style-type: none"> <li>• Tooltips with explanations and field names added to the elements of each card in the Dashboards Overview.</li> <li>• Dashboard group picker added to Dashboards Overview.</li> <li>• Inactive dashboards are only visible on the Dashboard Overview page and in the dashboard picker to the dashboard owner and to administrators.</li> </ul>
Delegated development and deployment	<p><a href="#">Application-specific deployment permissions</a></p> <p>Assign a non-administrator user or group as a developer or deployment resource for a specific application. You can set permissions that designate what specific actions the assigned user can perform in the current instance.</p> <p>For example, you might grant permissions that enable a user to upgrade the application, publish to the application repository and ServiceNow Store, but prevent publishing to an update set.</p> <p><a href="#">Instance-specific deployment user roles</a></p> <p>Assign roles that enable non-admin users to install or upgrade all applications in specific instances. You delegate these tasks by manually assigning specific user roles per instance. For example, you can assign user roles to Change Management personnel that allow them to perform application installations in non-production (development or QA) instances.</p>
Discovery	<p><a href="#">Discovery Quick Start</a></p> <p>Use the Discovery Quick Start interactive wizard to guide you through Discovery configuration.</p> <p><a href="#">Error resolution after Discovery</a></p> <p>Fix errors that can occur after you run Discovery by following the recommended actions provided in Discovery Home.</p> <p><a href="#">Support for AWS Organizations</a></p> <p>Assign a cloud service account as a master account to have it correspond to an Amazon Web Services (AWS) Organization account. Discovery can then recognize an Amazon Web Services (AWS) Organization account and automatically create member service accounts in the instance.</p> <p><a href="#">HTTP classification</a></p> <p>Use HTTP classification to find devices (not applications) via the HTTP protocol. HTTP is prioritized last behind WMI, SSH, and SNMP. An HTTP classifier is provided by default to find <a href="#">F5 load balancers</a> via REST.</p>

Application or feature	Details
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#### Pattern updates

Use the new and updated patterns that enable Discovery to find new types of Configuration Items (CIs), such as Oracle database clusters, Red Hat clusters, and F5 load balancer clusters.

#### Discovery APIs

The Discovery API plugin provides two new API classes for this release:

- **DiscoveryAPI - Scoped:** This class contains methods that perform the following actions:
  - Launch a quick discovery of a single IPv4 address.
  - Return summaries of previously launched Discovery statuses for a single CI or for all scanned CIs.
  - Return a summary of a CIs discovery status given the specific Discovery status sys\_id and IPv4 address.
- **ReportCiStatusOutputJS:** The methods in this class are getters that return specific object properties for the DiscoveryAPI reportCilpAddressStatus method and then convert the information into a JSON string.

#### Layer 2 discovery data

Use the `glide.discovery.sensors.forwardingtable.ssh` property to update the way Discovery performs Layer 2 discovery with VLANs. To instruct Discovery to launch the Switch — MAC Table SSH probe, which populates additional Layer 2 data, add and set this property to **true**. The property is **false** by default.

#### Shazzam JSON encoding for IP ranges

Use the `glide.discovery.shazzam_ranges_json` property to use JSON, instead of XML, to encode the IP ranges for the Shazzam probe. Set this property to **true** to reduce the size of input payloads when discovering several IP ranges. For upgrades, add the property. This property is set to **true** by default for new instances.

#### Credential synchronization

Use these properties to address performance issues that might occur during credential synchronization on several MID Servers:

- **com.snc.credentials\_user\_fields:** Includes all customized fields in credential synchronization. Set this property to **false** if you do not want to include the fields that you added to credential forms. This property is set to **true** by default.
- **com.snc.credentials\_recursion\_depth:** Tells the credential synchronization mechanism the number of tables that should be traversed when collecting fields from reference tables. Lower this number if you are experiencing performance issues and you have customized credential







Application or feature	Details
	<p>forms that include reference fields to tables that also have reference fields. This property is set to <b>3</b> by default.</p> <p>Add these properties to the System Properties [sys_properties] table. If you do not add these properties, the system uses the default value.</p>
Edge Encryption	<p><a href="#">CyberArk integration with the Edge proxy server</a></p> <p>Use CyberArk AIM (Application Identity Management) software with Edge Encryption.</p> <p>Use CyberArk to store passwords in a centralized and secure digital vault to secure passwords that were previously stored in clear text and secured by file access, or that were previously encrypted via a second file.</p> <p><a href="#">SafeNet key versioning</a></p> <p>Use SafeNet key versioning with Edge Encryption.</p> <p>Use SafeNet key versioning to simplify changing keys. Instead of creating a new alias for every new key, SafeNet key versioning keeps the same alias and increments the version.</p> <p><a href="#">Historical record encryption</a></p> <p>Encrypt historical records in the Audit table during mass encryption, mass decryption, and key rotation jobs. When encrypting historical records for a field in the Audit table, both new values and old values are encrypted.</p> <p><a href="#">Unbound Technology integration with the Edge proxy server</a></p> <p>Use the Unbound Technology (previously Dyadic Security) Key Management System.</p> <p><a href="#">Using a load balancer with the Edge proxy server</a></p> <p>You can use a load balancer to balance the load across the proxy servers in your Edge Encryption proxy setup. If the load balancer and proxy servers are using different ports, specify the host name and HTTPS port of the load balancer to enable users to view responses on their browser.</p>
Embedded help	<p><a href="#">Embedded help internationalization</a></p> <p>Localize your embedded help content for a variety of languages to meet <del>your global user needs</del>. Write your embedded help content in a language of your choice and decide what languages to display by selecting a language in the sys_embedded_help_queue table.</p>
Event Management	<p><a href="#">Alert management rules</a></p> <p>Create alert management rules that respond to alerts. The alert management rule actions are integrated with <a href="#">Flow Designer</a>, which</p>

Application or feature	Details
	<p>enables you to use subflows to resolve the cause of the alert. Several subflows are provided with the base instance. Other responses and actions that alert management rules provide are to open an incident, knowledge base (KB), open any kind of task, launch remediation action, and so on.</p> <p>You can continue to use existing alert action rules, but you cannot modify them. You cannot create new alert action rules. You can migrate alert action rules to alert management rules.</p>

### Priority group

Use the priority group to see which alerts to take care of first. The priority group is available in alert lists in the Dashboard, Alert Console, and All Alerts pages. The four priority group categories are:

Priority group	Icon	Description
Urgent		Highest level of priority. Attend to this alert ahead of other alerts, even those alerts that might have a higher severity.
High		High level of priority. Attend to this alert ahead of the lower priority group values.
Moderate		Moderate level of priority.
Low		Lowest priority level.

### Contextual search in alerts

Use contextual search to search for and attach a KB article from within an alert. The KB article can provide more information about the alert.

### Overall Event Count

Use the Overall Event Count field in the Alert [em\_alert] table to track how many events are bound to the alert. The counter is increased every time an event is bound to the alert. The count value is kept even after the actual event has been purged. Primary alerts are updated, based on their secondary alerts. The primary alert is the parent of the secondary child alerts. The actual number of events, primary plus secondary, that affected the alert is displayed.

### Alert Insight

Use Alert Insight data analysis to provide insight to key related records for the current Configuration Item (CI), similar CIs, and related CIs. You can use Alert Insight to expose the probable root cause of the alert. With Alert Insight, you can see information from similar alerts, incidents, problems, and change requests on the same CI, similar CIs, and other CIs. In the alert form, the Alert Insight data is available under Repeated Alerts, Similar

Application or feature	Details
	<p>Alerts, CI Incidents, CI Change Requests, CI Problems, Related Incidents, Related Change Requests, and Related Problems.</p> <p><a href="#">Application services</a></p> <p>Use application services to organize, maintain, and monitor services in your organization. An application service is a set of interconnected applications and hosts that are configured to offer a service to the organization. Application services can be internal or customer-facing. Application services replace manual services. You can no longer create manual services but you can continue to use them. You can also update or convert these existing manual services to application services. For more information, see <a href="#">Convert manual services to application services</a>.</p> <p><a href="#">Configure event collection from Hewlett-Packard Network Node Manager i</a></p> <p>Configure the HP Network Node Manager i (NNMi) connector instance to receive events while monitoring your network resources.</p> <p><a href="#">Configure event collection from VMware vCenter Server</a></p> <p>Configure the VMware vCenter Server (vCenter) connector instance to receive events from your VMware vSphere environment.</p>
Field Administration	<p><a href="#">Attach a file to a record</a></p> <p>Attach a file directly to a record by adding a file attachment field to the table. The file attachment field supports all file types.</p>
Field Service Management	<p><a href="#">Guided setup for Field Service Management</a></p> <p>Follow step-by-step instructions to configure Field Service Management on your ServiceNow instance. Perform structured configuration activities and monitor your progress.</p> <p><a href="#">Domain separation</a></p> <p>Use the domain separation feature to map companies to individual domains. Work orders and work order tasks created for a company reside in the company domain.</p> <p><a href="#">Quick start sample tests</a></p> <p>Use quick start sample tests in the Automated Test Framework to evaluate some common Field Service Management (FSM) scenarios. To execute these tests, you can activate and then create copies of the desired tests. The sample tests can be run as single tests or as a test suite.</p>

Application or feature	Details
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## Financial Management

## Prescriptive cost models

- Use either of the two preconfigured [prescriptive cost models](#), namely L1 – IT Shared Service Cost Model and L2 – IT Shared Service to Application Portfolio Cost Model that are available off-the-shelf for your financial modeling activities. Cloning is available for these prescriptive cost models.
- [Modify the cloned cost model by replacing the top segment](#) with a segment of your choice.

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**Note:** The segment that you use to replace must not be in use in the existing segment hierarchy.

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- [Map your financial data source to your cost model](#) for your financial modeling activities at the time of cloning.
- Enter a descriptive name, extending up to 80 characters, for the cost model to make it more meaningful in the Name field.

## Financial Modeling

- [Verify how the bucket amount was assigned](#) to a segment or an account by clicking the bucket name. A message displays the allocation method by which the bucket amount was distributed as well as the name of the segment or account to which the amount was assigned.
- Enable the [Account Scope check box](#) to execute the rollup script defined for each account at the segment level. You need not repeat similar rollup scripts for all the accounts under a segment. Instead use the FromAccountID of individual accounts and provide the rollup scripts.
- Track the money that fails to reach its target account or segment in the allocation setup stage of the Workbench. Use the logs to know the reasons why it failed to reach the target, and use the provided links to correct the errors and resolve the issue. [Missing money analysis](#) is an actionable, user friendly, and improved version of the allocation log functionality.

## Usability improvements

[Configure to display 5, 10, 15, 25, or 50 accounts on a page](#) out of the total number of accounts per segment. Display the selected number of accounts of a segment in the Allocation Setup page of the Workbench, Allocation Setup page of lighter workbench, and the Cost Lines Analysis page.

## Flow Designer

[Run a flow from a Service Catalog request](#)

Start a flow when a Service Catalog item is requested to automate the fulfillment process. To activate this feature, request the Flow Designer support for the Service Catalog plugin (com.glideapp.servicecatalog.flow\_designer) through the HI Customer Service system. This plugin activates related plugins if they are not already active.

Application or feature	Details
	<p><a href="#">Run a flow from a MetricBase Trigger</a></p> <p>Start a flow when a MetricBase trigger is met. MetricBase triggers track time series data and can monitor when a threshold is reached, when a trend is detected, or when a system stops reporting data.</p> <p><a href="#">Add stages to a flow</a></p> <p>Communicate the current stage of a request or flow with an end user.</p> <p><a href="#">Create flow-specific Service Catalog variables</a></p> <p>Create Service Catalog variables that are only available to a specific Service Catalog-triggered-flow. Flow-specific variables are available to catalog tasks and actions in the flow. To activate this feature, request the Flow Designer support for the Service Catalog plugin (com.glideapp.servicecatalog.flow_designer) through the HI Customer Service system. This plugin activates related plugins if they are not already active.</p> <p><a href="#">Create a catalog task in a flow</a></p> <p>Use the Create Catalog Task action to create a record in the Catalog Task [sc_task] table associated to a requested item in the Requested Items [sc_req_item] table. Adds the catalog task record as data to be used in the flow.</p> <p><a href="#">Access Service Catalog variables in a flow</a></p> <p>Use the Get Catalog Variables action to access Service Catalog variables as data pills in a flow.</p> <p><a href="#">Create a subflow</a></p> <p>Define a sequence of reusable actions that can be started from a flow, subflow, or script. Define inputs and outputs to pass data to and from the subflow.</p> <p><a href="#">Call a flow from another flow or subflow</a></p> <p>Enable the Show triggered flows option in the More Actions menu to select an activated flow and define the required inputs. Running a triggered flow ignores its trigger conditions and runs all actions.</p> <p><a href="#">Define advanced options for inputs</a></p> <p>Use advanced options to guide flow designers through adding and configuring an action or subflow in a flow. For example, create a choice input to provide flow designers with a pre-defined list of configuration options to choose from. Inputs provide advanced options based on their data type. All inputs have advanced options to add a hint or provide a default value.</p>

Application or feature	Details
	<p data-bbox="459 210 722 237"><a href="#">Call a flow from script</a></p> <p data-bbox="459 277 1002 304">Run activated flows using the scriptable API.</p> <p data-bbox="459 344 766 371"><a href="#">Call a subflow from script</a></p> <p data-bbox="459 411 1043 438">Run activated subflows using the scriptable API.</p> <p data-bbox="459 478 845 506"><a href="#">View the calling source of a flow</a></p> <p data-bbox="459 546 1303 573">Use the execution details to determine what started a flow or subflow.</p> <p data-bbox="459 613 834 640"><a href="#">View activated flows for a table</a></p> <p data-bbox="459 680 1254 707">View flows with record-based triggers that run on a specific table.</p>
Guided Tour Designer	<p data-bbox="459 798 991 825"><a href="#">Create guided tours for Service Portal pages</a></p> <p data-bbox="459 865 1326 953">When you activate guided tours for Service Portal pages, you can begin creating your tour. Refer to the <a href="#">what to do next guidelines for Service Portal callouts, pages, and branding</a>.</p> <p data-bbox="459 993 1222 1020"><a href="#">Create introductions and conclusions for your guided tour steps</a></p> <p data-bbox="459 1060 1337 1148">Use introductions to help your users understand the task you describe in your instructions. Use conclusions to summarize what they have accomplished or learned by completing the instructions.</p> <p data-bbox="459 1188 1326 1215"><a href="#">Leverage draft and published statuses as you create and revise your tour</a></p> <p data-bbox="459 1255 1319 1310">Use statuses to support your revision process and control tour visibility. See <a href="#">Edit a guided tour</a>.</p> <p data-bbox="459 1350 914 1377"><a href="#">Review Guided Tour Designer support</a></p> <p data-bbox="459 1417 1358 1472">Learn which applications and user interface elements that the Guided Tour Designer currently supports.</p> <p data-bbox="459 1512 826 1539"><a href="#">Review tour tips and examples</a></p> <p data-bbox="459 1579 1316 1644">See the revised guidelines for planning a guided tour including the new tips for callouts and testing your tours.</p>
HR Service Delivery	<p data-bbox="459 1726 876 1753">Case and Knowledge Management</p> <p data-bbox="459 1793 1321 1904">The Case and Knowledge Management application allows you to standardize the documentation, interaction, and fulfillment of employee inquiries and requests, improving HR efficiency and making it easier for employees to get the services they need.</p>

Application or feature	Details
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#### [Auto-case categorization for HR case management](#)

You can use Agent Intelligence with HR Service Delivery to train a predictive model to act as an HR agent to automatically categorize HR cases based on your past record data. Auto-case categorization allows for a faster response time and better case resolution for employees.

**Note:** This feature is only available with the HR Professional and HR Enterprise packages.

#### [Knowledge blocks for HR knowledge management](#)

You can use knowledge blocks with HR Service Delivery to simplify knowledge authoring for writers and knowledge consumption for readers. Knowledge blocks are reusable pieces of content secured by user criteria that you can add to knowledge articles in a knowledge base.

#### [Encryption Support for HR and Employee Document Management](#)

HR Service Delivery and Employee Document Management provides encryption support to secure sensitive information. Encryption support secures specific fields in HR or employee documents to prevent unauthorized users from viewing or downloading.

#### [Edge Encryption for HR and Employee Document Management](#)

HR Service Delivery and Employee Document Management provides edge encryption to secure sensitive information. Edge encryption provides direct control over your data security. Encryption and key management are performed on your intranet between your browser and your ServiceNow instance.

#### [HR Synonym Dictionary](#)

HR Service Delivery provides a synonym dictionary that helps expand text searches with additional keywords and can be customized to better match their business and terminology. The HR Synonym Dictionary loads automatically when you check the Load demo data box and activate the Human Resources Scoped App: Core [com.sn\_hr\_core] plugin.

#### [Employee Service Center](#)

The Employee Service Center application provides a single place for employees to quickly and easily get all the HR services they need.

#### [Content Delivery and Content Automation — Campaigns](#)

Content Automation takes information from Content Delivery to provide automated communication to specific audiences for a specific time in the form of a campaign. A campaign can be a targeted message with tasks like Open Enrollment for Benefits. Content Delivery provides information for a campaign like mass email or links to videos, events, or external web sites. Content Delivery can also provide static information like calendars or banners for your service portal or Employee Service Center.

Application or feature	Details
	<p><a href="#">Virtual agent conversations for HR</a></p> <p>Virtual agent conversations for HR use pre-defined dialog to automatically chat with employees who are requesting HR services. VA is programmed to understand the intent of an employee to handle repeatable requests.</p> <p>Virtual Agent is a platform feature that when paired with HR Service Delivery is integrated within the HR UI. It provides automated dialog for general HR inquiries, pay discrepancies, request for leave of absence, or updates to your HR profile.</p> <hr/> <p><b>Note:</b> This feature is only available with the HR Professional and HR Enterprise packages.</p> <hr/>

### [Employee Document Management](#)

The Employee Document Management application provides electronic storage and filing of employee documents. Security policies determine who can view and access employee documents. Retention policies determine how long employee documents should be retained and reduces compliance risks.

### [HR Integrations](#)

The HR Integrations application allows you to integrate with third-party HR management systems to synchronize employee profiles and with third-party background check systems to request background checks.

### [Integrating with the Accurate Background service](#)

The preconfigured Accurate integration uses REST services to request background checks through the Accurate service. You can use the preconfigured integration as-is or customize it to meet your needs.

### [Integrating with the Sterling Talent Solutions service](#)

The preconfigured Sterling integration uses REST services to request background checks through the Sterling service. You can use the preconfigured integration as-is or customize it to meet your needs.

### Incident Communications Management

### [Incident Communications Management](#)

Renamed Incident Alert Management as Incident Communications Management.  
Renamed Incident Alert as Incident Communication Plan Tasks.  
Renamed Incident Alert Management as Incident Communications Management.  
Renamed Alerts as My Communication Plans.  
Renamed the Incident Alert Management plugin (com.snc.iam) as the Incident Communications Management plugin.

### Incident Management

### [Incident management properties](#)

Use the Close open Incident Tasks when Incident is closed or canceled property to close open incident tasks when the incident is closed or canceled.



Application or feature	Details
	<p>Use the Close open Incident Communication Plans when Incident is closed or canceled property to close open incident communication plans when the incident is closed or canceled.</p> <p>Use the Close open Incident Communication Tasks when an Incident Communication Plan is closed or canceled property to close open incident communication tasks when an incident communication plan is closed or canceled.</p> <p>Use the Enable auto closure of incidents based on Resolution date. Setting this to 'No' will make auto closure to run based on the Updated date property to auto-close incidents based on the resolution date of the incident instead of the last updated date.</p> <hr/> <p><b>Note:</b> The property is set to true only for new customers. Existing customers must manually set the property to true.</p> <hr/>

#### Create standard change from Incident

Introduced a new UI action Create Standard Change to create a standard change request from an incident which redirects the user to the Standard Change Catalog. Previously, only a normal or emergency change request could be created from an incident.

#### Parent child synchronization in Incident

If an incident has child incidents, the following occurs:

- If an ITIL user reopens the parent incident, the parent incident and child incidents reopen. Both the parent and the child incident state are set to In Progress.
- If an ESS user reopens the parent incident, the parent incident state is set to In Progress, but the child incidents are not reopened.

When an ITIL or an ESS user adds a child, the child incident state is set to In Progress. When the parent incident is resolved, the child incident state also changes to Resolved.

#### Create request from Incident form using record producer

Click Create Request from the context menu on the Incident form and select a record producer to create the request. The new task created (for example, new Incident or Problem or Change) is associated with the parent incident record. To achieve this action, you must add the following script in the script block of the record producer:

```
var incRPUtil = new LinkRecordProducerToIncident();
incRPUtil.linkRecordProducerToParentIncident(RP.getParameterValue('sysparm_recid'));
```

#### Refresh Impacted Services

Introduced a new UI action Refresh Impacted Services on the context menu of the Incident form to populate impacted services based on the primary Configuration Item (CI) specified on the task record. The system property com.snc.task.refresh\_impacted\_services is introduced where you can mention all the task tables where you need this UI action. This property is applicable for both new and existing customers.

Application or feature	Details
	<p><a href="#">Major incident management</a></p> <p>Added a new Demote Major Incident UI option to the context menu of the Incident form. After a major incident candidate is promoted as a major incident and the major incident state changes to Accepted, a major incident manager can decide to demote a major incident by clicking <a href="#">Demote Major Incident</a>.</p> <p>Automatic closure of Major Incidents: Close a major incident automatically based on the system property Enable auto closure of incidents based on Resolution date. Setting this to 'No' will make auto closure to run based on the Updated date.</p> <p>Associate multiple incidents with a major incident: Associate one or more incidents with a major incident using the Actions menu.</p> <p>Reject multiple major incident candidates: Reject one or more major incident candidates using the Actions menu.</p> <p>Major incident assignment: Assign a major incident to a group at the time of proposal and promotion based on the value of the Major Incident Management Group (sys_id) to whom the Major Incident should be re-assigned on promotion to 'Major Incident' property (sn_major_inc_mgmt_major_incident_management_group).</p> <p>New fields added: Added the fields Proposed by and Proposed. When a major incident state is proposed, the fields Proposed by and Proposed capture the user who proposed the incident as a major incident candidate and the time when the incident was proposed. Similarly, when a major incident state is accepted, the fields Promoted by and Promoted capture the user who promoted the incident as a major incident and the time when the incident was promoted.</p> <p>Major incident management process guidance: Added a new guided setup category for major incident management.</p> <p>Major incident management workbench: Provides a single pane view designed for the major incident manager, communications manager, and resolver groups to manage the major incident process by aggregating and providing actionable information. The MIM workbench is integrated with the Task Communications Management flow and enhanced to include the Communications overview and the Post Incident report.</p>

### [Conference call management](#)

Notify role inheritance: The itil role inherits the notify\_view role when the Incident Communications Management (com.snc.iam) and the Notify (com.snc.notify) plugins are activated, enabling an itil user to view the Notify Conference Call Participant Session table.

End conference call: A new End Conference Call related link appears on the Incident Communication Plan Management form. After a conference call is initiated, a user with the ia\_admin role has the option to join or end a conference call, whereas a user with the itil role can only join a conference call.

Recommended and Selected list: The Recommended section no longer displays the frequently called participants because the frequent callers may not always be relevant for the incident. In the Selected section, the user who initiates the conference call is added.

Adding participants based on group: Added the Group field to the Notify Participant [notify\_participant] table that enables the major incident manager or the communication manager to involve groups in a conference call. When a group is selected, the person who is on-call in that group is then added to the conference call.

Conference call leader: The user or the host who initiates the conference call is automatically added to the list of participants.

Conference call leader: You can have a conference call leader for a conference call. The leader can initiate and end a conference call as well as kick, mute, and unmute participants on a conference call. A conference call leader can be any user with the ia\_admin role or the itil user to whom the Incident Communication Plan or the Incident Communication Task is assigned to.

Group name of a participant: If a user is added to a conference call and the user is a member of only a single group, then that group name is stored in the notify\_participant record. If the user is a member of multiple

Application or feature	Details
	<p>groups, then a formatter containing all those groups is displayed on the notify_participant record.</p> <p><a href="#">Dependency view for Business Services</a></p> <p>ITIL users can see the Business Service Management (BSM) map or dependency view for a business service on the Incident, Problem, and Change request form.</p> <hr/> <p><b>Note:</b> Currently, the Business Service field does not appear on the Change request form, but the user can add the field by clicking the Additional options menu icon and navigating to Configure &gt; Form Layout.</p> <hr/>
IntegrationHub	<p><a href="#">Microsoft Azure AD spoke</a></p> <p>Manage users, security groups, and office groups. Apply licenses and provision users in Office 365.</p> <p><a href="#">Microsoft AD spoke</a></p> <p>Create, delete, and manage objects in Microsoft Active Directory, such as users, groups, and computers.</p> <p><a href="#">Use integration steps to integrate with external systems</a></p> <p>Enable custom actions to integrate with external systems by activating IntegrationHub, which adds integration steps to the Action Designer interface.</p> <p><a href="#">Run integration steps through a MID Server</a></p> <p>Run actions from a MID Server to access data from external applications, data sources, or services in your network.</p> <p><a href="#">Run PowerShell commands in a flow</a></p> <p>Run PowerShell scripts on remote machines from your ServiceNow instance through a MID Server.</p> <p><a href="#">Select the format of a REST request</a></p> <p>Specify the format of the request in the REST web service request step. Options include:</p> <ul style="list-style-type: none"> <li>• Text: A request in JSON, XML, or other text format.</li> <li>• Binary: A request in a binary file format.</li> <li>• Multipart: A request consisting of multiple content types.</li> <li>• Form URL-Encoded: A request in a URL-encoded query.</li> </ul>

Application or feature	Details
	<p><a href="#">Save a REST response as an attachment</a></p> <p>Save the response to a REST web service request step as a record in the Attachment [sys_attachment] table and specify the target record to which the attachment is associated.</p>
	<p><a href="#">Run the REST step on a MID server</a></p> <p>Define MID Server applications and capabilities to send a REST web service request through a MID Server. A MID Server is required to communicate with or move data between a ServiceNow instance and external applications, data sources, and services in your network.</p>
	<p><a href="#">Select the Script step runtime environment</a></p> <p>Select a scripting environment to run the step. Options include:</p> <ul style="list-style-type: none"> <li>• Instance: The action step runs the script from instance. Select this option when the script needs access to the ServiceNow API or instance data. This is the default value.</li> <li>• MID: The action step runs the script from the MID Server. Select this option when the script needs access to <a href="#">MID Server script files</a> and APIs. Selecting this option displays the Select MID Server Using field.</li> <li>• Vanilla (Core JavaScript): The action step runs the script from either the instance or MID Server. Select this option when the script only needs the core JavaScript APIs and not the ServiceNow API or instance data.</li> </ul>
	<p><a href="#">Use connection-specific variables in an integration step</a></p> <p>When using an integration step, you must establish a connection with an external system. Use a Connection &amp; Credential alias instead of defining the connection inline. An alias enables you to update the connection details once without having to reconfigure every action. Any action step that uses an alias inherits the attributes associated with it. Flow Designer displays attributes as data pills that you can drag into your action step. For example, you can create a page size attribute that becomes a REST step query parameter.</p>
Knowledge Management	<p><a href="#">Knowledge User Criteria Diagnostics</a></p>
	<p>Run user criteria diagnostics to view which users have what type of access to knowledge bases and articles.</p>
	<p><a href="#">Actionable Knowledge Feedback</a></p>
	<p>Manage high volumes of article feedback by enabling automatic task generation for negative feedback.</p>
	<p><a href="#">Improve knowledge search rankings using SEO</a></p> <p>Improve knowledge search results from external search engines like Google by using the content in an article template field to generate SEO tags for articles created using that template.</p>

Application or feature	Details
MetricBase	<a href="#">Knowledge blocks</a>
	<p>Simplify knowledge authoring for writers and knowledge consumptions for readers with reusable knowledge blocks, which can be inserted into knowledge articles and are secured by user criteria.</p>
	<a href="#">Create a MetricBase band trigger</a>
	<p>Create a MetricBase band trigger to use with Flow Designer to detect when a metric value meets a certain threshold or is within a range.</p>
MID Server	<a href="#">Create a MetricBase linear predictor trigger</a>
	<p>Create a MetricBase linear predictor trigger to use with Flow Designer to detect when a metric value is expected to cross a specified threshold within a specified time with a specified confidence level.</p>
	<a href="#">Create a MetricBase gap trigger</a>
	<p>Create a MetricBase gap trigger to use with Flow Designer to detect when new metric values have not been stored for a metric for a specified period.</p>
	<a href="#">MID Server download and upgrade process</a>
	<p>For new instances, the MID Server host no longer communicates with install.servicenow.com to download the installer or to request an auto-upgrade. Instead, the MID Server sends a request to the instance, which retrieves the file from the download server and makes it available to the MID Server.</p>
	<a href="#">Nmap installer download process</a>
	<p>New ServiceNow instances handle all download requests for Nmap from the MID Server. The MID Server host machine no longer requires a connection to install.service-now.com to download and install Nmap. The instance retrieves the requested package from the download site and makes it available to the MID Server.</p>
	<a href="#">MID Server selection override filters</a>
	<p>Write your own filter condition that overrides the normal MID Server selection criteria for an application. In this release, the platform provides an override condition for MID Server capability in Cloud Management.</p>
	<a href="#">MID Server auto-upgrade</a>
	<p>Use these properties to control MID Server auto-upgrades:</p> <ul style="list-style-type: none"> <li>• mid.download.through.instance: Enables existing MID Servers to send auto-upgrade requests to the instance rather than upgrading directly through the MID Server host.</li> </ul>

Application or feature	Details
	<ul style="list-style-type: none"> <li>concurrent.dist.download: Sets the maximum number of concurrent MID Server auto-upgrades permitted by the instance.</li> </ul> <p><a href="#">MID Server duplicate name check</a></p> <p>On startup, the MID Server verifies that its name is unique. If the name is not unique, the MID Server shuts down and creates a record in the MID Server Issue [ecc_agent_issue] table.</p>
Notifications	<p><a href="#">Notifications in messaging applications</a></p> <p>Enable users to receive their ServiceNow platform notifications in Slack or Microsoft Teams messaging applications. Use the Now Actions app to configure the messaging apps for your instance.</p> <p><a href="#">Email access restrictions</a></p> <p>Use the Email Access Restriction [email_access_restriction] table to define conditions that control read access to an email record generated by a notification containing sensitive information. These conditions are processed by the base system ACL for the Email [sys_email] table. When you specify conditions to restrict access for a notification, the email records are visible only to users that match the conditions specified for the notification.</p>
Notify	<p><a href="#">Conference call management</a></p> <p>Use these features to manage conference calls:</p> <p>End conference call</p> <p>The End Conference Call related link appears in the Incident Communication Plan Management form. After a conference call is initiated, users with the ia_admin role can choose to join or end a conference call.</p> <p>Adding participants based on group</p> <p>Added the Group field to the Notify Participant (notify_participant) table. The major incident manager or communication manager can use this field to add groups to a conference call. When a group is selected, the group member who is on-call at that time is added to the conference.</p> <p>Conference call leader</p> <p>You can have a conference call leader who can initiate and end the call as well as kick, mute, and unmute call participants. A conference call leader can be any user with the ia_admin role or a user with the itil role who is assigned to the incident communication plan or the incident communication task.</p>

Application or feature	Details
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Group name of a participant

If a conference call participant is a member of only a single group, then that group name is stored in the notify\_participant record. If a participant is a member of multiple groups, then a formatter containing all those groups is displayed on the notify\_participant record.

## Operational Intelligence

### [Anomaly Alert Dashboard](#)

Use a central location to view important reports about anomaly alerts and promoted alerts, in relation to Event Management alerts. For example, the '% Daily Alerts are Promoted Anomalies' report, displays the percentage of newly promoted alerts in relation to the overall new Event Management alerts, for a time period.

### [Metric connectors](#)

Collect metrics using connector definitions for the following systems:

- SolarWinds server
- Zabbix server
- Nagios server

### [Advanced Insights Explorer](#)

Query metric data for configuration items (CIs) for which metric data is collected. CIs for the query can be from different sources such as application services, relationships, or a list of anomalous CIs. Query results are displayed in charts which let you further understand system behavior.


### [Anomaly Model Testing](#)

Use an anomaly model to test anomaly detection for a small set of specific CIs and metrics, before actually enabling anomaly detection for those CIs and metrics. Model testing simulates anomaly detection using actual metric data. You can then view the results in the Insights Explorer which is pre-loaded with the test results. You can compare anomaly test scores and the computed bounds to the results of actual anomaly detection.

## Password Reset

### [Specify the style sheet to apply to end-user pages](#)

Specify a custom style sheet using the Style sheet to apply to end-user pages during the password reset process. property. The Identify, Verify, and Reset pages use the specified style sheet. The following image shows the Identify page:

Application or feature	Details
	<div> <div>Identify</div> <div>Verify</div> <div>Reset</div> </div> <div> <div>* Email address</div> <div>able.tuter@example.com</div> <div>* CAPTCHA</div> <div> <input type="checkbox"/> I'm not a robot           <div>  <div>reCAPTCHA</div> <div>Privacy - Terms</div> </div> </div> <div>Next</div> </div>

#### History policy for local credential store

Select the Enforce history policy check box to ensure that users do not reuse passwords. For example, you might configure the history policy to not allow the user to reuse any of the previous 10 passwords.

#### History policy for Active Directory (AD) credential store

Select the Enforce history policy check box to enforce both of the following password reset policies:

- History policy (password reuse): Active Directory domains can be configured to include a history policy that ensures that users do not reuse passwords. For example, the history policy might be configured to not allow the user to reuse any of the previous 10 passwords when resetting a password.
- Maximum number of reset attempts: You can configure the maximum number of attempts to reset a password. A user who fails to reset the password (by failing password policies or the history policy) the specified number of times is blocked.

#### Send reminders to enroll for Password Reset

You can automatically send messages that remind users to enroll in the Password Reset process. You specify the text of the message and can configure the messages to repeat at intervals.

#### Redirect to the login page after password reset

You can specify the URL of the page that opens for users after they successfully reset their password — typically the login page. See the Post-reset URL property setting on [the Details tab of the Password Reset Processes form](#).

#### Customize the UI for resetting passwords

You can specify UI macros that add a header or footer to the pages that end users work in while resetting a password (the Identify, Verify, and Reset pages).



Application or feature	Details

The process of configuring client proxy settings is significantly simplified

You configure all proxy settings as registry keys. Download the installer and PDF user guide for Password Reset Windows Application version 4.0 from the [Password Reset Windows Application \[KB0542328\]](#) article in the HI Knowledge Base.

## Performance Analytics

### [Dependency Assessment Tree View](#)

View, analyze, and edit your performance analytics components including widgets, indicators, and breakdowns, from a single view. By viewing the hierarchy of components and the relationships between them, you can see immediately who is impacted by a change and what the effects of your changes are.

### [Breakdown Management](#)

Track breakdowns back to indicator sources and configure the breakdown matrix using an intuitive UI.

### [Breakdown Matrix Management](#)

Collect and manage two-breakdown combinations for automated indicators in a new UI.

## Platform quality and performance

### [Debug log displays invalid query script syntax conditions](#)

When Debug Log is enabled, the debug session displays information about invalid queries found in scripts. Common syntax errors, such as spelling mistakes and invalid field references, are flagged as invalid queries.

## Platform security

### [Instance Security Dashboard \(PA\)](#)

Use the Instance Security Dashboard (PA) to view the compliance effectiveness of your instance security controls, view security event monitoring metrics, and configure and maintain instance security settings.

Application or feature	Details
Problem Management	<p><a href="#">New security properties</a></p> <p>Use new security features to prevent XXE attacks, as detailed in the <a href="#">ServiceNow Instance Hardening</a> [KB0550654] article in the HI Knowledge Base.</p>
	<p>Dependency view for Business Services</p> <p>ITIL users are now able to see the BSM map or dependency view for a business service on the Incident, Problem and Change request forms.</p> <hr/> <p><b>Note:</b> Currently the Business Service field is not on the Change request form but user can add the field by opening the form context menu and selecting Configure &gt; Form Layout.</p> <hr/>
	<p>Resource Management</p> <ul style="list-style-type: none"> <li>• <a href="#">New UI for creating and managing resource plans</a>: Search for resources and see results in the Resource Finder. Create resource plans in an intuitive grid interface. The grid interface also provides a detailed breakdown of resource plans on monthly and weekly time frame. You can edit the breakdown values inline. Clicking the Manage button in Resource Plan related list on project and demand forms opens the new resource plan creation interface.</li> <li>• Enhanced Resource Allocation Workbench: Through Allocation Workbench, resource managers can create a personalized allocation board to view a category-wise list of their resources. You can review all requests in one place for your team in the grid interface. You can also see the available hours for requested users and allocate resources in the best possible way.</li> <li>• <a href="#">Complete</a> and <a href="#">Cancel</a> resource plan actions for a closed project and demand: Closing a project or demand prompts the demand and project managers to complete or cancel the associated open resource plans. Project and demand budgets include only resources that are actually working on the project or demand.</li> <li>• <a href="#">Automatic update of cost plan from resource plan</a>: The cost plan associated with a resource plan is automatically updated when the Planned cost in the resource plan is updated.</li> <li>• The table Requested Allocation Daily [resource_aggregate_daily] stores requested hours at daily level.</li> <li>• Use the Use budget reference rates to calculate the Resource requested/allocated cost (com.snc.resource_management.use_budget_reference_rates) property in the Resource Management properties to obtain accurate, period-specific planned costs when foreign currencies are involved. If you are an upgrade customer, you may want to enable this property since it is by default set to No. Note that, the existing cost plans created from resource plans will not be recalculated.</li> </ul>
Project Portfolio Management	

Application or feature	Details
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#### Client side planning console

Prevent time lags and build your project structure faster because you do not need to save every interaction in planning console in the cloud-based server. The option is enabled by default for new customers.

#### Investment Portal

Create a personalized investment board and track your key projects and demands in terms of their cost, schedule, and scope. Investment Portal replaces the Project Status Portal that was introduced in the Jakarta release. For upgraded customers, Investment Portal co-exists with Project Status Portal. If you are a new user (and London is your first release), only Investment Portal is available.

#### Project Management

- Create and manage the resource plans for a project and project tasks using the [Resources tab](#) in Project Workspace.
- Capture costs and benefits of a project using the [Financials tab](#) in Project Workspace. This tab provides a detailed breakdown of cost components of a project in a grid view. You can create a cost plan and benefit plan for the project. You can edit the breakdown values of a cost or benefit plan inline, making your editing faster and easier.
- Use the Actions related list on Project form to list the action items identified for the project. The same information is rolled up to a new section, Actions in the project status report.
- Copy an existing project status report including all fields into a new project status report using Copy option.
- [Project baseline](#): In addition to a task baseline, you can also create a financial baseline for a project, which captures benefit and financial metric information (snapshot of cost plan, benefit plan, and project-level financial metrics) of the project.
- Determine if the time component in actual start and end dates should always be derived from the time in planned start and end dates respectively. Use the Derive time component from planned dates field on Project form to do this.
- Update planned end date of a manual project from actual start date and planned duration by using the Enable alter of planned date with Actual for Manual Project project property. The property is set to true for upgrade customers if you have a manual project before upgrade.
- Use the **Calculate Estimate at Completion** related link to populate the **Estimate at completion** field with the sum of actual costs from periods prior to the currently open forecast period, and future planned costs for the entire project.
- Project stakeholders are stored in a new Project Stakeholder [pm\_m2m\_project\_stakeholder] table.

Application or feature	Details
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#### Planning Console

- Determine if the dates in the planning console should be displayed with or without time component by using the field Project schedule date format on Project form.
- Resize the grid and Gantt chart in planning console. Scroll bars are now available on each.
- You can visualize the baseline for milestones in planning console. Baseline visualization for milestone tasks was not available earlier.

#### Demand Management

- [Reset a demand to Draft state](#): Set a demand back to Draft state from any demand state. A demand can be set back to Draft state only until an artifact such as project, enhancement, defect, or change is created from the demand.
- Use the Assessment Required check box on [Demand form](#) to disable triggering assessment questionnaire to demand stakeholders. The field is set to True by default.
- [Demand baseline](#): Create a financial baseline for a demand, which captures benefit and financial metric information (snapshot of cost plan, benefit plan, and demand-level financial metrics) of the demand.

#### Project Financials

- Multi-currency support:
  - Project planned costs and planned benefits are always captured in the functional currency. Functional currency is obtained from the [glide.system.locale property](#). For upgraded customers, the currency configured in the **com.glide.financial\_management.currency\_code** property is used to calculate the total planned cost, capital expenditure, and operating expenditure of the project.
  - Cost plans created in foreign currencies are converted to the functional currency using the exchange rates in the budget reference rates table.
  - Benefit plans created in foreign currencies are converted to the functional currency using the exchange rates in the budget reference rates table.
- Extend the duration of a cost plan by creating a cost plan breakdown record.

#### Reporting

##### [New dot-walking component](#)

Report on extended table fields more easily with reworked dot-walking functionality.

Application or feature	Details
	<p data-bbox="467 212 790 237"><a href="#">Report_view access control</a></p> <p data-bbox="467 279 1326 363">Restrict views of content derived from a table or views of reports with aggregated data grouped by a field specified in the ACL. Prevents users from seeing unauthorized data.</p> <p data-bbox="467 405 713 430"><a href="#">New report_user role</a></p> <p data-bbox="467 472 1283 529">Assign this user role to provide access to reporting functionality and creating reports, but not sharing them.</p> <p data-bbox="467 571 828 596"><a href="#">Interactive filter enhancements</a></p> <p data-bbox="467 638 1272 663">Apply filters to database views as well as to all tables in a hierarchy.</p>
Search Administration	<p data-bbox="467 747 1129 772"><a href="#">Reindexing a table without impacting text search results</a></p> <p data-bbox="467 814 1315 961">You can reindex the text search for a parent or child table in a table hierarchy. In previous releases, the Regenerate Text Index related link in System Definition &gt; Text Indexes purged the text search index for the selected table before rebuilding, resulting in impacted search results during regeneration.</p> <p data-bbox="467 961 1353 1108">Using online reindex, you can continue to perform text searches on a table while the regeneration takes place. This method does not purge the entire text search index, nor adversely impact search results while running. It is also useful when you only want to reindex part of a table hierarchy (for example, the <code>sc_cat_item</code> table under the <code>sys_metadata</code> hierarchy).</p> <hr/> <p data-bbox="467 1125 1334 1377"><b>Note:</b> The online reindex process automatically runs on the <code>sys_metadata</code> table after the London upgrade completes, with no noticeable impact on search performance. If you must disable it, set the <code>glide.ts.reindex.sys_metadata.after.upgrade</code> system property to <b>false</b>. See <a href="#">Available system properties</a>.</p> <hr/>
Security Incident Response	<p data-bbox="467 1467 647 1493"><a href="#">Setup Assistant</a></p> <p data-bbox="467 1535 1355 1707">Walk through the Security Incident Response setup process in a simple, step-by-step fashion. The Setup Assistant helps you discover which capabilities of Security Incident Response require configuration, identify what permissions are required to configure them, and learn what settings are recommended for your environment. Setup Assistant helps you deploy Security Incident Response quickly and efficiently.</p> <p data-bbox="467 1749 796 1774"><a href="#">Security Analyst Workspace</a></p> <p data-bbox="467 1816 1353 1923">Use the tile-based Security Analyst Workspace to easily and efficiently perform day-to-day security analysis work. The customizable interface includes a peek feature for quickly browsing key incident details, and tools for rapidly transitioning from investigation to containment tasks.</p>

Application or feature	Details
	<b>Note:</b> To activate this feature, request the Security Incident Response UI plugin (com.app_secops_ui) through the HI Customer Service system.

#### [Security Analyst Playbook](#)

Resolve certain types of security threats in a step-by-step manner using the Built-in Security Analyst Playbooks. For example, an analyst can use the playbook to resolve phishing attacks and threats caused by malicious code activity.

### Service Catalog

#### [Multi-row variable set](#)

Use a multi-row variable set to capture variable data in a table layout while submitting a catalog item request for a group of entities.

**Note:** This variable set is also available in Service Portal.

#### [Automated test framework for Service Catalog in Service Portal](#)

Write automated end-to-end tests for requester flows to validate catalog items in Service Portal. When you upgrade or modify an instance, run these tests to confirm that the instance still works as designed. The following test step configurations are available in the Automated Test Framework (ATF) for Service Catalog in Service Portal:

- Open a Catalog Item (SP)
- Open a Record Producer (SP)
- Set Variable Values (SP)
- Set Catalog Item Quantity (SP)
- Validate Variable Values (SP)
- Variable State Validation (SP)
- Validate Price and Recurring Price (SP)
- Add Item to Shopping Cart (SP)
- Order Catalog Item (SP)
- Submit Record Producer (SP)

**Note:** ATF for Service Catalog in Service Portal is not supported for order guides and multiple items in the cart.

#### [Checkout Shopping Cart ATF test step configuration](#)

Use the Checkout Shopping Cart server test step configuration to test the submission of a shopping cart in the Now Platform and Service Portal.

Application or feature	Details
	<p><a href="#">Assert type for the Search for a Catalog Item ATF test step configuration</a></p> <p>Use the Assert Type field in the Search for a Catalog Item test step configuration to specify the condition for the success of the test step.</p>
	<p><a href="#">Create Request UI action</a></p> <p>Create a catalog request from other flows to join the Service Catalogflow. By default, this UI action is available from the incident flow, where you can create a request, and associate the request with the incident. You cannot add items to the wish list or save a record producer in these flows.</p> <p>When you create a request from an incident, the caller of the incident is automatically set as the Requested For user for both the one-step and two-step checkout. If the two-step checkout is enabled, the fulfiller can change the Requested For user.</p>
	<p><b>Note:</b> The Best Practice - Incident Resolution Workflow plugin (com.snc.bestpractice.incident) should be active for creating a request from an incident.</p> <p>Associate a record producer request with the parent table record by retrieving the sysparm_parent_sys_id and sysparm_parent_table parameters from the URL using the RP.getParameterValue() method in the Script field of the record producer.</p>
	<p><a href="#">Request Parent Mapping submodule</a></p> <p>Use the Request Parent Mapping submodule to add the mapping configuration for associating a request with any parent table record. Only the admin and catalog_admin roles have access to this submodule. By default, the request mapping configuration is available for the Incident [incident] table.</p>
	<p><a href="#">Service Catalog parameters</a></p> <p>Use the following Service Catalog parameters to link the parent record to the child record when using the catalog experience, that is, when a catalog is launched from a parent record (for example, incident).</p> <ul style="list-style-type: none"> <li>• sysparm_parent_sys_id</li> <li>• sysparm_parent_table</li> <li>• sysparm_view</li> </ul>
	<p><a href="#">Variable SQL Debugger</a></p> <p>Use the Variable SQL Debugger to analyze the impact of the variable setup of a catalog item on its runtime performance, and identify the issues, if any. You can review the processing time of the catalog item and its variables based on the triggered SQL queries.</p>
	<p><a href="#">Permission tab for a variable</a></p> <p>Use the Permission tab while creating a variable to specify the read, write, and create roles of the variable.</p>

Application or feature	Details
	<p>If no role is specified in this tab for the read, write, or create actions, all users who can access the catalog item can perform these actions irrespective of their role. For example, if no role is specified for the Write roles field, all users who can access the catalog item can edit the variable value in the variable editor.</p> <p>If you are upgrading to London and the catalog item form has been customized, the Permission tab is not visible until you revert the customization.</p>

#### Decryption support for a masked variable

Decrypt and encrypt the values of a masked variable using the Show and Hide buttons. These buttons are not available for a fulfiller (itil) without the catalog\_view\_masked role. However, the requester always has access to these buttons and the variable value on records submitted by the requester. The decryption support is also applicable in Service Portal.

#### Order for a catalog UI policy action

Use the Order field for a catalog UI policy action to specify the sequence in which the UI policy action is evaluated. The order is evaluated from the lowest value to the highest value. This order is also applicable in Service Portal.

#### Post-processing script for a record producer

Use the Post insert script field on a record producer form to include scripts that operate on the submitted record, after the record is inserted in the associated table.

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**Note:** Post insert script overrides the target record values and record producer template values.

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#### Clear a variable value using a catalog UI policy action

Select the Clear the variable value check box on a catalog UI policy action to clear the variable value. The selection is also applicable in Service Portal.

#### Auto-population of names for variables and variable sets

The Internal name field for a variable set is auto-populated based on the Title field for all variable types except break, container split, and container end.

The Name field for a variable is auto-populated based on the Question field for all variable types except break, container split, and container end.

#### Server-side scripting support for variables of a variable set

Use the Internal Name field of a variable set to access its variables that are set on the target record. You can access the variable value of the target record in a script using:

```
gr.variables.variable_set_name.variable_name
```

For example, consider a variable set with the internal name **vset** and the variable **single**. Access the variable value of the target record in a script using:



Application or feature	Details
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`gr.variables.vset.single`

#### Ability to access variables for task records

Use scripts to access variables of task records using the following access points:

- `gr.variables`: Gets GlideElementVariable of variables and variable sets associated with a GlideRecord.
- `gr.variables.getVariableValues()`: Gets the name value pair of variables associated with a GlideRecord.
- `gr.variables.getElements()`: Gets GlideElementVariable for variables within a GlideRecord.
- `gr.variables.<var_name>.getQuestion()`: Returns the Question object of each GlideElementVariable.

#### Support for a record producer variable mapped to an encrypted field

If the record producer variable is mapped to an encrypted field of a target table, then this variable value is not stored in Question Answer [question\_answer] table. So, this variable value is also not available in the variable editor of the target record.

If the record producer variable is masked and encrypted, and mapped to an encrypted field of a target table:

- The variable value is not stored in Question Answer [question\_answer] table.
- The decrypted value of the variable is copied to the encrypted field of the target record.

#### UserCriteriaLoader API

Use the UserCriteriaLoader API to get the user criteria associated with a specific user, or a user associated with a specific linkTable. To use this class in a scoped application, use the `sn_uc` namespace identifier.

#### New method for the Service Catalog REST API

Use the following method to get the display value of the specified variable.

`POST /sn/sc/servicecatalog/variables/{sys_id}/display_value`

Service Level  
Management

#### SLA Breakdown Definitions

Added a feature called SLA breakdowns. When activated and configured, you can generate breakdown data for each task SLA record by the Assignment group and the Assigned to field, capturing every user and group that owned the related task, the order they owned it, the amount of time and percentage of SLA duration their ownership consumed, and whether the SLA was breached while they owned the task. SLA

Application or feature	Details
	<p>breakdowns helps identify which users or groups helped to achieve an SLA or identify users and groups who most contributed to an SLA breach. Defined a single breakdown definition for new customers. The definition is known as Incident SLAs by Assignment and has SLA definitions “Priority 1 Resolution (1 hour)” and “Priority 2 Resolution (8 hour)” associated with the definition. Upgrading customers must enable the SLA Breakdowns plugin (com.snc.sla.breakdowns). Once the plugin is activated, upgrading customers have a single breakdown definition defined called Incident SLAs by Assignment. This breakdown definition does not have any SLA definitions associated with it, by default. Upgrading customers must associate the SLA definitions that they want to track breakdown definitions for.</p> <p>Ensure that you have the London versions of the script includes TaskSLAController and RepairTaskSLAController before activating the SLA Breakdowns plugin (com.snc.sla.breakdowns) to ensure that breakdown data is generated correctly. If you have ever customized either of these two script includes, you must incorporate all customizations into the London versions of these files from the most recent upgrade.</p> <p>Added a table cleanup job sla_breakdown_by_assignment. This job automatically removes any breakdown data (records) that are older than one year.</p>

### [New SLA Overview Homepage](#)

Deprecated and replaced the SLA homepage with an all new SLA Overview dashboard. This new dashboard can be found by navigating to Service Level Management > Overview or Self-Service > Dashboards. This dashboard is enabled by default for new customers. Upgrading customers must enable the com.snc.sla.overview plugin to activate this new dashboard.

### [New Performance Analytics Dashboard](#)

Added a new Performance Analytics dashboard called SLA Overview (Premium). To enable this dashboard, the plugin (com.snc.pa.sla.overview) must be activated.

### [New Task SLA Field Styles](#)

Added field styles to the Task SLA list view, replacing the legacy colored dots with a bar graph which is colored based on the amount of SLA duration that has elapsed. SLAs with 50% or less duration are displayed as green, SLAs between 50-75% SLA duration are displayed as yellow, SLAs with 75-100% duration are displayed as orange, and any SLA marked as breached displays a red bar.

## Service Mapping

### [Copy patterns from one instance to another](#)

Create an update set containing new or modified patterns with their related items.

### [Application services](#)

Use application services to create, maintain, and manage services in a unified way in Service Mapping, the CMDB, and other ServiceNow applications. Application services replace business services.

Application or feature	Details
Service Portal	<a href="#">Use patterns on Store</a>
	<p>On top of hosts and applications supported by default, you can discover additional hosts and applications by deploying patterns available on Store. New patterns are regularly published on Store outside major product releases.</p>
	<a href="#">Filter Service Portal search results using search facets</a>
	<p>Enable your end users to filter search results for a more meaningful result set. Create facets for simple or advanced search sources.</p>
	<a href="#">Paginate search results</a>
	<p>Limit the number of results that a search source displays at one time to improve performance. End users can load more results as needed.</p>
	<a href="#">Create Guided Tours for Service Portal</a>
	<p>Create a guided tour for a Service Portal page to guide users through the content step by step. In the base system, tours can only be manually launched from pages that use the SP Header Menu. Manually launched tours do not display on pages with custom header menus.</p>
	<a href="#">Set the duration that info and error messages persist</a>
	<p>Use the <code>glide.service-portal.notification_timeout.seconds</code> system property to set the duration in seconds that error and info messages remain on the screen before they are auto-dismissed. If set to 0, messages do not auto-dismiss and require that a user close them. The default value is 5.</p>
	<a href="#">Test Service Portal forms using the Automated Test Framework</a>
	<p>Write automated tests to validate Service Portal forms. The following Automated Test Framework (ATF) test steps are available:</p>
	<ul style="list-style-type: none"> <li>• Open a Service Portal form</li> <li>• Set field values on a form</li> <li>• Validate field values</li> <li>• Validate field states</li> <li>• Check UI action visibility</li> <li>• Click a UI action</li> <li>• Validate form submission</li> </ul>
	<a href="#">Use validation scripts in Service Portal</a>
	<p>Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must</p>

Application or feature	Details
Software Asset Management	<p>activate the Mobile and Service Portal version of the validation script to validate user input in the Service Portal. To use a validation or UI script in Service Portal, change the UI type to Mobile / Service Portal or All. See <a href="#">Activate Service Portal validation scripts</a>.</p>
	<p><a href="#">Change the display style of the Announcements widget</a></p>
	<p>Select the Use Display Style instance option to display each announcement in the widget according to the style defined in the announcement record. Before selecting this option, consider how the widget will display if multiple announcements in the widget use different styles.</p>
	<p><a href="#">Adobe Cloud License Management publisher pack</a></p>
	<p>Use the Adobe Cloud License Management publisher pack for enhanced discovery of Adobe subscriptions to determine license compliance. The Adobe User Management API is used for integration with Adobe Creative, Experience, and Document Cloud for normalization and reconciliation. Discovery sources include ServiceNow Discovery, Microsoft SCCM, and other third party discovery sources that can integrate as a data source in the ServiceNow CMDB.</p> <p><a href="#">Adobe Cloud dashboard</a> using Performance Analytics is activated with this publisher pack to forecast cloud license cost and consumption.</p>
	<p><a href="#">Citrix publisher pack</a></p>
	<p>Use Citrix publisher pack for reconciliation and optimization of Citrix products, such as XenApp and XenDesktop, to determine license compliance. Optimization includes license usage for concurrent users as well as per device, per processor, and per user. ServiceNow Discovery identifies applications deployed in your Citrix farm from the Citrix Delivery Controller using OData APIs.</p> <p><a href="#">Citrix dashboard</a> using Performance Analytics is activated with this publisher pack for compliance and cost optimization.</p>
	<p><a href="#">Software lifecycle content included in the Software Library</a></p>
	<p>Identify risk of software installed throughout your environment using software lifecycle content, such as general availability and end-of-life dates, provided as part of the Software Library. Software lifecycle content is also useful for <a href="#">Technology Portfolio Management</a> (ITBM) to perform application rationalization.</p>
	<p><a href="#">Automated software entitlement import</a></p>
	<p>Streamline the process of importing software license entitlements into the Software Asset Management application using a Microsoft Excel spreadsheet. Critical validation is performed during the import, such as identification of errors and duplicates, to ensure the data is accurate and complete. Validation records are included in the Entitlement Import Error list.</p>

Application or feature	Details
	<a href="#">License Change Projection</a>
	<p><a href="#">Integrate Change Management with Software Asset Management</a> to automatically calculate the impact of software license costs within Change Management when a change is proposed.</p>
	<a href="#">License Position report</a>
	<p>Use the License Position report to view compliance details for each software model in a single list. The License Position report makes your license position easy to understand from reconciliation output.</p>
	<a href="#">On-premise customer support</a>
	<p>Upload Software Library content to your on-premise environment from a zip file to take full advantage of the Software Library in Software Asset Management. On-premise customers can participate in the Software Asset Management Content Service by exporting custom content to contribute to the improvement of the normalization service. Exported data includes custom content, such as discovery models not fully normalized, and custom part numbers.</p>
	<a href="#">Updated dashboards using Performance Analytics to trend KPIs for SAM</a>
	<p>Leverage native ServiceNow platform capabilities to trend Microsoft, Oracle, IBM, VMware, and Citrix software cost and compliance key performance indicators (KPIs) over time. You can also customize your own KPIs to track progress toward your software asset goals.</p>
	<a href="#">IBM publisher pack enhancement</a>
	<p>Automate reconciliation of IBM products, including complex server licensing scenarios, using IBM publisher pack. Integration with IBM BigFix Inventory discovery application is used to measure subcapacity and full-capacity license compliance for PVU and RVU license metrics.</p>
	<a href="#">Oracle publisher pack enhancement</a>
	<p>Set the Oracle reconciliation property for a VMware vCenter cluster so that all processors on every ESX server are considered when determining license compliance. <a href="#">Oracle options usage data</a> is also collected.</p>
	<a href="#">Normalization suggestions</a>
	<p>Evaluate suggestions to normalize discovery models which were previously manually normalized incorrectly. Suggestions are automatically identified if an error exists after new normalization content is delivered to your instance via the Content Library. Suggestions can be either accepted, which updates the Discovery Model to the correct values, or rejected, which leaves the manually normalized values.</p>

Application or feature	Details
Subscription Management	<p><a href="#">View the roles that are associated with a subscription</a></p> <p>The Application Roles related list on the Subscriptions page includes all roles that are loaded with the plugin for the application. The roles in the list (that are identified as Subscription roles) form a good basis for constructing a user set.</p>
System upgrades	<p><a href="#">Debug upgrade</a></p> <p>Diagnose and resolve issues you suspect may have resulted from the most recent upgrade by enabling upgrade debugging during a user session. Each transaction lists whether an artifact was skipped, customized by the customer, or modified by ServiceNow during the last family-to-family or patch version upgrade. Debug Upgrade is a component of standard ServiceNow session debugging. You enable Debug Upgrade, process a transaction (for example, load a form), and then analyze the reported upgrade information.</p>
Table administration	<p><a href="#">Rollback and Delete recovery</a></p> <p>Recover deleted records and roll back some actions.</p>
Task Communications Management	<p><a href="#">Communication Plan</a></p> <p>Define the stakeholders who should be informed, what information should be shared, when the information should be delivered, and the methods of communication.</p> <p><a href="#">Communication Task</a></p> <p>Specify the mode of communication (channel) and the frequency at which the communication must be carried out.</p> <p><a href="#">Communication Contact</a></p> <p>Define the recipients of a particular communication plan to determine the target audience involved in each communication task and the responsibilities they are expected to handle. Earlier, using contract management, you could only define users and groups. Now, you can also define a Recipient list. This functionality is provided by the Targeted Communications (com.sn_publications) plugin. You can dynamically define the recipients of a particular communication plan using the recipient list.</p> <p><a href="#">Communication Channel</a></p> <p>Define a communication channel for each communication task to determine which mode of communication to use for the task when a plan</p>

Application or feature	Details
Time Card Management	<p data-bbox="469 212 1278 264">is attached to an incident. There are three modes of communication available: email, SMS, and conference.</p> <p data-bbox="464 352 791 380"><a href="#">Log time for your resources</a></p> <p data-bbox="469 422 1315 474">Log time and submit the time sheet of your resources from Time Sheet Portal. This option is available for user managers.</p> <p data-bbox="464 520 887 548">Notification for rejected time sheets</p> <p data-bbox="469 590 1350 642">Navigate to rejected time sheets by clicking the new notification icon. The icon is in the header of <a href="#">Time Sheet Portal</a>.</p> <p data-bbox="464 688 863 716">Approve button for user manager</p> <p data-bbox="469 758 1302 810">Approve a time sheet by using the new Approve button in Time Sheet Portal. The button is available only for a user manager.</p> <p data-bbox="464 856 603 884">Group tasks</p> <p data-bbox="469 926 1334 978">View the task cards for your assignment group by using the Group Tasks tab in Time Sheet Portal.</p> <p data-bbox="464 1024 815 1052">Calendar to switch time sheet</p> <p data-bbox="469 1094 1270 1146">Access the calendar to switch between time sheets. The calendar is available in the header of Time Sheet Portal.</p> <p data-bbox="464 1192 1046 1220">Inline edit of Project time category and Rate type</p> <p data-bbox="469 1262 1350 1367">Add information about the project time category and the rate time for your time cards in the new columns – Project time category and Rate type. The editable columns are available in the Logged Time Cards section of Time Sheet Portal.</p> <p data-bbox="464 1413 900 1440">Approval date and time on time card</p> <p data-bbox="469 1482 1238 1535">See when the time card state changes to Approved by using the Approved on field. The field is not on the form by default.</p>
UI	<p data-bbox="464 1619 751 1646"><a href="#">Duplicate CI Remediator</a></p> <p data-bbox="469 1688 1334 1793">Reconcile duplicate CIs in your system by using a wizard that guides you through the reconciliation process. The wizard pages provide detailed information about the duplicate CIs, letting you choose which attributes, relationships, and related items to retain, and what to reconcile. Use the <a href="#">CMDBDuplicateTaskUtils</a> API to manually create a de-duplication task for duplicate CIs that the system is not configured to detect. You can then remediate those tasks using the Duplicate CI Remediator as you would remediate a system generated de-duplication task. Get extra guidance through the remediation process from Embedded Help topics which are included with the Duplicate CI Remediator.</p>

Application or feature	Details
Vendor Risk Management	<p><a href="#">CI Relationships Health</a></p> <p>Use the 'Relationships not compliant with all relationship rules' report to see relationships that do not comply with any relationship governance rules, including suggested relationships and dependent relationship rules.</p>
	<p><a href="#">Application Services</a></p> <p>Use application services as a unified infrastructure for creating, maintaining, and managing services in the CMDB, Service Mapping, Event Management (if activated), and other ServiceNow applications. You can convert legacy business services to application services.</p>
	<p><a href="#">Vendor Tiering</a></p> <p>Determine your vendor's risk tiering score through the vendor tiering assessments workflow. Vendor risk managers route these assessments to internal assessors. The results are calculated against the default tiering scale. The vendor risk tiering score categorizes the potential risk posed by that vendor. Changes in the vendor tier can automatically generate a vendor risk assessment helping vendor risk managers determine the right assessment for the vendor based on the tier.</p>
	<p><a href="#">Security Score Integration</a></p> <p>Measure and monitor the security posture of a vendor, using third-party score providers, such as BitSight Technologies and SecurityScorecard, Inc. Vendor risk managers use these scores, or other internal metrics, to determine the potential risk of vendors. Each provider has different score ranges that are normalized through the Security Score Integration for determining security scores on a common scale. Changes in the security score can automatically generate a vendor risk assessment to reduce this vendor's risk exposure.</p>
Vulnerability Response	<p><a href="#">Setup Assistant</a></p> <p>Use Setup Assistant to walk you through the Vulnerability Response setup process in a simple, step-by-step fashion. Setup Assistant helps you discover which capabilities of Vulnerability Response require configuration, identify what permissions are required to configure them, and learn what settings are recommended for your environment. Setup Assistant helps you deploy Vulnerability Response quickly and efficiently.</p>
	<p><a href="#">CI Lookup Rules</a></p> <p>Configure the tables and fields within the CMDB that are used to look up existing Configuration Items when importing Vulnerable Items with CI Identifier Rules. They are also used for other Security Operations integration use cases. Rules are extensible to accommodate attribution and data that may be unique to a customer environment.</p>



Application or feature	Details
	<p data-bbox="467 212 1085 237"><a href="#">Multi-source Qualys vulnerability integration support</a></p> <p data-bbox="467 279 1364 646">Provide a unified view into the vulnerability exposure of your organization, using the Vulnerability Response multi-source support for the Qualys Cloud Platform. Multiple vulnerability assessment application deployments, and even multiple deployments from the same vulnerability assessment vendor, often occur after mergers and acquisitions. Multi-source support enables you to integrate multiple Qualys Cloud Platform deployments into a single instance of Vulnerability Response. Assets identified by multiple Qualys deployments and their vulnerabilities are consolidated and reconciled with your CMDB. This consolidation happens even when scan processes overlap between the multiple deployments. Qualys vulnerability integration Knowledge Base records are normalized across deployments, ensuring that instances of the same vulnerability across deployments are treated as the same vulnerability.</p> <p data-bbox="467 688 667 714"><a href="#">Discovered Items</a></p> <p data-bbox="467 756 1364 1041">Understand how hosts, discovered in your vulnerability assessment application, correspond to configuration items (CIs) in your CMDB using the Discovered Items feature. You can see how vulnerability instances from your vulnerability assessment application are de-duplicated when imported. For each host represented in each of your vulnerability assessment applications, a discovered item is created. The discovered item is then associated with its corresponding CI in the CMDB. Host information from your vulnerability assessment application is saved in the discovered item, which can aid in reclassifying the associated CI, as needed. The default listing for Discovered Items is unmatched CIs.</p> <p data-bbox="467 1083 820 1108"><a href="#">Vulnerability Rollup Calculator</a></p> <p data-bbox="467 1150 1272 1207">Use the risk score of vulnerable items to roll up the risk score at the Vulnerability group level.</p> <p data-bbox="467 1249 766 1274"><a href="#">Risk Score enhancements</a></p> <p data-bbox="467 1316 1348 1400">See how to use the interface to create a calculator using sample risk calculators, provided with the base system. These calculators are disabled by default.</p> <p data-bbox="467 1442 925 1467"><a href="#">New Reason added to the Closed state</a></p> <p data-bbox="467 1509 1353 1593">Added Fixed with Exceptions to the Vulnerability Group Closed state. This choice handles the case where not all vulnerable items are fixed, but the remediation specialist is finished working with that group.</p> <p data-bbox="467 1635 1034 1661"><a href="#">System property: sn_vul.impactd_services.limit</a></p> <p data-bbox="467 1703 1324 1789">Sets a limit on the number of vulnerable item records the scheduled job retrieves when calculating impacted services. Located in sys_properties.list.</p>

Application or feature	Details
Web services	<p><a href="#">External user REST API security</a></p> <p>Increase the security of sensitive data in your instance by preventing unauthorized external users from accessing scripted REST API resources.</p> <p><a href="#">Inbound REST API rate limiting</a></p> <p>Use rate limit rules to limit the number of inbound REST API requests processed per hour to prevent excessive use.</p> <p><a href="#">Install an ODBC driver patch</a></p> <p>Use ServiceNow patches to install incremental ODBC fixes that occur between major ODBC releases.</p> <p><a href="#">Support for custom request content types</a></p> <p>Added support for the following custom content types in scripted REST APIs:</p> <ul style="list-style-type: none"> <li>• Custom user-defined content types, with the ability to safely parse custom content types to JavaScript objects</li> <li>• <b>application/x-www-form-urlencoded</b> requests using standard request APIs</li> </ul>
Workflow	<p><a href="#">Display approvers in workflow stage fields</a></p> <p>Enable workflow stage fields to display approvers, change the number of approvers to display, or disable displaying approvers.</p> <p><a href="#">Retain activity scratchpad values</a></p> <p>View activity scratchpad values from the Workflow Activity History Scratchpad [wf_history_scratchpad] table. Workflow Activity History Scratchpad is also an embedded list in Workflow Activity History records.</p>

## Changes to London features and products

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018

Cumulative release notes summary on changes to London features and products.

### Changed features

Existing ServiceNow products were updated and changed in London. This includes the renaming of certain buttons or features.

Application or feature	Details
Accessibility	<p>Keyboard accessibility improvements</p> <p>In live feed, use the Tab key to navigate to an avatar then press Enter to open the avatar popover. Use the Tab key to navigate through the popover and select additional elements.</p>
Agile Development 2.0	<p>Home tab</p> <p>The Home tab in Agile Board has been renamed to Analytics tab.</p> <p>Sprint Board tab</p> <p>The Sprint Board tab is renamed to Sprint Tracking.</p>
Application Portfolio Management	<p><a href="#">APM plugin modifications</a></p> <p>The Application Portfolio Management [com.snc.apm] plugin is the base plugin for the application. However, three add-on plugins are available on subscription: analytics – compatible solution</p> <ul style="list-style-type: none"> <li>• Performance Analytics – Content Pack – Application Portfolio Management [com.snc.pa.apm] plugin to view APM portals and dashboards.</li> <li>• Performance Analytics – Content Pack – Application Portfolio Management and Change Management [com.snc.pa.apm.change_request] plugin to access performance analytics metrics of business applications associated with Change requests.</li> <li>• Application Portfolio Management, Performance Analytics, Performance Analytics – Content Pack – Problem Management [com.snc.pa.apm.problem] plugin to access performance analytics metrics of business applications associated with Problem management.</li> </ul> <p>Ideas Funnel replaced with Demands Column</p> <p>The Ideas funnel in the Program Navigation page has been replaced with <a href="#">Demands Column</a> to enable you to create demands directly as you identify opportunities.</p> <p>Usability changes</p> <ul style="list-style-type: none"> <li>• In Capability based planning map, both Business Capability view and the Technology Risk view can display direct and indirect business applications that are related to the business capability.</li> </ul>

Application or feature	Details
Assessments and Surveys	<p><a href="#">Renamed the Migrate to Assessment related link</a></p> <p>The Migrate to Assessment related link for legacy surveys is renamed as Migrate to New Survey Management.</p> <p><a href="#">Save functionality on a Survey Designer configuration form</a></p> <p>Click Save to save the current survey without changing its state.</p>
Asset Management	<p><a href="#">Approval History related list replaced the Approval History tab on the Contract Management form</a></p> <p>Track the approval history of a contract using a related list instead of the contract approval history journal. All approvers are listed in the Approval History related list.</p>
Authentication	<p><a href="#">Added State parameter for OAuth request</a></p> <p>Adds the system property glide.oauth.state.parameter.required to control the requirement of the State parameter in an OAuth request for Authorization code flow.</p>
Automated Test Framework	<p><a href="#">Search for a catalog item test step category change</a></p> <p>Moved the Search for a Catalog Item test step configuration from the Service Catalog category to the Server category.</p>
Benchmarks	<p><a href="#">Email notification change</a></p> <p>Email notifications are sent to the Benchmarks admin role only. Notifications include monthly global score availability, historical data recalculation, and KPI updates.</p>
Change Management	<p><a href="#">Change Request Approval Records</a></p> <p>Enhanced the approval summarizer in approval records associated with a change request to include additional information from the change request record.</p> <p><a href="#">Refresh Impacted Services</a></p> <p>The Refresh Impacted Services option was only available for the Change Request table. In this release, this option is also available for tables that extend the task table. The list of these tables is driven by the com.snc.task.refresh_impacted_services property. This option populates the Impacted Services or Impacted CIs related list based on the primary</p>

Application or feature	Details
	CI, that is, the CI that you specify in the Configuration Item reference field on the Change Request form.
Communities	<p><a href="#">Content posting from your community homepage</a></p> <p>Create a question, blog, video, document, or event from your homepage.</p> <p><a href="#">Forum view</a></p> <p>View up to eight forums on your community homepage. To find the forum that you are interested in, see the Forums list page and search for the forum you require.</p> <p><a href="#">Activity feed</a></p> <p>View the most recent activity for all content by looking at the activity feed. Only the most recent activity is listed per content item in the activity feed. All activities for each content item are grouped.</p> <p><a href="#">Community logs</a></p> <p>See what your community members are searching for and viewing by looking at the community logs.</p> <p><a href="#">Community feedback and bookmarks tables</a></p> <p>See the content that is getting the most feedback or bookmarks by members of your community. To view this information, go to the feedback and bookmark tables in the navigation filter view.</p> <p><a href="#">Case deflection with community content</a></p> <p>View community-related search results for questions and blogs in the Customer Service Management Case form and in the Customer Service Management Service Portal Case form.</p>
Contextual development environment	<p><a href="#">Enable global applications creation by default</a></p> <p>Enable global applications creation by default. When creating a new application, the Start from global option is available by default without having to set the <code>glide.app.creator.global</code> system property to <b>true</b>.</p>
Contextual search	<p><a href="#">KB attachment field</a></p> <p>The KB attachment field in Table Configuration is moved to the Attachment type field in the Table Configuration &gt; Search Action Configurations related list. The default for all new customers is Embed link to article so that a link to the article is used instead of embedding a copy of the whole article.</p>

Application or feature	Details
Customer Service Management	<p>When you upgrade, the KB attachment (Table Configurations only), Result action label, and Result action value fields are moved to the new Search Action Configurations related list.</p>
	<p><a href="#">Mandatory skills</a></p>
	<p>Use this feature to identify skills that are required for customer service cases. Then, rank and assign agents with those required skills to work on the cases.</p>
	<p><a href="#">Targeted communications recipients lists</a></p>
	<p>Create recipients lists by running scripts or uploading files in addition to using a condition builder. Create a recipients list of type Account that can be used by the Major Issue Management application to create child cases for a major case.</p>
Discovery	<p><a href="#">Chat enhancements</a></p>
	<p>Use Virtual Agent to create or use predefined chatbot conversations for your users. The customer always has the option of switching to a live agent.</p>
	<p><a href="#">Viewing dashboard reports</a></p>
	<p>Use the Performance Analytics administrator (pa_admin) and viewer (pa_viewer) roles to view the Customer Service executive, manager, and agent dashboards.</p>
	<p><a href="#">AWS event and Azure alert processing</a></p>
Field Service Management	<p>If an event occurs on a database in your AWS or Azure cloud, or on a Web Server in your Azure cloud, the event triggers the horizontal discovery process using a pattern to update the CMDB. In previous releases, the event did not trigger the discovery process.</p>
	<p><a href="#">NetScaler load balancer discovery</a></p>
	<p>New probes populate network path information for Citrix NetScaler load balancers to enable support for Service Mapping.</p>
Field Service Management	<p><a href="#">IP range auto-assignment</a></p>
	<p>Use Discovery Quick Start, rather than MID Server Guided Setup, to perform IP range auto-assignment after subnet discovery.</p>
	<p><a href="#">Team calendar enhancements</a></p>
	<p>Search for individual or multiple team members in the calendar by first or last name.</p>

Application or feature	Details
Financial Management	<a href="#">Mandatory skills</a>
	Use this feature to identify skills that are required for work orders and work order tasks. Then, rank and assign technicians with those required skills to work on the tasks.
	Financial Modeling
	Allocation log functionality has been changed to Missing money analysis. The error type and possible causes are stored as <a href="#">Missing money logs</a> .
	Financial Charging
Flow Designer	Charge item is renamed as Statement item in the Financial Charging application.
	Financial Planning
	Beginning with Kingston Patch 7, Financial Planning is only for <a href="#">Portfolio Planning</a> .
	<a href="#">Add more actions to a flow or subflow</a>
	Set the maximum number of actions a flow or subflow can contain with the <code>sn_flow_designer.max_actions</code> system property. The default value changed from 20 to 50 actions.
October 5, 2018	<a href="#">Nest For Each flow logic blocks</a>
	Add a For Each flow logic block inside of another to repeat an action over a series of records. However, avoid nested For Each loops that process many records. Nested loops may cause the flow to run until stopped by the flow transaction quota rule, which prevents flows from running longer than an hour. For more information about transaction quotas, see <a href="#">Transaction quotas</a> .
	<a href="#">Improve flow creation</a>
	Use Flow Designer interface enhancements to improve flow creation.
	<ul style="list-style-type: none"> <li>• Read flows faster with improved spacing between elements.</li> <li>• Configure additional flow properties from the More Actions menu.</li> <li>• Show or hide conditional logic by clicking a flow logic block.</li> <li>• Annotate triggers and flow logic blocks to communicate flow functionality.</li> <li>• Change the order of actions in a flow by dragging-and-dropping them.</li> </ul>

Application or feature	Details
Guided Tour Designer	<p>Role change</p> <p>In the Kingston release, the <code>sn_tourbuilder.tour_admin</code> role was used to administer guided tours. In this release, the <code>guided_tour_admin</code> role is used for this purpose.</p>
HR Service Delivery	<p>Case and Knowledge Management</p> <p><a href="#">Response templates for HR case management</a></p> <p>This feature, previously known as templated snippets, was renamed to response templates. You can also now configure response templates from HR Administration &gt; Response Template Configuration.</p> <p>Employee Service Center</p> <p><a href="#">Create content for Content Delivery</a></p> <p>Content for your service portal or Employee Service Center is configured from Content Delivery. Previously, content was configured under HR Administration &gt; Service Portal &gt; Content Types.</p> <ul style="list-style-type: none"> <li>Two categories have been added to identify content: <ul style="list-style-type: none"> <li>– Portal Content</li> <li>– Notification Content</li> </ul> </li> <li>Manage Content was changed to Portal Content.</li> <li>Link Content was added to define URLs for information and videos.</li> <li>Manage Audiences was added to define who can view the content.</li> <li>Schedule Content was added to define date ranges that content is available and the widget instance.</li> <li>Content Type and Organization Chart were moved under Configurations.</li> </ul> <p><a href="#">HR Integrations</a></p> <p>UI updates were made to several forms and lists in the HR Integrations application.</p>
Import and Export	<p><a href="#">File type data sources</a></p> <p>If the XML file used for an XML data source does not contain a field in the first 10 nodes, the field is ignored. To import the field and ensure it is not ignored, you can add the <code>glide.db.impex.XMLLoader.max.scan_nodes</code> system property with a value greater than or equal to the position of the node where the field is first encountered.</p>



Application or feature	Details
Incident Communications Management	<p><a href="#">Incident Communications Management</a></p> <p>A new state model for incident communication plan is introduced. This state model is available only for new users. The new state model has three states: Open, Closed, and Canceled.</p> <p>Conference call notification: When you initiate a conference call, an email or Slack notification is sent to the participants.</p> <p>Roles: Users with the major_incident_manager and communication_manager roles can edit a plan that is attached to a major incident.</p> <p>Table: The Incident Communication Plan table extends from the Communication plan table. The Incident communication tasks table extends the Communication tasks table so that the incident communication plan inherits any future enhancements made to the communication object.</p> <p>Incident Communication Plan form:</p> <ul style="list-style-type: none"> <li>Updated, added, or removed the following fields: <ul style="list-style-type: none"> <li>Details section is renamed as Notes.</li> <li>Comments is renamed as Actions taken.</li> </ul> </li> <li>Updated related lists to match the communication plan related lists: <ul style="list-style-type: none"> <li>Incident communication tasks</li> <li>Users</li> <li>Contacts</li> <li>Recipient lists</li> </ul> </li> </ul> <p>Communication and Conference: Introduced new sections – Communication and Conference on the form. Using the Communication section, you can send email or SMS updates to the participants of the conference call for that communication plan. Using the Conference section, you can initiate, join, or end a conference call. These sections are added to make it easy for users to directly take actions related to any type of communication or conference instead of opening the incident communication task from the form and then taking the appropriate action.</p> <p>The UI actions Kick, Mute, and Unmute on the notify_participant record are available for users with the major_incident_manager and communication_manager roles who also have the ia_admin role.</p> <p>Added the Group field to the Notify Participant [notify_participant] table. If a user is added to a conference call, the following things can happen:</p> <ul style="list-style-type: none"> <li>If the user is a member of only a single group, then that group value appears in the notify_participant entry.</li> <li>If the user is a member of multiple groups, then a formatter containing all the groups is displayed on the notify_participant record.</li> </ul> <p>Incident Communication Task</p> <ul style="list-style-type: none"> <li>You can initiate a conference call at the task level. Under Related links, the Initiate Conference Call related link appears.</li> <li>The Incident Communication task state changes with the progress of the communication channel.</li> <li>Incident Communication Task form: In the related lists, the Communication and Conference tabs are added.</li> </ul>

Application or feature	Details
Incident Management	<p><a href="#">Major incident management</a></p> <p>The major incident manager is responsible for a major incident when a child incident is promoted. Currently, even though the incident is promoted to a major incident, a caller has access to resolve or reopen the major incident. Starting this release, an ESS user is unable to resolve, reopen or close a major incident even if the user is the caller. The ESS user is prompted to enter Work Notes and the business impact at the time of major incident proposal and promotion. Rejection notification. The ESS user is prompted to enter the rejection reason while rejecting a major incident candidate. The rejection notification is then sent to the user that the incident is assigned to and the user who proposed the incident as a major incident candidate.</p>
Knowledge Management	<p><a href="#">Pagination for Knowledge Service Portal</a></p> <p>Use pagination to navigate through knowledge base search results in the Knowledge Management Service Portal.</p> <p><a href="#">Knowledge article access in the Knowledge Service Portal</a></p> <p>Make knowledge articles visible to external or public users by enabling knowledge articles on the Knowledge Management Service Portal.</p>
MetricBase	<p><a href="#">Create a legacy MetricBase trigger</a></p> <p>Create a trigger to run a script. The trigger is based on static thresholds you create. Data is checked when added to the MetricBase database. The legacy MetricBase trigger is deprecated and is unavailable for new instances, but is still available on instances upgraded from a previous release.</p> <p><a href="#">Create a legacy MetricBase trigger level</a></p> <p>Define levels or ranges for a trigger. The legacy MetricBase trigger level is deprecated and is unavailable for new instances, but is still available on instances upgraded from a previous release.</p>
MID Server	<p><a href="#">Nmap error message for Service Mapping</a></p> <p>If Service Mapping selects a MID Server for credential-less Discovery that does not have the Nmap capability, the dependency map displays the error message on the configuration item (CI) rather than in the MID Server log.</p> <p><a href="#">Credential synchronization</a></p> <p>You can control how customized reference fields on the Credential [discovery_credentials] table are synchronized with MID Servers.</p>

Application or feature	Details
	<p data-bbox="464 212 767 239"><a href="#">IP range auto-assignment</a></p> <p data-bbox="464 279 1369 363">IP range auto-assignment was moved from MID Server Guided Setup to the <a href="#">Discovery Quick Start</a> wizard. IP ranges are assigned automatically to MID Servers after subnet Discovery has identified the available ranges.</p> <p data-bbox="464 405 722 432"><a href="#">Java Service Wrapper</a></p> <p data-bbox="464 472 1257 527">The MID Server installer includes the Tanuki Software Java Service Wrapper, version 3.5.34.</p> <p data-bbox="464 569 826 596"><a href="#">Flow designer memory control</a></p> <p data-bbox="464 636 1369 720">The <code>mid.process_flow.log_listener.max_size</code> property sets the maximum size in bytes of memory available to save log messages for Flow Designer actions running on a MID Server.</p>
Notifications	<p data-bbox="464 804 906 831"><a href="#">Search bar in notification preferences</a></p> <p data-bbox="464 871 1369 955">In UI16, the Notifications tab of the System Settings window includes a search bar. Use it to find a specific notification in your preferences or get a list of all your notifications in alphabetic order.</p>
Notify	<p data-bbox="464 1035 810 1062"><a href="#">Conference call management</a></p> <p data-bbox="464 1102 1066 1129">Changes to conference call management features:</p> <p data-bbox="464 1169 1262 1197">Recommended and Selected lists for conference call management</p> <p data-bbox="464 1236 1369 1362">The Recommended section no longer displays the frequently called participants as the frequent callers may not always be relevant for the incident. In the Selected section, the user who initiates the conference call is added.</p> <p data-bbox="464 1402 735 1430">Notify role inheritance</p> <p data-bbox="464 1470 1369 1596">Users with the <code>itil</code> role inherit the <code>notify_view</code> role when the Incident Communications Management (<code>com.snc.iam</code>) and Notify (<code>com.snc.notify</code>) plugins are activated. The <code>notify_view</code> role lets these users view the Notify Conference Call Participant Session (<code>notify_participant_session</code>) table.</p>
Operational Intelligence	<p data-bbox="464 1686 882 1713"><a href="#">Operational Intelligence MID Server</a></p> <ul data-bbox="464 1753 1369 1896" style="list-style-type: none"> <li data-bbox="464 1753 1369 1808">• The Operational Intelligence MID Server application supports the ALL setting.</li> <li data-bbox="464 1827 1369 1896">• It is not required that the Operational Intelligence MID Server be a dedicated MID Server.</li> </ul>

Application or feature	Details
	<a href="#">Insights Explorer</a>

Insights Explorer provides:

- Host name: If available for a CI, appears underneath the CI name.
- Related CIs: Ability to add related CIs to be explored in Insights Explorer.
- Advanced search: Narrow down the search for CIs to a specific class or to other specific CI attribute filters.

### [Anomaly Map](#)

Anomaly Map provides:

- Host name: If available for a CI, appears underneath the CI name.
- Advanced search: Narrow down the search for CIs, to a specific class or to other specific property values.

### [Anomaly detection](#)

- **Change Detection:** When incoming data clusters around a new value, using the current control bounds and statistical model, Operational Intelligence detects this clustering as a value change and adjusts the statistical model so that most incoming data is again within the control bounds. The time it takes the Learner to adjust the statistical models to accommodate a permanent change in incoming metric data, is improved.  
Change detection is useful when, for example, cores or memory are added to the server, which impact the baselines.
- **Classification of data with a gap:** Improved classification of a seasonal model when there is a gap in the metric data. An improved analysis of the data before and after the gap makes it easier to identify seasonality in the data despite the gap. Also, less data points after the gap are needed to correctly identify a seasonal model.

### Terminology

The following terms have changed:

Function	Current Term	Legacy term
Metrics visualization	Insights Explorer	Metric Explorer
MID Server capability	Metrics	ITOA Metrics
Metric extension	Operational Intelligence Metrics Context	Operational Intelligence Manager Context
MID Server extension	Operational Intelligence Metrics	ITOA MetricExtension

Application or feature	Details
Password Reset	<p data-bbox="461 249 1091 277"><a href="#">Default security questions in all supported languages</a></p> <p data-bbox="461 319 1350 459">The base system provides a large set of default questions in all supported languages. Questions are presented to each user in the language that the user requested during login. Creating a custom English language question is a one-step process. To create a custom question in a non-English language, you can use either of the following options:</p> <ul data-bbox="461 489 1222 594" style="list-style-type: none"> <li>• Create a custom question in the non-English language.</li> <li>• Create a custom English-language question plus one or more translations of the question into other languages.</li> </ul> <p data-bbox="461 655 815 682"><a href="#">Installed with Password Reset</a></p> <p data-bbox="461 724 1350 806">Tables, roles, business rules, scripts, and workflows have been added to the Password Reset application. Some items existed in earlier releases and are documented for the first time.</p> <p data-bbox="461 848 1150 875"><a href="#">Enroll for the Password Reset program on a mobile device</a></p> <p data-bbox="461 917 1302 999">End users can enroll for most Password Reset programs on a mobile device. You cannot use a mobile device to enroll for a Password Reset process that uses the Google Authenticator verification.</p> <p data-bbox="461 1041 970 1068"><a href="#">Security questions are presented randomly</a></p> <p data-bbox="461 1110 1326 1167">For the Security Question verification process, questions are selected at random and are presented in random order.</p> <p data-bbox="461 1209 1230 1266">McAfee disk encryption support in the Password Reset Windows Application</p> <p data-bbox="461 1308 1350 1413">You can enable McAfee MDE 7.2 on a Windows desktop computer to support the Password Reset Windows Application. Download the installer and PDF user guide from the <a href="#">Password Reset Windows Application [KB0542328] article</a> in the HI Knowledge Base.</p> <p data-bbox="461 1455 1350 1512">User's preferred display language support in the Password Reset Windows Application</p> <p data-bbox="461 1554 1326 1665">The Password Reset Windows Application supports the user's preferred display language. Download the installer and PDF user guide from the <a href="#">Password Reset Windows Application [KB0542328] article</a> in the HI Knowledge Base.</p>
Performance Analytics	<p data-bbox="461 1753 571 1780"><a href="#">Spotlight</a></p> <ul data-bbox="461 1822 1331 1904" style="list-style-type: none"> <li>• Changed Spotlight job scheduling so it is set for each Spotlight group. You no longer have a single job for all Spotlight groups. See <a href="#">Create a Spotlight group</a>.</li> </ul>

Application or feature	Details
	<ul style="list-style-type: none"> <li>Changed score retention. Only the most recent Spotlight scores are available. New Spotlight scores overwrite older scores. The first time you run a Spotlight job after upgrading to this version of ServiceNow®, any existing Spotlight scores are deleted.</li> <li>Provided Spotlight logs to help in debugging. See <a href="#">Spotlight logs</a>.</li> <li>Automated the creation and maintenance of database views that join Spotlight group and facts tables. See <a href="#">Viewing Spotlight data</a>.</li> <li>Provided on-the-fly Interactive Analysis to examine the results of Spotlight evaluations. See <a href="#">Spotlight interactive analysis</a>.</li> </ul>

### Text analytics

Added the ability to search for phrases, not only individual words, in indicator text fields.

### Analytics diagnostics

Added the ability to run all active, applicable diagnostics for one indicator. Previously, you could only run one diagnostic for all applicable records, or all diagnostics for all applicable records.

### Performance Analytics data forecasts

Added the Random Forest method for time series, which creates a multitude of decision trees based on the historical data and then outputs the mean prediction of the trees. Also added 95% confidence intervals for forecasting on time series widgets, and upper and lower bounds for forecast values.

## Platform security

### Delegated development and deployment

Delegated development allows designated users without the admin role to develop or deploy applications on the ServiceNow platform.

### Securing data in domain-separated instances

The London release includes changes to better secure your data in domain-separated instances. These changes may result in some data not appearing in reports or lists. Review your access controls for any field that no longer appears in reports or lists.

### Assigning admin and security\_admin roles

- To grant the admin role to a user, the granting user must also have the admin role. For example, a user with only the user\_admin role cannot grant the admin role to other users.
- To grant the security\_admin role to a user, the granting user must also have the security\_admin role and must elevate to the security\_admin role before granting the security\_admin role to other users. A user with only the admin role cannot grant the security\_admin role to other users.

Application or feature	Details
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#### [Adding users to admin and security\\_admin groups](#)

- Non-admin users cannot add a user to a group that contains the admin role.
- A user without the security\_admin role cannot add a user to a group that contains the security\_admin role.

## Project Portfolio Management

### Changes in Resource Management

- For a resource plan in Allocated state, changes made to allocated hours now update only allocated hours. Previously, it updated the planned hours. Any changes to the Resource Allocation now change only the Confirmed/Allocated cost and leave the Planned cost as the baseline.
- Change Allocation on Actuals Hours: Resource managers can now make allocation changes even if the resource plan has actual hours booked.
- The following fields on resource management forms are renamed:
  - Requested hours to Planned hours.
  - Allocated hours to Confirmed/Allocated hours.

### Changes in Project Management

- When you change the state of a project task to Closed complete, the Percent complete field is set to 100 and becomes read-only.
- Updating the project state from Closed to Work In Progress, Pending, or Open is not allowed. If you need to reopen a closed project, reopen an existing project task or add a new task to the project. This moves the project from Closed to Work in Progress state without affecting the other closed tasks.
- The planned start date is copied over to actual start date when the state of a project task changes to Work in Progress. And the planned end date is copied over to actual end date when the state of the task changes to Closed. The actual dates previously defaulted to the date and time when the state change happened.
- You can assign users with a time card user-role to a project task. However, a time card user can not modify the assigned project task.
- The Summary tab in project workspace is renamed Analytics.
- You can navigate to Project Workbench using Planning tab in Project Workspace. Previously, the Tracking tab in Project Workspace was used for opening a project in Project Workbench.

### Changes in Demand Management

- The Portfolio field on Stakeholder Register form is no longer mandatory.
- The Submit button on a demand record in Draft state is renamed as Submit Demand.
- The values in Score, Risk, and Value fields are recalculated when the metrics influencing these values such as cost plan, benefit plan, or

Application or feature	Details
	<p>resource plan are updated for a demand in Qualified or Approved state. The field values are recalculated only until an artifact such as project, enhancement, defect, or change is created from the demand.</p>
Reporting	<p>Report type search</p> <p>When you create a report, the Report type choice list automatically populates when you enter text. For example, if you type <b>pivot</b>, only Pivot table and Multilevel pivot table report types are shown.</p> <p>Favorites filtering in the <a href="#">Reports list</a></p> <p>When you view the Reports list, Favorites filtering is on by default. Click the Favorites filtering button to display all reports.</p> <p><a href="#">Remove the old Report Builder UI</a></p> <p>The admin can remove the old Report Builder and restrict users to the new Report Designer UI for creating and editing reports.</p> <p>Plotting nil vs. null data in time series reports</p> <p>When creating or editing time series reports that contain multiple datasets, you can choose to have time points with missing data plotted as gaps rather than as zero values. For more information about creating time series reports that use line visualizations, see <a href="#">Report types and creation details</a>.</p>
Security Incident Response	<p><a href="#">User-Reported Phishing Enhancements</a></p> <p>The User-Reported Phishing feature, introduced in the Kingston release, has been enhanced to receive forwarded phishing mail submissions. Alert employees can forward suspicious mails from any device (including mobile phones) to their ServiceNow instance mailbox to automatically generate a phishing security incident for the Security Operations Center to work on.</p> <p><a href="#">Domain Separation Support for Integrations</a></p> <p>All existing and future integrations are domain separated, enabling Managed Security Service Providers to provide domain-separated implementations of integrations, such as threat lookup, observable enrichment, and sighting search on a per-user basis. Domain separation removes any limitations on using one common implementation of an integration for all users.</p>
Service Catalog	<p><a href="#">Category change for the Search for a Catalog Item ATF test step configuration</a></p> <p>Moved the Search for a Catalog Item test step configuration from the Service Catalog category to the Server category.</p>



Application or feature	Details
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#### [Choice direction of a variable question in Service Portal](#)

The Choice direction field value of a Lookup multiple choice variable question is applicable in Service Portal.

#### [Default quantity choice](#)

The default quantity choices are 1-10. These values are configured under System Definition > Choice Lists for the Item [sc\_cart\_item] table and the quantity element.

#### [My Request Filter condition](#)

The default filter condition is updated to display the active requests opened by or requested for the current user by navigating to Self-Service > My Requests.

#### [Modifications to a variable set](#)

- Variable set is elevated as a first-class citizen in Service Catalog. Like variables, a variable set has read, write, and create roles. If roles are provided for a variable set, the roles are applicable for the variables within the set. Roles of an individual variable are overridden by the roles of the variable set.
- The Name field of a variable set is deprecated and replaced with the Title field.
- A catalog item cannot have two variable sets with the same internal name.
- A catalog item cannot have a variable set and a variable with the same name.

#### Modifications to the Service Portal API

The result for \$sp.getCatalogItem() API has changed to:

```
{
  ..
  _fields: {
    name: '<name>'
    variable_name: 'IO:<sys_id>'
  }
}
```

Prior to the London release, the result was as follows:

```
{
  ..
  _fields: {
    name: 'IO:<sys_id>'
    variable_name: '<name>'
  }
}
```

Application or feature	Details
Service Mapping	<p>Gray-out of configuration items (CIs) and segments in application service maps</p> <p>These changes make the feature more intuitive:</p> <ul style="list-style-type: none"> <li>• The CIs and map segments are not grayed out during rediscovery. A CI is grayed out only if Service Mapping failed to discover the CI itself or all connections leading to the CI.</li> <li>• If a CI has more than one connection, the CI is not grayed out if at least one of its upstream connections is properly discovered.</li> </ul> <p>For an example of how to use this feature for troubleshooting maps, see <a href="#">Fix errors in individual business service maps</a>.</p> <p><a href="#">Improved Debug session functionality</a></p> <p>This enhancement improves the user experience of customizing patterns in Debug mode. The debug session does not end when users navigate between sections within the same pattern.</p> <p>SSH protocol alignment between Discovery and Service Mapping</p> <p>In fresh install deployments, patterns use the same SSH library that Discovery probes use.</p> <p>PowerShell and PowerShell Remoting Usage</p> <p>In fresh install deployments, MID Servers use PowerShell or PowerShell Remoting instead of WMI (Windows Management Instrumentation) Collector service to connect to Windows servers for top-down discovery. WMI Collector service is used as a failover.</p> <p><a href="#">Improved errors categorization</a></p> <p>Service Mapping and Discovery categorize errors in a unified way. Both applications group errors by root cause in addition to error code.</p> <p>Business Services navigation item renamed to Application services</p> <p>The navigation item under Service Mapping &gt; Services is renamed from Business Services to Application Services.</p> <p>For an example of the new navigation path, see <a href="#">Fix errors in individual application services using discovery messages</a>.</p> <p>The following user interface screens refer to application services as business services: Business Service Group Responsibilities, Approve, Service Mapping Properties, and Service Map Planner.</p>

## Service Portal

### [Announcements](#)

The To field is no longer required when creating announcements. If the field is not defined, the announcement continues to display until it is deactivated.

Application or feature	Details
Software Asset Management  Subscription Management	<p><a href="#">Search Page widget</a></p> <p>The Faceted Search widget replaces the Search Page widget. Use the <code>sp_search</code> page to enable users to filter search results using the Faceted Search widget. See <a href="#">Enable search facets</a>.</p>
	<p>Unused rights have been renamed to rights available.</p> <p><a href="#">Subscription page lists only active subscriptions</a></p> <p>The Subscription page lists only subscriptions that are currently active (have not expired). To view expired subscriptions as well, set the list filter to All.</p> <p><a href="#">Admin role required to change Limit to purchased setting</a></p> <p>The Limit to purchased setting ensures that you do not exceed the purchased subscription limit while attempting to allocate users. The setting affects whether you can use the Allocate selected users button for users in the Pending state.</p>
System upgrades	<p><a href="#">Inactive choices included in table definitions for applications and plugins</a></p> <p>Before this release, inactive choice values (<code>sys_choice</code> inactive attribute = true) were not included in table definitions when you published an application. For example, if a choice set contained Red, White, and Blue choices, but Blue was inactive, only Red and White would be included in the table definition.</p> <p>In addition, ServiceNow plugins did not contain inactive choices in table definitions.</p> <p>Starting in this release, table definitions include inactive choices when you publish applications. When you install or upgrade a published application, the inactive choices load into the client table. Two new system properties (<code>com.snc.apps.publish.include_inactive_choices</code> and <code>glide.db.table.update_inactive_choices_enabled</code>), which by default, are set to true, control the behavior of publishing applications and the behavior of installing applications. ServiceNow plugins also include inactive choices in table definitions.</p> <hr/> <p><b>Note:</b> You can enable old behaviors for inactive choice table selections. Manually set the two system properties to false in the instance in which applications are published, and in the instance in which they are installed. See <a href="#">Add a system property</a>.</p> <hr/>
Time Card Management	<p><a href="#">Renamed Worker Portal</a></p> <p>Worker Portal is renamed as Time Sheet Portal.</p>

Application or feature	Details
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Redesigned user interface

The user interface for Time Sheet Portal has been redesigned to provide you with a better navigation and user experience.

UI

List v3 support changes

Activating this plugin is not recommended if your organization has large or complex datasets, or if you are accustomed to the feature set and performance of List v2.

UI

#### CI Class Manager

- Labels and other elements in the user interface have been changed across the CI Class Manager for better clarity and helpfulness.
- [Suggested relationships](#) displays a diagram of all suggested relationships for the class and lets you add or delete suggested relationships for the class. All suggested relationships provided and used by Discovery, Service Mapping, and patterns, appear in the diagram (however, there is no notation of the source of a suggested relationship).
- Embedded help provides information and guidance for using the CI Class Manager.

#### Tables added to the CMDB

The following tables are added, increasing the total number of CMDB tables to 700.

Class Label	Class Name
Package	cmdb_ci_os_packages
UNIX Cluster Node	cmdb_ci_unix_cluster_node
UNIX Cluster Resource	cmdb_ci_unix_cluster_resource
CMDB Duplicate Remediator Default Related item	cmdb_dedup_default_rel_item
Duplicate CI Remediation	cmdb_duplicate_ci_remediation
CMDB Relationship All Rules Health Results	cmdb_health_result_rel_all
Affected CIs	cmdb_outage_ci_mtom
CI Relation Attributes	cmdb_rel_attributes
Application Service (Was part of another application in earlier releases)	cmdb_ci_service_discovered
Monitor Service (Was part of another application in earlier releases)	cmdb_ci_service_auto
Service Group	cmdb_ci_service_group

Application or feature	Details				
	<table> <tr> <th>Class Label</th><th>Class Name</th></tr> <tr> <td>(Was part of another application in earlier releases)</td><td></td></tr> </table>	Class Label	Class Name	(Was part of another application in earlier releases)	
Class Label	Class Name				
(Was part of another application in earlier releases)					

## Vulnerability Response

### [Reasons list for deferrals](#)

The reasons for a deferral have changed and increased in number.

- Awaiting maintenance window
- False positive
- Fix unavailable
- Risk accepted
- Mitigating control in place
- Other

## Removed features and products in London

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018

Cumulative release notes summary on features that were removed from London features and products.

## Removed features

Some features were removed as part of London product updates.

Application or feature	Details
Application Portfolio Management	<p>Since idea is just a thought to a possible course of action whereas demand is more of an action for a request, the concept of creating an idea within Application Portfolio Management is removed. Creating Idea actions within the Application Portfolio Management module from the following portals has been removed:</p> <ul style="list-style-type: none"> <li>• Application Portfolio Management Home.</li> <li>• Bubble charts.</li> <li>• Capability Based Planning map.</li> <li>• Technology Portfolio Management timeline.</li> <li>• New Idea form.</li> <li>• Program Navigation page.</li> </ul>
Asset Management	<p>The Approval History tab has been removed from the Contract Management form, and was replaced by the Approval History related list.</p>
Contextual search	<ul style="list-style-type: none"> <li>• The KB attachment field in Table Configuration is no longer available.</li> </ul>

Application or feature	Details
	<ul style="list-style-type: none"> <li>The Result action label and the Result action value field in Table Configuration and Record Producer Configuration are no longer available (platform only).</li> <li>The Order button no longer appears in search results for content items that are defined in the Service Catalog. Content items are not goods or services, which means that they cannot be ordered. In earlier releases, all Service Catalog items, including content items that appeared in the search results, had the Order button.</li> </ul>
Financial Management	<ul style="list-style-type: none"> <li>Allocation logs in the Allocation Setup stage.</li> <li>The Financial Management costing dashboard of the Financial Modeling application.</li> <li>The term Charge Item from the Financial Charging application.</li> <li>The <code>com.glide.financial_management.currency_code</code> property, specific to the Financial Management application, is removed from the System Property <code>[sys_properties]</code> table. This property was earlier used as functional currency. Now, functional currency is derived from the <code>glide.system.locale</code> property.</li> </ul> <p>For upgraded customers, functional currency is still derived from the <code>com.glide.financial_management.currency_code</code> property. If you have a value in this property, you may want to remove it so that all your financial plan conversions are reported in the same functional currency.</p>
HR Service Delivery	<ul style="list-style-type: none"> <li>The HR Workday Integration plugin (<code>com.sn_hr_wday</code>) was removed.</li> </ul>
Incident Communications Management	<ul style="list-style-type: none"> <li>Incident Communication Plan form: Removed the Activity and Post Incident Review sections.</li> <li>Conference call participants: The participants who are fetched frequently in a conference call option is no longer a part of the recommended list in the conference call participant dialog.</li> <li>UI action: Disabled the UI action View PIR Report.</li> <li>Incident Communication Task form: Removed the Send SMS UI Action.</li> </ul>
Incident Management	<ul style="list-style-type: none"> <li>The Show "Create Incident" link property is removed from the Incident Management Properties UI because this field is related to Knowledge Management.</li> <li>The URL used for the "Create Incident" link property is removed from the Incident Management Properties UI because this field is related to Knowledge Management.</li> </ul>
MID Server	<p>The installation prerequisite for the Java Runtime Environment (JRE) has changed for new MID Servers. You must install the supported JRE manually on each MID Server host or verify that the correct version is already running. There is no change in the way the instance upgrades existing MID Servers to the supported JRE version. See <a href="#">MID Server system requirements</a> for JRE version information.</p>
Performance Analytics	<ul style="list-style-type: none"> <li>Spotlight: The previous scheduled job, which was run for all Spotlight groups at once, has been removed and replaced with scheduled jobs set for each Spotlight group.</li> </ul>

Application or feature	Details
Platform security	<ul style="list-style-type: none"> <li>The Now Platform no longer supports creating new Triple DES keys for an Encryption Context, but continues to support previously-created Triple DES keys. Previously-created Triple DES keys are listed in the Encryption Contexts with a Type of 3DES.</li> </ul>
Project Portfolio Management	<ul style="list-style-type: none"> <li>The Tracking tab in the Project Workspace is removed. The tab was used for opening the selected project in Project Workbench. You can now navigate to Project Workbench using the Planning tab in Project Workspace and selecting Project Workbench from the Planning Console selection arrow.</li> <li>The <code>com.glide.financial_management.currency_code</code> property, specific to the Financial Management application, is removed from the System Property <code>[sys_properties]</code> table. This property was earlier used as functional currency. Now, functional currency is derived from the <code>glide.system.locale</code> property.</li> </ul> <hr/> <p><b>Note:</b> For upgraded customers, functional currency is still derived from the <code>com.glide.financial_management.currency_code</code> property. If you have a value in this property, you may want to remove it so that all your financial plan conversions are reported in the same functional currency.</p> <hr/> <ul style="list-style-type: none"> <li>The Incomplete button on Demand form is removed. It is replaced with Reset to Draft button.</li> </ul>
Service Catalog	<ul style="list-style-type: none"> <li>Removed <code>sc_cat_item_producer</code> from the exclusion list of the <code>glide.sc.item.order_guide_exclusion</code> property.</li> </ul>
Service Mapping	<ul style="list-style-type: none"> <li>The Service Map Planner module is deprecated. Fresh install deployments do not have the Service Map Planner module. The Service Mapping Home screen and the application service form provide capabilities you can use for planning. For more information, see the <a href="#">New features replacing Service Planner in Service Mapping [KB0689681]</a> article in the HI Knowledge Base.</li> </ul> <p>If you used this feature prior to upgrading, the Service Map Planner module is not removed from upgraded deployments.</p>
Time Card Management	<ul style="list-style-type: none"> <li>The Quick Add option on the task cards in Time Sheet Portal has been removed. You can use the Add to Time Sheet option to add time cards for a task card.</li> </ul>
Timeline Visualization	<ul style="list-style-type: none"> <li>The Timeline Visualization plugin is no longer dependent on the Project Management (<code>com.snc.project_management_v3</code>) plugin. Activating the Timeline Visualization plugin does not activate the Project Management plugin.</li> <li>Activating Timeline Visualization does not activate the CIO roadmap. You must activate the Project Portfolio Management</li> </ul>

Application or feature	Details
	(com.snc.financial_planning_pmo) plugin to use the CIO roadmap with timeline visualization.
Vulnerability Response	<ul style="list-style-type: none"> <li>• <b>Vulnerability Configuration module:</b> Replaced by Setup Assistant.</li> <li>• <b>CI Identifier Rules:</b> Removed in favor of CI Lookup Rules.</li> <li>• <b>Closed state Fixed reason:</b> Removed the Fixed reason. You are not able to change the vulnerability group state manually to Closed/Fixed. The vulnerability group state changes automatically to Closed/Fixed when all the vulnerable item states are changed to Closed/Fixed.</li> </ul>

## Activation information for all London features and products

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018

Cumulative release notes summary on activation information for London features and products.

### Activation information

Some products and features require specific subscriptions, roles, or licenses. Other features are part of the Now Platform® and are active by default.

Application or feature	Details
Accessibility	<p>Enable accessibility from the system settings option. For more information on system settings, see <a href="#">System settings for the UI</a>.</p> <p>Enable accessibility mode</p> <p>Use the Tab key to navigate to every item on a page. Accessibility mode also enables the option to skip to different places on a page. Your users can enable this option individually on the General tab of the system settings menu. You can also enable this preference for your users by navigating to User Administration &gt; User Preferences and searching for the preference glide.ui.accessibility.</p>
Agent Intelligence	<ul style="list-style-type: none"> <li>• Agent Intelligence is included in the following packages: ITSM Professional, CSM Professional, HR Professional, and HR Enterprise. When you subscribe to any of these packages, you can activate the Agent Intelligence plugins in your production instance using your administration rights. You can also request activation of these plugins on a non-production instance.</li> <li>• If you are running your instance on an earlier version than Kingston Patch 2, such as Kingston Patch 0 or Kingston Patch 1, when you activate your plugins, you must update your scheduler URL property so it is compatible with Agent Intelligence. For activation instructions, see <a href="#">Activate Agent Intelligence</a>.</li> </ul>
Agile Development 2.0	You can <a href="#">activate Agile Development 2.0 (com.snc.sdlc.agile.2.0)</a> if you have the admin role.



Application or feature	Details
API	<ul style="list-style-type: none"> <li>Discovery APIs: Discovery is available as a separate subscription from the rest of the Now Platform and requires the Discovery (com.snc.discovery) plugin.</li> <li>Flow Designer APIs: Flow Designer is a Now Platform feature that is active by default.</li> <li>Interaction Management APIs: An administrator can activate the Interaction Logging, Routing, and Queueing plugin [com.glide.interaction] to access the functionality.</li> <li>Major Incident Management API: An administrator can activate the Incident Management - Major Incident Management plugin (com.snc.incident.mim) to access the functionality.</li> <li>Messaging Notification APIs: To activate notifications in messaging applications, request the Messaging Notification plugin (com.glide.notification.messaging) through the HI Customer Service system. This plugin activates related plugins if they are not already active. Integrations with third-party systems also require a separate IntegrationHub subscription.</li> <li>MetricBaseAPIs: The MetricBase product requires a separate subscription and must be activated by ServiceNow personnel.</li> <li>SentimentAnalyser API: An administrator can activate the Sentiment Analysis (com.snc.sentiment_analysis) plugin to access the functionality.</li> <li>Service Portal APIs: Service Portal is a Now Platform feature that is active by default.</li> <li>UserCriteriaLoader API: Available with the User Criteria Scoped API plugin (com.glideapp.user_criteria.scoped.api) that is active by default.</li> </ul>
Application Portfolio Management	<p><a href="#">Activate the Application Portfolio Management (com.snc.apm) plugin</a> if you have the admin role.</p>
Assessments and Surveys	<p>Platform feature – active by default.</p> <p>Activate the Continual Improvement Management plugin (com.sn_cim) to enable the Create Improvement Initiative related link for surveys and assessments.</p> <p>Activate the Sentiment Analysis (com.snc.sentiment_analysis) plugin to enable the following modules:</p> <ul style="list-style-type: none"> <li>Sentiment Analysis &gt; Sentiment Connector Configurations: Contains the connector configurations for sentiment analysis.</li> <li>Sentiment Analysis &gt; Sentiment Analysis Properties: Contains the customization properties for the Sentiment Analysis module.</li> <li>Survey &gt; Question Sentiment Results: Contains the sentiment analysis results for surveys.</li> </ul>
Asset Management	<p>The Software Asset Management Foundation (com.snc.sams) plugin must be activated by ServiceNow personnel. This plugin includes demo data. See <a href="#">Request Software Asset Management Foundation plugin</a>.</p>
Authentication	<p>You can activate the Custom URL plugin (com.snc.customurl) if you have the admin role.</p>
Automated Test Framework	<p>Active by default. To use quick start sample tests, activate the Customer Service Management Demo Data plugin (com.snc.customerservice.demo).</p>

Application or feature	Details
Benchmarks	Active by default. However, you must opt in to the Benchmarks program to participate.
Change Management	To view the Change Schedules page, you must activate the Change Management - Change Schedule plugin (com.snc.change_management.soc).
Cloud Management	The Cloud Management (com.snc.cloud.mgmt) plugin requires a separate subscription. You must <a href="#">request activation</a> from ServiceNow personnel.
Communities	<p>Communities is only available for customers who are licensed for Customer Services Management. To activate Communities, activate the Customer Communities plugin (com.sn_customer_communities).</p> <p>To implement knowledge harvesting, activate the Knowledge Management Service Portal plugin (com.snc.knowledge_serviceportal).</p>
Configuration Compliance	<p>Activate the Configuration Compliance [com.snc.vulc] plugin and configure it based on the needs of your organization. This plugin is available as a separate subscription.</p> <hr/> <p><b>Note:</b> Configuration Compliance can process scan data from various sources.</p> <p>The Qualys Cloud Platform plugin for Vulnerability Response has been extended to import Qualys PC content and scan results into ServiceNow Configuration Compliance. Plugins that support other configuration scanning applications, such as those from Tenable, Rapid7, and TripWire, may exist. See the ServiceNow Store for available plugins or consult your scanning application representative, for availability.</p> <hr/>
Contextual development environment	To activate application restricted caller access, you activate the Scoped Application Restricted Caller Access plugin (com.glide.scope.access.restricted_caller).
Contextual search	The Contextual Search plugin (com.snc.contextual_search) is activated by default for upgrade and new customers.
Continual Improvement Management	The Continual Improvement Management (com.sn_cim) plugin requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data and activates related plugins if they are not already active. The Continual Improvement Management application is available with the ITSM Professional subscription only. Please contact your account manager for more information.
Customer Service Management	You can activate the Customer Service Management plugin (com.sn_customerservice) if you have the admin role. This plugin includes demo data and activates related plugins if they are not already active.
Delegated development and deployment	Active by default.

Application or feature	Details
Discovery	Discovery is available as a separate subscription from the rest of the Now Platform and requires the Discovery (com.snc.discovery) plugin.
Edge Encryption	Active by default.
Embedded help	The Embedded Help (com.glide.embedded_help) plugin is active by default for all new and upgraded instances.
Event Management	Event Management is available as a separate subscription from the rest of the Now Platform and requires the Event Management (com.glideapp.itom.snac) plugin.
Field Administration	Platform feature — active by default.
Field Service Management	The Field Service Management (com.snc.work_management) plugin is available as a separate subscription. This plugin activates related plugins if they are not already active.
Financial Management	You can <a href="#">activate the Financial Management Core (com.snc.financial_management) plugin</a> if you have the admin role.
Flow Designer	<ul style="list-style-type: none"> <li>Platform feature – active by default.</li> <li>Running a flow from a Service Catalog item request requires a separate plugin that is inactive by default. To activate this feature, request the Flow Designer support for the Service Catalog plugin (com.glideapp.servicecatalog.flow_designer) through the HI Customer Service system. This plugin activates related plugins if they are not already active.</li> </ul>
HR Service Delivery	<p>HR Service Delivery is available as a separate subscription. You can activate one or more of the following plugins:</p> <ul style="list-style-type: none"> <li>Case and Knowledge Management plugin (com.sn_hr_core)</li> <li>Employee Service Center plugin (com.sn_hr_service_portal)</li> <li>Enterprise Onboarding and Transitions plugin (com.sn_hr_lifecycle_events)</li> </ul> <p>If you are integrating HR Service Delivery with a third-party HR management system or background check system, the HR Integrations plugin (com.sn_hr_integrations) is automatically activated with the Case and Knowledge Management plugin (com.sn_hr_core) to assist you in the integrations process.</p> <p>If you are subscribed to both HR Service Delivery and Performance Analytics, you can activate one or more of the following content packs:</p> <ul style="list-style-type: none"> <li>Performance Analytics - Content Pack - Human Resources Scoped App [com.sn_hr_pa]</li> <li>Performance Analytics - Content Pack - Human Resources Lifecycle Events Scoped App [com.sn_hr_lifecycle_pa]</li> </ul> <p>If you are migrating from the legacy (non-scoped) version to the scoped version of HR Service Delivery, you can activate the HR Migration plugin (com.sn_hr_migration) to assist you in the migration process.</p>

Application or feature	Details
	If you are subscribed to both HR Service Delivery and Facilities Service Management, activate the Facilities Move Management plugin (com.snc.facilities_service_automation.move) first. Activating the Facilities Move Management plugin first ensures that the building map appears in the Employee Service Center.
Import and Export	<a href="#">File type data sources</a> is a platform feature that is active by default.
Incident Communications Management	The Incident Communications Management plugin (com.snc.iam) must be activated by new customers. For more information, see <a href="#">Activate Incident Communications Management</a> .
Incident Management	The Incident Management - Core plugin (com.snc.incident_management) is available by default in new instances but it is not available on upgrade. Customers upgrading from Geneva or earlier versions must request the plugin.
IntegrationHub	The ServiceNow IntegrationHub Installer plugin (com.glide.hub.integrations) requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data and activates related plugins if they are not already active.
Interaction Management	An administrator can activate the Interaction Logging, Routing, and Queuing plugin [com.glide.interaction] to access the functionality.
ITSM Virtual Agent	<p><a href="#">Virtual Agent</a> must be activated before you can use the ITSM Virtual Agent chatbot topics.</p> <p>To activate this feature, request the Virtual Agent plugin (com.glide.cs.chatbot) through the HI Customer Service system.</p> <p>You must have the admin role to activate the ITSM Virtual Agent Conversations plugin (com.snc.itsm.virtualagent) to access the predefined ITSM Virtual Agent topics.</p>
Knowledge Management	<p>Activate the Knowledge Management Advanced plugin (com.snc.knowledge_advanced) to enable advanced features for Knowledge Management. For more information on activating the plugin, see <a href="#">Activate the Knowledge Management Advanced plugin</a></p> <p>Activate the Knowledge Management Service Portal plugin (com.snc.knowledge_serviceportal) to use the Knowledge Management Service Portal. For more information on activating the plugin, see <a href="#">Activate the Knowledge Management Service Portal plugin</a></p> <p>The Knowledge User Criteria Diagnostics feature is included in the Knowledge v3 plugin, which is enabled by default.</p>
MetricBase	The MetricBase product requires a separate subscription and must be activated by ServiceNow personnel. A demonstration plugin with sample tables, metrics, triggers, and data is available. Be sure to request the MetricBase Demo plugin with the MetricBase product.
MID Server	Platform feature - active by default

Application or feature	Details
Notifications	<ul style="list-style-type: none"> <li>Platform feature - active by default.</li> <li>To activate notifications in messaging applications, request the Messaging Notification plugin (com.glide.notification.messaging) through the HI Customer Service system. This plugin activates related plugins if they are not already active. Integrations with third-party systems also require a separate IntegrationHub subscription.</li> </ul>
Operational Intelligence	The Operational Intelligence plugin (com.snc.sa.metric) requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data and activates related plugins if they are not already active.
Password Reset	<ul style="list-style-type: none"> <li>A simple version of the Password Reset application is active by default and includes example verifications. The base system enables connections only to the Local ServiceNow Instance credential store type. For details, see <a href="#">Credential stores for Password Reset</a>.</li> <li>To enable connections to Active Directory (AD) and Remote (SOAP) ServiceNow Instance credential store types, you must activate the Password Reset - Orchestration Add-on plugin. The plugin also activates the Password Reset Windows Application (com.glideapp.password_reset_desktop). No other components are installed. Orchestration is available as a separate subscription. See <a href="#">Activate the Password Reset - Orchestration Add-on plugin</a>.</li> </ul>
Performance Analytics	<p>Platform feature — Complimentary Performance Analytics for Incident Management is active by default.</p> <ul style="list-style-type: none"> <li>Full Performance Analytics functionality requires a separate subscription. For more information, see <a href="#">Get licensed Performance Analytics</a>.</li> </ul>
Platform quality and performance	Active by default.
Platform security	<p>The <a href="#">Instance Security Dashboard (PA)</a> is active if the Performance Analytics - Instance Security Dashboard plugin (com.snc.pa.instance_sec_dash) is active.</p> <p><a href="#">Delegated development and deployment</a> is a platform feature that is activated when Application Administration is selected in the application record.</p>
Problem Management	The Problem Management plugin (com.snc.problem) is activated by default for new and upgrade customers.
Project Portfolio Management	Users with the admin role can <a href="#">activate the Project Portfolio Management</a> (com.snc.financial_planning_pmo) plugin.
Reporting	<ul style="list-style-type: none"> <li>Platform feature - active by default.</li> </ul>
Scaled Agile Framework	The <a href="#">Scaled Agile Framework plugin (com.snc.sdlc.safe)</a> plugin requires a separate subscription and must be activated by ServiceNow personnel.

Application or feature	Details
Search Administration	Platform feature - active by default.
Security Incident Response	Activate the Security Incident Response (com.snc.security_incident) plugin and configure it based on the needs of your organization using Setup Assistant. This plugin is available as a separate subscription.
Service Catalog	Active by default.
Service Level Management	The SLA Breakdowns plugin (com.snc.sla.breakdowns) is activated by default for new customers. Upgrading customers must activate the plugin to install the SLA breakdowns feature.
Service Mapping	Service Mapping is available as a separate subscription and requires activation by ServiceNow personnel. The following plugins are activated automatically when Service Mapping (com.snc.service-mapping) is activated: Discovery (com.snc.discovery), Pattern Designer (com.snc.pattern.designer), Cloud Management Core (com.snc.cloud.core), Performance Analytics - Content Pack - Service Mapping (com.snc.service-mapping.pa.content), and Event Management and Service Mapping Core (com.snc.service-watch). The Event Management and Service Mapping Core (com.snc.service-watch) plugin is different from the Event Management plugin (com.glideapp.itom.snac).
Service Portal	<ul style="list-style-type: none"> <li>Service Portal is active by default on new instances. For upgraded instances, activate the Service Portal for Enterprise Service Management plugin (com.glide.service-portal.esm) if you have the admin role. Activating the Service Portal plugin does not affect any existing Content Management System (CMS) configuration. For more information, see <a href="#">Content Management and Service Portal</a>.</li> </ul>
Software Asset Management	<p>The Software Asset Management Professional (com.snc.samp) plugin requires a separate subscription and must be activated by ServiceNow personnel. This plugin includes demo data. Depending on your environment, you may choose to request one or more related plugins which also must be activated by ServiceNow personnel. See <a href="#">Request Software Asset Management</a>.</p> <p>For the Software Asset Management (com.snc.software_asset_management) plugin and Software Asset Management Foundation (com.snc.sams) plugin features of Asset Management, see <a href="#">ITSM Software Asset Management</a>.</p>
Subscription Management	Platform feature - active by default.
System upgrades	Platform feature — active by default.
Table administration	Platform feature — active by default.
Task Communications Management	The Task Communications Management plugin (com.snc.task_communication_management) is not available for independent activation. Currently, the plugin is activated when you activate the Incident Communications Management plugin (com.snc.iam), the Incident Management - Major Incident Management plugin

Application or feature	Details
	(com.snc.incident.mim), or Major Issue Management plugin (com.sn_majorissue_mgt).
Test Management 2.0	You can <a href="#">activate Test Management 2.0 (com.snc.sdmc.test_management)</a> if you have an admin role.
Time Card Management	You can <a href="#">activate the Time card management (com.snc.time_card)</a> plugin if you have the admin role.  Time Card also gets activated as part of the <a href="#">Project Portfolio Suite with Financials (com.snc.financial_planning_pmo)</a> plugin.
Timeline Visualization	Users with the admin role can <a href="#">activate the Timeline Visualization (com.snc.timeline_visualization)</a> plugin. To use CIO roadmap with timeline visualization, you must activate the Project Portfolio Management (com.snc.financial_planning_pmo) plugin.
UI	Platform feature – active by default.
Vendor Risk Management	The GRC: Vendor Risk Management (com.sn_vdr_risk_asmt) plugin is available as a separate subscription.
Virtual Agent	To activate this feature, request the Virtual Agent (com.glide.cs.chatbot) plugin through the HI Customer Service system.
Vulnerability Response	Activate the Vulnerability Response (com.snc.vulnerability) plugin and configure it based on the needs of your organization using Setup Assistant. This plugin is available as a separate subscription.
Walk-up Experience	You can activate the Walk-up Experience plugin (com.snc.walkup) if you have the admin role. This plugin includes demo data.
Web services	<a href="#">External user REST API security</a> is a platform feature that is active by default if the REST APIs - Explicit Roles (com.glide.explicit_roles) plugin is already active on that instance.  <a href="#">Inbound REST API rate limiting</a> is a platform feature that is active by default.  <a href="#">Install incremental ODBC fixes</a> does not require activation.  <a href="#">Support for custom request content types</a> is a platform feature that is active by default.
Workflow	Platform feature — active by default.

## Browser requirements for all London features and products

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018

Cumulative release notes summary on browser requirements for London features and products.

## Browser requirements

Several products have specific browser requirements. Review this information to ensure you are using the correct browsers and browser versions.

Application or feature	Details
Accessibility	Some keyboard shortcuts are browser-specific. See your specific browser documentation for more information.
Project Portfolio Management	If you are using Internet Explorer, version 11 or later (including Edge) is required to use all aspects of the workbenches.
Vendor Risk Management	Google Chrome 63 and later.

## Accessibility information for all London features and products

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018

Cumulative release notes summary on accessibility information for London features and products.

### Accessibility information

Some products have specific accessibility information or exceptions.

Application or feature	Details
Project Portfolio Management	In custom UI pages like Planning Console where Gantt chart is used, few exceptions such as date time picker and timeline task bars are not keyboard accessible.
Service Mapping	<p>Service Mapping supports Web Content Accessibility Guidelines (WCAG) 2.0 level A for all tasks performed on service maps in the View and Edit modes. User interface elements have enhancements that make them accessible to screen readers. Service Mapping offers text alternatives for the following UI elements:</p> <ul style="list-style-type: none"> <li>• Map elements</li> <li>• Business service list</li> <li>• Business service and CI Properties pane</li> <li>• The More Options menu</li> <li>• The timeline area</li> <li>• Pattern Designer elements like step tree</li> </ul> <p>For information on operating Service Mapping using keyboard shortcuts, see <a href="#">Keyboard shortcuts for operating Service Mapping in accessibility mode</a>.</p>

## Additional requirements for all London features and products

**Last updated:** April 10, 2018

**Last updated:** April 10, 2018



Cumulative release notes summary on additional requirements for London features and products.

## Additional requirements

To use certain products, specific setups or third-party requirements are required.

Application or feature	Details
Embedded help	Embedded help is only available in UI16. It is not compatible with UI15.
Financial Management	Right-to-left languages in custom UI pages are not supported. Alternatively, you can use platform lists and forms.
Guided Tour Designer	The Guided Tour Designer is only available in UI16. The designer is not compatible with UI15. For more information, see <a href="#">Activate UI16</a> .
Project Portfolio Management	Right-to-left languages in custom UI pages are not supported. Alternatively, you can use platform lists and forms.

## Available versions (London)

**Last updated:** September 27, 2018

**Last updated:** September 27, 2018

The London family includes Enterprise patches and hot fixes, as well as releases for Password Reset, ODBC, and Mobile.

For more information about how to upgrade an instance, see [Upgrade to London](#).

For more information about the release cycle, see the [ServiceNow Release Cycle](#). For a downloadable, sortable version of London fixed problems, see [KB0692695](#).

**Note:** This version is under FedRAMP evaluation.

## Q4 2018 QPP Targets

Releases	Patch target option	Release notes
Jakarta	<a href="#">Jakarta Patch 10</a>	<a href="#">Jakarta</a>
Kingston	<a href="#">Kingston Patch 9</a>	<a href="#">Kingston</a>
London	<a href="#">London Patch 1 Hot Fix 2</a>	<a href="#">London</a>

- Targets are subject to change prior to patching. Target versions for a quarter change only if absolutely necessary.
- ServiceNow will occasionally add an additional letter to some patch and hot fix names (for example, Helsinki Patch 9a). Please consult the release notes for the list of fixes included in each version.

## Available versions

For patch release notes that are not yet listed below, refer to [KB0656793](#).

For publicly available hot fix and security patch release notes that are not yet listed below, refer to [KB0598632](#).

Release version	Release type	Released on	Availability
<a href="#">London Patch 2</a>	Patch	10/04/2018	Available
<a href="#">London Patch 1 Hot Fix 2a</a>	Security patch	10/04/2018	Available
<a href="#">London Patch 1 Hot Fix 2</a>	Hot fix	09/13/2018	Available
<a href="#">London Patch 1</a>	Patch	09/05/2018	Unavailable  Replaced by <a href="#">London Patch 1 Hot Fix 2</a>
<a href="#">London security and notable fixes</a>	Feature	07/26/2018	Unavailable
<a href="#">All other London fixes</a>			Replaced by <a href="#">London Patch 1 Hot Fix 2</a>

- *Available*: Any user can upgrade to the version. "Available" versions will appear on the [Instance Upgrade Management Dashboard](#). ServiceNow QPP targets and patches are immediately available. Users do not need to request an entitlement to schedule an upgrade to these versions.
- *Unavailable*: The release version is not available.

## Mobile versions

For the latest iOS and Android mobile application release notes, refer to [KB0598602](#).

## Password Reset Windows Application releases

For the latest Password Reset Windows Application release notes, refer to [KB0598975](#).

## ODBC Driver releases

For available ODBC release notes that are not yet listed below, refer to [KB0540707](#).

The [ODBC Driver patch release notes](#) contain problem fixes for supported and legacy ODBC Driver patch versions.

## London Patch 2

**Last updated:** October 04, 2018

**Last updated:** October 04, 2018

The London Patch 2 release contains problem fixes.

London Patch 2 was released on October 4, 2018.

Build date: 09-20-2018\_1514  
Build tag: glide-london-08-27-2018\_\_patch2-09-19-2018

ServiceNow QPP targets and patches are immediately available. Users do not need to request an entitlement to schedule an upgrade to these versions.

For more information about how to upgrade an instance, see [Upgrade to London](#).

For more information about the release cycle, see the [ServiceNow Release Cycle](#). For a downloadable, sortable version of London fixed problems, see [KB0692695](#).

**Note:** This version is under FedRAMP evaluation.

## Security-related fixes

London Patch 2 includes fixes for security-related problems that affected certain ServiceNow® applications and the Now Platform®. We recommend that customers upgrade to this release for the most secure and up-to-date features. For more details on security problems fixed in London Patch 2, refer to [KB0713186](#).

## Notable fixes

The following problems and their fixes are ordered by potential impact to customers, starting with the most significant fixes.

Problem category	Short description	Description	Steps to reproduce
Activity Stream PRB1158420	When clicking 'Show email details' in the email activity, the content of the email is opened in a new page	When clicking 'Show email details' in an Email Activity, the email content is opened in the same activity. If 'Sent/Received Emails' is unchecked and re-checked, when clicking 'Show email details' again, the email content is opened in a new page.	
Templates PRB1175777 <a href="#">KB0692580</a>	Unable to see all the incident form fields in the Field Values list in the Set Field Values step	Users with the itil and atf_test_admin roles who create an incident via ATF cannot see all the incident form fields in the Field Values list in the Set Field Values step.	<ol style="list-style-type: none"> <li>1. Log in as an admin.</li> <li>2. If required, activate the Automated Test Framework plugin (com.glide.automated_testing_framework).</li> <li>3. Add the itil and atf_test_admin roles to Abel Tuter.</li> <li>4. Impersonate Abel Tuter.</li> <li>5. Open any incident and check that you can see all the fields.</li> <li>6. Navigate to Automated Test Framework &gt; Tests and click New.</li> <li>7. Enter the following values: <ul style="list-style-type: none"> <li>• Create a test with the test name as Test1 and save it.</li> <li>• Select Add Test Step.</li> <li>• Select Form &gt; Open a New Form and select the table name as "incident".</li> </ul> </li> <li>8. Save the record.</li> <li>9. Click Add Test Step and go to Form &gt; Set Field Values.</li> <li>10. Open the list for Field Values.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			It shows only three or four field names. Users with the itil role expect to see all the fields in the incident form.
Condition Builder PRB1242164 <a href="#">KB0688305</a>	List v2 filters with time operands appear in the correct language in the filter breadcrumb but not in the condition builder drop-down	Filters used on v2 lists and filters made on reports work and show the expected result only within the same language used to create or to edit that filter.	Refer to the listed Known Error KB article for details.
Lists PRB1004508 <a href="#">KB0696733</a>	When clicking a record in a related or embedded list, the user receives a blank screen if the generated URL is too long		Refer to the listed Known Error KB article for details.
Forms and Fields PRB1246612 <a href="#">KB0662267</a>	Document ID type fields still support the on-hover functionality on the reference icon	Unable to hover to view the reference pop-up text, but document ID type fields still show the text and they flicker continuously.	<ol style="list-style-type: none"> <li>1. Navigate to System Definition &gt; Tables.</li> <li>2. Navigate to the sysapproval_approver table.</li> <li>3. Open any record.</li> <li>4. Hover over the info icon on the Approving field.</li> </ol>

## All other fixes

Problem category	Short description	Description	Steps to reproduce
Activity Stream PRB1259814	When an email is received, the activity log displays the wrong value	In the activity log, the status on the right side displays the wrong value 'Email sent' when an email is received.	<ol style="list-style-type: none"> <li>1. In separate tabs, go to sys_email_list and any incident.</li> <li>2. Create a record where the type is received, and the target is the incident you are viewing the activity stream from.</li> <li>3. Reload the incident.</li> </ol> <p>The mail entry says 'Email received', but the top right text says 'Email sent.'</p>
Agent Workspace for ITSM	The subscription category for the com.snc.agent_workspace.itsm		

Problem category	Short description	Description	Steps to reproduce
PRB1300778	plugin is incorrect		
Agent Workspace	The choice-list population does not work on the change client script	Once switching the priority to P1, further priority switches do not re-populate the incident type with all the options. The incident type choice list still only shows outage and performance.	<ol style="list-style-type: none"> <li>1. Create an incident and fill in all required details (Set the priority to P4) and save the record. The incident type dropdown has more than 5 choice list options.</li> <li>2. Change the priority to P1. The incident type choice list is updated with 2 options (outage and performance).</li> <li>3. Change the priority to P4.</li> </ol> <p>The incident type choice list does not show all the incident types.</p>
Agent Workspace	Change Agent Workspace plugins to State @ Development for London		
PRB1300979			
Agile Development	The Date Time Picker does not apply the system time format	When setting the format to 'dd.MM.yyyy', the date/time value is not populated correctly.	<ol style="list-style-type: none"> <li>1. Activate the Agile Development 2.0 plugin (com.snc.sdmc.agile.2.0).</li> <li>2. Set the property glide.sys.date_format to dd.MM.yyyy.</li> <li>3. Go to Agile Development &gt; Groups.</li> <li>4. Open any group displayed on the list.</li> <li>5. Click the link 'Create Sprint' (you need to add your user as a group member). The date/time value on the load of the UI dialog is populated correctly with the system date/time format.</li> <li>6. Fill in all fields and submit the UI dialog.</li> <li>7. Open the list of sprints/rm_sprint.</li> <li>8. Open the sprint record created.</li> </ol> <p>The planned start date shows incorrectly as 01.01.1970 and the end date is also calculated incorrectly.</p>
PRB1292802			
Agile Development	The safe team board owner is always set to be the user who can access the board first	<p>When the first user of the safe team accesses the sprint tracking page, a VTB should be created.</p> <p>If this user has the safe_scrum_master, safe_product_owner, or safe_admin role, the user</p>	
PRB1295630			

Problem category	Short description	Description	Steps to reproduce
		should be the owner of the VTB.  If not, check if there is any other user with these roles, and set the user to be the owner. Otherwise, the current user should be set to the owner.	
Application Navigator & Banner Frame	The clear filter button has no label	The clear filter button in the navigator has no label and is described by NVDA/JAWS as 'button'.	<ol style="list-style-type: none"> <li>1. Activate NVDA.</li> <li>2. Set focus to the Filter Navigator and enter some text.</li> <li>3. Select the tab to set focus to the clear button.</li> </ol>
PRB1291631			The button has no label.
Asset Management	Clarify which OOB queries get executed	SAMP Usage 2012v2 and 2016 contain an OOB query which does not run at runtime. When the corresponding scheduled import is executed, the actual query is generated at runtime and replaces the placeholder query.	
PRB1298780			
Asset Management	The name field is updated with the serial number when ILMT server sends a null value	When ILMT server sends an empty name, if the serial number does not start with TLM_VM and does not contain a dot in it, the serial number is copied over to the name field.	
PRB1300291			
Asset Management	The request times out at 300 seconds on the ECC record	If the ILMT API call takes more than 300 seconds to respond, the ECC queue will time out with an error 'com.glide.ecc.ECCResponseTimeoutException: No response for ECC message request with sysid=xxxx after waiting for 300 seconds in ECC Queue.'	
PRB1302999			
Benchmarks Application client	Benchmarks configuration properties are missing		
PRB1292376			
Change Management	'Change Properties' does not include the new feature to have discovery automatically launched when		<ol style="list-style-type: none"> <li>1. Activate the Discovery plugin.</li> <li>2. Upgrade to London.</li> <li>3. Navigate to task_ci table and open any record.</li> <li>4. View the xml and verify that there are Discovery related fields present.</li> </ol>
PRB1297213			

Problem category	Short description	Description	Steps to reproduce
	a Change Request is fulfilled		<p>5. After an upgrade, navigate to 'Change Properties'.</p> <p>The discovery related properties are not present.</p>
Chat PRB1253523 <a href="#">KB0690911</a>	Agent name and avatar do not show up in Anonymous Chat the first time the chat is opened	In Anonymus chat, the user agent's name and avatar are not visible to the end user until the end user refreshes the page.	<p>As a prerequisite, install the Consumer Service Portal plugin.</p> <ol style="list-style-type: none"> <li>1. Navigate to Admin Users.</li> <li>2. Search for and select Beth Anglin.</li> <li>3. Add the 'sn_customerservice.consumer_agent' role to Beth.</li> <li>4. Add Beth to the Product Support group.</li> <li>5. Impersonate Beth.</li> <li>6. In another browser without logging in, navigate to &lt;instance_name&gt;.service-now.com/csp.</li> <li>7. Click the header menu item Live Chat.</li> <li>8. Type in test information and make sure the issue type is Product.</li> <li>9. Click Submit.</li> <li>10. As Beth, click the accept button in the chat sidebar.</li> <li>11. As Beth, send some messages. The message text shows in the guest's chat window, but the agent's name and avatar are missing.</li> </ol> <p>After reloading the chat window, the agent's name and avatar are shown.</p>
Chat PRB1288792 <a href="#">KB0696041</a>	After Hours (Not available) Message for Chat Queue does not show on French Translations		<ol style="list-style-type: none"> <li>1. Activate the Connect Support and I18N: French - Canada Translations plugin (or the I18N: French Translations plugin).</li> <li>2. Go to chat_queue_list.do and open any of the Connect Support Chat queues.</li> <li>3. Set the schedule to '8-5 weekdays' and save.</li> <li>4. Change the language to French - Canada.</li> <li>5. Go to the queue page on step 2. If there is no message on 'Not available', add one.</li> <li>6. Click the URL next to 'Support Link'.</li> </ol> <p><u>Expected behavior:</u> The Unavailable Message for Chat Queue shows up under the Welcome message.</p> <p><u>Actual behavior:</u> Unavailable Message is empty and there is a console error.</p>

Problem category	Short description	Description	Steps to reproduce
Chat PRB1297473	On hovering over a URL in the Connect Chat, the URL embeds "nav_to.do"	The Connect Chat changes the URL to be nav_to.do instead of the Service Portal.	<ol style="list-style-type: none"> <li>1. Navigate to the connect chat.</li> <li>2. In a chat box, paste any URL.</li> <li>3. Hover over the sent URL and see that the URL embeds 'nav_to.do'.</li> </ol>
Cloud Management Application PRB1294924	AWS Signer does not use the actual payload value for POST messages and assumes the payload is the default invokePost payload which causes signing errors	<p>The out-of-the-box invokePost method in the "AmazonWebServicesAPIInvoker" MID Server script include ignores the incoming payload parameter and instead uses the signed headers as the payload.</p> <p>In turn, the signer MID Server script include "AmazonWebServicesRequestSigner" assumes that all posts use the parameter string as the payload because that is the default for the invoker. When the payload is different, the signer fails.</p>	
Cloud Management Application PRB1295564	Deprovisioning a stack that is attached to an elastic IP address does not release the IP address	<p>Blueprint attribute DiscoverAndAttachIP looks to find a free elastic IP address in the account or creates it and attaches it to a new instance on provision/launch stack.</p> <p>However, for the current design, on de-provision of the stack/instance, the elastic IP is not released but only disassociated from the instance and the IP is returned back to the account for use with another instance.</p> <p>Since the DiscoverAndAttachIP attribute creates an elastic IP if a free IP cannot be found, an option should be added to release the IP when a stack is de-provisioned.</p>	<ol style="list-style-type: none"> <li>1. Create a blueprint with a virtual server on a logical datacenter.</li> <li>2. Launch the Stack on an AWS account with the parameter 'DiscoverAndAttachIP = True'.</li> <li>3. The Stack gets provisioned correctly and an elastic IP is created and assigned to the VM.</li> <li>4. Deprovision the Stack.</li> </ol> <p>The Stack is deprovisioned correctly, but the elastic IP is left on the AWS account.</p>
Cloud Management Application PRB1297004	Infoblox integration fails while provisioning an instance in Azure		<ol style="list-style-type: none"> <li>1. Create a blueprint to provision in Azure.</li> <li>2. Create a resource operation policy.</li> <li>3. Create a rule and action for IPAM integration</li> </ol>



Problem category	Short description	Description	Steps to reproduce
			Policy is executed, but ends up in errors.
Cloud Management Application PRB1297975	Installing the Cloud Management Core plugin activates the "Price Discovery" module that is exposed to ITIL Users	Running the "Price Discovery" module may cause performance issues due to the high memory consumption.	<ol style="list-style-type: none"> <li>1. Activate the Cloud Management Core plugin.</li> <li>2. Navigate to Modules &gt; Price Discovery (The record exists with an empty Role Set).</li> <li>3. Impersonate an ITIL user and look for discovery in the navigation page.</li> </ol> <p>The 'Price Discovery' module pops up.</p>
Cloud Management Application PRB1298768	Cloud User Portal: The search functionality does not find resources that are not owned by the user even if the user is an admin	As a system admin, the user is not able to search the stacks that belong to different users even though the 'All' filter is enabled in the user portal.	
Cloud Management Application PRB1298773 <a href="#">KB0696185</a>	License and Compliance: Script producing license data is incorrect and needs to be replaced		Refer to the listed Known Error KB article for details.
Cloud Management Application PRB1301807	Resource Operation Input Parameters should not prevent use of _ in the parameter name		<ol style="list-style-type: none"> <li>1. Navigate to the Cloud Admin portal.</li> <li>2. Navigate to the resource block under the Design module.</li> <li>3. Choose the virtual server resource block.</li> <li>4. Choose input parameters.</li> <li>5. Create an input 'input_test'.</li> </ol> <p><u>Expected behavior:</u> The system should accept special characters in input names.</p> <p><u>Actual behavior:</u> The system does not allow the user to create an input with special characters in its name.</p>
Cloud Management Application PRB1303484	The AWS cloud account authentication using a call out script does not work		
Configuration Management Database (CMDB)	The health inclusion rule does not work on several classes	The CMDB Health Dashboard shows the wrong result	

Problem category	Short description	Description	Steps to reproduce
PRB1267732			
Continual Improvement Management - (CIM)	Continual Improvement Management - Drag and Drop issue	Duplicate items are created while dragging and dropping in Continual Improvement Management.	<ol style="list-style-type: none"> <li>1. Activate the Continual Improvement plugin.</li> <li>2. Go to Continual Improvement &gt; Workbench.</li> <li>3. Go to the planning tab.</li> <li>4. Drag an item from the backlog section to the implementation.</li> <li>5. Drop the item back into again backlog section.</li> </ol>
PRB1298477			<p><u>Expected behavior:</u> The item should only be in the backlog section.</p> <p><u>Actual behavior:</u> The item exists in both sections.</p>
Core Platform	Users with protected roles (sn_hr_core.xx) and impersonating another user (having protected roles) do not have the access to some modules	The HR manager with sn_hr_core.manager and impersonator roles impersonating an HR agent with the sn_hr_core.basic role does not work.	<ol style="list-style-type: none"> <li>1. Create a user with the impersonator role and the sn_hr_core.manger role.</li> <li>2. Create a user with the sn_hr_core.basic role.</li> <li>3. Log in as the user created in step 1.</li> <li>4. Impersonate the user created in step 2.</li> </ol>
PRB1288753			
Currency	The ECBDownloader URL cannot be changed and the downloader cannot parse the response payload if the site redirects	The ECBDownloader reaches out to a site which downloads currency conversion rates. The site redirects to a new site and the downloader cannot parse the redirect.	
PRB1303161			
Customer Service Management	Agent is blocked on being able to request info or resolve a case when a case is already assigned to the agent	On the platform, if the case has already had Assigned To filled out to the agent's name, there is a UI action called 'Accept'. Once the agent accepts, the agent can see other related UI actions (i.e. Propose solution and Request Info). However, in the workspace, the agent does not see the Accept UI action and can only close or escalate cases.	
PRB1297429			
Customer Service Management	Change CSM Agent Workspace and Ribbon plugins to State =		

Problem category	Short description	Description	Steps to reproduce
PRB1301016	Development and license_category		
Demand Management	Demand workbench - Performance	After applying a filter on the workbench view, the workbench graph takes more time to load.	
PRB1296267	Issues in loading the demands list		
Discovery	Split payload mechanism		
PRB1268722	should cover related tables		
Discovery	Shazzam's final sensor job can	Shazzam's final sensor job can run a node out of memory by holding all results from the discovery schedule in memory at once. The sensor has no limit check for how many results it will end up adding to an array in the instance node memory.	
PRB1280464	run a node out of memory by holding all results in an array		
Discovery	DiscoveryJSONIDSensor and DiscoveryIDSensor can create a blank model record for CI if adding real model records fails	DiscoveryJSONIDSensor does not get the model in the Identity phase, and model "Unknown" (with null company) does not exist in cmdb_hardware_product_model, sensor tries to add a model record. If it fails to add the record, a model record gets added which has all blank fields. Each time discovery runs, discovery creates another blank mode recorded.	
PRB1296372			
Discovery	Horizontal discovery of Hyper-V is slow since the system tries to execute SSH commands before running the commands using WMI		
PRB1297721			
Discovery	Issues with wildcard masks	Dest_ip_network in the exit router interface table are parsed incorrectly, causing invalid layer 3 relationships.	
PRB1300147			
Discovery	Pattern Launcher WebLogic Identification for HTTP fails		
PRB1300338			

Problem category	Short description	Description	Steps to reproduce
	to find the library		
Discovery PRB1303015	Network Switch and Network Router HD Pattern fails		
Event Management PRB1291875 <a href="#">KB0696716</a>	Incoming event maintenance flags blank out all alerts glide_date_time fields through the impact calculator	<p>Several date/time fields on the event record like initial_event_time and last_event_time are cleared out when an alert moves out of a maintenance window.</p> <p>When a CI is in a change window, if an event comes in for that CI, an alert is created for it with the maintenance flag set to true, because the CI is in the change window. At this point, the initial and last event times have valid values. Once the change is closed, the maintenance flag on the alerts is removed, causing all the glide_date_time fields on the alert to be emptied.</p> <p>The impact calculator runs when there are any changes to the alert. Once the maintenance flag on the alert becomes inactive, the impact calculation triggers and calls a method in the backend code which blanks out the fields.</p>	Refer to the listed Known Error KB article for details.
Event Management PRB1296648	Selecting and opening an alert from the Dashboard alert panel cause an exception		<ol style="list-style-type: none"> <li>1. Create a dashboard with many with services.</li> <li>2. Make sure no service is selected.</li> <li>3. Select an alert and click to open it.</li> </ol> <p>The alert panel fails to be displayed.</p>
Event Management PRB1300774	license_category in com.em-scoped-app plugin.xml is not correctly		
Flow Designer PRB1298454	Ask for Approvals Action creates duplicate	Two approval records are created for the same user under the sysapproval_approver table.	<ol style="list-style-type: none"> <li>1. On Flow Designer, create a flow for a Non-task.</li> <li>2. Add Ask For Approvals Action.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
	approvals for non-task tables		<p>3. Set the approval rule, such as Approves All Users [UserA] or Rejects All Users [UserA].</p> <p><u>Expected behavior:</u> Only one approval record is created under sysapproval_approver table.</p> <p><u>Actual behavior:</u> Two approval records are created for the same user under sysapproval_approver table.</p>
Forms and Fields PRB1295009	Selecting the button to expand timing details in the response time indicator sometimes causes the page to load a blank form	Issues occur when clicking the 'Expand Timing Details' arrow on the Approval form. Clicking the down arrow jumps to a blank approval form.	
Guided Tours PRB1238660	Guided Tours prevent from adding callouts due to dictionary entry attribute no_attachment = true	Users want to disallow attachments on some tables, but adding the Guided Tour Callouts should not be prevented by this attachment setting in the table.	
Guided Tours PRB1293518	Guided tour rendering issues	Sometimes Guided tours with related lists do not load properly, and users have to scroll the page (if available), or resize the browser.	
Guided Tours PRB1294070	Create Guided Tour breaks and generates an error "Cannot read property 'getAttribute' of undefined" unless the Service Portal plugin is activated		
Guided Tours PRB1297874	Callouts do not work on a custom tab in an incident	When there is a space in Form Section's name, a respective reference cannot be created as a Guided Tour Element. The callout seems to be created for another tab, but does not work for the custom tab.	
Guided Tours	IDs of related links are malformed if it	Callout does not work on the HR Payroll Case form or	1. Create a tour on HR Payroll Case form or Incident form.

Problem category	Short description	Description	Steps to reproduce
PRB1298161	starts other than characters	Incident form in the Related Links section.	<ol style="list-style-type: none"> <li>2. Add a callout on the Related Links section.</li> <li>3. Callout does not work for IDs starting other than characters.</li> </ol> <p>Callout does not work on the HR Payroll Case form or Incident form in the Related Links section.</p>
Guided Tours PRB1298162	Unable to create a step in sn_hr_core_case_payroll_list		<ol style="list-style-type: none"> <li>1. Create a tour for sn_hr_core_case_payroll_list.</li> <li>2. Place a callout on any of the record to open the record details.</li> </ol> <p>Unable to save the callout.</p>
Guided Tours PRB1300368	On the Service Portal, unable to create tours and a message is displayed	Unable to create guided tours on the Service Portal. When trying to open the guided tour record which is based on the Service Portal, an error "gtd_portal_title should ends with delimiter;" is displayed.	
Guided Tours PRB1300586	Cannot add callouts to dot-walked fields	Unable to add callouts to dot-walked fields, which causes the callout to display "Not found in current view."	<ol style="list-style-type: none"> <li>1. Navigate to Guided Tour Designer &gt; Create Tour.</li> <li>2. Choose a name, and make the application page 'Incident'.</li> <li>3. Click Create.</li> <li>4. Add a dot-walked field to the incident form.</li> <li>5. Drag a callout to the dot-walked field's input and save it.</li> </ol> <p>The panel on the right side of the designer says 'Not found in current view' when hovering over the callout.</p>
HTML Editor PRB1273142	Insert/Edit link in the text editor replaces images with the text		<ol style="list-style-type: none"> <li>1. Go to kb_knowledge.do.</li> <li>2. In the text field, use the text editor to add an image.</li> <li>3. Select the added image and use the insert/edit link button to add a URL and text and click OK.</li> <li>4. Click the source code button and check the generated HTML.</li> <li>5. Copy the generated HTML.</li> <li>6. Go to kb_knowledge.do.</li> <li>7. In the text field, use the source code button of the text editor and paste the HTML code of step 5.</li> <li>8. Click OK to go back to the HTML editor and select the image.</li> <li>9. Click the insert/edit link button of the editor.</li> <li>10. Change the URL and click OK.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			<p><u>Expected behavior:</u> The URL should be updated.</p> <p><u>Actual behavior:</u> The image is deleted and replaced by the text field contents.</p>
Human Resources Service Management	Non admin/Non HR profile_writer roles cannot see notifications in system settings		<ol style="list-style-type: none"> <li>1. Install the HR Scoped Core plugin.</li> <li>2. Log in as Abel Tuter.</li> <li>3. Go to System Settings.</li> <li>4. Go to the Notifications tab.</li> <li>5. Select the 'Human Resources' category, and notice it says 'No results found'.</li> <li>6. Log in as a system administrator.</li> </ol> <p>It shows all of the notifications underneath the Human Resources category.</p>
Human Resources Service Management	PDF generator - Cannot render a footer image across the page		<ol style="list-style-type: none"> <li>1. Add a footer image to a PDF template.</li> <li>2. Generate the PDF.</li> </ol> <p>The image does not take the whole page width.</p>
Human Resources Service Management	The activity 'Complete' button does not function correctly	The Complete UI action is enabled for a short period of time on tasks in the HR Portal after adding an attachment to a different task.	<ol style="list-style-type: none"> <li>1. Navigate to the HR portal.</li> <li>2. Click the To-dos to open the list.</li> <li>3. Expand the first two tasks.</li> <li>4. Add an attachment only to the first task.</li> </ol> <p>After a short period of time, the 'Complete' button becomes clickable under the second task.</p>
Human Resources Service Management	Client roles do not work after installing Employee Files with Server Encryption	When the Employee Files and Encryption Support plugin is activated with HR Core, the client roles no longer get assigned properly. This affects both the scheduled job (which is running as an HR Admin), and the Assign Roles UI action on the user form with HR admin users.	<ol style="list-style-type: none"> <li>1. Install Human Resource: Scoped App: Core.</li> <li>2. Log in as an HR Admin.</li> <li>3. Navigate to a user with no client roles.</li> <li>4. Use the Assign Roles UI action and give the user 'sn_hr_core.hrsm_employee' role.</li> <li>5. Use the Assign Roles UI action and remove the role.</li> <li>6. Install the Employee Document Management and Encryption Support plugins.</li> <li>7. Repeat steps 2-5.</li> </ol> <p>The roles are updated and an error message is displayed 'Your role does not</p>

Problem category	Short description	Description	Steps to reproduce
			allow assignment of sn_hr_core.hrsm_employee role.'
Human Resources Service Management PRB1297964	Double-byte character such as Japanese does not get merged to the fillable PDF	Double-byte character, such as Japanese, does not get merged to the fillable PDF. It works when the value is in English.	<ol style="list-style-type: none"> <li>1. Go to HR administration &gt; Document Templates.</li> <li>2. Open an OOB sample file.</li> <li>3. Open any PDF Template Mapping (e.g. Address).</li> <li>4. Paste 'Hello ' in the preview value update.</li> <li>5. Click PDF preview.</li> </ol>
Human Resources Service Management PRB1300766	The business rule 'Auto Assign' throws a message "No agents meet the auto-assignment criteria for HRT000****"		<ol style="list-style-type: none"> <li>1. Open any HR case.</li> <li>2. Create an HR task and set the state to ready.</li> <li>3. Fill in mandatory fields.</li> <li>4. Select the assignment group.</li> <li>5. Save it.</li> </ol> <p><u>Expected behavior:</u> The assignment group should be selected without any info message on the screen.</p> <p><u>Actual behavior:</u> An info message is thrown on the screen 'No agents meet the auto-assignment criteria for HRT000****'.</p>
Human Resources Service Management PRB1302929	Upgrade issue with hr_AssignmentAPI script include	<p>On upgrades to London or later with HR Scoped apps, RCA errors are generated when HR cases are created from the HR Portal and when set to Ready from the native UI. The root issue appears to be a combination of two changes:</p> <ul style="list-style-type: none"> <li>• Change of Caller Access field for hr_AssignmentAPI script include from none to Caller Restriction.</li> <li>• Reparenting of the matching_rule table (existing records are treated as the global scope). As a result, RCA errors are displayed for each different OOB and custom matching rule that are utilized for HR Case tables.</li> </ul>	<ol style="list-style-type: none"> <li>1. Install the Human Resources Scoped App: Core plugin.</li> <li>2. Inspect the Caller Access of hr_AssignmentAPI script include, and verify that is blank.</li> <li>3. Upgrade the instance to London.</li> <li>4. Inspect the Caller Access of hr_AssignmentAPI script include again, and see that is Caller Restriction.</li> </ol> <p>Note that is Read Only and cannot be modified.</p>
Incident Alert Management	Domain path fix included in reparenting of		



Problem category	Short description	Description	Steps to reproduce
PRB1303271	incident_alert takes a long time		
IT Asset Management	Software entitlements are not reconciling		
PRB1296985			
IT Operations Management	Change the ITOM Alert Intelligence (com.em-scoped-app) plugin to State = Development for London		
PRB1301488			
Lists	The label for the list search field does not indicate that selecting enter is required to initiate the search		<ol style="list-style-type: none"> <li>1. Start a screen reader.</li> <li>2. In a list, navigate to the main filter.</li> </ol> <p>The screen reader description of the field does not include the requirement of selecting enter to perform the search.</p>
PRB1291633			
MID Server	Issues with Discovery Schedules timing out	When running Windows Discovery under a heavy load with WinRM enabled, the PowerShell Session Pool may become unresponsive and the Worker Thread is stuck. Eventually, all Worker Threads on the MID Server become stuck, rendering the MID Server unusable.	<ol style="list-style-type: none"> <li>1. Set up credentials.</li> <li>2. Set up Discovery with WinRM for Windows. Use IP range that would discover more Windows servers than the number of worker threads.</li> <li>3. Run discovery once.</li> <li>4. Disable all Windows credentials and add a bogus credential.</li> <li>5. Rerun all Windows Classify probes.</li> </ol> <p><u>Expected behavior:</u> All probes complete with Authentication errors.</p> <p><u>Actual behavior:</u> Some probes become unresponsive and do not return.</p>
PRB1298206			
On-call Scheduling	A user with the appropriate access is not able to view or search schedules in the "On-call Schedules" module	The On-Call Schedules title does not populate any data as all schedules need to be loaded in the "All on-call schedules" tab.	
PRB1291076			
On-call Scheduling	Skipping/ Missing Roster member issue on the On-Call calendar	Issues occur when a schedule is created, which rotates on week days and the shift spreads across two days (starting in the evening and ending on the next morning). A roster member	
PRB1293987			

Problem category	Short description	Description	Steps to reproduce
		is skipped or missing every week.	
On-call Scheduling PRB1296458	On-call JS API - invalid code	The startEscalations method should start escalation without the compilation error and the getFullEscalationDocument method should not give the compilation error.	
On-call Scheduling PRB1296498	A blank page shows up when trying to create the on-call schedule using the 12 hour format	A blank page shows up when trying to create an on-call schedule where the time is in yhr 12 hour format and the on-call shift starts on one day and ends on another day	<ol style="list-style-type: none"> <li>1. Make sure the 12 hour format setting is done.</li> <li>2. Create an on-call schedule using the wizard.</li> <li>3. Select to create a schedule and a shift starting on one day before the end day.</li> <li>4. Submit the details.</li> </ol> <p>Calender does not show up and shows a blank page.</p>
On-call Scheduling PRB1298367	Able to edit the span to overlap another rota even when the overlapping rota property is set to false		<ol style="list-style-type: none"> <li>1. Log in to the application as the rota admin.</li> <li>2. Make sure that overlapping the rota property is set to false.</li> <li>3. Edit an existing rota and update time to overlap the other one and save it.</li> </ol> <p>Observe that the overlapping of rota happens.</p>
Patterns PRB1296990	HP-UX server discovery error Pre sensor failed due to: TypeError: Cannot convert null to an object	Discovery of HP-UX results in "start_date" having "NaN" + ". Running pre sensor script- Linux\Unix OS - Pre Sensor fails due to: TypeError: Cannot convert null to an object."	
Patterns PRB1297294	Issues with the pattern for JBoss on Linux and Windows	The JBoss version is not populated in "cmdb_ci_app_server_jboss."	
Patterns PRB1298431	MSSQL database names with spaces are truncated when using the MSSQL database on the Windows pattern	MSSQL databases with spaces in the names are truncated.	

Problem category	Short description	Description	Steps to reproduce
Patterns PRB1301588	Add graceful termination steps to cloud patterns	Issues occur when running discovery from the AWS/Azure account.	
Performance Analytics PRB1293827	Malformed JSON reply in the PA Indicator REST API	"Unexpected string JSON at position NNNNN" error message appears in the text analytics widget if duplicate mappings exist for the same breakdown-indicator pair in pa_indicator_breakdowns table.	
Performance Analytics PRB1302305	The Security Fixes link on the Overview tab is broken		<ol style="list-style-type: none"> <li>1. Navigate to <code>https://&lt;instance&gt;/\$pa_dashboard.do</code></li> <li>2. Go to the Overview tab.</li> <li>3. Under Security Fixes, click the more details link.</li> </ol> <p>The link is incorrect.</p>
Persistence PRB1253960 <a href="#">KB0690068</a>	Importing a scoped app deletes/changes a task table field	If an update set is committed with a DELETE update for a field on the child table and the field on the target instance is defined on the parent table, it is dropped from the parent table.	<ol style="list-style-type: none"> <li>1. Create a scoped application.</li> <li>2. Create a standalone scoped table with a column named 'number'. Scoped fields do not get a 'u_' prefix, so on the database/dictionary/storage alias level, the field name can match an OOB field name.</li> <li>3. Delete the standalone scoped table.</li> <li>4. Create the same table again, and extends tasks.</li> <li>5. Open the application record and publish it to an update set. The update set contains delete updates for the table and the number field.</li> <li>6. Import the update set on the target instance and preview it. The update set contains an insert and delete updates for the same table (which will be created in a task hierarchy) and a delete update for the number field.</li> <li>7. Commit the update set.</li> <li>8. Open the task.number dictionary record. The record is broken and no label is shown.</li> </ol> <p>Confirm there is no task.number field on lists and forms of task tables.</p>

Problem category	Short description	Description	Steps to reproduce
Persistence PRB1269502 <a href="#">KB0695298</a>	Two separate alters are invoked for sys_audit_delete		Refer to the listed Known Error KB article for details.
Persistence PRB1300795	StackOverflowError leaves the prior result set	StackOverflowError can cause the database connection corruption. Specifically, the connection enters a state where each query executes normally, and returns the results of the prior query. The same happens on the next query.	
Persistence PRB1302788	Reparenting in the TASK hierarchy consumes unnecessary storage columns	When certain tables are reparented back into TPH as children of existing task children, their columns are not combined onto existing storage as expected. As a result, valuable limited real estate is unnecessarily consumed in the Task hierarchy.	
Project Management PRB1300177	Planned task - Shifting dates before the start date of top tasks throws an exception		
Project Portfolio Management PRB1297178	The planned effort field is not imported from the MS project file	When importing an MS Project 2016 file, the planned effort field is blank on the project tasks.	
Reporting PRB1292058 <a href="#">KB0694624</a>	Creating a List Report or Database View on a table with a long name fails, throwing a Java SQL exception	When trying to create a List Report or a Database View on a table that has a long name, the instance gives errors and does not create the list view.	Refer to the listed Known Error KB article for details.
Reporting PRB1294279	The HTTP 500 error occurs while exporting reports as a PDF		<ol style="list-style-type: none"> <li>1. Click any homepage (i.e. My Apps Development Redline).</li> <li>2. Edit any report and run the report. Verify you can see a chart which contains the data.</li> <li>3. Click the arrow that is next to the Save button.</li> <li>4. Select Export to PDF.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			An error occurs '(HTTP Code:500) Conversion Failed:Did not receive a success in the HTTP response.'
Reporting PRB1298857	Report source filters are applied twice on platform list records	In the Report Builder, after loading a calendar or multipivot report, clicking "view all records" for the calendar report and clicking a cell value for a pivot apply the report source filter twice on the drill down list.	<ol style="list-style-type: none"> <li>1. In the Report Builder, create a calendar report with a data source.</li> <li>2. Click Save, and click View all records link.</li> <li>3. Check the list filter. It should include the report source filter.</li> </ol> <p>Report source filters are applied twice on platform list records. Issue happens only when saving reports.</p>
Resource Management PRB1300161	On an upgrade to London, requested allocations are not created if only the com.snc.project_portfolio_suite plugin is active		<ol style="list-style-type: none"> <li>1. Activate the com.snc.project_portfolio_suite plugin.</li> <li>2. Upgrade the instance to London.</li> <li>3. Create a user resource plan.</li> </ol> <p>Requested allocations are not created.</p>
Resource Management PRB1302237	Manage UI action in the resource plan related list on the project form does not work if the com.snc.project_portfolio_suite plugin is active		
Security Incident Response PRB1269461	User Reported Phishing Inbound Email Action is skipped and does not process	The phishing email process only support .eml file type. When any attached file is not .eml, the warnings are generated in the logs, the processing of the script is halted, and SIR records are not generated as intended.	
Security Incident Response PRB1298455	Observable Enrichment and CI Enrichment workflows are not triggered when the actions are launched on demand from the new UI		<ol style="list-style-type: none"> <li>1. Implement the integration capability for CI Enrichment and Observable Enrichment.</li> <li>2. Navigate to Security Incidents &gt; Incidents (New UI).</li> <li>3. Open/Create a security incident and add observables and configuration items.</li> <li>4. On the observable list, select observable(s) and launch "Observable Enrichment".</li> </ol>

Problem category	Short description	Description	Steps to reproduce
Security Incident Response PRB1300583	The Security Incident Response UI plugin installation issue		
Service Catalog: Service Portal Widgets PRB1300966	Labels are not displayed for the checkbox with the label variable created under the order guide		Refer to the listed Known Error KB article for details.
<a href="#">KB0712452</a>			
Service Catalog: Service Portal Widgets PRB1301815	When 'glide.sc.sp.twostep' is set false, multiple requests get created when the user tries to click Order Now multiple times in a quick succession		<ol style="list-style-type: none"> <li>1. Set 'glide.sc.sp.twostep' to false.</li> <li>2. Open any catalog item in the Service Portal and click Order Now multiple times in a quick succession until the user gets the order status page.</li> </ol> <p><u>Expected behavior:</u> User should be allowed only one request.</p> <p><u>Actual behavior:</u> Multiple requests are created for each click.</p>
Service Mapping PRB1297372	"Retrieve File Content" does not work - Tomcat on windows discovers wrong DB (in AWS)		
Service Mapping PRB1298949	The layer 2 connection is not created if more than one record with the same MAC address exist in the switch forwarding table		<ol style="list-style-type: none"> <li>1. Discover a server with a network adapter.</li> <li>2. Discover a switch.</li> <li>3. Add to the forwarding table of the switch 2 records with the same port and with the MAC address of the network adapter.</li> <li>4. Run the layer 2 connections algorithm on the server.</li> </ol> <p>The layer 2 connection is not created between the server and the switch.</p>
Service Mapping PRB1298952	The layer 2 connection is not created in the case of NIC teaming		<ol style="list-style-type: none"> <li>1. Discover a server with a bonding network adapter.</li> <li>2. Discover 2 switches.</li> <li>3. Add to the forwarding table of each switch a record with the MAC</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			<p>address of the network adapter with a different port.</p> <p>4. Run the layer 2 connections algorithm on the server.</p> <p>The layer 2 connection is not created between the server and the switch.</p>
Service Mapping PRB1298956	Issues with the layer 2 connection	Locating the ESX of VMs should not be only based on the 'Virtualized By' relation, but also on 'Instantiated By' and 'Registered On' relations.	
Service Mapping PRB1298957	Issues with finding MAC addresses of VMs based on VMware network adapters		
Service Mapping PRB1301779	The layer 2 connection cannot be created between the network adapter and the switch itself		<ol style="list-style-type: none"> <li>1. Discover a server with a network adapter.</li> <li>2. Discover a switch with the router interface.</li> <li>3. Change the install status of the router interface to absent.</li> <li>4. Add a record with the network adapter MAC address, which matches the router interface, to the forwarding table of the switch.</li> <li>5. Run the layer 2 connections algorithm on the server.</li> </ol> <p>The connection is supposed to be created between the network adapter and the switch itself. Instead, it is created between the network adapter and the router interface.</p>
Service Portal PRB1242592	The List and Form widget (id = lf) should create the CSS exception for panels embedded by all formatters (i.e. the variable editor)	On the Service Portal, the activity log section overlaps the variables section after an upgrade.	
Service Portal PRB1297599	The showFieldMsg clients script calls with the "error" parameter, causing unexpected behaviors on	showFieldMsg() does not work as expected when called on OnChange behavior of Date type variable in the catalog item. An extra error message is displayed 'Enter date in format DD/MM/YYYY ' even	

Problem category	Short description	Description	Steps to reproduce
	date variable types in the Service Portal in London	if the entered date is in the required format. This happens only when users provide the 'type' parameter as 'error'.	
Software Asset Management PRB1290865	An exception is thrown when upgrading SCCM 2012 to version 1702		
Software Asset Management Professional PRB1298108	Improve Suite Engine performance		
Usage Analytics PRB1295196	Inconsistent app usage payload chunking	Inconsistent app usage payload chunking causes a large payload to be uploaded by the Usageanalytics Upload job.	
VA-Designer PRB1291003	Admins should be able to remove the menu 'Contact Support' from the three-dot menu		
VA-Messenger Adapter PRB1303071	Broken images are displayed in the messaging apps integration screen		
VA-Publisher PRB1299082	The HTML output displays HTML tags	HTML tags should not be displayed.	
VA-Teams Adapter PRB1303344	MS Teams image upload does not have a file name and results in 'null' displayed in the case card		<ol style="list-style-type: none"> <li>1. Run 'Get Help with an Order' in MS Teams.</li> <li>2. After creating a case, continue to add a picture to the case.</li> </ol>
Virtual Agent Platform PRB1284577	User cannot use 'Check Case Status' after activating the CSM Demo Data plugin	In a Kingston instance, activate the Customer Service Demo Data plugin, which has the Check Case Status topic for VA. Then, upgrade the instance to London and enable Customer Service Virtual	



Problem category	Short description	Description	Steps to reproduce
		Agent Conversations (com.sn_csm.virtualagent).  Notice that Check Case Status does not work properly as it is not installed as part of the activation of CSM conversations.	
Vulnerability Response PRB1295391	The sn_vul.group_commented event can take a long time to process, delaying other events from being processed	The sn_vul.group_commented event can take a very long time to process if the group has 10,000s of related Vulnerability items. This can lead to a backlog in the event queue processing and delaying other events from being processed timely.	
Workflow PRB1300163 <a href="#">KB0697436</a>	SLAs created before the London upgrade do not pause their SLA percentage timer activities correctly after the upgrade	The SLA percentage timer activity does not pause if started before an upgrade to London and if paused after the upgrade. Notifications are triggered even though the SLA is paused.	Refer to the listed Known Error KB article for details.

## Fixes included

\* Unless any exceptions are noted, you can safely upgrade to this release version from any of the versions listed below. These prior versions contain PRB fixes that are also included with this release. Be sure to upgrade to the latest listed patch that includes all of the PRB fixes you are interested in.

- [London Patch 1 Hot Fix 2](#)
- [London Patch 1](#)
- [London security and notable fixes](#)
- [All other London fixes](#)

## London Patch 1 Hot Fix 2

**Last updated:** September 13, 2018

**Last updated:** September 13, 2018

The London Patch 1 Hot Fix 2 release contains fixes to these problems.

For London Patch 1 Hot Fix 2:

Build date: 09-11-2018, 1115  
Build tag: glide-london-08-27-2018\_\_patch1-hotfix2-09-10-2018

For more information about how to upgrade an instance, see [Upgrade to London](#).

For more information about the release cycle, see the [ServiceNow Release Cycle](#). For a downloadable, sortable version of London fixed problems, see [KB0692695](#).

**Note:** This version is under FedRAMP evaluation.

## Fixed problem in London Patch 1 Hot Fix 2

Problem	Short description	Description	Steps to reproduce
Currency PRB1303161	The ECBDownloader URL cannot be changed and the downloader cannot parse the response payload if the site redirects	The ECBDownloader reaches out to a site which downloads currency conversion rates. The site redirects to a new site and the downloader cannot parse the redirect.	
Workflow PRB1300163 <a href="#">KB0697436</a>	SLAs created before the London upgrade do not pause their SLA percentage timer activities correctly after the upgrade	The SLA percentage timer activity does not pause if started before an upgrade to London and if paused after the upgrade. Notifications are triggered even though the SLA is paused.	Refer to the listed Known Error KB article for details.

## Fixes included with London Patch 1 Hot Fix 2

\* Unless any exceptions are noted, you can safely upgrade to this release version from any of the versions listed below. These prior versions contain PRB fixes that are also included with this release. Be sure to upgrade to the latest listed patch that includes all of the PRB fixes you are interested in.

- [London Patch 1](#)
- [London security and notable fixes](#)
- [All other London fixes](#)

## London Patch 1

**Last updated:** September 05, 2018

**Last updated:** September 05, 2018

The London Patch 1 release contains problem fixes.

London Patch 1 was released on September 5, 2018.

Build date: 08-24-2018\_1706  
Build tag: glide-london-06-27-2018\_\_patch1-08-15-2018

ServiceNow QPP targets and patches are immediately available. Users do not need to request an entitlement to schedule an upgrade to these versions.

For more information about how to upgrade an instance, see [Upgrade to London](#).

For more information about the release cycle, see the [ServiceNow Release Cycle](#). For a downloadable, sortable version of London fixed problems, see [KB0692695](#).

**Note:** This version is under FedRAMP evaluation.

## Security-related fixes

London Patch 1 includes fixes for security-related problems that affected certain ServiceNow® applications and the Now Platform®. We recommend that customers upgrade to this release for the most secure and up-to-date features. For more details on security problems fixed in London Patch 1, refer to [KB0696837](#).

## Notable fixes

The following problems and their fixes are ordered by potential impact to customers, starting with the most significant fixes.

Problem category	Short description	Description	Steps to reproduce
Condition Builder PRB1240334 <a href="#">KB0687788</a>	If using a dot-walking field of an extended table, the Condition Builder v3 results in 'empty' conditions	The new report designer's condition builder shows empty conditions if the report uses dot-walking of an extended table. Fields are shown in the filter and breadcrumb, but not in the listed conditions.	Since this has to do with extended tables, first change the property <code>glide.ui.list.allow_extended_fields</code> to true.  1. Create a new report of any type in the new Report Designer. 2. Set the table to task. 3. Add a new filter with the change <code>task &gt; close</code> code. 4. Save the report. 5. Refresh the page. 6. Expand the filter.  The filter is empty.
Service Catalog PRB1268040 <a href="#">KB0691890</a>	In Kingston, a setValue client script causes the catalog item to have a changed form	After the upgrade to Kingston, while navigating from the catalog form to the previous screen, a popup 'Are you sure you want to leave this page' is displayed even though no changes are done on the form.	Refer to the listed Known Error KB article for details.
Usage Analytics PRB1295059	The usage data of the last month should not be uploaded if the job context is empty	OOM exceptions are thrown due to many records being uploaded in the past month payload.	
Tables and Dictionary PRB1296576	Adding elements to a TPP grandparent and grandchild table in an update set can cause the alias corruption	When adding an element to a particular table in the CMDB hierarchy, and another element to a grandchild (or lower) of that table, within the same update set, the storage aliases can be corrupted so that the elements are stored in the same column. This can cause	

Problem category	Short description	Description	Steps to reproduce
		functional problems and data loss.	

## All other fixes

Problem category	Short description	Description	Steps to reproduce
Activity Stream PRB1294044	In the Workspace UI, @mentions do not send a notification email		
Agent Workspace PRB1292004	Consecutive incidents created with Workspace do not have consecutive incident numbers		In Workspace, create a new incident. Notice that incident numbers are not consecutive - for example, INT3693517 and INT3693521. In the legacy UI, incident numbers are consecutive.
Agent Workspace PRB1294033	In Workspace, it is difficult to set the currency type	Currency options are hidden and cannot be selected by using a mouse. They can be selected by keyboard, but that option is not intuitive.	
Agent Workspace PRB1294773	On mobile, changing the language or any other field on a user profile and saving the form results in console errors		<ol style="list-style-type: none"> <li>1. Open mobile view (<a href="https://instancename.service-now.com/\$m.do#/home">https://instancename.service-now.com/\$m.do#/home</a>).</li> <li>2. Navigate to Profile &gt; More Details.</li> <li>3. Try to change the language from English to any other language.</li> <li>4. Save.</li> </ol> <p>There are errors in the browser console.</p>
Agent Workspace PRB1292372	Attachments are blank when viewing incidents		<ol style="list-style-type: none"> <li>1. Navigate to Agent Workspace &gt; Agent Workspace Home.</li> <li>2. Open an incident with attachments.</li> <li>3. In the contextual side bar, click the Attachments tab.</li> </ol> <p>The tab is completely blank. It should at least display the empty state if there are no attachments.</p>
Agent Workspace PRB1292345	In Workspace, users cannot search on any csm_workspace tables	The tables are not text-indexed when the plugin is activated.	
Agent Workspace	Sub tab style is broken when open the same		<p>In a base instance:</p> <ol style="list-style-type: none"> <li>1. Navigate to Incident.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
PRB1292884	records multiple times		<ol style="list-style-type: none"> <li>Open INC0000018.</li> <li>On the form, click the Task SLAs tab.</li> <li>Open INC0000018 in the related list as a sub-tab.</li> <li>In the full list of Task SLAs (task_sla records), open INC0000018. If the list is not there, create one.</li> <li>To open INC0000018 as a sub tab, click the reference field icon of Task.</li> <li>Switch back to the Details tab of the first main tab.</li> </ol> <p>The style of the sub-tab next to it is broken.</p>
Agent Workspace	In reference fields, search results display "no records to display" even when a valid selection has been made		<p>In Workspace:</p> <ol style="list-style-type: none"> <li>Select a valid value in a reference field. For example, navigate to Incident.</li> <li>In the Business Service field, select Tableau Desktop.</li> <li>Select the search icon.</li> </ol> <p>The search modal displays "No records to display."</p>
App Client UI	Plugin dependency popups can have incorrect links to plugins	Store applications can depend on platform plugins. If the platform plugin is not installed, the required dependency (plugin) is shown in a popup message, which has a link to send users to the activation/installation plugin page. Some of these plugin links are incorrect.	
Application Navigator Banner Frame	Keyboard Shortcuts Enable toggle is out of sync	When no user preference is set, by default the keyboard shortcuts are enabled, but the Keyboard Shortcuts Enable toggle is out of sync.	<ol style="list-style-type: none"> <li>Log in to an instance. Keyboard shortcuts are enabled.</li> <li>Navigate to Settings &gt; General.</li> </ol> <p>The Keyboard Shortcuts Enabled toggle is off.</p>
Application Portfolio Management (APM)	The date format issue in the 'Technology Lifecycles' module	<p>The 'Technology Lifecycles' module displays incorrect dates on the date bar when the date format has been changed from the default.</p> <p>When users change the date format from the system-wide property 'yyyy-MM-dd' to 'dd-MM-yyyy', it does not work as expected. With the system default as 'yyyy-MM-dd', the 'Technology</p>	

Problem category	Short description	Description	Steps to reproduce
		Lifecycles' module works as expected.	
Assessment PRB1294038	On the walk-up one-click survey, the question 'Please rate your overall walk-up experience' is not translated		
Asset Management PRB1294155	Update SCCM 2012v2 and 2016 transform scripts to execute when SAM Foundation is installed and fix scripts		
Asset Management PRB1298088	Activating SAMP does not automatically activate other PA plugins	When SAMP is activated, it should automatically activate PA SAMP (com.snc.pa.samp) and PA Premium SAM (com.snc.pa.premium.sam).	
Cloud Management Application PRB1296121	In Cloud Management blueprints, steps can execute in the wrong order	Blueprint operation condition are not evaluated correctly during runtime.	<ol style="list-style-type: none"> <li>1. Navigate to the Cloud Admin Portal.</li> <li>2. Create a new blueprint with multiple steps in the provision operation (for example, block until ready, execute config package).</li> <li>3. Add a condition to one of the steps so that it will skipped during runtime.</li> <li>4. Order this catalog and wait for the successful execution.</li> <li>5. Navigate to thesnc_cmp_order_step_status table and look for the steps executing for the provisioning.</li> </ol> <p>In the order step status table, there is no record for the skipped test.</p>
Cloud Management Application PRB1293457 <a href="#">KB0691910</a>	Global UI Actions are overridden when the Cloud Management plugin is activated	Global UI Actions are overridden when the Cloud Management (com.snc.cloud.mgmt) plugin is activated on top of the domain support plugin.	Refer to the listed Known Error KB article for details.
Cloud Management Application	Certain errors are buried in trails which makes it impossible to	When the order fails, the error 'script execution failed' is thrown on the user portal stack activity, instead of the	

Problem category	Short description	Description	Steps to reproduce
PRB1294669	Find the actual cause of ARM provisioning failures	actual error 'Can't supply admin as username.'	
Cloud Management Application	Intermittent issues during Resource Block import and export	Some records might fail to upgrade after they are imported in an update set.	
PRB1294842			
Contextual Search	Issues with the Contextual Search results on the Portal	The page scrolls to the top every time the contextual search results are loaded.	
PRB1243153			
Customer Service Management	Files are not loaded properly after the plugin is activated	After activating the plugin 'Performance Analytics - Content Pack - Customer Service (New)' - com.snc.pa.customer_service, there are many errors in the logs and files are not loaded properly.	
PRB1295561			
Discovery	Parsing parameters from ECC queue records with text nodes in a parameter fail	In the ECC Queue output Payload field, if there is any whitespace between a payload's 'parameter' element and a child element inside it, the MID Server will fail to parse the payload. This leaves the job in the ready state which is never processed.  The problem is caused by the space/text between child nodes within a parameter node:  An error is thrown in the MID Server's agent log.	Refer to the listed Known Error KB article for details.
PRB1297922			
<a href="#">KB0695259</a>			
Discovery	PowerShellProbe does not work with WinRM using HTTPS	There is currently no way to configure the PowerShellProbe to use HTTPS with WinRM. Even when this can be enabled, SSL certification validation should be disabled since most servers have self-signed certificates.	
PRB1263374			
Discovery	Issues with the delete strategy when following the development of		
PRB1279986			

Problem category	Short description	Description	Steps to reproduce
	Unix Cluster patterns		
Discovery PRB1293504	Invalid MID Servers in a schedule cause multiple 'discovery.canceled' events from each Discovery Status, triggering the powered waterfall	Too many discovery jobs started for chained schedules cause backlogs in the sys_trigger table, causing a major outage.	
Discovery PRB1296045	Apache Web Server \$cmdb_ci_apache_web_server Horizontal Discovery does not populate "Version" correctly	In London, Apache Web Server Horizontal Discovery does not populate "Version" correctly. It appears to be specific to Ubuntu hosts and caused by '\$process.executablePath + "-V"' in Step 19 of Identity Pattern: "Identification for HTTP(S) entry point type(s)" of Application Pattern: "Apache on UNIX based OS".	
Discovery PRB1291922	When classifying Unix/Linux machines with unsupported shell, the classification fails as F5, ESX and ZOS are reporting errors	Discovery fails for Linux servers to classify in Kingston after upgrade from Jakarta.	
Discovery PRB1293496	Multiple 'discovery.canceled' events from each Discovery Status trigger powered waterfall	Undefined variable causes multiple 'discovery.canceled' events from each Discovery Status, triggering powered waterfall.	
Discovery PRB1297346	Pattern customer operations parameters are not exported	As part of pattern development, users can create custom operations. Each operation can define parameters, which are stored in a separate table: sa_custom_operation_param. However, the parameters of the defined operation are not exported.	
Discovery PRB1292140	Discovery creates duplicate models after	After activating the Normalization Data Services plugin, the models are duplicated because	1. Activate the Normalization Data Services plugin.



Problem category	Short description	Description	Steps to reproduce
<a href="#">KB0692003</a>	enabling the Normalization Data Services plugin	Discovery keeps creating models in each run instead of updating the existing one.	<ol style="list-style-type: none"> <li>2. Make sure that the properties are set to true. <ul style="list-style-type: none"> <li>• glide.cmdb.canonical.discovery.enabled is supposed to allow discovery to make use of MakeAndModel normalization.</li> <li>• glide.cmdb.canonical.always_run runs at the business rule level and is intended to allow imports to be normalized.</li> </ul> </li> <li>3. Run discovery on any device.</li> </ol> <p>After completing the discovery, duplicate models are created in the cmdb_model table.</p>
Discovery PRB1293425	MID Server memory leak Issue due to the H2 database connection leak		
Discovery PRB1281592 <a href="#">KB0696013</a>	NetApp provider does not support querying SVMs	Unable to discover NetApp servers after an upgrade to Kingston.	Refer to the listed Known Error KB article for details.
Discovery PRB1293544	The "physical_interface_count" attribute in the cmdb_ci_ip_switch CI has a wrong value when discovering using the "Network Switch" pattern	The "physical_interface_count" attribute in the cmdb_ci_ip_switch CI has a wrong value when discovering using the "Network Switch" pattern.	
Event Management PRB1262408	Slowness on the node due to the huge data processing	An event threshold rule configured to process a huge amount of data can run the instance out of memory.	
Event Management PRB1294952	Users cannot see the Event Management Dashboard on mobile devices		<p>On a Kingston instance</p> <ol style="list-style-type: none"> <li>1. Activate the Event Management plugin with demo data.</li> <li>2. Create a test user account, provide it a password, and give the test user the admin role.</li> <li>3. Impersonate the test user.</li> <li>4. Add Event Management &gt; Dashboard as a favorite.</li> <li>5. As this test user, log in to the instance using a mobile device.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			<p>6. Navigate to favorites and tap the Event Management Dashboard as favorite.</p> <p>When using mobile devices or tablets, an error is displayed: "This page is not supported on tablets." The same error appears when trying to open the Event Management Dashboard in a mobile web browser.</p>
Event Management PRB1289536	CMDBCI lookups should not perform a query if it has no conditions	CMDBCI lookup tries to query the table based on the conditions of the alert. If there are no conditions, it still performs a query at all tables and returns all CIs in the table.	
Event Management PRB1293947	Issues with the MID Server retry bulk event sender	The MID Server event queuing in case of network failures does not work.	
Financial Management PRB1294480	When the cost type of a cost plan is changed, the cost rollup to program does not work	When cost type is changed, the value gets aggregated to the new type but it does not get deducted from old cost type. As a result, the total planned cost also gets an incorrect value.	
Flow Designer PRB1294567	Flow logs are not logged into sys_flow_log - only error logs are logged		
Flow Designer PRB1295333	The incorrect label is shown on certain script steps	If two of the same type of step is present in an action, users are unable to effectively edit inputs in action designer steps. The input takes the last-entered value, and displays that for all steps of the same type.	
Flow Designer PRB1271176	Issues occur when using the flow designer to update an HTML field on a form		<ol style="list-style-type: none"> <li>1. In the app navigator, type incident.list and open any record.</li> <li>2. Right click the description field (if missing add it by clicking Configure &gt; Form Layout) and click Configure dictionary. Make sure that the field type is HTML and save it.</li> <li>3. In the app navigator, navigate to Flow designer &gt; designer.</li> <li>4. Click + to add a new flow.</li> <li>5. Fill in the name and click Submit.</li> <li>6. Click + to add a Trigger.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			<ol style="list-style-type: none"> <li>7. Select Trigger: Created and Table: incident.</li> <li>8. Click + to add an Action.</li> <li>9. Select Action: Create record, Table name: incident, and Fields: Description.</li> <li>10. Click Done.</li> </ol>
Flow Designer PRB1300329	Logs are still captured even after flows are canceled or returned from the MID Server		
Flow Designer PRB1297060	Boolean values cannot be saved in a flow Designer as expected		
Forms and Fields PRB1289754	In the mobile application for Kingston, text is not translated		<p>In a Kingston instance:</p> <ol style="list-style-type: none"> <li>1. Open the mobile view (href="https://instancename.service-now.com/\$m.do#/home).</li> <li>2. Navigate to Profile &gt; More Details.</li> <li>3. Try to change the language from English to any other language.</li> <li>4. Save.</li> </ol> <p>Text is not translated to the selected language.</p>
Forms and Fields PRB1295742	Cannot edit a date_time field when timeago is enabled	When the date/time format is set to timeago or both, users cannot edit a date/time field. Nothing happens when the calendar button is clicked.	<p>In a London instance:</p> <ol style="list-style-type: none"> <li>1. Use the cog on the top-right corner to set Date/Time to Timeago.</li> <li>2. Open ncident.do.</li> <li>3. Under the Resolution Information section, click the calendar icon to pick a date for the Resolved at field.</li> </ol> <p>Clicking the calendar icon does not do anything.</p>
Graph API PRB1298276	Improve memory users for users who are not using Workspace		
Guided Tours PRB1289480	React Js is running on all lists and forms even if guided tours do not exist, causing browser performance issues	This causes performance browser time performance degradation on all browsers.	

Problem category	Short description	Description	Steps to reproduce
Guided Tours PRB1291491	The Guided Tours Designer throws an error if the Openframe plugin is installed	Issues occur when users try to create a guided tour using the Guided Tour Designer. When they drag a callout onto the screen and click Save, it does not get saved under the Steps section.	
Guided Tours PRB1269993	If two tours exist with the same name in different domains, a validation error occurs		<ol style="list-style-type: none"> <li>1. Create a tour in Domain 1 with the name Test.</li> <li>2. Create a tour in Domain2 with same name.</li> </ol> <p>Another tour with name "Name" already exists.</p>
Guided Tours PRB1291204	In some situations, users are unable to stop tours from auto-launching	After the Disable Autolaunch field on a record in the overrides table is set to false, the Dismiss Auto Launch workflow does not work as expected.	
Human Resources PRB1294367	Errors occur when the "HRJ Completed Items" widget is added to the custom page	After an upgrade to Kingston, an error is thrown when the HRJ Completed Items widget is added to the custom page.	
Human Resources PRB1295516 <a href="#">KB0695276</a>	After installing the Knowledge Blocks plugin, bookmark/favorite icons are not shown properly		<ol style="list-style-type: none"> <li>1. Install the Knowledge Blocks com.snc.knowledge_blocks plugin.</li> <li>2. Log out and log in again.</li> <li>3. Go to the Favorites tab.</li> </ol> <p>The bookmark icon is shifted and not visible.</p>
Human Resources PRB1259107	The KB knowledge base does not entertain the HR criteria	The execute operation on the script include hr_Criteria from the 'Global' scope is denied because the source cannot be found.	
Human Resources Service Management PRB1294568	Organization charts are missing when an instance is upgraded from Jakarta to London		<ol style="list-style-type: none"> <li>1. On a Jakarta instance, install the HR scoped Service Portal plugin.</li> <li>2. Upgrade the instance to London and go to the HR Service Portal.</li> </ol> <p>Upon clicking the org chart link from the header, a blank page is displayed.</p>
Human Resources Service Management PRB1294526	The SLA field on the HR Talent Management case does not get populated		<p>Plugin required: HR Core scoped app</p> <ol style="list-style-type: none"> <li>1. Create the SLA definition for the talent management case.</li> <li>2. Create a talent management case.</li> <li>3. Add the SLA field to the HR case list and form.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			The field does not get set/populated.
Human Resources Service Management PRB1283338	When users click on the 'Assign roles' UI action/related link, a popup is shown with 'Leave Site?' with a message that it will not be saved		<p>On a London instance with the HR Core plugin installed:</p> <ol style="list-style-type: none"> <li>1. Navigate to the sys_user table.</li> <li>2. Open an existing user or create a new one.</li> <li>3. Click Assigned roles to try to assign roles to the user.</li> </ol> <p>The popup message appears.</p>
Human Resources Service Management PRB1292852	The HR case "Restrict Query" business rule is invoked multiple times for non-HR records	<p>The HR application has custom Approve and Reject UI actions for the sysapproval_approver form. These UI actions check whether the record being approved is an HR case to determine whether to display or not.</p> <p>This check is done with a GlideRecord lookup against the HR Case table, as opposed to a class name check. This causes the page to load slowly when there are many approval records or tasks in the system.</p>	<ol style="list-style-type: none"> <li>1. As an admin, add a log statement to the HR case 'Restrict Query' business rule script.</li> <li>2. Log in as a user with no HR roles who has a requested approval record for a non-HR record (such as a Change Request).</li> <li>3. As the non-HR user, load the sysapproval_approver form for the non-HR approval.</li> </ol> <p>The added message appears eight times in a row in the system log.</p>
Human Resources Service Management PRB1293019	Under HR Services, there are duplicate options for 'Non-Disclosure Agreement'		
Human Resources Service Management PRB1293872	The Transfer Case modal breaks with HR Service and Topic Categories having apostrophe in the name	When the global property glide.ui.escape_all_script is set to false, the Transfer Case modal currently does not work properly when there are HR Services or Topic Categories containing an apostrophe character in the name.	<ol style="list-style-type: none"> <li>1. Log in as an admin and change the value of property glide.ui.escape_all_script to false.</li> <li>2. Create an HR Service with an apostrophe character in the name.</li> <li>3. Open an active HR case, and click Transfer Case in the form context menu.</li> </ol> <p>The Transfer case dialog is displayed, but the 'Transfer Case to' list is not rendered properly, and a browser error is displayed.</p>
Human Resources Service Management	The HR document template is not editable in the		<ol style="list-style-type: none"> <li>1. Install the French language plugin.</li> <li>2. Install the following HR plugins: <ol style="list-style-type: none"> <li>a. Human Resources Scoped App: Core</li> </ol> </li> </ol>

Problem category	Short description	Description	Steps to reproduce
PRB1293324	French language		b. Human Resources Scoped App: Service Portal c. Human Resources Scoped App: Lifecycle Events 3. Log out and log in again. 4. Navigate to HR Administration > Document Templates. 5. Open the template 'Sample Education Agreement'. 6. Add some text in the field 'Body'. 7. Right-click in the header and save. 8. Change the language to French. 9. Perform the steps 7-8 again.  An error message appears on the top 'Mise à jour non valide'. Another error message is visible at the bottom 'Corps es un champ obligatoire.'
Instance Data Replication	Instance stops sending replication events if an admin drops the column after being included in Replication		
PRB1294815			
Instance Data Replication	When an instance is upgraded, the 'IDR.System' user record and other fields should not get overridden		
PRB1295032			
Instance Data Replication	Possible replication event loss scenario can occur when an admin chooses to 'activate without seeding' after the first failed seeding attempt		
PRB1296188			
Integration Hub	Base URL is missing from the REST Step form when using a connection alias	When the 'Use Connection Alias' option is selected, the 'Base URL' field is hidden. This field should not be hidden, and should instead be shown as read-only as it was in Kingston.	In a London instance:  1. In Action Designer, create a new action or edit an existing action. 2. Add a REST step. 3. Set Connection to Use Connection Alias.  The 'Base URL' field is hidden
PRB1296956			

Problem category	Short description	Description	Steps to reproduce
IntegrationHOB PRB1292052	choice lists should be included	The output 'Status' should be changed to type 'Choice' in all AD and Azure AD actions to provide consistent guidance in all spokes and avoid flow designing mistakes.	
Language and Translations PRB1297055	Add language translations for London	This PRB adds language translations for various products to London.	
Lists PRB1292416	Rows Per Page displays current and previous selections in List v2		On incident list, set rows per page to a different value than what is currently selected. Note that when selecting another rows per page, both the current and previously selected values have a checkmark.
Lists PRB1294016	List UI action button does not work in List v3		<ol style="list-style-type: none"> <li>1. Navigate to System Definition &gt; UI Actions &gt; New.</li> <li>2. Name the UI action List Test: UI Action.</li> <li>3. Check the following: List Banner Button, List Bottom Button, List Context Menu, List Link, Client, List v2 and List v3 Compatible.</li> <li>4. Point the UI action to the incident table.</li> <li>5. In the onClick() field, type testList().</li> <li>6. Create a script: function testList() { alert('ui action msg'); }</li> <li>7. Click on each of the UI action buttons.</li> </ol> <p>No alert message appears like it normally would on List V2.</p>
MID Server PRB1274535	Large ECC Queue payloads created in the TEMP folder are not removed	When EccQueueMonitor or RefreshMonitor is run from a MID Server to poll the ECC Queue on the instance and there are records with a huge payload, the StreamReader buffers the output to a TEMP location on the file system with files named 'temp numbers' and never remove them. This seems to happen due to large probe sizes during Service Discovery.	
MID Server	MID Server fails to start up on		

Problem category	Short description	Description	Steps to reproduce
PRB1294899	Some Windows machines		
On-call Scheduling	Schedule members are not filtering based on groups while creating on-call schedules	After an upgrade, While creating an On-Call schedule, when selecting the group and try to add group members for the schedule, the list collector shows all the users in the system and not limiting to the current group members.	
PRB1294491	The On-call Schedule Interceptor triggers global workflows	The On-call Schedule Interceptor is set on the global table which triggers all other global workflows.	<ol style="list-style-type: none"> <li>1. Navigate to On-Call Scheduling &gt; Create new schedule.</li> <li>2. Use the wizard to generate a schedule.</li> <li>3. Navigate to the wf_context table to find global workflows that were triggered by this process.</li> </ol>
Operational Intelligence	Verify learned trendy models before storing them	Before models are trained as 'trendy,' changes in baselines should be detected and verified.	
PRB1293297	The graceful termination is missing in Amazon AWS Route53 on empty hosted zones		<ol style="list-style-type: none"> <li>1. Configure Cloud Discovery for AWS.</li> <li>2. Run Discovery.</li> </ol>
<a href="#">KB0691942</a>			Errors are thrown in the Discovery log and Pattern log.
Patterns	Unable to run the horizontal discovery on WMB on the Unix Pattern related to install_directory	Unexpected behavior from WMB on the Unix Pattern.	
PRB1293296			
Patterns	Add OID to the OOTB pattern		
PRB1294318			
Patterns	The Pattern Discovery on the Windows Server 2012 does not complete properly	When discovering Hyper-V servers, they appear as class "windows server" with no virtual instances.	
PRB1293288			
Patterns	If cmdb_ci is not extending cmdb, Discovery should get the child and	When the 'create relationship/reference step' is leveraged in a pattern, the product checks if the parent and child tables satisfy certain conditions. One of	
PRB1296736			



Problem category	Short description	Description	Steps to reproduce
	extension tables from 'cmdb_ci' and not 'cmdb'	the conditions is whether the tables are part of list returned from calling getCITypes(). For some users, the root is 'cmdb_ci' and not 'cmdb'. However, 'cmdb' is queried for the child and extension tables, which causes patterns to fail.	
Patterns PRB1296032	Reconciliation issues on the networking device discovery	The network switch pattern throws an error message "insertion failed with error" when trying to insert the record.	
Patterns PRB1296637	The Cisco GSS create connection does not work correctly and the cluster is not created correctly	The 'Could not find farm name. Assigned default farm name' warning is thrown for the GSS pattern.	
Patterns PRB1293419	The FTPClient library was added to the MID Server in order for the Azure functions pattern to perform the function code scanning		
Patterns PRB1291151	The discovery creates duplicate related CIs on the F5 load balancer record after switching to the pattern	When creating a F5 using the probe and sensor and switching the classification to patterns, duplicates are created in the related lists.	
Performance Analytics PRB1296034	On the performance dashboard's pie chart Data labels, is shown as amp;		
Performance Analytics PRB1294647	Export to PDF on a dashboard does not work when a breakdown is applied to that dashboard		
Persistence	Slow performance	Filtering using INSTANCEOF ("class is-a") on a table,	

Problem category	Short description	Description	Steps to reproduce
PRB1281035	issues on transactions and queries	which has the class pathing enabled, should have used the classpath.	
Persistence PRB1290053	The term optimization should be seperated from the upgrade	The populate_term_config_xml takes over 10 hours, which can affect other users who do not want the event queue to be paused for such extended durations.	
Persistence PRB1294748	Some users are unable to activate the HR scoped application plugin (com.sn_hr_core)	This applies to London OOB instances that were provisioned through the HI service catalog.	
Persistence PRB1294630 <a href="#">KB0694082</a>	After cloning an instance and upgrading it, an unnecessary task table alter is performed which extends the upgrade duration		Refer to the listed Known Error KB article for details.
Platform Security PRB606404 <a href="#">KB0656976</a>	An error message "Insufficient permission to access reports" occurs on the ESS Reports page when users have no roles	When the Report Security Plugin is activated, a user with no roles is not able to access the Reports page in the ESS portal or view reports shared with them.	<ol style="list-style-type: none"> <li>1. Log in to an instance and make sure the com.glideapp.report_security plugin is not activated.</li> <li>2. To check, navigate to System Definition &gt; Plugins and search for the plugin and make sure the status is set to inactive.</li> <li>3. Log in to an instance that does not have the com.glideapp.report_security plugin activated, and navigate to report_home.do. You can access the page.</li> <li>4. Activate the com.glideapp.report_security plugin and try to access report_home.do as Joe Employee again.</li> </ol> <p>The message 'Insufficient permission to access reports' occurs.</p>
Project Management PRB1296783	In demo data, project and task dates are not synced		<ol style="list-style-type: none"> <li>1. Install the Project Management plugin with demo data.</li> <li>2. Look at the project and project task dates.</li> </ol> <p>The project and project task dates are out of sync.</p>

Problem category	Short description	Description	Steps to reproduce
Project Management PRB1294274	After upgrading to London, the Project Status Portal timeline is blank		<ol style="list-style-type: none"> <li>1. Create a project with several tasks.</li> <li>2. Upgrade the instance to London.</li> <li>3. Load the Project Status Portal.</li> <li>4. Click the Timeline view.</li> </ol> <p>The timeline view is blank.</p>
Project Management PRB1291478	The planned end date changes for the milestone when a project/task is closed	On Project Management, when a milestone is set to close complete, either directly on the task or if the parent is closed, the planned start date and planned end date are the same when saved. However, if users open the form again, a client script changes the value of the planned end date, not honoring the data on the database.	
Project Management PRB1295296	Planning console issues after upgrading to London	The Project Workbench does not open as expected. In addition, the planning console is not properly rendered and the WBS field is not hidden.	
Reporting PRB1294279	The HTTP 500 error occurs while exporting reports as a PDF		<ol style="list-style-type: none"> <li>1. Click any homepage (i.e. My Apps Development Redline).</li> <li>2. Edit any report and run the report. Verify you can see a chart which contains the data.</li> <li>3. Click the arrow that is next to the Save button.</li> <li>4. Select Export to PDF.</li> </ol> <p>An error occurs '(HTTP Code: 500) Conversion Failed: Did not receive a success in the HTTP response.'</p>
Reporting PRB1294736	PDF exports show the report name as 'Chart Title'	Report name on pdf is coming as "Chart Title"	<ol style="list-style-type: none"> <li>1. Navigate to Report &gt; View/Run &gt; Create a report.</li> <li>2. Name the report.</li> <li>3. Set the source type to table, and the table name is Incident.</li> <li>4. Select the visualization bar, select Display data table in configuration.</li> <li>5. Save the report.</li> <li>6. Export the report to PDF.</li> </ol> <p>Above the chart on the PDF, the report name is 'Chart Title.'</p>
Reporting	In a multilevel pivot report,		<ol style="list-style-type: none"> <li>1. Navigate to Reports &gt; View/Run.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
PRB1258167 <a href="#">KBO688998</a>	the columns header position changes/overlaps depending on the size of the condition builder when it is expanded		<ol style="list-style-type: none"> <li>2. Create a multilevel pivot report using the Report Designer.</li> <li>3. In the Configure section, use the following example values: <ul style="list-style-type: none"> <li>• Select Columns: Created by</li> <li>• Select Rows: Short Description</li> </ul> </li> <li>4. Click Run Report.</li> <li>5. Scroll down the table, both with the condition builder expanded or with it minimized.</li> </ol> <p>When the condition builder is expanded, the columns header position is lower than expected.</p>
Reporting PRB1272748	The trend chart displays the max number of groups and other UI elements show, even though it does not support these elements	These elements should not be displayed on the report designer.	
Reporting PRB1294262 <a href="#">KBO694117</a>	When executing a Multilevel Pivot export from the report designer or report builder, the filter will not be applied		<ol style="list-style-type: none"> <li>1. Enable the WHTP plugin.</li> <li>2. Create a new multilevel pivot.</li> <li>3. Export from the Report Designer without scheduling.</li> <li>4. Check the logs.</li> </ol> <p>Note that they contain an exception. Also, if there was a filter, the export does not honor it.</p>
Reporting PRB1294935	The report title has the report source query's condition added to it		
Reporting PRB1296659	Filter does not apply on reports after switching dashboards and then tabs	Dashboards do not consistently follow interactive filters.	
Reporting PRB1296013	Unable to tell if a report is running when clicking on 'run'		<ol style="list-style-type: none"> <li>1. Open an existing report.</li> <li>2. Click Run.</li> </ol> <p>The "loading report" message is not shown.</p>
Reporting PRB1269391 <a href="#">KBO692485</a>	The bar report displays the same column data repeatedly		Refer to the listed Known Error KB article for details.

Problem category	Short description	Description	Steps to reproduce
Reporting PRB1294609	Export to PDF is broken when using date query conditions such as Created 'at or after'	When a user creates a report with different relative queries, exporting the report to PDF does not work.	<ol style="list-style-type: none"> <li>1. Create a report with query condition such as [Created] [at or after].</li> <li>2. Ensure you have data in the report.</li> <li>3. Export the report to PDF.</li> </ol> <p>The PDF is mostly blank.</p>
Reporting PRB1294824	Unable to export reports with Pareto visualization to JPG/PNG		<ol style="list-style-type: none"> <li>1. Navigate to Report &gt; View/Run &gt; Create a report.</li> <li>2. Name the report.</li> <li>3. Set the source type to table, and set the table name to Incident.</li> <li>4. Select the visualization Pareto.</li> <li>5. Save the report.</li> <li>6. Try to export the report as PNG/JPG.</li> </ol> <p>A message 'Export Complete' appears, but no image is downloaded.</p>
Resource Management PRB1293152 <a href="#">KB0693435</a>	Resource managers are unable to update the resource plan or earlier dates	After impersonating a resource manager and opening the resource plan, all the fields on the resource plan are read-only and cannot be edited.	<ol style="list-style-type: none"> <li>1. Create a Resource Plans by navigating to Resource Plans &gt; Create New for yesterday or any past date.</li> <li>2. Move it to requested state by clicking Request on the top gray bar.</li> </ol> <p><u>Expected behavior:</u> Fields on the resource plan are editable. <u>Actual behavior:</u> Impersonate a resource manager, and open the resource plan. All the fields on the resource plan are read-only and cannot be edited.</p>
Resource Management PRB1295307	After upgrading to London, the resource grid does not load	The message "Resource Management upgrade is in progress. Please check after sometime" is displayed.	
Security Incident Response PRB1295765	Update links to the setup assistant documentation	Within the product, there are weblinks to the setup assistant documentation on the ServiceNow docs site. These links should get updated to the correct URL.	
Server Side Scripting PRB1285930	After upgrading to Kingston, users can no longer use a script include as a default filter	An error appears: "Security restricted: Unexpected Jelly Expression -- \$ [sysparm_collectionID];"	<ol style="list-style-type: none"> <li>1. Save a task or open a submitted task</li> <li>2. Go to the related lists and right-click List Control.</li> <li>3. Change the default filter to: [Company] [is] \$ [sysparm_collectionID].</li> <li>4. Save.</li> <li>5. Go back to the task, scroll to the same related list, and click Edit.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			6. Confirm it shows [Company] [is] \$ [sysparm_collectionID]. 7. Insert the property 'glide.ui.jelly.initial_filter.allow' and set it to true. 8. Repeat steps 5 and 6.  It shows [Company] [is] [some_sys_id].
Service Mapping PRB1291033	MID Server SystemCommandCitChanged causes slowness and HTTP 429 errors (related to PRB1201839)	The default semaphore is exhausted, leaving the instance unresponsive for several minutes.	
Service Mapping PRB1294589	The Pattern Oracle database on the Unix pattern needs improvement		
Service Mapping PRB1291929	The new DNS lookup scheduled job should be enabled	The new DNS lookup scheduled job should be enabled and changed to run once a week (on Sundays).	
Service Mapping PRB1295013	When installing the content shipping on an instance, the script includes do not work		
Service Mapping PRB1291927	F5 Cluster (REST) - Wrong operational status	The REST API library and SSH library in the F5 top down pattern does not run because of the wrong order in the pattern.	
Service Mapping PRB1295442	F5 discovery using SSH causes tables to reach more than 60,000 rows	The F5 load balancer pattern fails after upgrading to Kingston and activating the pattern-based discovery.	
Service Mapping PRB1292330	Extensions are not executed for patterns with an empty metadata_id		1. Open the WebLogic Module pattern. This pattern has an empty metadata_id. 2. Define a new or existing extension. 3. Run Discovery for the WebLogic Module. 4. Due to problem, the execution of extension does not appear in the 'Pattern Log'.

Problem category	Short description	Description	Steps to reproduce
Service Mapping PRB1297303	DB2 is not discovered in the WMB setup Cannot change user		
Service Mapping PRB1294484	Typo in the Tomcat pattern eval()	The Step "work on default ctx" in the baseline Tomcat pattern contains a typo.	
Service Mapping PRB1292746	The TD pattern execution should override the CI class match when there is more than one HD CI with the same fully qualified domain name (FQDN)	When there is more than 1 cloud CI discovered as part of HD with the same FQDN, the TD pattern is only triggered based on the first HD CI that has been picked up.	
Service Portal PRB1292581	Catalog search source should not show facets if there are no search results (consistent with KB search source)		<ol style="list-style-type: none"> <li>1. As a guest user, search for "email."</li> <li>2. Note the Service Catalog search source is visible to the guest user.</li> </ol>
Service Portal PRB1296964	Branding Editor - When uploading image for a logo from branding editor under Quick Setup, broken image is seen	The image is applied on the Theme Preview and the portal.	<p>Prerequisites:</p> <ul style="list-style-type: none"> <li>• Enable the Communities Demo Data plugin.</li> <li>• Enable the Customer Service plugins.</li> </ul> <p>Steps to reproduce:</p> <ol style="list-style-type: none"> <li>1. As admin, navigate to Service Portal Configuration &gt; Branding editor.</li> <li>2. In another tab, open the Community application.</li> <li>3. Navigate to Quick Setup &gt; Title Logo and change the logo.</li> </ol>
Service Portal PRB1296066	Adding an attachment with the icon in the Ticket Conversation widget header saves the attachment to the wrong place	When adding an attachment to records in the Service Portal, using the icon in the Ticket Conversation widget header will not properly attach the item. The item will be saved to the table in the URL and not the table of the record in the ticket.	<p>In the Service Portal:</p> <ol style="list-style-type: none"> <li>1. View a change record.</li> <li>2. Click the paperclip attachment icon in the ticket conversation header.</li> <li>3. Attempt to add an attachment. Notice the attachment appears in the conversation widget, but not in the Ticket Attachments widget on the right hand side of the screen.</li> <li>4. View the change record in the platform UI.</li> </ol>

Problem category	Short description	Description	Steps to reproduce
			<p>Notice there is no attachment.</p> <p>5. Navigate to sys_attachment_list.do.</p> <p>The attachment is associated with the task table (the table in the URL above).</p>
Software Asset Management PRB1295621	Display values for publishers and products should be used for content libraries		
Software Asset Management PRB1294559	Discovery models with the 'New' status are not properly normalized	The normalization rates for Discovery models should be as high as possible.	
Tables and Dictionary PRB1297613	StackOverflowError can be caused by queries in v_customer_uploads or enabling DB Trace		
UI Policy/Client Script PRB1297433	Mandatory 'List Collector' type fields are not working as expected on catalog pages	Even after mandatory fields are filled, the catalog form shows the error message 'Mandatory fields not filled.'	
VA-Conversation Server PRB1293510	Chat interaction does not properly show the case details snapshot based on what the user was requesting	From Virtual Agent, the user can choose to view an existing case and then connect to the live agent. However, upon connecting to the live agent, the live agent sees a broken image with a link. Clicking on that link redirects the user to a sys_attachment record, but it cannot be viewed.	
VA-Conversation Server PRB1292032	The domain separation live agent setup should be supported	Only one global live agent setup is possible and the domain separation is not supported.	
VA-Slack Adapter PRB1297705	Slack API changes are breaking HR input images	Slack introduced a <a href="#">change in their API</a> . This feature affects one of the Virtual Agent UI controls for image upload, which is used by OOB topics in the ServiceNow HR product.	<ol style="list-style-type: none"> <li>1. Create a topic which takes an input image and shows it in the output.</li> <li>2. Upload image to the topic.</li> </ol> <p>The upload hangs, and the uploaded image is not shown.</p>



Problem category	Short description	Description	Steps to reproduce
Vendor Security Risk Assessment (VSRA) PRB1292433	Vendor Risk Assessments show an incorrect number of unanswered questions		<ol style="list-style-type: none"> <li>1. Design a vendor questionnaire with multi-choice questions dependent on each other.</li> <li>2. Log in with a vendor account and try to answer the question.</li> </ol> <p>The answered question and total questions are not accurate.</p>
Visual Task Boards PRB1277238	VTB filters revert back to previous filter conditions after they are changed		<p>Open 2 separate sessions.</p> <p>Session 1</p> <ol style="list-style-type: none"> <li>1. Create a new data driven board for the Incident table where the lane field is 'Assigned To'.</li> <li>2. Add a filter (the state is one of new and in progress).</li> <li>3. Make sure you stay in the newly created VTB and do not navigate away.</li> </ol> <p>Session 2</p> <ol style="list-style-type: none"> <li>1. Navigate to the vtb_board.list open record for the newly created VTB.</li> <li>2. Change the filter in this record so that the state is one of new, in progress, and on hold.</li> <li>3. Save.</li> </ol> <p>Session 1</p> <p>From the current VTB, click one of the unassigned incidents and give it a Primary Assignee (may need to turn off UI Policies for the task and incident table). You should see the task be moved out of the current lane.</p> <p>Session 2</p> <p>Refresh the VTB_Board record. Notice the filter gets set back to what it was set to previously.</p>

## Other London Patch 1 information

### Plugin activation updates

Admins can activate these plugins:

- Agent Intelligence
- Continual Improvement
- Scaled Agile Framework (SAFe)

- Virtual Agent CSM
- Virtual Agent HR
- Virtual Agent ITSM
- Virtual Agent Platform

### Agent Intelligence for Incident Management

Use the default Agent Intelligence records as templates to create Incident Management-specific solutions. This topic was updated with Agent Intelligence upgrade information for users who are upgrading from Kingston to London.

### Activate guided tours

The workflow for activating guided tours was updated in London Patch 1.

### Activate Virtual Agent

You can activate the Glide Virtual Agent plugin (com.glide.cs.chatbot) if you have the admin role. This plugin includes activates related plugins if they are not already active.

### Domain separation and Virtual Agent

The Managed Service Provider (MSP) has one Live Agent setup record in the global domain when the instance is provisioned. The MSP can configure a separate Live Agent setup for each subdomain.

## Fixes included with London Patch 1

\* Unless any exceptions are noted, you can safely upgrade to this release version from any of the versions listed below. These prior versions contain PRB fixes that are also included with this release. Be sure to upgrade to the latest listed patch that includes all of the PRB fixes you are interested in.

- [London security and notable fixes](#)
- [All other London fixes](#)

## London security and notable fixes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

The London release contains fixes to these problems.

London was released on July 26, 2018.

Build date: 07-14-2018\_1223  
Build tag: glide-london-06-27-2018\_\_patch0-07-11-2018

For more information about how to upgrade an instance, see [Upgrade to London](#).

For more information about the release cycle, see the [ServiceNow Release Cycle](#). For a downloadable, sortable version of London fixed problems, see [KB0692695](#).

**Note:** This version is under FedRAMP evaluation.

## Security-related fixes

London includes fixes for security-related problems that affected certain ServiceNow® applications and the Now Platform®. We recommend that customers upgrade to this release for the most secure and up-to-date features. For more details on security problems fixed in London, refer to [KB0692609](#).

## Important fixes in London

The following problems and their fixes are ordered by potential impact to customers, starting with the most significant fixes.

Problem	Short description	Description	Steps to reproduce
Persistence PRB1282065 <a href="#">KB0688314</a>	Setting the property glide.db.query.term.table_limit to zero causes severe cache issues on sys_term_table_cache and a high flush count	When the property glide.db.query.term.table_limit is set to 0, the related property glide.cache.size.sys_term_table_cache is created with a value of 0. As a result, the instance experiences significant performance degradation.	1. Set the system property glide.db.query.term.table_limit to 0. 2. Restart the instance. A static initializer sets the cache size. 3. Issue any arbitrary updates, for example, against an incident. 4. Look at /xmlstats.do?include=cache for the entry for sys_term_table_cache.  Entries are always 0 and the flush count climbs with every update.
Persistence PRB1243052 <a href="#">KB0675026</a>	Data loss can occur when adding an index on an existing column on a TPP table via IndexDescriptor#create when that table is out of index capacity	Adding an index to a TPP column will sometimes try to migrate columns to accommodate an index.	Refer to the listed Known Error KB article for details.
Usage Analytics PRB1268561 <a href="#">KB0685641</a>	Detect and handle the corruption of usageanalytics_count entries within Usage Analytics	The usageanalytics_count table loses entries mysteriously on some customer instances. The problem is usually discovered when the instance stops reporting usage counts and can take a while. It manifests itself in two different ways:	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
		<ul style="list-style-type: none"> <li>The number of entries in the <code>usageanalytics_count_cfg</code> table is too low - less than 100.</li> <li>The number of entries in the <code>usageanalytics_count_cfg</code> table does not match the number of corresponding entries in the parent <code>sys_metadata</code> table.</li> </ul>	
Forms and Fields PRB1155488 <a href="#">KB0636102</a>	Document ID field types are showing the <code>sys_id</code> instead of the display value	When a document ID field is set to read-only via ACL or dictionary (server-side methods), the field shows the <code>sys_id</code> instead of the display value when viewed in a form.	Refer to the listed Known Error KB article for details.
Application Navigator & Banner Frame PRB1244652 <a href="#">KB0657636</a>	Non-admins cannot impersonate users in Jakarta	Non-admin users with the impersonator role are unable to select any users from the impersonation dialog, except for users in the recent impersonation list.	Refer to the listed Known Error KB article for details.
List PRB1260603 <a href="#">KB0686718</a>	Date/Time settings are not used on the list	The Date/Time selection of "Time Ago" or "Both" in system settings is not used when accessing a list view of records, nor when the list view is refreshed. Instead, the calendar view is shown.	Refer to the listed Known Error KB article for details.
Asynchronous Message Bus PRB1177878	Queued AMB messages can push session waiters beyond the 'Max Waiters' threshold, resulting in ignored requests	AMB messages queued for delivery can push a session's waiting transactions beyond the system's allowed maximum amount. The result is that legitimate UI requests are ignored.	
Forms and Fields PRB1166822 <a href="#">KB0655925</a>	The date picker is returning incorrect results	When using the date picker on any new record, the expected date is not being selected.	<ol style="list-style-type: none"> <li>1. Navigate to <code>change_request.do</code> and open a new change request form.</li> <li>2. Under the Schedule tab, use the date picker to select a planned start date.</li> <li>3. Select a date in the month after the one you are in.</li> </ol>

Problem	Short description	Description	Steps to reproduce
			The same date in the next month is returned.
Forms and Fields PRB1188317 <a href="#">KB0657385</a>	Multiline text fields do not automatically expand if ACLs prevent the current user from writing to the field	Multiline read-only text fields do not automatically expand. This makes the field to appear in only 3 lines, and users have to scroll down/up to read the content.	<ol style="list-style-type: none"> <li>1. Log in as an administrator.</li> <li>2. Add the Description field on an Incident form.</li> <li>3. Open a closed incident record.</li> <li>4. Fill with a long text in the Description field.</li> <li>5. Impersonate its "Assigned to" user.</li> <li>6. Open that incident.</li> </ol> <p>Only three lines are displayed in the description, and users have to scroll up/down to read that text.</p>
Email PRB1247356	Email client is no longer showing uploaded attachments for non-admin users	In the Kingston release, when a non-admin user who has access to the Email Client uploads an attachment to the Email Client, the attachment is correctly attached to the email, but it is not shown in the email client itself.	<ol style="list-style-type: none"> <li>1. Open the incident form with an ITIL user with no admin roles.</li> <li>2. Open the Email Client.</li> <li>3. Add an attachment.</li> </ol> <p>The attachment does not reflect on the email client once it has been uploaded. The attachment is present and properly attached to the email and will be sent when 'send' is pressed. However, a non-admin user will not know that because they cannot see it on the email client.</p>
Service Catalog: Service Portal Widgets PRB700689 <a href="#">KB0622371</a>	Mandatory label variables do not have asterisks and are not enforced	<p>When a label variable for a catalog item is set to mandatory by either a catalog client script or a catalog UI policy, it is neither displayed as mandatory (denoted by an asterisk) nor enforced in Service Portal.</p> <p>However, mandatory labels work in the backend catalog item view because they are denoted with an asterisk and are enforced upon the catalog item form submission.</p>	Refer to the listed Known Error KB article for details.
Lists PRB1153993 <a href="#">KB0657384</a>	The page value in a list v2 in IE11 is not displaying correctly	When using List v2 in IE11, changes to pagination values are not reflected. However, this works as expected in Chrome.	<ol style="list-style-type: none"> <li>1. Make sure List v2 is enabled.</li> <li>2. In IE11, navigate to Incident &gt; Open.</li> <li>3. Modify the pagination value in the top right.</li> </ol> <p>The page numbers do not increment past 1.</p>

Problem	Short description	Description	Steps to reproduce
Activity Stream PRB1160000 <a href="#">KB0656801</a>	Activity stream logs for inbound emails show a blank 'From:' field on the email preview	When an email is received from a registered user with an account in the sys_user table, the 'From:' field is empty. If the user is not registered, the email is visible in the 'From:' field.	<ol style="list-style-type: none"> <li>1. Send an email from an email address associated with a valid user.</li> <li>2. Verify that the inbound email has been received by the instance.</li> </ol> <p>The 'From:' field in the activity log is left empty.</p>
Persistence PRB1169930	Slowness and potential browser lock ups	<p>When attempting to add extended fields of cmdb_ci (and likely any other Table Per Partition) fields, large table structures can cause adding those fields to be slow, and potentially locking the browser.</p> <p>This may occur in any place where users are able to add extended fields using a slushbucket, like in the report builder or when trying to add dot-walk fields to forms using the form layout.</p>	
Reporting PRB1244157 <a href="#">KB0684541</a>	List gauges showing the wrong row count on the homepage	The pagination controls and counts for all list gauges for the same table name added to a homepage appear to have counts derived from the first gauge.	<ol style="list-style-type: none"> <li>1. Configure a user with an ITIL role and Network and Service Desk groups.</li> <li>2. Impersonate the user and open a homepage by typing HomePage Admin &gt; My Home in the filter navigation.</li> <li>3. Click the Add Content button, find Gauges &gt; Task &gt; My Groups Work and add it to the page. The record/page count at the bottom of the list.</li> <li>4. Click the Add Content button, find Gauges &gt; Task &gt; Unassigned Work and add it to the page. Both lists show the same record/page count.</li> </ol> <p>When more than one list gauge is present, the first one's record/page count is applied to the rest.</p>
Application Navigator & Banner Frame PRB1194588	The application navigator filters much more slowly in Istanbul and later releases when admins		<ol style="list-style-type: none"> <li>1. Log in to a Helsinki instance.</li> <li>2. Type a long string of text into the type filter text of the application navigator. For example: business rules  scripts - background</li> </ol>

Problem	Short description	Description	Steps to reproduce
<a href="#">KB0639087</a>	type in the Type Filter Text to filter		<p>Result: No matter how fast you type, the list is filtered almost immediately. You cannot get ahead of it.</p> <ol style="list-style-type: none"> <li>Log in to an Istanbul or a later instance.</li> <li>Type the same strings of text into the type filter text of the application navigator.</li> </ol> <p>There is a noticeable delay, almost as if a timeout has been added. It is possible to get in the entirety of the above examples before the navigator filters, if typing fast enough. The same results and poor comparative speed exist if pasting a value in Helsinki vs. Istanbul or later.</p>
List PRB1162821 <a href="#">KB0639102</a>	Reports containing a field from a variable are default to only showing the first record and throws a NullPointerException error	When attempting to create reports, if adding a field from a variable, the report is default to only showing the first record and nothing further. Also, if using group by, it recognizes other records are available but does not display them.	<ol style="list-style-type: none"> <li>Edit a catalog item, such as Submit an IT request.</li> <li>Add these variables: Incident Number (reference type to incident), Incident description (multi-line text).</li> <li>Submit the catalog item a few times to generate some records in sc_req_item.</li> <li>Set the system property glide.ui.optimize.lists to false.</li> <li>Create a report on the requested item table (sc_req_item), and add a filter for Item = &lt;catalog item created or Submit an IT Request&gt;.</li> <li>Run the report. Only one record is displayed, even though there are many records.</li> <li>Remove the filter and run the report again.</li> </ol> <p>All records are shown.</p>
Activity Stream PRB752835 <a href="#">KB0657392</a>	Field 'work_notes' is not editable	g_form.isEditableField() returns false for journal/journal_input fields on existing record forms. This PRB also blocks the ATF plugin from setting the field value of journal_input fields during test execution.	Refer to the listed Known Error KB article for details.
Workflow PRB1244065 <a href="#">KB0657504</a>	Group activity gets stuck when using a custom approval script	When using an Approval - Group activity with the Wait For Condition based on script option, the Approval - Group activity may get stuck and not progress the workflow.	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
Activity Stream PRB1103343 <a href="#">KB0634440</a>	Turning off live forms glide.ui16.live_forms.enabled in Jakarta hides journal fields associated to the activity formatter and activities (filtered)	If users turn off live forms and set glide.ui16.live_forms.enabled to false, the comment fields associated to a form's activity formatter are hidden.	<ol style="list-style-type: none"> <li>1. In UI16, navigate to Incident &gt; Open. Confirm there are journal fields and Work Notes displayed above the Activity Formatter.</li> <li>2. Set glide.ui16.live_forms.enabled to false.</li> <li>3. Return to the incident form. The journal fields do not display.</li> </ol> <p>If you inspect the element, the journal field is set to display: none.</p>
Activity Stream PRB1196249 <a href="#">KB0687022</a>	Additional Comments and Work notes do not always work as expected	If text is entered into a collapsed journal field (for example, when Additional Comments and Worknotes are collapsed to only show one field) before the field is set to mandatory (such as by a client script), the 'hasChanged' flag is not triggered. When a user tries to update the Additional Comments and Worknotes fields, the updates fail with the error message 'The following mandatory fields are not filled in.'	Refer to the listed Known Error KB article for details.
Persistence PRB1234411 <a href="#">KB0662210</a>	DBOnlineAlter uses ExecutionTracker from multiple threads		Refer to the listed Known Error KB article for details.
Service Catalog PRB1246090 <a href="#">KB0677332</a>	UI policies on list collector variables do not work, which causes the RITM form to break	When there is a UI policy applied on a list collector variable on a catalog item, when viewed in the RITM record, the form breaks. The list collector displays as 'Loading.'	Refer to the listed Known Error KB article for details.
Source Control Integration PRB1238101 <a href="#">KB0656115</a>	Source Control operations in Studio throw an error: JGITInternalException: Cannot Read	When users attempt to commit their changes via Source Control > Commit Changes, an error appears: "An error occurred while executing that operation. Try again, check logs, and contact support if the error persists."	Refer to the listed Known Error KB article for details.
UI Components	The form section captions are not	The form section captions are not	<ol style="list-style-type: none"> <li>1. Change the language to Japanese.</li> </ol>



Problem	Short description	Description	Steps to reproduce
PRB1102307	translated in the Upgrade History module or any module	translated in the Upgrade History module.	<ol style="list-style-type: none"> <li>2. Navigate go to <code>sys_upgrade_history.list</code>.</li> <li>3. Open any record on the list.</li> </ol> <p>The form section captions for the Upgrade History Details and Review Skipped Records modules are not translated.</p>
Discovery PRB1204637 <a href="#">KB0639427</a>	MID ServerLister incorrectly notifies MID Servers of potential changes	<p>In Jakarta, support for attachments on MID Server Script Files was added. There was a dictionary change to add the field <code>script_attachment</code> and reference <code>sys_attachment</code>. It also had the default cascade delete rule to nullify the reference upon deletion of the attachment.</p> <p>The platform performs a multiple update database execution when an attachment is deleted to null out references. Even though no actual change is made, this triggers the database listener <code>MidScriptListener</code> to incorrectly notify all MID Servers of a potential change.</p>	<ol style="list-style-type: none"> <li>1. Initiate a grab log files from an existing MID Server record.</li> <li>2. Upon an input response with an attachment, remove the attachment.</li> </ol> <p>An <code>ecc_queue</code> record is created per MID Server with the following:</p> <p>Topic: <code>SystemCommand</code>, Source: <code>FileChange</code>, Name: <code>ecc_agent_script_file</code>, Queue: <code>output</code></p>
Reporting PRB1204046 <a href="#">KB0656974</a>	Accessing a public report of the type 'List' deletes the default record of the report table from <code>sys_ui_list</code> , causing the default list for a table to revert to its system-generated version	Accessing the results of a public report from the type 'List' causes the default record from the <code>sys_ui_list</code> table to be deleted. Any list layout configured by the administrator is lost. In addition, a record is created by the guest user on the <code>sys_ui_list</code> table with an empty 'View' field.	<ol style="list-style-type: none"> <li>1. Navigate to Reports &gt; View/Run &gt; Create a Report.</li> <li>2. Create a report from the incident table with type List.</li> <li>3. Click Save.</li> <li>4. Click the drop-down next to Save to click Publish and Copy Public URL.</li> <li>5. Open an incognito window to make sure there are no active sessions in the system you are in.</li> <li>6. View the URL copied in step 4, then close that browser. It is no longer needed.</li> <li>7. Refresh the list from step 3.</li> </ol> <p>The task list is no longer there.</p>
Audit History PRB1235550	The activity log is capturing incorrect workflow changes	The Stage field in the Requested Item shows the same value for the old and new stage in the History Set.	

Problem	Short description	Description	Steps to reproduce
Activity Stream PRB1238364 <a href="#">KB0657390</a>	The User Preference <code>sys_user_preference</code> for the <code>'stream_input'</code> can cause field visibility issues for comments and work notes depending on the form layout	<p>This issue occurs when the user has a <code>sys_user_preference</code> for the <code>'stream_input'</code> of the form's table. This impacts mostly ITIL users.</p> <p>In some situations, users cannot post journal input as previously/expected. There can be unexpected visibility issues with comments and worknotes, depending on the form layout.</p> <p>If the user navigates to a form view such as Self-Service, and the form view does not contain their current preference value (for example, work note), the alternative field does not display. However, the 'Post' button remains visible.</p>	<ol style="list-style-type: none"> <li>1. Impersonate an ITIL user.</li> <li>2. Navigate to a New/Work in Progress incident and ensure you are in the Default View. The OOB default view is configured to have both additional comments and work note fields within the Notes Section.</li> <li>3. Switch your view to the Self Service View. The OOB Self Service View only has additional comments. Work notes is not configured to be on the form.</li> <li>4. Switch back to the Default View and post a comment. Then select Update.</li> <li>5. Return to the record and post a work note. Then select Update.</li> <li>6. Repeat step 5. This ensures, if it did not yet exist, that <code>glide.ui.incident.stream_input</code> has been created and contains the value <code>work_notes</code>.</li> <li>7. Switch to the Self Service View. The comments field is no longer visible, yet you can see the Post button.</li> </ol> <p>It is expected you can still see/post comments, but because your preference is work notes, the field is no longer visible.</p>
Express to Enterprise PRB1275142 <a href="#">KB0686992</a>	The Notes and Closure information sections are not displayed on the incident form	The form sections Notes and Closure information are not visible on the incident form. This symptom is seen after the first upgrade after the Express to Enterprise conversion.	Refer to the listed Known Error KB article for details.
Lists PRB707443 <a href="#">KB0598990</a>	In Helsinki (UI16), List v3 has performance and availability issues compared to List v2	After upgrading to List v3 (a new feature in Helsinki), a substantial difference is noticeable in performance, specifically on load time.	Refer to the listed Known Error KB article for details.
Persistence PRB1241406 <a href="#">KB0657450</a>	CMDB TPP migration is creating records in the <code>cmdb\$par1</code> table with <code>sys_class_path</code> is NULL	CMDB TPP migration is creating records in the <code>cmdb\$par1</code> table with <code>sys_class_path</code> is NULL. As a result, some relationships are not showing on CMDB related lists and searches	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
		against CMDB tables are not returning all records.	
Benchmarks After upgrading Application to Kingston, users cannot hide the Dashboards module that is installed as part of the Benchmark Client application		Admins cannot see the Benchmark Client application under 'Application picker' because it has been set to private.	<ol style="list-style-type: none"> <li>1. Log in as an admin.</li> <li>2. Edit the application Benchmarks menu and set it to be visible for the roles admin and sn_bm_client.benchmark_data_viewer. Note that the role ITIL has sn_bm_client.benchmark_data_viewer under Contains Roles.</li> <li>3. Try to edit and remove the role sn_bm_client.benchmark_data_viewer from itil in the Contains Roles list.</li> </ol> <p>You are unable to remove it. Even on selecting, Delete is disabled.</p>
Condition Builder PRB1165671	On translated instances, condition operators in the UI16 report designer are displayed in the incorrect language	If multiple languages are enabled, condition operators in report new UI designer are displayed for all users in the incorrect language, regardless of their language settings. The condition operators are displayed in the language used by the first user who logged in and accessed the report designer after an instance restart.	Refer to the listed Known Error KB article for details.

## Other notable London fixes

Problem	Short description	Description	Steps to reproduce
Activity Stream PRB1110812	HTML fields in the activity stream show HTML tags	If an HTML field is added on the form and the activity stream, when the field changes, its content shows on the activity stream including HTML tags.	<ol style="list-style-type: none"> <li>1. Navigate to the incident form: incident.do.</li> <li>2. Use Configure &gt; Form Layout to add an HTML field called Test HTML.</li> <li>3. Open the incident.do form again, and create an incident with the blank value on the new Test HTML field.</li> <li>4. Open the newly created record, navigate to the activity section, and click the Funnel or Filter icon.</li> <li>5. Scroll down and click the Configure available fields link.</li> <li>6. Add the Test HTML field in the slushbucket.</li> <li>7. Navigate back to the incident.do form again, and change the value in the Test HTML field to 'Hello World'.</li> </ol>

Problem	Short description	Description	Steps to reproduce
			8. Save the record.  In the activity stream, 'Hello World' appears as '<p>Hello World</p>'.
Activity Stream PRB1151939 <a href="#">KB0636101</a>	Journal fields in a different tab from the Activity formatter are being hidden	If a journal field is placed in a tab separate from the Activity Formatter, the field is hidden. In Istanbul, the journal field would still be displayed.	<ol style="list-style-type: none"> <li>1. In OOB Jakarta, navigate to the incident form.</li> <li>2. Remove the Additional Comments and Work Notes fields from the Notes tab.</li> <li>3. Add the Additional Comments and Work Notes fields to the Related Records tab.</li> <li>4. View the incident form and open the Related Records tab.</li> </ol> <p>The journal fields are hidden.</p>
Activity Stream PRB1235806	Work notes are not saved when the activity stream filter is not checked, which causes data loss		<ol style="list-style-type: none"> <li>1. Navigate to Incident &gt; Open.</li> <li>2. Select any record.</li> <li>3. Click Show All Journal Fields and ensure that both Comments and Work notes are displaying, along with the Post button.</li> <li>4. Click Filter Activity, and uncheck Work Notes.</li> <li>5. Reload the form.</li> <li>6. Populate the Work notes field with any value, and click Post.</li> </ol> <p>The value clears out from the Work notes field, but it does not display in the stream.</p>
Activity Stream PRB1235811 <a href="#">KB0662270</a>	Activity stream filter preferences do not save when reloading the form		<ol style="list-style-type: none"> <li>1. Go to any incident form.</li> <li>2. Click the activity stream filter icon and uncheck Work notes and Attachments.</li> <li>3. Reload the form.</li> </ol> <p><u>Expected behavior:</u> Work notes and Attachments fields are unchecked in the activity stream filter.</p> <p><u>Actual behavior:</u> Work notes and Attachments fields are checked but work notes and attachments are not shown in the activity stream.</p>
Activity Stream PRB1236280 <a href="#">KB0676245</a>	After adding the new property glide.ui16.emailStreamResponse, under certain conditions, the email client page closes/ disappears	When using the glide.ui16.emailStreamResponse property, UI16 is enabled with live forms, the email reply buttons appear on the Activity filter stream. However, when clicking these buttons, the email client page displays but when	<ol style="list-style-type: none"> <li>1. Make sure the live forms property glide.ui16.live_forms.enabled is enabled. For more information, see <a href="#">Disable live form feature</a>.</li> <li>2. Make sure email sending and receiving is enabled through the</li> </ol>

Problem	Short description	Description	Steps to reproduce
		clicking the message box to type in a message, the pop-up page closes/disappears.	<p>glide.ui16.emailStreamResponseActions property.</p> <p>If you do not see this property in /sys_property_list.do, add it and set it to true.</p> <ol style="list-style-type: none"> <li>Go to /incident_list.do and open a record that has an email sent.</li> <li>Scroll down in the activity formatter and click the Reply/Reply All/Forward buttons.</li> </ol> <p>The email client page appears, but once you click the message box, it closes.</p>
Activity Stream PRB1254635	The form intermittently becomes unresponsive while scrolling through the activity formatter	When loading a form (e.g., incident.do) that contains the activity formatter, sometimes while scrolling down the page, the page sometimes becomes unresponsive.	<ol style="list-style-type: none"> <li>Navigate to the Incident &gt; Open module.</li> <li>Open an incident (one that has many emails, comments, and work notes).</li> <li>Once the form completely renders, open the Developer Tools window.</li> <li>Clear the console tab and the network tab.</li> <li>Navigate to the Performance tab and click the record button.</li> <li>In the form DIV, scroll down through the form.</li> </ol> <p><u>Expected behavior:</u> The scrolling is expected to be smooth.</p> <p><u>Actual behavior:</u> The scrolling can become unresponsive intermittently.</p>
Activity Stream PRB657186 <a href="#">KB0564273</a>	In UI16, g_form.showFieldMsg does not work on the comments and work_notes journal fields		Refer to the listed Known Error KB article for details.
Activity Stream PRB678316	The list of email recipients is truncated in the activity history	When users send emails from an incident, and fill the To and CC fields with many emails, the list of email recipients gets truncated in the activity history. This happens in IE11.	
Activity Stream PRB697478	Mandatory asterisk shows up when expanding journal fields on existing incidents	When expanding journal fields on an existing incident and imputing text into Additional Comment or Work Notes, a mandatory asterisk shows up.	

Problem	Short description	Description	Steps to reproduce
Agent Intelligence PRB1242161 <a href="#">KB0657171</a>	ML Solution (ml_solution) records are in 'Training request timed out' after activating the Agent Intelligence com.glide.platform_ml plugin	Following the activation of Agent Intelligence com.glide.platform_ml plugin, no training can be done. ML Solution (ml_solution) records are not active and end up in the state 'Training request timed out'.	Refer to the listed Known Error KB article for details.
Application Navigator & Banner Frame PRB1089970 <a href="#">KB0634642</a>	The form style is stuck on the first chosen theme and does not change to the style of the currently selected theme	The incident form page theme is stuck in the pink color. Upon the initial change of the system theme, the form page theme changes correctly. However, when changing to a different system theme, the form page theme does not change and still loads the style theme of the first theme that was changed.	Refer to the listed Known Error KB article for details.
Application Navigator & Banner Frame PRB1118622	Application menus and module titles are displaying instead of hint text in UI16	When hovering over an application module, if defined, the hint text should be displayed. However, in UI16 on some release versions, the Title text is displayed instead. This issue does not occur in UI15.	
Application Navigator & Banner Frame PRB1194919	In Chrome 61, any module with arguments does not work and adds the arguments to the query for that module		<ol style="list-style-type: none"> <li>1. Navigate to System Definition &gt; Modules.</li> <li>2. Click the new button.</li> <li>3. Set the Name and application menu to anything.</li> <li>4. Set the Link Type to List of records.</li> <li>5. In the Arguments field, add this code. &lt;script&gt;  &lt;/script&gt;</li> <li>6. Save the record and refresh the navigation to reload the modules.</li> <li>7. Search for and select the module you created.</li> </ol> <p><u>Expected behavior:</u> The module should direct you to the list of records.</p> <p><u>Actual behavior:</u> Nothing happens when you click the module.</p>
Application Navigator	When typing the Polish letter "ć" (Alt + c), the	When typing the Polish letter "ć" (Alt + c) in ITIL view, the left navigation	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
& Banner Frame PRB748899 <a href="#">KB0681360</a>	left navigation panel opens or closes, interrupting user's text input	panel opens or closes and interrupts the user's typing. The user can be typing on a field on any form.	
Application Navigator & Banner Frame PRB825356 <a href="#">KB0622547</a>	In UI15, if the collaboration.frameset system property is set to false, the left filter navigator cannot be resized by dragging the vertical bar	When the property collaboration.frameset is set to false or glide.connect.chat.disabled is set to true, users are unable to resize the left filter navigator or split pane tab by dragging the vertical bar. The browser console shows the error: "Uncaught TypeError: Cannot read property 'msie' of undefined."	Refer to the listed Known Error KB article for details.
Approvals PRB1211255	Approval Coordinator with a Manual Approval child activity errors out when pre-generating approvals	When using a Manual Approval activity inside an Approval Coordinator, any Generate activity fails to generate approvals. The error "Cannot read property 'duration' from null" appears in logs.	
Approvals PRB1234664	Manual approvals skip when included in an Approval Coordinator activity with an error	Manual approvals have unexpected results when included in an Approval Coordinator. Symptoms may include: <ul style="list-style-type: none"> <li>Approval states are set to 'No Longer required' rather 'requested'.</li> <li>Activity throws an error "Cannot read property 'total' from undefined".</li> <li>Activity approves with result=skipped even when approvals exist.</li> </ul>	
Approvals PRB1235008	The stage field in RITM with 'Waiting for Approval' as its value does not display the approver's name for the workflow driven renderer approach	The 'Waiting for Approval' stage value does not display the approver's name in the RITM form.	
Approvals	Manually created	When multiple approval records are added for a	

Problem	Short description	Description	Steps to reproduce
PRB1238554	approval records are not recognized by the Manual Approval activity	workflow that uses the Manual Approval activity, they are added in the 'Not yet requested' state. If one of those approvals is immediately approved, the Manual Approval activity will not complete.	
Approvals PRB1244475	The deduplication on the approvals does not work as expected	Deduplicated approvals are not properly recorded and not attached to correct activities	
Approvals PRB1244790	Advanced approval script that returns user or group IDs instead of sys_ids no longer creates approvals	When using the Advanced script field to build a list of users or groups that should get approval in the Approval - User or Approval - Group activity, scripts that return a list of user or group IDs do not trigger approvals to be created. Returning a list of user or group sys_ids works as expected.	
Assessments PRB1241026 <a href="#">KB0685504</a>	Users with the survey_reader role are not able to view responses of the assessments	Users with the survey_reader role are not able to view responses of assessments because the assessment_take_2 UI page requires the survey_admin role.	<ol style="list-style-type: none"> <li>1. Impersonate a user that has the survey_reader role but not the survey_admin role.</li> <li>2. Navigate to Survey Instances &gt; Completed. All the survey instances that are in the complete state are shown.</li> <li>3. Open any record here.</li> <li>4. Click the View User's Response related link.</li> </ol> <p>A new dialog opens and is blank rather than displaying the user's survey response.</p>
Asset Management PRB1244928	Unable to create the mapping with Asset state / CI Status	Unable to create any mapping for a CI state that has already been mapped when using the Asset CI Install Status Mapping (alm_asset_ci_state_mapping) table.	
Audit History PRB692555	Activity fields are missing	In UI15, activity fields disappear after notification email is sent. The issue also occurs in UI11, which is used in print preview.	<ol style="list-style-type: none"> <li>1. Navigate to Incidents &gt; All.</li> <li>2. Open an incident record.</li> <li>3. Ensure that sent/received email is configured in the activity log.</li> <li>4. Impersonate an ITIL user.</li> </ol>



Problem	Short description	Description	Steps to reproduce
<a href="#">KB0597988</a>			<ol style="list-style-type: none"> <li>5. Create an incident on behalf of ITIL user.</li> <li>6. Assign the incident to the ITIL user.</li> <li>7. Check the activity logs. The field configured in the activity formatter is displayed.</li> <li>8. After the email notification is sent, check the activity log again.</li> </ol> <p>Some of the fields are missing.</p>
Authentication PRB1237810	Users are getting logged out automatically from a system in a short duration	Users are re-authenticating (via the SAML authentication) within minutes of their last active transaction even before the session timeout.	
Authentication PRB1258396	Semaphore exhausted and high instance response time	High memory usage for SAML guest sessions.	
Authentication PRB654728	Users are not able to log in to the instance through SSO	After an upgrade, the SSO is broken and users are not able to log in to the system.	
Authentication - SSO PRB1265474	The relay state URL encoding causes failures if the query string contains a JavaScript function	When using the Multi SSO plugin, if an unauthenticated user makes a request to a URL that contains a JavaScript function as part of the query string, it is not encoded correctly in the relay state parameter for the subsequent auth_redirect.do request, which causes an incorrect redirection. The message "Security constraints prevent access to requested page" is displayed.	
Automated Test Framework PRB1236512	Clicking a UI action cannot click the client form link with an action name		<ol style="list-style-type: none"> <li>1. Create an ATF Test.</li> <li>2. Add an open existing record step, set the table to incident, and choose any incident from zboot or create a new one and refer to that incident in the open state.</li> <li>3. Add a Click a UI Action step, and set its UI action to Repair SLAs (client = true, form link = true, has a defined Action name).</li> <li>4. Run the test.</li> </ol>
<a href="#">KB0685082</a>			

Problem	Short description	Description	Steps to reproduce
Benchmarks Application download scores for the PRB1241049 first month after opt-in <a href="#">KB0685381</a>			<p><u>Expected behavior:</u> The modal pop-up appears asking to confirm starting the repair process.</p> <p><u>Actual behavior:</u> The client test runner opens the form to incident, then leaves the form via <code>g_form.submit('sla_repair')</code>.</p> <ol style="list-style-type: none"> <li>1. Request two instances.</li> <li>2. Set up one instance as a client instance and another instance as central instance.</li> <li>3. Set up the central instance with benchmark and global scores for the previous six months.</li> <li>4. Opt-in and verify scores are downloaded for previous six months.</li> <li>5. Wait for a month and verify that the download event is scheduled.</li> </ol> <p>You are unable to download scores for first month after opt-in.</p>
Change Management PRB1201834 <a href="#">KB0657476</a>	ChangeTaskState script include is not installed when upgrading to Jakarta from pre-Geneva	After upgrading to Jakarta, errors are thrown when attempting to insert records into <code>sysapproval_group</code> .	<ol style="list-style-type: none"> <li>1. Open or create a new <code>change_request</code>.</li> <li>2. Scroll to the bottom of the page and select the Change Task related list.</li> <li>3. Create a Change task, note down the time it has been created.</li> <li>4. Navigate to <code>syslog_list.do</code>.</li> </ol> <p>There should be one or more messages referring to <code>org.mozilla.javascript.EcmaError: 'ChangeTaskState' is not defined.</code></p>
Change Management PRB713373 <a href="#">KB0647724</a>	Cannot create Standard Changes via the catalog on Service Portal	Standard changes cannot be created through the Service Portal. The catalog on Service Portal does not treat standard changes in the same way the catalog handles those in the normal UI.	Refer to the listed Known Error KB article for details.
Chat PRB1030558	If a user ends and rejoins a connect support conversation before it is accepted, the duration time of <code>chat_queue_entry</code> will be incorrect	Instead of the duration of the record showing how long the agent has chatted with the end user, the duration is something similar to 23:59:56, which is a whole day minus the time between the time the user left the chat and the agent is accepted.	

Problem	Short description	Description	Steps to reproduce
Chat PRB1102152	"At Mention" (@username) logs out the current user if the impersonating user is not visible to a user in the result list	If an end user navigates to an incident and tries to enter a work note using @<username>, it will not load the usernames. When this happens the session is ended, and navigating elsewhere will prompt the user to log in. Symptoms: - @mention never loads the user list - End user can no longer navigate the instance	
Chat PRB666963	Connect chat live profile is not updated when user's name changed in sys_user record by admin		
Chat PRB733150 <a href="#">KB0659154</a>	Idle Countdown never times out even after several minutes of inactivity	After several minutes of inactivity, the Idle Countdown does not time out the user. The Connect Support properties connect.support.idle.count_down and connect.support.idle.delay are not working as described in <a href="#">Configure Connect Support chat timeout</a> .	<p>Prerequisites</p> <ul style="list-style-type: none"> <li>• Use two browsers, such as Chrome and Firefox.</li> <li>• Set the Connect Support properties connect.support.idle.count_down and connect.support.idle.delay.</li> </ul> <p>Steps to reproduce</p> <ol style="list-style-type: none"> <li>1. In Firefox, impersonate an end user, such as Abel Tuter.</li> <li>2. In Chrome, impersonate a chat agent, such as David Loo.</li> <li>3. Initiate a chat for the end user by entering any queue (e.g., HR Support: \$chat_support.do?queueID=aeb40252d7133100816403548e610363).</li> <li>4. As David Loo, respond to the chat after accepting it into your queue.</li> </ol> <p><u>Expected behavior:</u> After 20 seconds of inactivity, the end user should get a timer for a timeout alert. After an additional 10 seconds, the user should get removed from the chat session. The agent should get a message that the user has left the chat session.</p> <p><u>Actual behavior:</u> After several minutes of inactivity, nothing happens on the end-user side.</p>
Chat PRB748843	Users can enter their question to a support queue after the queue's	If a user opens the chat support URL within the available time, they are still able to enter their question after time	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
<a href="#">KB0676865</a>	scheduled availability time	expires on the queue's schedule. A user will see "Waiting for an Agent..." even though the queue could be closed for the day or weekend.	
Cloud Management Application PRB1236143	CMPv2 AWS and Azure Client do not honor MID Server properties for proxy	When leveraging AWS Cloud Accounts in a Jakarta Cloud Management instance, if the MID Server is configured to use a proxy, it is not honored.	
Cloud Management Application PRB1250019	Provisioning an Azure virtual machine from the Cloud User portal fails with an error	When creating the Azure public IP and NIC, it does not wait for the Public IP to finish provisioning before requesting to create NIC. Since NIC depends on the Public IP, an error occurs.	<ol style="list-style-type: none"> <li>1. Create a blueprint for the Azure virtual machine.</li> <li>2. Set DiscoverAndAttachIP to true on the virtual server.</li> <li>3. Provision the blueprint.</li> </ol> An error occurs.
Cloud Management Application PRB1268429	Cloud Management V2 billing jobs are stuck	The cloud billing discovery is not able to handle a huge number of downloads. It runs for a few days and eventually times out.	
Condition Builder PRB724836	In the new report designer, the condition builder is not displayed in 24-hour time format		
Configuration Management Database (CMDB) PRB1249088	Performance issues for users running the Service Dashboard	<p>When the Service Dashboard is running, some users experience performance or memory usage issues.</p> <p>The fix for this PRB adds the glide.cmdb.health.processServiceScore system property. If set to false, service health scores are not calculated.</p>	
Configuration Management Database (CMDB) PRB1251933 <a href="#">KB0680536</a>	Long running CompactRelations from the IdentificationEngine are causing excessive memory usage	The IdentificationEngine was spending too much time/resource for CompactRelations.'	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
Configuration Management Database (CMDB) PRB1273072	The relations for the CI are prevented from being edited	Several characters get cropped from the front of the sys_id of the relationship type, which prevents relations for the CI being edited. This can happen when "Save and Exit" ends up being clicked multiple times due to the slowness of the form to close.	
Core Platform PRB1099724	Broken pipe error which leaves sys_attachment.do stuck, causing performance issues		
Core Platform PRB1196849	Scoped applications display the error messages "function beginningOfToday is not allowed in scope" and "endOfToday is not allowed in scope"		
Core Platform PRB1204535	Inserting a sys_dictionary record for an extensible table on a multi-node instance causes the label to not show up on any node other than the node it was created on		
Core Platform PRB1253861	When trying to export dashboards, scorecards, and reports to PDF or other formats, an error appears: "Requested attachment does not exist"	Exporting dashboards or scorecards as PDF fails when users have an Encryption Context assigned role. The export finishes almost immediately. When the user clicks Download, they are taken to "/sys_attachment.do?sys_id=null". The following error is displayed: "Requested attachment does not exist'."	

Problem	Short description	Description	Steps to reproduce
		This issue also occurs with reports and other exports, such as JPG.	
Core Platform PRB1254550 <a href="#">KB0682682</a>	'Highlight changes to field' drop-down in Calendar History Detail shows Jelly expressions instead of field names	In history records, the functionality for highlighting changes to fields is broken. While using 'Highlight changes to fields', the drop-down displays Jelly variables instead of field names.	Refer to the listed Known Error KB article for details.
Core Platform PRB599919 <a href="#">KB0678885</a>	Glide Record queries with addQuery with undefined "parameter" causes the query to bring back the entire record count	Glide Record queries with addQuery with an undefined "parameter" causes the query to bring back the entire record count, instead of bringing back 0 results.	Refer to the listed Known Error KB article for details.
Core Platform PRB687400 <a href="#">KB0610476</a>	Reference qualifier search and sort produce different results in non-English languages	<p><b>Important:</b> This problem applies to platform reference fields only. PRB687400 will not address any issues that may or may not exist with catalog variables of type Reference.</p> <p>In Jakarta and Kingston: Reference field autocompleter text is not taken into account. The reference qualifiers are not applied when the session language is other than English and the display value is translated.</p>	<ol style="list-style-type: none"> <li>1. Log in as an administrator.</li> <li>2. Install any language plugin, for example, I18N: French - Canada Translations.</li> <li>3. Modify the new_call.request_item Reference Qual condition with the following conditions: <ul style="list-style-type: none"> <li>• Active is True</li> <li>• Class is Catalog Item</li> </ul> </li> <li>4. Open a new_call Record.</li> <li>5. Change the Call type to Request.</li> <li>6. In the Request Item field, type *a. The first available item is Active Clones, which matches the criteria as it is a Catalog Item class.</li> <li>7. Switch the language to French-Canadian.</li> <li>8. Open a new_call Record.</li> <li>9. Change the Call type Type d'appel to Request Demande.</li> <li>10. In the Request Item field, type *a.</li> </ol> <p>The first available item is Absence autorisée, Leave of absence, which should not appear because its class is Record Producer.</p>

Problem	Short description	Description	Steps to reproduce
Core Platform PRB696038 <a href="#">KB0597379</a>	Records with the 'null' sys_id can be created and imported	Records can be created or imported with a null sys_id. Modifying these null records can modify other task records with empty parent fields.	Refer to the listed Known Error KB article for details.
Core Platform PRB921034	Unable to update sys_choice record in global scope or in the Application Portfolio Management application	Users cannot update choice records in the global scope or in the Application Portfolio Management application. The following error appears: "Invalid 'Choice' record even though the selected outside Table 'Business Application' is allowed. Invalid update"	
Currency PRB1238030	Currency and price fields marked as read-only at the field definition level sys_dictionary are saved incorrectly	Currency and price fields marked as read-only at the field definition level are saved incorrectly in the session currency. Also, values may be multiplied if the user locale uses a different decimal separator (e.g., the amount can be multiplied by 100 or 1000).	
Data Certification PRB1171743 <a href="#">KB0639495</a>	Demo data is causing certification schedules to rerun	Certification schedules are unnecessarily rerun, which causes more instances and tasks.	Refer to the listed Known Error KB article for details.
Discovery PRB1168742	Horizontal Discovery Sensor is slow and runs instance OutOfMemory due to excessive duplicate cmdb_ci_ip_address values returned	The 'Horizontal Discovery Sensor' sensor can run for a long time and use an excessive amount of memory (and potentially cause an OutOfMemory condition). This issue occurs when the ECC queue payload contains an excessive number of duplicate cmdb_ci_ip_address values that are discovered in the "Get VIP's 1" step.	
Discovery PRB1190701	Long-running 'Unix - ADM' sensor job overloads the sensor and remains in a	During discovery of a server with special applications running, the ADM input payload stays in the 'ready' or 'processing' status	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
<a href="#">KB0639505</a>	state of 'ready' or 'processing' indefinitely	indefinitely, as the sensor runs in an infinite loop. Symptom: The related ECC input with a name that contains 'Application Dependency Mapping' eventually has a State of 'Error'. The error string displayed is "Sensor error: Transaction cancelled: maximum execution time exceeded".	
Discovery PRB1204788	Performance issues occur when multiple 'discovery.phase.complete' events are processed	Processing multiple 'discovery.phase.complete' events results in the completion of the same sys_mutex key, which causes performance issues.	Refer to the listed Known Error KB article for details.
Discovery PRB1206051	Unable to upgrade the MID Server	System commands upgradenow and autoupgrade are not working as expected.	
Discovery PRB1239923	Horizontal Discovery Pattern error - java.lang.IllegalArgumentException: Cannot deserialize object undefined	The system property mid.discovery.max_payload_size in Discovery limits the payload size. When it is set to -1, there is no size restriction, causing a division by zero in certain circumstances.	1. Set the property mid.discovery.max_payload_size = -1 2. Run Discovery.  Observe the error message: Sensor error when processing Horizontal Pattern: java.lang.IllegalArgumentException: Cannot deserialize object undefined.
Discovery PRB1241320	Duplicate ESX Server records are created when an ESX Server is migrated to another vCenter		1. Discover vCenter. A relationship is created between the ESX Server and vCenter.  2. Migrate the ESX Server to a different vCenter (new). 3. Discover the vCenter that contains the migrated ESX server.  <u>Expected behavior:</u> The ESX Server record created in step 1 shows a relationship to the new vCenter.  <u>Actual behavior:</u> An ESX server record is created that has a relationship to the new vCenter. However, the record with the relationship to the original vCenter still exists.
Discovery PRB1254852	The classify sensor incorrectly identifies the	The classify sensor incorrectly assumes that the presence of an hrDeviceEntry with an	1. Enable SNMP Pass-Thru in iLO. 2. Discover a HP® server that is running Windows via the IP address of the iLO



Problem	Short description	Description	Steps to reproduce
<a href="#">KB0682478</a>	device as a network printer	hrDeviceType value ending in ".5" means the whole device is a network printer, when it can be a server with printer drivers installed. This is particularly problematic when an HP® iLO card is exposing the Windows® OS details through SNMP.	card. Discovery will classify it as a printer (cmdb_ci_printer).
Discovery <a href="#">PRB1261595</a> <a href="#">KB0687692</a>	MID Server DefaultUdpTransportMapping thread not reused with use_getbulk use_getscalar options	<p>When SNMP probes run with use_getbulk or use_getscalar probe parameter set to true, the DefaultUdpTransportMapping thread will not be reused by subsequent SNMP probes with the same parameter(s). This will result in instances of this thread accumulating over time, which will eventually cause the MID Server to be unable to create threads, requiring the MID Server to be restarted.</p> <p>The OOB probes with one of the parameters enabled are:</p> <ul style="list-style-type: none"> <li>• SNMP - Switch - BridgePortTable</li> <li>• SNMP - Switch - ForwardingTable</li> <li>• SNMP - Switch - SpanningTreeTable</li> </ul> <p>Probes without either parameter (or with the parameters, but set to false) do not have this issue. Patterns are also unaffected.</p>	Refer to the listed Known Error KB article for details.
Discovery <a href="#">PRB697567</a> <a href="#">KB0598937</a>	Failed SNCSSH executions leak SSH channels which may result in hung SSHCommand probes	There is a limit on the number of simultaneous channels that can be opened to any particular IP (the default limit is 7). After that limit is reached, any subsequent commands must wait for a channel to become available. Currently, when there is an error in	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
		executing a command, the channel is not closed and it leaks away instead. When this happens enough times for a single IP, all subsequent commands hang. This should result in the command timing out, but it does not.	
Email PRB1158590	The node gets restarted due to an improper event	The events processor runs the node out of memory when processing email notifications for records which contain un-closed "<" tags.	
Email PRB1162252 <a href="#">KB0640042</a>	Email notification categories created on instances do not share the same sys_id		<ol style="list-style-type: none"> <li>1. Upgrade to a release from Jakarta on two similar systems (for example, cloned instances).</li> <li>2. Export one notification from one of the upgrade systems and import it to the other system.</li> <li>3. Open the notification on the new system.</li> </ol> <p>The Email Category is not displayed.</p>
Email PRB1244022 <a href="#">KB0676301</a>	SMS notifications are sent as HTML content messages after upgrading to Jakarta		<ol style="list-style-type: none"> <li>1. Create a new notification of type SMS.</li> <li>2. Trigger the SMS notification.</li> <li>3. Navigate to the sys_email record generated by the notification.</li> </ol> <p>The received email content-type header is: "Content-Type: text/html; charset=UTF-8".</p> <p>On the instance, the outbound email will have Content Type: multipart/mixed</p>
Email PRB995233 <a href="#">KB0623193</a>	Group Email is not included as a notification recipient if the email address is the same as a user email address and the user is excluded		<ol style="list-style-type: none"> <li>1. Ensure you have an email notification for the assignment group.</li> <li>2. Set a group's group email field, for example CAB Approval, to the same as that of a user. For example, abel.tuter@example.com.</li> <li>3. Set the user, for example, abel.tuter, notification disabled or inactive.</li> <li>4. Set an incident to have that group as an assignment group, for example, CAB Approval.</li> <li>5. Navigate to the notification and perform as Preview based on the incident created.</li> </ol> <p>As a result, in the preview notification, you see the user's name/email. If the user is</p>

Problem	Short description	Description	Steps to reproduce
			inactive, red is struck through the user name.
Express PRB1196482	Admins are unable to configure available fields in activity formatter		
Express PRB1235389 <a href="#">KB0647480</a>	Administrators are unable to upload video files of the supported format	Users or administrators with the full read/write access to KB articles try to upload a new mp4 video, the 'Insert/Modify Video' tooltip shows the load bar endlessly, and fails to upload. Even if the video is attached to the article, the upload tooltip does not show any file available even selecting from attachments, failing to initiate the insert operation into the db_video target table.	Refer to the listed Known Error KB article for details.
Express PRB1239496	In the Express SSO console, the user is unable to toggle 'Primary' (glide.authenticate.sso.redirect.idp) as an admin user		
Express PRB1245059 <a href="#">KB0675052</a>	In Express versions only, all customizations are overwritten when upgrading to a Jakarta or newer version	On Express versions only, if an application was ever uninstalled, all customizations will be overwritten/removed when upgrading to a Jakarta or higher version. This condition is created after an application is uninstalled and data loss is only encountered on upgrade.	Refer to the listed Known Error KB article for details.
Field Normalization PRB1236316	The iframe error occurs when running the "Update Reference Qualifiers" step of the guided setup in Normalization Data Services		<ol style="list-style-type: none"> <li>1. Log in to an OOB instance.</li> <li>2. Navigate to Normalization Data Services &gt; Guided Setup &gt; Run Update Reference Qualifiers.</li> </ol> <p>The iframe throws an error that page cannot be loaded.</p>

Problem	Short description	Description	Steps to reproduce
Field Service Management PRB1282047	The Appointment Booking plugin provides the incorrect schema for sm_order and sm_task tables	<p>If a user installs the Appointment Booking plugin before the Service Management Core plugin, the 'sm_order' and 'sm_task' tables are created with the incorrect schema.</p> <p>Other plugins, such as the Facilities Service Management plugin, cannot extend the table from 'task' in a "Global" scope, and the table is still in the Appointment Booking application scope.</p>	<ol style="list-style-type: none"> <li>1. Start with an instance that does not have either the Service Management Core or the Appointment Booking plugin installed.</li> <li>2. Install the Appointment Booking plugin.</li> <li>3. Install the Service Management Core plugin.</li> <li>4. Install the Facilities Service Management plugin.</li> </ol> <p>Tables created with the Facilities Service Management plugin are created without fields provided by 'task'. You can also see that 'sm_order' and 'sm_task' do not extend 'task', and are in the "Appointment Booking Application" scope.</p>
Filters PRB1197866 <a href="#">KB0639240</a>	During the TPP migration, if a row size limitation error occurs, the CMDB table may experience data loss	<p>During the TPP migration, a MySQL row size limitation error can occur when there is a large number of medium text fields on the CMDB and its child tables. The migration can fail and cause data loss.</p> <p>If this has occurred, the state of the migration will be in "Complete (with errors)". Check the sys_tpp_migration record for "Base Configuration Item [cmdb]" to see the state of the TPP migration.</p>	Refer to the listed Known Error KB article for details.
Flow Designer PRB1250616 <a href="#">KB0688902</a>	The flow is unresponsive with the "Unable to deserialize process plan from JSON" exception	When running the flow contains the REST action which retrieves a large size of data, the flow unresponsive with the "unable to deserialize process plan from JSON" exception.	Refer to the listed Known Error KB article for details.
Flow Designer PRB1260197	The URL encoding problem occurs when the resource path has a space		<ol style="list-style-type: none"> <li>1. Create an action and use the REST Message step.</li> <li>2. Use a resource path which has a space.</li> <li>3. The flow execution fails with an error message and this happens before the request is dispatched.</li> </ol>

Problem	Short description	Description	Steps to reproduce
			The above problem also happens for other characters like '+' as part of a resource path.
Forms and Fields PRB1091270	Reference qualifier on all fields is ignored when List V3 is enabled		<p>Ensure List V3 is active, and tree_picker is set to false.</p> <ol style="list-style-type: none"> <li>1. Open a new incident.</li> <li>2. Assign the incident to a group with a limited member list.</li> </ol> <p>Members of all groups will display in magnifier tree list, but members that are not in the assigned_to field will not validate if they are typed into the field. This functionality works correctly for the text field, but not for the drop-down list.</p>
Forms and Fields PRB1114743 <a href="#">KB0636099</a>	'Printer-friendly version' is not working when you have an attachment in the record		<ol style="list-style-type: none"> <li>1. Navigate to an open Incident record that does not have an attachment.</li> <li>2. Click the gear icon in the upper right and select the Printer Friendly feature in the system settings. It should display ok.</li> <li>3. Attach a file to the Incident record and repeat step 2.</li> </ol> <p>The code shown in customer visible description is displayed at the bottom of the page.</p>
Forms and Fields PRB1181032 <a href="#">KB0647552</a>	Glide list fields set to read-only via client script or UI policy do not update the value when the form is saved	After upgrading to Jakarta, if a user sets a Glide list type field to read-only with a UI policy, client script, cictionary or ACL, if the value for this field is updated with scripts, it does not get saved when the form is submitted.	Refer to the listed Known Error KB article for details.
Forms and Fields PRB1204839	Slowness after an upgrade to Jakarta	List loading for "Cases Opened" or "All Cases" takes up to 10-15 seconds. This issue relates to the list containing a category field, which is set to a choice type field.	
Forms and Fields PRB1238856	Unable to upgrade TinyMCE editor to fix issues that are available in		

Problem	Short description	Description	Steps to reproduce
Forms and Fields PRB1240727 KB0661834	the latest version  When the calendar icon (date picker) is clicked to select a date, the form scrolls down to the bottom of the page		<ol style="list-style-type: none"> <li>1. Go to incident_list.do.</li> <li>2. Open any incident record.</li> <li>3. Right-click in the form header and choose Configure &gt; Form Layout.</li> <li>4. Under Create New Field, add a date/time field, for example, Start Date.</li> <li>5. Move some fields from Available to Selected so that the main form section has several fields, and click Save.</li> <li>6. If tabbed forms are not enabled, click the gear icon in the upper right, click Forms, and enable it.</li> <li>7. Select a Start Date by clicking the Calendar icon.</li> </ol> <p>The page scrolls down.</p>
Forms and Fields PRB1247068	The ElementTree control does not show glide_list elements as being selectable		<ol style="list-style-type: none"> <li>1. Create a workflow on the task.</li> <li>2. Add the 'Approval - User' activity.</li> <li>3. Click the lock icon next to the Users field.</li> <li>4. Click Select Fields to add fields to the list.</li> </ol> <p>'Additional assignee list' is not available.</p>
Forms and Fields PRB1247562 KB0681760	When using UI15 in Kingston, task record headers have a space missing between the table label and the record label	There should be a space between the table label (user) and the user's name on the form header. However, in Kingston, if users switch to UI15, there is no space between table label (User) and user's name on the header.	<ol style="list-style-type: none"> <li>1. Log in to a demo Kingston instance.</li> <li>2. Switch to UI15.</li> <li>3. Go to any form, such as a user record: /nav_to.do?uri=sys_user.do?sys_id=&lt;sys_id of the user record&gt;</li> </ol> <p>There is no space between the Table label(User) and the user's name on the header</p> <p>This happens in all forms. For example, the form header title for incident "Incident INCXXXXXX" is displayed as "IncidentINCXXXXXX".</p>
Forms and Fields PRB1254192	A JavaScript error occurs when users navigate away from the form	Intermittent JavaScript errors "TypeError: uncaught exception " occur when users navigate away from any form. This causes ATF tests to fail randomly.	
Forms and Fields PRB1273396	Clickthrough popup (eye icon) is inconsistent with standard		

Problem	Short description	Description	Steps to reproduce
	reference icon behavior		
Forms and Fields PRB1279803	Scripted UI policies no longer work on Service Portal or mobile in London if 'Isolate Script' is true or for scoped apps		<ol style="list-style-type: none"> <li>1. Create a scripted UI policy for any table. Ensure it runs on mobile or Service Portal.</li> <li>2. Open the form for that table in Service Portal.</li> </ol> <p>There are JavaScript errors, and the script was not properly escaped.</p>
Forms and Fields PRB626737	Dot-walked fields do not work on record templates		<ol style="list-style-type: none"> <li>1. Personalize/Configure the incident form layout</li> <li>2. Add the Caller &gt; Country code field to the form</li> <li>3. Navigate to System Definition &gt; Templates and create a template on incident.</li> <li>4. Click the filter drop-down and click Show Related fields.</li> <li>5. Select the Caller &gt; Country code field. Set a value.</li> <li>6. Apply the template to the incident form.</li> </ol> <p>The country code value does not get applied, but other values apply fine.</p>
Forms and Fields PRB924635	The real-time updated check box field value does not save properly	When a same record is open for two separate users, and one user updates a check box field, the other user sees that as a real-time update. However, when the other user changes the same value and tries to save it, the value does not save as expected.	Refer to the listed Known Error KB article for details.
Guided Tours PRB935838	Guided Tour Plugin - Callouts are in letters instead of graphics	Guided Tour Designer callouts do not display images.	
Import / Export PRB1244501	If multiple imports happen on the same table (for example, sync Web service imports), transformation maps using fast lock could cause deadlock		Refer to the listed Known Error KB article for details.

[KB0657398](#)[KB0622130](#)[KB0657641](#)

Problem	Short description	Description	Steps to reproduce
Import / Export PRB1246928	When a report is exported into CSV, an incomplete number of records is downloaded	Exporting list view and reports in the CSV format does not export all expected records. The same data can be exported in Excel and XML.	
Import / Export PRB714243	XML imports ignore nodes if they are not present in the first 10 records being processed	XML imports from data source attachments ignore nodes if they are not present in first 10 records being processed. The XML being processed contains optional fields that may not exist in the first 10 records of data. Data being explicitly ignored can lead to data consistency concerns.  For details on the fix to this PRB, refer to <a href="#">File type data sources</a> .	
Knowledge Management PRB1200463	Searching for a KB article returns an outdated version	In the global search, searching for a KB article with versioning enabled returns an outdated version, instead of the published one.	
Workflow PRB1270381 <a href="#">KB0685194</a>	Join activities are resulting in an error	Join activities in workflows are not working as expected. An error 'java.lang.NullPointerException' occurs when the join activity is reached.	<ol style="list-style-type: none"> <li>1. Navigate to Service Catalog &gt; Catalog Definitions &gt; Maintain Items.</li> <li>2. Create a catalog item.</li> <li>3. Next to the Workflow field, click the lookup icon.</li> <li>4. Next to Workflow at the top, click New to create a workflow with a Join activity.</li> <li>5. Click Try it and then Order Now to order the item.</li> <li>6. Navigate to the requested item you created.</li> <li>7. In the Catalog Tasks related list, change the state of tasks to 'Complete'.</li> <li>8. Refresh the related list and click Show Workflow.</li> </ol> <p>An error occurs when the workflow reaches the Join activity.</p>
Knowledge Management PRB1245302	Users cannot download attachments from published KB	Customers were unable to download the attachments from published KB articles,	<ol style="list-style-type: none"> <li>1. Enable the Knowledge Management Advanced plugin and follow instructions in <a href="#">Activate the Knowledge Management Advanced Plugin</a>.</li> </ol>



Problem	Short description	Description	Steps to reproduce
<a href="#">KB0684002</a>		such as <a href="#">KB0542328</a> and <a href="#">KB0540707</a> .	<ol style="list-style-type: none"> <li>2. Create a knowledge article, and insert an image to the article.</li> <li>3. Publish the article to create v1.0.</li> <li>4. Check out the article and publish it to create v2.0.</li> <li>5. Log in as a user without knowledge_admin role but has access to the article.</li> </ol> <p>Users should be able to see the image but it is missing in the article.</p>
Knowledge Management PRB1248928	The Add button is not shown for Knowledge Manager	The Add button on the category picker is not visible to the knowledge_manager of the knowledge base. It does appear for users with the admin and knowledge_admin roles so that they can create a category.	<ol style="list-style-type: none"> <li>1. Impersonate a user who is the manager of a knowledge base.</li> <li>2. Navigate to Knowledge &gt; Articles &gt; Create New.</li> <li>3. In the Knowledge Base field, select a knowledge base that the user is a manager of to set the Category field to readable.</li> <li>4. Click the Lookup using the picker icon next to the Category field.</li> </ol> <p>The Category Picker is displayed. The manager is unable to create a category in the Category Picker window.</p>
Lists PRB1238913	The tags field does not render in list v2 when paginating or ordering by a column		<ol style="list-style-type: none"> <li>1. Open problem.list or incident.list from the application filter navigator.</li> <li>2. Add the Tags field in the list view via Personalize List Columns. The Tags field shows the contents.</li> <li>3. Click any other column like Created or Number to sort the list.</li> </ol> <p>The Tags field does not show any contents in the list view.</p>
Lists PRB1241416	The system property glide.ui.list_edit.show_calendar_only is ignored in Jakarta	Setting glide.ui.list_edit.show_calendar_only to true or false should alter the Date Picker format accordingly. However, this is not working in Jakarta.	
Lists PRB699028 <a href="#">KB0639090</a>	Users can still use 'Go To' search for tags in a list, resulting in an error: Unknown column 'task0.sys_tags' in 'where clause'		<ol style="list-style-type: none"> <li>1. Go to /incident_list.do to access the incident table.</li> <li>2. Click the gear icon and add the Tags column.</li> <li>3. Click the column header search icon (magnifying glass). The header search does not work.</li> </ol>

Problem	Short description	Description	Steps to reproduce
			<p>4. Select tags from the Search or Go To field in the list column header, fill in the search term, and search.</p> <p>Errors occur when searching.</p>
Lists PRB724481	The user preference to set the default go to search field in a list is not honored in List v3	The user preference to set the default search category in a list is not honored in List v3. In List v2, setting the 'db.order' user preference would not only affect which column the list was default sorted on, but also what the default search category on that list would be. e.g. incident.db.order value: name system:true user:[blank] This would set the default search category on the incident list to Name. In List v3 this only affects the sort column.	
List v2 PRB925311 <a href="#">KB0634380</a>	Clicking All in a breadcrumb from a reference field has no effect	After typing a few characters into a reference field and using the magnifying glass to run a query, it is not possible to modify the breadcrumbs in the resulting list more widely.	<p>1. Go to a reference field on a form. For example, navigate to Incident &gt; Open and select an incident.</p> <p>2. In any reference field, for example, the Caller field, type a couple of characters.</p> <p>3. Click the reference lookup (the magnifying glass) icon. A list of users whose name starts with "a" is displayed.</p> <p>4. Try to expand the breadcrumbs to find a wider audience. The filter does not change.</p> <p>You are limited to the initial query that was run for the list.</p>
Password Reset Application PRB1184610	The Security Questions Enrollment questions block section does not show up	The Security Questions Enrollment questions block section does not appear on the enrollment page for non-English languages. Also, when the UI is changed to a language other than English, the verification methods 'Enter email' and 'Confirm email' give an error.	

Problem	Short description	Description	Steps to reproduce
Performance Analytics PRB1185068 <a href="#">KB0656901</a>	Email notifications for sharing the Performance Analytics dashboard cannot be turned off or customized	When a PA Dashboard is shared, users on the shared list get an email notification that the "dashboard has been shared with you." The notification hardcoded and is not customizable in any way - users cannot edit the content or format editing, nor can they disable or opt out of the notifications.	<ol style="list-style-type: none"> <li>1. Navigate to Performance Analytics &gt; Dashboards.</li> <li>2. Select any dashboard.</li> <li>3. Click Sharing icon.</li> <li>4. Click Users.</li> <li>5. Type a user name.</li> <li>6. Click Invite.</li> <li>7. Go to System Logs &gt; Emails and look for the email with subject dashboard has been shared with you.</li> </ol> <p>Email notification is not defined anywhere in the system so the user can neither turn it off not customize it.</p>
Performance Analytics PRB1239514	The com.snc.pa.premium plugin should have the 'published' state	When users try to create indicators, an error 'Creating new indicators or breakdowns is not available in this trial version of Performance Analytics. You will be able to create indicators and configure more breakdowns once you upgrade to the premium version of this feature' occurs. The com.snc.pa.premium plugin needs to be activated first.	
Performance Analytics PRB1239918 <a href="#">KB0657606</a>	The Incident Management dashboard is missing as part of the Performance Analytics trial plugin	The "out of the box" Incident Management dashboard, which is supposed to come with the trial version of Performance Analytics for Incident Management is absent.	<ol style="list-style-type: none"> <li>1. Navigate to System Definition &gt; Plugins.</li> <li>2. Make sure the Performance Analytics (com.snc.pa) plugin is active.</li> <li>3. Navigate to Performance Analytics &gt; Dashboards.</li> <li>4. Search for the Incident Management dashboard.</li> </ol> <p>It does not appear.</p>
Performance Analytics PRB1246261 <a href="#">KB0687720</a>	Scrollbars on the records and Breakdowns tabs of scorecards are not displayed when the property glide.cms.enable.responsive_grid_layout is set to 'false'		<ol style="list-style-type: none"> <li>1. Add the glide.cms.enable.responsive_grid_layout system property, and set the value to false.</li> <li>2. Run the [PA Incident] Historic Data Collection job.</li> <li>3. Open the Incident Management PA dashboard.</li> <li>4. On the Incident Overview tab, to open a detailed scorecard, click the chart of the Open Incidents widget.</li> <li>5. Click a point with a high enough number (20+) of incidents in order to eventually bring up a record list that will require scrolling.</li> </ol>

Problem	Short description	Description	Steps to reproduce
			<p>6. Click the Records tab.</p> <p>No horizontal/vertical scrollbars are displayed for the record list. There is a separate vertical scrollbar, but it is for the container of the scorecard, and it will not allow you to scroll down the list entirely.</p>
Performance Analytics PRB1249401 <a href="#">KB0680652</a>	Multiple dashboard tabs show the same incorrect content	Tabs that encounter the swap are missing the mandatory Page field which references a sys_portal_page record. To prevent this issue, when moving a dashboard using update sets, it is important to follow all the documented steps and to move all the portal pages which are associated with its tabs separately, since sys_portal_page table changes are not tracked by default. After moving your dashboard, you should check that each tab has an associated Page that contains its widgets.	<ol style="list-style-type: none"> <li>1. Make sure there are couple of records in sys_grid_canvas.list that do not have an associated portal page in the instance.</li> <li>2. Install the WebKit HTML to PDF plugin.</li> <li>3. Create a dashboard and add several widgets to it.</li> <li>4. From the Dashboard Menu, select Export to PDF.</li> <li>5. Select the Print all tabs option and export.</li> <li>6. After export is complete, reload the page.</li> </ol> <p><u>Expected behavior:</u> Tab content should not change.</p> <p><u>Actual behavior:</u> Tab content is swapped with the content of another canvas page that does not have an associated portal page.</p>
Persistence PRB1234751 <a href="#">KB0676207</a>	SQL exceptions can occur for a storage column/alias that exists in multiple partitions	If a storage column/alias exists in multiple partitions, but some partitions are erroneously classified as synchronized in a TPP, SQL exceptions can occur.	After an instance upgrade, notice the presence of SQL exception messages.
Persistence PRB1235193	Filtering on tags in the list view for CMDB generates an error message in Jakarta		<ol style="list-style-type: none"> <li>1. On the filter navigator, navigate to Business Services.</li> <li>2. In the list view, create a filter with 'Tags'.</li> <li>3. For the 'Tags' filter, make it 'Tags has Contacts'.</li> </ol> <p>When you run the filter, an error occurs.</p>
Persistence PRB1238846	OrderByLimitOptimization is ignoring index from ORDER BY field when WHERE clause is clearly not selective		

Problem	Short description	Description	Steps to reproduce
Persistence PRB1242353	Changing the class for CIs from UI leads to the transaction cancellation and the deletion of few records		<ol style="list-style-type: none"> <li>1. Take a count of the total number of CIs you in the two classes.</li> <li>2. Navigate to the list of the CIs you want to change their class.</li> <li>3. Right click the column heading Class.</li> <li>4. Select Update All.</li> <li>5. Click Ok to confirm that you want to reclassify the CIs.</li> <li>6. Input the new class.</li> <li>7. Click Update to save the change.</li> <li>8. Take a count of the total number of CIs in the two classes again and compare it to the first count.</li> </ol> <p>One or more CIs are missing.</p>
Persistence PRB1244056	Configure label action for an inherited field on CMDB hierarchy via right click label (from a form for a child table) and click Configure Label results in a "record not found" message	Base sys_documentation records are not duplicated for descending tables on CMDB hierarchy (TPP), resulting in a 'record not found' message when attempting to configure label from a child table form.	
Persistence PRB1244420 <a href="#">KB0682447</a>	After committing an update set that deletes a (custom) field from a table in the CMDB hierarchy, other tables show errors	When a field is deleted in the CMDB hierarchy through the update set, data loss occurs for the table with a column mapped to the same storage alias as is used by the column that is deleted.	Refer to the listed Known Error KB article for details.
Persistence PRB1245189	An update set that drops and recreates a CMDB table deletes cmdb.name and other cloned elements	If an update set drops and recreates a table inheriting from CMDB, and the update set is manually altered in a certain way, columns that are in use on CMDB may be dropped, leading to data loss and outage.	
Persistence PRB1245494	The sys_storage_alias record is not deleted when dropping a column through the update set	The sys_storage_alias record is not deleted when dropping a column through the update set, resulting in an orphan record in sys_storage_alias.	

Problem	Short description	Description	Steps to reproduce
Persistence PRB1245803	Intra-CMDB (TPP) reparenting fails with data loss when siblings share a storage alias with the new parent	<p>When attempting to reparent a CMDB table within the CMDB hierarchy (for example, changing the parent from 'cmdb' to 'cmdb_ci'), the operation can fail and cause data loss. Data loss can occur if the table being reparented has multiple child tables (siblings) that all use the same "glommed" storage column alias as one used by the new parent.</p> <p>The symptom is that entire columns from the tables that are being moved are nulled out, and the detailed log messages indicate that the same storage alias is being assigned to multiple logical columns.</p>	
Persistence PRB1248973 <a href="#">KB0684419</a>	Editing a label for the CMDB table with TPP overwrites the other languages for that field label	If users have multiple languages for their instance and edit a label (sys_documentation record) on the CMDB table, it will overwrite all of the other languages on the child tables with that language.	<ol style="list-style-type: none"> <li>1. Install the I18N: Internationalization plugin and at least one language.</li> <li>2. Navigate to System Localization &gt; Field Labels.</li> <li>3. Set the filter [table] [starts with] [cmdb] AND [element] [is] [assignment_group]. You can use any field that is on the base CMDB table and has translations for itself and at least one child table. If they are not on the child table, you might need to view a record in that child table in another language.</li> <li>4. Edit the Label field on the CMDB table for the English language.</li> <li>5. Refresh the list.</li> </ol> <p>All child tables are updated, but the other language records also get updated and changed to English, making it look like duplicate records are created.</p>
Persistence PRB1251698 <a href="#">KB0678055</a>	Data loss can occur when committing an update set that creates a unique index on a shared storage alias containing	When an update set is committed that creates a unique index on a column that uses a shared storage alias, records for other tables using the same storage alias and containing	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
	non-unique values	duplicate values for it are lost.	
Persistence PRB1252503	TPP migration on the upgrade can leave null sys_class_path values in partition tables	The upgrade migrates CMDB to TPP and creates partition tables such as cmdb\$par1. The sys_class_path column in these tables can be left null, causing problems in various CMDB list views.	
Persistence PRB1253535 <a href="#">KB0683833</a>	Exports and reports on database views with 'left joins' fail to retrieve data	Left-join coercion is an optimization applied to queries run against the back-end database that is used to convert certain left joins to less expensive inner joins. When the LEFTJOINCOERCION optimized query is active on the instance, it is possible that scheduled exports are no longer generating data. No errors are generated.	Refer to the listed Known Error KB article for details.
Persistence PRB1256511 <a href="#">KB0685682</a>	Reference variable does not show the display value in catalog items for cmdb_ci or its child table		<p>In a Kingston instance:</p> <ol style="list-style-type: none"> <li>1. Create a catalog item which has a reference type variable.</li> <li>2. Point the reference of this variable to any cmdb_ci table or any child table (for example, cmdb_ci_server).</li> <li>3. Set the display value for the cmdb_ci table to Short Description. It automatically sets the display value for the short description on cmdb_ci_server.</li> <li>4. Go the catalog item created in step 2.</li> <li>5. Click Try It.</li> <li>6. Fill the value for the reference variable.</li> </ol> <p>The short description should be shown, but the name is shown instead.</p>
Persistence PRB1277025 <a href="#">KB0689057</a>	Unintentional in-app clone may corrupt sys_storage_alias and sys_storage_table data in an Oracle instance	In an Oracle instance, an in-app clone can launch unintentionally if an instance fails to contact the server to schedule a backup-based clone. The backup-based clone can be manually fixed, but data can be lost if an unexpected in-app clone is launched after that.	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
Persistence PRB997687	When grouping by report results, the total records shown for each group do not match the total number of records returned overall	When users create a report that has conditions containing more than one tag using an OR condition, and group by anything (i.e. State, Task Type), the total number of records is different than the sum of the records obtained by the aggregation (group by).	<ol style="list-style-type: none"> <li>1. Add more than one tags to several incidents.</li> <li>2. Create a report of any type (except Heatmap) that uses group by and count aggregation. Make sure you have tags in the filter condition and an OR condition in the report.</li> <li>3. Run the report and group by anything.</li> <li>4. Click the specific group (or the graphical representation of the group in a chart) to open the individual list.</li> </ol> <p>The number in the list is less than the total reported for the sub-group in the main report.</p>
Platform Security PRB1241247	Instances encounter a white screen, with log 'Security restrictions on GlideServletUITransaction'	Due to issues which deny access to ACL checks on GlideServletUITransaction, all users may be blocked from accessing the system.	
Project Management PRB1111218	Scripted ACL does not work as designed in Planning Console, and always returns false		
Project Management PRB1202324a	Using the planning console to add a task in a project causes already closed tasks to become active=true again	Using 'Add task below' in the planning console in a project that already has closed complete tasks can incorrectly cause those closed tasks to become active=true.	<ol style="list-style-type: none"> <li>1. Enable the PPM with Financials plugin.</li> <li>2. Create a project.</li> <li>3. Create three child tasks named 1, 2, and 3. Set them to Start ASAP with no relations.</li> <li>4. Start the project. All tasks are moved to work in progress.</li> <li>5. Set task 3 to Closed complete. Active is set to false.</li> <li>6. Open the planning console.</li> <li>7. Select task 2 and click Add Task Below.</li> <li>8. Leave the task name as New Task, and click outside the task to save.</li> <li>9. Go back to task 3.</li> </ol> <p>Task 3 is set to active=true.</p>
Project Management	The description changes to the string 'null'	In the Project module, when a user closes a project record while in the planning console, the	<ol style="list-style-type: none"> <li>1. Create a project with the Description field populated.</li> </ol>



Problem	Short description	Description	Steps to reproduce
PRB1244574	when closing a project record	description changes to 'null'.	<ol style="list-style-type: none"> <li>2. Access this project in the planning console.</li> <li>3. Close the project.</li> <li>4. View the description.</li> </ol> <p>The description's text is 'null'.</p>
Project Portfolio Management PRB1237886 <a href="#">KB0656082</a>	Potential data loss when the com.snc.project_management plugin is active but the com.snc.project_management_v2 plugin is not activated	On an instance configured with a recent management and the Project Management v1 plugin, unexpected message error v2 attempts to activate either the Project Management v2 or Project Management v3 plugins. When installing the v2 plugin, although the install indicates as successful, certain components and key fields from the tables are not installed. This is due to changes in the behavior of the product since the Project Management v1 plugin is created.	<p>To confirm whether an instance is at risk for this issue, open the following list view, which has been filtered to show the installed Project Management plugins. If the v1 plugin is installed but neither the v2 nor v3 plugins are installed, then the instance is at risk. Reach out to <a href="#">ServiceNow Customer Support</a> before attempting to activate a Project Management plugin.</p> <p>Filtered list view: <a href="https://&lt;instance_name&gt;.service-now.com/v_plugin_list.do?sysparm_query=idSTARTSWITHcom.snc.project_management">https://&lt;instance_name&gt;.service-now.com/v_plugin_list.do?sysparm_query=idSTARTSWITHcom.snc.project_management</a></p> <p>Plugins:</p> <ul style="list-style-type: none"> <li>• Version 1 plugin: com.snc.project_management</li> <li>• Version 2 plugin: com.snc.project_management_v2</li> <li>• Version 3 plugin: com.snc.project_management_v</li> </ul>
Record Watcher PRB1242184 <a href="#">KB0678795</a>	Severe error when watched record changes if the sys_tag condition is in the query	Certain search criterion that use sys_tags such as sys_tags.= causes an exception.	<ol style="list-style-type: none"> <li>1. Activate the record watcher amb demo plugin.</li> <li>2. Navigate to rw_amb_demo.do.</li> <li>3. Add either sys_tag.= or sys_tag.=&lt;sys_id&gt; (replacing the sys_id with a sys_id) and change the table to incident.</li> <li>4. Change an incident.</li> <li>5. There is no update on the rw_amb_demo.do page.</li> </ol> <p>There is a stack trace that looks something like: java.lang.NullPointerException.</p>
Reporting PRB1238177 <a href="#">KB0657599</a>	The "Highlight based on" drop-down option is not visible in the classic UI of reports	In the calendar report, the Highlight field drop-down does not work in the classic UI in Chrome, and the width of the drop-down is wrong.	<ol style="list-style-type: none"> <li>1. Navigate to Reports &gt; Create New.</li> <li>2. Create a report of Type Calendar.</li> <li>3. Select the incident table.</li> <li>4. For Event to Display, select Created.</li> <li>5. Scroll to the bottom of the report and click Highlight based on.</li> </ol> <p>The highlight based on drop-down option is not visible.</p>
Reporting	Using a different date format other than the		

Problem	Short description	Description	Steps to reproduce
PRB1244424	system date format is resulting in issues while generating reports for the Resource Allocation table		
Reporting PRB1251037 <a href="#">KB0687727</a>	After an upgrade from Istanbul, users are not able to list their reports created prior to a change to their sys_user.user_name	In Jakarta, the new field created_by_user has been added to the sys_report table. This is a reference field to the sys_user record of the user who creates a report. The sys_report.sys_created_by field essentially captured the user_name of the user at the time they created a report. If their user_name is subsequently changed, it will no longer match the value in the sys_report.sys_created_by field. Any report a user created after an upgrade is visible, but reports created prior to their name change are not shown.	Refer to the listed Known Error KB article for details.
Reporting PRB1251482 <a href="#">KB0683360</a>	'Group by' does not persist when a report is exported to PDF	When users create a new report, or open an existing one, the 'group by' filter does not apply if they export to PDF or schedule the report.	Refer to the listed Known Error KB article for details.
Reporting PRB1262711 <a href="#">KB0685333</a>	Exporting PDF from a report gives an error	Exporting PDF from a report where 'Aggregation by' is 'Sum' or 'Average' produces no report and gives an error '(HTTP Code: 500) Conversion Failed: Did not receive a success in the HTTP response'. The issue occurs on both the new UI and classic UI.	Refer to the listed Known Error KB article for details.
Reporting PRB599758 <a href="#">KB0621004</a>	Reports do not render properly for users with a user ID that is longer than 40 characters		Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
Reporting PRB712052 <a href="#">KB0657023</a>	Empty values are displayed in column cells for reports containing Question variable columns	Reports with Question variable columns display empty value in column cells. The hidden cell value is displayed when the user clicks the cell (if the value is not really blank). The value is displayed, but the user sees an error that security constraints prevent from writing to the field. However, the values are not displayed on the column header while reporting. Instead, the report shows up null values for these variables.	<ol style="list-style-type: none"> <li>1. Create a variable for an existing catalog item, by navigating to Catalog Definition &gt; Record Producer &gt; Submit an Idea.</li> <li>2. Click the catalog item and Try It. Populate the catalog item with data and click Submit.</li> <li>3. Navigate to Reports &gt; Create New.</li> <li>4. Create a report with the following criteria and Save the report: <ul style="list-style-type: none"> <li>• Table: Idea [Idea]</li> <li>• Type: List</li> <li>• In the slushbucket, expand Question[+], navigate to the Catalog Item Submit and Idea and add it to the available slushbucket</li> <li>• Add some variables</li> <li>• Save the report</li> </ul> </li> </ol> <p>Data for the variable columns is not visible, and when clicked the cell shows the error. Security prevents writing to this field.</p>
Reporting PRB717670 <a href="#">KB0610447</a>	Users are unable to create multilevel pivot reports on the Tag field	Users cannot group multilevel pivot reports on tags.	<ol style="list-style-type: none"> <li>1. Create a new multilevel pivot report. <ul style="list-style-type: none"> <li>• Set Table to Task [task].</li> <li>• In the Available column, move Tags and Assigned to the Selected column.</li> </ul> </li> <li>2. Click Run.</li> </ol> <p>Note the error message: Syntax Error or Access Rule Violation detected by database (Unknown column 'task0.sys_tags' in 'field list').</p>
Reporting PRB947977 <a href="#">KB0656900</a>	Dashboards shared with a group with the name containing an ampersand (&) throws an error and not load	While using responsive dashboard and sharing it with a group, when the group contains a '&', it throws an error "The entity name must immediately follow the '&' in the entity reference." The dashboard does not load.	<ol style="list-style-type: none"> <li>1. Enable responsive dashboard by setting the system property glide.cms.enable.responsive_grid_layout to true.</li> <li>2. Open any dashboard.</li> <li>3. Click the Sharing icon on the top-right to share the dashboard.</li> <li>4. Click Add groups, users and role.</li> <li>5. Add a group containing an &amp; character in the group name.</li> <li>6. Refresh the page.</li> </ol> <p><u>Expected behavior:</u> The dashboard should load without any messages.</p> <p><u>Actual behavior:</u> The dashboard does not load and displays the message "The entity name must immediately follow the '&amp;' in the entity reference."</p>

Problem	Short description	Description	Steps to reproduce
Resource Management PRB684820	Any application that uses sys_user.schedule to store spans can cause a conflict with Resource Management		
Scheduled Job Processing PRB1263160	Session properties persist on scheduler threads indefinitely	<p>If a session property is changed on a scheduler thread, such as through a script in a synchronized business rule or a scheduled script execution, this session property is set indefinitely on that scheduler thread's session until it is changed again or the node is restarted.</p> <p>This means that every job or operation running through that thread inherits its session properties. For example, if the sys_update_set property is set, all future updates generated on that thread are recorded in the update set referenced by the property. This can result in updates appearing in seemingly random update sets from scheduled jobs, async business rules, etc.</p>	
Security Access Control Lists PRB1264451	On a converted instance, deleting the demo data triggers the creation of more than 6000 ACLs	On an instance which is converted from Express to Enterprise, deleting the demo data triggers the creation of more than 6000 ACLs. As a result, admin users are unable to see sys_user_role, sys_user_preference, etc.	
Service Analytics PRB744428	Users are seeing 'org.slf4j.impl.StaticLoggerBinder' errors upon MID Server startup	When the MID Server starts up errors appear in the wrapper log.	
Service Catalog: Service	In Service Portal, pressing the enter key in a variable or		1. Navigate to href="https://%3Cinstance_name%3E.service-

Problem	Short description	Description	Steps to reproduce
Portal Widgets PRB1189578 <a href="#">KB0682683</a>	field triggerS the last element on the page rather than submit		now.com/sp?id=sc_cat_item&sys_id=38c1fc840a0a0b2700285921c2bf5 2. Set focus in any text input field and press Enter.  This opens the attachment dialog box to select the file.
Service Catalog: Service Portal Widgets PRB1190937	Instructions in a label variable above check boxes are not visible in Service Portal		
Service Catalog: Service Portal Widgets PRB1247349 <a href="#">KB0682517</a>	Catalog client script (onChange) is running twice on the 'SC Catalog Item' widget		Refer to the listed Known Error KB article for details.
Service Catalog: Service Portal Widgets PRB1248440	Unable to submit the order for a catalog item whose mandatory values are marked as non-mandatory using an onLoad UI policy	Clicking the OrderNow button to place the order throws a 404 bad request error.	
Service Catalog: Service Portal Widgets PRB1248662 <a href="#">KB0676328</a>	Catalog items without short description are causing issues when included in order guides		Refer to the listed Known Error KB article for details.
Service Catalog: Service Portal Widgets PRB1258168	The onLoad catalog client script is triggered in the request item form view in Service Portal	This issue can manifest in four different ways: <ul style="list-style-type: none"> <li>onLoad catalog client script configured to run only on the catalog item view is triggered on the requested item form view in Service Portal.</li> <li>onLoad catalog client script configured to run</li> </ul>	This issue was reproducible with a catalog item that uses a variable of type Multiple Choice, check box, Single Line Text, and Numeric Scale but might not be limited to only these variable types.

Problem	Short description	Description	Steps to reproduce
		<p>only on the requested item view is triggered on the catalog item form view in Service Portal.</p> <ul style="list-style-type: none"> <li>• onLoad catalog client script configured to run only on the catalog item view is missing on the catalog item form view in Service Portal.</li> <li>• onLoad catalog client script configured to run only on the requested item view is missing on the requested item form view in Service Portal.</li> </ul>	
Service Catalog: Service Portal Widgets PRB1260573	Catalog item fields are not translated	In the Service Portal widget 'SC Catalog Item,' catalog item fields are not translated. This issue is caused by the incorrect language in System Localization.	
Service Catalog: Service Portal Widgets PRB1287069	Catalog client scripts for order guides do not work in the Service Portal	Catalog client scripts on order guides do not work in the Service Portal. There is no issue in the back-office native UI when clicking Try It on the order guide.	Refer to the listed Known Error KB article for details.
Service Catalog PRB1150401	ServiceCatalog cache for items and variables can take over 5 minutes to rebuild, causing transaction timeouts	When the cache is flushed, every catalog item, category and every variable must be put back in the cache. In the case where there is a single Service Catalog category that contains 45,000 catalog items with 20-30 variables per item, the Service Catalog cache can take over 5 minutes to rebuild, once on each node, the first time a user tries to access the category.	
Service Catalog PRB1237806	UI policy that sets display to false for a catalog label variable throws		

Problem	Short description	Description	Steps to reproduce
	an error if it has a parent container when sysparm_media=print		
Service Catalog PRB1241469 <a href="#">KB0678157</a>	Mandatory variables are not becoming not mandatory when using UI Policies, which causes issues when trying to close a RITM or task	If there is a catalog item with a UI policy associated with it and the UI policy is used to make a variable not mandatory and not visible based on a condition on the catalog view, errors display when the item is ordered. At the RITM or Task level, an error is seen if any changes are made to the forms, for example, adding a work note. An error message is displayed stating that the variable that was hidden and made not mandatory via a UI policy is not populated.	<ol style="list-style-type: none"> <li>1. Create a test catalog item in a subprod Kingston instance.</li> <li>2. Within that test catalog item, create three variables: two single-line and one check box variable.</li> <li>3. Create a UI policy for that catalog item.</li> <li>4. Within the UI policy, include the condition that states If check box is true.</li> <li>5. Set the Applies on a Catalog item view, Applies on Catalog Tasks and Applies on Requested Items check boxes to true.</li> <li>6. In the Catalog UI policy Actions add one action for each of the single-line text variables.</li> <li>7. For one of the single-line text variables, set the Mandatory and Visible values to true.</li> <li>8. For the other single-line text variable, set the Mandatory and Visible values to false.</li> <li>9. Save the UI policy.</li> <li>10. Order the test catalog item and go to the RITM.</li> <li>11. Try to add something to the work notes and press save.</li> </ol> <p>An error is displayed that says to fill in the mandatory variable that was set to false using the UI policy.</p>
Service Catalog PRB1244960 <a href="#">KB0676327</a>	Unable to apply filters on the requested item table	Users are not able to apply filters on the requested item table for the stage field, as there is no value in the filter.	Refer to the listed Known Error KB article for details.
Service Catalog PRB1245444 <a href="#">KB0682516</a>	Automated Test Framework fails when an individual catalog item has 'use cart layout' set to false	When using the Automated Test Framework for a catalog item when the catalog item field 'Use cart layout' is false, the following error appears: "Error 'FAILURE: Cannot find 'Add to Cart' button."	<ol style="list-style-type: none"> <li>1. Create a test.</li> <li>2. Add a step to Open a catalog item, such as a standard laptop. Make sure item is set to Use cart layout = false.</li> <li>3. Add the step Add item to shopping cart.</li> <li>4. Test Run.</li> </ol> <p>An error appears: "Error 'FAILURE: Cannot find 'Add to Cart' button."</p>

Problem	Short description	Description	Steps to reproduce
Service Catalog PRB1245555 <a href="#">KB0678900</a>	After upgrading to Kingston, setting a variable to non-mandatory and hidden on forms is not honored	Setting a variable to not-mandatory and hidden using a UI policy does not work on the variable editor on a form.	<ol style="list-style-type: none"> <li>1. Create a catalog item.</li> <li>2. Create a multiple choice variable with two choices (Choice 1 and Choice 2). Under Type Specifications check Do not select the first choice.</li> <li>3. Create two multi-line variables (V1 and V2) and set them to mandatory through the variable check box.</li> <li>4. Create two UI policies. <ul style="list-style-type: none"> <li>• One applying to the multiple choice variable created when Choice 1 is selected, with a policy action setting V1 visible and mandatory to True, and Reverse if False checked</li> <li>• One applying to the multiple choice variable created when Choice 2 is selected, with a policy action setting V2 visible and mandatory to True, and Reverse if False checked.</li> </ul> </li> <li>5. Click Try it.</li> <li>6. Check choice 1. It should show variable V1 and be mandatory.</li> <li>7. Check choice 2. It hides the V1 variable and makes it not-mandatory, and show the V2 variable that was hidden.</li> <li>8. Type something on V2 variable and select Order Now. You can order the item because the other variable is hidden and not mandatory.</li> <li>9. Go to the RITM and make sure that the variable editor shows up in the form.</li> <li>10. Test the UI policy in the RITM form by selecting different choices. The variables should be either hidden or shown depending on the choice.</li> <li>11. Make sure the V1 variable is empty and hidden, then try updating or saving the form.</li> </ol> <p><u>Expected behavior:</u> The form is updated without any warning or errors since V1 should be hidden and not mandatory.</p> <p><u>Actual behavior:</u> The form does not get updated, and shows an error "The following mandatory fields are not filled in: V1"</p>
Service Catalog	If the Cascade Variables option is checked for	This issue only occurs if Cascade Variables are checked on the order	<ol style="list-style-type: none"> <li>1. Create a catalog item and add a few variables.</li> </ol>



Problem	Short description	Description	Steps to reproduce
PRB1249226 <a href="#">KB0687639</a>	an order guide, when submitting a catalog item via the order guide, mandatory variables do not have the default value displayed	guide settings. Once this option is unchecked, mandatory variables work as expected.	<ol style="list-style-type: none"> <li>2. Set a variable as mandatory.</li> <li>3. Set a default value for the variable.</li> <li>4. Create an order guide, and click the Rule base tab to add the catalog item you created.</li> <li>5. Check the Cascade Variables option for the order guide.</li> <li>6. Submit the catalog item via the order guide.</li> </ol> <p>The mandatory variable of the catalog item does not have the default value displayed.</p>
Service Catalog PRB1250774 <a href="#">KB0679518</a>	Excessive size of the Service Catalog question cache causes high memory usage issue		This issue is data-dependent and occurs when the Question table has 500 or more entries.
Service Catalog PRB1252274 <a href="#">KB0680017</a>	List collector variables with a mandatory UI policy on a catalog item do not load on the submitted Requested Item [sc_req_item] form in the variable editor UI formatter	On submitted sc_req_item records, a list collector variable with a mandatory UI policy on a catalog item shows 'on loading.' A console error is displayed.	Refer to the listed Known Error KB article for details.
Service Catalog PRB1253475 <a href="#">KB0691350</a>	The pop-up window from hovering over the icon for previewing catalog items becomes unresponsive		<ol style="list-style-type: none"> <li>1. Navigate to Service Catalog &gt; Catalog.</li> <li>2. Click Add Content and add the catalog items from any category to the catalog_home page.</li> <li>3. Keep hovering over the icons for the catalog items.</li> </ol> <p>The popup stays and does not close. You have to reload the page again.</p>
Service Catalog PRB1255064 <a href="#">KB0679940</a>	When a check box variable is used in an order guide, navigating back to 'Describe Needs' hides all fields	This issue also occurs if a check box variable is used in a variable set.	Refer to the listed Known Error KB article for details.
Service Catalog PRB1259149	Users receive "g_sc_form is not defined" in the browser console with onSubmit	When a catalog item has an onSubmit catalog client script, and "Applies on Requested Items" or "Applies on Catalog Tasks" is checked, users receive an error when opening the browser	

Problem	Short description	Description	Steps to reproduce
	catalog client scripts	console "g_sc_form is not defined."	
Service Catalog PRB1289778	Check box variable in variable editor on sc_task form throws Uncaught TypeError: Cannot read property 'value' of null error	If there is a check box variable within the variable editor on a sc_task form, it causes the form not to load completely. Clicking any reference (i) icon or the magnifying glass icon does not load the popup windows.	
Service Catalog PRB733057 <a href="#">KB0635831</a>	The Requested Items state is not updated to Closed if any of the tasks in the Execution Plan are closed	Setting a sc_task state belonging to an execution plan to a Closed state does not update the RITM stage. If the sc_task item is the last ordered item in the execution plan, then changing the state to Skipped or Incomplete does not update the RITM to 'Closed complete'.  The expected sequence of multiple catalog tasks does not work. Closing a predecessor task does not open the successor. Also, as soon as the first task is closed, the whole execution plan ends.	Refer to the listed Known Error KB article for details.
Service Level Agreement (SLA) PRB1251707	Using the choice variable from the record producer causes a NullPointerException when reading through the history of the record	Using lookup or Yes/No variables from any record producer or catalog item causes an NPE when reading through the history of the record. The variable types causing the issue are Yes/No, Lookup Select Box, and Lookup Multiple Choice.	
Service Level Agreement (SLA) PRB1254494 <a href="#">KB0683910</a>	Dot-walking to the SLA Definition from the script in a business rule on the Task SLA table may not return the correct data when a retroactive Task SLA is created	If both the 'Retroactive start' and 'Retroactive pause' options are selected on an SLA Definition, a retroactive pause calculation is performed when a Task SLA is created for that definition.	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
Service Mapping PRB1201839	Users experience slowness and receive an HTTP 429 error	The default semaphore is exhausted, leaving the instance unresponsive for several minutes.	
Service Mapping PRB1242240 <a href="#">KBO678119</a>	"process on port - mac" causes the process detection to fail on certain OS types during pattern execution	Some customers who have upgraded to Jakarta are experiencing an issue in the process detection phase of the pattern execution. The problem was identified as a result of the system executing the "process on port - mac".	<ol style="list-style-type: none"> <li>1. Navigate to the Mapping Discovery Commands (sa_mapping_ext_commands).</li> <li>2. Look for "process on port - mac".</li> </ol> <p>Notice whether the Operating System Type shows numbers.</p>
Service Mapping PRB1242501	Removing a traffic-based discovery causes all CIs to be deleted		
Service Mapping PRB1254922	High memory consumption due to Service Mapping Recomputation jobs running during the rediscovery	The default four Service Mapping Recomputation jobs per node are running during rediscovery, which affects the instance performance, due to a high memory consumption. When lowering the number of jobs to two per node, the performance improves significantly. When lowering that to one, the performance improves even more.	
Service Portal PRB1194824	Date/time field value changes do not save in id=lf page	The error "TypeError: Array.prototype.some called on null or undefined" is generated for some records in the /sp?id=lf page in Service Portal.	
Service Portal PRB1194921	Attachment name and size are not properly displayed on the Order Confirmation popup	In the Service portal, when an attachment is in a request or incident form, the attachment name is not displayed, but "{ {::attachment.file_name}} ({{::attachment.size}})".	
Service Portal PRB1206063	The reference variable drop-down containing a long string is overlapping		

Problem	Short description	Description	Steps to reproduce
	with the other column		
Service Portal PRB1238271	Typeahead glyph does not change based on search results	When getting results from the typeahead search widget in the Service Portal, the glyphs for the search results do not update correctly after the first search.	
Service Portal PRB1239357	On Windows 10 tablets or specific desktop touch screens in IE11, Service Portal has a vertical scrollbar issue	The portal display shows a double scroll-bar. This issue only occurs on Chrome and Windows 10 Edge laptops with a touch screen. If users go into Device Manager and disable touch screen, the problem disappears.	
Service Portal PRB1243915 <a href="#">KB0662274</a>	In the Service Portal Designer, widget order reverts back to original when the page is refreshed		Refer to the listed Known Error KB article for details.
Service Portal PRB1248054 <a href="#">KB0683753</a>	g_form.setValue() does not work in onLoad scripts		Refer to the listed Known Error KB article for details.
Service Portal PRB1270104	Cannot scroll down on HI Service Portal pages with IE11 and Edge browsers		
Service Portal PRB722129	Scripts (client in Istanbul+ and UI policy in Helsinki+) are hiding sections of the form (g_form.setSectionDisplay) and do not work in Service Portal	In the Service Portal, UI policies with scripts containing setSectionDisplay do not hide that particular section. For example, this is displayed in HR Cases where certain sections are hidden using a UI policy /sys_ui_policy.do?sys_id=1f5b51f3c3033100be55b4ad81d3aece.	
Service Portal PRB748004	Data table widget breadcrumbs are incorrect on dot-walked fields	Using the 'Show Matching' context menu returns incorrect results when one of the fields in the filter is dot-walked.	1. Create an instance with a table inside a Service Portal page with the following information: <ul style="list-style-type: none"> <li>Table: sc_req_item</li> </ul>

Problem	Short description	Description	Steps to reproduce
<a href="#">KB0678915</a>			<ul style="list-style-type: none"> <li>Filter: Request.Requested for is (dynamic) me</li> <li>Widget: Data Table from Instance Definition</li> </ul> <ol style="list-style-type: none"> <li>Open the page in Service Portal and the list of sc_req_item created by the current user is displayed.</li> <li>Right-click on any record field and select Show matching.</li> </ol> <p>The widget does not display any record.</p>
Service Portal PRB753458	In the Form widget, saving record does not capture unposted comment or worknote left in the ticket-conversation input	In Service Portal, CTRL+S or Save dose not capture the comments and worknotes.	
Service Portal PRB830966	Clicking Enter multiple times can create duplicate comments	A single update to comments or work notes cause multiple records to be created and added to the activity stream.	
Service Portal PRB932738	The placeholder text 'How can we help?' in the search bar is not translated to any language		
Survey Management PRB1257594 <a href="#">KB0684639</a>	Records of assessment template and assessment template definition tables are missing even though the list count shows the correct number	An obvious difference is observed of the number of records in sys_metadata records as opposed to the listview per tables.	<ol style="list-style-type: none"> <li>Log in to a non-upgraded instance from an earlier release (Helsinki, Istanbul, Jakarta).</li> <li>Make a note of the number of records in asmt_template_definition.list.</li> <li>Upgrade that instance to an early Kingston patch.</li> <li>Check the asmt_template_definition.list and observe missing records.</li> <li>Navigate to sys_metadata and set class &gt; is &gt; (either of the 2 tables classes that are affected) and take note of the number of records.</li> <li>Navigate to the listview of either of the tables and take note of the number of records.</li> </ol> <p>An obvious difference in sys_metadata records as opposed to the list view per tables.</p>
System Applications	Optimizer prevents the plugin upgrade	Uninstalling and reactivating an optional plugin does not	<ol style="list-style-type: none"> <li>Activate an optional plugin like Vulnerability Response.</li> </ol>

Problem	Short description	Description	Steps to reproduce
PRB1238888 <a href="#">KB0689553</a>	from repairing what it traditionally does	completely load all plugin changes.	<ol style="list-style-type: none"> <li>2. Verify that the App Modules for Vulnerability Response are available in the navigation panel.</li> <li>3. Uninstall the optional plugin.</li> <li>4. Activate the optional plugin again.</li> </ol> <p>App Modules for plugin are missing in the navigation panel.</p>
System Applications PRB1244879 <a href="#">KB0689554</a>	Publishing scoped applications can include personalized list layouts when bad data already exists	When personalized list layout records (sys_ui_list) contain an update name, the personalized list layout can be included when the application is published. The bad data can be carried over from previous releases and will continue to be incorrectly included in an application. This can create issues for the application and trick the upgrade engine into thinking the list was customized, causing the upgrade engine to skip any updates to the list layout.	<ol style="list-style-type: none"> <li>1. Create an app.</li> <li>2. With the app selected in the app picker, personalize some list layouts. <ul style="list-style-type: none"> <li>• In Helsinki and Istanbul, you may need to log out and back in to start a new session.</li> <li>• In Jakarta and later, you can either script the bad data or import it from XML, changing the application to your new app ID.</li> </ul> </li> <li>3. Publish the app to Update Set, or publish to the app_repo.</li> </ol> <p>The personalized lists are included in the app.</p>
System Applications PRB1253833 <a href="#">KB0690905</a>	Installing the Nuvolo application may result in an OutOfMemory error due to the file stream failing unzip		<ol style="list-style-type: none"> <li>1. Activate the Managed Document plugin as prerequisites for the known affected application Nuvolo.</li> <li>2. Try to install the application into the internal certification instance.</li> </ol> <p>The progress activity stops at 2% and a system error is thrown: java.lang.OutOfMemoryError.</p>
Tables and Dictionary PRB1236387	Fields are glommed to medium text columns even when the sys_dictionary max length is less than 256 characters	This also results in creating a multiline text field on the form.	
Templates PRB934232 <a href="#">KB0657393</a>	Cannot apply a template to set a check box if another check box higher on the form is read-only	Users get an error saying that the template could not be applied, and they are unable to update the field 'Made SLA'.	<ol style="list-style-type: none"> <li>1. Navigate to an incident.</li> <li>2. Add the Active and Made SLA fields to the form and make sure that Active is above Made SLA.</li> <li>3. Right click the Active label and select Configure Dictionary.</li> <li>4. In the dictionary record for active check the Read Only check box.</li> </ol>

Problem	Short description	Description	Steps to reproduce
			<ol style="list-style-type: none"> <li>5. Save the dictionary record and navigate back to the incident form.</li> <li>6. Make sure templates are visible and create a new template which sets Made SLA to true.</li> <li>7. Apply that template to the incident form.</li> </ol> <p>There is an error saying that the template could not be applied and Unable to update field 'Made SLA'.</p> <p>If you configure the form layout again and make the Made SLA field higher than the Active field, the template will work.</p>
Text Search PRB1235472 <a href="#">KB0656786</a>	Global search results do not honor <code>ts.show_empty_groups</code> user preference in Jakarta despite being documented	The global search functionality that was redone in Jakarta does not account for the <code>ts.show_empty_groups</code> user preference that is supposed to not show groups that had no matches in the search results page.	<ol style="list-style-type: none"> <li>1. In a Jakarta instance, navigate to User Administration &gt; User Preferences.</li> <li>2. Add a record with the following values: <ul style="list-style-type: none"> <li>• Name: <code>ts.show_empty_groups</code></li> <li>• Type: string</li> <li>• Value: false</li> <li>• User: ITIL User</li> </ul> </li> <li>3. Impersonate an ITIL User.</li> <li>4. Do a global search for a term that will not have values in some of the search groups.</li> </ol> <p>Empty groups are still returned. In previous releases when this preference was set to false, empty groups would not be listed.</p>
UI Components PRB1107867 <a href="#">KB0635412</a>	The domain picker breaks upon an upgrade if the instance does not contain the UI16 plugin (UI15 only)	<p>This issue only occurs in instances where the user does not have UI16 installed in the instance. Upon upgrading, when switching to a different domain using the domain picker selector or reference UI Macros, the domain looks as if it was switched. However, in the backend, the action was not completed.</p> <p>This causes many problems when creating records in other lower domains, since the instance does not switch domains and the records tend to be created in the global domain instead. This is also an issue with data visibility as the user believes they switched domains and they are still</p>	Refer to the listed Known Error KB article for details.

Problem	Short description	Description	Steps to reproduce
		viewing all records as if they were in global.	
UI Components PRB751999	Navigating to sys_user record via 'Profile' under the name drop-down and uploading a Photo redirects to an invalid URL	If a user clicks their name, selects 'Profile', and are able to upload an image into the 'Photo' field, the user is redirected to an invalid URL upon upload.	<ol style="list-style-type: none"> <li>1. In the top-right, click the user name to access the drop-down menu.</li> <li>2. Select Profile.</li> <li>3. Switch to the Default view, or add the Photo field to the ESS view.</li> <li>4. Upload an image into the photo field.</li> </ol> <p>The user is redirected to an invalid URL, instead of getting navigated back to the sys_user record.</p>
UI Components PRB756215	Deleting a template from sys_template.list results in an error	The delete button on sys_template fails with the error 'dialogClass is not a constructor'.	<ol style="list-style-type: none"> <li>1. Navigate to sys_template.list.</li> <li>2. Open a template.</li> <li>3. Click Delete.</li> </ol> <p>An error occurs on the browser console.</p>
UI policy/ Client Script PRB1270017 <a href="#">KB0685032</a>	UI policies and client scripts on the Form widget are not honored when the form is saved	After the form is saved, the client script is not executed, and the alert box is not displayed when reloaded.	<ol style="list-style-type: none"> <li>1. Create a UI policy on the Problem table with the following settings: <ul style="list-style-type: none"> <li>• Global and onload checked</li> <li>• Uncheck Reverse if false</li> </ul> </li> <li>2. Create a UI policy action with the following settings: <ul style="list-style-type: none"> <li>• Field name: Short Description</li> <li>• Visible: false</li> <li>• Mandatory: leave alone</li> <li>• Read Only: leave alone</li> </ul> </li> <li>3. Access this link on the Service Portal to create a new problem: <a href="https://&lt;instancename&gt;.service-now.com/sp?id=form&amp;table=problem&amp;sys_id=-1">https://&lt;instancename&gt;.service-now.com/sp?id=form&amp;table=problem&amp;sys_id=-1</a></li> </ol> <p>The Short Description field is hidden.</p> <ol style="list-style-type: none"> <li>4. Fill in the mandatory fields and click Save.</li> </ol> <p>After the form is saved, 'Short Description' still appears without honoring the UI policy.</p>
Update Sets PRB1098221 <a href="#">KB0689555</a>	The progress worker cannot be found and the update set preview will not finish	The progress worker created with GlideUpdateSetWorker completes with an error "Progress worker state is not set to complete after worker is finished."	Refer to the listed Known Error KB article for details.
Update Sets PRB1235331	Grandchild tables of task created as TPC can be corrupt if they are	TPC child tables of Task created from hybrid flattening does not create extended grandchild tables	<ol style="list-style-type: none"> <li>1. Create an update set and make it current.</li> <li>2. Navigate to /sys_db_object_list.do and create an extensible table (for</li> </ol>



Problem	Short description	Description	Steps to reproduce
<a href="#">KB0661797</a>	created in the wrong order	correctly. Grandchild tables of Task do not display their labels, and users cannot navigate to the list view of the table.	<p>example, Library[u_library]) that extends from Task, and save.</p> <ol style="list-style-type: none"> <li>3. Create another table (for example, Books[u_books]) that extends the newly created table (Library) and save.</li> <li>4. Go back to the update set, mark complete, and export the update set to another instance where Task is larger than 1 million rows.</li> <li>5. Preview and commit the update set.</li> <li>6. Go to /sys_db_object_list.do and filter for the newly created table.</li> </ol> <p>The Label value appears as "label". The table is not created correctly on the backend. This occurs for newly created grandchildren tables of Task. Also, navigating to the list view of the table displays an error that the page cannot be found.</p>
Update Sets <a href="#">PRB715156</a>	Committing an update set with sys_dictionary record, but not sys_db_object causes problems when the plugin containing the actual table is installed later	When an update set does not contain the sys_db_object for a table, but does contain the sys_dictionary for a table, a subsequent plugin activation cannot later parent the table as it is supposed to be configured.	
Upgrade Engine Issues <a href="#">PRB1156759</a> <a href="#">KB0635467</a>	Records that are set to the new disposition of 'Skipped Manual Merge' have no option selectable to resolve conflicts with the record	Certain records in the skipped records list for an upgrade to Jakarta show a disposition of 'Skipped Manual Merge'. However, when these records are opened for review, there are no options to resolve the conflict with this record or compare the new incoming record to the existing record on the instance. Thus, from the Upgrade History record, users are unable to compare and merge the new version of the record with the preexisting version of the record found on the instance.	<ol style="list-style-type: none"> <li>1. Upgrade an instance from a previous version to Jakarta. Ensure that several system properties have been modified on the instance.</li> <li>2. Log in to the upgraded instance with an account that has administrator rights to the system.</li> <li>3. Navigate to System Diagnostics &gt; Upgrade History and click to view the most recent upgrade history record on the instance.</li> <li>4. In the lists of skipped records, search for any records with a disposition of Skipped Manual Merge and select one.</li> </ol> <p>The Sys Upgrade History record for the change is displayed but no options are provided to compare the existing record to the new record.</p>
Upgrade Engine Issues <a href="#">PRB1235020</a>	The 'Revert to Base System' UI action on the 'Upgrade Details' and 'Resolve Conflict' forms	The 'Revert to Base System' UI action on the 'Upgrade Details' and 'Resolve Conflict' forms for 'Skipped' records does not work. The issue occurs when an upgrade	<ol style="list-style-type: none"> <li>1. Identify and modify a record included with a plugin, like a Script Include record.</li> <li>2. Upgrade the plugin.</li> <li>3. Delete the 'Current' record in the sys_update_version table.</li> </ol>

Problem	Short description	Description	Steps to reproduce
<a href="#">KB0679424</a>	for 'Skipped' records does not work	<p>skips loading a version, and that version does not have a sys_update_version record with a state of 'Current'.</p> <p>Note that if users see a 'Payload not found' error when clicking 'Resolve Conflicts' UI Action, there is a different Problem for that: PRB1249568. This Problem has been resolved as part of Problem PRB1156759. See <a href="#">KB0635467</a>.</p>	<p>4. Click the Revert to Base System UI Action by drilling into the sys_upgrade_history_log record or selecting it from the right click menu on the list view.</p> <p>Nothing happens and the record stays in the 'Skipped' State, instead of being reverted to the base version.</p>
Upgrade Engine Issues PRB1239377 <a href="#">KB0679938</a>	sys_update_xml.replace_on_upgrade=true is excessively persistent when set on an update in the default update set	<p>When marking a user update as 'replace on upgrade' and then keep updating it, the system remembers the decision to replace on upgrade independent of other updates for as long as users continue working in the same update set.</p> <p>The default update set is the most extreme example of this, since most users never complete it. If a user works with the default update set, it is unlikely they will remember marking something 'replace on upgrade', possibly months or years ago, and someone else might have done the marking.</p> <p>Preserving the 'replace on upgrade' flag leads to the system overwriting the customization, even if that outcome is no longer desired.</p>	<ol style="list-style-type: none"> <li>1. Update a record in the default update set.</li> <li>2. Revert that record to the base system (or find the sys_update_xml record for that update and set replace_on_upgrade = true).</li> <li>3. Modify the record again in the default update set.</li> </ol> <p>The record is still replaced on upgrade.</p>
Usage Analytics PRB1266341	App persistor and license download jobs (via the App Manager) consume all semaphores	<p>When the license downloader and app persistor jobs run at the same time trying to access UI objects, this can possibly cause the node to become unresponsive.</p>	

Problem	Short description	Description	Steps to reproduce
Visual Task Boards PRB1173148	Opening the modal window of a task record with the description filled out causes failures (i.e. related lists not loading, UI actions not working)	<p>This issue occurs for Firefox users when the description field on a task record has a value and is visible on the form.</p> <p>When the user clicks the number in a task card, the available modal window does not work correctly. Removing the field or deleting the value seems to resolve the issue for individual task records.</p>	
Vulnerability Response PRB12403672000 <a href="#">KB0688278</a>	Failed to run CWE Comprehensive 2000 Integration		<ol style="list-style-type: none"> <li>1. Install the Vulnerability Response plugin.</li> <li>2. Navigate to Vulnerability &gt; Integrations.</li> <li>3. Click and run CWE Comprehensive 2000 Integration.</li> </ol> <p>The integration fails.</p>
Workflow PRB1016241 <a href="#">KB0683299</a>	The article state is incorrectly displayed in the article view page for older versions when compared with the actual status in the platform	When a new version of an article is created, the older version's status will change from Published to Outdated. However, when the user views the article, sometimes the status is still Published even though the article is Outdated in the platform.	<ol style="list-style-type: none"> <li>1. Navigate to &lt;instance-name&gt;/kb page and select any article.</li> <li>2. Click the Edit button.</li> <li>3. Click the Checkout button, make some changes, and click Publish. The article is sent for review.</li> <li>4. Click Approvals and choose the Reject option while reviewing the article. The article status is moved back to Draft.</li> <li>5. Check the status in the article view page.</li> </ol> <p>The page still shows the article status as Reviewed.</p>
Workflow PRB1236313	'current' can be replaced during the workflow processing, and this can affect the processing of all subsequent business rules under certain circumstances	<p>During the business rule processing, if a script updates a record in a different table and:</p> <ul style="list-style-type: none"> <li>• the updated record has multiple active workflows</li> <li>• the first workflow updated results in one of the other active</li> </ul>	

Problem	Short description	Description	Steps to reproduce
		workflows being completed or canceled	
		When the workflow context that was completed or canceled is then processed, 'current' will be set to the record for that workflow. However, it will not be restored to the original record when the workflow processing completes.	
Workflow PRB1238666	Stage values are duplicated in the Stage field	Duplicate 'Request Approved (Approved)' appear in the list view of requested items.	
Workflow PRB1239361	The deletion of duplicate user approvals causes an incorrect evaluation of the group approval state	<p>When a user is a member of multiple groups that are part of an approval process, the resulting duplicate user approvals are deleted. The missing user approval records cause the group approval state to be evaluated incorrectly. The exact behavior depends on the specific configuration of the workflow and its approval activities, but can be either:</p> <ul style="list-style-type: none"> <li>• Group approvals that auto-approve because all user approvals in the group have been deleted</li> <li>• Group approvals that hang because they are waiting for a user approval that has been deleted</li> </ul>	
Workflow PRB1241205 <a href="#">KB0686731</a>	The null pointer exception occurs when stage_state is empty when trying to load RITM	<p>The form view does not load completely for a record that meets the following conditions:</p> <ul style="list-style-type: none"> <li>• Multiple parent workflow contexts are attached</li> <li>• At least one of those contexts has a stage_state that is empty</li> </ul>	<ol style="list-style-type: none"> <li>1. Create the glide.web_service.hierarchical system property and set it to true.</li> <li>2. Try to generate the WSDL through <code>https://&lt;instance&gt;/sys_user.do?WSDL</code>.</li> </ol> <p>Memory issues occur.</p>

Problem	Short description	Description	Steps to reproduce
		<ul style="list-style-type: none"> <li>At least one of those contexts uses the "Main flow" or "Simple Progress Bar" renderer</li> </ul>	
Workflow PRB1241543 <a href="#">KB0680048</a>	The exported PDF/CSV takes the value of the Stage field from the workflow context instead of the sc_req_item table		<ol style="list-style-type: none"> <li>1. Navigate to the sc_req_item.list and make sure there are at least 20 items. Order items from Service Catalog if needed.</li> <li>2. Right click the table header and select Export &gt; Excel (.xlsx).</li> <li>3. For each RITM, compare the 'Stage' value in the exported file with the one in the record field.</li> </ol> <p><u>Expected behavior:</u> The stage values in the exported file match the stage values of the RITMS.</p> <p><u>Actual behavior:</u> The stage values in the exported file do not match the stage values of the RITMS.</p>
Workflow PRB1270381 <a href="#">KB0685194</a>	Workflow gets stuck on the null pointer exception during Orchestration Join activities	Join activities in workflows do not work as expected. An error 'java.lang.NullPointerException' occurs when the join activity is reached.	<ol style="list-style-type: none"> <li>1. Navigate to Service Catalog &gt; Catalog Definitions &gt; Maintain Items.</li> <li>2. Create a catalog item.</li> <li>3. Next to the Workflow field, click the lookup icon.</li> <li>4. Next to Workflow at the top, click New to create a workflow with an Orchestration activity and a Join activity.</li> <li>5. Click Try it and then Order Now to order the item.</li> <li>6. Navigate to the requested item you created.</li> <li>7. In the Catalog Tasks related list, change the state of tasks to Complete.</li> <li>8. Refresh the related list and click Show Workflow.</li> </ol> <p>An error occurs when the workflow reaches the Join activity.</p>

## All Other Fixes

To view a list of all other PRBs fixed in London, refer to [All other London fixes](#).

## All other London fixes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

The London release contains fixes to these problems.

London was released on July 26, 2018.

Build date: 07-14-2018\_1223  
Build tag: glide-london-06-27-2018\_\_patch0-07-11-2018

For more information about how to upgrade an instance, see [Upgrade to London](#).

For more information about the release cycle, see the [ServiceNow Release Cycle](#). For a downloadable, sortable version of London fixed problems, see [KB0692695](#).

**Note:** This version is under FedRAMP evaluation.

## All other London fixes

Problem category	Number	Short description
Activity Stream	PRB955358	UI16 activity streams handle [code] tags differently than UI15
Activity Stream	PRB1273226	Activity stream user preferences <table>.activity.filter do not add or remove fields from stream
Activity Stream	PRB1202377	Activity stream still shows recipient email address instead of user display name when property glide.ui.activity.email.use_display is true
Activity Stream	PRB666998	Adding an activity filter to a new table displays multiple blank options
Activity Stream	PRB1239636	Loading form for a nonexistent record produces Javascript error "g_form is undefined"
Activity Stream	PRB1270019	Activity history truncates the list of email recipients in IE11 and Firefox
Agent Intelligence	PRB1265935	Agent Intelligence user 'sharedservice.worker' was not created during plugin activation
Agile Development	PRB1282044	List filtering options on Task Board do not work and produce script error "Cannot read property 'checked' of null"
Agile Development	PRB1239107	Delete ACL for table 'm2m_release_group' produces table not found error
Agile Development	PRB1249930	Sprint planning board not displaying sprints created from the release related list
Agile Development	PRB1290192	Groups created from a product do not have an assignment group type and do not display in the Groups related list
Agile Development	PRB752327	After installing Agile Development, dictionary displays two "order_Index" fields
Agile Development	PRB1266850	UI action 'Create story' does not work from rm_defect form in 'Scrum View' when there are no related or embedded lists
Agile Development	PRB1178803	Clicking an info icon in the Planning Board view produces a browser console error
Agile Development	PRB1270556	Agile dashboard does point to correct page after upgrade
Agile Development	PRB1248020	Cannot drag and drop stories to the top of the backlog in the Agile Board
Agile Development	PRB1241483	Task "Assigned To" field not being automatically populated in the Task Progress Board

Problem category	Number	Short description
Agile Development	PRB1241688	List sort and filter options not working in Sprint Planning Board
Agile Development	PRB1243836	Difficulties moving tasks in Task Progress Board when using IE and sprint has many stories
Agile Development	PRB1236284	After upgrading to Jakarta, "scrum_team_member" role no longer inherits the "scrum_story_creator" role, which prevents "write" access to the rm_story table
Agile Development	PRB1290297	Agile2SecurityManager script include does not properly process GlideList fields such as Assignment Group
Application Navigator & Banner Frame	PRB1270820	Application Navigator displays rendering errors when changing domain from domain picker
Application Navigator & Banner Frame	PRB1272442	Public application navigator content is not visible from the login screen after upgrade
Application Navigator & Banner Frame	PRB1202123	In the UI16 application navigator, the star icon is not right-aligned for non-admin users
Application Navigator & Banner Frame	PRB1199371	Browser displays wrong icons after upgrading from Helsinki to Istanbul
Application Navigator & Banner Frame	PRB1203271	No upgrade history available for sys_index_sys_ui_navigator_history_user_sys_created_on.xml
Application Navigator & Banner Frame	PRB1244656	After a successful impersonation, subsequent attempts to impersonate produce a "java.lang.NullPointerException" in the browser console
Application Navigator & Banner Frame	PRB1262707	System Update Sets menu does not show modules after committing an update set
Application Navigator & Banner Frame	PRB1248003	Duplicate system properties for "Unselected navigation tab icon and favorite icons color" in "Basic Configuration UI 16"
Application Navigator & Banner Frame	PRB1255721	System setting "Compact User Interface" produces opposite effect of option selected
Application Portfolio Management (APM)	PRB1240379	No one can delete records from the cmdb_ci_business_app table
Application Portfolio Management (APM)	PRB1270330	JavaScript warning "sn_apm" is not defined when working with business applications and Application Portfolio Management is not installed
Application Portfolio Management (APM)	PRB1279135	Cannot create a dictionary override or flow formatter for the Business Application cmdb_ci_business_app table
Application Portfolio	PRB1265622	Previously calculated capability scores change in error when new capabilities are assessed

Problem category	Number	Short description
Management (APM)		
Application Portfolio Management (APM)	PRB1275551	Technology portfolio takes a long time to load data
Application Portfolio Management (APM)	PRB1268320	Technology Portfolio Management timelines do not display discovered business services
Approvals	PRB1245078	Approval Events (Task) business rule triggers wrong event when using custom approver variable
Approvals	PRB1264753	Changing the state of a group approval before requesting approval for the record sets the state of all other group approvals to "No Longer Required"
Assessments	PRB1267785	Category results for ratings should be calculated correctly when the "anonymize responses" option is chosen
Assessments	PRB1239069	The choice for the image scale question shows up correctly on mobile, but the image displayed is that of the last choice
Assessments	PRB1280290	The calculation of category results is incorrect based on the answer choices of the questions
Assessments	PRB1264850	The "Default answer from script" method does not work with metric where the data type is "Choice"
Asset Management	PRB1065644	Retired and decommissioned computers still show values in the Assigned to field
Asset Management	PRB1258596	Default semaphore is exhausted
Asset Management	PRB1241840	The Stockroom field width is too small on procurement sourcing
Asset Management	PRB1288979	In French, in a contract, the calculation for total cost and tax cost is not calculated correctly onChange
Asset Management	PRB1278252	sys_choice records are automatically deleted after the instance upgrade
Asset Management	PRB1234962	Transfer Order Line has a negative Quantity Remaining, and fixing the Quantity Received value does not recalculate it correctly
Asset Management	PRB1247211	Asset-CI Field Mappings allow selecting the Class sys_class_name]field, and when synchronization occurs, records become corrupted and unusable
Asset Management	PRB1250631	An asset attribute is still being updated after a related CIs attribute is prevented from update due to a reconciliation definition
Asynchronous Message Bus	PRB1254318	Log files display null pointer exception message for AMBProcessorAdapter
Asynchronous Message Bus	PRB1197193	Leaking listeners cause the number of listeners to grow, which impacts the instance performance over time
Audit History	PRB1249729	Activity stream does not display changes for fields whose column name is longer than 40 characters



Problem category	Number	Short description
Authentication	PRB1237204	Reset password link displays blank page with error message "Security restricted when invoking processor"
Authentication	PRB897842	Localized LDAP servers using UTF-8 produce JSON formatting errors
Authentication	PRB820080	Unable to create LDAP OU with name greater than 40 characters after upgrade
Authentication	PRB1201941	Instance does not display E-signature tab despite plugin being active
Authentication	PRB1237672	Links not working for single sign-on users even though they have a valid session
Authentication	PRB598684	DigestToken does not always work as expected after activating MultiProvider SSO
Authentication - SSO	PRB1277955	Users with web service access only produce an infinite loop of logout redirects when they log in
Authorization - LDAP	PRB1250454	Upgrades overwrite customizations to the "LDAP Admins" group
Automated Test Framework	PRB1278373	Click a modal button step does not submit the modal when javascript is executed in the button's onClick
Automated Test Framework	PRB1243954	Test run fails with error "Step execution failed with error: Cannot read property 'step_execution_generator' of undefined" upon first opening a client test runner
Automated Test Framework	PRB1247670	Client Test Runner hangs during screenshot capture, usually occurs with the Click Modal button step
Automated Test Framework	PRB1209940	Record Query step fails in scoped applications because it does not wait for records to exist
Automated Test Framework	PRB1265788	The record query timeout does not work when the test is scoped
Benchmarks Application	PRB1247525	The email notification with the Benchmarks monthly scores download is sent to all ITIL users
Benchmarks Application	PRB1245213	Client score dates are displaying incorrectly on non "yyyy-MM-dd" date format instances
Benchmarks Application	PRB1285178	Benchmarks Card view: Mini-trend is not loading when one category has scores for the last 6 months and another category does not have scores for the last 4 months
Benchmarks Application	PRB1255407	Benchmark Recommendations are not evaluated when the customer upgrades from Jakarta to the Kingston release
Benchmarks Central Application	PRB1241076	Benchmark central: Instance ID is truncated to 32 characters if it is greater than 32 characters
Change Management	PRB1290275	"Refresh Agenda Items" UI Action contains misleading text
Change Management	PRB1251827	"Refresh agenda items" doesn't honor the "Change start after dates" and "Change starts before dates" fields when there are OR conditions in the filter
Change Management	PRB1257468	The Change lookup function is not working in Sample Change Requests under Propose a new Standard Change Template
Change Management	PRB1185785	During a meeting using the CAB Workbench, attendee's names are displayed incorrectly

Problem category	Number	Short description
Change Management	PRB1240170	ACLs that grant the sn_change_cab.cab_manager role access to the cmn_other_schedule table are missing
Change Management	PRB1195547	When Standard Change Proposal are created with a value in the Short description field, the template that is generated from the proposal has no value in the Short description field
Change Management	PRB1208918	In the Change form on the HI Service Portal, there are issues opening the Calendar view
Change Management	PRB1235366	Setting the sysparm_fixed_query within the URL for task_add_affected_cis.do does not apply, but it works when using a normal sysparm_query
Change Management	PRB1273823	When the Risk condition is set to "impact=Leave Alone," and when risk assessment is executed on the Change Request, the impact value is set to empty /blanked out
Change Management	PRB1262255	Revert a change request to New state through the "Revert to new" UI Action leaves the change on hold and unable to move back if the On Hold field was checked
Change Management	PRB1256501	When the Two Step property is enabled in Standard Change Properties, standard changes created from standard change templates that have an attachment do not inherit the attachment from the template
Change Management	PRB1256967	"MaintenanceScheduleCalculator" fires duplicate info messages on the form when users toggle the schedule date for a change request
Change Management	PRB1244570	Change Template Management breaks after selecting 'show related fields' in the template
Change Management	PRB1089829	An approved or rejected agenda item is marked as having no decision if the CAB meeting is ended while the agenda item is still the "current agenda item"
Change Management	PRB953574	"Health Dashboard" tooltip is misspelled as "Health Dashbaord" when hovering over the second button to the right of the Configuration Item field on an existing Change Request
Change Management	PRB1186759	After submitting the change request, the conflict status field is not getting updated from the default value "Not Run"
Change Management	PRB1238899	The "Check Conflict" UI Action active flag is turned on after upgrading to Jakarta
Change Management	PRB1261372	The 'Revert To New' UI action does not work properly if the workflow of the change request has been changed
Change Management	PRB1258960	Unable to change the current agenda item in the CAB Workbench when there are many attendees
Change Management	PRB1240984	Comparing a standard change proposal template with a published version fails with 'TypeError: Cannot convert null to an object.' if a field added to the template is dropped from the table after the template is published
Change Management	PRB1237013	E-signature is not available when approving or rejecting a change in the CAB meeting 'Current Agenda Item' widget
Change Management	PRB1242718	The CAB Workbench form view does not display splits correctly as specified in the layout configuration

Problem category	Number	Short description
Change Management	PRB1235402	The 'update_synch' attribute is still set to 'true' for the Collection record of the std_change_record_producer table following an upgrade to Istanbul or Jakarta
Change Management	PRB1250450	In the CAB Workbench, when an agenda item order field is empty, clicking the "Promote" link does nothing
Change Management	PRB1264376	The Change Request Calendar does not change messages translations when the language is changed
Change Management	PRB1260626	The save_as_template ACLs do not prevent users from editing reference fields when they make or edit a Standard Change Proposal
Change Management	PRB1250154	OOTB UI policies are causing conflicts: Show - CAB fields for Normal/Emergency changes
Change Management	PRB1251835	In Jakarta, the 'hours' value is truncated for the 'Duration' field in the CAB workbench view
Change Management Conflict Detector	PRB1259605	The dialog message for the conflict check does not disappear when users move the Conflict Progress Checker element out of the Conflicts tab
Change Management Conflict Detector	PRB1251400	Conflict detection may run out of memory if the start/stop dates are too far apart
Chat	PRB1235390	Users cannot attach files to chat conversation after activating Human Resources Application: Core plugin
Chat	PRB1068961	Connect un-encodes URL after clicking it in chat window causing not authorized message
Chat	PRB1237575	Connect Chat does not use translations for all values when starting conversation
Chat	PRB1264703	Queue Count is not updating in real time for Chatbot and Connect Support
Chat	PRB1270876	JAWS screen reader in internet explorer (IE) reads Angular code instead of message text in Connect
Chat	PRB1067048	Missing translations for Connect Chat
Chat	PRB955111	Upon activation of the "Connect.support" plugin, the Business Rule "task closer" is getting updated
Chat	PRB752215	Action icons module is accessible by non-role users under Collaborate application
Chat	PRB897726	End users can submit chat queue entries to inactive support queues
Chat	PRB1264077	Chat window does not show the transfer message work note to the agent transferring or canceling transfer of a chat until the page is refreshed
Chat	PRB1241743	Task <--> Conversation relationships can get crossed when switching conversations during execution of a Connect Action
Chat	PRB712523	Background ongoing chat gets closed when downloading an attachment in connect support
Chat	PRB1277905	Connect AMB Processor has a gs.log() statement which adds many "checking permissions for ..." messages to the logs
Chat	PRB1254973	Links to external sites posted in Live Feed are showing an "unknown exception" error

Problem category	Number	Short description
Chat	PRB1282088	Connect chat conversations do not show new messages or message history in UI15 in Kingston
Chat	PRB1289963	End users make requests to support/sessions?closed=true while in the frameset if they have created support sessions previously
Chat	PRB726719	Support chat uses the user's live_profile name for chat sessions, but uses the sys_user name when displaying disconnect messages
Chat	PRB997103	Connect chat throws concourse error if UI16 is not enabled
Chat	PRB1171082	Guest users are not receiving messages automatically in anonymous support chat
Clone Issues	PRB725919	clone_admin role does not work as described
Cloud Management Application	PRB1241930	Associating a datacenter from service accounts with different credentials to the same cloud account throws a unique key violation error
Cloud Management Application	PRB1206461	Excessive resource information appears in the System Log after running Discovery
Cloud Management Application	PRB1243746	Problems discovering tags with inconsistently capitalized keys
Cloud Management Application	PRB1270351	Load balancer pools and pool members are not populated during provisioning
Cloud Management Application	PRB1270958	Default values for catalog attributes are not saved
Cloud Management Application	PRB1151425	Storage disk size of a virtual machine is different than what is in the Compute profile (VMWare)
Cloud Management Application	PRB1275659	Discovery does not work for customized cloud providers
Cloud Management Application	PRB1262949	Deprovisioning of an Azure stack on Cloud Management v2 fails because of the business rule "Remove BSM for terminated VM"
Cloud Management Application	PRB1252225	Two Discovery status records are created for every Discovery run
Cloud Management Application	PRB1253564	Memory use is high while processing the Discovery of a web service
Cloud Management Application	PRB1253831	Discovery Error: type of blob in container is unrecognized
Cloud Management Application	PRB1254576	If a policy fails, Orchestration is not able to resume the correct order

Problem category	Number	Short description
Cloud Management Application	PRB1244910	Item provisioned from a blueprint does not create an approval task using the Custom Approval workflow
Cloud Management Application	PRB1256103	Newly created interface operations cannot be included in existing interface
Cloud Management Application	PRB1258750	'Modify lease' life cycle operation does not work
Cloud Management Application	PRB1194362	Records for the "Compute Security Group Template" reference field do not appear
Cloud Management Application	PRB1206348	Azure billing download keeps connection open
Cloud Management Application	PRB1242676	Azure list node discovery fails due to duplicate records in list nodes payload
Cloud Management Application	PRB1269725	Incorrect sequence for the deprovisioning of an AWS ELB
Cloud Management Application	PRB1271545	Discovery does not populate the IP address of VMs or NICs
Cloud Management Application	PRB1239076	Billing report cost totals are incorrect on instances with number formats using a decimal (European style)
Cloud Management Application	PRB1277438	Duplicate credential links named 'Azure Enterprise Agreement Credential(s)'
Cloud Management Application	PRB1249225	Provisioning errors occur after users delete catalog items based on ARM or Cloud Formation templates
Cloud Management Application	PRB1251101	The 'cmdb_ci_security_grp_template' table does not have a default view
Cloud Management Application	PRB1253783	Other cloud management workflows that are not a part of PRB1158173 can cause instance state to be 'error' and create incidents with Request Id: Undefined
Cloud Management Application	PRB1255124	The Survey Publish URL points to the Cloud Management Portal
Cloud Management Application	PRB1257008	'Skipped Error' message appears after upgrade
Cloud Management Application	PRB1259424	The 'Assigned to' value changes on a stack when different users execute the life cycle operation
Cloud Management Application	PRB1241447	Cloud resource tags are not populated for Azure Virtual Networks

Problem category	Number	Short description
Cloud Management Application	PRB1202392	Manually created blueprint constraints and imported blueprint form rules do not load properly
Cloud Management Application	PRB1242672	Users can submit requests while operations are in progress
Cloud Management Application	PRB1269716	Unable to use Elastic Load Balancer due to a certificate error, despite a valid certificate that is already uploaded
Cloud Management Application	PRB1271912	Script execution with script parameters fails with Windows servers
Cloud Management Application	PRB1237718	Tags with a capitalized value in the 'Name' field cannot have values assigned
Cloud Management Application	PRB1276064	The 'Show Matching on Stack' UI action on the Cloud User portal does not work
Cloud Management Application	PRB1266101	Application type load balancers discovery fails if listener information is missing
Cloud Management Application	PRB1244799	Multiple IPAM actions are fired for a single request
Cloud Management Application	PRB1255993	Upgrade from KP1 to KP2 skips records
Cloud Management Application	PRB1245495	Loading order form for ARM template results in form performance issues and errors in the browser log
Cloud Management Application	PRB1246598	Amazon AWS Config service does not recognize security group resource
Cloud Management Application	PRB1247369	Resource Input parameter does not get added to operation inputs
Cloud Management Application	PRB1248264	'Create CName Record' fails in Cloud Management with an Infoblox integration
Cloud Management Application	PRB1198015	Default CMDB relationships from VM to a private image are not mapped to the correct Image
Cloud Management Application	PRB1241568	Form loads of the Catalog items in the Cloud User Portal are slow
Cloud Management Application	PRB1242745	Billing report fails to capture tags when tag values are tracked only on-instance and not the cloud
Cloud Management Application	PRB1235890	List nodes get stuck at processing during Azure discovery

Problem category	Number	Short description
Cloud Management Application	PRB1237716	Parsing issues occur if a billing row includes backslashes
Cloud Management Application	PRB1248555	Resource Operation policies are not triggered
Cloud Management Application	PRB1249082	Records in sys_choice table are unable to be modified when the table is 'incident' and the element is 'category'/'subcategory'
Cloud Management Application	PRB1249497	Order form breaks when users have the wrong combinations on Blueprints or in the catalog table
Cloud Management Application	PRB1251000	The ListResourceGroup sensor fails if the discovered Azure subscription has no resource groups
Cloud Management Application	PRB1251697	Related lists do not appear by default for the VMware Datacenter form, but do appear for AWS and Azure
Cloud Management Application	PRB1254554	Resource operation policies execute out of order
Cloud Management Application	PRB1245674	Blueprint forms cannot be published when the 'DataSource' field is 'pool' and the 'Datasource Value' field is empty
Cloud Management Application	PRB1258981	No default relationship between VMWare templates and LDC
Cloud Management Application	PRB1287257	The input parameter 'Virtual Server ClusterDatastore' causes an error
Cloud Management Application	PRB1235500	The Azure Billing download results in no data when the downloaded CSV column headers are localized to a non-English language
Cloud Management Application	PRB1244534	The sequence of steps is lost in the blueprint UI and execution order of steps is not maintained
Cloud Management Application	PRB1250656	VMWare discovery fails due to multiple logical datacenters
Cloud Management Application	PRB1250995	Form fields do not display properly and data types not supported in blueprint form
Cloud Management Application	PRB1251611	Multiple sys_dictionary entries have invalid 'text' value for the internal_types field
Cloud Management Application	PRB1253468	When a VM is provisioned or modified, the wrong ESX server can be selected
Cloud Management Application	PRB1255028	Service account discovery times out causing the application to be stuck

Problem category	Number	Short description
Cloud Management Application	PRB1256231	Stacks are visible to users who do not own the stack
Cloud Management Application	PRB1257249	VMware discovery error: "Failed to create provider com.snc.cloud.discovery.cfgmgmt.CfgMgmtDiscoveryProvider: no thrown error"
Cloud Management Application	PRB1258579	Catalog disappears from user portal when categories are not associated
Cloud Management Application	PRB1240528	Blueprint TLR: Newly added custom attribute is missing after blueprint import
Cloud Management Application	PRB1241370	Not able to select an event on the Add Form Load rule
Cloud Management Application	PRB1283814	Errors occur on the stack item in the Cloud User Portal
Cloud Management Application	PRB1242282	Blueprint catalog item changes are not preserved when a blueprint form is published
Cloud Management Application	PRB1234401	VMware discovery fails on the "VMWareGuestCustomizationProbe" after upgrade to Jakarta
Cloud Management Application	PRB1289974	Catalog items load slowly
Cloud Management Application	PRB1236112	Cloud Account user interface is stuck with a 'Starting' status if Discovery fails
Cloud Management Application	PRB1273100	Error occurs when generating catalog item from blueprint: "You cannot select category [Compute] because it does not exist"
Cloud Management Application	PRB1275483	The display order on a blueprint provisioning form is not preserved
Cloud Management Application	PRB1261356	After upgrade from Jakarta to Kingston, configuration content is duplicated and operations do not work
Cloud Management Application	PRB1268420	When a Cloud API record is deleted, the associated MID Server script files remain
Cloud Management Application	PRB1245840	Form rules are not working after blueprint import
Cloud Management Application	PRB1259178	After upgrade to Istanbul patch 10, changes to cmp_provider_extension_point are not preserved
Cloud Management Application	PRB1199193	The "Apply OperationApproval Policy" activity has a hard-coded change type



Problem category	Number	Short description
Cloud Management Application	PRB1242492	Necessary parameters are not marked mandatory in Image templates
Cloud Management Application	PRB1271482	User portal freezes or experiences slow performance when a user launches a stack
Cloud Management Application	PRB1273447	Hostname is not populated in the VM NIC cmdb_ci_nic table after a VM is provisioned in Azure
Cloud Management Application	PRB1262099	Discovery plugin activation causes the error: "Table 'sn_cmp_bp_rule_info' does not exist"
Cloud Management Application	PRB1249871	During cloud registration, the datacenter URL is not honored
Cloud Management Application	PRB1251278	AWS billing CSV rows with a negative cost or a missing RecordId are improperly skipped
Cloud Management Application	PRB1244931	Form rules do not work when with special characters in parameter names
Cloud Management Application	PRB1280984	Blueprint form parameter 'UI datatype' does not show 'List Collector' as an option
Cloud Management Application	PRB1282943	Cloud User Portal catalog item variables have incorrect permissions for admins
Cloud Management Application	PRB1242473	After Azure discovery, OS and data disk information are stored in wrong table
Cloud Management Application	PRB740861	After running AWS Discovery, the following error is triggered: "IllegalArgumentException: Invalid uri"
Cloud Management Application	PRB1273046	Cloud User Portal experiences poor performance
Cloud Management Application	PRB1238318	AWS billing discovery fails when the CSV file has a 'Cost' column instead of 'Blended Cost' and 'Unblended Cost'
Cloud Management Application	PRB1266972	Azure alerts do not work if users have a password with a special character
Cloud Management Application	PRB1267456	Discovery does not populate the operating system type
Cloud Management Application	PRB1269279	Cloud account permission errors do not appear on the Activity page
Cloud Management Application	PRB1256108	Newly and updated form UI groups disappear from Form UI group

Problem category	Number	Short description
Condition Builder	PRB1265733	Gaps occur in auto-number fields in task records with the List v3 condition builder
Condition Builder	PRB1100065	Special characters are removed when loading a report or filtering lists using List v3
Condition Builder	PRB1240144	Using the 'at or before' operator in the filter condition of an alert group produces an error
Condition Builder	PRB1262477	Condition builder shows date/time fields using a different format
Configuration Management	PRB1240759	CMDB Suggested Relationship table cmdb_rel_type_suggest shows Sys IDs in the relationship field
Configuration Management Database (CMDB)	PRB1204843	ClassCastException thrown top-level rule is also containment rule when recomputing a business service
Configuration Management Database (CMDB)	PRB1285689	Query builder query execution turns on verbose query tracing
Configuration Management Database (CMDB)	PRB1242469	CMDB Dashboard populates completeness/correctness score incorrectly
Configuration Management Database (CMDB)	PRB1210530	Instance experiences slow performance while querying CDDb baseline items
Configuration Management Database (CMDB)	PRB1244036	The itil and itil_admin roles are not assigned read and write access on the cmdb_health_metric_pref table
Configuration Management Database (CMDB)	PRB1261722	CI is not added in the "Impacted Services" related list after refreshing impacted services
Configuration Management Database (CMDB)	PRB1259137	Orphan CI dashboard does not show any record if cmdb_rel_ci table has parent or child empty
Configuration Management Database (CMDB)	PRB1287618	The "Edit Manual CI" button does not work under a CMDB Group record when List v3 is active
Configuration Management Database (CMDB)	PRB1274930	NullPointerException in CMDB Relation Health Job when there are domains without any health failures
Configuration Management Database (CMDB)	PRB1256359	Identification Engine null pointer exception error occurs the WMQ pattern
Configuration Management	PRB1277335	Calendar icons are aligned to the bottom of the start date and the end date instead of beside them

Problem category	Number	Short description
Database (CMDB)		
Configuration Management Database (CMDB)	PRB1251706	Relationship Type reference field has the incorrect default value of 1
Configuration Management Database (CMDB)	PRB1261904	Incorrect attribute 'Class' is available on reconciliation definitions
Configuration Management Database (CMDB)	PRB1263292	Mangled text in CI Class Manager when compact UI user preference is enabled
Configuration Management Database (CMDB)	PRB1247937	CMDB Health Reconciliation/De-Duplication Tasks do not have their own prefix
Configuration Management Database (CMDB)	PRB1262843	The identification simulation module causes the browser to become unresponsive
Configuration Management Database (CMDB)	PRB1251315	While processing 'skip duplicates' in the identification engine, memory issues may occur with high numbers of duplicates
Configuration Management Database (CMDB)	PRB1252679	Changing the selected CMDB Baseline on a CI Form returns the user to the previous page if the CI is read-only
Configuration Management Database (CMDB)	PRB1259556	NullPointerException can occur while creating RecordCommitterForRelationCleanup
Configuration Management Database (CMDB)	PRB1197952	Run time exception occurs after changing impact rules
Configuration Management Database (CMDB)	PRB947592	The CI relations formatter on the CMDB CI forms ignores the dictionary display field and displays CI 'name' values
Configuration Management Database (CMDB)	PRB1167901	CMDB dashboard relationship widgets do not calculate properly
Configuration Management Database (CMDB)	PRB1263137	Updated value on CMDB Health Metrics reverts to a different value
Configuration Management	PRB1256477	The first_discovered field does not get populated for existing CIs upon the first discovery

Problem category	Number	Short description
Database (CMDB)		
Configuration Management Database (CMDB)	PRB1280234	CI's are missing in the relationship formatter when a CI has relationships with endpoint CI's
Configuration Management Database (CMDB)	PRB1243157	CMDBRuntimeException with message "not editable" is not helpful or accurate
Configuration Management Database (CMDB)	PRB1251488	Default suggested relationships do not include a child or parent to form a pair
Configuration Management Database (CMDB)	PRB1247840	Upgrades retain only the first section of the Virtual Private Network cmdb_ci_vpn form in default view
Configuration Management Database (CMDB)	PRB934800	Hovering over the reference icon for a Configuration Item on the Incident form saves the record
Configuration Management Database (CMDB)	PRB1274446	Identification engine can get into an infinite loop when finding matching CI's and duplicates
Configuration Management Database (CMDB)	PRB1261044	When editing a table that is not in the Global scope using the CI Class Manager, it will incorrectly say changes were successful and throw an error
Configuration Management Database (CMDB)	PRB1244875	The CI dashboard shows 'Not Applicable' under the Correctness dashboard
Configuration Management Database (CMDB)	PRB1244926	CMDB Scheduled Change formatter displays title twice and expand icon does not function
Configuration Management Database (CMDB)	PRB1248151	Identification rules with 'independent = true' leads to multiple "runs on" relations
Content Management System (CMS)	PRB1262260	Remove content from "CMS Admin Sitemap" content block
Contextual Search	PRB1275971	When previewing a KB article that shows up in the Related Results pane, if users click the back arrow that is presented with the KB article, it does not return users to the record they are editing
Contextual Search	PRB1211357	The attachment link was missing when viewing the KB article using the Contextual Search widget in Service Portal

Problem category	Number	Short description
Contextual Search	PRB1155133	Contextual Search does not work as expected with a default value in a Record Producer
Contextual Search	PRB1248341	Contextual Search: When updating the values under table configuration, the value of "Show action on new record" under cxs_ui_action_config table is being reset
Contract Management	PRB1249918	Contract History is not being created when a contract is renewed
Contract Management	PRB1290391	Monthly cost and Yearly cost on a contract always calculate in USD even if the payment amount is made in a different currency
Core Platform	PRB1279988	Help text translation issue on catalog item in Service Portal after the page reloads
Core Platform	PRB1196560	Tags not showing in Database view
Core Platform	PRB1244621	When two OOB business rules have the same order, one is not executed because it depends on the other
Core Platform	PRB1238125	Inserts into sys_script_validator failing during upgrade if a validator for the same type exists
Core Platform	PRB1254385	500 error message accessing scripterrorreporting.service-now.com due to sys_whitelist_member.inserted events
Core Platform	PRB1257374	SizeAwareness size estimation is additive when ScriptableObjects are instantiated in a loop causing the size of scriptable objects estimation to be larger than expected
Core Platform	PRB1248570	X-Forwarded-Host validation does not validate values with comma-separated multiple host names or if a single host name has a trailing comma
Core Platform	PRB1253248	Dot-walked workflow stage field states get forced to the stage of the referencing table
Core Platform	PRB1203898	current.work_notes.getJournalEntry(1) is not returning the most recent work note when used in an "After Insert" business rule
Core Platform	PRB1263660	Usability Issue: Keywords that are stopwords: 'Issue' and 'broken' are not working
Core Platform	PRB1244963	Option values of choice lists in UI page: render_gadget_performance_controls are not translated
Core Platform	PRB1235332	Records with empty sys_ids can be created and can cause invalid cascade deletion
Core Platform	PRB1244757	Business phone field cannot be updated when "Dynamic Creation" is checked
Core Platform	PRB1279628	Thumbnail images by <attachment>.iix?t=small causes "Stream closed" in the system logs if the image does not exist
Core Platform	PRB1241199	The Download All Attachments button does not include duplicate file names, even if the content is different
Core Platform	PRB1207110	JavaScript generated for conditions evaluating date or date time variables is unable to evaluate dates
Core Platform	PRB909987	Read action Cross Script error while reading a workflow context for privately scoped table record
Core Platform	PRB1247576	Exception thrown when processing code tags that contain <?=

Problem category	Number	Short description
Core Platform	PRB1200618	Data Policy mandatory alert message cannot be translated
Core Platform	PRB1171210	Table API - Dot-walked fields are returned with blank values, but the request status is 200 (success)
Core Platform	PRB1261823	When function definition of function field is provided, improper syntax throws "Record not found" for the corresponding table
Core Platform	PRB1235252	An exception is thrown when the transform map calls the script include function
Core Platform	PRB1262690	The size of JavaScript objects is calculated incorrectly
Core Platform	PRB1259731	When displaying dot-walked field choice fields, if the choices are defined on an extended table, their value is displayed instead of the label
CSM Communities	PRB1278954	Upgrading from Jakarta to Kingston changes the custom theme colors of CSM Portal back to the default colors
CSM Communities	PRB1209386	Communities form admins cannot see the Accept button in the answers section, and they cannot change Accept to true or false via kb_social_qa_answer_list
CSM Communities	PRB1254470	Notifications and Subscriptions portal page cuts the KB article short descriptions after the colon ':' character
CSM Communities	PRB1257609	Change in the Primary header color is not reflected when value is changed through branding editor
Currency	PRB1248691	CurrencyPriceOptimizer can generate a NullPointerException when memory usage is high during a table reindexing process
Customer Service Management	PRB1250863	Edit UI action not appearing on case table
Customer Service Management	PRB1259677	Flow designer: Upgrading from Kingston with the Field Service Spoke plugin activated generates 203 Skipped Errors
Customer Service Management	PRB1238935	The widget "Password Reset" installed by plugin "Customer Service Base Portal" is using the legacy Password Reset URL
Customer Service Management	PRB1261244	Customer Self Registration form: Links for "Privacy Policy" and "Terms and Conditions" appear within special characters
Customer Service Management	PRB1236382	CSM Portal: Email label appears twice on the contacts form
Customer Service Management	PRB1260932	Special handling notes are display multiple times in a session
Customer Service Management	PRB1256283	Upgrade Twilio JavaScript SDK to 1.4
Customer Service Management	PRB1262539	Instance upgrade reverts System Property "glide.email.reply_subject_prefix" back to OOB (removing "Case:") if it has not been modified by a user
Customer Service Management	PRB1245153	Publications do not properly display all HTML elements. The background colors and styles are missing.
Customer Service Management	PRB1248095	OOB business rule "Sync company to account" is assigning incorrectly
Customer Service Management	PRB1178216	Approval process does not work in business-to-business registration

Problem category	Number	Short description
Customer Service Management	PRB1239602	Resolution Shaper plots without successfully fetching data, and then gives errors
Customer Service Management	PRB1236716	Delete inactive business rule 'Customer query rule'
Customer Service Management	PRB1261858	Choices added to sn_customerservice_case choice sets (added as part of "Customer Service" plugin) are deleted upon upgrade
Customer Service Management	PRB1246407	Contact names (profiles) are not showing up when snc_external contacts reply to Social QA items
Customer Service Management	PRB1203165	Encrypted field is conflicting with 'sn_customerservice.customer_admin' role
Customer Service Management	PRB1237808	Resolution Shaper (com.sn_resolutionshaper) contributes to 13s load time when querying the email field
Customer Service Management	PRB1263609	Attempts to associate knowledge articles with cases generates errors
Customer Service Management	PRB1256761	The Japanese version of the CSM case timeline is showing an additional character "s" after time unit
Customer Service Management	PRB1206486	URL which includes '%2B' (a plus sign) could not be decoded successfully
Customer Service Management	PRB1290619	Cannot generate client script for Customer Service State Flow; getting an error about cross-scope access
Customer Service Management	PRB1250874	OpenFrameAPI 1.0.2 backwards compatibility is broken
Customer Service Management	PRB1246056	Close notes and field changes are copied twice to the activity log when closing a case
Dashboards and Home Pages	PRB1248139	Illegal character URL encoding error occurs while exporting a dashboard tab in PDF
Dashboards and Home Pages	PRB1261599	Report errors occur when the URL length reaches up to the max value
Dashboards and Home Pages	PRB1245432	When adding content to a PA dashboard, users without the report_on ACL for a table prevents them from filtering for existing reports on the table
Dashboards and Home Pages	PRB1290912	Display issues in dashboard in RTL language (Hebrew), such as widgets overlapping and tabs not showing full tab titles
Dashboards and Home Pages	PRB1248505	When accessing Homepages from the Navigator with keyboard commands, the user must tab through the remaining Navigator options for the focus to reach the Homepage content (Accessibility concerns)
Data Certification	PRB1268144	The Certification tasks show multiple check boxes when in closed complete state
Data Certification	PRB1234990	Users with 'certification' role cannot update cmdb_ci records as expected
Data Certification	PRB1211282	Data Certification task contains a list with the "Certification Task Element" field, and its filter is broken for "is one of" condition
Data Certification	PRB1245834	Filtering the table on the Certification Task form displays records which do not need certification
Data Certification	PRB1203069	Certification task does not work correctly on IE11

Problem category	Number	Short description
Data Certification	PRB1286931	Certification users do not see images attached to the schedule definitions, as these are only visible for the certification admin
Debugger	PRB1240746	Patterns do not use the affinity table
Delegated Development	PRB1174111	A delegated developer is able to update the fields of the table outside of the scope even with "allowed configuration" turned off
Delegated Development	PRB1112891	The delegated_developer role blocks access to script fields in the global scope
Demand Management	PRB1268305	Demand Management creates two new Save UI actions on the form, making it possible to have both of them on the form at the same time if the sys_property is set to True
Demand Management	PRB1254563	Demands in 'Completed' state are going back to 'Approved' state when updating via the portfolio workbench
Demand Management	PRB1244962	Setting a TeamSpace Demand to State = "Completed" (9) has the effect of setting State to "Screening" instead
Demand Management	PRB1248988	Demand Stage Config record points to an image that does not exist
Demand Management	PRB1264810	Users with it_demand_manager and assessment_admin roles see the message 'User not allowed to access table: dmn_demand' when viewing an Assessment Metric Type Condition
Demand Management	PRB1041896	Create Project UI action does not populate Affected CI on the project record
Dependency Views (BSM Map)	PRB1286865	In dependency map, if multiple CIs are related to same endpoint CI, then only one CI and its relation is shown
Dependency Views (BSM Map)	PRB1260168	Virtual Group into a Cluster Group causes a duplication when expanding the Cluster
Dependency Views (BSM Map)	PRB1262126	Users without permissions to specific rows in the TASK table do not get any indicators
Discovery	PRB1283734	Credentialless discovery appears to classify network device (Cisco IOS) as a computer (Apple iOS) instead of switch/router
Discovery	PRB1242682	Lookup tables do not update when changing the identifier
Discovery	PRB1234002	If the network adapter name is null, Windows network adapter information is not populated
Discovery	PRB1236611	Duplicate SQL instances created when a windows (SQL) cluster fails over
Discovery	PRB823474	Discovery of some device types result in a 'Product' model record rather than a more specific type of model record
Discovery	PRB1238294	Discovery sometimes does not complete on successive runs of a schedule
Discovery	PRB1251107	First time discovery of ESX servers can remove vCenter CI relationships
Discovery	PRB1266263	Duplicate entries occur in the dscy_router_interface table
Discovery	PRB1252485	The 'nginx' script include throws an exception when the IP version is IPv6



Problem category	Number	Short description
Discovery	PRB1255130	MID Server selection in Cloud Application Discovery does not support domain separation
Discovery	PRB1241282	SNMP probes do not end when OID values 'noSuchInstance' or 'noSuchObject' are received
Discovery	PRB1200073	Discovery for ESX servers is not populating the Operating System field correctly
Discovery	PRB1209212	Discovery does not populate the relationship field on cmdb_ci_disk and cmdb_ci_filesystem
Discovery	PRB993381	VSphere Discovery fails when FQDN is provided instead of the IP address
Discovery	PRB1179547	MID Server fails after downgrade from Jakarta to any pre-Jakarta release
Discovery	PRB1248901	Slow 'ASYNCR: Discovery - Sensors' scheduled job
Discovery	PRB1263374	PowerShellProbe does not work with WinRM using HTTPS
Discovery	PRB1263701	Discovery creates only one record for multiple network adapters with exit interface routes and next hops
Discovery	PRB1250810	Errors with the 'SNMP - Identity' probe: Error: No close tag string: <CIData><data>
Discovery	PRB1267628	vCenter VMsSensor flip-flops the object_id for VMs or templates with duplicate vm_instance_uuid
Discovery	PRB1255690	Sensor 'UNIX - OS Uptime' causes error when discovering the CI for the second time with glide.sys.date_format 'dd-MM-yyyy'
Discovery	PRB1194221	An 'undefined' warning appears in the Discovery log and Solaris/AIX/Unix ADM sensor log
Discovery	PRB1281985	Credential-less discovery creates CIs with fqdn as the hostname even though 'glide.discovery.hostname.include_domain' is set to false
Discovery	PRB1241570	The probes 'Solaris - Zones' and 'ADM Launcher Multiple' triggers warning message: "zoneadm: not found" when running discovery on a Solaris host
Discovery	PRB1241891	If a classified application triggers a pattern, the CI is not be created until after mapping runs
Discovery	PRB1210223	The ECC Input is processed by a 'Guest user' when the MID Server username includes a backslash character
Discovery	PRB1242750	Storage servers are not explored if 'ElementName' and 'SerialNumber' are missing
Discovery	PRB1236133	CIM exploration probes can take an excessive (12+ hours) amount of time
Discovery	PRB1238084	Discovery probes with use_getbulk set to 'true' disregard the SNMP v3 discovery schedule setting, which causes unwanted queries of the target
Discovery	PRB1239071	Network path information is not populated for Netscaler with probes/sensors
Discovery	PRB1249910	The "Discovery - Complete" business rule is changed from a 'before' to an 'after' business rule

Problem category	Number	Short description
Discovery	PRB1208905	Windows Storage 2012 sensor error occurs after upgrade from Helsinki to Jakarta
Discovery	PRB1211443	With the introduction of MariaDB, Match_rgx is not valid for HBase
Discovery	PRB1234467	SNMP V3 credentials with no password give cryptic error message - "java.lang.IllegalArgumentException: Parameter value may not be null"
Discovery	PRB713995	MID Server selection throws an exception after the Capability check fails
Discovery	PRB1149780	Discovery for Solaris 11 throws the error: 'KSH - showrev not found'
Discovery	PRB1239294	Shazzam does not honor active flag on port probe
Discovery	PRB1248790	Storage reconciliation does not work without target IQN
Discovery	PRB1261384	Guest not created when MAC not available for guest
Discovery	PRB1245852	IP address type discoveries fail with an exception if the classification debug property "glide.discovery.debug.classification" is true
Discovery	PRB1192173	SNCSSH rejects large inbound packets with the error "Corrupt packet received, claims impossible length of <32k+> bytes"
Discovery	PRB1242731	Process classifier creates multiple applications ignoring classification criteria
Discovery	PRB1244353	The 'SNMP - F5 BIG-IP - System' probe and sensor always set the load balancer service operational status to non-operational
Discovery	PRB948355	The 'find -L' command sometimes hang on Linux servers
Discovery	PRB1173039	vCenter does not reconcile VM-to-ESX relationships when a VM is migrated
Discovery	PRB1262170	The 'Location' field on the Hyper-V server is not set after running Discovery
Discovery	PRB1252142	Credential-less discovery is triggered even when it is not enabled
Discovery	PRB1266435	Pattern Designer error 'org.codehaus.jackson.map.JsonMappingException'
Discovery	PRB1195015	SNMP community strings are displayed in the ECC Queue from the Shazzam input
Discovery	PRB720081	During NetScaler device discovery, 'vsvrName' returns a hash instead of server name if entity name exceeds 32 bytes
Discovery	PRB1236302	No indication on ECC Queue input record status about payload size exceeding max length
Discovery	PRB1095503	Many-to-many records with blank reference fields are often not validated
Discovery	PRB1238866	Nested resource pools in vSphere are not handled correctly
Discovery	PRB1260239	Several external credential store fields do not appear
Discovery	PRB1261152	Steps do not work in the HP-UX Server pattern
Discovery	PRB1250645	DNS resolution failures on SFTP imports send the worker thread into a hung state

Problem category	Number	Short description
Discovery	PRB1269456	Integrations timeout or receive a RejectedExecutionException with use of the API_INT semaphore set
Discovery	PRB1254508	Shazzam causes Linux secure log warnings and can trigger OSSEC to block subsequent access
Discovery	PRB1248223	SCCM 2012 v2 Computer Identity transform fails with "Object has exceeded maximum permitted size of 268435456"
Discovery	PRB1186554	Discovery deletes or fails to update the cmdb_ci_file_system relationship 'Provided by - Disks '
Discovery	PRB1279444	vCenter WSDL check fails to catch SSL handshake hang
Discovery	PRB1281592	NetApp provider does not support querying SVMs and HTTPS protocol
Discovery	PRB1241196	NetApp pattern does not support NetApp clustered environment properly
Discovery	PRB1234661	Discovery deleteEntities query in DiscoveryErrorMessageDAO is causing impact to the instance database
Discovery	PRB1236541	Unable to discover VLAN data from Cisco switches that require the SNMPv3 context
Discovery	PRB742357	Mongo DB is not visible to ITIL users
Discovery	PRB874481	When two load balancers have the same serial number, both load balancer reconcile as one
Discovery	PRB1104438	Domain Separation plugin activation does not create sys_domain and sys_domain_path columns in the cmdb_ip_service table
Discovery	PRB1237671	List operations on CMDB tables are slower on average than other types of list operations
Discovery	PRB1118340	CMDB tables have the same label
Discovery	PRB1238331	Discovery schedules may not complete if there are many concurrent pattern-based discoveries to the same target machine
Discovery	PRB1167118	Discovery console options not followed when discovering devices
Discovery	PRB1275730	Updates to storage volume CIs cause warnings from StorageDataSize
Discovery	PRB1267067	The ops view event integration does not work even though connector testing succeeds
Discovery	PRB1252594	Script include "DeviceL3Mapping" does not filter on install_status=1, which creates spurious IP Connection relationships
Discovery	PRB1246829	Linux - Azure probe falsely check is_virtual flag on physical Linux machines
Discovery	PRB1258317	Discovery of layer 2 tables can leave the current data as absent=true
Discovery	PRB1284693	The 'Cloud Application' field is missing on the Schedule form after activating the Discovery Core plugin
Discovery	PRB1289907	Debug session auto reconnect does not sync on the events/ parsing strategy

Problem category	Number	Short description
Discovery	PRB1244327	Incorrect storage probe triggered during Windows client discovery
Discovery	PRB1236653	SAN zones, aliases, and other fields can have values longer than the allowed field length
Discovery	PRB1238548	Migration of VM between vCenters causes a duplicate VM to be created
Discovery	PRB1277588	Dell KE causes serial number to not be found in Discovery when running ESXi6
Discovery	PRB1249668	Shazzam encoding for IPs is inefficient and leads to nodes running out of memory
Domain Support	PRB1200477	Domain separation table's sys_domain column is out of sync with sys_id
Domain Support	PRB1239309	When the Domain Hierarchy Validation nightly job begins to starve on the DB connection, domain-enabled tables are marked as "corrupt"
Domain Support	PRB1253253	Importing domain records without the parent domain record results in a null or invalid domain path
Domain Support	PRB1248716	Importing domain records with invalid data (code, path) should not be allowed
Edge Encryption	PRB1193533	Edge Encryption rules engine should handle all valid request types appropriately without error logs
Edge Encryption	PRB1193131	The sysparm_query parameter in Http POST request containing 'SUBQUERY' is modified to an invalid value when passing through the Edge proxy
Edge Encryption	PRB1282754	Connecting in EdgeProxy to a Kingston instance causes the Post button to disappear when the save button is pressed
Edge Encryption	PRB1247084	Manual upgrade to Jakarta on Windows throws a RuntimeException error
Edge Encryption	PRB1258699	'Delete' UI Action on the sys_platform_encryption_configuration table hides the out of box Delete UI Action on the Global table
Edge Encryption	PRB1270146	Auto AHA transfers leave four edge proxies in an unresponsive state
Edge Encryption	PRB1238902	Clicking post and save (on after another) on an encrypted journal field, results in the value being prepended with _123STREAMENTRY321_
Edge Encryption	PRB1260310	Problem with RSA key validation mixing proxies from Geneva or Helsinki, with Istanbul or newer versions
Edge Encryption	PRB1263256	Unable to connect to Edge proxy via load balancer if the proxy and LB are running on different ports
Edge Encryption	PRB1290633	Edge Encryption rule signature fails validation for rules created with order greater than 1000 in locales where the thousands separator is not a comma or dot
Edge Encryption	PRB1236678	Restricted permissions on Edge GUID file cause spam of errors in logs
Edge Encryption	PRB1260644	Inactive rules are saved on the proxy side and validated on startup, adding validation time and slowing the process

Problem category	Number	Short description
Edge Encryption	PRB1249284	Upgrading the Edge Proxy is generating a new folder for each upgrade run, rather than reusing the existing folder and creating a backup
Email	PRB635843	Inbound email actions action type "reply email" does not work
Email	PRB1201421	Background color on a table row does not work when viewing the Sent email in the Activity Formatter, or the Preview HTML Body of the email record
Email	PRB700338	Business rules that are triggered by a scoped app inbound email action defined within a script set the wrong record to "current"
Email	PRB1181773	"Core Instance Properties" clone data preserver preserves email-related properties, preventing inbound actions from running after a clone
Email	PRB1284009	The recipient fields in the Compose Email popup no longer allow users to press <Enter> to select a matching recipient without first selecting the user from the suggestions list
Email	PRB1236131	Email watermark is not accessible with scoped application
Email	PRB1237513	Notification categories are not being translated in the new Notifications UI
Email	PRB1238374	Email body is truncated when com.glide.email.max_body_bytes is set to a value larger than the body of an email
Email	PRB1239271	IE11 produces duplicate watermarks when using an email client
Email	PRB1248404	Notifications sent to a group might not add some users acting as delegate if they were already included as a recipient
Email	PRB1240504	Email addresses surrounded by quotes are discarded from an inbound email and not stored in relevant email fields (recipient, copied, etc.)
Email	PRB1234909	Notification preview shows different language choice list values than what is sent in outbound email notifications
Email	PRB1235296	Notification form does not display with glide.ui.escape_text = false
Email	PRB1180659	Email client templates do not render correctly when the sys_email body field has an internal type of "html"
Embedded Help	PRB1248239	"Embedded Help Trigger" is logging a StringIndexOutOfBoundsException
Embedded Help	PRB1248339	Reduce Embedded Help CDN logs (warnings and errors) from the instance
Event Management	PRB1242242	SLA does not calculate (close the SLA) when the alert is closed
Event Management	PRB1277549	Issues occur when running more than one groovy connector (SCOM) on the same MID Server
Event Management	PRB1254446	The 'evt_mgmt_user' role does not need 'timeline_user' role
Event Management	PRB1247191	After upgrading from Helsinki to Jakarta, users cannot open existing event rules
Event Management	PRB1260192	Creating Event Rules through Events and Groups failed with ArrayIndexOutOfBoundsException

Problem category	Number	Short description
Event Management	PRB1239850	Service group severity is incorrect after changing a service to maintenance
Event Management	PRB1280849	New line characters are removed from 'Description' for events coming from the MID Server
Event Management	PRB1198180	Improve or delete the job that deletes worknotes on alerts
Event Management	PRB1272323	Issues occur when building the impact tree for a business service with many CIs
Event Management	PRB1260545	Incorrect "Regex" creates <<UNKNOWN>> on some fields the 'em_alert' table
Event Management	PRB1262623	Task value on SCOM is updated with a NULL instead of the Incident number
Event Management	PRB1251027	The status of resolved in vRealize Operations alert is never updated
Event Management	PRB1245920	Reported event time is wrong and same event is reported several hours
Event Management	PRB1278975	After Dashboard refresh, the services tree jumps back to the root
Event Management	PRB1241232	HP OMI connector fails to parse when the date format is string
Event Management	PRB1272279	PRTG integration not using local system dates
Event Management	PRB1264437	Multiple "The related alert AlertXXXXXXXX state is Closed" Work Notes appear on the related incident after it is closed
Event Management	PRB1256493	Catastrophic backtracking in regex defined in em_match_field can cause Event Management process events job to fail and leave events in a queued state
Event Management	PRB1194011	Slowness while accessing the Event Management dashboard
Event Management	PRB1241027	HP OMI connector does not bring in events for HPOMI instances in a different time zone
Event Management	PRB1234970	Upgrading event rules using the UI action failed
Event Management	PRB1272236	After the upgrade/insertion, the field is truncated and events are not processed
Event Management	PRB1277927	The OMI connector does not create events on the em_event table
Event Management	PRB1234662	After an upgrade to Jakarta, legacy binding by rule (to a specific CI type) fails to work and does not create alerts
Event Management	PRB1291229	If the 'Additional info' on an event has a field containing 'incident', Event Management adds a task with the sys_id of the value of the JSON field
Event Management	PRB1253439	VRealize connector out of box configuration loads MID Server JVM Memory/CPU to 100% and throws out of memory exceptions
Event Management	PRB1245637	Self health alerts should be enabled by default to assist detection and troubleshooting of processing issues

Problem category	Number	Short description
Event Management	PRB1247898	Impact is invalid for the application cluster
Event Management	PRB1238160	Business service groups with many business services and groups fail to show alerts in the dashboard
Event Management	PRB1274189	OOB SolarWinds regex pattern is not working (Solarwinds Node Status)
Event Management	PRB1238990	After upgrading to Jakarta, events are matching with incorrect rules
Event Management	PRB1260093	Cannot add formatted text into the description field for event rules
Event Management	PRB1240745	SCOM bi-directional not working if the SCOM user password contains special characters
Event Management	PRB1235871	Event rule in a domain will not be upgraded automatically to Jakarta
Event Management	PRB1272724	The same property is used in Event Management to control reading of the alert table and alert history
Event Management	PRB1237777	Open alert is not updated correctly
Event Management	PRB1260213	Incident not reopened when event is repeated
Express	PRB1260179	The knowledge_manager role is deleted on the Express to Enterprise upgrade
Express	PRB1234694	When an approval is set to "any of," and two approvers approve the change simultaneously, the second tier approvers are set to "No longer required"
Express	PRB1191482	Many OOB notification plaintext views display NO Message or Message Text. The OOB notifications default editor varies.
Express to Enterprise	PRB1240959	Clean up unrequired user updates related to ACLs
Express to Enterprise	PRB1201552	On converted instances, the property glide.security.admin.override.accessterm is set to false, preventing admin access to many tables
Express to Enterprise	PRB1249595	Application menu: System notification remains INACTIVE in post-conversion instances
Express to Enterprise	PRB1261938	Diagnostics Page does not load on Express to Enterprise conversions
Express to Enterprise	PRB1201241	After a conversion from Express to Enterprise, the * ACL needs to grant access to admins by default
Express to Enterprise	PRB1235515	View-specific UI policies cannot be created on Enterprise instances converted from Express
Express to Enterprise	PRB1251365	Express to Enterprise Upgrade - Unable to add "Dynamic" or "Advanced" Reference qualifiers
Express to Enterprise	PRB1244040	The inbound email action 'Guest Request Comments' is missing after conversion
Express to Enterprise	PRB1249246	The Autoclose property 'glide.ui.autoclose.time' value gets updated, which causes incidents to close prematurely during the conversion process

Problem category	Number	Short description
Facilities Service Management	PRB1277975	Incomplete message added to work notes on sm_order tables
Field Normalization	PRB1237681	Field normalization's rollback is using the removed rollback engine
Field Normalization	PRB1236109	User with admin role unable to add new record to Normalization Data Services > Normalized Mappings
Field Service Management	PRB1236609	FSM work orders are not getting closed even when all tasks are closed
Field Service Management	PRB1238922	On the Central Dispatch page, no agents are available for dispatching the Work Order Task if Use agent or task scheduling is not enabled
Field Service Management	PRB1259089	Multiple SM config modules are being created
Field Service Management	PRB1259403	Read ACLs on wm_order and wm_task throw an error
Field Service Management	PRB1210129	When the signature capture and pdf order Summary on Field service configuration are enabled, they are not saved when the table label name has special characters
Field Service Management	PRB1275496	Header title and close icon are missing in the Central Dispatch screen
Field Service Management	PRB1288931	The agent calendar weekly view displays a multi-day event only on the first day and not on all days
Field Service Management	PRB1257216	OOTB "start work" UI action does not work in a work order task
Field Service Management	PRB1184419	Upgrade reverts the related list customizations of sm_part_requirement to OOTB
Filter Builder	PRB1080802	List v3 treats a "/" character as a separator in the 'is one of' filter
Filter Builder	PRB1243811	A customized table list does not search the choice list column properly, which affects usability
Filters	PRB1235228	On List V3 on Jakarta when a user with role filter_group try to share a filter, it shows all the groups where user supposed to see only groups they are part of
Filters	PRB1238132	Related List Condition is not working when using "Incident State" as the filter
Filters	PRB1002900	Queries against decimal fields return unexpected results when instance locale uses a comma as the decimal separator
Filters	PRB1250231	On CMDB tables, the 'Configure -> All' context menu option is only filtering on the specific table the record is on
Filters	PRB1235337	SLA conditions on a select box variable throw errors when the sys_id of the variable starts with a number
Filters	PRB662447	Catalog filter condition for variables is not working for multiple conditions using AND
Filters	PRB1246836	Auto-complete does not work with records with display value as a Translated Text or Translated Field when using a translated language
Financial Management	PRB1284530	Activating the Financial Management plugin does not install proper roles



Problem category	Number	Short description
Financial Management	PRB1274390	Portfolio budgets are not promoted to the budget console after the Kingston upgrade
Financial Management	PRB1236738	The budget items are not rolling up in the budget preview
Financial Management	PRB1253708	CIO Dashboard widgets no longer display data after upgrading to Kingston
Financial Management	PRB1104965	Cost Center is getting changed to "IT Infrastructure" when changing the name from "IT Infrastructure and Operations" to "Infrastructure & Operations"
Financial Management	PRB965356	OOB Linux and Unix server forms contain the legacy related CI formatter instead of the new CI formatter
Financial Management	PRB1250676	Cleansing data makes the general ledger cleansed data table to grow continuously
Financial Management	PRB1248423	Amounts are not rolled up when the segments have fiscal validity configured
Financial Management	PRB1240545	Performance issues due to leaf level granularity in breakdown lines
Financial Management	PRB1203702	Unable to allocate the "Hardware Depreciation" and "Internal Labor" buckets to the components segment's accounts in the workbench
Financial Management	PRB1079953	Trying to add companies in the "Mapped to Company" column causes performance issues when there are already many companies
Financial Management	PRB1266068	Account is assigned to the incorrect bucket during bucketing on the Financial Workbench
Financial Management	PRB1268585	ITFM workbench is missing a few HTML files after the upgrade
Financial Management	PRB1248422	Weight maps are generated when no data is available for the selected fiscal period and "enforce life span" is enabled
Financial Management	PRB1209942	Budget console drill detail at a period level does not work correctly
Financial Management	PRB1235884	Cost plans spanning across fiscal years are not promoted
Financial Management	PRB1256811	"Create New" button on the budget definition workbench page is disabled
Financial Management	PRB1284720	Project Actual Cost (pm_project.work_cost) is set to user session currency
Financial Management	PRB1239896	Wrong currency displays in the Workbench for a promoted project with cost plans consisting of different currencies
Financial Management	PRB1236282	Custom data source segments are broken
Financial Management	PRB1236961	Changes to field mappings/segments or hierarchy is not reflected immediately
Financial Management	PRB1109905	ITFM Workbench: Incorrect currency is displayed for Allocated Buckets
Financial Management	PRB1239189	Project Actuals are not rolling up to the Portfolio level

Problem category	Number	Short description
Financial Management	PRB1246365	When choosing years to display for fiscal calendar generation, there is a restriction of -10years to +10years
Flow Designer	PRB1244630	Corrected the choice list label "Dropdown with Default Value"
Flow Designer	PRB1245801	Script Output Variable Type for True/False is not being respected
Flow Designer	PRB1284215	Condition used in a subflow does not go into the Else loop if the condition fails
Flow Designer	PRB1287321	Getting a "Flow not found" error when opening a flow
Flow Designer	PRB1270744	Copying flow also copies remote trigger id
Flow Designer	PRB1248783	Pasting RTF to content editable fields adds unnecessary texts
Flow Designer	PRB1262454	"Ask for approvals" action does not clean up all watcher records if one of them has been triggered and completed
Flow Designer	PRB1291059	Unable to select 'Application' while creating a new Flow Designer if the 'com.glide.ui.concourse_app_picker' plugin is Inactive
Flow Designer	PRB1266327	A reference field with attribute "ref_auto_completer=AJAXReferenceChoice" only allows choice mappings
Forms and Fields	PRB709851	UI16 on tablet: Slushbucket (list collector) shows 0 items in available and selected lists even when items are present
Forms and Fields	PRB740309	Mobile Service Catalog: When using JavaScript for default values, returning an empty value displays the JavaScript instead of an empty field
Forms and Fields	PRB1276720	Setting the payload_name of a wizard answer (sys_wizard_answer) causes form to stop rendering or display a Jelly error
Forms and Fields	PRB1210372	Dependent field is not honored when set via client script (v3 only)
Forms and Fields	PRB737755	Cannot add an address to the Watch List - Email field
Forms and Fields	PRB1105582	Images embedded in HTML content are unexpectedly uploaded by TinyMCE every time a record is opened
Forms and Fields	PRB1237769	Mobile app - Assigned to field does not honor dependent field of Assignment group when Assigned to is selected first
Forms and Fields	PRB1274369	Knowledge of 'wiki' type converts escape wiki text on edit/save
Forms and Fields	PRB1281108	UI page: ui_multiline_input_field is not accessible from processing script
Forms and Fields	PRB1238731	Messages for the field status = Conflict on Change Requests do not always appear in the correct language
Forms and Fields	PRB1277936	View rules in domain-separated instances are not always applied
Forms and Fields	PRB1195085	Currency fields set to read-only through UI Policy or Client Script do not honor value changes made through client scripts
Forms and Fields	PRB1242317	Tooltips for form field labels are not accessible to keyboard users

Problem category	Number	Short description
Forms and Fields	PRB1192118	Tooltip for HTML field help icon is not visible when the field is positioned at the top of a form section, with tabbed forms enabled
Forms and Fields	PRB1284783	Inactive field appears on the form
Forms and Fields	PRB1271122	On Knowledge article, 'valid to' date displays as '10-10-0022' when date format is dd-MM-yyyy
Forms and Fields	PRB1283255	When glide.sys.date_format = dd-MM-yyyy, date values are corrupted
Forms and Fields	PRB1271722	List control filters are not working
Forms and Fields	PRB1160414	Watchlist reference icon activates on hover only and is not keyboard accessible
Forms and Fields	PRB1244429	The g_form.setValue does not work for Date and DateTime fields on Mobile
Forms and Fields	PRB1244655	Focusing in and out of an HTML field with multiple carriage returns causes the field to be marked as modified/dirty form
Forms and Fields	PRB1237207	The string <value 1> was <value 2> in activity formatter is wrongly composed, leading to meaningless translation
Forms and Fields	PRB868761	Label URL is not translated and uses the English label URL value when switching to another language
Forms and Fields	PRB1184026	Errors in JavaScript console when creating a Change Type
Forms and Fields	PRB1252533	Checklist formatter is not working on UI15
Foundation	PRB733904	Client script "Populate Caller Location" on Service Order (sm_order) uses getReference inefficiently
Foundation	PRB1247011	Submitting a Security Incident Response record via the record producer produces an error
Governance, Risk and Compliance	PRB1236218	Unable to update an Authority Document's Active field from true to false
Governance, Risk and Compliance	PRB1241594	When a user creates multiple test plans to one control, creates a new engagement, and links the profile to the engagement, only one test plan is displayed
Governance, Risk and Compliance	PRB1235902	Navigating to Audit > Engagements > Workbench, causes audit_workbench to display for a second and then the homepage reloads
Governance, Risk and Compliance	PRB1237536	When a user chooses a "Multiple Selection" control in the Questionnaire Template Designer, it does not display the control type, the question, or the choice
Governance, Risk and Compliance	PRB1254560	When the Risk framework is set to inactive, the related Risk Statements are not deactivated
Governance, Risk and Compliance	PRB1258676	The "Add" button for upstream/downstream profile filters does not display the correct profiles
Governance, Risk and Compliance	PRB1114228	Out of the box GRC Policy & Compliance UCF does not set Authority Documents to read only in the list view
Governance, Risk and Compliance	PRB1242729	After the GRC plugin is installed and a survey URL is entered in the browser, Survey > User does not display the question on the public survey

Problem category	Number	Short description
Governance, Risk and Compliance	PRB1235882	When creating a new GRC Audit Engagement, the newly-created number is prepended with whatever contents were added to the NAME field
Governance, Risk and Compliance	PRB1191193	Performance Analytics Premium Integrations plugin creates several invalid ACLs
Governance, Risk and Compliance	PRB1238144	The control status does not change, regardless of whether an indicator passes or fails
Guided Tours	PRB1241461	Guided tours show several warning messages in logs: "EmbeddedHelpUtil" is not defined.
Guided Tours	PRB1289480	React Js is running on all lists and forms even if guided tours do not exist, causing performance browser degradation
Guided Tours	PRB1246335	Saving the first step in an OOB Guided Tour causes a Duplicate entry error message
Guided Tours	PRB1248278	When creating a tour, slushbucket "roles this tour is for" is empty when the system property "glide.invalid_query.returns_no_rows" is set to "True"
Guided Tours	PRB1254165	Guided tour ends because the next step was not found
Guided Tours	PRB1238560	Guided tours do not work on personalized lists with the "Personalize List Columns" feature (blue gear icon with a blue dot)
HTML Editor	PRB1253082	Hovering over a question mark icon in a text field displays the wrong information
HTML Editor	PRB1273526	TinyMCE is not able to load any language besides English
Human Resources	PRB1281549	Unable to use 'Templated Snippets' if the HR plugins are not installed
Human Resources	PRB1259107	The KB knowledge base is not entertaining the HR criteria
Human Resources	PRB1251840	HR Integration - Coding typos
Human Resources	PRB1151895	Incorrect alignment on generated PDFs for HR cases from a template
Human Resources Service Management	PRB1271440	On HR cases, users with template snippet read and write roles cannot see images (sys_attachment) on the template snippet
Human Resources Service Management	PRB1273333	User can select an HR Service they cannot read on case creation page
Human Resources Service Management	PRB1248935	Activating Human Resource Scoped App: Core & Service Portal Applications creates records in sys_user_has_role table with empty roles
Human Resources Service Management	PRB1265737	In HR case, user can click outside the dialog box and save the state as 'Suspended'
Human Resources	PRB1242764	After enabling the HR scoped application plugin, "sysapproval_approver" is slow to load the approval form

Problem category	Number	Short description
Service Management		
Human Resources Service Management	PRB1243015	HR Services - Deactivating some services did not remove some that still appeared in the reference lookup
Human Resources Service Management	PRB1290209	HR matching rules / assignment logic does not work correctly if the user changing draft state does not have permission to read cases
Human Resources Service Management	PRB1272857	HR Task templates are not editable from \$sm_templates_task page
Human Resources Service Management	PRB1271193	Email icon/attribute not added OOB to (sn_hr_core_case_total_rewards) table
Human Resources Service Management	PRB1249087	Source field on User has incorrect type
Human Resources Service Management	PRB1252970	Workday - Outbound service references inbound user name & password
Human Resources Service Management	PRB1281100	Assign HR Roles causing schedulers to flood with system trigger jobs
Human Resources Service Management	PRB1283436	Workflow is not canceling when HR Case is moved back to "Ready" state from "Awaiting Acceptance"
Human Resources Service Management	PRB1273176	Changing logo image of the standard "HR Header Block" is not visible to non-admin users in HR portal index page
Human Resources Service Management	PRB1277239	Pointer does not point to exact location on Signature pad
Human Resources Service Management	PRB1285939	HRJ Case Info widget does not support translation
Human Resources Service Management	PRB1271518	When system property 'com.snc.signaturepad.retrieveSignature' is set to false, canvas section of the Signature Pad does not display
Human Resources	PRB832069	"Download Template" in bulk case creation not working

Problem category	Number	Short description
Service Management		
Human Resources Service Management	PRB1239049	Variables are not translated in the Description of an HR Case from the record producer
Human Resources Service Management	PRB1249994	When HR demo data is deleted, it reappears after an upgrade to a newer release version
Human Resources Service Management	PRB1246165	HR API 'HRSecurityUtils.userReportsTo' only works for direct manager/subordinate relationship
Human Resources Service Management	PRB1278805	Approval via email does not always move case to approved
Human Resources Service Management	PRB1193875	Failing widget: 'HRI Task Panel'
Human Resources Service Management	PRB1243168	Non-role users can create HR categories through "Manage Human Resources Catalog" module
Human Resources Service Management	PRB1275797	Template issue in HR Cases
Human Resources Service Management	PRB1239942	Creating a record through an HR record producer creates a dummy insert first, then updates the proper information
Human Resources Service Management	PRB1242851	In the HR scoped application, script Include: hr_Filters is inefficient
Human Resources Service Management	PRB1291098	Generated PDF attachments from life cycle events are not named correctly when document is signed
Human Resources Service Management	PRB1267844	Failing to set the table width when generating PDF
Human Resources Service Management	PRB1255221	Business rule "Restrict query" on table Bank Account sn_hr_core_profile_bank_account contains reference to field that does not exist
Human Resources	PRB1255775	The getByFormat method for GlideDate returns the incorrect year with certain combinations of formats and dates

Problem category	Number	Short description
Service Management		
Human Resources Service Management	PRB1247565	After deactivating HR Templates, an inactive HR Template was applied
Human Resources Service Management	PRB1280230	The show_hr_profile UI macro can unnecessarily query many records
Human Resources Service Management	PRB1194697	Regular expression errors occur when generating PDF document
Human Resources Service Management	PRB1241480	HR template not getting applied to the HR task
Human Resources Service Management	PRB1270966	Rendering issue with nested bullet points in PDFs generated from HR Document Templates
Human Resources Service Management	PRB1272407	Issue displaying HR cases with respect to user's time-zone (bulk upload)
Human Resources Service Management	PRB1251195	"HR My Task" widget does not display HR Tasks in French in HR Service Portal
Human Resources Service Management	PRB1265783	Lifecycle Events - Only 10 Activity Sets can run at a time
Human Resources Service Management	PRB1246785	'New' button on the HR cases list does not work with V3 list
Import / Export	PRB1185848	Failed data import via MID Server finishes with a completion code of Success
Import / Export	PRB1236439	Easy import hangs when run by a non-admin user with authority to run it
Import / Export	PRB1115026	XML Data Sources fail with an absolute XPath if the XML has a DOCTYPE element
Import / Export	PRB1259949	JDBC Probes become deadlocked when loading Driver classes
Import / Export	PRB1271526	Data sources sharing an import set table could incorrectly execute the wrong transformation and import repeat row numbers
Import / Export	PRB1257283	Cannot change default port numbers for imports via "FTPS (Implicit SSL)", and "FTPS (Implicit TLS)" data source options

Problem category	Number	Short description
Import / Export	PRB1275909	Original currency and amount not preserved when exported to Excel if the currency symbol is longer than 1 character
Import / Export	PRB1253023	Data source with CSV format "Use last run datetime" set to true but empty, the "Last run database field" fails with a syntax error
Import / Export	PRB1245581	REST API calls intermittently fail due to the error: "Could not initialize class com.glide.rest.service.impset.ImportSetAPIService"
Import / Export	PRB1196790	NullPointerException when sending SOAP request with a non-existent field and the com.glide.import_set.column_resize property set to true
Import / Export	PRB1262316	Import Set processor returns 200 response for failed request
Incident Alert Management	PRB1206680	In Incident Alert Management, glide.notifynow.frequent_participant_count does not honor default or set maximum value
Incident Management	PRB1272335	MIM workbench tabs overlap when the compact user interface is enabled
Incident Management	PRB1246627	When using Major Incident Workbench with "Compact the user interface" turned on, the M.I. workbench text does not display properly
Incident Management	PRB1279978	Client Script (BP) "Hide Choice - Close" activates to true on converted, upgraded instances
Incident Management	PRB1244271	Fulfiller count on incident management is calculating incorrectly
Incident Management	PRB1259956	The OOB Resolve UI Action on the Incident table calls "current.resolved_by = gs.getUserID()" after current.update(), so it is never executed
Incident Management	PRB1260186	Duplicate communication plans and tasks are attached to a Major incident that is created from a candidate
Incident Management	PRB1274300	'Actions Taken' field in Incident is visible to ESS users
Incident Management	PRB1254189	Major Incident Management Workbench: Compose Email button does not load the Email Client if Quick Message/ Client Canned Message has a \${variable} in the body
Incident Management	PRB1247632	Changing the state of an incident back to "New" or "In Progress" cannot clear the mandatory state of the Additional comments field
Incident Management	PRB1275080	Description field is absent from the incident form after upgrade
Incident Management	PRB1253606	Data policies for incident state "On Hold" fire when trying to use the "Canceled" state
Incident Management	PRB1241943	Location does not get populated on the Incident form when the caller is defaulted
IntegrationHub	PRB1271965	Saving response as an attachment is not working
IntegrationHub	PRB1284367	Selecting http method as "Delete," the request body gets grayed out, however, some REST APIs require JSON in the request Body
Integrations	PRB1253549	The hr_integration_job_status Email Script is adding CC values incorrectly



Problem category	Number	Short description
Integrations	PRB1255575	Import into sys_user ignores the dry run parameter
IT Asset Management	PRB1270245	Deleting a core_company record clears out the mandatory reference field in the publisher table
IT Asset Management	PRB1239781	After an upgrade, an inactive choice in the incident.state table is reactivated
IT Asset Management	PRB1288250	Asset tag field is mandatory on the Receive Purchase Order page, but alm_license is not
IT Asset Management	PRB1288182	Edition field is not populated for Acrobat installations discovered through SCCM
IT Asset Management	PRB1245815	Performance Analytics widgets on SAM dashboards take a long time to load
IT Business Management	PRB1243171	All fields do not translate on Resource reports
IT Operations Management	PRB1262901	Identification Engine: createorUpdate API returns sysId even if the insert failed due to a data policy or a business rule
Knowledge Management	PRB1040201	Imported KB article table formatting issue
Knowledge Management	PRB934595	Unable to write in the field under 'Title' on the 'Ask question' page (social_qa)
Knowledge Management	PRB1165801	Not able to view the articles when page is made public and Advanced installer and Customer service portals are active
Knowledge Management	PRB1284491	User Criteria that is not used by a knowledge base triggers on the first article opened in the session
Knowledge Management	PRB1235388	The kb_view iframe is not resized correctly in CMS when an article has attachments listed in more than two lines
Knowledge Management	PRB1273253	Knowledge articles with 'snc_external' role do not appear in context search result for snc_external users
Knowledge Management	PRB1164704	When a knowledge base has > 100 articles, search results in Knowledge Management Service Portal are rounded to the previous number divisible by 10
Knowledge Management	PRB1174881	The email message has the relative URL for the 'View Question' link, which is not clickable
Knowledge Management	PRB1249588	Knowledge Query Facet widget does not translate to desired language
Knowledge Management	PRB1269078	When checking out a published article, the new draft article has a published date
Knowledge Management	PRB1244907	Article versioning in template-based article is not copying attachments on check out of the article
Knowledge Management	PRB1256508	Newly created knowledge base does not auto-subscribe the owner
Knowledge Management	PRB1187265	Missing translation in the Knowledge search result page
Knowledge Management	PRB1206285	"Disable suggesting" and "Disable commenting" for knowledge article are not changing when moving article from one knowledge base to another.
Knowledge Management	PRB1242405	After clicking a link in knowledge base search results, cannot go back to the results

Problem category	Number	Short description
Knowledge Management	PRB1244399	Hyperlinks in imported articles link the entire paragraph instead of the specific word
Knowledge Management	PRB1149968	The knowledgeExists variable is always false, even when set to true
Knowledge Management	PRB1174231	Featured content is not working on Knowledge homepage
Knowledge Management	PRB1290357	Navigation to Knowledge Homepage takes 15 to 20 seconds when there are many user criteria records
Knowledge Management	PRB1114453	Poor scrolling behavior for KB articles on iOS native apps and iOS Safari
Knowledge Management	PRB1273645	Searching in the knowledge base causes the page to load midway or at the bottom of the list
Knowledge Management	PRB1274834	Behavior of Knowledge subscription property "glide.knowman.enable_km_subscription.roles is incorrect
Knowledge Management	PRB1253223	Knowledge versioning: Tags do not copy over to the new version of a knowledge article after activating the knowledge advanced plugin
Knowledge Management	PRB1254243	Sorting Knowledge articles by view count is not working as expected
Knowledge Management	PRB1246579	Image inside a shape object is missing in the article created by Importing Docx file
Knowledge Management	PRB1184895	The JavaScript error in IE11 causes advanced knowledge search to fail
Knowledge Management	PRB1240289	Non-admin users are not able to see "Most Useful" and "Most Viewed" knowledge articles
Knowledge Management	PRB1291236	"View article" in the standard operating procedure knowledge article is not displaying text field
Knowledge Management	PRB1260249	If there are more than 17 categories in a knowledge base, the CMS page /ess/knowledge_splash.do will not display more than 17 categories
Knowledge Management	PRB1252350	The glide.knowman.search.apply_acls = true causes infinite scroll to fail on \$knowledge.do
Knowledge Management	PRB1267962	The help pop-up field "Lookup using picker" is not translated into other languages and only displays in English
Knowledge Management	PRB1255889	Incorrect behavior in the knowledge search from the homepage when clearing text string without searching for it
Knowledge Management	PRB1260109	Missing translation in the Knowledge search result page
Knowledge Management	PRB743858	The image size is lost when a word document is imported to the knowledge base
Knowledge Management	PRB1075224	The "Display owner info message" client script contains a logic error and is not working
Knowledge Management	PRB1260097	Knowledge article Approval for publishing remains in "Requested" instead of "Cancelled" state when the article is Recalled
Knowledge Management	PRB1189173	IE11: Check box size is not consistent on search page when nested category is present or category length is long in \$knowledge

Problem category	Number	Short description
Knowledge Management	PRB1235592	If only the UI15 plugin is enabled, 'Post a question' does not give the form
Knowledge Management	PRB759649	'Topic' field (v2) value is showing on the task relations formatter in Knowledge v3
Knowledge Management	PRB1259169	Content Management System: Iframe containing "kb_home.do" is collapsing the Iframe by removing the width attribute
Knowledge Management	PRB1288839	In Case or Incident form, template content is not copied when attaching an article with a template type
Knowledge Management	PRB1254602	KB Versioning: Script Include KBVersioningSNC is missing the method definition for _isApprover
Knowledge Management	PRB1258242	Knowledge portal is not showing the right article count for knowledge bases
Language and Translations	PRB867258	Invalid entries in sys_choice language .xls files
Language and Translations	PRB1244863	Some of Catalog OOB business rules and client scripts are not translated
Language and Translations	PRB1244887	The title in UI Action: View Survey URL and description_row for UI Page:survey_publish_url are not translated
Language and Translations	PRB613412	Unique key violation when attempting to insert translated records in sys_ui_message
Language and Translations	PRB1244883	Message in Business Rule: Workflow Release Lock is not translated
Language and Translations	PRB1244880	InfoMessages in Business Rule: Service Portal Outage Events are not translated
List v2	PRB628939	Dot-walked choice list does not return any searches if done from list search
List v2	PRB624507	Paging through a list of records scrolls to bottom of each page rather than top
List v2	PRB792621	Duration column in the list view (both v2 and v3) does not display seconds
List v3	PRB1104469	Reference picker is not opening properly
Lists	PRB1236488	listEditRefQualTag variable used as a member API for getListControl() throws an error
Lists	PRB1244425	Slushbucket: [+] is not displayed for reference fields in Available choices reference fields on initial load
Lists	PRB724412	Reference lookup list does not respect table level "Disable list v3" value and continues to display a flyout modal screen (List v3) instead of a popup (List v2)
Lists	PRB821466	Wildcard % Search term is not honored when List v3 is enabled and glide.ui.goto_use_contains property is set to true
Lists	PRB1159661	Drop down on approvers tab on change form renders differently between Chrome and IE
Lists	PRB1238816	Some variable types do not load values in a list report after refreshing if glide.ui.optimize.lists or glide.ui.list.optimize are set to false

Problem category	Number	Short description
Lists	PRB1245077	RP.isRelatedList() returns invalid result for List Choice UI Actions
Lists	PRB1169319	Embedded list issue when using IE and UI15
Lists	PRB1261905	Related Lists cannot apply saved filters when set to load 'After the Form' or 'On-demand'
Lists	PRB732506	Edit Personal Filters context menu does not work when related lists do not load "With the Form"
Lists	PRB1160608	List v2 edit is not working in IE11
Lists	PRB1181338	Embedding list2_default.xml in a UI formatter causes the second Run button in the condition builder to incorrectly navigate to an empty form
Lists	PRB830103	Cannot clear selected saved filters on related lists
Live Feed	PRB1250287	No longer able to add "About Me" text
Live Feed	PRB1244582	Warnings in system logs: ""fieldsChanged" is not defined" from Live table notification
Managed Documents	PRB1241505	Duplicate number is created for new Managed Document when a document is searched and then users create a new one from the list
MetricBase	PRB1241143	ClassDefNotFound error appears on MetricBase 'Test Connection' with MetricBase HA setup
MID Server	PRB1237206	Issue on sys_script_include within the 'handleError' function
MID Server	PRB996468	Activating the Customer Service plugin causes all MID Servers to go down
MID Server	PRB1247763	Unable to connect to the MID Server JVM after enabling JMX parameters
MID Server	PRB1240174	Users cannot create REST APIs via a MID Server
MID Server	PRB1250502	SNCSSH: SSHCommand probe can hide detailed error information
MID Server	PRB1267339	Discovery probes 'Linux - Hardware Information' and 'Linux - Memory Modules' can cause a hung sudo process on the target host if sudoers iolog is enabled
MID Server	PRB1249733	MID file synchronizer keeps redownloading files from ecc_agent_script_file in the MID ./script folder although they already exist
MID Server	PRB1268063	When reverifying the Nmap installation, the 'Start-Sleep -s \$retryDelay' in NmapInstallation.ps1 is missing
MID Server	PRB1268960	SNCSSH: Error occurs if the target SSH server sends the 'close' message before sending both EOF and Exit Status message
MID Server	PRB1240295	ecc_queue outputs are occasionally stuck in the Processing state
MID Server	PRB1250031	Windows ADME does not work when there is a \$ in the password
MID Server	PRB1249020	After upgrading to Kingston, com.snc.core.automation.api is not active
MID Server	PRB1235593	MID Servers should not allow multiple MIDs with the same name

Problem category	Number	Short description
MID Server	PRB1160596	NullPointerException in SSHCommand when errors occur while building sudo commands
MID Server	PRB1238588	Importing an incompatible credential XML file may cause MID Servers to lose access to all credentials (NullPointerException MIDServerInfoAccessor)
MID Server	PRB648444	Update Tanuki Java Service Wrapper licenses for 'MID' and 'MID Upgrade' distribution
MID Server	PRB1253581	SNCSH: SCPCommand probe and SCP import can leak an SSH channel object on source host connection
Mobile	PRB1264425	Reference variable on record producer does not respond on Mobile UI when there is a Hebrew value in it
NotifyNow	PRB923484	"source" field is not available for notify_call records created from Notify Workflow Activity: Call
NotifyNow	PRB1253516	Send SMS activity corrupts mail script context with workflow.scratchpad variables
NotifyNow	PRB1258944	Outbound connections to Twilio through NotifyNow API do not honor glide.http.proxy_host
On-call Scheduling	PRB1290525	The Roster Schedule Span defined by a user schedule in a different time zone from the rotation is not correctly factored when it is repeated
On-call Scheduling	PRB956455	The Rotation Schedule shows empty or disappears from the 'Members' related list on a Roster record if the rotation interval is greater than 4 weeks
On-call Scheduling	PRB1263379	When creating a favorite from the On Call Calendar, all the favorite 'symbols' are displayed as part of the dialog box in black font on the white background
On-call Scheduling	PRB1281229	The daily rotation skips rosters on the Monday to Friday rotation
On-call Scheduling	PRB1247941	The "If - Response received "activity on the On-Call: Assign by Acknowledgement workflow always returns "no"
On-call Scheduling	PRB1264446	When viewing the On-Call Escalations report, there are two dashes in the selected column
On-call Scheduling	PRB1262894	Deleting a span in an on-call calendar causes the page to refresh, but with the first group in the list, not with the group that was selected
On-call Scheduling	PRB1244059	Inconsistent behavior when adding a schedule time-off span
On-call Scheduling	PRB1271727	My Scheduled Reports for on-call does not recognize a date range with the same start and end date
On-call Scheduling	PRB1235329	On-Call Wizard creates a record on the Global table, which triggers workflows on the Global table
On-call Scheduling	PRB1269663	When creating a rotation from a schedule template that contains multiple schedule entries, schedule entry start dates are not maintained
On-call Scheduling	PRB1272060	Increasing the "Get Coverage For" field in a Rota record to a high number is resource-intensive
On-call Scheduling	PRB1263614	Legacy on-call calendar display does not honor the background colors that were selected when the calendars were built

Problem category	Number	Short description
On-call Scheduling	PRB1234195	When editing a Rota, the interval weekly Rotation Start time is being honored even if Daily is selected
On-call Scheduling	PRB1274521	The Schedule report takes a long time to calculate when a user is a member of several large groups
On-call Scheduling	PRB1277730	On-call schedule performance degrades when roster_schedule_spans (time off/ coverage) exceed 1000 records
On-call Scheduling	PRB1069037	The Manage Rota pop-up on the On-call calendar page (\$oc.do) does not scale on mobile devices
On-call Scheduling	PRB1091181	Selecting a roster in the Manage Rota module selects all rosters. For example, when trying to change the "Shift End" date for one roster, all rosters are selected
Open Database Connectivity (ODBC)	PRB1110116	ODBC driver returns non-integer fields as NTEXT where varchar is expected
Orchestration	PRB1258233	Getting java.util.ConcurrentModificationException when running JDBC custom activities
Orchestration	PRB1204628	Orchestration Workflows kick off unexpectedly due to wrong workflow condition
Orchestration	PRB1239638	The input variables display on the activity "Test Inputs" dialog does not display all inputs
Orchestration	PRB1246289	Maximum payload size above 999 defaults to 64KB in JDBC Activity Designer
Outbound Messaging	PRB1028554	Rest Message .saveResponseBodyAsAttachment function does not work when proxy is involved
Outbound Messaging	PRB1253705	"Auto-generate variables" UI action does not generate variables when variables have a '-' (dash)
Outbound Messaging	PRB1242589	Partially encrypted SOAP Payload via MID Server is not working
Outbound Messaging	PRB1260827	HTTP 204 No Content responses to Outbound REST cause a Null Pointer Exception (NPE) when Outbound HTTP Logging set to 'All'
Outbound Messaging	PRB881493	Error: Unsupported OAuth grant type 'Client Credentials'. - when 'Get OAuth Token' is clicked
Outbound Messaging	PRB1234876	Selecting "Generate sample SOAP messages" fails with java.lang.NoClassDefFoundError: junit/framework/ComparisonFailure
Password Reset Application	PRB1262660	Formatting for Danish mobile phone numbers gets prefixed with the US international code, failing E.164 compliance
Password Reset Application	PRB1249894	Password Reset Device enrollment codes and verification codes are stripped when sending SMS to the registered device
Password Reset Application	PRB1259511	The URL does not work after 10 minutes whereas it is supposed to be valid for 12 hours according to the email sent by Password Reset
Password Reset Application	PRB1239469	Password Reset Windows Application crashes after verification with AD credential store
Patterns	PRB1282786	Issues occur with load balancers because the identification pattern continues to fail

Problem category	Number	Short description
Performance Analytics	PRB1239675	Change arrows should be based on the absolute change, not on the change percentage
Performance Analytics	PRB725263	The Column Chart widget with the 'Previous period chart' box checked does not render the first and the last bar available for a full year period
Performance Analytics	PRB1106523	Using multiple reports as interactive filters can make it difficult to reset a dashboard
Performance Analytics	PRB1260018	Show error/warning in PA data collection job logs to identify if collection is not running for some breakdown elements
Performance Analytics	PRB1240631	If an indicator has no scores, the score value does not match with the total values of scores from breakdowns for the formula indicators
Performance Analytics	PRB1202996	The score migration process fails on the scores table
Performance Analytics	PRB1272505	When the range of periods is years, if there is no score for the last month of the previous period, hovering over the bar will display the wrong month for the first year
Performance Analytics	PRB1245778	Remove noCache from HTML template
Performance Analytics	PRB1279962	Add ability to disable forecast per indicators
Performance Analytics	PRB1240587	The PA indicator condition 'is same' does not correctly collect data for date fields
Performance Analytics	PRB1242912	With List V3 enabled, the pa_configuration_generations table does not show the 'New' button on the list menu or the 'Generate' button on the form
Performance Analytics	PRB1291458	When collecting text analytics for several fields to analyze, PA job collection fails with the error message "Sparse storage format has one field, sys_id"
Performance Analytics	PRB1260526	HR scoped app content packs for PA are broken
Performance Analytics	PRB1250729	Repetitive columns break the widget layout on the right hand side for the Indicator row when the breakdown scorecard widget has 'Show Indicator,' 'Change,' and 'Gap' set to true
Performance Analytics	PRB1240153	Score and default Time Series are not displayed on PA Scorecards when the Customer Service plugin com.sn_customerservice is activated and an OpenFrame is configured with a URL which does not have the same origin as the instance
Performance Analytics	PRB1280373	Breakdowns are still shown in the breakdown widget filter even if the breakdown is not active
Performance Analytics	PRB1194172	Unable to modify Dashboard Groups with 'pa_admin' users when Domain Separation is enabled
Performance Analytics	PRB1242590	White labels in stacked column charts do not show in IE11
Performance Analytics	PRB1238185	Breakdown widget should be able to follow related breakdowns for every visualization, not only scorecards
Performance Analytics	PRB1169133	Performance Analytics tab renders without taking the breakdown into account

Problem category	Number	Short description
Performance Analytics	PRB1262244	When the \$pa_dashboard.do page is opened outside of nav_to.do, the custom fav icon is not shown in the browser tab
Performance Analytics	PRB1252957	An error on the Knowledge Management dashboard prevents widgets from being displayed
Performance Analytics	PRB712759	The Pivot Scorecard widget displays scores under incorrect objects
Performance Analytics	PRB1236720	New records are created on the breakdown source table during the 'Cloud DB' PA collection job
Performance Analytics	PRB891187	Performance Analytics does not allow the creation of a functioning dashboard in any domains except global
Performance Analytics	PRB1238169	If Time Series with an unsupported function is used as the default time series by one of the indicators, all the PA collections result in errors
Performance Analytics	PRB1245142	Remove redundant server calls when rendering widgets
Performance Analytics	PRB1256877	Issue with breakdown filters, and timeout is not reliable
Performance Analytics	PRB1186632	On Performance Analytics scorecards, it takes a long time to display the score for the selected period
Performance Analytics	PRB1240747	If the aggregation is done on a non-number value, the application always tries to convert them to integers using (GlideAggregate.getIntValue)
Performance Analytics	PRB1282110	While creating a new indicator field, 'new tab name' goes out of position if a bigger value is selected in the 'Put the widgets on a new tab on dashboard' field
Performance Analytics	PRB1201144	Unable to use formula indicators with second level breakdowns as widget indicators
Performance Analytics	PRB1205144	Records tab in detailed score cards shows the error: "Number of rows removed from this list by deletion or Security constraints: 1, and this should be 0"
Performance Analytics	PRB1242513	PA widgets show the message "You do not have access to any breakdown element for the selected breakdown"
Performance Analytics	PRB1242870	Data collectors should support domain separation without the com.glide.domain.msp_extensions plugin
Performance Analytics	PRB961168	A time series chart widget with the 'Previous period chart' and 'Show data label' boxes checked does not show Data labels
Performance Analytics	PRB1264379	The detailed scorecard becomes slow when the selected breakdown contains a large number of elements
Performance Analytics	PRB1252332	On domain separated instances, Performance Analytics Collection Jobs do not use sys_choice Breakdown Elements defined on a parent domain only, and scores are not collected per breakdown element
Performance Analytics	PRB1267941	If there are two or more invalid indicators, the invalid score numbers are not calculated correctly
Performance Analytics	PRB1278641	Interactive Analysis - No option to close the preview of a spotlight group record
Performance Analytics	PRB1283799	When the choice list label for widget visualization for Scorecard is not 'Scorecard' (e.g in French, the breakdown



Problem category	Number	Short description
		widget scorecard is not rendered properly when the visualization picker is enabled)
Performance Analytics	PRB1211079	Unexpected string JSON error message appears in text analytics widget
Performance Analytics	PRB1244046	Instances with a system localization that uses comma as a decimal separator cannot convert numbers correctly in some situations
Performance Analytics	PRB1263130	New dashboard tab is created for a domain if a tab does not exist for that dashboard and when a user attempts to access the dashboard from a different domain than the domain the dashboard is defined
Performance Analytics	PRB1256435	When a node is restarted while a PA collection is running on that node, the original entry in the log for the PA Collection contains two entries
Performance Analytics	PRB1239687	Improve message on PDF output for top x of y elements
Performance Analytics	PRB1186078	NullPointerException errors occur for widgets with a range and an additional indicator with Time Series
Performance Analytics	PRB1279383	Element retrieval is slow for breakdown widgets with many elements
Performance Analytics	PRB1240967	Performance Analytics Linear forecasting gives a global target breach at the incorrect point in time
Performance Analytics	PRB1282051	Unexpected behavior for widgets whose indicators do not have scores
Performance Analytics	PRB1242249	After switching tabs, the detailed scorecard does not refresh date changes
Performance Analytics	PRB1242690	When there is no index, the text widget displays the error "Cannot read property 'start_at' of undefined"
Performance Analytics	PRB1271462	Users who have changed the system property 'glide.sys.date_format' see a message when they click the refresh button
Performance Analytics	PRB1117823	No scores are collected when an automated indicator condition uses variables to query
Performance Analytics	PRB1263915	Characters of the PA indicator description are shown as HTML entities on the dashboard
Performance Statistics and Graphs	PRB1234596	Performance graphs do not load after upgrading to Jakarta
Persistence	PRB1188166	Update set batching does not execute second phase of Bootstrap (TableCreate/Upgrade)
Persistence	PRB1286626	After upgrading to Kingston, the order in which conditions are listed for reports returns a smaller query than the correct result
Persistence	PRB564916	After running a trend report, the breadcrumb and expanded filter do not match when clicked through
Persistence	PRB1271291	Documentation overrides do not persist
Persistence	PRB1236830	Unable to override the Display flag on CMDB.Name once it is set

Problem category	Number	Short description
Persistence	PRB1100877	"BLOB/TEXT column 'correct_answer_template' used in key specification without a key length" when alter storage table asmt_metric
Persistence	PRB1258222	Unnecessary updates during cmdb_ci class change from TPP change
Persistence	PRB1164336	"Unknown column 'cmdb0.maintenance_schedule' in 'on clause'" error when approving change through CAB workbench
Persistence	PRB1267268	Term optimization applies to incorrect fields
Persistence	PRB1187071	When entering Name (41 letters) into Clone Exclude tables, only up to 40 letters could be registered
Persistence	PRB1243178	Performance issues can occur during CI creation or updates
Persistence	PRB1271175	Some aliases break JOIN query and generate ERROR 1064 (42000)
Persistence	PRB1253509	GlideRecord explicit joins on TPP partitioned fields with WHERE conditions on main table can fail with SQL error
Persistence	PRB1246257	The table extending CMDB_CI is missing all parent columns when installing an app that adds fields to CMDB_CI
Persistence	PRB1278292	No matching records are returned when searching for multiple tags using the AND condition
Persistence	PRB1104540	Related list condition with multiple group by conditions, one on a dot walking field, can throw NPE
Persistence	PRB1261173	Clean Temp Files schedule job can clean RowBlock files that are currently in use
Persistence	PRB1254722	Exception "Operand should contain 1 column(s)" when a sub-query has a condition on a TPP partitioned column
Persistence	PRB1281035	Performance issues when using INSTANCEOF for filtering on a table
Persistence	PRB1264049	Application reinstallation issue --- cloned TPP elements appearing in app / update sets
Persistence	PRB1251544	The 'Collect Table Per Hierarchy Stats' can lead to excessive choice cache flushes
Persistence	PRB1240265	"Error Message Syntax Error or Access Rule Violation detected by database (Table '_instancename_2.encryption_configuration' doesn't exist)" occurs sometimes
Persistence	PRB1205143	The optimizer is trying to optimize for the ORDER BY when it is better to optimize for the WHERE clause
Persistence	PRB1285757	The left join optimization generates a StackOverflow error on certain queries
Persistence	PRB718363	Searching in the date field results in the error "ORA-01843: not a valid month"
Persistence	PRB1087112	Rollback shadow tables created during upgrade (name starting with 'sh\$') are not getting dropped by the Clean Expired Rollback Contexts job
Persistence	PRB1237012	Table creation of a CMDB/TPP extension/child table through UI takes longer than it should

Problem category	Number	Short description
Persistence	PRB1154339	Importing XML can cause some records to lose attachments
Persistence	PRB1258912	ATF rollback only rolls back the most recent change to a field
Persistence	PRB1193551	Making changes that corrupt the data dictionary can lead to data loss
Persistence	PRB1267824	Slow response time can occur when the sys_user_presence update is blocked
Persistence	PRB1247537	Dictionary invalidation refactoring is causing undesired side effects
Planned Maintenance Application	PRB1269713	Newly created records are displayed in planned maintenance records when the model does not match
Planned Maintenance Application	PRB1238604	Memory related exception is thrown when there is many maintenance plan records
Platform Performance Monitoring	PRB1239219	'TotalTimeToCloseForClosedINTs' Usage Analytics Count job runs inefficient SQL queries
Platform Security	PRB1241288	Invalid support for the encryption key causes insert /update of the encrypted field set to encryptedContext: null
Platform Security	PRB1203000	ACL cache not flushed after enabling the Explicit Roles plugin on an automated node (run-node-script), resulting in a blank login page
Platform Security	PRB1237560	Upgrades to Jakarta cause the role delegation functionality to break when if using more than 1 group for RoleManagementV2
Platform Security	PRB965992	ATF: Empty step configure popup while adding a test step
Platform Security	PRB1248224	The system property "glide.security.use_explicit_roles" causes the instance to be inaccessible if the Explicit Roles plugin is not active
Platform Security	PRB1200492	The instance security dashboard has glide.xml.entity.whitelist.enabled listed twice under Security Whitelisting
Platform Security	PRB1160234	Role Management V1: Role deletion from groups issue
Policy and Compliance	PRB1250491	When an attestation fails, an issue is not created
Policy and Compliance	PRB1247297	Policy and Compliance does not migrate control test definitions unless they collect supporting data
Policy and Compliance	PRB1148844	While an indicator is collecting supporting data, and a user clicks a button (for example, Save, Update, or the Indicator "i" button) on an associated Indicator task, the user is redirected to a "hello" message
Procurement	PRB1185793	The Stage (Workflow) field is not reflecting the correct value in the list view of a Transfer Order and Transfer Order line for the same stockroom transfers
Procurement	PRB926042	When a software asset is sourced, the resulting Requested Item (RITM) record that is produced becomes stuck in the applicable workflow
Procurement	PRB1261455	The items that were denied approval appear in the source request page, when they should be excluded

Problem category	Number	Short description
Procurement	PRB1259927	Negative values are not permitted when receiving a purchase order
Procurement	PRB1250208	Values in the Unit Cost field on the Receive Purchase Order form are displayed and saved based on the US format and not following the 'glide.system.locale' system property
Procurement	PRB1253671	OOB client script: 'Update Total Cost on cost change' throws an error when calculating proc_po_item.total_cost value
Procurement	PRB1240232	Stockroom is not being populated in the add transfer order for software
Product Catalog	PRB906853	Product Catalog demo data includes duplicate fx_price records, causing unexpected behavior in lists
Profiles and Remediation	PRB1105276	When associate one policy to policy statement, the progress bar on the top hangs
Project Management	PRB1235767	When decisions are created in the demand, they are being copied to the project when the project is created and not moved over to the project
Project Management	PRB1159819	The system property com.snc.project.auto_close_milestones is not working as expected
Project Management	PRB1262081	Planning Console project task disappears when changing Assigned to
Project Management	PRB1262275	While importing projects, sub-projects are deleted from the system
Project Management	PRB1252991	The planning console does not have a "contains" search for 'Assigned to' field in the planning console
Project Management	PRB1245536	Planning Console: Overdue icon differences between Istanbul & Jakarta
Project Management	PRB1281995	The project cost plans do not work for multi-currency
Project Management	PRB1288501	Activating plugins having dependency on Project Management plugin or clearing plugin log and re-installing project management show an error message in plugin logs
Project Management	PRB1262626	Clicking on the "Create Project" link on a demand in the draft state displays an error
Project Management	PRB1251409	Assigning a project task to a group causes an error on the ScrumPPMIntManager in the logs
Project Management	PRB1266155	Client side planning console functional issues
Project Management	PRB1252211	In .mpp file if there is a negative lag time mentioned in the predecessor column, it is not getting calculated properly in the lag time after importing
Project Management	PRB1247759	Updating a planned_task record causes the Recalculate business rule to be triggered, entering a long loop and running the instance low on memory
Project Management	PRB1240812	Error "Cannot change program dates as some projects start before the given program start date" is displayed when changing the program's planned start date manually
Project Management	PRB1199972	Print Projects from Planning Console does not work

Problem category	Number	Short description
Project Management	PRB1287587	When property 'com.snc.project.fire_brs_from_planning_console' is set to true, External Dependencies created on the Planning Console do not update the project dates
Project Management	PRB1288372	Program planned duration is negative
Project Management	PRB1233676	For custom scoped app/teamspace, when users create a template from a project with attachments, the attachments are missing
Project Management	PRB1235533	End date on projects created from demand records is incorrect if the timezone is set to anything more than UTC+8
Project Management	PRB1272320	Project Management Issues
Project Management	PRB1114720	The upgrade history does not show records skipped customization during the upgrade
Project Management	PRB1252204	Date rollups are not working properly for non-project entities
Project Management	PRB1245682	Using current.setAbortAction(true) for a project task causes the planning console to fail
Project Management	PRB1258137	Project Management - issue with project start dates when using a project template
Project Management	PRB1195231	The planned duration is not calculated automatically and the planned end date is changed to a wrong date when creating a pm_project_task record
Project Management	PRB1241044	Changing the view on the planning console redirects to / blank.do page and does not change the view
Project Management	PRB1206187	The project detail screen disappears after a few seconds
Project Management	PRB1236362	Cost (Planned vs Actual) does not work if the fiscal calendar type is period
Project Management	PRB1080756	The currency conversion based on the locale on Project is inconsistent
Project Management	PRB1161375	Program Management - PPM Blitz issues related to the Planning Console
Project Management	PRB1250470	When loading a project, it shows one date and time and switch quickly to another date and time that is 2 seconds behind
Project Management	PRB1265568	The actual duration is copied from the planned duration
Project Management	PRB1268772	Exporting Project with % complete as 100 shows 99 in MSPP
Project Management	PRB1258135	Importing a mpp file with the user name mapped to the assigned to column mapping the incorrect user to the assigned to field
Project Management	PRB1281089	Project Status Report - The Status History Widget does not work when the date format is set as dd-MMM-yy
Project Management	PRB1283913	After the refresh, the system takes users to the beginning of the project schedule and they must scroll down to find their place

Problem category	Number	Short description
Project Management	PRB1290075	Importing projects with many cost plans run a node out of JVM memory
Project Management	PRB1270125	Duplicate tasks are created when a .mpp file is imported to the project table
Project Management	PRB1273527	Importing project tasks changes the project's state to the "Pending" state
Project Management	PRB1248076	Project Status Portal does not show the formatted cost(Budget Cost/Actual Cost)
Project Management	PRB1244729	When actual end date of the program/program task is updated, the planned end date of the program/program task is set to the actual end date
Project Management	PRB1181313	In the planning console print, the weekend notification color and milestone are not displayed
Project Management	PRB1249724	Project task is not editable and it remains in the pending state when the associated change request is closed
Project Management	PRB1251311	Slow OOB business rules 'Recalculate' and 'Process State Change'
Project Management	PRB1258115	Attachments are not getting copied when the user clicks on 'Copy Project' UI Action in Jakarta
Project Management	PRB1272412	When creating a sub project the project tasks are being created with the field Project (sub_tree_root) with the Top Project instead of the SubProject
Project Management	PRB1181305	planning console not getting refreshed, when task is added/deleted/modified from right click edit context menu
Project Management	PRB1266360	Planning console breaks when setting the timezone as "IST" in the sys_user record
Project Management	PRB1256154	Specific project "MS Dynamics: Sales and Marketing" is showing errors while opening the project bench
Project Management	PRB1257214	The copy project functionality on the project table does not work
Project Management	PRB1241324	Resource Workbench failed to load when the Start and End Dates are far apart (~4 years)
Project Management	PRB1205041	When project is copied, the strategies and goals set within the project are not getting copied
Project Management	PRB1270484	Timeline Visualization does not hide the spinning 100% loading progress bar after it loads the records to view
Project Management	PRB1166625	If a resource has a hard allocation September through December, and the project end early and is closed, the hard allocations are not released or canceled
Project Management	PRB1253006	Unable to partially copy project (PRJTASK) from the Planning Console
Project Management	PRB1256753	Decision records (dmn_decision) have only the Rejected state configured as a close state
Project Management	PRB1247837	When closing all project tasks, the project "State" does not change to closed complete
Project Management	PRB1260032	Project Workbench breaks if a child project task is named as <<Task>>

Problem category	Number	Short description
Project Portfolio Management	PRB1280958	Baseline Script Include "AggregationHelper" contains a log statement and a printRollupStructure(rollupStructure) call
Project Portfolio Management	PRB1238454	Updating cost plans updates locked months forecasts
Project Portfolio Management	PRB1067058	Program state is not getting moved to closed complete when its related project and project tasks are moved to closed completed
Project Portfolio Management	PRB832194	Timeline view responsiveness
Project Portfolio Management	PRB1264188	Activating "Project Portfolio Suite with Financials" loads records with reference to non-existent "budget_admin" role
Project Portfolio Management	PRB1246375	Planning Console: The custom column type = boolean breaks the column
Project Portfolio Management	PRB1271657	In the Portfolio Workbench, in the Timeline View, users are unable to scroll to see all selected fields
Record Watcher	PRB1235676	Excessive logout events are generated on pages
Record Watcher	PRB1274737	Record watcher does not detect changes for journal fields if other fields are also updated
Release Management	PRB1274018	When creating a New Product Release under Enterprise Release Management, the Planned End Date does not save correctly
Release Management	PRB1250170	Clicking the UI action in the release record shows an error
Reporting	PRB1102005	Single Score reports can show negative values when using real time updates
Reporting	PRB1170663	Header Footer Templates module link do no link to sys_report_page_hdrftr_list.do
Reporting	PRB1238952	Clicking on the other column of a stacked by bar chart will not drill down properly
Reporting	PRB1248455	In interactive analysis, "sysparm_field_list" parameter to set the fields for report_viewer list widget is ignored
Reporting	PRB1261281	Adding multiple columns to the 'Select Rows' of multi pivot report results in the error "Error processing request: null"
Reporting	PRB1253302	In the report function, UI16 cannot show the "eye" icon when loading the report
Reporting	PRB1257040	Zero's in multi level pivot reports cannot be highlighted using the coloring rule
Reporting	PRB1259449	Single Score is not rendering in the homepage if the query condition contains UTF-8 characters
Reporting	PRB1244010	'Click to Print' for published reports displays only one page
Reporting	PRB1290425	Users cannot see lines or formatting for the report printer friendly version
Reporting	PRB1291022	Recently selected choices under the data source show up as sys_id and not as their name (New UI)
Reporting	PRB1248441	Exporting to PDF fails if users have multilevel pivot with the query condition that includes 'before'
Reporting	PRB1252457	attributes="update_synch" does not exist in sys_report_layer

Problem category	Number	Short description
Reporting	PRB1192920	The interactive filter view causes memory spike
Reporting	PRB1241273	Reporting new UI replaces accents and Japanese characters with unicode
Reporting	PRB1282753	Creating a first report of type bar chart shows a popup to the user twice
Reporting	PRB1238788	The invite panel in dashboards sharing tab is not displaying the complete list of users/roles/groups
Reporting	PRB1275131	The choice field offers different choices with the same label and rows are grouped by this choice field, resulting in the incorrect PDF export
Reporting	PRB1181392	Bubble chart adds two blank rows to the chart
Reporting	PRB1248438	Report never loads with message 'Loading report'
Reporting	PRB1248897	On map reports, two locations with the same city name and different state names point to the same state
Reporting	PRB1257285	Reports included into another report are not sent if the main report is empty
Reporting	PRB1192564	Multilevel pivots with a % in the name of the grouping or in the filter causes the drilldown to not work
Reporting	PRB1240578	Widgets are no longer central aligned after the Jakarta upgrade
Reporting	PRB1234720	List editing is not working as expected on Dashboards
Reporting	PRB1243896	If a report has group-by set to a dot-walked field, when opening the report if users change the group by the condition builder v3 is not working anymore
Reporting	PRB1291270	The new "Create New" Reports page is not showing the correct page label
Reporting	PRB1272758	The exclusion list and default values are not populating for the interactive filter of type choice, when the choice table is defined for that field
Reporting	PRB923064	Adding columns fails in the "Edit reports" when users add extended fields
Reporting	PRB1238018	Calendar report entries are overlapped and label is obscured
Reporting	PRB1252379	Unexpected authentication appears in the homepage when using interactive filters
Reporting	PRB1256887	Homepages/dashboards with a "\" in the name cause the add to dashboard to break
Reporting	PRB1247633	'insert a new row' is displayed twice when the list edit inserts row = true
Reporting	PRB1189433	Cannot use the ampersand (&) in axis labels in reports
Reporting	PRB1241995	"Trend by" configuration is not saved on datasets in the Jakarta new UI reporting
Reporting	PRB1272423	Labels on pie charts disappear when query results return 520 records or more (due to more than 8 groups)
Reporting	PRB1272748	Max Number of groups and show other do not work for Trend reports with a Group By field selected



Problem category	Number	Short description
Reporting	PRB1238361	Drill down into the list on the Report widget does not redirect users to the Service Portal
Reporting	PRB1184765	A pop-up shows up when creating a new report from the Reports list
Reporting	PRB1240032	The single score report shows an error when the result number is 0
Reporting	PRB1284349	The Iceland map is missing in the reporting solution and the Europe map does not have all conditions for all countries
Reporting	PRB1241972	The translation for percent, total and totals can be stuck in a single language for export to PDF of reports
Reporting	PRB1287812	Unable to select a (scoped) database view in the report module
Reporting	PRB1290342	Slowness on the dashboard when applying the filters
Reporting	PRB610473	In list reports, URL column links break when exporting to PDF if the text goes beyond one line
Reporting	PRB1271506	Exporting an image or PDF resulting in an incorrect report for the child dataset
Reporting	PRB1236573	Chart size "small" reports are truncated on IE using the new report UI
Reporting	PRB1237244	Breakdown selection duplicates across all dashboards sharing the same breakdown source
Reporting	PRB1275086	Multi Pivot reports cannot be exported to PDF from the web UI if the report title contains "&"
Reporting	PRB1277117	Published Report: In the print friendly mode, appending '&sysparm_media=print' to the URL of a published report adds a useless bookmark form to the page
Reporting	PRB1239524	New UI display for the sys_report table does not reflect the Aggregate field stored in the report record
Reporting	PRB1249982	List calculations errors occur on reports
Reporting	PRB1250451	Errors in report builder can prevent adding a report to a dashboard
Reporting	PRB1287030	Multiple reports on Content Management==>Page shows "Loading Report" on the first report and that report never loads
Reporting	PRB1273097	When using a sumfield on a multiple datasets that is larger than 40 characters, it causes the report to error out
Reporting	PRB1275426	When users use dot walk fields in the multi-Level pivot table, "Max number of groups" is not working at the number of limits
Reporting	PRB1177784	Having multiple rows on a Multilevel Pivot causes total rows to be misaligned if data display value is not unique
Reporting	PRB1261351	Count returns 0 when a secondary dataset is added to a bar report when string field Group By contains double quote marks
Reporting	PRB1254896	Emails are not sent from a scheduled report when the report has errors like com.glideapp.report.charting_v2.datagen.pivot.TooManyCellsException

Problem category	Number	Short description
Reporting	PRB1245395	Cascading Interactive Filter name is not saved fully and gets truncated after 80 characters
Reporting	PRB1246069	Reports Search bar does not work when the property glide.ui.js_includes is set to false
Reporting	PRB1247204	X- Y axis Labels are overlapping with report chart when showing report in Hebrew language
Reporting	PRB1281558	The display grid does not reset when the chart type is changed and updated for an existing report that has the display grid set
Reporting	PRB1201559	Clicking on "Update" in report editor does not take you to Reports homepage
Reporting	PRB1210847	Users provided with 'report admin' roles are unable to select the color palette modifications on reports
Reporting	PRB1236505	Dial widgets do not resize properly when using the quick layout on the dashboard
Reporting	PRB1272023	Aggregation field is not retained after reloading a saved report
Reporting	PRB1237598	Recent tables show a null label on db view tables for ITIL users with the report_admin role when saving from the report designer
Reporting	PRB1259165	"Ctrl + Click" does not open report bars in new tab in the browser, from report designer and from dashboards (relevant for Windows clients)
Resource Management	PRB1209215	The Resource Workbench does not show the capacity trend for the Monthly timescale
Resource Management	PRB1288516	My calendar module is showing 404 for ITIL users
Resource Management	PRB1251460	When using the 'Specific members' preference, 'Copy Resource Plan' populates a member from the incorrect assignment group
Resource Management	PRB1250082	Dictionary override (short_description) no longer honored in Resource report
Resource Management	PRB1261229	The Extend Resource Plan UI action on the resource plan does not work as expected if date format is changed from yyyy-MM-dd.to MM-dd-yyyy
Resource Management	PRB1241860	When changing the Start Date on a Demand, the resource plan's Start Date does not get updated if the time format is yyyy-MMM-dd
Resource Management	PRB1237192	When changes are made in an allocation details resource report, the changes are not reflected when the report is run again
Resource Management	PRB1239707	An error occurs when the user submits a time off request and resource allocation runs
Resource Management	PRB1281701	Time cards do not always update the resource plan's actual hours
Resource Management	PRB1267083	Task reference on Resource aggregates is not updated when demands are converted to projects
Resource Management	PRB1246086	Cost plan numbers are not updated correctly when canceling an 'allocated' resource plan; when an 'allocated' resource plan is removed and the cost is updated, the costs do not sync

Problem category	Number	Short description
Resource Management	PRB1238843	The Capacity value in Resource Reports is not updated after changing an event in a user calendar type to a non-excluded type
Resource Management	PRB1250607	Canceling a resource plan does not update cost plans
Resource Management	PRB1247989	When a group resource plan is created, the 'Specific Members' field is populated, but if the group is changed later, the Members list is not updated
Risk Management	PRB1155186	Risk SLEs and ALEs currency should be consistent
Scheduled Job Processing	PRB1234854	Schedule worker can hold the same connection for hours if there are many jobs in the queue
Scheduled Job Processing	PRB1239033	When running 'Execute Now' on a job, the thread can get stuck on GlideDateTime.addDuration
Schedules	PRB1190018	Deleting/updating spans need extra manual refresh
Schedules	PRB1250221	Issues occur with the maintenance schedule in the Change Management
Schedules	PRB1278246	The height of the Dialog Modal is small when clicked on one of the Change Ticket from Schedule Calendar after scrolling
Security Access Control Lists	PRB1196670	Elevated privilege roles created through an update set are not visible to the assigned user until the cache flush is done manually
Security Access Control Lists	PRB1275556	ITIL users are no longer able to update the sc_task.state field
Security Access Control Lists	PRB1253695	Admins will see security constraints for read-only protection policy after the conversion
Security Applications	PRB1247254	When observables are added, the correct type should be detected
Security Incident Response	PRB1249754	In workflows that set the security incident state to Review, PIR assessments are triggered, which causes the number of assessment questions to aggregate every time a new security incident is created
Security Incident Response	PRB1246614	When glide.ui.escape_text is set to "false," the Security Incident form does not load
Security Incident Response	PRB1236606	Users with the sn_si.knowledge_admin role cannot create new runbooks
Security Incident Response	PRB1255104	After the Security Incident Response plugin is activated, the Closed, Closed by & Draft KB Task table columns are appearing under Security Incident Response, instead of global
Security Incident Response	PRB720734	The Update Risk Score business rule causes multiple workflow contexts to be triggered
Security Incident Response	PRB1235615	Users with no assigned security incident role (sn_si.read or sn_si.special_access) see a blank State field in security incident tasks assigned to them
Security Incident Response	PRB1042031	The Threat Intelligence plugin related issue
Security Incident Response	PRB1251462	When the Qualys integration import fails, errors do not appear in the Vulnerability Integration Runs table

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Server Side Scripting	PRB1242192	In Jakarta, the incident.assigned.to.group event is not fired when an incident is created
Server Side Scripting	PRB1199772	The global scope script include members which do not use the prototype.js "Class.create" mechanism cannot be called from app scopes
Service Analytics	PRB1272901	Jelly is complaining about missing files when the com.snc.sa.metric plugin is not enabled
Service Analytics	PRB1245841	Change how CacheManager is used for sa_metric_schema_definition
Service Catalog	PRB1239883	Shopping cart summary values are incorrectly transformed by gs.getMessage()
Service Catalog	PRB1278467	Label variables are not supported in ATF
Service Catalog	PRB1240229	Unable to set values for variables of type Select or Yes/No through a catalog client script on the RITM and Task pages.
Service Catalog	PRB1279353	Estimated Delivery Date shows '1970-01-01' instead of "--"(blank) when the due_date is set to blank during insertion and update from a business rule
Service Catalog	PRB1194586	g_form.clearValue on any variable triggers an onChange of that field
Service Catalog	PRB1244428	When used in an order guide, variable values are not retained if it has a reference qualifier and is depending on other variable values
Service Catalog	PRB1271634	When "use cart layout" is not selected on an order guide, "this item" is not translated to any language
Service Catalog	PRB1248635	Using a client script to make the list collector (non-glide) variable mandatory throws browser error and blocks further g_form actions on the page
Service Catalog	PRB1266947	Issue with cloning request: Bulk request submission is no longer working
Service Catalog	PRB1269113	After setting the read role on a catalog item variable to a specific group, when a user orders that item the variable does not appear
Service Catalog	PRB1188106	UI Policies cannot build conditions on a list collector variable with attribute set to 'glide_list'. The reference list lookup window does not open to select a value
Service Catalog	PRB1279349	The catalog property to control ability to clone requests to users with a specific role was deprecated when sc_layout was enabled
Service Catalog	PRB1240363	Validate Variable Values does not work when using output from previous steps
Service Catalog	PRB1242442	Reference qualifier on the look-up select box does not work on the variable editor upon loading the form
Service Catalog	PRB1235160	Since Jakarta, the Variable Editor breaks a form if the record had a change in class since being created by a Record Producer with variables
Service Catalog	PRB1235553	Check box variable does not get ticked when set to read-only from a Catalog Client Script
Service Catalog	PRB1271940	Variables in record producer extend to fit the page instead of being sized properly

Problem category	Number	Short description
Service Catalog	PRB1275566	Clearing the value of a reference variable via <code>g_form.clearValue</code> does not allow it to pass validation: "The following fields contain invalid text:"
Service Catalog	PRB1276589	Using referencing qualifier on lookup select box is performing slowly after upgrade to Kingston
Service Catalog	PRB1249745	Using the 'GlideappCalculationHelper' API to add an item to an existing Request adds the item to the cart but does not remove it
Service Catalog	PRB1264457	A reference-type item variable with reference qualifier does not work in the condition builder
Service Catalog	PRB1280512	Additional items are getting attached to the parent request when trying to check out the order guide items
Service Catalog	PRB1201267	ATF on record producers fails on the step Variable State Validation if the fields in the forms are controlled by UI policies
Service Catalog	PRB1243189	"Available for" restrictions on catalog items are not enforced in order guides
Service Catalog	PRB1291018	Catalog task cannot be saved or closed because the mandatory fields checks fail
Service Catalog	PRB1089977	On Call Scheduling > My Group Schedules wizard banner violates 1.3.1 Info and Relationships Level A WCAG guideline
Service Catalog	PRB1272502	"See more" button on the Service Portal Catalog is not working correctly
Service Catalog	PRB1250076	Calls to the <code>sn_sc</code> (Service Catalog API) to add items to cart generate warning messages and do not return pricing information correctly
Service Catalog	PRB1254824	Variable in the <code>sc_req_item</code> is shown differently in Japanese
Service Catalog	PRB1255600	JavaScript console error occurs when viewing RITM or TASK catalog records with variables for which the user does not have read roles permission
Service Catalog	PRB1247082	Reference qualifier condition is not honored for the Lookup select box when the table has multiple values with same Lookup field
Service Catalog	PRB1189863	On order guides, subtotal reverts to base price after updating the quantity, continuing the order guide, then returning to the tab where users changed the quantity
Service Catalog	PRB1199775	The Item field on the Requested Item form shows irrelevant items in the auto-suggestion list
Service Catalog	PRB1241425	Back button functionality is not working as expected
Service Catalog	PRB1271789	The 'sp-variable-editor' widget uses the latest variables to show requested item data, not the variables from when the item was ordered
Service Catalog	PRB1236734	Catalog UI Policy will not hide a container as expected after revealing it
Service Catalog	PRB1267089	The Reference popup icon displays for Catalog items in Service Catalog for ESS users with an Open Record button that goes to an empty form
Service Catalog	PRB1244791	Changing choice list configuration of multiple choice variables breaks existing RITMs

Problem category	Number	Short description
Service Catalog	PRB1255587	JavaScript error with use of <code>g_form.getEditableFields()</code> on legacy catalog forms
Service Catalog	PRB1259387	CartJS.orderNow and other functions to submit orders generate errors
Service Catalog	PRB1259575	An Image in a UI Macro does not take up 100% width in order guides, but it does take up 100% width in catalog items
Service Catalog	PRB1285111	The <code>g_form.getElement</code> is returning as undefined in Service Catalog
Service Catalog	PRB1236310	In Jakarta, Cart function does not check for an invalid item and creates RITM without any valid catalog item
Service Catalog	PRB1274235	Advanced reference qualifiers on a Reference variable do not work when Checkbox is present in a wizard
Service Catalog	PRB1256482	The filter condition for list collectors in rule guides shows only 'is', 'is not', and 'is anything'
Service Catalog	PRB1258116	Unable to clear the value in List Collector variable
Service Catalog	PRB1259274	Catalog onload/onchange client script does not hide macro variables type
Service Catalog	PRB1272413	Admin home categories are not hidden when accessed from a catalog item variable in Service Portal
Service Catalog	PRB1147691	After clicking "Add to Cart" in the Service Catalog "Order this Item" widget, the tooltip style changes in the "Shopping Cart" widget
Service Catalog	PRB1238352	"Requested For" is not working as expected when trying to order items from a Bundle
Service Catalog	PRB1274642	<code>g_form.getValue("&lt;id&gt;")</code> for multiple-choice variable returns empty for users without the write role
Service Catalog	PRB1172811	Searchable choice on catalog page is not working correctly when using it with the <code>ref_qual_elements</code> attribute
Service Catalog	PRB1260647	508 Compliance issues with form fields on catalog Item that are missing a valid label
Service Catalog	PRB1249310	Changing the title of a category is not updating the Service Catalog and Service Portal pages unless the cache is cleared
Service Catalog	PRB1252127	<code>g_form.setValue('ref_var_name', '', '');</code> does not clear the <code>sys_id</code> when passed an empty value in Service Catalog, <code>three(3)</code> parameter <code>setValue</code> API
Service Catalog	PRB1252674	Using a catalog client script to clear a selected button on a multiple choice field does not completely clear the selection or reset the mandatory flag
Service Catalog	PRB1245406	Delegates who are end users cannot access the approvals of users they are delegates for
Service Catalog	PRB1256170	The variables of type "Multiple Choice" and "Lookup Multiple Choice" in Kingston are not working the same way as in Jakarta.
Service Catalog	PRB1259553	When using a Catalog Order Wizard panel, if the catalog item has input fields to select, the 'Changes you made may not be saved. Stay/Leave' alert is shown continuing to the next page
Service Catalog	PRB1259816	Issue with non-visible mandatory variables

Problem category	Number	Short description
Service Catalog	PRB1239697	OnChange fired multiple times on a list collector variable configured as glide_list
Service Catalog	PRB1240968	Read-only choice fields on catalog shows dropdown values
Service Catalog	PRB652410	Close Task UI action displays on pending catalog tasks
Service Catalog	PRB1272741	On RITM page, the UI policy to make the table variable (multi-row variable set) mandatory/hide/readonly is not working
Service Catalog	PRB909763	Hovering over the preview icon for a record on a report on a homepage causes the homepage UI to expand by a few millimeters causing the cursor to move position so that is not directly not over the 'i' preview icon
Service Catalog	PRB1248987	When glide.expert.checkout.twostep is true, editing the shopping cart order causes the loss of the association to the project task where the request was created.
Service Catalog	PRB1249697	The "Items Added After Request Approved" business rule is overwhelming a method needed in the "Cascade Request Approval to Request Item" business rule
Service Catalog	PRB1249978	Using a lookup select box with a reference qualifier dependent on an inactive lookup select box removes the variable from the RITM.
Service Catalog	PRB1253429	Not able to update the RITM/Task tickets even after providing the value in mandatory radio button variables
Service Catalog	PRB1254151	g_form.addOption for Select type variable does not work as expected
Service Catalog	PRB1254710	When a list collector or a reference variable is on a catalog item, an error/popup appears
Service Catalog	PRB1244877	The OOB business rule "Reset Binding" is not translated
Service Catalog	PRB1283775	The GET method does not return the "none" key in the REST response for the Catalog API
Service Catalog	PRB1241681	OnChange fired for list collector variable (no glide_list) when the value from the Available/Selected list is selected for movement
Service Catalog	PRB1287663	Catalog Items with 'Lookup Recurring Price' selected but no 'Lookup Price Field' value selected do not display the Price under Order Now in Service Portal
Service Catalog	PRB1234171	The variable attribute 'ref_ac_columns_search=true' does not work in tasks created by the 'Catalog Task' activity in a workflow
Service Catalog	PRB1234652	Unable to attach an image when clicking on the Insert/Edit image option on the HTML variable in a record producer
Service Catalog	PRB710522	Task variables included in a list report display no data
Service Catalog	PRB717535	Helsinki: "Create Request" UI action does not populate the Parent field value in the Request record for Record Producer type Catalog Items
Service Catalog	PRB1248974	The Reference magnifier button is hidden when the page containing a variable of type "List collector" is resized
Service Catalog	PRB1261761	Catalog UI policies and client scripts are not working on the variable editor of RequestedItem
Service Catalog	PRB1262090	508 standards issues with Web: Section Headings

Problem category	Number	Short description
Service Catalog	PRB1250356	Search results miss the breadcrumbs displayed beneath the "preview" option
Service Catalog	PRB1254024	Radio button is not honoring the read-only attribute for IE and Firefox
Service Catalog Item Designer	PRB1256028	Existing question types, as well as newly created ones, do not allow editing of the order in Item Designer > Question Types
Service Catalog Item Designer	PRB1253025	When users make a question inactive in question types which has pre-configured questions, the questions are still appearing while configuring through item designer
Service Catalog: Service Portal Widgets	PRB1240728	A user with no role is unable to add comments to an RITM requested
Service Catalog: Service Portal Widgets	PRB1182292	HTML tags in are shown with Label variables within Service Portal, but not in other labels
Service Catalog: Service Portal Widgets	PRB1260994	When an order guide with a record producer is order from the Service Portal, it created a REQ record and not the RITM record
Service Catalog: Service Portal Widgets	PRB1278454	User without the write role to a variable cannot edit the variable value in the shopping cart in Service Portal
Service Catalog: Service Portal Widgets	PRB1235736	When a Catalog Item with Date Time variable is "Saved" through the Cart Edit Button, the DateTime variable value changes unexpectedly
Service Catalog: Service Portal Widgets	PRB856149	Containers with assigned read roles stop the variables from rendering and causes JavaScript console errors for Service Portal users who do not meet the role required
Service Catalog: Service Portal Widgets	PRB1251733	The 'Write roles' field on a variable does not work consistently
Service Catalog: Service Portal Widgets	PRB1284475	Inconsistent handling of cat item variables submitted through Order Guides
Service Catalog: Service Portal Widgets	PRB1235047	Break lines on Catalog forms are not appearing after upgrading to Jakarta
Service Catalog: Service Portal Widgets	PRB1244261	When requesting several items, the total price for the request is shown, but the requested item and related approval show only the single price of the requested item
Service Catalog: Service Portal Widgets	PRB820804	The Variable Editor does not work on Catalog Task in Service Portal
Service Catalog: Service Portal Widgets	PRB1238391	UI page variable contained inside a container variable is showing an input field for default view
Service Catalog: Service Portal Widgets	PRB1267598	Catalog UI policy is triggered unexpectedly in Service Portal



Problem category	Number	Short description
Service Catalog: Service Portal Widgets	PRB1244904	Attempting to clone Service Portal Widget 'SC Categories' returns an error: "Do not use href="#" in the Service Portal, use href="javascript:void(0)" instead"
Service Catalog: Service Portal Widgets	PRB1279944	Specifying a page property for instance of SC Categories widget gives invalid url and 404 error
Service Catalog: Service Portal Widgets	PRB1284396	The Catalog Content widget in Service Portal does not display an item with multiple categories in different catalogs
Service Catalog: Service Portal Widgets	PRB1242319	Under cart, if the instance option is used to update the cart template, the result is carttemplate in JSON instead of cartTemplate
Service Catalog: Service Portal Widgets	PRB1283366	Catalog Client Scripts are not running in the Mobile App/Browser
Service Catalog: Service Portal Widgets	PRB720573	I18N issue, variable editor widget does not show translated values
Service Catalog: Service Portal Widgets	PRB1261865	The Categories widget does not display category counts correctly with User Criteria enabled
Service Catalog: Service Portal Widgets	PRB1246912	Cannot save the sc_req_item form because of an error in sp-variable-editor
Service Catalog: Service Portal Widgets	PRB1240285	Price for Reference that is populated via client script on the Service Portal does not update
Service Catalog: Service Portal Widgets	PRB1272746	In the Service Portal, users are unable to make a variable set read only and mandatory using a UI policy
Service Catalog: Service Portal Widgets	PRB1278247	A category on a variable is causing an error in Service Portal: "org.json.JSONException: JSONObject["layout"] not found"
Service Catalog: Service Portal Widgets	PRB1201712	Submitting a catalog item in Service Portal generates the browser error "TypeError: Cannot read property 'message' of undefined"
Service Catalog: Service Portal Widgets	PRB1287800	SC Order Status widget does not consider the user preference for language when displaying "Monthly" next to the recurring price of a request
Service Catalog: Service Portal Widgets	PRB944055	In iPad Portrait mode, breadcrumbs are not clickable on the Service catalog home page (sc_home)
Service Catalog: Service Portal Widgets	PRB1261056	The Duration field with the max_unit=hours attribute displays an incorrect value on Service Portal in Kingston
Service Catalog: Service Portal Widgets	PRB1254500	Reference qualifier on an order guide with cascade variables produces different results on service portal versus catalog page.
Service Catalog: Service Portal Widgets	PRB1259809	Order Guide Rule based on List Collector is not triggered with JP8

Problem category	Number	Short description
Service Catalog: Service Portal Widgets	PRB1243086	"Lookup Select Box" variable with reference qualifier does not load in the shopping cart widget or in edit shopping cart
Service Catalog: Service Portal Widgets	PRB1236103	Breadcrumb link does not display the right category when the item is in multiple catalogs
Service Catalog: Service Portal Widgets	PRB1247193	Variables type container start/end gets an "undefined" value when submitted from the portal
Service Catalog: Service Portal Widgets	PRB1258863	Service Portal does not honor quantity configurations beyond 10 even when configured in sc_cart_item
Service Desk Call	PRB1235564	HTML tags are showing in the description of a record created from a new_call (Service Desk Call)
Service Desk Call	PRB1277062	Business rule 'CallTypeChanged to Request' is not executing on 'Update,' only on 'Insert' (via record or Inbound email action).
Service Level Agreement (SLA)	PRB1090831	Duplicate updates are getting created in the Task SLA when the SLA is breached
Service Level Agreement (SLA)	PRB1275135	Retroactive pause calculations may have incorrect business duration calculations if the last of multiple retroactive pause periods is outside of the schedule
Service Level Agreement (SLA)	PRB1274339	Resolution SLA is not moving to 'Paused' state for a child incident when related to an already resolved parent incident
Service Level Agreement (SLA)	PRB1249908	SLA property com.snc.sla.compatibility.breach is updated on upgrade
Service Level Agreement (SLA)	PRB1267563	Customized form section on task_sla form is overwritten during upgrade
Service Level Agreement (SLA)	PRB1279932	Old SLA engine has no debug logging to identify problems with the calculation of sysrule_escalation
Service Level Agreement (SLA)	PRB1242878	'SLATimeLineV2SNC' can cause out of memory for records with large journal fields
Service Level Agreement (SLA)	PRB1267506	SLA with Retroactive Start and Retroactive Pause values can calculate Actual and Business Time Remaining incorrectly
Service Level Agreement (SLA)	PRB1275069	HistoryWalker variable values might be incorrect when walking through the history
Service Level Agreement (SLA)	PRB1248463	The \$sla_timeline page is missing translations
Service Level Agreement (SLA)	PRB1249934	SLA Timeline view can loop endlessly if original_breach_time is missing
Service Mapping	PRB1198305	Support changes of host IP addresses
Service Mapping	PRB1241668	Importing a CSV file does not work
Service Mapping	PRB1243054	MID Server upgrade fails because the wmi_collector.exe file is locked
Service Mapping	PRB1234649	Pattern execution may hang when users try to restart the WMI Collector Service
Service Mapping	PRB1291033	MID Server SystemCommand CitChanged introduces slowness and HTTP 429 errors (related to PRB1201839)

Problem category	Number	Short description
Service Mapping	PRB1237774	Cisco devices are partially discovered due to a timeout in changeto command
Service Mapping	PRB1275035	Add '&' to the invalid characters for the pattern name creation
Service Mapping	PRB1275137	Tracked Files: \$sa_tracked_file_content.do does not support files with JSON content
Service Mapping	PRB1180107	Using the Safari browser, users cannot drag the column dividers in the Discovery pattern designer
Service Mapping	PRB1260562	Layer 2 connections are not always created because the 'absent' field in the discovery_net_base table is not considered
Service Mapping	PRB1250097	Poor performance of Business Service tree calculation
Service Mapping	PRB1254871	Invalid payload error when pattern exceeds allowed number of outgoing connections
Service Mapping	PRB1256509	Pattern SSH layer cannot communicate with the OpenVMS and cannot discover OpenVMS
Service Mapping	PRB1190639	When connecting to pattern debugging session, the host_name field on HTTP endpoint is ignored and the host value is parsed from the URL
Service Mapping	PRB1241455	In a language other than English, strings are parsed and missed, and users are unable to restart/create the wmi_collector
Service Mapping	PRB1241896	Topology Map: Endpoint error is not in the map when the endpoint has outgoing relations of any type
Service Mapping	PRB1289466	Checkpoint Reaper fails on broken service -> layer reference
Service Mapping	PRB1235905	Records in sa_network_paths table are stuck in the waiting_for_discovery state
Service Mapping	PRB1081215	Users get the following message "Error on server request connectToExistingBusinessService. It is impossible to connect to service end point already belongs to."
Service Mapping	PRB1252973	Service Mapping can select a MID Server that does not have Nmap installed can cause an exception to be thrown
Service Mapping	PRB1254864	Missing identifier for SAP Application Server endpoint
Service Mapping	PRB1245535	The 'Delivery Controller' pattern should support HTTP entry point (url + uri) for users that do not fill the icon path for Citrix
Service Mapping	PRB1248138	IIS horizontal discovery fails when there are no running websites
Service Mapping	PRB1239849	Adding connection section to Weblogic at E-Business pattern
Service Mapping	PRB1240298	Cloud access MID custom operation does not work with the proxy
Service Mapping	PRB1198119	WMB HTTP Listener failed on multiple paths leading to the same destination
Service Mapping	PRB1284107	The Solaris server fails due to ChassisSerialNumber 'unknown'
Service Mapping	PRB1286427	While running discovery on IP switch, the pattern does not always discover the switches in stack mode
Service Mapping	PRB1235690	Unknown CI type error on serial number table for Horizontal Discovery pattern for F5

Problem category	Number	Short description
Service Mapping	PRB1270841	Users get many 'CI Changed' notifications because of changes to the hit_count field in the cmdb_ci_lb_service table
Service Mapping	PRB832300	Load balancer discovery does not set the status of non-existent services, pools, and related fields to 'Absent'
Service Mapping	PRB1264257	The scheduled job 'Generate entry point candidates from netflow and netstat data' issues incorrect queries
Service Mapping	PRB1247938	Jboss is discovered because the OS on the pattern was changed from 'All' to only Windows and Unix
Service Mapping	PRB1248108	Creating physical connections can cause performance issue due to a large query on discovery_switch_fwd_table
Service Mapping	PRB1240794	Oracle Forms Applications are being found as generic HTTP applications
Service Mapping	PRB1242879	Service map is not shown when the same entry points are defined in the service model as entry points of another environments
Service Mapping	PRB1236596	Service mapping fails to detect process listening on port on some AIX systems
Service Mapping	PRB1260927	Two records per business service are added to sys_audit on every sync of svc_ci_assoc
Service Mapping	PRB1266440	If a Discovery error on the map has an unescaped character in the message, PDF export fails
Service Mapping	PRB1254819	SSH layer of the pattern engine may hang while trying to execute command with sudo
Service Mapping	PRB1255919	The 'Is hidden' check box makes the 'Save' button unclickable
Service Mapping	PRB1269703	SAP CIs pattern uses MQ Flow Endpoint, and ActiveMatrix Business Works as a Target CI type, but it is incorrect with other app types integrated with SAP
Service Mapping	PRB1235886	Business service map throws error "Cannot display the map: Found link with invalid source/target"
Service Mapping	PRB1236580	On some Solaris systems, Service Mapping fails to discover the process listening on the port
Service Mapping	PRB1237296	Unable to stop MID Server services with WMI collectors
Service Mapping	PRB1275115	Outdated connections handler does not check user decision regarding traffic-based connections
Service Mapping	PRB1168109	Service Mapping issue with additional prompt
Service Mapping	PRB1265333	Azure LB service top-down discovery does not find the correct pool
Service Mapping	PRB1245638	Oracle RAC connection is not discovered if it is directly in the web.config file and does not search within files that web.config refers to
Service Mapping	PRB1247903	MSSQL database is not discovered on Windows machines because it has "_" in the name
Service Mapping	PRB1189354	When resuming discovery on a connection going to localhost, the system replaces the value in the 'host' field in the endpoint with the IP of the computer
Service Mapping	PRB1283300	VeritcalFile parsing strategy creates HashMap instead of List<HashMap> that represent table

Problem category	Number	Short description
Service Mapping	PRB1287253	In the Single Service form, the Update operation relies on a UI action which is supplied by Change Management and the operation may fail
Service Mapping	PRB1088871	PDF export of a business service contains 'truncated' hostnames
Service Mapping	PRB1178094	Failed to match endpoint of type cmdb_ci_endpoint_sap
Service Mapping	PRB1239245	Access is denied when trying to run dir command on a host through shared host
Service Mapping	PRB1266425	Cloud Discovery does not work on Azure resources
Service Mapping	PRB1267081	Cannot open the debug session for patterns on a specific domain from the Service Mapping topology map
Service Mapping	PRB1255810	On some Linux systems, Service Mapping process detection should fall back to lsof when netstat command fails to bring the process ID
Service Mapping	PRB1258569	When there is more than one PID in the IIS discovery log, 'show traffic-based connections' does not show all the relevant connections
Service Mapping	PRB1242275	Dependency Types should only be visible to users with the Service Mapping plugin
Service Mapping	PRB1239501	The discovery of SAM premium CIs changes from probes to using patterns
Service Mapping	PRB1258015	In some cases, createPhysicalConnections function is not called when the device discovery is completes
Service Mapping	PRB1284247	Recomputation job thread limit scripts for pre-Kingston releases must be removed or deactivated on upgrade to Kingston
Service Mapping	PRB1235400	SNMPProviderImpl.java contains a typo
Service Mapping	PRB1235582	Patterns are not synced to a MID Server after getting updated via an update set
Service Mapping	PRB759202	In a pattern step, file output gets truncated
Service Mapping	PRB1238988	Business service without traffic base creates an error in the logs
Service Mapping	PRB1177213	Linux devices with the SNMP service running on them are discovered as ISAM devices
Service Mapping	PRB1249836	A pattern is not synced with MID Server after republishing
Service Mapping	PRB1263501	Service Mapping discovery of large load balancers can fail
Service Mapping	PRB1264354	PostGres 8.1 and earlier are not discovered
Service Mapping	PRB1254886	If MID Server property 'mid.sa.ssh.port' is defined with more than one port when more than one port is open, the property is ignored
Service Mapping	PRB1245096	When a Windows host that was previously discovered is not active anymore, Service Mapping tasks may hang for a long time
Service Mapping	PRB1245264	Correct credentials for SNMP v3 must be with the highest order while executing SNMP query
Service Mapping	PRB1245550	Sys_index_cmdb_ci_endpoint_manual_endpoint_identifier.xml is always a Skipped Error in a Jakarta to Kingston upgrade

Problem category	Number	Short description
Service Portal	PRB1278244	Service Portal widget sn-record-picker issue with translated field
Service Portal	PRB1190755	UI scripts are cached to the browser and not refreshed/updated with the page refresh
Service Portal	PRB1244280	Portal widget "search page," options include unused and unsupported "Show score" value
Service Portal	PRB716271	Tagged Questions List widget with long, unbroken text or wide image exceeds the container width
Service Portal	PRB756643	Dropdown from header menu can be hidden if the screen width is sized down
Service Portal	PRB1245251	Flagging a knowledge article adds a public comment in Service Portal
Service Portal	PRB1248319	Type-ahead search from Homepage search does not honor the type-ahead contextual_search_sources option
Service Portal	PRB1240915	When typing the Polish letter "ś" (Alt Right + s), no text appears
Service Portal	PRB1283704	Ticket-conversation widget fails if an attachment was created by a user without a Name
Service Portal	PRB1233990	HTML tables added as comments via code tags can extend outside of the ticket conversation widget
Service Portal	PRB1234756	Reference fields do not highlight (Editable Highlight) when navigating through the "Tab" key
Service Portal	PRB716182	Error on SC Shopping Cart widget due to the capitalization of cartTemplate in option schema
Service Portal	PRB754298	Service Portal infoMessage and errorMessage timeout do not have configurable notification timing and the current timeout is too short
Service Portal	PRB1090391	The reference field 'No Matches Found' message is not translated
Service Portal	PRB1238437	Getting server JavaScript errors when "Data Table from Instance Definition" widget is cloned in an application scope and no "Link to this page" option is specified
Service Portal	PRB1170659	The text area field in the Service Portal can expand horizontally but not vertically
Service Portal	PRB1264280	Date translations for the month are not working in Service Portal for Dutch language
Service Portal	PRB1246298	Delegates cannot see the Approve/Reject UI buttons in the "Approval Info" widget
Service Portal	PRB1247411	The 'Target' HTML link attribute is not working in the avatar dropdown in the Service Portal header
Service Portal	PRB1241069	Service Portal update_synch tables must extend sys_metadata
Service Portal	PRB1283468	Adding images to an HTML field through the service portal form widget adds the image every time the form loads
Service Portal	PRB688321	The widget editor should throw error message if it failed to save

Problem category	Number	Short description
Service Portal	PRB715786	Autocomplete on reference field/variable fails if display column of target table is translated_text
Service Portal	PRB734909	Branding editor colors are not being applied to panel headings
Service Portal	PRB1249515	Date and date/time variables and fields are broken for certain languages in Service Portal
Service Portal	PRB1245025	Service Portal type-ahead widget fails to search properly if the user clicks magnifying glass during search
Service Portal	PRB1245160	"Homepage Search" and "Search Page" results do not match
Service Portal	PRB1184967	Pasted images in the HTML editor need to be converted to attachments like in the normal UI
Service Portal	PRB1282507	The Service Catalog Service Portal plugin must not be activated before the core Service Portal plugin
Service Portal	PRB1286028	Reference field 'Loading more results' message in autocomplete is not translated
Service Portal	PRB1099834	The Save button on the form is not disabled after the first click, allowing multiple form updates
Service Portal	PRB1275119	"Ticket Attachment" widget generates an error if the URL does not have table and sys_id parameters
Service Portal	PRB1241397	Compile error occurs when updating cloned Approval Records widget due to unwrapped server script
Service Portal	PRB1201227	Inconsistency between Service Portal interface and the standard UI in the replacement of invalid characters when creating an ID for a widget
Service Portal	PRB1210022	My favorite tags widget contains non-translated "Tags saved" message
Service Portal	PRB1234450	Unnecessary and confusing console.dir line left in the Carousel widget
Service Portal	PRB1236116	Unable to nest multiple widgets in an already embedded widget
Service Portal	PRB1271158	Yes/No variable is not translated in Ticket Fields widget
Service Portal	PRB1065398	The unscripted search source does not pass a score to the result object, causing results to appear out of the correct order
Service Portal	PRB748303	12 hour glide.sys.time_format is ignored in Service Portal date/time picker
Service Portal	PRB1099142	Visual labels not associated with their respective form controls: APM
Service Portal	PRB916136	When clearing a field, sn-record-picker directive is triggering field.change event more than once
Service Portal	PRB1237925	Copy/paste for HTML fields works, but the option to paste does not show up in the right-click context menu
Service Portal	PRB1245428	Next and Previous buttons are hidden on the Approvals widget after updates are made to the page
Service Portal	PRB1246410	Users with sp_admin are not able to create sp_carousel_slide
Service Portal	PRB1281700	Context menu on list and form is not in focus

Problem category	Number	Short description
Service Portal	PRB1244057	Gender is not considered in form widget title
Service Portal	PRB1235418	Inactive articles are displayed in the 'KB Category Page' widget
Service Portal	PRB1270084	The business rule run from the Service Portal on a custom scoped application does not honor the current object
Service Portal	PRB728162	Using calendar picker in Service Portal triggers onChange event multiple times for Date/Time field
Service Portal	PRB1042792	The time in Date/Time variables in the service catalog saves as 00:00:00 in the 24 hour data format if the second is skipped
Service Portal	PRB1250913	In the General Request form, the screen reader is 'trapped' in drop-down fields/variables like 'Requested for'
Service Portal	PRB1245121	Line breaks/linefeed characters are not used when displaying multi-line text in standard list widget
Service Portal	PRB1288858	The panel_body_height option in Simple list widget is not working on Internet Explorer
Service Portal	PRB1244328	UI action conditions are being re-evaluated when a record is modified
Service Portal	PRB711148	Dropdown menus stay on the page after using browser back/forward buttons
Service Portal	PRB1262349	The g_form.removeOption() is not working in Service Portal forms
Service Portal	PRB1269430	Service Portal throws a JS error on clicking a UI action if the form contains a reference field which is mandatory at the dictionary level
Service Portal	PRB1245120	Thousands separator is not displayed in the Service Portal (price, currency, integer, decimal)
Service Portal	PRB1285737	Lookup select box variable dependent on another lookup variable with reference qualifiers is not getting set on a record producer using onload client script
Service Portal	PRB1085963	The Service Portal Designer does not gracefully fail when users in a scoped context make modifications to pages in a different context
Service Portal	PRB829127	Calendar picker for Date/Time fields does not close when focus goes to another field
Service Portal	PRB908697	Header menu item hint field is not translated
Service Portal	PRB958853	Sysapproval_approver.document_id is not populated correctly by the workflow when a record is created
Service Portal	PRB1268319	Ticket widget - Typing and pressing enter quickly might truncate the comment being added
Service Portal	PRB1255206	When glide.attachment.extensions is customized, Images are stored incorrectly when users drag and drop or paste in Service portal TinyMCE editor
Service Portfolio Management	PRB1150586	Business Service Catalog page does not exist without demo data, causing menu item to work improperly
Service Portfolio Management	PRB723995	Attachment icon is shown for Business Service (sc_cat_item_service) type Catalog Items, and the Item can be used in other inappropriate ways



Problem category	Number	Short description
Service Portfolio Management	PRB1205734	Under the business service entries (sc_cat_item_service) the Commitments do not show in order on the page
Service Portfolio Management	PRB1249726	In the "MY Services SLA" homepage report, the commitments display in a random order
Service Portfolio Management	PRB831595	X-axis and Y-axis on the "Availability commitment report" graph are mislabeled
Service Workspace	PRB1273849	In workspace, 'oldValue' in client scripts reflects the value in the database, but in the platform form it reflects the last changed value
Service Workspace	PRB1245985	Platform attach function is not using kb_attachment configuration
Service Workspace	PRB1285180	Adding attachments via email client throws an error in JS Console (Chrome browser)
Service Workspace	PRB1272054	Searching on a reference field lookup list does not use keyword search
Slushbucket	PRB1268024	UI macro 'ui_slushbucket' is broken
SNC-Provision	PRB1256389	During upgrade, dist-upgrade-runner throws exception while trying to log exception
Software Asset Management	PRB1267422	Platform reports on the dashboard show no values
Software Asset Management	PRB1242037	Device dropdown is not populating in Procurement because 'is active=true' for an invalid column
Software Asset Management	PRB1289196	Business Rule "Auto Select SW transform for SCCM 2012v2" needs to be updated to check SAMS and legacy SAM
Software Asset Management	PRB1263298	When viewing some CIs in the CMDB, the following error is displayed twice 'Syntax Error or Access Rule Violation detected by database'
Software Asset Management	PRB1242017	Software reconciliation does not complete when there are entitlements with an empty license metric
Software Asset Management	PRB1244358	Discovery model normalization job errors out in the middle of running
Software Asset Management	PRB1282362	O365 - response body from Microsoft has changed and the wrong values are entered in the samp_sw_subscription table fields
Software Asset Management	PRB1290865	An exception is thrown when upgrading SCCM 2012 to version 1702
Software Asset Management	PRB1262793	Contract Compliance Checks are not customizable
Software Asset Management	PRB1267472	Installed Software probe fails when there is a mismatch in the data retrieved
Software Asset Management	PRB1263114	"Consumed" is available in the State field for an asset, even when the Class is Hardware
State Flows	PRB1260948	Unable to add 'Starting State' and 'Ending State' in State flows form in Internet Explorer v11
Survey Management	PRB1084030	Check box does not honor the dependency defined in the survey designer

Problem category	Number	Short description
Survey Management	PRB1236950	Difficulty updating an incident (related record) when it is opened from a survey
Survey Management	PRB1256373	Type-ahead search does not work for Survey reference fields in Service Portal
Survey Management	PRB1266935	Users are able to access surveys that are in Canceled state, although their responses are not saved
Survey Management	PRB1272791	Clicking the 'Instance Number' hyperlink in the Survey report based on the 'Metric Results' table navigates to the assessment_take2 UI page
Survey Management	PRB1263681	Category/Question Images in details are not displayed for public surveys
Survey Management	PRB1290131	Problem on surveys when trying to save one in the French language
Survey Management	PRB1181351	Button on My Assessments & Surveys does not react to the assessment being completed
Survey Management	PRB1266089	The 'Breadcrumbs' widget in Service Portal does not work correctly with my_surveys page in Jakarta and Kingston.
Survey Management	PRB1255069	Normalized values for metric results also take the inactive metrics weight
Survey Management	PRB1290355	When surveys are retaken from the portal (support_portal), the state of the survey shows incorrect value "In Progress" instead of "Complete."
Survey Management	PRB1271726	Smiley template choices in survey are not tab/arrow key enabled
Survey Management	PRB1248172	"Satisfied" is misspelled on the Smiley Faces - Satisfaction template
Survey Management	PRB1188264	Survey introduction/end notes images do not appear for guest users when taking public surveys
Survey Management	PRB1261282	Multiple Selection assessment metric definition displays as checked on the Service Portal survey page if value is set to 0
System Applications	PRB1287620	"*Unknown [label]" occurs for dot-walked fields in a form in a scoped application
Tables and Dictionary	PRB1249243	CMDB reparenting can fail when conflicted aliases are on partition tables
Tables and Dictionary	PRB1247974	Scoped app installation fails due to invalid ALTER TABLE
Tables and Dictionary	PRB1244340	Deparenting a table with a long table name that is greater than 30 characters is failing
Templates	PRB1255696	Creating a template with the name of the target table applies the template to all new records created for that table
Templates	PRB1156185	Cannot apply a date field while using a template if the date format system property is altered
Templates	PRB660576	See Details after applying a template shows 'Description' field as 'Short Description'
Templates	PRB1154865	Applying a template to an HTML text field and reverting the changes erases the content and replaces it with 'XXmultiChangeXX'

Problem category	Number	Short description
Test Management	PRB1250523	Assignee chart does not display all the assignee's assigned-to test cases in a test plan
Test Management	PRB1281928	Test plan widget "tm_report_test_case_by_priority" shows incorrect count for active test cases
Test Management	PRB1277169	Saving a test case updates the test case related list on Test Plan records
Test Management	PRB1241365	Dates in test plan signoff history are incorrect if date format is dd-MMM-yyy
Test Management	PRB1278480	Notify Tester gives the error message "Testing of <plan name> already in progress" and does not send a notification to the tester
Text Search	PRB1244869	Update set does not capture setting of text_index on extending tables
Text Search	PRB1204087	Some terms are filtered from a text query because the terms are too common
Text Search	PRB1234732	Global text search has Issues with ordering and grouping results
Text Search	PRB1207139	Global text search results dragged to the Favorites/Bookmarks tab do not work
Text Search	PRB1237035	Knowledge results always appear above other categories because its ir_query_score is consistently higher
Text Search	PRB1259828	Searching for a variables value on global search does not work after regenerating text indexes
Text Search	PRB1243839	Text indexing causes Out of Memory condition when indexing the workflow stage field in sc_req_item
Text Search	PRB1254713	Records with attachments that do not have a file name do not get indexed properly and do not show up in keyword search
Text Search	PRB607614	Grouping a list after a text search results in a white screen and a server error with a stack trace
Text Search	PRB1248682	Global Search and search auto-complete are returning missing results in multi-language instances
Time Card Management	PRB1284223	Time Sheet - Info message day is not translated in a multilanguage instance
Time Card Management	PRB1236000	In Worker Portal, Tasks tab, selecting a task option changes the sort order of task choices
Time Card Management	PRB1250304	Activating the Time Card plugin breaks updates on sys_user when the manager is changed
Time Card Management	PRB1236142	Adding notes to a time card in the Worker Portal causes instance slowdown and unavailability if there are only numbers in the user_name column
Time Card Management	PRB1290956	Worker Portal "add unassigned tasks to time sheet" link displays ASCII for some characters
Time Card Management	PRB1252187	IE11 + JAWS accessibility issues
Time Card Management	PRB1241211	Actual effort does not update properly when duplicating timecards

Problem category	Number	Short description
Time Card Management	PRB1241490	In the Worker Portal, the category cannot be changed when the time card task is edited
Time Card Management	PRB1250177	Updating the 'time worked' field does not update 'actual efforts'
Time Card Management	PRB1270082	When a time card is submitted in Worker Portal Project Task, the wrong resource plan is allocated if there are multiple resource plans for the project
Time Card Management	PRB1237231	Unable to create a new time card using 'insert a new row' for a timesheet prior to the current week
Time Card Management	PRB1260237	Time Card created in Worker Portal allocates the earliest dated resource plan when the project task has multiple resource plans
Transaction and Session Management	PRB1274224	Event Queue buildup from a backlog of logout events after upgrade to London
UI Action	PRB1194987	Any word containing "do" that is used in a redirect URL in a Mobile UI Action treats the preceding character as a period, and cuts off anything after it in the URL as if it were the final ".do" in the URL
UI Action	PRB1252252	Negative numbers are converted to positive due to stripping the minus sign
UI Components	PRB1241110	The com.glide.k15_demo and com.glide.service-portal.k16 plugins are unnecessary and should be removed
UI Components	PRB1117354	Upgrade does not update z_last_include.js version, causing reference-related issues
UI Components	PRB1234597	When the content of the Email field is cleared, the change is not visible in the Activity log of the User record
UI Components	PRB1261179	Encoded strings containing pluses (+) are not converted to spaces when sent through batchedGlideAjax
UI Components	PRB1244490	The tooltip for the Planning Console for Manual Projects (an icon) has visible control characters displayed
UI Components	PRB1193567	Hints are not visible properly in context menus
UI Components	PRB1102259	The 'Title' field under the sys_filter table is not a translated type of field
UI Components	PRB1257099	On an OEM version, the custom sys_app_module is deactivated after an upgrade
UI Pages/Macros	PRB1271528	Issue when hovering over a reference icon in GlideDialogWindow
UI Policy/Client Script	PRB1275667	JavaScript generated for a condition fails for new records when a condition on an integer field with choice is used
Unified Compliance Framework (UCF)	PRB1176883	Value of the Number field is missing when an async business rule is used to insert/update the authority document
Update Sets	PRB1272514	Retrieved batched update sets are missing a parent value when the property glide.invalid_query.returns_no_rows is set to true
Update Sets	PRB1238818	UpdateMutex is not reaped on the node restart

Problem category	Number	Short description
Update Sets	PRB1239388	VersionCoalescer does not preserve values for fields that do not yet exist in the payload for an update to an existing record for which synch_attachments=true
Update Sets	PRB1089692	Update set commit should order by sys_recorded_at if available
Update Sets	PRB1254522	'Not authorized to update this record' appears in the Resolve Conflicts window while the user is in the correct scope
Update Sets	PRB1238164	An update set preview error is thrown for an object that extends sys_metadata with a self-reference column, and which exists on the target instance
Update Sets	PRB1241953	Committing a batch update set with a scoped application selected in the application picker places some of the updates in the wrong scope
Update Sets	PRB1092327	Update set operation or plugin activation can still proceed while a store app is being installed or uninstalled
Update Sets	PRB1273360	Backing out an update set can lead to unexpected results if glide.invalid_query.returns_no_rows is set to true
Update Sets	PRB1238819	UpdateMutex held for longer than 24 hours is not released, preventing the execution of subsequent operations
Upgrade Engine Issues	PRB901457	sys_update_version records are not created for some updated records during upgrade
Upgrade Engine Issues	PRB1198005	Upgrade history form layout not resetting on upgrade
Usage Analytics	PRB1246014	Log UA download results when subscriptions do not update on daily download of contract updates
Usage Analytics	PRB1237199	When a user opens the table subscription record, an "Invalid update of subscription management attributes" error appears
Usage Analytics	PRB1238204	Compliance report 'Application Use Without a Purchased Subscription' shows no data or incorrect data
Usage Analytics	PRB1274888	Entitled HR scoped app tables are hidden after an upgrade
Usage Analytics	PRB1273150	App to family mapping table contains duplicate entries for store apps that cause exceptions in customer instance logs
Usage Analytics	PRB1263652	UADBListener leaks a database connection when running against sys_user_session changes
Usage Analytics	PRB1274155	persist_scores_ua_app job runs after triggers get created on customer instances when the first one fails to run
Vendor Security Risk Assessment (VSRA)	PRB1244957	In Vendor Risk Management, the vendor (business partner) can submit an assessment without filling out the mandatory questions
Vendor Security Risk Assessment (VSRA)	PRB1244454	The Vendor Portal sometimes displays an incorrect number of answered questions and total questions
Visual Task Boards	PRB1270013	"@mention "Cannot see record" text is showing for the first few characters in freeform visual task boards
Visual Task Boards	PRB1179296	ESS users unable to add members in VTB if there is an ACL on sys_user.active
Visual Task Boards	PRB1259595	Record view of a VTB task displays an 'X' on top of the Save button

Problem category	Number	Short description
Visual Task Boards	PRB1244198	Field name 'Purple Label' used for Idea appears in orange text on VTB
Visual Task Boards	PRB1256281	When a visual task board has a specified assignment group, and an unassigned card is assigned, the Details tab does not honor the assignment group condition.
Visual Task Boards	PRB964390	"Additional assignee" field uses dependent attributes of the "Assigned to" field on VTBs
Visual Task Boards	PRB1267524	Conditions added to Visual Task Board filters do not appear in reference pop-up window
Visual Task Boards	PRB960086	When a reference qualifier is added to the 'Additional Assignee' field for a VTB, it appears on the form view for a VTB task instead of the VTB view itself
Visual Task Boards	PRB1198855	VTB card fields do not appear in the same order as the associated form layout
Vulnerability Response	PRB1263862	When a vulnerable item has a vulnerability score of 0 or blank for a CI associated to a noncritical business service, and a vulnerability calculator group is used, an incorrect business impact is set on vulnerable items
Vulnerability Response	PRB1285573	Bulk edit UI action for vulnerable item freezes the browser window
Vulnerability Response	PRB1252456	sn_vul_vulnerable_item text indexing is on by default, which causes an excessive number of events to 'age'
Vulnerability Response	PRB1278304	Processing of the sn_vul.group_state_change event runs slowly due to an inefficient query
Vulnerability Response	PRB1289019	The Vulnerability Analytics (com.snc.vulnerability.analytics) plugin contains invalid demo data
Vulnerability Response	PRB1280288	Encoded information received from the NVD did not get decoded
Vulnerability Response	PRB1284296	Language translation issue: Vulnerability Groups > Filter Type shows the information message in English, regardless of the language selected
Vulnerability Response	PRB1270527	Unable to "Defer" a vulnerability group if the date format is set as dd-MM-yyyy or MM/dd/yyyy
Vulnerability Response	PRB1248469	Updates to the sn_vul_vulnerable_item.age column cause text index events to back up
Vulnerability Response	PRB1252287	Vulnerability state transition can bypass approval workflow
Vulnerability Response	PRB1240484	Vulnerable Items are not sometimes not automatically created
Vulnerability Response	PRB1242802	When launching a vulnerability scan with more than 20 vulnerable items (IP addresses), Java out-of-memory errors occur
Vulnerability Response	PRB1275212	Relationships/related lists previously created using the Vulnerability Response plugin in an earlier release no longer exist
Vulnerability Response	PRB1276876	Open vulnerable items with the fixed substate are exhibiting abnormal behavior

Problem category	Number	Short description
Vulnerability Response	PRB1259474	Relying on SQL unique constraint is not a good method for avoiding duplicate data in the Associated IP Addresses (sn_vul_vi_ip_address) table
Web Services	PRB1242788	Log errors: RESTAPIProcessor : Unknown exception RuntimeException: Streaming errorDetail: Streaming error are being observed
Web Services	PRB582537	Cannot clear a value or set an empty value in the SOAP API
Web Services	PRB629039	SOAP SocketTimeoutException warning message to nodestats ecc_queue is spamming the logs
Web Services	PRB1243859	Unexpected REST API response: The "ci" attribute is empty when the sysparm_display_value query param is set to true, but it is populated when sysparm_display_value is not included
Web Services	PRB810678	For incoming REST Post calls with content-type application/xml, null values are inserted as TRUE
Web Services	PRB1249474	During upgrade: org.mozilla.javascript.EcmaError: "GlideSystemSemaphore" is not defined
Web Services	PRB1290329	No advice on how to access WSDL without authentication as per Properties->Require authorization for incoming WSDL requests
Web Services	PRB1271029	Requesting sys_user WSDL is causing the instance to run out of memory
Web Services	PRB1073626	REST service responses for the "application/xml" and "text/xml" content types return an empty closed xml tag when the value is true for boolean fields
Workflow	PRB1264290	The calcDuration method of DurationCalculator is incorrectly adjusting on the day when daylight saving time starts, impacting Breach Time calculations for SLAs
Workflow	PRB1239648	The workflow.inputs variable becomes an undefined value after an approval activity is completed
Workflow	PRB1243698	When a request approval rejects some items and approves the rest, all items render as approved
Workflow	PRB1238207	Records excluded by a previous fix remain in a broken state due to the wf_context.stage_states value being empty
Workflow	PRB1248620	Workflows do not follow the error condition transitions and stop executing if an activity faults
Workflow	PRB1262906	Incorrect calculation of catalog task duration
Workflow	PRB1239304	Approvals that come after a rollback point in a workflow are reset by generated activity if it comes after the approval, but before the rollback
Workflow	PRB1248512	The 'Run if no other workflows match' workflow properties do not work if a previous update to the record started a flow
Workflow	PRB1249900	In some cases, the old stage in the activity stream on a RITM can display the value instead of the Display value
Workflow	PRB1239700	After a "Rollback To" activity is executed a second time, a Manual Approval activity.result goes to "Skipped"
Workflow	PRB1285921	Double clicking on any workflow activity opens two 'Activity Properties' popups in the Workflow Editor

Problem category	Number	Short description
Workflow	PRB1237836	Join activities do not complete when the deprecated 'Rollback' activity is used in the path up to the Join activity
Workflow	PRB1281016	Workflows where the domain has been overridden are not triggering correctly from the Service Catalog
Workflow	PRB1264021	"Revert to New" UI action repeatedly triggers the same sub-workflow, causing the transaction to time out
Workflow	PRB1250902	Workflow context deletion does not clean up wf_workflow_binding records
Workflow	PRB1253385	Workflow activity update fails to close the modal when proxy'd URL's

## ODBC Driver patch release notes

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

The ODBC Driver is updated with each new family release, and problem fixes are included in driver patch updates.

[Download the ODBC driver](#) from the HI Knowledge Base. For installation and configuration information, refer to [Installing the ODBC driver](#).

## ODBC Driver 1.0.14 release notes

The ODBC Driver 1.0.14 release contains fixes to these problems.

Fixed problems	Short description	Description
Open Database Connectivity (ODBC) PRB1162624	A ODBC query to a 'string' with the value of a field name will translate to the incorrect 'same as' query, returning incorrect rows	When using ODBC to query to a 'string' that matches the value of a field name, it translates to an incorrect 'same as' query. The incorrect query can return the incorrect rows.
Open Database Connectivity (ODBC) PRB1267497	The JRE was removed from ODBC installers	
Open Database Connectivity (ODBC) PRB1278032	64-bit ODBC Driver fails to connect to instances hosted in FedRAMP datacenter due to TLSv1.2 requirements	FedRAMP data centers no longer allow for connections made with TLSv1.1 or lower. The 64-bit version of the 1.0.13 driver uses JDK 1.8.152, which has been known to have issues with TLS. As a result, the server rejects the connection when falling back to the next highest version.  For symptoms, cause, and resolution information, see <a href="#">KB0563593</a> in the HI Knowledge Base.

- [Install an ODBC driver patch](#)



- [ODBC driver installation requirements and supported software](#)
- [Download and install the ODBC driver](#)

## ODBC Driver 1.0.13 release notes

The ODBC Driver 1.0.13 release contains fixes to these problems.

Fixed problems	Short description	Description
Open Database Connectivity (ODBC)  PRB1110116	ODBC driver returns non-integer fields as NTEXT where varchar is expected	Users cannot use ODBC driver 1.0.11 correctly in combination with: SQL Version: Microsoft SQL Server 2014 (SP2-CU2-GDR) (KB3194718) - 12.0.5532.0 (X64) Oct 5 2016 20:28:25 Copyright (c) Microsoft Corporation Enterprise Edition: Core-based Licensing (64-bit) on Windows NT 6.3 <X64> (Build 9600: ) (Hypervisor)  "SELECT INTO" queries cause the ODBC driver to convert fields to NTEXT where varchar is expected instead.

- [ODBC driver installation requirements and supported software](#)
- [Setting ODBC properties](#)
- [Configure the ODBC driver for large data sets](#)

## ODBC Driver 1.0.12 release notes

ODBC driver product enhancements and updates in the 1.0.12 release.

Version 1.0.12 of the ODBC Driver uses Java 1.8. You may need to configure your Java path after installing this version. See [KB0597981](#) for more information.

Fixed problems	Short description
PRB708941  <a href="#">KB0597404</a>	Querying more than 4MB with ODBC driver creates temp files
PRB747962  <a href="#">KB0621993</a>	ODBC driver outputting incorrect number of records when using LEFT JOIN ON SELECT * query

## ODBC Driver 1.0.11 release notes

ODBC driver product enhancements and updates in the 1.0.11 release.

Version 1.0.11 of the ODBC Driver uses Java 1.8. You may need to configure your Java path after installing this version. See [KB0597981](#) for more information.

Fixed problems	Short description
PRB711960  <a href="#">KB0597602</a>	When querying a table that has a string field whose value exceeds 65535 kb, the following error occurs:

Fixed problems	Short description
	[SN][ODBC ServiceNow driver][OpenAccess SDK SQL Engine]Disk cache error. Field length:93238 exceeds maximum limit of 65535
PRB691056 <a href="#">KB0597979</a>	ODBC query on Display Value for a state does not return the entire Display Value
PRB716125 <a href="#">KB0598308</a>	iSQL returns only 16383 bytes even if a field contains more data

## ODBC Driver 1.0.10 release notes

ODBC driver product enhancements and updates in the 1.0.10 release.

New in the 1.0.10 release

### Improvements to timer and duration fields

The display format for timer and duration fields has been improved. Queries on timer and duration fields now return the field value in the UTC timezone. You can query the field display value, as shown in the UI, by adding dv\_ to the field name. The property LegacyDurationTimeZone has been added to preserve compatibility with legacy integrations.

### Database schema and caching properties

The EnableDBSchema and ExtendedSchemaCache properties enable you to control how the ODBC driver queries and caches database schemas.

### Fixed problems

Problem	Short description	Steps to reproduce
PRB634397 <a href="#">KB0551938</a>	ODBC driver fails to get data or connect when invoking multiple or parallel connections.	Refer to the listed Known Error KB article for details.
PRB637895	ODBC select query does not return columns in the defined order.	<ol style="list-style-type: none"> <li>1. Using the ODBC driver version 1.0.9, run a select query.</li> <li>2. Note the returned column order is random.</li> </ol>
PRB630646 <a href="#">KB0549682</a>	ODBC driver caches schema between different connections.	Refer to the listed Known Error KB article for details.
PRB630233 <a href="#">KB0549578</a>	The ODBC driver doesn't use the SOAP aggregate API for aggregate queries.	Refer to the listed Known Error KB article for details.

Problem	Short description	Steps to reproduce
PRB629818 <a href="#">KB0549557</a>	ODBC driver does not optimize select top N queries.	Refer to the listed Known Error KB article for details.

## Upgrade to London

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

The upgrade process moves your instance to a new ServiceNow release version. Understand the difference between upgrading and patching, release definitions, rollback and backup options, and how to test your non-production and production instance upgrades.

For an in-depth explanation of the upgrade process, refer to [Upgrade your instance](#).

Before you begin the upgrade process, read the [London release notes](#) and review the [upgrade and migration tasks for your applications and features](#).

System upgrades can be significant projects. Each ServiceNow feature release includes major additions, and you should always consider the impact of new functionality on an instance. Upgrading implements enhancements to all features that are part of the base system or are already active, unless the feature is customized on your instance. For a list of all available plugins and whether they are active by default on the base system, see [List of London plugins](#).

Careful preparation and knowledge of the available software, tools, and resources can contribute to a successful upgrade. In addition to the materials provided by ServiceNow, it is important to understand how your ServiceNow instance is currently operating and the performance level of key business functionality. Set the expectation with IT and business users that time must be dedicated to preparing for, implementing, and testing ServiceNow upgrades.

If you have any issues during the upgrade process, [contact ServiceNow Customer Support](#). ServiceNow Customer Support is available 24 hours a day, 7 days a week to assist you with any questions or issues.

For additional help with upgrades, ServiceNow also offers various [Production Readiness Services](#). These services specifically address challenges with instance upgradability, manageability, scalability, and performance. The reviews are performed by a ServiceNow-certified professional consultant, who provide recommendations to align customer configurations with ServiceNow best practices. Contact your ServiceNow sales representative for more details.

## Upgrade durations in London

The performance of the upgrade engine is enhanced, resulting in significantly shorter duration times for family-to-family upgrades. A family-to-family upgrade occurs when an instance moves from its current release version to another version in a different family (for example, upgrading from Jakarta Patch 6 to London). The upgrade process is optimized for both patching and family-to-family upgrades.

**Note:** The performance improvement can be significant enough to cause concern that your upgrade may not have run properly. As always, test your upgrades, but do not assume that the upgrade was unsuccessful based just on the time it took to execute.

## Supported upgrades

You can upgrade directly to the latest release family. For more information about release terminology and availability phases, see the [ServiceNow Release Cycle \[KB0547244\]](#) article in the HI Knowledge Base.

## Upgrades and the ServiceNow Store

The [ServiceNow Store](#) includes official applications that are developed and released by ServiceNow. Users can download, access, and configure ServiceNow Store apps on their instances.

Starting in the London release, new versions for a ServiceNow Store app can be defined in patch and family releases. This includes the ability to define a minimum version and/or a hotfix for a version you already have installed. From London onwards, if your instance has an installed app version below the defined minimum version, the app will be upgraded to the minimum required version. Similarly, if your instance has an installed app below the defined hotfix version, your app will be upgraded to the hotfix version.

For example, consider an application that defines these versions in a release: 1.7.1, 2.4.0, and 3.0.1. In this example, version 1.7.1 is the minimum version. Versions 2.4.0 and 3.0.1 are hotfix versions.

When an instance upgrades to the release version, the following behavior occurs:

### Minimum version upgrades

Version installed before the upgrade	Expected version after the upgrade
1.0.0	1.7.1 - The version upgrades to the minimum version
1.3.2	1.7.1 - The version upgrades to the minimum version
1.7.1	1.7.1 - The version stays the same, because the instance was already on the minimum version
1.7.2	1.7.2 - The version stays the same, because the instance was already ahead of the minimum version

### Hotfix version upgrades

Version installed before the upgrade	Expected version after the upgrade
1.8.0	1.8.0 - The version stays the same, because the instance was already ahead of the defined hotfix version
2.0.0	2.4.0 - The version upgrades to the defined hotfix version
2.6.0	2.6.0 - The version stays the same, because the instance was already ahead of the defined hotfix version

Version installed before the upgrade	Expected version after the upgrade
3.0.0	3.0.1 - The version upgrades to the defined hotfix version
3.0.5	3.0.5 - The version stays the same, because the instance was already ahead of the defined hotfix version
4.0.0	4.0.0 - The version stays the same, because there are no hotfix versions defined for 4.0.0+.

## Upgrades vs. patches

ServiceNow organizes its releases into families. A family is a set of releases that are named after a major city, such as London. Within a family, releases are further differentiated by patch and hot fix number. For example, the following releases are both part of the Jakarta family:

- Jakarta Patch 7
- Jakarta Patch 6 Hot Fix 1

*Upgrading* is the act of moving to a release that is in a different family than your current release. For example, a move from Jakarta Patch 7 to Kingston Patch 2 is an upgrade because Jakarta and Kingston are different families.

*Patching* is the act of moving to a release that is in the same family as your current release. For example, a move from Kingston Patch 1 to Kingston Patch 2, is a patch because both versions are part of the Kingston family.

In both cases, the target release is Kingston Patch 2. It is the difference between your current and target release family that determines whether you are upgrading or patching.

## Features, patches, and hot fixes

Each release family contains features, patches, and hotfixes.

A feature provides a complete solution that customers can implement to add value to their organization. New features are generally only available as part of a feature release. Features are supported with patches and hot fixes.

Type	Scope
Feature	<ul style="list-style-type: none"> <li>• Introduces new features</li> <li>• Includes all available fixes to existing functionality</li> <li>• Is production-oriented; quality and stability are of the highest priority throughout the life cycle</li> </ul>
Patch	<ul style="list-style-type: none"> <li>• Supports existing functionality with a collection of problem fixes</li> <li>• Generally does not include new features</li> </ul>
Hot Fix	<ul style="list-style-type: none"> <li>• Supports existing functionality with a specific problem fix for a feature release</li> <li>• May or may not include any previous fixes for a given release</li> </ul>

Type	Scope
	<ul style="list-style-type: none"> <li>Does not include new features</li> </ul>

For more information about release terminology and availability phases, see the [ServiceNow Release Cycle \[KB0547244\]](#) article in the HI Knowledge Base.

## Rollbacks and backups

When you plan an upgrade, remember that ServiceNow does not provide a universal rollback option. Rollbacks are available for upgrades (for example, London patch-to-patch and London patch-to-hotfix). The rollback window is 10 days by default. You can customize this window by modifying the `glide.rollback.expiration_days` property. To request a rollback, [contact ServiceNow Customer Support](#).

Avoid restoring a production instance from backup, when possible, due to downtime and data loss. When a problem cannot be solved using other methods, restoring a production instance from backup is a final option. ServiceNow can restore an instance to any point in time, regardless of when a backup is completed. ServiceNow provides customer support 24 hours a day, 7 days a week for assistance with critical post-upgrade issues.

**Note:** ServiceNow does not perform on-demand backups. Instances are automatically backed up daily during non-peak business hours on schedules defined by ServiceNow. The timing of existing backup schedules is not adjusted.

## Testing throughout upgrades

Testing is an integral portion that occurs after each instance is upgraded. After you upgrade an instance, test and validate it.

This instance naming convention assumes that you have three ServiceNow instances. If you have three instances, upgrade your instances in this order:

1. Development
2. Test
3. Production

If you have more or less than three instances, or if you are using [Team Development](#), these instance labels will be different. In general, upgrade your instances furthest from production towards your production instance.

Instance	Type of testing required
Development	<ul style="list-style-type: none"> <li>Conduct smoke tests.</li> </ul>
Test	<ul style="list-style-type: none"> <li>Use the ServiceNow <a href="#">Automated Test Framework</a> to assist you in testing your non-production instances.</li> <li>For extra testing coverage, you can also conduct user acceptance testing (UAT) on your non-production instances.</li> </ul>

Instance	Type of testing required
Production	<ul style="list-style-type: none"> <li>• Conduct UAT.</li> </ul> <p><b>Note:</b> The <a href="#">Automated Test Framework</a> is intended for use on non-production instances. On your production instance, conduct UAT only.</p>

If you encounter any post-upgrade issues, document the issue's conditions, steps to reproduce the issue, and your customizations. [Contact ServiceNow Customer Support](#) to open an incident for each issue, and provide this information accordingly. ServiceNow Customer Support is available 24 hours a day, 7 days a week to assist you with any questions or issues.

- [Upgrade your instance](#)

Upgrading and patching your instance requires planning, testing, and validation. To ensure a safe and effective upgrade, read the release notes, create upgrade plans, and test your upgrade on non-production instances before upgrading your production instance.

- [Upgrade and migration tasks by application or feature](#)

Complete the upgrade tasks where necessary to prepare an application or feature for the upgrade process, and complete appropriate migration tasks after the upgrade to protect your data and customizations from changes to the system.

- [Upgrade planning checklist \(London\)](#)

Plan and track the activities related to your ServiceNow instance upgrade. To help ensure that you complete all the tasks for a successful upgrade, follow the step-by-step instructions in the upgrade planning checklist to track and plan the upgrade.

## Upgrade your instance

**Last updated:** September 05, 2018

**Last updated:** September 05, 2018

Upgrading and patching your instance requires planning, testing, and validation. To ensure a safe and effective upgrade, read the release notes, create upgrade plans, and test your upgrade on non-production instances before upgrading your production instance.

These topics contain in-depth explanations about upgrades. For a step-by-step reference of upgrade steps, refer to the [Upgrade planning checklist \(London\)](#).

- [Phase 1 - Read the release notes and plan your upgrade](#)

Before you begin the upgrade process, it is essential to read the release notes for your target version so you understand the required upgrade and migration tasks. This information helps you plan a safe and effective upgrade.

- [Phase 2 - Prepare for the development instance upgrade](#)

For a better understanding of your production upgrade duration, request a full clone of your production instance (including large tables and attachments) onto a non-production instance. Confirm your current and target release versions, because you will later use this information when scheduling your upgrade in HI.

- [Phase 3 - Verify your upgrade configurations and schedule the development instance upgrade in HI](#)

Check the configuration of the Upgrade scheduled job to view how often and when it runs. Review information about timing your upgrade in coordination with the Upgrade scheduled job. Then, schedule your upgrade in HI.

- [Phase 4 - Upgrade and validate the development instance](#)

Track the progress of your upgrades with the Upgrade Monitor. For your first non-production instance upgrade (your development instance), use the Upgrade Monitor to process the skipped list of records that were not addressed in the upgrade. Then identify your update sets and perform functional testing.

- [Phase 5 - If applicable: Upgrade and validate your other non-production instances, such as your test instance](#)

If you have any other non-production instances in addition to your development instance, such as a test instance, request to upgrade these instances. Request these upgrades after you have configured and refined your development instance. Immediately after the upgrade is complete, apply the post-upgrade changes made to your development instance, including activating optional plugins, installing and upgrading applications, and applying update sets.

- [Phase 6 - Prepare to upgrade the production instance](#)

After you have configured and refined your test environment to be a good representation of your production environment, prepare to upgrade your production instance.

- [Phase 7 - Upgrade the production instance](#)

After you have upgraded your development, non-production, and test instances, upgrade your production instance last. Then validate that the upgrade was complete, apply update sets and fix scripts, and perform post-upgrade user acceptance testing (UAT).

- [Troubleshooting and other upgrade resources](#)

Use this information to troubleshoot post-upgrade issues and learn more about other aspects of ServiceNow's upgrade process.

## Phase 1 - Read the release notes and plan your upgrade

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Before you begin the upgrade process, it is essential to read the release notes for your target version so you understand the required upgrade and migration tasks. This information helps you plan a safe and effective upgrade.

1. Read the release notes for your target version. Review upgrade and migration tasks that you will need to complete before or after your upgrade.

ServiceNow provides release notes for every release. The release notes offer valuable information about new functionality, notable changes, and fixes available in a particular version. Read the [London release notes](#) to determine whether the upgrade contains functionality you need and fixes that resolve any issues affecting your instance. The release notes can also help you determine whether items you previously customized are being upgraded. For London-specific upgrade considerations, see [Upgrade and](#)



[migration tasks by application or feature](#). For a downloadable, sortable version of London fixed problems, see [KBO692695](#).

2. Complete the preparation and planning tasks in Phase 2 of the [Upgrade planning checklist \(London\)](#).

The checklist contains a list of planning tasks that guide you through various aspects of upgrade preparation. You are guided through tasks such as scoping, gathering stakeholders, identifying features to disable and enable, and creating test plans to use throughout the upgrade. Follow these steps to ensure that all aspects of your organization are ready for the upgrade.

3. Create a comprehensive test plan that includes test cases for all core instance functionality and integrations, including any customizations you may have.

To efficiently test and evaluate system functionality, create a set of detailed test scripts for your testing team to use. You will use this test plan throughout each instance upgrade.

Instance	Type of testing required
Development	<ul style="list-style-type: none"> <li>• Conduct smoke tests.</li> </ul>
Test	<ul style="list-style-type: none"> <li>• Use the ServiceNow <a href="#">Automated Test Framework</a> to assist you in testing your non-production instances.</li> <li>• For extra testing coverage, you can also conduct user acceptance testing (UAT) on your non-production instances.</li> </ul>
Production	<ul style="list-style-type: none"> <li>• Conduct UAT.</li> </ul>
<b>Note:</b> The <a href="#">Automated Test Framework</a> is intended for use on non-production instances. On your production instance, conduct UAT only.	

Next Topic

- [Phase 2 - Prepare for the development instance upgrade](#)

## Phase 2 - Prepare for the development instance upgrade

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

For a better understanding of your production upgrade duration, request a full clone of your production instance (including large tables and attachments) onto a non-production instance. Confirm your current and target release versions, because you will later use this information when scheduling your upgrade in HI.

1. On your production instance, create a system clone and select your development instance as the Target instance.  
The clone provides you with an exact copy of production. Performing an upgrade on your clone allows you to simulate an upgrade on your production configuration in a non-production environment. Refer to [System clone](#) for details.

---

**Important:** For effective upgrade testing, use this clone to test on a system that reflects the production instance as closely as possible. If your non-production and production instances are the same size, include the production audit log and the attachment data on your production clone. To ensure that all production data is included with the clone, make sure that you clear all the Exclude check boxes on the Request Clone form. On your non-production instance, replicate typical user behaviors that occur on your production instance to enhance an estimate of your upgrade duration.

---

## 2. Set expectations for performance during upgrades.

During an upgrade, your performance may be impacted because your nodes initiate the distribution upgrade. All nodes are restarted during an upgrade, but your multi-node instances are available during an upgrade because ServiceNow instances operate on a multi-node system. This multi-node system staggers node distribution upgrades, ensuring that there is at least one active pair of nodes for multi-node instances during an upgrade.

To help you set accurate expectations for performance during upgrades, be aware of the differences between the nodes on your non-production and production instances. Instances with one node experience a short period of downtime during the upgrade, but multi-node instances do not have UI downtime. For details on your nodes and their status, see the [Upgrade Progress screen](#).

### Previous Topic

- [Phase 1 - Read the release notes and plan your upgrade](#)

### Next Topic

- [Phase 3 - Verify your upgrade configurations and schedule the development instance upgrade in HI](#)

## Phase 3 - Verify your upgrade configurations and schedule the development instance upgrade in HI

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Check the configuration of the Upgrade scheduled job to view how often and when it runs. Review information about timing your upgrade in coordination with the Upgrade scheduled job. Then, schedule your upgrade in HI.

### Before you begin

You must check the configuration of the Upgrade and Check Upgrade Script sys\_triggers, which are essential to making sure your instance upgrades to the correct target version.

sys_trigger	Function
Upgrade	<ul style="list-style-type: none"> <li>• Queries HI to ask whether an upgrade is going to happen in a given time interval, which is determined by the configuration for the Upgrade scheduled job.</li> </ul>

<b>sys_trigger</b>	<b>Function</b>
	<ul style="list-style-type: none"> <li>Asks whether the instance should be running a different version. If so, the distribution for that version is downloaded, and your instance upgrades to the target version.</li> </ul>

#### Check Upgrade Script

- Runs after the distribution has been upgraded.
- Performs the database upgrade.

## About this task

Your upgrades are orchestrated out of your instance, not HI.

HI keeps records of what version you should be running, and your instance periodically queries HI to check its assigned version. When you designate a time for your upgrade, your instance begins the upgrade at that time. For example:

<b>Action</b>	<b>Result</b>
You schedule an upgrade to London Patch 8 to take place on June 10 at 3:00pm.	HI changes its records to reflect that you should be on London Patch 8 on June 10 at 3:00pm.
HI waits to get pinged by your instance after the scheduled time on June 10.	Your instance continues to operate on its current release version, and it periodically pings HI.
After the scheduled time on June 10, HI receives a ping from your instance.	HI tells your instance that it should be on London Patch 8.
Your instance receives HI's notification that it should be running a different version.	Your instance starts the upgrade.

## Procedure

- Check the configuration of the Upgrade scheduled job to view how often and when it runs.
  - Navigate to System Scheduler > Scheduled Jobs > Scheduled Jobs.
  - In the list, find the Upgrade scheduled job.
  - View the Next action column to determine when the job next runs.
- Verify that the Upgrade sys\_trigger is set properly for upgrading.
  - Navigate to System Scheduler > Scheduled Jobs > Scheduled Jobs.
  - Find and click the Upgrade scheduled job.
  - Make sure that the Trigger type is set to Interval.
  - Make sure that the System ID is set to None.
- Verify that the Check Upgrade Script sys\_trigger is set properly for upgrading.
  - Navigate to System Scheduler > Scheduled Jobs > Scheduled Jobs.
  - Find and click the Check Upgrade Script scheduled job.
  - Make sure that the Trigger type is set to Run at System Startup.
- Schedule the upgrade in HI.
  - Log in to HI.
  - Click Instances in the left navigation menu.
  - Select Manage Instances.
  - [Partners only] From the user menu, use the Switch Company feature to select a company.
  - Select the instance that you want to upgrade or patch.
  - In the Actions menu, click Upgrade Instance.

The Upgrade an Instance Service Catalog item opens up. It is prepopulated with the instance name and available versions to which you can upgrade or patch the

instance.

## Upgrade an Instance ☆

This catalog item enables you to schedule a patch/upgrade to a new ServiceNow release version. Upgrading and patching your instance requires planning, testing, and validation. Please plan to test your upgrade/patch on non-production instances before applying to your production instance.

Before initiating an upgrade process, review the upgrade and migration tasks for your applications and features. To help ensure that you complete all the tasks for a successful upgrade/patch, follow the step by step instructions in the upgrade planning checklist to track and plan the upgrade.

**Upgrade assistance**

The following resources are available to help you plan your upgrade/patch:

- [Upgrade Product Documentation](#)
- [Release Notes](#)
- [Known Error Information](#)
- [Upgrade and migration tasks for your applications and features](#)
- [Upgrade Planning Checklist](#)

---

**\* Instance**

**instance-name**  
 Jakarta Patch 7

Non-Production

Change Instance

---

**\* Available Versions**

Kingston Patch 4
Kingston Patch 3
Kingston Patch 2
Kingston Patch 1
Kingston
Jakarta Patch 8

- g. To specify a date and time for the upgrade or patch, click the calendar icon next to the Start Date and Time field.
- h. Click the clock icon to select the time for the upgrade or patch.

---

**Note:** Setting the time for an upgrade or patch is important. Set the upgrade or patch to start 10–15 minutes before the Upgrade scheduled job runs. This setting allows enough time for the upgrade or patch request to update HI's records about which release version your instance should be on before the Upgrade scheduled job runs.

---


- i. Click Submit.  
A confirmation message appears. If you do not need an entitlement, a change request is created.
5. If applicable, request a version entitlement.
  - a. In the Actions column, click Schedule.  
If the version does require an entitlement, this screen appears:

## \* Available Versions

Kingston Patch 3
Kingston Patch 2
Kingston Patch 1
<b>Jakarta Patch 8</b>

**Entitlement:** This version requires entitlement approval. A request will be submitted for review & approval before the upgrade can begin.

## \* Start Date and Time

\*Due to the additional review that is required, you must select a date at least 3 days from today

- b. Click the calendar icon and specify a date and time at least three days in the future.

ServiceNow entitlement managers respond to your entitlement request within three days.

---

**Note:** Setting the time for an upgrade or patch is important. Set the upgrade or patch to start 10–15 minutes before the Upgrade scheduled job runs. This setting allows enough time for the upgrade or patch request to update HI's records about which release version your instance should be on before the Upgrade scheduled job runs.

---

- c. Click Schedule.  
A confirmation message appears. If you need an entitlement, the entitlement request number is included. Click the entitlement request number to view the request.
- d. If you have any questions about your entitlement, comment on your entitlement request after you have submitted it.

Previous Topic

- [Phase 2 - Prepare for the development instance upgrade](#)

Next Topic

- [Phase 4 - Upgrade and validate the development instance](#)

Phase 4 - Upgrade and validate the development instance

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Track the progress of your upgrades with the Upgrade Monitor. For your first non-production instance upgrade (your development instance), use the Upgrade Monitor to process the skipped list of records that were not addressed in the upgrade. Then identify your update sets and perform functional testing.

## About this task

The [Upgrade Monitor](#) helps you upgrade an individual instance. You can monitor the progress of an upgrade and resolve conflicts between the upgrade and customizations.

## Procedure

1. Using the Upgrade Monitor, monitor the upgrade to your instance and validate that the upgrade to your development instance is complete.
2. After the upgrade for your development instance is complete, [process the skipped records list](#) in the Upgrade Monitor.

As you are processing the skipped list, you may merge and revert records, [resolve conflicts for an individual record](#), and make additional customizations. These changes go into the latest version, which goes into your current update set.

3. Identify your update sets.

You need these update sets for your subsequent non-production instances. If there are issues that must be addressed after the upgrade, make the appropriate changes and they will go into your current update set. Collect the update sets that:

- Were created while reviewing the skipped updates list.
- Were created while changing customizations to work with the latest release.
- Must go live immediately after your next upgrade.

Gathering these update sets before your upgrade expedites the process of exporting, importing, and committing them onto your other instances. After the correct update sets are identified, follow the standard process for moving and applying those update sets. Refer to [System update sets](#) for details.

4. Before and after upgrading, conduct smoke tests on your development instance. Use your comprehensive test plan to perform functional testing.

After upgrading, track any defects or deviations from the pre-upgrade testing results. Defect tracking can help identify root causes and create fixes. When a fix is identified, capture the fix in a single update set. The resulting update sets hold the cumulative fixes that should be applied to the production instance.

To help automate your testing and validation on non-production instances, use the [Automated Test Framework](#).

### Previous Topic

- [Phase 3 - Verify your upgrade configurations and schedule the development instance upgrade in HI](#)

### Next Topic

- [Phase 5 - If applicable: Upgrade and validate your other non-production instances, such as your test instance](#)

Phase 5 - If applicable: Upgrade and validate your other non-production instances, such as your test instance

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

If you have any other non-production instances in addition to your development instance, such as a test instance, request to upgrade these instances. Request these upgrades after you have configured and refined your development instance. Immediately after the upgrade is complete, apply the post-upgrade changes made to your development instance, including activating optional plugins, installing and upgrading applications, and applying update sets.

## About this task

This instance naming convention assumes that you have three ServiceNow instances. If you have three instances, upgrade your instances in this order:

1. Development
2. Test
3. Production

If you have more or less than three instances, or if you are using [Team Development](#), these instance labels will be different. In general, upgrade your instances furthest from production towards your production instance.

After you have applied your development update sets to your test instance, perform the following tasks on your test instance (and other non-production instances, if applicable).

## Procedure

1. Create a system clone down from your production instance.
2. Schedule the non-production upgrade in HI and verify your upgrade configurations.
3. Validate that the upgrade to your non-production instance is complete.
4. Install any optional plugins that were installed on your development instance.
5. Install any custom applications and post-upgrade fix scripts that you need.
6. Install update sets.  
Use these update sets to move your initial changes into your subsequent non-production instances.
7. Perform functional testing and monitor the performance of your instance.  
Reproduce the typical user activities that occur on your production instance. The [Automated Test Framework](#) can greatly assist you in testing your non-production instances. For extra testing coverage, you can also conduct user acceptance testing (UAT).

Previous Topic

- [Phase 4 - Upgrade and validate the development instance](#)

Next Topic

- [Phase 6 - Prepare to upgrade the production instance](#)

Phase 6 - Prepare to upgrade the production instance

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

After you have configured and refined your test environment to be a good representation of your production environment, prepare to upgrade your production instance.

## Before you begin

To ensure that all stakeholders in your company are prepared for the final production upgrade, complete the administrative planning tasks in Phase 6 of the [Upgrade planning checklist \(London\)](#). When upgrading a production instance:

- Obtain confirmation from IT and management that all non-production instance defects have been fixed, validated, and included in an update set.
- Use the change management process established by your organization to track the upgrade.
- Communicate effectively with your user community regarding changes, new features, and process updates resulting from the upgrade.
- Negotiate a suitable upgrade time for all users of the ServiceNow system.

For example, schedule the upgrade after hours, to minimize impact to your users. Remember to schedule the upgrade to occur 15–20 minutes before the [Upgrade scheduled job](#) interval.

- Allow time in your change window to run all test cases and validate that all integrations, key business functionality, and system performance are acceptable. Add a time buffer for responding to errors without breaching the change window.

## Procedure

1. Profile the performance of your instance before upgrading.

Pre-upgrade instance validation can provide a reliable benchmark of the current operating environment and alert you to any issues that may appear after the upgrade. For example, it sometimes appears that specific functionality is broken by an upgrade. Analysis might show that the functionality did not work properly in the production instance, even before the upgrade.

Before performing the upgrade, analyze the current operating environment. Specifically, review:

- Key functionality
- Integrations
- Instance performance

2. Use the ServiceNow Performance homepage to document the performance of your instance before the upgrade.

You will later compare and contrast this information during your post-upgrade validation and testing. Benchmarks will be different for each of your instances.

To access the ServiceNow Performance homepage:

- a. Log in to your instance.
- b. From the list in the top left of the instance homepage, select ServiceNow Performance.





3. On your clone, perform functional testing and monitor the performance of your instance. Replicate typical user behaviors that occur on your production instance. Assign a consistent core team of power users and key stakeholders to validate important functionality in the ServiceNow instance before and after upgrades.

Previous Topic

- [Phase 5 - If applicable: Upgrade and validate your other non-production instances, such as your test instance](#)

Next Topic

- [Phase 7 - Upgrade the production instance](#)

## Phase 7 - Upgrade the production instance

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

After you have upgraded your development, non-production, and test instances, upgrade your production instance last. Then validate that the upgrade was complete, apply update sets and fix scripts, and perform post-upgrade user acceptance testing (UAT).

1. Schedule the upgrade in HI.
  - a. Log in to HI.
  - b. Click Instances in the left navigation menu.
  - c. Select Manage Instances.
  - d. [Partners only] From the user menu, use the Switch Company feature to select a company.

- e. Select the instance that you want to upgrade or patch.
- f. In the Actions menu, click Upgrade Instance.  
The Upgrade an Instance Service Catalog item opens up. It is prepopulated with the instance name and available versions to which you can upgrade or patch the instance.

## Upgrade an Instance ☆

This catalog item enables you to schedule a patch/upgrade to a new ServiceNow release version. Upgrading and patching your instance requires planning, testing, and validation. Please plan to test your upgrade/patch on non-production instances before applying to your production instance.

Before initiating an upgrade process, review the upgrade and migration tasks for your applications and features. To help ensure that you complete all the tasks for a successful upgrade/patch, follow the step by step instructions in the upgrade planning checklist to track and plan the upgrade.

**Upgrade assistance**

The following resources are available to help you plan your upgrade/patch:

- [Upgrade Product Documentation](#)
- [Release Notes](#)
- [Known Error Information](#)
- [Upgrade and migration tasks for your applications and features](#)
- [Upgrade Planning Checklist](#)

**\* Instance**

instance-name

Non-Production

Change Instance

Jakarta Patch 7

**\* Available Versions**

Kingston Patch 4
Kingston Patch 3
Kingston Patch 2
Kingston Patch 1
Kingston
Jakarta Patch 8

- g. To specify a date and time for the upgrade or patch, click the calendar icon next to the Start Date and Time field.
- h. Click the clock icon to select the time for the upgrade or patch.

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**Note:** Setting the time for an upgrade or patch is important. Set the upgrade or patch to start 10–15 minutes before the Upgrade scheduled job runs. This setting allows enough time for the upgrade or patch request to update HI's records about which release version your instance should be on before the Upgrade scheduled job runs.

---

- i. Click Submit.  
A confirmation message appears. If you do not need an entitlement, a change request is created.
2. If applicable, request a version entitlement.
  - a. In the Actions column, click Schedule.  
If the version does require an entitlement, this screen appears:

## \* Available Versions

Kingston Patch 3
Kingston Patch 2
Kingston Patch 1
<b>Jakarta Patch 8</b>

**Entitlement:** This version requires entitlement approval. A request will be submitted for review & approval before the upgrade can begin.

## \* Start Date and Time

\*Due to the additional review that is required, you must select a date at least 3 days from today

- b. Click the calendar icon and specify a date and time at least three days in the future.

ServiceNow entitlement managers respond to your entitlement request within three days.

---

**Note:** Setting the time for an upgrade or patch is important. Set the upgrade or patch to start 10–15 minutes before the Upgrade scheduled job runs. This setting allows enough time for the upgrade or patch request to update HI's records about which release version your instance should be on before the Upgrade scheduled job runs.

---

- c. Click Schedule.  
A confirmation message appears. If you need an entitlement, the entitlement request number is included. Click the entitlement request number to view the request.
- d. If you have any questions about your entitlement, comment on your entitlement request after you have submitted it.
3. [Monitor the upgrade to your instance](#) and validate that the upgrade to your production instance is complete.

There are several methods of verifying that your upgrade is complete:

- Navigate to the System Diagnostics > Upgrade Monitor.
- Navigate to System Diagnostics > Upgrade Log and locate the Notifying HI that upgrade has been completed message.
- Navigate to System Definition > System Upgrades. Information about all system upgrades is listed.
- Navigate to System Diagnostics > Upgrade History and search for the most recent upgrade.

4. Apply any update sets and post-upgrade fix scripts that you have.
5. Validate and test your instance by conducting user acceptance testing (UAT).

Previous Topic

- [Phase 6 - Prepare to upgrade the production instance](#)

Next Topic

- [Troubleshooting and other upgrade resources](#)

Troubleshooting and other upgrade resources

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Use this information to troubleshoot post-upgrade issues and learn more about other aspects of ServiceNow's upgrade process.

## Evaluate log data

Performance and operating information is available in the system logs, which offer an excellent source of information for evaluating the inner workings of a ServiceNow instance. Use this information to help resolve as many errors as possible. To access the log data, navigate to System Logs > System Log > Errors.

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**Note:** Not all errors in the error log are results of your upgrade. Error messages are often present in pre-upgrade instances, and many of these messages do not affect users or performance.

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## Other resources

- [Quarterly Patching Program - Customer FAQ](#)

Previous Topic

- [Phase 7 - Upgrade the production instance](#)

## Upgrade and migration tasks by application or feature

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Complete the upgrade tasks where necessary to prepare an application or feature for the upgrade process, and complete appropriate migration tasks after the upgrade to protect your data and customizations from changes to the system.

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**Note:** In Jakarta and later, Internet Explorer versions prior to IE11 are no longer supported.

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Application or feature	Details
Asset Management	<hr/> <p><b>Warning:</b> If you upgrade to Software Asset Management Foundation plugin (com.snc.sams) from Software Asset Management plugin (com.snc.software_asset_management), you cannot revert back to Software Asset Management plugin (com.snc.software_asset_management).</p> <hr/>

Application or feature	Details
Automated Test Framework	<p><b>Note:</b> Tests can be promoted to production instances, but the test execution property is disabled to prevent them from running on a production system. Run tests only on development, test, and other non-production instances. See <a href="#">Enable or disable executing Automated Test Framework tests</a></p>
Cloud Management	<p>If you are upgrading, to the current release, from a release prior to Jakarta with the cloud plugins (com.snc.azure, com.snc.aws, and orchestration.vmware) activated on your instance and you decide to activate the Cloud Management plugin (com.snc.cloud.mgmt), then the cloud plugins activated prior to Jakarta may not work correctly. Do not use the cloud plugins (com.snc.azure, com.snc.aws, and orchestration.vmware) because they are deprecated. You must migrate all configurations, discovery schedules, and catalog items to the post-Jakarta Cloud Management plugin (com.snc.cloud.mgmt).</p>
Dashboards	<ul style="list-style-type: none"> <li>Responsive dashboards are enabled by default on new instances. On upgrading instances, responsive canvas must be <a href="#">enabled by an administrator</a>.</li> </ul>
Edge Encryption	<p>When you upgrade from previous releases, you may encounter an issue during Edge Encryption proxy server upgrades because the proxy has not yet been upgraded to handle newly introduced request and response codes.</p> <p>During the proxy upgrade, a message like the following may appear in the proxy logs:</p> <p><b>Error:</b></p> <pre>2018-05-25 09:48:44,758 WARN Unexpected response code 555 from the ServiceNow 2018-05-25 09:48:44,784 ERROR Update stats received error code : 555 : ServiceNow 2018-05-25 09:48:49,862 WARN Unexpected response code 555 from the ServiceNow</pre> <p>The solution is to restart the proxy and then retry the proxy upgrade.</p>
Event Management	<p>The upgrade process moves your instance to a new ServiceNow release version. Upgrading and patching your instance requires planning, testing, and validation. To ensure a safe and effective upgrade, create upgrade plans and test your upgrade on non-production instances before upgrading your production instance.</p>
Guided Tour Designer	<p>The Guided Tour Designer was first introduced in the Jakarta release with support for guided tours on the standard platform UI. For new instances created in Jakarta and beyond, guided tours are active by default. For instances originating from pre-Jakarta, guided tours are inactive by default. See <a href="#">Activate guided tours</a> to enable the feature on your instance.</p> <p>With the London release, you can also enable guided tours to run on Service Portal pages. When you upgrade your instance to London, the following results occur.</p> <ul style="list-style-type: none"> <li>For instances that are new in London, the Guided Tours for Service Portal feature is active by default.</li> <li>For pre-London instances that you upgrade to London, the Guided Tours for Service Portal feature is inactive by default.</li> </ul>

Application or feature	Details
	<ul style="list-style-type: none"> <li>To run guided tours on Service Portal pages, ensure the <code>com.glide.guided_tours.enable</code> and <code>glide.sp.guided_tours.enable</code> properties are both set to True. See <a href="#">Activate guided tours</a> to enable the feature on your instance.</li> </ul>
HR Service Delivery	<p><b>Note:</b> When upgrading from Istanbul, HR document templates have a new field. The Document type field helps to filter a list of document templates that appear on the HR case form. HR criteria works with this field to further narrow the list of document templates you want available for an HR case. Because Istanbul did not have this field, you must create new or select an existing document type for your document templates. See <a href="#">Document Types</a>.</p>
MetricBase	Legacy triggers are available only to upgraded instances. New activations of the MetricBase application do not include legacy triggers.
MID Server	<ul style="list-style-type: none"> <li>There is a new process for accessing the <code>install.service-now.com</code> download site for MID Server upgrades. New ServiceNow instances handle all traffic from the download site, which eliminates the need for MID Server host machines to connect with <code>install.service-now.com</code>. However, instances upgraded to the London release require their MID Servers to send their initial upgrade requests through <code>install.service-now.com</code>. After the first upgrade, MID Servers can send subsequent auto-upgrade requests directly to the instance, when the <code>mid.download.through.instance</code> system property is set to true. For details, see <a href="#">MID Server upgrade</a>.</li> <li>The change to the Java Runtime Environment (JRE) installation procedure for new MID Servers does not affect upgrades of existing MID Servers. These MID Servers receive the supported JRE version when they upgrade.</li> </ul> <p>For additional information about MID Server upgrades, see:</p> <ul style="list-style-type: none"> <li><a href="#">MID Server pre-upgrade check</a>: Describes how the AutoUpgrade monitor tests the MID Server's ability to upgrade on your system before the actual upgrade.</li> <li><a href="#">Upgrade the MID Server manually</a>: Describes how to upgrade your MID Servers manually.</li> </ul>
Notifications	If you are upgrading from a pre-Jakarta release and want to enable <a href="#">randomized watermarks</a> in email notifications for upgraded instances, activate the Random Watermark Support plugin ( <code>com.glide.email.random_watermark</code> ). This plugin includes system properties for managing a watermark transition period, during which the system recognizes both randomized watermarks and non-randomized watermarks in emails created before upgrading. For details, see <a href="#">Notifications upgrade information</a> .
Password Reset	Platform feature – upgraded by default.

Application or feature	Details
	<p><b>Note:</b> The Password Reset application is not available during upgrade.</p>
Project Portfolio Management	<ul style="list-style-type: none"> <li>Planning Console: If you are upgrading, the Client side planning console functionality for project scheduling is disabled. To enable the functionality, you must: <ol style="list-style-type: none"> <li>Set the project property Enable firing of Business Rules on save from Planning Console to false, if it was set to true before upgrade.</li> <li>Set the Enable Client Side Planning check box to true.</li> </ol> </li> </ul> <p><b>Note:</b> If you do not have any custom business rules on the fields listed below, mark Fire BR on Save to false for these fields in planning console column configuration:</p> <ul style="list-style-type: none"> <li>State</li> <li>Percent Complete</li> <li>Actual start date</li> <li>Actual end date</li> </ul> <ul style="list-style-type: none"> <li>Resource Management: Changes made to allocated hours now update only allocated hours in the resource plan. Prior to this, it had updated the planned hours. Because of this change, if you have customizations around Planned or Allocated hours and cost on the resource plan or resource allocation, you need to alter these in the London release.</li> <li>Demand Management: On a demand form, the value for the new Assessment Required field is set to true for all existing demands on upgrade.</li> </ul>
Security Incident Response	<p>After you have completed the upgrade from Jakarta or Kingston to London, navigate to System DefinitionFix Scripts, activate and run the Update integrations to multi domain fix script to allow certain integrations to have multiple configurations defined. For example, if you have multiple Splunk instances, you can create connections and queries that run Sighting Searches across multiple Splunk instances. After the fix script has run, return to System DefinitionFix Scripts and deactivate it. It is important that the script not be allowed to run more than one time.</p>
Service Catalog	<p>Before upgrading, you should be aware of changes made to the underlyingService Catalog data model. These changes affect the way that you implement multiple service catalogs. For details, see <a href="#">Upgrade to multiple service catalogs</a>. If you are upgrading from a version prior to the Fuji release, see <a href="#">Migrate cart layouts</a>.</p>
Security Incident Response	<p>If you have completed an upgrade from Jakarta or Kingston to London, navigate to System Definition &gt; Fix Scripts, run the Update integrations to multi domain fix script to allow certain integrations to have multiple configurations defined. For example, if you have multiple Splunk instances, you can create connections and queries that run Sighting Searches across multiple Splunk instances. After the fix script has run, return to System Definition &gt; Fix Scripts and deactivate the fix script. It is important that the script not be allowed to run more than one time.</p>
Service Portal	<ul style="list-style-type: none"> <li>In new instances, search facets are enabled by default. If upgrading from a previous release, enable search facets by activating a record in the Page Route Maps [sp_page_route_map] table. See <a href="#">Enable search facets</a>.</li> </ul>

Application or feature	Details
	<ul style="list-style-type: none"> <li>Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must activate the Mobile and Service Portal version of the validation script to validate user input in the Service Portal. See <a href="#">Activate Service Portal validation scripts</a>.</li> <li>In new instances, guided tours in Service Portal are enabled by default. If upgrading from a previous release, you must enable the <code>com.snc.guided_tours.sp.enable</code> system property to create a guided tour in Service Portal. See <a href="#">Activate guided tours for Service Portal</a>.</li> </ul>
Software Asset Management	<hr/> <p><b>Warning:</b> If you upgrade to Software Asset Management (<code>com.snc.samp</code>) plugin from Software Asset Management plugin (<code>com.snc.software_asset_management</code>), you cannot revert back to Software Asset Management plugin (<code>com.snc.software_asset_management</code>).</p> <hr/>
Subscription Management	Platform feature – upgraded by default.
UI	The List v3 plugin is no longer available for new deployments.
Vulnerability Response	<p>For releases prior to Kingston, during upgrade the Vulnerable Item table is reparented to improve performance. If you have large numbers of vulnerable items, the upgrade process may take additional time. No special handling is needed, however, you should stop any Vulnerability Response activities prior to upgrade and record your vulnerable item count. Once complete, verify that your pre- and post-upgrade vulnerable item counts match each other. For more information on the impact of reparenting, see the <a href="#">Upgrade impact of reparenting change in the Kingston release [KB0680550]</a> article in the HI Knowledge Base. For information on the upgrade impact to existing instances, see the <a href="#">Vulnerability Response: FAQ for Kingston Upgrade [KB0680543]</a> article in the HI Knowledge Base. This information does not apply if you upgrade from Kingston to this release. For Kingston release information, see <a href="#">Kingston Vulnerability Response release notes</a>.</p> <p>To reduce upgrade time, if you have Qualys or a third-party integration installed, delete all attachments on your integration data sources. You can find the attachments by navigating to System Import Sets &gt; Administration &gt; Data Sources and searching by integration. See <a href="#">Manage attachments</a> for more information.</p> <p>Application administration is not enabled, by default, in Vulnerability Response for upgrades. If you have added custom tables that rely on inherited ACLs, you must recreate the ACLs on that custom table. If you added custom roles or custom ACLs, and you enable Application administration, retest those roles and ACLs after upgrading. Ensure the assignable by attribute on the roles is set correctly to enable access to application administration.</p> <hr/> <p><b>Note:</b> Once enabled, Application administration cannot be disabled.</p> <hr/>



Application or feature	Details
	Existing CI Identifier Rules are disabled by default but not removed. They appear in Security Operations > CI Lookup Rules. To reenable, open a rule and enter values for Source and Source field, select the Active check box, and click Submit.
	When upgrading from a version prior to Kingston, the Vulnerable Items by Remediation Target Status report does not appear in the Vulnerability Response Overview and must be added manually.

## Upgrade planning checklist (London)

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Plan and track the activities related to your ServiceNow instance upgrade. To help ensure that you complete all the tasks for a successful upgrade, follow the step-by-step instructions in the upgrade planning checklist to track and plan the upgrade.

This topic contains step-by-step upgrade instructions. To download a PDF version of this checklist, click [here](#). For in-depth explanations about upgrades, refer to [Upgrade your instance](#).

Some optional steps may not be appropriate depending on the number of instances, customizations, and so forth. Mark the ones you do not need in the N/A column.

**Note:** The process for completing steps for self-hosted customers may vary (for example, requesting an instance clone or upgrades). These differences must be considered during planning.

Customer name:	
Product instance name:	<a href="https://[instancename].service-now.com">https://[instancename].service-now.com</a>
Other instance names	<a href="https://[instancename].service-now.com">https://[instancename].service-now.com</a> <a href="https://[instancename].service-now.com">https://[instancename].service-now.com</a>

	Description	Yes	No	N/A
Phase 1 - Read the release notes and plan your upgrade				
1	Review the <a href="#">London release notes</a> for the target ServiceNow feature release and patch, in addition to product and release documentation.  For London-specific upgrade considerations, see <a href="#">Upgrade and migration tasks by application or feature</a> .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phase 2 - Complete these planning tasks.				
2	Confirm which ServiceNow instances are in-scope for upgrade.			

	Description	Yes	No	N/A
3	Confirm the instance hosting model. For example, ServiceNow cloud, on-premise, or off-premise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Based on the <a href="#">London release notes</a> and other release materials, determine new functionality or notable changes that need to be validated after the upgrade.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Confirm plans to enable or disable features introduced in the new product release.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Review the <a href="#">supported web browsers</a> to determine browser prerequisites. For example, versions and types supported, and additional requirements for new UI versions. Compare these supported browsers to your corporate standard and identify any gaps.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Create a project plan for cloning, upgrading, and testing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Identify the core team of testers, power users, and key stakeholders required to validate functionality in the ServiceNow instances before and after the upgrade.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	Confirm whether there are any change freeze windows impacting the timing for environment clones or upgrades. For example, end quarter.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	<p>Confirm which of the following situations applies to your ServiceNow non-production instances:</p> <ol style="list-style-type: none"> <li>1. Development and testing can be frozen until the production upgrade is completed.</li> <li>2. Continued development (and testing) activities need to continue in a non-production instance while upgrade, remediation, and testing activities are performed in parallel on another instance.</li> <li>3. Once the final upgrade to your production instance is complete, the cloning of your final production instance to your non-production instance will wait until <u>after</u> the production upgrade is complete.</li> </ol>			
11	Confirm the availability of other systems required for integration testing (key resources and environments).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	Confirm whether there are any restrictions in which ServiceNow instances can be used for integration testing. For example, an interfacing system is only set up to access a specific ServiceNow test instance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	Confirm the testing scope and approach.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Description	Yes	No	N/A
14	Create a comprehensive test plan including test cases for all core instance functionality and integrations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	Confirm the method for tracking any defects identified during testing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	Create a high-level implementation plan that covers: <ul style="list-style-type: none"> <li>the sequence and timing to upgrade non-production and production instances</li> <li>the instances to be cloned</li> <li>the instance to be used for integration testing.</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	Confirm whether there are any change freeze windows impacting the timing for environment clones or upgrades. For example, end quarter.  <i>Responsible: ServiceNow or Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	Determine whether existing internal training materials, Knowledge Base articles in the customer instance, or other supporting documentation must be updated to align with the upgraded version. For example, changes in functionality or user interface.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19	Optional: Schedule the <a href="#">ServiceNow Configuration Review</a> , which provides recommendations to align the customer configurations with ServiceNow best practices.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Note:</b> There may be a service charge and require professional services engagement.			
20	On your production instance, create a system clone and select your development instance as the Target instance. Notify impacted users and internal stakeholders of the scheduled date/time for cloning (from production) and upgrade of the non-production instance.  <b>Note:</b> It is important to test on a system that reflects the production instance as closely as possible. If your non-production and production instances are the same size, include the production audit log and the attachment data, and ensure that you have deselected the exclude options.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Phase 3 - Verify your upgrade configurations and schedule the development instance upgrade in HI

	Description	Yes	No	N/A
21	Check the configuration of the Upgrade scheduled job to view how often and when it runs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22	Verify that the Upgrade sys_trigger is set properly for upgrading.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
23	Verify that the Check Upgrade Script sys_trigger is set properly for upgrading.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24	Schedule the upgrade in HI.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25	If applicable, request a version entitlement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phase 4 - Upgrade and validate the development instance				
26	Using the Upgrade Monitor, monitor the upgrade to your instance and validate that the upgrade to your development instance is complete.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27	After the upgrade for your development instance is complete, <a href="#">process the skipped records list</a> in the Upgrade Monitor.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28	Identify your update sets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29	Before and after upgrading, conduct smoke tests on your development instance. Use your comprehensive test plan to perform functional testing.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phase 5 - If applicable: Upgrade and validate your other non-production instances, such as your test instance				
30	On your production instance, create a system clone and select your development instance as the Target instance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31	Schedule the non-production upgrade in HI and verify your upgrade configurations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
32	Validate that the upgrade to your non-production instance is complete.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
33	Install any optional plugins that were installed on your development instance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
34	Install any custom applications and post-upgrade fix scripts that you need.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
35	Install update sets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
36	Perform functional testing and monitor the performance of your instance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Description	Yes	No	N/A
Phase 6 - Prepare to upgrade the production instance				
37	Confirm sign-off from IT and Business stakeholders that all non-production instance defects have been fixed and validated in update sets.  <i>Responsible: Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
38	Confirm the core team of key stakeholders required to validate functionality in the ServiceNow instance after the production upgrade.  <i>Responsible: Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
39	Confirm coverage for Day 1 support post-upgrade.  <i>Responsible: Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
40	Create a Production Upgrade Implementation Plan that includes all upgrade steps, roles and responsibilities, communication plans, key contacts, support coverage for Day 1, and so forth.  <i>Responsible: Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
41	Schedule a walkthrough and sign-off of the Implementation Plan with key stakeholders and the core team.  <i>Responsible: Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
42	Submit and obtain approvals for change records as required by the organization change process.  <i>Responsible: Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
43	Send a communication to key stakeholders and end users with details for the production upgrade outage, new features, and so forth.  <i>Responsible: Customer</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
44	Profile the performance of your instance before upgrading.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
45	Use the ServiceNow Performance homepage to document the performance of your instance before the upgrade.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
46	On your clone, perform functional testing and monitor the performance of your instance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Phase 7 - Upgrade the production instance				
47	Schedule the upgrade in HI.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
48	If applicable, request a version entitlement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
49	<a href="#">Monitor the upgrade to your instance</a> and validate that the upgrade to your production instance is complete.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Description	Yes	No	N/A
50	Apply any update sets and post-upgrade fix scripts that you have.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
51	Validate and test your instance by conducting user acceptance testing (UAT). Verify with all key stakeholders that the system is performing properly after production upgrade, and key functionality is available.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Upgrade to London from Istanbul

**Last updated:** July 27, 2018

**Last updated:** July 27, 2018

When you upgrade from the Istanbul release to the London release, understand the fixes in each release version, notable changes for the user interface, browser support, plugin updates, and each feature's upgrade and migration tasks if applicable.

- [Release notes for upgrade from Istanbul to London](#)

Before you upgrade from Istanbul to London, read the release notes for information about new features, notable changes, and fixes to existing functionality.

- [User interface in London](#)

List v3 is no longer available for new deployments. If you are already using List v3, you can continue to do so. There are several aspects of list administration that are specific to List v3.

- [Notable changes for upgrades from Istanbul to London](#)

Complete the upgrade tasks where necessary to prepare an application or feature for the upgrade process, and complete appropriate migration tasks after the upgrade to protect your data and customizations from changes to the system.

- [Changes to plugins](#)

This table lists new plugins in the London release and existing plugins that were deprecated, renamed, or changed in some way.

- [Browser support in London](#)

Browser support varies for each version of the user interface (UI). Most major browsers are supported.

## Release notes for upgrade from Istanbul to London

**Last updated:** July 27, 2018

**Last updated:** July 27, 2018

Before you upgrade from Istanbul to London, read the release notes for information about new features, notable changes, and fixes to existing functionality.

## New features and changes in Jakarta, Kingston, and London

Each release family contains new functionality. Read the release notes for details on the new features and changes in Jakarta, Kingston, and London.

- [Jakarta release notes](#)
- [Kingston release notes](#)
- [London release notes](#)

## Patch and hot fix release notes

Patches and hot fixes contain security fixes as well as fixes for products and applications. These fixes are listed in each family's Available Versions.

- [Available versions \(Jakarta\)](#)
- [Available versions \(Kingston\)](#)
- [Available versions \(London\)](#)

Patch release notes are organized into three sections.

Release notes section	Type of information
Security-related fixes	Contains a KB article with details on the patch's fixed security bugs
Notable fixes	Lists important fixed PRBs in the patch
	<b>Important:</b> Examine the notable fixes in each patch and consider adding them to your upgrade testing plans. For information on how to test different instances during upgrades, refer to <a href="#">Upgrade to London</a> .
All other fixes	Lists all other fixed PRBs in the patch

Refer to the [Known Error Portal](#) to quickly locate Known Error articles related to the various releases.

## Upgrade instructions

After you have reviewed the release notes and patch information to understand all the changes that will be implemented in London, you can start upgrading your instance. For an overview of the upgrade process, release definitions, and upgrade testing, refer to [Upgrade to London](#).

For a step-by-step guide through the upgrade process, refer to [Upgrade your instance](#) and the [Upgrade planning checklist \(London\)](#).

## User interface in London

**Last updated:** July 27, 2018

**Last updated:** July 27, 2018

List v3 is no longer available for new deployments. If you are already using List v3, you can continue to do so. There are several aspects of list administration that are specific to List v3.

## UI16

The UI16 interface provides an updated look and usability improvements.

Notable features include real-time form updates, user presence, a redesigned application navigator with tabs for favorites and history, and enhanced activity streams. UI16 is the default user interface for new instances. For upgraded instances, an administrator must activate UI16.





### UI16 user interface

The screenshot displays the ServiceNow UI16 interface for a System Administrator. The top navigation bar includes the ServiceNow logo, 'Service Management', and user information. A filter navigator on the left lists various application areas like Self-Service, Service Desk, Incident, Problem, Change, and Standard Change. The main content area shows a list of Change Requests with columns for Number, Short description, Approval, Type, State, Planned start date, Planned end date, and Assigned to. The list contains 14 items, each with a status icon (e.g., Requested, Approved, Rejected) and a link to the record.

	Number	Short description	Approval	Type	State	Planned start date	Planned end date	Assigned to
<input type="checkbox"/>	<a href="#">CHG0000001</a>	Rollback Oracle Version	Requested	Normal	New	2015-09-03 16:00:00	2015-09-03 18:00:00	<a href="#">ITIL User</a>
<input type="checkbox"/>	<a href="#">CHG0000004</a>	Upgrade to Oracle 11i	Not Yet Requested	Normal	Review	2015-09-04 00:00:00	2015-09-04 06:00:00	<a href="#">ITIL User</a>
<input type="checkbox"/>	<a href="#">CHG0000005</a>	Install new PBX	Approved	Normal	Implement	2015-09-07 00:00:00	2015-09-10 16:46:31	<a href="#">David Loo</a>
<input type="checkbox"/>	<a href="#">CHG0000006</a>	Put another 100 Gb drive on the 2nd Floor Server	Not Yet Requested	Normal	Scheduled	2015-09-11 23:00:00	2015-09-11 23:45:00	<a href="#">ITIL User</a>
<input type="checkbox"/>	<a href="#">CHG0000007</a>	R&D wants to know what it'd cost to switch them over to Linux desktops	Rejected	Normal	Authorize	2015-09-12 16:00:00	2015-09-12 20:00:00	<a href="#">ITIL User</a>
<input type="checkbox"/>	<a href="#">CHG0000008</a>	Install new Cisco	Requested	Normal	Authorize	2015-09-09 12:30:00	2015-09-09 17:30:00	<a href="#">ITIL User</a>
<input type="checkbox"/>	<a href="#">CHG0000009</a>	Apply patches 10.2.0.1 to 10.2.0.3	Approved	Normal	New	2015-09-07 03:00:00	2015-09-07 08:00:15	<a href="#">Bow Ruggeri</a>
<input type="checkbox"/>	<a href="#">CHG0000010</a>	Java Application Server change	Approved	Normal	New	2015-10-02 03:00:00	2015-10-02 08:00:00	<a href="#">Don Goodliffe</a>
<input type="checkbox"/>	<a href="#">CHG0000011</a>	Another Java Application Server change	Approved	Normal	New	2016-04-16 03:00:00	2016-04-17 06:00:00	<a href="#">David Loo</a>
<input type="checkbox"/>	<a href="#">CHG0000012</a>	Java App Server	Approved	Normal	New	2016-04-08 18:00:00	2016-04-08 20:00:00	<a href="#">Charlie Whitherspoon</a>
<input type="checkbox"/>	<a href="#">CHG0000013</a>	Oracle FLX (Java App Dependency)	Approved	Normal	New	2016-04-17 12:00:00	2016-04-17 14:00:00	<a href="#">Fred Luddy</a>
<input type="checkbox"/>	<a href="#">CHG0000014</a>	CMS App FLX (depends on Java Apps FLX)	Approved	Normal	New	2016-04-19 01:00:00	2016-04-19 02:59:59	<a href="#">Christen Mitchell</a>



## UI16 components

Component	Description
Banner frame	<p>Runs across the top of every page and contains a logo and the following information, controls, and tools.</p> <ul style="list-style-type: none"> <li>User menu provides options to access your profile and preferences. Administrators can impersonate users and elevate their security role.</li> <li><a href="#">Connect sidebar icon</a> (): Lets you begin or continue conversations. This icon is available if Connect is enabled.</li> <li><a href="#">Global text search</a> icon (): Finds records from multiple tables.</li> <li>Help icon (): Opens the help panel with embedded help, where available. If there is no embedded help, it offers help search options.</li> <li>Gear icon (): Opens the <a href="#">System settings for the user interface (UI)</a>.</li> </ul>
Application navigator	Also called the left-navigation bar. Provides links to all applications and modules. See <a href="#">Application navigator</a> .
Content frame	Displays information such as lists, forms, homepages, and wizards.
The Edge	The Edge is removed in UI16. The collapsed view of the UI16 application navigator is similar to the Edge.

### Related Tasks

- [Configure logo, colors, and system defaults for UI16](#)

## List v3 in London

List v2 is the default version of lists and is supported in all versions of the UI. Even when List v3 is activated, some UI16 lists may display in List v2. For details, see [List v3 compatibility](#).

For details on how to activate and administer List v3, refer to [List v3 administration](#).

### Visual differences between List v2 and List v3

If you are unsure whether a list is v2 or v3, look for the following identifiers.

- The personalize list gear icon appears in the upper left corner of v2 lists. The personalize list option is located in the [List title menus](#).
- Page controls appear in the list title bar of v2 lists.
- The list mode toggle appears in the list title bar of v3 lists. You can switch between the standard list mode, called Grid mode, and a Split list and form mode.
- Avatars appear by user names in v3 lists.
- Page controls appear in a footer at the bottom of the page for v3 lists.

- The response time indicator does not appear on the bottom, right of v3 lists. You can create a property to display the response time in milliseconds (ms) on the lower left in the List v3 footer.

### List v2 identifiers

Annotations in the screenshot:

- Personalize list icon:** Points to the gear icon in the top left of the list header.
- Page controls in title bar:** Points to the pagination controls (1 to 55 of 55) in the top right.

	Number	Short description	Caller	Priority	State	Category	Ass
<input type="checkbox"/>	INC0000001	Can't read email	Fred Luddy	1 - Critical	Closed	Network	Charlie Whitte
<input type="checkbox"/>	0000002	Unable to get to network file shares	Fred Luddy	1 - Critical	Awaiting Problem	Network	Howard
<input type="checkbox"/>	INC0000003	Wireless access is down in my area	Joe Employee	1 - Critical	Active	Network	Beth Ar
<input type="checkbox"/>	INC0000004	Forgot email password	Fred Luddy	1 - Critical	Closed	Request	Bud Ric
<input type="checkbox"/>	INC0000005	CPU load high for over 10 minutes	Alejandro Mascall	1 - Critical	Closed	Hardware	Bud Ric
<input type="checkbox"/>	INC0000006	Hang when trying to print VISIO document	Joe Employee	1 - Critical	Closed	Software	Howard

### List v3 identifiers

Annotations in the screenshot:

- List mode toggle:** Points to the 'Grid' and 'Split' buttons in the top right.
- Avatar:** Points to the user profile picture of Alejandro Mascall.
- Footer:** Points to the bottom section containing '20 rows per page' and pagination controls.

	Number	Short description	Caller	Priority	State	Category
<input type="checkbox"/>	INC0000001	Can't read email	FL Fred Luddy	1 - Critical	Closed	Network
<input type="checkbox"/>	INC0000002	Unable to get to network file shares	FL Fred Luddy	1 - Critical	On Hold	Network
<input type="checkbox"/>	INC0000003	Wireless access is down in my area	Joe Employee	1 - Critical	In Progress	Network
<input type="checkbox"/>	INC0000004	Forgot email password	FL Fred Luddy	1 - Critical	Closed	Inquiry / Help
<input type="checkbox"/>	INC0000005	CPU load high for over 10 minutes	Alejandro Mascall	1 - Critical	Closed	Hardware
<input type="checkbox"/>	INC0000006	Hang when trying to print VISIO document	Joe Employee	1 - Critical	Closed	Software
<input type="checkbox"/>	INC0000007	Need access to sales DB for the West	Joe Employee	1 - Critical	On Hold	Database
<input type="checkbox"/>	INC0000010	Need Oracle 10GR2 installed	FL Fred Luddy	4 - Low	Closed	Database
<input type="checkbox"/>	INC0000011	Need new Blackberry setup	Don Goodliffe	3 - Moderate	Closed	Inquiry / Help

For more information on the differences between List v2 and v3, see the [comparison of List v2 and List v3](#).

## Notable changes for upgrades from Istanbul to London

**Last updated:** July 27, 2018

**Last updated:** July 27, 2018

Complete the upgrade tasks where necessary to prepare an application or feature for the upgrade process, and complete appropriate migration tasks after the upgrade to protect your data and customizations from changes to the system.

## Notable changes to applications and features

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**Note:** In Jakarta and later, Internet Explorer versions prior to IE11 are no longer supported.

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Application or feature	Details
Agile Development	Installing Agile Development 2.0 replaces the existing Agile Development, if already installed. Review <a href="#">Agile Development upgrade information</a> before activating Agile Development 2.0.
Application Portfolio Management	Application Portfolio Management integrates with Service Mapping differently from what it was. The application Instances tab has been removed and the application instances [apm_app_instance] table is no longer used to store application instances data. The application instances table is replaced with the Business Services [cmdb_ci_service] table (if Service Mapping is not installed) or the Discovered Business Service [cmdb_ci_discovered_service] table (if Service Mapping product is installed). Any data in the application instances table for service mapping integration must be migrated to the business service table. If you are upgrading to the London release, then contact ServiceNow personnel for help with migrating the data.
Asset Management	<p>If you have the ITSM Software Asset Management feature enabled using the existing Software Asset Management (com.snc.software_asset_management) plugin on a release prior to London, you can continue to use the Software Asset Management plugin.</p> <p>To migrate from the Software Asset Management (com.snc.software_asset_management) plugin to the Software Asset Management Foundation (com.snc.sams) plugin, consult your service manager.</p> <hr/> <p><b>Warning:</b> If you upgrade to Software Asset Management Foundation plugin (com.snc.sams) from Software Asset Management plugin (com.snc.software_asset_management), you cannot revert back to Software Asset Management plugin (com.snc.software_asset_management).</p> <hr/>
Automated Test Framework	Tests can be promoted to production instances, but the test execution property is disabled to prevent them from running on a production system. Run tests only on development, test, and other non-production instances. See <a href="#">Enable or disable executing Automated Test Framework tests</a> .
Calendars and schedules	Starting with the London release, the Fiscal calendar is a platform feature and is no longer dependent on Financial Management.
CMDB	CMDB content undergoes table per partition <a href="#">table flattening</a> during upgrade. This change does not have a performance impact and is transparent to users. Customers with a large CMDB table may experience a longer upgrade duration. See <a href="#">KB0635006</a> .
Connect	If you are currently using the legacy chat feature to provide help desk support, close any open help desk chats before activating Connect Support. Legacy chat and Connect Support cannot be used concurrently. When you activate Connect Support, the system automatically sets the

Application or feature	Details
	state of all Chat Queue Entry [chat_queue_entry] records to Closed Complete. This ends any open help desk chats.
Credentials	<p><b>Upgrading Connection information:</b> The JDBC connection [jdbc_connection] and JMS connection [orch_jms_ds] tables extend from the Connection [sys_connection] table. They move from the Orchestration run time plugin (com.snc.runbook_automation.runtime) to the Centralized Connection and Credential plugin (com.snc.core.automation.connection_credential). The upgrade process obtains JDBC and JMS connection information and creates corresponding connection aliases and assigns the alias to its corresponding connection.</p> <p>Upgrading Credential tagging: The upgrade process migrates credential tags to credential aliases. All credential tags in the Credentials table have a corresponding credential alias, comprised of:</p> <ul style="list-style-type: none"> <li>• Name: alias name</li> <li>• Scope: global</li> <li>• ID: alias name</li> </ul> <p>The credential tag field type changes from string to GlideList in the Credential table and the credential alias field refers to the created alias records.</p>
Customer Service Management	<p>Before you upgrade, read the information in <a href="#">KB0640006</a>. Upgrading to Kingston from any previous release also requires an upgrade to OpenFrame version 1.0.2. <b>Data migration:</b> To use the new dashboards for existing case records, you must perform a one-time data migration. The procedure populates the new Case Report table. Perform the procedure during off-hours. The process can take several hours, depending on data volume.</p> <hr/> <p><b>Note:</b> The Case Report table includes three new calculated metrics: Agent Reassignment Count, First Contact Resolution, and Reopen Count, as described in <a href="#">Customer Service Manager dashboard</a>. To add the Case Report column to the Cases list, navigate to Customer Service &gt; Cases Customer ServiceCases and add the Case Report field.</p> <hr/> <ol style="list-style-type: none"> <li>1. Navigate to System Definition &gt; Schedule Job.</li> <li>2. Open the CaseDataMigrationForCaseReports record and click Execute Now.</li> <li>3. When the process finishes, the instance generates a record in the syslog table with the Message column populated with the text "Case column migration completed".</li> </ol>
Customer Service Management	Upgrading an instance brings back demo data for the Customer Service Management Demo Data plugin (com.snc.customerservice.demo) even if the demo data was previously deleted. For more information, see <a href="#">KB0634950</a> .
Dashboards	Review <a href="#">Dashboards upgrade information</a> for information about <a href="#">responsive canvas</a> and <a href="#">dashboard versions of homepages</a> .
Edge Encryption	Because the Edge Encryption proxy server requires at least 4 GB of memory, 32-bit JREs and 32-bit operating systems are no longer supported starting with the London release. Review the <a href="#">Edge Encryption system requirements and limitations</a> to ensure an optimal environment for your implementation.

Application or feature	Details
	<p>When upgrading the Edge Encryption proxy server to the London release, use the new command-line upgrade commands.</p> <ul style="list-style-type: none"> <li>• <a href="#">Manually upgrade an Edge Encryption proxy server running on Windows</a></li> <li>• <a href="#">Manually upgrade an Edge Encryption proxy server running on Linux</a></li> </ul> <p>When you upgrade from previous releases, you may encounter an issue during Edge Encryption proxy server upgrades because the proxy has not yet been upgraded to handle newly introduced request and response codes.</p> <p>During the proxy upgrade, a message like the following may appear in the proxy logs:</p> <pre>Error: 2018-05-25 09:48:44,758 WARN Unexpected response code 555 from 2018-05-25 09:48:44,784 ERROR Update stats received error code 2018-05-25 09:48:49,862 WARN Unexpected response code 555 from</pre> <p>The solution is to restart the proxy and then retry the proxy upgrade.</p>
Event Management	<p>The upgrade process moves your instance to a new ServiceNow release version. Upgrading and patching your instance requires planning, testing, and validation. To ensure a safe and effective upgrade, create upgrade plans and test your upgrade on non-production instances before upgrading your production instance.</p>
Event Management and Service Analytics	<p>During an upgrade to the Jakarta release, a script converts and moves Event Management rules and events for the release. Even though this script runs automatically, there are configuration tasks you must complete after the upgrade.</p>
Financial Management	<p>The Financial Planning application is newly introduced in the London release. If you are using the legacy Financial Planning and would like to upgrade to the new Financial Planning application, follow the <a href="#">upgrade instructions</a>.</p> <p>The upgrade instructions do not apply to Project Portfolio Planning (Portfolio Budget Model) as it is automatically upgraded as part of the London upgrade. Financial Management is no longer dependent on its use of IT DataMart. The DataMart Definitions have been upgraded to Financial Management Segments in Istanbul. New segments required for cost model or budget model must henceforth be created in Financial Management Segments.</p>
GRC: Policy and Compliance Management	<p>The GRC: UCF Import (com.snc.ucf_import_add_on) plugin was deprecated and replaced by the new GRC: Compliance UCF (com.sn_comp_ucf) plugin.</p>

Application or feature	Details
	<p><b>Note:</b> If your GRC entitlement date is before December 1, 2016, you are entitled to a free UCF CCH account for the period of December 1, 2016 through November 30, 2018. For customers on Helsinki (Patch 7 and above), or Istanbul and whose effective GRC entitlement date start on Dec 1, 2016 or after, you need to sign up for a <a href="#">UCF CCH</a> account and customize your basic subscription to include API Access. For more information about establishing a UCF CCH account, see <a href="#">Unified Compliance</a>.</p>
Guided Setup	<p>The new plugin that provides a new, process-centric version of guided setup is introduced in this release. The ITSM Guided Setup plugin (com.snc.guided_setup_metadata.itsm) is active by default for new customers. Upgrading customers can activate the plugin to view the new version of guided setup.</p> <p>One or both versions appear as modules in the navigation pane or as links on the System Administration homepage. They appear as ITSM Guided Setup or ITSM Guided Setup (Old). ITSM Guided Setup (Old) takes you to the guided setup created in the Helsinki and Istanbul releases. The administrator can hide the version that you do not want to use.</p> <p><b>Note:</b> The plugin name, ITSM Guided Setup, is the same for both old and new versions, but the plugin ID is different.</p>
Guided Tour Designer	<p>The Guided Tour Designer was first introduced in the Jakarta release with support for guided tours on the standard platform UI. For new instances created in Jakarta and beyond, guided tours are active by default. For instances originating from pre-Jakarta, guided tours are inactive by default. See <a href="#">Activate guided tours</a> to enable the feature on your instance.</p> <p>With the London release, you can also enable guided tours to run on Service Portal pages. When you upgrade your instance to London, the following results occur.</p> <ul style="list-style-type: none"> <li>• For instances that are new in London, the Guided Tours for Service Portal feature is active by default.</li> <li>• For pre-London instances that you upgrade to London, the Guided Tours for Service Portal feature is inactive by default.</li> <li>• To run guided tours on Service Portal pages, ensure the com.glide.guided_tours.enable and glide.sp.guided_tours.enable properties are both set to True. See <a href="#">Activate guided tours</a> to enable the feature on your instance.</li> </ul>
HR Service Delivery	<p>HR data migration is recommended when you are upgrading from the global version of HR to the scoped version. The Istanbul release introduced the scoped version of HRSM. The scoped version prevents users outside of HR from accessing HR data.</p> <p>Customers already on the scoped version of HR do not need to migrate their data.</p> <ul style="list-style-type: none"> <li>• <a href="#">Migration from Non-Scoped to Scoped HR</a></li> </ul>

Application or feature	Details
ITSM Guided Setup	<p><b>Note:</b> When upgrading from Istanbul, HR document templates have a new field. The Document type field helps to filter a list of document templates that appear on the HR case form. HR criteria works with this field to further narrow the list of document templates you want available for an HR case. Because Istanbul did not have this field, you must create new or select an existing document type for your document templates. See <a href="#">Document Types</a>.</p> <hr/> <p>A new plugin that provides a new, process-centric version of guided setup is introduced in this release. The ITSM Guided Setup plugin (com.snc.guided_setup_metadata.itsm) is active by default for new customers. Upgrading customers can activate the plugin to view the new version of guided setup.</p> <p>One or both versions appear as modules in the navigation pane or as links on the System Administration homepage. They appear as ITSM Guided Setup or ITSM Guided Setup (Old). ITSM Guided Setup (Old) takes you to the guided setup created in the Helsinki and Istanbul releases. The administrator can hide the version that you do not want to use.</p> <hr/> <p><b>Note:</b> The plugin name, ITSM Guided Setup, is the same for both old and new versions, but the plugin ID is different.</p> <hr/>
Knowledge Management	<p>Review the content in the community page for Knowledge upgrade best practices at <a href="#">All things Upgrade considered on Knowledge v2 to v3</a>.</p> <p>Some of the key differences between Legacy Knowledge and Knowledge v3 are:</p> <ul style="list-style-type: none"> <li>• Multiple knowledge bases (instead of one knowledge base)</li> <li>• Separate customizable workflows available for each knowledge base (instead of a single lifecycle shared by all articles)</li> <li>• Category structure that supports any number of levels (instead of a two-level organizational structure using Topic and Category)</li> <li>• Permissions defined per knowledge base and article, using user criteria (instead of per article, using roles and ACLs)</li> </ul> <p>For additional upgrade considerations, see the links under <a href="#">Migrate</a>.</p>
MID Server	<ul style="list-style-type: none"> <li>• There is a new process for accessing the install.service-now.com download site for MID Server upgrades. New ServiceNow® instances handle all traffic from the download site, which eliminates the need for MID Server host machines to connect with install.service-now.com. However, instances upgraded to the London release require their MID Servers to send their initial upgrade requests through install.service-now.com. After the first upgrade, MID Servers can send subsequent auto-upgrade requests directly to the instance, when the mid.download.through.instance system property is set to true. For details, see <a href="#">MID Server upgrade</a>.</li> <li>• The change to the Java Runtime Environment (JRE) installation procedure for new MID Servers does not affect upgrades of existing MID Servers. These MID Servers receive the supported JRE version when they upgrade.</li> </ul>

Application or feature	Details
	<ul style="list-style-type: none"> <li>For additional information about MID Server upgrades, see: <ul style="list-style-type: none"> <li><a href="#">MID Server pre-upgrade check</a>: Describes how the AutoUpgrade monitor tests the MID Server's ability to upgrade on your system before the actual upgrade.</li> <li><a href="#">Upgrade the MID Server manually</a>: Describes how to upgrade your MID Servers manually.</li> </ul> </li> <li>To understand how the IP range auto-assignment feature affects IP ranges defined in version prior to Jakarta, see <a href="#">View automation status sets and IP range assignments</a>.</li> <li>Customers who use network service providers must request specific SNMP access to use MID Server IP range auto-assignment. See <a href="#">Required SNMP OIDs for MID Server IP range auto-assignment</a>.</li> <li>In Jakarta, the MID Server can run SSH commands using either the J2SSH client or the proprietary ServiceNow® SNCSSH client. When you upgrade from Dublin or earlier, the MID Server property that controls the SSH client selection is not active in your upgraded instance, and the MID Server will use the J2SSH client by default. To enable the SNCSSH client, you must add the <code>mid.property.ssh.use_snc</code> MID Server property and set it to true. Instances upgraded from Eureka or later have the SNCSSH client enabled by default, and no configuration is required. For details, see <a href="#">MID Server properties</a>.</li> </ul>
Notifications	<p>If you want to enable <a href="#">randomized watermarks</a> in email notifications for upgraded instances, activate the Random Watermark Support plugin (<code>com.glide.email.random_watermark</code>). This plugin includes system properties for managing a watermark transition period, during which the system recognizes both randomized watermarks and non-randomized watermarks in emails created before upgrading. For details, see <a href="#">Notifications upgrade information</a>.</p> <p>To enable randomized watermarks in email notifications for upgraded instances, activate the Random Watermark Support (<code>com.glide.email.random_watermark</code>) plugin. This plugin includes system properties for managing a watermark transition period, during which the system recognizes both randomized watermarks and non-randomized watermarks in emails created before upgrading. For details, see <a href="#">Notifications upgrade information</a>.</p>
Notify	<p>If the Legacy Notify plugin (<code>com.snc.notifynow</code>) is activated on the instance:</p> <ul style="list-style-type: none"> <li>The Legacy Notify plugin and the Notify plugin (<code>com.snc.notify</code>) can coexist and work independently because they use different tables, properties, and API namespaces. You must also use two different Twilio accounts for both plugins to work.</li> <li>The Legacy Notify plugin and the Notify plugin (<code>com.snc.notify</code>) can be simultaneously instantiated on the same instance. However, the applications must be configured with different Twilio accounts or subaccounts.</li> <li>Notify account setup can be configured for a single number within an account (Legacy Notify) or for multiple numbers (Notify).</li> <li>Conference call flow is hard-coded in Legacy Notify. Notify uses a workflow-driven conference call approach.</li> <li>Legacy Notify and Notify use independent properties and schemas.</li> <li>Legacy Notify modules are moved to the Notify menu in the application navigator.</li> <li>Notify includes the <code>notifynow_admin</code> user role.</li> <li>Updates the Category field for all workflow activity to display Legacy Notify rather than NotifyNow.</li> </ul>



Application or feature	Details
	<p>If the Incident Alert Management plugin (com.snc.iam) is activated on the instance:</p> <ul style="list-style-type: none"> <li>• And Notify is activated for the first time, the appropriate scripts are installed for Notify integration.</li> <li>• And Legacy Notify has been previously configured with Incident Alert Management and the Notify plugin is activated, Incident Alert Management continues to use Legacy Notify properties.</li> <li>• To switch to the Notify plugin, configure the Twilio account and upgrade the Incident Alert Management plugin.</li> </ul> <p>If the On-Call Scheduling plugin (com.snc.on_call_rotation) is activated on the instance, the appropriate files related to On-Call Scheduling and Notify are installed.</p>
On-Call Scheduling	<p>Upgrading from previous versions is automatic, and all events are recorded in the upgrade logs (System Diagnostics &gt; Upgrade History).</p> <ul style="list-style-type: none"> <li>• The existing On-Call plugin has been changed. When you upgrade, the plugin changes are applied automatically (this action is not optional).</li> <li>• The group device functionality is deprecated in favor of a Catch All person.</li> <li>• On-call Scheduling replaces the existing business rules for escalations with escalations based on Graphical Workflow.</li> <li>• The workflow uses Notification Activities, so it sends emails and not SMS messages. It must be modified to use Create Events activities to send SMS messages.</li> </ul> <p>See <a href="#">Upgrade to on-call scheduling</a> for links to other changes that you should be aware of as you transition to on-call scheduling.</p>
Platform Security	<p>The <a href="#">Contextual Security: Role Management V2</a> plugin prevents duplicate entries caused by inherited roles in the User Roles [sys_user_has_role] table. This plugin is automatically installed on new instances starting with the London release and can be activated for upgrades. If upgrading to London from a previous release, you can manually <a href="#">upgrade to Contextual Security: Role Management V2</a>.</p>
Project Portfolio Suite with Financials	<p>After you upgrade the instance, the default value of the Retain start on constraint on tasks after adding relations property is now set to true and cannot be changed back to false. As a result, the upgraded instances that had the property set to false can experience a change in behavior of time constraint when a relation is added to a task. After relations are added to a task, the start date of the task is not affected.</p>
Reporting	<p>Report Charting v2 is automatically used, and Reporting v1 can no longer be used after an instance is upgraded.</p> <p>The Report Charting v2 plugin uses the Highcharts charting library to generate reports on the client. This plugin generates all the reports in the ServiceNow report set.</p> <hr/> <p><b>Note:</b> Scheduled reports, custom charts, and reports saved as PDF are generated on the server using the Highcharts charting library. As a result, these types of reports sometimes appear differently than reports generated on the client side.</p> <hr/>

Application or feature	Details
Schedules	Domain separation functionality is introduced for schedules.
Search administration	<p>To enable scoring knowledge documents by inverse term frequency, regenerate the index for the knowledge table.</p> <hr/> <p><b>Note:</b> Regenerating an index may take a while to complete depending on table size and other factors. You may notice performance degradation or incomplete search results while the system regenerates the index.</p> <hr/>
Security Incident Response	<p><a href="#">Application administration</a> is enabled for Security Incident Response by default. During the upgrade, verify whether you have added custom tables to Security Incident Response. If so, and your custom tables rely on global ACLs, you may need to recreate those global ACLs in the Security Incident Response scope after the upgrade. If you added custom roles or custom ACLs, retest them after the upgrade and ensure the assignable by attribute on the roles is set correctly to allow access to application administration.</p> <p>After you upgrade, but prior to configuring the <a href="#">Splunk - Incident Enrichment integration</a>, please contact ServiceNow support to manually activate the com.snc.core.automation.api plugin. The configuration will not function properly if this action is not taken.</p>
Service Catalog	Before upgrading, you should be aware of changes made to the underlying Service Catalog data model. These changes affect the way that you implement multiple service catalogs. For details, see <a href="#">Upgrade to multiple service catalogs</a> .
Service Mapping	<p>After you upgrade from a previous release, complete the following tasks:</p> <ul style="list-style-type: none"> <li>• Make sure that discovery errors are categorized by rediscovering CIs that were discovered before the upgrade with errors. For details, see <a href="#">Categorize discovery errors after Service Mapping upgrade</a>.</li> <li>• Make sure that discovery errors hidden before the upgrade do not reappear in business maps. To resolve these errors, rediscover all CIs using the All Applications schedule.</li> </ul>
Service Portal	<ul style="list-style-type: none"> <li>• In new instances, search facets are enabled by default. If upgrading from a previous release, enable search facets by activating a record in the Page Route Maps [sp_page_route_map] table. See <a href="#">Enable search facets</a>.</li> <li>• Validate user input in a specific field type using a validation script. In new instances, Service Portal includes XML, Script, Script (Plain), Email, and Version validation scripts by default. If upgrading from a previous release, the Mobile and Service Portal version is not active by default. You must activate the Mobile and Service Portal version of the validation script to validate user input in the Service Portal. See <a href="#">Activate Service Portal validation scripts</a>.</li> <li>• In new instances, guided tours in Service Portal are enabled by default. If upgrading from a previous release, you must enable the com.snc.guided_tours.sp.enable system property to create a guided tour in Service Portal. See <a href="#">Activate guided tours for Service Portal</a>.</li> <li>• Announcements are active on new instances. To activate announcements after upgrade, activate the Service Portal Announcements plugin (com.glide.service-portal.announcements).</li> <li>• The Font Awesome library has been upgraded to version 4.7 and includes new icon names and syntax changes. If your Service Portal implementation includes custom use of the Font Awesome library, you</li> </ul>

Application or feature	Details
	may need to update icon names in your custom widgets. For more information, see the <a href="#">Font Awesome GitHub upgrade guide</a> .
Software Asset Management	<p>You are using the existing Software Asset Management plugin feature (com.snc.software_asset_management) on a release prior to London, you are using a feature of the Asset Management application. After upgrading to London, you can continue to use the Software Asset Management plugin feature. To migrate to the Software Asset Management application (com.snc.samp), consult your service manager.</p> <hr/> <p><b>Warning:</b> If you upgrade to Software Asset Management (com.snc.samp) from Software Asset Management plugin (com.snc.software_asset_management), you cannot revert back to Software Asset Management plugin (com.snc.software_asset_management).</p> <hr/>
Subscription Management	Platform feature – upgraded by default.
Time Cards	When you upgrade to the London release, a default rate type named Standard is available through the Rate Type feature. This rate type is available only if the user's default time sheet policy has the Allow multiple rate types field selected. When you upgrade to the London release, some changes are made to the time cards.
UI	<ul style="list-style-type: none"> <li>• UI11 is no longer available. Use UI15 or UI16 instead.</li> <li>• Pop-up forms are no longer available.</li> <li>• The List v3 plugin is no longer available for new deployments.</li> </ul>
Upgrades	Under certain conditions, a family upgrade to Jakarta can take an extremely long time. For those conditions, see <a href="#">KB0623275</a> .
Vulnerability Response	<p>For releases prior to Kingston, during upgrade the Vulnerable Item table is reparented to improve performance. If you have large numbers of vulnerable items, the upgrade process may take additional time. No special handling is needed, however, you should stop any Vulnerability Response activities prior to upgrade and record your vulnerable item count. Once complete, verify that your pre- and post-upgrade vulnerable item counts match each other. For more information on the impact of reparenting, see the <a href="#">Upgrade impact of reparenting change in the Kingston release [KB0680550]</a> article in the HI Knowledge Base. For information on the upgrade impact to existing instances, see the <a href="#">Vulnerability Response: FAQ for Kingston Upgrade [KB0680543]</a> article in the HI Knowledge Base. This information does not apply if you upgrade from Kingston to this release. For Kingston release information, see <a href="#">Kingston Vulnerability Response release notes</a>.</p> <p>To reduce upgrade time, if you have Qualys or a third-party integration installed, delete all attachments on your integration data sources. You can find the attachments by navigating to System Import Sets &gt; Administration &gt; Data Sources and searching by integration. See <a href="#">Manage attachments</a> for more information.</p> <p>Application administration is not enabled, by default, in Vulnerability Response for upgrades. If you have added custom tables that rely on inherited ACLs, you must recreate the ACLs on that custom table. If you added custom roles or custom ACLs, and you enable Application administration, retest those roles and ACLs after upgrading. Ensure the</p>

Application or feature	Details
	assignable by attribute on the roles is set correctly to enable access to application administration.
	<b>Note:</b> Once enabled, Application administration cannot be disabled.
	Existing CI Identifier Rules are disabled by default but not removed. They appear in Security Operations > CI Lookup Rules. To reenable, open a rule and enter values for Source and Source field, select the Active check box, and click Submit. When upgrading from a version prior to Kingston, the Vulnerable Items by Remediation Target Status report does not appear in the Vulnerability Response Overview and must be added manually.
Workflow	The <a href="#">table cleaner</a> for workflow context records is enabled by default. In previous releases, the default setting was disabled to improve performance, which is unnecessary in this release. If you prefer the table cleaner to not run, you can disable it manually.

## Changes to plugins

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

This table lists new plugins in the London release and existing plugins that were deprecated, renamed, or changed in some way.

Plugin	Status	Description	Details
Amazon Web Services [com.snc.aws]	Planned for deprecation in Release L	Provided Integration with Amazon Web Services - CloudFormation, EC2	Replaced by: Cloud API [com.snc.cloud.api]
Appointment Booking [com.snc.appointment_booking]	New in London	Enables customers to book service appointments from the Customer and Consumer Service Portals.	
Appointment Booking Demo Data [com.snc.appointment_booking_demo]	New in London	Provides demo data for the appointment booking feature.	
Benchmarks Spoke [com.sn_bm_client.spoke]	New in London	Contains the evaluation framework for Benchmarks Recommendations.	
Configuration Automation [com.snc.configuration_automation]	Deprecated and non-supported	Allows you to use Orchestration, Puppet, and Chef to provision and configure individual servers or groups of	

Plugin	Status	Description	Details
		servers in your network.	
Configuration Automation – Chef [com.snc.chef]	Deprecated and non-supported	Use configuration item (CI) data to bring Linux or Windows computers into a desired state.	
Configuration Automation - Puppet [com.snc.puppet]	Deprecated and non-supported	Use CMDB (CI) data to bring computers into a desired state.	
Configuration Compliance [com.snc.vulc]	New in London	Exposes your high-impact configuration-related security vulnerabilities, and orchestrates their remediation across frequently isolated information security, IT operations, and business process areas. Activation of this plugin on production instances may require a separate license. Contact ServiceNow for details.	
Connect Spoke for Flow Designer [com.glide.connect_v3plus.core.ah]	New in London	The Connect Spoke for the Flow Designer provides actions that a process analyst can use when designing flows. The actions allow them to automate the creation of conversations, to add users to a conversation, and to send messages to a conversation. These actions work with Connect API version 3 and later.	
Customer Communities [com.sn_customer_communities]	New in London	Enables you to connect, engage, and collaborate with your employees, customers, partners, and prospects.	Only available for customers who are licensed for Customer Services Management.
Customer Service Spoke [com.snc.customer_service.spoke]	New in London	Enables Flow Designer users to automate the creation of customer	

Plugin	Status	Description	Details
Email Digest [com.glide.email_digest]	New in London	service cases and updates to existing cases.  Enables you to create an email digest that summarizes the activity for a notification during a specified time interval.	
Encrypted Workflow Scratchpad [com.snc.encrypted.scratchpad]	New in London	Supports encryption of data stored in wf_context and wf_executing scratchpads by a private workflow engine encryption context, which prevents data from being stored in plain text.	
Enterprise Release Management [com.snc.enterprise_release_management]	New in London	Enables you to manage enterprise releases, product releases, and deployment process.	
Facilities Service Management Floor Plan Viewer [com.snc.facilities_service_automation]	Planned for deprecation in Release L	Provided a floor plan view as part of Facilities Service Management.	Replaced by: This feature has been replaced by the interactive facility maps application.
Field Service Spoke [com.snc.field_service.spoke]	New in London	Enables Flow Designer users to automate the creation of work orders and work order tasks and updates to existing work orders and work order tasks.	
Financial Management Core [com.snc.financial_management]	Changed in London	Enables financial analysts to assemble spending data, build cost models, and generate reports to show how funds are being used. Activation of this plugin on production instances may have licensing implications. Contact your ServiceNow account team for details.	This plugin activates the following applications: <ul style="list-style-type: none"> <li>Financial Modeling [com.snc.financial_management]</li> <li>Financial Planning [com.snc.financial_planning_default_de</li> <li>Financial Charging [com.snc.service_charging]</li> </ul>

Plugin	Status	Description	Details
Flow Designer - Designer [com.glide.hub.designer]	New in London	Flow Designer - Designer	
Flow Designer - Engine Reporting Dashboard [com.glide.hub.flow_reporting.dashboard]	New in London	Flow Engine Reporting PA Dashboard for Flow Designer	
Flow Designer - Flow Engine [com.glide.hub.flow_engine]	New in London	Flow Designer runtime components	
Flow Designer - Flow Engine Reporting [com.glide.hub.flow_reporting]	New in London	Flow Engine Reporting components	
Flow Designer - Installer [com.glide.hub]	New in London	Suite of plugins necessary to support the Flow Designer Designer App	
Flow Designer Action Step - CORE [com.glide.hub.action_step.core]	New in London	Action Step - Core operations on GlideRecord	
Flow Designer Action Step - CRUD [com.glide.hub.action_step.crud]	New in London	Action Step - CRUD operations on GlideRecord	
Flow Designer Action Step - Email [com.glide.hub.action_step.email]	New in London	Action step for emails	
Flow Designer Action Step - Log [com.glide.hub.action_step.log]	New in London	Action Step - Log	
Flow Designer Action Step - Notification [com.glide.hub.action_step.notification]	New in London	Action steps for notifications	
Flow Designer Action Step - Script [com.glide.hub.action_step.script]	New in London	Action Step - Script	
Flow Designer Action Step Template [com.glide.hub.action_step.template]	New in London	Action Step Template Design Time components	
Flow Designer Action Trigger [com.glide.hub.flow_trigger]	New in London	Action plans that map a Trigger (Record, Email, REST) to an Action	
Flow Designer Designer Backend [com.glide.hub.designer_backend.suite]	New in London	Suite of plugins necessary to support the Flow Designer Designer App	

Plugin	Status	Description	Details
Flow Designer Designer Model [com.glide.hub.designer_backend.model]	New in London	Data model and REST API for representing Process Plans as Flows, Actions, and Steps	
Flow Designer System Level Actions [com.glide.hub.action_type.system]	New in London	Action Type Definitions for low-level functions such as GlideRecord operations	
I18N: Korean Translations [com.snc.i18n.korean]	Deprecated and non-supported	Localizes content into Korean.	<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
Incident Management - Major Incident Management [com.snc.incident.mim]	New in Kingston	Provides a recommended process to easily identify major incident candidates and respond to major incidents.	
Integration - Altiris 2.0 [com.snc.integration.altiris2]	Deprecated and non-supported	Provides one direction import of the Altiris data into the CMDB.	<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
ITSM Spoke [com.snc.itsm.spoke]	New in London	Enables Flow Designers to automate and create flows and actions associated with ITSM.	
Knowledge Management - External Content Integration [com.snc.knowledge.external_integration]	New in Kingston	Adds external content search capabilities to the knowledge management application.	
List V3	Changed in London	List v3 is no longer available for new deployments. If you are already using List v3, you can continue to do so. There are several aspects of list administration that are specific to List v3.	



Plugin	Status	Description	Details
Microsoft Azure Management [com.snc.azure]	Deprecated and non-supported		Replaced by: Cloud Management [com.snc.cloud.mgmt]
MID Server Distributed Cluster [com.snc.agent.distributed.cluster]	New in London	Enables the MID Server distributed cluster type, for Operational Intelligence.	
Okta [com.snc.sso.okta]	Planned for deprecation in Release M		<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
Performance Analytics - Content Pack - Human Resources Lifecycle Events Scoped App [com.sn_hr_lifecycle_pa]	New in London	Provides Performance Analytics reports for Scoped HR Lifecycle Events. Activation of this plugin on production will require a PA Premium license. Contact ServiceNow for details.	
Personal Task Management [com.flide.ui.m.pt]	Deprecated and non-supported		<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
Scoped Application Restricted Caller Access [com.glide.scope.access.restricted_caller]	New in London	Allow scoped applications to restrict access to public tables and script includes.	Admin users can enable this plugin. Alternatively, the HR Service Delivery and Security Incident Response applications have application restricted caller access active by default.
Security Incident Response GRC Support [com.snc.security_incident.grc]	Deprecated and non-supported		Activation: Requires subscription
Security Incident Response Event Management support [com.snc.security_incident.itom]	Deprecated and non-supported		<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Replaced with Security Incident Response [com.snc.security_incident]</li> </ul>

Plugin	Status	Description	Details
			and Event Management [com.glideapp.itom.snac].
Security Operations Spoke [com.snc.secops.spoke]	New in London	Provides the ability to use Security Operations flows and actions. Activation of this plugin on production instances may require a separate license. Contact ServiceNow for details.	
Service Portal Announcements [com.glide.service-portal.announcements]	New in London	Enables administrators to broadcast announcements to Service Portal users.	
Service Portal - Service Catalog v2 [com.glideapp.servicecatalog.portal]	New in London	Enables Service Catalog widgets for Service Portal.	
Service Portal - Service Catalog [com.glide.service-portal.service-catalog]	Changed in London	Enables Service Catalog widgets for Service Portal.	
UI11 [com.glide.ui11]	Deprecated and non-supported	Provided version 11 of the user interface.	Replaced by: UI15 and UI16.
Time Recording for Customer Service [com.snc.csm_time_recording]	New in London	Enables customer service ages to record time on cases, case tasks, and other activities. Recording time automatically generates time cards and time sheets for approval by customer service managers.	
Visual Task Board Flow Designer Spoke [com.glide.ui.vtb.ah]	New in London	The Visual Task Board (VTB) Spoke for the Flow Designer provides Actions enable process analysts to compose flows that manipulate task boards, cards, board members, and assignees on given tasks without having to write code. The Visual Task Board	

Plugin	Status	Description	Details
Workflow Plugin Utility [com.glideapp.workflow.pause]	New in London	Plugin (com.glide.ui.vtb.ah) should be installed to use these actions.  Provides functionality for pausing or resuming all workflow contexts, a subset of qualified workflow contexts, or individual workflow contexts.	

## Browser support in London

**Last updated:** July 27, 2018

**Last updated:** July 27, 2018

Browser support varies for each version of the user interface (UI). Most major browsers are supported.

Some features have additional browser requirements, which are noted in the appropriate documentation.

**Note:** UI11 is no longer supported. All instances have been upgraded to UI15 or UI16.

### Browser support for each UI version

UI version	Chrome support	Firefox support	Internet Explorer support	Microsoft Edge support	Safari support	Tablet mobile browser	Phone mobile browser*
UI16	Latest public release	Latest public release of Firefox or Firefox ESR	11 and up <ul style="list-style-type: none"><li>Edge mode is supported</li></ul>	Latest public release	9.1 and up	Supported	Not supported
UI15	Latest public release	Latest public release of Firefox or Firefox ESR	11 and up <ul style="list-style-type: none"><li>Edge mode is supported</li></ul>	Latest public release	9.1 and up	Supported	Not supported

\*Mobile phone browsers do not support the desktop version of the UI. Instead, mobile browsers use the [mobile UI](#).

## Internet Explorer web browser notes

**Important:** Due to significant performance issues, ServiceNow recommends that customers utilize a modern browser for its products and migrate away from Internet Explorer 11. For more information, refer to [KB0683275](#).

- Internet Explorer 11 is susceptible to memory leaks, which may impact performance, especially in Windows 7.
- In Jakarta and later, Internet Explorer versions prior to IE11 are no longer supported.
- Compatibility mode is not supported.
- Setting Security Mode to High (via Internet Options > Security tab) is not supported.

## Safari web browser notes

- There is a security issue in some versions of Safari. User credentials may be disclosed to an unexpected site via auto-fill. For more information, see the [Apple security update](#).
- Starting with Safari 9.1 and future versions of Safari, the leave page / stay on page pop-up message only displays once.

## Exceptions to browser support

For information on product-specific browser requirements, refer to the [Browser requirements for all London features and products](#).

## Changes to plugins in the London release

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

This table lists new plugins in the London release and existing plugins that were deprecated, renamed, or changed in some way.

Plugin	Status	Description	Details
Amazon Web Services [com.snc.aws]	Planned for deprecation in Release L	Provided Integration with Amazon Web Services - CloudFormation, EC2	Replaced by: Cloud API [com.snc.cloud.api]
Appointment Booking [com.snc.appointment_booking]	New in London	Enables customers to book service appointments from the Customer and Consumer Service Portals.	
Appointment Booking Demo Data [com.snc.appointment_booking_demo]	New in London	Provides demo data for the appointment booking feature.	
Benchmarks Spoke [com.sn_bm_client.spoke]	New in London	Contains the evaluation framework for Benchmarks Recommendations.	
Configuration Automation [com.snc.configuration_automation]	Deprecated and non-supported	Allows you to use Orchestration, Puppet, and Chef to provision and configure individual servers or groups of servers in your network.	

Plugin	Status	Description	Details
Configuration Automation - Chef [com.snc.chef]	Deprecated and non-supported	Use configuration item (CI) data to bring Linux or Windows computers into a desired state.	
Configuration Automation - Puppet [com.snc.puppet]	Deprecated and non-supported	Use CMDB (CI) data to bring computers into a desired state.	
Configuration Compliance [com.snc.vulc]	New in London	Exposes your high-impact configuration-related security vulnerabilities, and orchestrates their remediation across frequently isolated information security, IT operations, and business process areas. Activation of this plugin on production instances may require a separate license. Contact ServiceNow for details.	
Connect Spoke for Flow Designer [com.glide.connect_v3plus.core.ah]	New in London	The Connect Spoke for the Flow Designer provides actions that a process analyst can use when designing flows. The actions allow them to automate the creation of conversations, to add users to a conversation, and to send messages to a conversation. These actions work with Connect API version 3 and later.	
Customer Communities [com.sn_customer_communities]	New in London	Enables you to connect, engage, and collaborate with your employees, customers, partners, and prospects.	Only available for customers who are licensed for Customer Services Management.
Customer Service Spoke [com.snc.customer_service.spoke]	New in London	Enables Flow Designer users to automate the creation of customer service cases and	

Plugin	Status	Description	Details
Email Digest [com.glide.email_digest]	New in London	updates to existing cases.  Enables you to create an email digest that summarizes the activity for a notification during a specified time interval.	
Encrypted Workflow Scratchpad [com.snc.encrypted.scratchpad]	New in London	Supports encryption of data stored in wf_context and wf_executing scratchpads by a private workflow engine encryption context, which prevents data from being stored in plain text.	
Enterprise Release Management [com.snc.enterprise_release_management]	New in London	Enables you to manage enterprise releases, product releases, and deployment process.	
Facilities Service Management Floor Plan Viewer [com.snc.facilities_service_automation]	Planned for deprecation in Release L	Provided a floor plan view as part of Facilities Service Management.	Replaced by: This feature has been replaced by the interactive facility maps application.
Field Service Spoke [com.snc.field_service.spoke]	New in London	Enables Flow Designer users to automate the creation of work orders and work order tasks and updates to existing work orders and work order tasks.	
Financial Management Core [com.snc.financial_management]	Changed in London	Enables financial analysts to assemble spending data, build cost models, and generate reports to show how funds are being used. Activation of this plugin on production instances may have licensing implications. Contact your ServiceNow account team for details.	This plugin activates the following applications: <ul style="list-style-type: none"> <li>Financial Modeling [com.snc.financial_management]</li> <li>Financial Planning [com.snc.financial_planning_default_de</li> <li>Financial Charging [com.snc.service_charging]</li> </ul>

Plugin	Status	Description	Details
Flow Designer - Designer [com.glide.hub.designer]	New in London	Flow Designer - Designer	
Flow Designer - Engine Reporting Dashboard [com.glide.hub.flow_reporting.dashboard]	New in London	Flow Engine Reporting PA Dashboard for Flow Designer	
Flow Designer - Flow Engine [com.glide.hub.flow_engine]	New in London	Flow Designer runtime components	
Flow Designer - Flow Engine Reporting [com.glide.hub.flow_reporting]	New in London	Flow Engine Reporting components	
Flow Designer - Installer [com.glide.hub]	New in London	Suite of plugins necessary to support the Flow Designer Designer App	
Flow Designer Action Step - CORE [com.glide.hub.action_step.core]	New in London	Action Step - Core operations on GlideRecord	
Flow Designer Action Step - CRUD [com.glide.hub.action_step.crud]	New in London	Action Step - CRUD operations on GlideRecord	
Flow Designer Action Step - Email [com.glide.hub.action_step.email]	New in London	Action step for emails	
Flow Designer Action Step - Log [com.glide.hub.action_step.log]	New in London	Action Step - Log	
Flow Designer Action Step - Notification [com.glide.hub.action_step.notification]	New in London	Action steps for notifications	
Flow Designer Action Step - Script [com.glide.hub.action_step.script]	New in London	Action Step - Script	
Flow Designer Action Step Template [com.glide.hub.action_step.template]	New in London	Action Step Template Design Time components	
Flow Designer Action Trigger [com.glide.hub.flow_trigger]	New in London	Action plans that map a Trigger (Record, Email, REST) to an Action	
Flow Designer Designer Backend [com.glide.hub.designer_backend.suite]	New in London	Suite of plugins necessary to support the Flow Designer Designer App	

Plugin	Status	Description	Details
Flow Designer Designer Model [com.glide.hub.designer_backend.model]	New in London	Data model and REST API for representing Process Plans as Flows, Actions, and Steps	
Flow Designer System Level Actions [com.glide.hub.action_type.system]	New in London	Action Type Definitions for low-level functions such as GlideRecord operations	
I18N: Korean Translations [com.snc.i18n.korean]	Deprecated and non-supported	Localizes content into Korean.	<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
Incident Management - Major Incident Management [com.snc.incident.mim]	New in Kingston	Provides a recommended process to easily identify major incident candidates and respond to major incidents.	
Integration - Altiris 2.0 [com.snc.integration.altiris2]	Deprecated and non-supported	Provides one direction import of the Altiris data into the CMDB.	<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
ITSM Spoke [com.snc.itsm.spoke]	New in London	Enables Flow Designers to automate and create flows and actions associated with ITSM.	
Knowledge Management - External Content Integration [com.snc.knowledge.external_integration]	New in Kingston	Adds external content search capabilities to the knowledge management application.	
List V3	Changed in London	List v3 is no longer available for new deployments. If you are already using List v3, you can continue to do so. There are several aspects of list administration that are specific to List v3.	



Plugin	Status	Description	Details
Microsoft Azure Management [com.snc.azure]	Deprecated and non-supported		Replaced by: Cloud Management [com.snc.cloud.mgmt]
MID Server Distributed Cluster [com.snc.agent.distributed.cluster]	New in London	Enables the MID Server distributed cluster type, for Operational Intelligence.	
Okta [com.snc.sso.okta]	Planned for deprecation in Release M		<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
Performance Analytics - Content Pack - Human Resources Lifecycle Events Scoped App [com.sn_hr_lifecycle_pa]	New in London	Provides Performance Analytics reports for Scoped HR Lifecycle Events. Activation of this plugin on production will require a PA Premium license. Contact ServiceNow for details.	
Personal Task Management [com.flide.ui.m.pt]	Deprecated and non-supported		<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Activation: Requires ServiceNow personnel support.</li> </ul>
Scoped Application Restricted Caller Access [com.glide.scope.access.restricted_caller]	New in London	Allow scoped applications to restrict access to public tables and script includes.	Admin users can enable this plugin. Alternatively, the HR Service Delivery and Security Incident Response applications have application restricted caller access active by default.
Security Incident Response GRC Support [com.snc.security_incident.grc]	Deprecated and non-supported		Activation: Requires subscription
Security Incident Response Event Management support [com.snc.security_incident.itom]	Deprecated and non-supported		<ul style="list-style-type: none"> <li>• Not available for new deployments.</li> <li>• Replaced with Security Incident Response [com.snc.security_incident]</li> </ul>

Plugin	Status	Description	Details
			and Event Management [com.glideapp.itom.snac].
Security Operations Spoke [com.snc.secops.spoke]	New in London	Provides the ability to use Security Operations flows and actions. Activation of this plugin on production instances may require a separate license. Contact ServiceNow for details.	
Service Portal Announcements [com.glide.service-portal.announcements]	New in London	Enables administrators to broadcast announcements to Service Portal users.	
Service Portal - Service Catalog v2 [com.glideapp.servicecatalog.portal]	New in London	Enables Service Catalog widgets for Service Portal.	
Service Portal - Service Catalog [com.glide.service-portal.service-catalog]	Changed in London	Enables Service Catalog widgets for Service Portal.	
UI11 [com.glide.ui11]	Deprecated and non-supported	Provided version 11 of the user interface.	Replaced by: UI15 and UI16.
Time Recording for Customer Service [com.snc.csm_time_recording]	New in London	Enables customer service ages to record time on cases, case tasks, and other activities. Recording time automatically generates time cards and time sheets for approval by customer service managers.	
Visual Task Board Flow Designer Spoke [com.glide.ui.vtb.ah]	New in London	The Visual Task Board (VTB) Spoke for the Flow Designer provides Actions enable process analysts to compose flows that manipulate task boards, cards, board members, and assignees on given tasks without having to write code. The Visual Task Board	

Plugin	Status	Description	Details
		Plugin (com.glide.ui.vtb.ah) should be installed to use these actions.	
Workflow Plugin Utility [com.glideapp.workflow.pause]	New in London	Provides functionality for pausing or resuming all workflow contexts, a subset of qualified workflow contexts, or individual workflow contexts.	

## Browser support

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

Browser support varies for each version of the user interface (UI). Most major browsers are supported.

Some features have additional browser requirements, which are noted in the appropriate documentation.

**Note:** UI11 is no longer supported. All instances have been upgraded to UI15 or UI16.

### Browser support for each UI version

UI version	Chrome support	Firefox support	Internet Explorer support	Microsoft Edge support	Safari support	Tablet mobile browser	Phone mobile browser*
UI16	Latest public release	Latest public release of Firefox or Firefox ESR	11 and up • Edge mode is supported	Latest public release	9.1 and up	Supported	Not supported
UI15	Latest public release	Latest public release of Firefox or Firefox ESR	11 and up • Edge mode is supported	Latest public release	9.1 and up	Supported	Not supported

\*Mobile phone browsers do not support the desktop version of the UI. Instead, mobile browsers use the [mobile UI](#).

## Internet Explorer web browser notes

**Important:** Due to significant performance issues, ServiceNow recommends that customers utilize a modern browser for its products and migrate away from Internet Explorer 11. For more information, refer to [KB0683275](#).

- Internet Explorer 11 is susceptible to memory leaks, which may impact performance, especially in Windows 7.
- In Jakarta and later, Internet Explorer versions prior to IE11 are no longer supported.
- Compatibility mode is not supported.
- Setting Security Mode to High (via Internet Options > Security tab) is not supported.

## Safari web browser notes

- There is a security issue in some versions of Safari. User credentials may be disclosed to an unexpected site via auto-fill. For more information, see the [Apple security update](#).
- Starting with Safari 9.1 and future versions of Safari, the leave page / stay on page pop-up message only displays once.

## Exceptions to browser support

For information on product-specific browser requirements, refer to the [Browser requirements for all London features and products](#).

## Accessibility and compliance

**Last updated:** July 26, 2018

**Last updated:** July 26, 2018

To make the interface accessible to users with disabilities, ServiceNow includes features that support several specifications in the Web Content Accessibility Guidelines (WCAG) 2.0.

ServiceNow® products are developed with the goal of adhering to the accessibility guidelines and principles which are set by the Section 508 Amendment to the Rehabilitation Act of 1973 and the Web Content Accessibility Guidelines (WCAG) 2.0 Level A. The assistive technologies [JAWS](#), [NVDA](#), and [VoiceOver](#) are used to test ServiceNow products.

- [ServiceNow Accessibility Conformance Report](#)

This page details the level of accessibility support for the London release, according to the Web Content Accessibility Guidelines (WCAG) 2.0.

Related Topics

- [Section508.gov](#)

## ServiceNow Accessibility Conformance Report

**Last updated:** October 02, 2018

**Last updated:** October 02, 2018

This page details the level of accessibility support for the London release, according to the Web Content Accessibility Guidelines (WCAG) 2.0.

**VPAT® Version 2.1 – March 2018**

**Date:** 27 July 2018

**Product Name:** ServiceNow Service Automation

**Product Version Number:** London

**Vendor Company Name:** ServiceNow

**Vendor Contact Name:** ServiceNow Compliance

**Vendor Contact information:** [compliance@servicenow.com](mailto:compliance@servicenow.com)

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**Note:** This is a web only application.

The following product categories contain exceptions, but accessible alternatives exist or the product is in the process of being deprecated.

- Forms Designer Alternate: Accessibility Path Exists: please use Slushbucket
  - Mobile: Category is deprecated: to be replaced with new Mobile (SkyNow)
  - Live Feed: Component is deprecated and will no longer be supported from an accessibility perspective
- 

## Evaluation methods used

To make the interface accessible to users with disabilities, ServiceNow includes features that support several specifications in the Web Content Accessibility Guidelines (WCAG) 2.0. ServiceNow® products are developed with the goal of adhering to the accessibility guidelines and principles which are set by the Section 508 Amendment to the Rehabilitation Act of 1973 and the Web Content Accessibility Guidelines (WCAG) 2.0 Level A. The assistive technologies JAWS, NVDA, and VoiceOver are used to test ServiceNow products. The London Web Content Accessibility Guidelines (WCAG) 2.0 document describes accessibility features and limitations. Web Content Accessibility Guidelines (WCAG) 2.0 This page details the level of accessibility support for the London release, according to the Web Content Accessibility Guidelines (WCAG) 2.0

## Applicable standards/guidelines

This report covers the degree of conformance for the following accessibility standard/guidelines:

Standard/Guideline	Included in report
Web Content Accessibility Guidelines 2.0, at <a href="http://www.w3.org/TR/2008/REC-WCAG20-20081211/">http://www.w3.org/TR/2008/REC-WCAG20-20081211/</a>	Level A (Yes)
	Level AA (Yes)
	Level AAA (No)
<a href="#">Revised Section 508 standards</a> as published by the U.S. Access Board in the Federal Register on January 18, 2017	(Yes)
<a href="#">Corrections to the ICT Final Rule</a> as published by the US Access Board in the Federal Register on January 22, 2018	
EN 301 549 Accessibility requirements suitable for public procurement of ICT products and services in Europe, - V1.1.2 (2015-04) at <a href="http://mandate376.standards.eu/standard">http://mandate376.standards.eu/standard</a>	(No)

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## Terms

The terms used in the Conformance Level information are defined as follows:

- **Supports:** The functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.
- **Supports with Exceptions:** Some functionality of the product does not meet the criterion.
- **Does Not Support:** The majority of product functionality does not meet the criterion.
- **Not Applicable:** The criterion is not relevant to the product.
- **Not Evaluated:** The product has not been evaluated against the criterion. This can be used only in WCAG 2.0 Level AAA.

## WCAG 2.0 Report

Tables 1 and 2 also document conformance with:

- EN 301 549: Chapter 9 - Web, Chapter 10 - Non-Web documents, Section 11.2.1- Non-Web Software (excluding closed functionality), and Section 11.2.2 - Non-Web Software (closed functionality).
- Revised Section 508: Chapter 5 – 501.1 Scope, 504.2 Content Creation or Editing, and Chapter 6 – 602.3 Electronic Support Documentation.

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**Note:** When reporting on conformance with the WCAG 2.0 Success Criteria, they are scoped for full pages, complete processes, and accessibility-supported ways of using technology as documented in the WCAG 2.0 Conformance Requirements.

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### Success criteria: Level A

Criteria	Conformance level	Remarks and explanations
<b>1.1.1 Non-text Content</b> (Level A)	Supports with exceptions	Chat
Also applies to:		
EN 301 549 Criteria		Buttons with images as labels have no alternate text for assistive technologies
<ul style="list-style-type: none"> <li>• 9.2.1 (Web)</li> <li>• 10.2.1 (non-web document)</li> <li>• 11.2.1.1 (Software)</li> <li>• 11.2.2.1 (Closed Functionality Software)</li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul>		CSM Communities
2017 Section 508		The icons next to Forum Expertise and Topic Expertise are missing equivalent text. Equivalent text is missing for each of the icons in the list of postings in the Community Portal. Equivalent text is missing for each of the icons that identify the type of post in the list of postings.
		Guide Tours
<ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> <li>• 602.3 (Support Docs)</li> </ul>		Callout icons do not have a text alternative
		Human Resources Service Management
		Images in the HR Portal: Upcoming Events and Holiday Calendar panes are missing alt attributes.

Criteria	Conformance level	Remarks and explanations
		Performance Analytics
		Dashboard graphs do not have an accessible equivalent.
		UI Components
		Microsoft link does not have the proper description in the ALT attribute.
		Live Feed
		Alt attribute is not provided for the uploaded image in the Attachments section.
<b>1.2.1 Audio-only and Video-only (Prerecorded)</b> (Level A) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>• 9.2.2 (Web)</li> <li>• 10.2.2 (non-web document)</li> <li>• 11.2.1.2 (Software)</li> <li>• 11.2.2.2.1 and 11.2.2.2.2 (Closed Software)</li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> <li>• 602.3 (Support Docs)</li> </ul>	Not Applicable	Product does not use prerecorded media
<b>1.2.2 Captions (Prerecorded)</b> (Level A) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>• 9.2.3 (Web)</li> <li>• 10.2.3 (non-web document)</li> <li>• 11.2.1.3 (Software)</li> <li>• 11.2.2.3 (Closed Software)               <ul style="list-style-type: none"> <li>– Does not apply</li> </ul> </li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> </ul>	Not applicable	Product does not use prerecorded media.

Criteria	Conformance level	Remarks and explanations
<ul style="list-style-type: none"> <li>602.3 (Support Docs)</li> </ul>		
<b>1.2.3 Audio Description or Media Alternative (Prerecorded)</b> (Level A) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>9.2.4 (Web)</li> <li>10.2.4 (non-web document)</li> <li>11.2.1.4 (Software)</li> <li>11.2.2.4 (Closed Software)</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>	Not applicable	Product does not use prerecorded media.
<b>1.3.1 Info and Relationships</b> (Level A) Also applies to:  EN 301 549 <ul style="list-style-type: none"> <li>Criteria 9.2.7 (Web)</li> <li>10.2.7 (non-web document)</li> <li>11.2.1.7 (Software)</li> <li>11.2.2.7 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>	Supports with exceptions	Cloud Management application  Cannot set focus to values inside table of Quota Details dialog popup.  Condition Builder  Malformed heading structure in the list v3 condition builder.  Email  The structured data on the Email Diagnostics screen do not impart the clear key-value list structure to users of assistive technologies.  Flow designer  Screen reader is not reading Select Step to add popup. Confirmation message is not announced when flow is saved/copied  Forms and fields  Reference field labels are not read by screen readers. Annotations used to denote sections of a form is plain text rather than using header tags. JAWS does not read or narrate the state and control types of the elements on Active Section.



Criteria	Conformance level	Remarks and explanations
		Guided tours
		Steps have the incorrect heading structure.
		Incident Management
		Edit Data Table Inline should allow users to edit data table inline.
		Performance Analytics
		Radio buttons on the Detail Scorecard are not labeled. Detail Scorecard: Screenreader does not announce the name of the Show more statistics button and the close/Back button in the info/scores panel of the Detail Scorecard. The screenreader does not announce items inside menu/list/combo box when the user navigates inside an item using arrow keys in Detail Scorecards.
		Reporting
		The title input is missing an accessible label in the reporting interface.
		Security Incident Response
		Labels/information for filters and records in a table is not read correctly.
		Service Analytics
		ITOM - Metric Explorer page has no headings
		Service Portal
		Input field related to the attachment button is missing a description. Description button inadequately labeled. When a user creates a new incident through Service Portal, the confirmation message stating that the incident was created lacks context.
		UI components
		The application times out without providing a notification before timing out. Within System Settings, JAWS does not reveal the tab selected on expand/collapse.
		Password Reset Application
		The mandatory marker for Retype Password is missing until the field gains focus.

Criteria	Conformance level	Remarks and explanations
<b>1.3.2 Meaningful Sequence</b> (Level A) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>• 9.2.8 (Web)</li> <li>• 10.2.8 (non-web document)</li> <li>• 11.2.1.8 (Software)</li> <li>• 11.2.2.8 (Closed Software)               <ul style="list-style-type: none"> <li>– Does not apply</li> </ul> </li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> <li>• 602.3 (Support Docs)</li> </ul>	Supported	
<b>1.3.3 Sensory Characteristics</b> (Level A) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>• 9.2.9 (Web)</li> <li>• 10.2.9 (non-web document)</li> <li>• 11.2.1.9 (Software)</li> <li>• 11.2.2.9 (Closed Software)               <ul style="list-style-type: none"> <li>– Does not apply</li> </ul> </li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> <li>• 602.3 (Support Docs)</li> </ul>	Supported	
<b>1.4.1 Use of Color</b> (Level A) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>• 9.2.10 (Web)</li> <li>• 10.2.10 (non-web document)</li> <li>• 11.2.1.10 (Software)</li> <li>• 11.2.2.10 (Closed Software) – Does not apply</li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul>	Supports with exceptions  Field Service Management  Information is conveyed by color alone in Field Service Management - Field Service - Agent - My Schedule  Service Analytics  Some icons rely on color to indicate selection in ITOM - Metric Explorer.	

Criteria	Conformance level	Remarks and explanations
2017 Section 508		Service Workspace
<ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> <li>• 602.3 (Support Docs)</li> </ul>		Color is the only distinguishing indication that the blue article numbers are links.
		Live Feed
		Insufficient contrast ratios for Live Feed controls.
<b>1.4.2 Audio Control</b> (Level A)	Supports	
Also applies to:		
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>• 9.2.11 (Web)</li> <li>• 10.2.11 (non-web document)</li> <li>• 11.2.1.11 (Software)</li> <li>• 11.2.2.11 (Closed Software) <ul style="list-style-type: none"> <li>– Does not apply</li> </ul> </li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> <li>• 602.3 (Support Docs)</li> </ul>		
<b>2.1.1 Keyboard</b> (Level A)	Supports with exceptions	
Also applies to:		Activity Stream
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>• 9.2.15 (Web)</li> <li>• 10.2.15 (non-web document)</li> <li>• 11.2.1.15 (Software)</li> <li>• 11.2.2.15 (Closed Software)</li> <li>• 11.6.2 (Authoring Tool)</li> <li>• 12.1.2 (Product Docs)</li> <li>• 12.2.4 (Support Docs)</li> </ul>		Focus goes to the next link in the work notes, related records etc instead of moving inside the open filter popup.
		Application Navigator and banner frame
		It is not possible to select items in the navigation bar when using Chrome and JAWS.
		When using the Firefox browser, users cannot tab past the Accessibility enabled switch in the System Settings modal if the switch is toggled off.
		Unable to switch to the main content of the General Settings page using keyboard.
2017 Section 508		
<ul style="list-style-type: none"> <li>• 501 (Web)(Software)</li> <li>• 504.2 (Authoring Tool)</li> <li>• 602.3 (Support Docs)</li> </ul>		Benchmarks Application
		Tooltip in ITSM Benchmarking is not available to keyboard-only users.
		Customer Service Management
		Cannot remove existing skills using keyboard only.

Criteria	Conformance level	Remarks and explanations
		Field Service Management
		<p>Date and time information is not announced by the screenreader.</p> <p>No keyboard alternative to drag action for assigning tasks in Central Dispatch.</p> <p>Unable to navigate WOT on Central Dispatch.</p>
		Forms and fields
		<p>The Show version link in the form layout is not keyboard accessible.</p> <p>Cannot close the More Options popup menu.</p> <p>The Form Favorites dialog does not get focus when selected.</p> <p>When tabbed forms are disabled, the buttons that expand or collapse form sections are not accessible with a keyboard.</p>
		Guided Tours
		Alerts cannot be dismissed with keyboard.
		On-call scheduling
		The date picker in the ITSM on-call calendar is not accessible with keyboard.
		Performance Analytics
		<p>Drag functionality is not available to non-mouse users.</p> <p>Incident Premium has buttons that are not keyboard accessible.</p> <p>Nodes are only accessibility issues in a scoresheet.</p> <p>Nodes are not focusable or actionable in IE or Microsoft Edge, and cannot be actioned when using NVDA in Google Chrome.</p>
		Reporting
		Edit Widget and Close links are not part of the tab order.
		Service Mapping
		<p>Cannot navigate date picker on timeline with keyboard.</p> <p>Drag functionality is not accessible with a keyboard.</p>
		Service Portal
		<p>Date/time picker button is not accessible with keyboard.</p> <p>Difficult for keyboard users to navigate to Part.</p> <p>Unable to use drop down with the keyboard.</p>
		UI components
		<p>Pop out panels are inaccessible using keyboard.</p> <p>The icon (actions) associated with Configuration Item is not accessible by keyboard alone.</p> <p>System Settings tab is not accessible using arrow keys.</p> <p>Global Navigator is not accessible using arrow keys.</p>

Criteria	Conformance level	Remarks and explanations
		User experience engineering
		Color picker is not accessible using tab.
		Password reset application
		Arrow keys fail to move between tabs in the Enrollment page.
<b>2.1.2 No Keyboard Trap</b> (Level A) Also applies to:	Supports with exceptions	Chat
EN 301 549 Criteria		Editing the Message Field is not keyboard accessible.
<ul style="list-style-type: none"> <li>9.2.16 (Web)</li> <li>10.2.16 (non-web document)</li> <li>11.2.1.16 (Software)</li> <li>11.2.2.16 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Forms and fields
		Users cannot get focus with a keyboard in Tag Details if they access it from the Show related Lists pop-up.
		Lists
		Header menu list is not accessible with a keyboard.
2017 Section 508		User experience engineering
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		In the Branding settings, focus remains on save button.
<b>2.2.1 Timing Adjustable</b> (Level A) Also applies to:	Supports	
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>9.2.17 (Web)</li> <li>10.2.17 (non-web document)</li> <li>11.2.1.17 (Software)</li> <li>11.2.2.17 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>2.2.2 Pause, Stop, Hide</b> (Level A)	Supports	

Criteria	Conformance level	Remarks and explanations
Also applies to:		
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>9.2.18 (Web)</li> <li>10.2.18 (non-web document)</li> <li>11.2.1.18 (Software)</li> <li>11.2.2.18 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>2.3.1 Three Flashes or Below Threshold</b> (Level A)	Supports	
Also applies to:		
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>9.2.19 (Web)</li> <li>10.2.19 (non-web document)</li> <li>11.2.1.19 (Software)</li> <li>11.2.2.19 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>2.4.1 Bypass Blocks</b> (Level A)	Supports	
Also applies to:		Application Portfolio Management (APM)
EN 301 549 Criteria		Application Portfolio Management home page does not have skip links.
<ul style="list-style-type: none"> <li>9.2.20 (Web)</li> <li>10.2.20 (non-web document) – Does not apply</li> <li>11.2.1.20 (Software) – Does not apply</li> <li>11.2.2.20 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> </ul>		Benchmarks application
		ITSM Benchmarking - User UI Dashboard does not provide skip links
		Skip links are not provided in ITSM Benchmarking: User UI details

Criteria	Conformance level	Remarks and explanations
<ul style="list-style-type: none"> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Service Portal
2017 Section 508		Skip links are not available for bypassing common banner/header information. User is unable to navigate blocks.
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs) - Does not apply to non-web docs</li> </ul>		UI components
		A skip link is not present in the application list, the user has to navigate through the application list.
<b>2.4.2 Page Titled</b> (Level A) Also applies to:	Supports with exceptions	Performance Analytics
EN 301 549 Criteria		Detail Scorecard pages do not have a page title.
<ul style="list-style-type: none"> <li>9.2.21 (Web)</li> <li>10.2.21 (non-web document)</li> <li>11.2.1.21 (Software) - Does not apply</li> <li>11.2.2.21 (Closed Software) - Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		VA-designer
		Conversation Builder page does not have a title.
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>2.4.3 Focus Order</b> (Level A) Also applies to:	Supports with exceptions	Application navigator and banner frame
EN 301 549 Criteria		The user menu remains visible when tabbing to another element. Tabbing back into to the Navigator bar after tabbing out takes you to the bottom of instead of where you left off.
<ul style="list-style-type: none"> <li>9.2.22 (Web)</li> <li>10.2.22 (non-web document)</li> <li>11.2.1.22 (Software)</li> <li>11.2.2.22 (Closed Software) - Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Benchmark application
		Content behind the graph is focusable when the View Trend controls are activated in the User UI Dashboard.
		Dashboards and homepages
2017 Section 508		It is possible to navigate behind the Remove Access dialog box.
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		Flow Designer
		Data panel does not receive keyboard focus.

Criteria	Conformance level	Remarks and explanations
		Forms and fields
		Create New Template popup does not hold focus. When the Attachments dialog box is opened, focus does not move to the first interactive control within the dialog box (the Browse control) in any browser.
		Guided Tours
		Focus does not follow logical order after deleting a step in the guided tour designer.
		Performance Analytics
		When selecting Show Chart Options, the chart option expands but focus goes to the Go back button on the top of the page for Detail Scorecard.
		Security incident response
		Tab order is not constrained to the Security Cases dialog box.
		Service Mapping
		Focus does not go to the X button after submit as it should.
		UI components
		Flyouts do not hold input focus. Focus management is inadequate when the user is minimizing/maximizing the navigation pane. In the new notification preference modal, user cannot tab back into the iFrame after tabbing out. Focus does not move to the first item on the menu when the menu expands.
		User Experience engineering
		In General settings, focus remains on save button.
		Continual Improvement Management (CIM)
		There is a focus order issue when user moves from Planning to Overview.
		Live Feed
		Focus order is not ideal in Show Live Feed dialog.
		Mobile
		Unexpected focus order.



Criteria	Conformance level	Remarks and explanations
<b>2.4.4 Link Purpose (In Context)</b> (Level A) Also applies to:	Supports with exceptions	Condition builder
EN 301 549 Criteria		The None button does not have sufficient description.
<ul style="list-style-type: none"> <li>9.2.23 (Web)</li> <li>10.2.23 (non-web document)</li> <li>11.2.1.23 (Software)</li> <li>11.2.2.23 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Lists
		JAWS cannot distinguish between all the preview links.
		Performance Analytics
		JAWS is not narrating the chart descriptions correctly.
		JAWS is not reading the proper description for all the Refresh Widget links in overview/after converting homepage to dashboard.
2017 Section 508		Live Feed
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		Edit and Remove buttons of attachments are not descriptive enough to identify them. Favorite, Leave, Request, and Join buttons are not descriptive enough to identify their purpose. Delete Link button is not descriptive enough and crashes with use of NVDA. JAWS is reading extra content for the alternate menu items in the ITSM button menu.
<b>3.1.1 Language of Page</b> (Level A) Also applies to:	Supports	
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>9.2.27 (Web)</li> <li>10.2.27 (non-web document)</li> <li>11.2.1.27 (Software)</li> <li>11.2.2.27 (Closed Software)</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>3.2.1 On Focus</b> (Level A) Also applies to:	Supports	
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>9.2.29 (Web)</li> <li>10.2.29 (non-web document)</li> <li>11.2.1.29 (Software)</li> </ul>		

Criteria	Conformance level	Remarks and explanations
<ul style="list-style-type: none"> <li>11.2.2.29 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> <p>2017 Section 508</p> <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<p><b>3.2.2 On Input</b> (Level A) Also applies to:</p> <p>EN 301 549 Criteria</p> <ul style="list-style-type: none"> <li>9.2.30 (Web)</li> <li>10.2.30 (non-web document)</li> <li>11.2.1.30 (Software)</li> <li>11.2.2.30 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> <p>2017 Section 508</p> <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>	Supports with exceptions	<p>Approvals</p> <p>There is no feedback for the user when approving or rejecting an Approval request.</p> <p>Event Management</p> <p>Selection of an option within the All drop down reloads the page in the ITOM - EM Dashboard.</p> <p>Forms and fields</p> <p>In IE11+JAWS, deleting a name-value record results in focus transfer to address bar in the browser.</p> <p>Performance Analytics</p> <p>Deleting a previously entered search key in the search field causes the page to refresh.</p> <p>Survey Management</p> <p>Clicking form labels in the Properties dialog box immediately dismisses the dialog box, rather than moving focus into the related form field.</p>
<p><b>3.3.1 Error Identification</b> (Level A) Also applies to:</p> <p>EN 301 549 Criteria</p> <ul style="list-style-type: none"> <li>9.2.33 (Web)</li> <li>10.2.33 (non-web document)</li> <li>11.2.1.33 (Software)</li> <li>11.2.2.33 (Closed Software)</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>	Supports with exceptions	<p>CSM Communities</p> <p>Individual errors for each field are not described in text: color alone (a red border) is placed around the field to indicate an error.</p> <p>Knowledge Management</p> <p>Search Knowledge error messages are not read by assistive technologies.</p>

Criteria	Conformance level	Remarks and explanations
2017 Section 508		UI components
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		<p>At initial login screen, the instructions for the wrong username/password error message is not associated with the form field.</p> <p>Password reset application</p> <p>JAWS incorrectly notifies the user that there is an error before the user begins to enter values to field. Error messages are not announced when they appear on the page.</p> <p>Editable fields are incorrectly described as password fields.</p>
<b>3.3.2 Labels or Instructions</b> (Level A) Also applies to:	Supports with exceptions	Application navigator and banner frame
EN 301 549 Criteria		Clear Filter button does not have a label.
<ul style="list-style-type: none"> <li>9.2.34 (Web)</li> <li>10.2.34 (non-web document)</li> <li>11.2.1.34 (Software)</li> <li>11.2.2.34 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		<p>Field Service Management</p> <p>JAWS reads the wrong label for controls.</p> <p>Forms and fields</p> <p>On forms, the screen readers announce instructions to use the Reference Lookup icon even when the icon is not available.</p>
2017 Section 508		Human Resources Service Management
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		<p>Focus indication is inadequate for HR Bulk creation.</p> <p>Performance Analytics</p> <p>The control that triggers the popup combobox for fields like Indicator is labeled by the currently selected value, not by the actual label text related to the combobox</p> <p>Service Portal</p> <p>Labels are not programmatically associated with Submit and search buttons.</p> <p>There is no feedback for screen reader users when they select Subscribe to Updates.</p> <p>UI components</p> <p>Multiple Links with duplicate names.</p> <p>Search input field does not have a label.</p>

Criteria	Conformance level	Remarks and explanations
		User Experience engineering
		In Chrome, voice over tool does not announce the label of the input field.
<b>4.1.1 Parsing</b> (Level A) Also applies to: EN 301 549 Criteria <ul style="list-style-type: none"> <li>9.2.37 (Web)</li> <li>10.2.37 (non-web document)</li> <li>11.2.1.37 (Software)</li> <li>11.2.2.37 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>	Supports with exceptions	Configuration Management Database (CMDB) Header attributes are not properly applied, causing duplication Service Portal Parsing errors because of stray end tags and disallowed attribute values.
<b>4.1.2 Name, Role, Value</b> (Level A) Also applies to: EN 301 549 Criteria <ul style="list-style-type: none"> <li>9.2.38 (Web)</li> <li>10.2.38 (non-web document)</li> <li>11.2.1.38 (Software)</li> <li>11.2.2.38 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>	Supports with exceptions	Application Navigator and Banner Frame JAWS description of the Navigation Filter is insufficient leading to user confusion. Authentication Assistive tool does not announce name of OK and Cancel buttons on admin pages. Change Management The Search field below the Sample Change Requests select box is provided with a role of combobox but behaves like a text input Cloud Management Application SVG images in Cloud User Portal does not have alternate accessible presentations. Condition Builder Screenreader does not announce the name, state, type, and value of combobox correctly. JAWS does not announce menu options for the Edit Report widget. JAWS is not narrating the name of Quality properly when the dialog is displayed.

Criteria	Conformance level	Remarks and explanations
		JAWS is narrating content repetitively for the label Choose field under All of these conditions must be met. JAWS does not narrate some of the calendar controls.
		CSM Communities
		Aria-label incorrectly applied to the semantically neutral <div> element for the Forum Expertise and Topic Expertise panels.
		Forms and fields
		Select2 labels are not pronounced by JAWS. Select2 used for table name element is not connected to label. There are aria attributes on some elements in the platform that are not allowed.
		Guided Tours
		Name of steps are not narrated.
		Human Resources
		The Test link within the expandable/collapsible Test panel is marked as a role of link inside a container with a role of button.
		Lists
		JAWS+IE11 Voice does not announce the Previous and Next buttons in the date picker for the list v3 condition builder.
		Performance Analytics
		Performance analytics Scorecards are missing roles or labels for assistive technologies. Secondary information related to the To field (added users) is not programmatically associated with the field. The C/MDR health dashboard page has incorrect keyboard mappings.
		Reporting
		Legends for certain user interface elements are not announced by JAWS
		Service Portal
		Error messages are not programmatically associated with the input fields. Fading confirmation message on the Community Portal landing page is not conveyed by screen readers. Keyboard-only accessibility issues in Service Portal Configuration page fields. Screen readers reads the field name rather than the actual field name of Choice List.

Criteria	Conformance level	Remarks and explanations
		Software Asset Management
		ITAM - Software Asset Management Premium: The Select the publisher(s) for which compliance should be calculated label is not marked up as a label and is not programmatically associated with the related custom drop-down.
		UI components
		There is a typo in the screen reader label for the close button in system notification messages. JAWS is not reading the Microsoft link name correctly in header section. JAWS is not narrating the control type for the check boxes in the Notifications section
		Live Feed
		The screenshot modal is not correctly marked up as a dialog.

## Success Criteria, Level AA

Criteria	Conformance Level	Remarks and Explanations
<b>1.2.4 Captions (Live)</b> (Level AA) Also applies to:	Not applicable	Product does not use prerecorded media.
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>9.2.5 (Web)</li> <li>10.2.5 (non-web document)</li> <li>11.2.1.5 (Software)</li> <li>11.2.2.5 (Closed Software) <ul style="list-style-type: none"> <li>Does not apply</li> </ul> </li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>1.2.5 Audio Description (Prerecorded)</b> (Level AA) Also applies to:	Not applicable	Product does not use prerecorded media.
EN 301 549 Criteria		
<ul style="list-style-type: none"> <li>9.2.6 (Web)</li> <li>10.2.6 (non-web document)</li> <li>11.2.1.6 (Software)</li> </ul>		

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> <li>11.2.2.6 (Closed Software) <ul style="list-style-type: none"> <li>Does not apply</li> </ul> </li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> <p>2017 Section 508</p> <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>1.4.3 Contrast (Minimum)</b> (Level AA) Also applies to:	Supports with exceptions	Activity Stream
EN 301 549 Criteria		Activity stream contents do not have a sufficient contrast ratio
<ul style="list-style-type: none"> <li>9.2.12 (Web)</li> <li>10.2.12 (non-web document)</li> <li>11.2.1.12 (Software)</li> <li>11.2.2.12 (Closed Software) <ul style="list-style-type: none"> <li>Does not apply</li> </ul> </li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Application Navigator and Banner Frame
2017 Section 508		All radio buttons appear to be selected when in Windows High Contrast mode.
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		Benchmarks Application
		Color contrast is insufficient.
		Chat
		Conversation icons in the Connect sidebar disappear when in Windows High Contrast mode
		Contrast between the foreground color and background color is insufficient
		Elements in DEO - Connect - Landing page do not have sufficient contrast ratio
		The color used to identify unread chat messages does not reflect the current theme
		Customer Service Management
		Elements do not have sufficient color contrast on several elements on the Agent dialog box.
		Domain Support
		Domain Configuration does not have sufficient contrast.
		Flow Designer
		AutomationHub Branching Creating Approval Action does not have sufficient contrast.
		Guided Setup
		Elements have insufficient color contrast

Criteria	Conformance Level	Remarks and Explanations
		Guided Tours
		The color of the Delete button does not have sufficient contrast.
		Incident Management
		Insufficient color contrast ratio for Major Incident Management Workbench.
		Performance Analytics
		Color contrast is insufficient for certain elements of Detail Scorecard.
		Reporting
		Many controls in the report creator do not show focus when using Windows High Contrast mode
		Service Catalog
		Color contrast is insufficient: The contrast ratio for some items in the service catalog is insufficient.
		Service Mapping
		Page elements are not honored in Windows High Contrast mode: ITOM Service Mapping
		Service Portal
		Business Service Capability map does not have sufficient color contrast. Insufficient contrast ratios for text in To Do page.
		Software Asset Management
		Active Proceed button does not meet contrast minimum.
		Templates
		Template links have an insufficient contrast ratio.
		UI components
		Connect Support module does not have sufficient contrast. The left-hand navigation does not meet color contrast ratio requirements. Unable to visually distinguish when some focusable elements are selected in High Contrast mode.



Criteria	Conformance Level	Remarks and Explanations
		User Experience Engineering
		The custom radio buttons in the Export to PDF dialog box are not honored correctly in Windows High Contrast mode.
		Password Reset Application
		Submit button has insufficient color contrast when enrolling in password reset.
		Mandatory asterisk (*) marker has an insufficient contrast ratio with the white color background.
		UI Pages/Macros
		Response time text has an insufficient contrast ratio.
<b>1.4.4 Resize text</b> (Level AA) Also applies to:	Supports with exceptions	Application Navigator and Banner Frame
EN 301 549 Criteria		The selected list item and the drop list icons overlap in the Choose field in 200% zoom mode.
<ul style="list-style-type: none"> <li>9.2.13 (Web)</li> <li>10.2.13 (non-web document)</li> <li>11.2.1.13 (Software)</li> <li>11.2.2.13 (Closed Software)</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Chat
		Multiple elements in Conversation page are not visible in increased zoom mode (200%).
		Multiple elements in the Conversation tab in the Connect sidebar are cropped in increased zoom mode (200%).
		Tool tips (title attribute) are not provided for conversations button and menu in increased zoom mode (200%).
		Unable to access Toggle left and right side buttons in increased zoom mode (200%) through keyboard.
2017 Section 508		Domain Support
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		Domain Configuration: Zooming/scaling is disabled.
		Flow Designer
		AutomationHub Branching Creating Approval Action cannot be resized.
		Forms and Fields
		The ability to pinch zoom on some touch devices may be suppressed.
		Service Catalog
		Unable to resize screen using tablet or iPad

Criteria	Conformance Level	Remarks and Explanations
		Service Portal
		Zooming/scaling is disabled in Community.
		Live Feed
		Search drop list button is not accessible from a keyboard in increased zoom mode (200%).

#### 1.4.5 Images of Text (Level AA)

Also applies to:

EN 301 549 Criteria

- 9.2.14 (Web)
- 10.2.14 (non-web document)
- 11.2.1.14 (Software)
- 11.2.2.14 (Closed Software) – Does not apply
- 11.6.2 (Authoring Tool)
- 12.1.2 (Product Docs)
- 12.2.4 (Support Docs)

2017 Section 508

- 501 (Web)(Software)
- 504.2 (Authoring Tool)
- 602.3 (Support Docs)

#### 2.4.5 Multiple Ways (Level AA)

Also applies to:

EN 301 549 Criteria

- 9.2.24 (Web)
- 10.2.24 (non-web document) – Does not apply
- 11.2.1.24 (Software) – Does not apply
- 11.2.2.24 (Closed Software) – Does not apply
- 11.6.2 (Authoring Tool)
- 12.1.2 (Product Docs)
- 12.2.4 (Support Docs)

2017 Section 508

- 501 (Web)(Software) – Does not apply to non-web software
- 504.2 (Authoring Tool)

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> <li>602.3 (Support Docs) – Does not apply to non-web docs</li> </ul>		
<b>2.4.6 Headings and Labels</b> (Level AA) Also applies to:	Supports with exceptions	Application Navigator and Banner Frame
EN 301 549 Criteria		Global Search frame title is not descriptive. Two unique scripted elements are named Incident.
<ul style="list-style-type: none"> <li>9.2.25 (Web)</li> <li>10.2.25 (non-web document)</li> <li>11.2.1.25 (Software)</li> <li>11.2.2.25 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Domain Support
2017 Section 508		Some form fields in Domain Configuration do not have appropriate headings.
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		Forms and Fields
		The labels for read-only Document ID fields are not properly associated with its input.
		Service Catalog
		Data table rows and column headers are not identified programmatically. The Propose a new Standard Change Template page lacks appropriate headings.
		Service Portal
		Reference pickers do not have labels (i icon).
		Survey Management
		Malformed landmarks
		Password Reset Application
		The state of the progress indicator is not included when AWS is describing the indicator. The Security Questions Verification heading is not properly defined as a heading
		Live Feed
		Edit and Remove buttons for attachments are not descriptive enough to identify them.
<b>2.4.7 Focus Visible</b> (Level AA) Also applies to:	Supports with exceptions	Application Navigator and Banner Frame
EN 301 549 Criteria		The navigator default theme does not have enough contrast between the focused/non-focused state.
<ul style="list-style-type: none"> <li>9.2.26 (Web)</li> </ul>		

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> <li>10.2.26 (non-web document)</li> <li>11.2.1.26 (Software)</li> <li>11.2.2.26 (Closed Software) - Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		Chat
		Focus is not visible on all the images in Conversations. Focus indicator is not visible on Close button and Upload attachment button in New Conversation dialog.
		Domain Support
2017 Section 508		Keyboard focus issue around the Save button.
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		Flow Designer
		On IE11 Focus is not properly visible when user navigates to certain sections.
		Guided Setup
		Focus indication is inadequate for some links.
		Knowledge Management
		Static header for Read and Rate a Question page poses visibility issues for keyboard.
		Performance Analytics
		While an indicator is provided, the contrast between focused and non-focused nodes is extremely low. Focus is not visible on some header elements of Detail Scorecard.
		Reporting
		Focus is not properly visible on the Click to expand the chart data button present under the Pie and Bar chart.
		Service Catalog
		Difficult to see which control has input focus. Focus around Request Number and associated Favorite icon is difficult to perceive. Focus indication is inadequate.
		UI components
		PAR Canvas - Hide Widget Header has weak indication of visible keyboard focus. Sufficient visual focus is not provided for certain user interface elements.
		Password Reset Application
		No focus indicator on Enrollment tab.

Criteria	Conformance Level	Remarks and Explanations
		Live Feed
		Delete button is not visible when navigated through keyboard dialog. Focus indicator is not visible on Chart image button in the dialog. Focus indicator is not visible on Live Feed frame.
<b>3.1.2 Language of Parts</b> (Level AA) Also applies to:  EN 301 549 Criteria	Supports	
<ul style="list-style-type: none"> <li>9.2.28 (Web)</li> <li>10.2.28 (non-web document)</li> <li>11.2.1.28 (Software) – Does not apply</li> <li>11.2.2.28 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		
<b>3.2.3 Consistent Navigation</b> (Level AA) Also applies to:  EN 301 549 Criteria	Supports with exceptions	Guided Tours
<ul style="list-style-type: none"> <li>9.2.31 (Web)</li> <li>10.2.31 (non-web document) – Does not apply</li> <li>11.2.1.31 (Software) – Does not apply</li> <li>11.2.2.31 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		User is not informed of new browser window that is opened when a new tour is created.
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software) – Does not apply to non-web software.</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs) – Does not apply to non-web docs.</li> </ul>		

Criteria	Conformance Level	Remarks and Explanations
<b>3.2.4 Consistent Identification</b> (Level AA) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>9.2.32 (Web)</li> <li>10.2.32 (non-web document) – Does not apply</li> <li>11.2.1.32 (Software) – Does not apply</li> <li>11.2.2.32 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>501 (Web)(Software) – Does not apply to non-web software.</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs) – Does not apply to non-web docs.</li> </ul>	Supports with exceptions	Chat  The Edit Group details button is not consistently identified.
<b>3.3.3 Error Suggestion</b> (Level AA) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>9.2.35 (Web)</li> <li>10.2.35 (non-web document)</li> <li>11.2.1.35 (Software)</li> <li>11.2.2.35 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul> 2017 Section 508 <ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>	Supports	
<b>3.3.4 Error Prevention (Legal, Financial, Data)</b> (Level AA) Also applies to:  EN 301 549 Criteria <ul style="list-style-type: none"> <li>9.2.36 (Web)</li> </ul>	Supports with exceptions	Forms and Fields  Confirmation message that the system automatically reformatted invalid currency values is inaccessible to non-visual users.

Criteria	Conformance Level	Remarks and Explanations
<ul style="list-style-type: none"> <li>10.2.36 (non-web document)</li> <li>11.2.1.36 (Software)</li> <li>11.2.2.36 (Closed Software) – Does not apply</li> <li>11.6.2 (Authoring Tool)</li> <li>12.1.2 (Product Docs)</li> <li>12.2.4 (Support Docs)</li> </ul>		
2017 Section 508		
<ul style="list-style-type: none"> <li>501 (Web)(Software)</li> <li>504.2 (Authoring Tool)</li> <li>602.3 (Support Docs)</li> </ul>		

## 2017 Section 508 Report

### Functional Performance Criteria (FPC)

Criteria	Conformance Level	Remarks and Explanations
302.1 Without Vision	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.1.1, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.4.2, 1.4.5, 2.1.1, 2.1.2, 2.2.2, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.6, 3.1.1, 3.1.2, 3.2.1, 3.2.2, 3.2.3, 3.2.4, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 4.1.1, 4.1.2 Or to view the full list, see <a href="#">Section 508 302.1</a> .
302.2 With Limited Vision	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.4.1, 1.4.3, 1.4.4, 2.1.1, 2.1.2, 2.4.3, 2.4.6, 2.4.7, 3.2.3, 3.2.4, 3.3.1 To view the full list, see <a href="#">Section 508 302.2</a> .
302.3 Without Perception of Color	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.4.1, 1.4.3 To view the full list, see <a href="#">Section 508 302.3</a> .
302.4 Without Hearing	Not Applicable	Product does not use prerecorded media.
302.5 With Limited Hearing	Not Applicable	Product does not use prerecorded media.
302.6 Without Speech	Not Applicable	Product does not use prerecorded media.
302.7 With Limited Manipulation	Supports with exceptions	See PRBs listed in WCAG Criteria: 2.1.1, 2.1.2, 2.2.1, 2.2.2, 2.4.5, 2.4.7, 3.2.3, 3.2.4

Criteria	Conformance Level	Remarks and Explanations
		To view a full list, see <a href="#">Section 508 302.7</a> .
302.8 With Limited Reach and Strength	Not Applicable	No hardware is produced.
302.9 With Limited Language, Cognitive, and Learning Abilities	Supports with exceptions	See PRBs listed in WCAG Criteria: 2.2.1, 2.2.2, 2.4.3, 2.4.5, 2.4.6, 3.1.1, 3.1.2, 3.2.1, 3.2.3, 3.2.4, 3.3.1, 3.3.2, 3.3.3, 3.3.4, 4.1.2 To view the full list, see <a href="#">Section 508 302.9</a> .

## Software

Criteria	Conformance Level	Remarks and Explanations
501.1 Scope – Incorporation of WCAG 2.0 AA	See the <a href="#">WCAG 2.0 section</a> .	See information in the WCAG section
502 Interoperability with Assistive Technology		
502.2.1 User Control of Accessibility Features	Supports	
502.2.2 No Disruption of Accessibility Features	Supports	
502.3 Accessibility Services		
502.3.1 Object Information	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1. For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
502.3.2 Modification of Object Information	Supports with exceptions	See PRBs listed in WCAG Criteria: 2.1.1, 2.1.2, 3.2.2 For more information, see <a href="#">Section 508 502.3.2</a> .
502.3.3 Row, Column, and Headers	Supports with exceptions	See PRBs listed in WCAG Criteria: 2.4.6, 4.1.2 For more information, see <a href="#">Section 508 502.3.3</a> .
502.3.4 Values	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1 For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
502.3.5 Modification of Values	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1, 3.2.2 For more information, see <a href="#">Section 508 502.3.5</a> .
502.3.6 Label Relationships	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1



Criteria	Conformance Level	Remarks and Explanations
		For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
502.3.7 Hierarchical Relationships	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1 For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
502.3.8 Text	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1 For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
502.3.9 Modification of Text	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1, 3.2.2 For more information, see <a href="#">Section 508 502.3.9</a> .
502.3.10 List of Actions	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1 For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
502.3.11 Actions on Objects	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1 For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
502.3.12 Focus Cursor	Supports with exceptions	See PRBs listed in WCAG Criteria: 2.4.3, 2.4.7 For more information, see <a href="#">Section 508 502.3.12</a> .
502.3.13 Modification of Focus Cursor	Supports with exceptions	See PRBs listed in WCAG Criteria: 2.4.3, 2.4.7 For more information, see <a href="#">Section 508 502.3.13</a> .
502.3.14 Event Notification	Supports with exceptions	See PRBs listed in WCAG Criteria: 3.2.6, 3.3.1 For more information, see <a href="#">Section 508 502.3.14</a> .
502.4 Platform Accessibility Features	Supports with exceptions	See PRBs listed in WCAG Criteria: 1.3.1 For more information, see <a href="#">section 1.3.1 Info and Relationships</a> .
Applications		

Criteria	Conformance Level	Remarks and Explanations
503.2 User Preferences	Supports	
503.3 Alternative User Interfaces	Supports	
503.4 User Controls for Captions and Audio Description		
503.4.1 Caption Controls	Supports	
503.4.2 Audio Description Controls	Supports	
504 Authoring Tools		
504.2 Content Creation or Editing (if not authoring tool, enter not applicable)	See the <a href="#">WCAG 2.0 section</a> .	See information in WCAG section
504.2.1 Preservation of Information Provided for Accessibility in Format Conversion	Supports	
504.2.2 PDF Export	Supports	
504.3 Prompts	Supports	
504.4 Templates	Supports	

## Support Documentation and Services

This report covers accessibility conformance for the ServiceNow product and does not discuss Documentation or Support Services.

## Hardware

The hardware section has been removed. No hardware is produced.

### Related Topics

- [Web Content Accessibility Guidelines \(WCAG\) overview](#)

### VPAT Section 508 additional information

**Last updated:** July 30, 2018

**Last updated:** July 30, 2018

The following sections provide more details on 508 compliance.

## Section 508 302.1 Without Vision

### Activity Stream

Focus goes to the next link in the work notes, related records etc. instead of moving inside the open filter popup.

### Application Navigator & Banner Frame

Not possible to select items in the navigation bar when using Chrome & JAWS.  
The user menu remains visible when tabbing to another element.  
Unable to switch to the main content of the General Settings page using keyboard.

When using Firefox browser, cannot tab past the Accessibility enabled switch in the System Settings modal if the switch is toggled off.  
 Tabbing back into to the Navigator bar after tabbing out takes you to the bottom of instead of where you left off.  
 Global Search frame title is not descriptive.  
 Two unique scripted elements are named Incident.

## Application Portfolio Management (APM)

Application Portfolio Management home page does not have skip links.

## Benchmark application

Content behind the graph is focusable when the View Trend controls are activated in the User UI Dashboard.  
 ITSM Benchmarking is not available to keyboard-only users.  
 Skip links are not provided in ITSM Benchmarking: User UI details

## Chat

Buttons with images as labels have no alternate text for assistive technologies

## Cloud Management application

Cannot set focus to values inside table of Quota Details dialog popup.

## Condition Builder

Malformed heading structure in the list v3 condition builder.  
 The None button does not have sufficient description.

## CSM Communities

The icons next to Forum Expertise and Topic Expertise are missing equivalent text.  
 Equivalent text is missing for each of the icons in the list of postings in the Community Portal.  
 Equivalent text is missing for each of the icons that identify the type of post in the list of postings.

## Customer Service Management

Cannot remove existing skills using keyboard only.  
 Focus is not trapped inside the Agent dialog box.

## Dashboards and homepages

It is possible to navigate behind the Remove Access dialog box.

## Domain Support

Some form fields in Domain Configuration do not have appropriate headings.

## Email

The structured data on the Email Diagnostics screen do not impart the clear key-value list structure to users of assistive technologies.

## Field Service Management

Date and time information is not announced by the screenreader.  
 No keyboard advice given on drag action for assigning tasks in Central Dispatch.  
 Button label does not adequately describe function in Central Dispatch.  
 Buttons have missing labels.  
 Day/serve buttons are not part of the tab order.  
 Purpose of skills field is not identified.  
 Search on tasks field is not identified.  
 Selecting the settings button does not move input focus to the popup window.  
 Unable to tab to the day/week/month select or.  
 Unable to tab to the team members in the list in the Central Dispatch User Interface.

## Flow Designer

Data panel does not receive keyboard focus.  
 Screen reader is not reading Select to add popup.  
 Confirmation message is not announced when flow is saved/copied

## Forms and fields

Reference field labels are not read by screen readers.  
 Watch list Email input has no label.  
 Annotations are used to denote sections of a form in plain text rather than using header tags.  
 JAWS does not read or narrate the state and control types of the elements on Active Section.  
 Cannot close the More Options popup menu.  
 The form favorites dialog does not get focus when selected.  
 When tabbed forms are disabled, the buttons that expand or collapse form sections are not accessible with a keyboard.  
 Users cannot get focus with a keyboard in Tag Details if they access it from the Show related lists pop-up.  
 When the Attachments dialog box is opened, focus does not move to the first interactive control within the dialog box (the Browse control) in any browser.  
 The Show version link in the form layout is not keyboard accessible.  
 Tooltips for mandatory field indicators are inaccessible to keyboard users.  
 The labels for read-only Document ID fields are not properly associated with its input.

## Guided Setup

Progress indicator circles on the Guided Setup does not have a visual alternative to indicate how much of a task is complete (relies on color & shape).

## Guided tours

Steps have the incorrect heading structure.  
 Alerts cannot be dismissed with keyboard.  
 Focus does not follow logical order after deleting a step in the guided tour designer.  
 Call out icons do not have a text alternative.

## Human Resources Service Management

Images in the HR Portal: Upcoming Events and Holiday Calendar panes are missing alt attributes.

## Incident Management

Edit Data Table Inline should allow users to edit data table inline.

## Knowledge Management

Incident links under Most recent tasks are not descriptive enough to identify their purpose in the page.

## Lists

Header menu list is not accessible with a keyboard.  
JAWS cannot distinguish between all the preview links.

## On-call scheduling

The date picker in the ITSM on-call calendar is not accessible with keyboard.

## Performance Analytics

Drag functionality is not available to non-mouse users.  
Keyboard only accessibility issues in Pa. Scorecard.  
Nodes are not focusable or actionable in IE or Microsoft Edge, and cannot be actioned when using NVDA in Google Chrome.  
JAWS is not reading the proper descriptions correctly after converting homepage to dashboard.  
Dashboard graphs do not have an accessible equivalent.  
Radio buttons on the Detail Scorecard are not labeled.  
Detail Scorecard: Screenreader does not announce the name of the Show more statistics button and the Close/Back button in the info/scores panel of the Detail Scorecard.  
The screenreader does not announce items inside menu/list/ combo box when the user navigates inside an item using arrow keys in Detail Scorecards.  
Structure of the tree widget is not easily determinable when using a screen reader.  
Unable to open hamburger menu with keyboard in Records table for Scorecard details.  
Detail Scorecard: Show Chart Options, the chart option expands but focus goes to the Go back button on the top of the page for Detail Scorecard.

## Reporting

The title input is missing an accessible label in the reporting interface.  
Edit Widget and Close links are not part of the tab order.  
Dashboards do not have list elements.  
Report home page - report type images do not have a label.

## Security Incident Response

Tab order is not constrained to the Security Cases dialog box.  
Labels/ information for filters and records in a table is not read correctly.

## Service Analytics

ITOM - Metric Explorer page has no headings

## Service Catalog

Data table rows and column headers are not identified programatically.  
The proposed new Standard Change template page lacks appropriate headings.  
Instructions for On Call Scheduling Wizard list rely on being able to see the content.

## Service Mapping

Cannot navigate date-picker on timeline with keyboard.  
Focus does not go to the X button after submit as it should.

## Service Portal

Reference pickers do not have labels (i icon).  
Search field related to the attachment button is missing a description.  
Search button inadequately labeled.  
When a user creates a new incident through Service Portal, the confirmation message stating that the incident was created lacks context.  
Date/time picker button is not accessible with keyboard.  
Difficult for keyboard users to navigate to Chart.  
Unable to use drop down with the keyboard.  
Filter functionality is not keyboard accessible.

Skip links are not available for bypassing common banner/header information.  
User is unable to navigate blocks.

## Survey Management

Malformed landmarks

## System Applications

Popup for removing files has malformed heading/title structure.

## UI Components

Microsoft link does not have the proper description in the ALT attribute.  
The application times out without providing a notification before timing out.  
User interface settings on expand/collapse does not reveal the tab selected.  
Pop out panels are inaccessible using keyboard.  
The icon (actions) associated with the configuration item is not accessible by keyboard alone.  
Global navigation is not accessible using arrow keys.  
A skip link is not present in the application list, the user has to navigate through the application list.  
Focus does not hold input focus.  
Focus management is inadequate when the user is minimizing/maximizing the navigation pane.  
In the new notification preference modal, user cannot tab back into the IFrame after tabbing out.  
The slushbucket does not trap focus.  
Focus does not move to the first item on the menu when the menu expands.

## User Experience engineering

In General settings, focus remains on save button.  
Color picker is not accessible using tab.  
In the Branding settings, focus remains on save button.

## Password Reset Application

The mandatory marker for Retype Password is missing until the field gains focus.  
The state of the progress indicator is not included when JAWS is describing the indicator.  
The Security Questions verification heading is not properly defined as a heading.  
Arrow keys fail to move between tabs in the Enrollment page.

## VA-designer

Conversation Builder page does not have a title.

## Continual Improvement Management (CIM)

There is a focus order issue when user moves from Planning to Overview.

# Section 508 302.2 With Limited Vision

## Activity Stream

Focus goes to the next link in the work notes, related records etc. instead of moving inside the open filter popup.  
Activity stream contents do not have a sufficient contrast ratio

## Application Navigator & Banner Frame

Not possible to select items in the navigation bar when using Chrome & JAWS.  
The user menu remains visible when tabbing to another element.  
Unable to switch to the main content of the General Settings page using keyboard.

When using Firefox browser, cannot tab past the Accessibility enabled switch in the System Settings modal if the switch is toggled off.  
 Tabbing back into to the Navigator bar after tabbing out takes you to the bottom of instead of where you left off.  
 Global Search frame title is not descriptive.  
 Two unique scripted elements are named Incident.

## Benchmark application

Color contrast is insufficient.  
 Content behind the graph is focusable when the View Trend controls are activated in the User UI Dashboard.  
 Tool tip in ITSM Benchmarking is not available to keyboard-only users.  
 Insufficient contrast ratios for text on the Benchmarks Dashboard page.

## Chat

Conversation icons in the Connect sidebar disappear when in Windows High Contrast mode.  
 Contrast between the foreground color and background color is insufficient.  
 Elements in the Connect Landing page do not have sufficient contrast ratio.  
 The color used to identify unread chat messages does not reflect the current theme.  
 Multiple elements in the Conversation page are not visible in increased zoom mode (200%).  
 Multiple elements in the Conversation tab in the Connect sidebar are cropped in increased zoom mode (200%).  
 Tool tips (title attribute) are not provided for conversations button and menu in increased zoom mode (200%).  
 Unable to access toggle left and right side buttons in increased zoom mode (200%) through keyboard.  
 Editing the Message field is not keyboard accessible.

## Cloud Management application

Cannot set focus to values inside table of Quota Details dialog popup.

## Condition Builder

Malformed heading structure in the list v3 condition builder.

## Customer Service Management

Cannot remove existing skills using keyboard only.  
 Focus is not trapped inside the Agent dialog box.  
 Elements do not have sufficient color contrast on several elements on the Agent dialog box.

## Dashboards and homepages

It is possible to navigate behind the Remove Access dialog box.

## Domain Support

Some form fields in Domain Configuration do not have appropriate headings.  
 Domain Configuration: Zooming/scaling is disabled.

## Email

The structured data on the Email Diagnostics screen do not impart the clear key-value list structure to users of assistive technologies.

## Field Service Management

Date and time information is not announced by the screenreader.  
 No keyboard alternative to drag action for assigning tasks in Central Dispatch.

Unable to navigate WOT on Central Dispatch.  
 Union label does not adequately describe function in Central Dispatch.  
 Day/Week buttons are not part of the tab order.  
 Information is conveyed by color alone in Field Service Management - Field Service - Agent  
 My Schedule.  
 Purpose of Skills field is not identified.  
 Purpose of Task Search button is not identified.  
 Selecting the settings button does not move input focus to the popup window.  
 Unable to tap to the day/week/month select or.  
 Unable to tap to the team members in the list in the Central Dispatch User Interface.

## Flow Designer

AutomationHub Branching Creating Approval Action does not have sufficient contrast.  
 Data panel does not receive keyboard focus.  
 Screen reader is not reading Select step to add popup.  
 Confirmation message is not announced when flow is saved/copied.  
 Screen reader is not reading Select Step to add popup.

## Forms and fields

Reference field labels are not read by screen readers.  
 Watch List Email Input has no label.  
 JAWS does not read or narrate sections of a form in plain text, rather than using header tags.  
 Section.  
 Can't close the More Options popup menu.  
 When tabbed forms are disabled, the buttons that expand or collapse form sections are not accessible with a keyboard.  
 Users cannot get focus with a keyboard in Tag Details if they access it from the Show related lists popup.  
 When the Attachments dialog box is opened, focus does not move to the first interactive control within the dialog box (the Browse control) in any browser.  
 The Show version link in the form layout is not keyboard accessible.  
 Tooltips for mandatory field indicators are inaccessible to keyboard users.  
 The labels for read-only Document ID fields are not properly associated with its input.  
 The ability to pinch zoom on some touch devices may be suppressed.

## Guided Setup

Progress indicator circles on the Guided Setup does not have a visual alternative to indicate how much of a task is complete (relies on color & shape).  
 Focus indication is inadequate for some links.  
 Elements have insufficient color contrast.

## Guided tours

Steps have the incorrect heading structure.  
 Focus does not follow logical order after deleting a step in the guided tour designer.  
 The color of the Delete button does not have sufficient contrast.

## Incident Management

Edit Data Table Inline should allow users to edit data table inline.  
 Insufficient color contrast ratio for Major Incident Management Workbench.

## Knowledge Management

Static header for Read and Rate a Question page poses visibility issues for keyboard.

## Lists

Header menu list is not accessible with a keyboard.

## On-call scheduling

The date picker in the ITSM on-call calendar is not accessible with keyboard.



## Performance Analytics

Drag functionality is not available to non-mouse users.  
 Incident and premium accessibility issues that are not keyboard accessible.  
 Nodes are not focusable or actionable in IE or Microsoft Edge, and cannot be actioned when using NVDA in Google Chrome.  
 Structure of the tree widget is not easily determinable when using a screen reader.  
 Shadow buttons on name filter, people with a board label records table for Scorecard details.  
 Detail Scorecard: Screenreader does not announce the name of the Show more statistics button and the close/Back button in the info/scores panel of the Detail Scorecard.  
 The screenreader does not announce items inside menu/list/combo box when the user navigates inside an item using arrow keys in Detail Scorecards.  
 When selecting Show Chart Options, the chart option expands but focus goes to the Go back button on the top of the page for Detail Scorecard.  
 While an indicator is provided, the contrast between focused and non-focused nodes is extremely low.  
 Focus is not visible on some header elements of Detail Scorecard.  
 Color contrast is insufficient for certain elements of Detail Scorecard.

## Reporting

The title input is missing an accessible label in the reporting interface.  
 Edit Widgets and Close links elements.  
 Edit the report on home page, list configuration does not have a label.  
 Many controls in the report creator do not show focus when using Windows High Contrast mode.  
 Focus is not properly visible on the Click to expand the chart data button present under the Pie and Bar chart.  
 Focus is not visible on the selected tab present in the Style tab section in the page for the bar and pie chart.

## Security Incident Response

Tab order is not constrained to the Security Cases dialog box.  
 Labels/information for filters and records in a table is not read correctly.

## Service Analytics

ITOM - Metric Explorer page has no headings  
 Some icons rely on color to indicate selection in ITOM - Metric Explorer.

## Service Catalog

Data table rows and column headers are not identified programmatically.  
 Instructions for on-boarding scheduling wizard list rely on being able to see the content.  
 Color contrast is insufficient.  
 The contrast ratio for some items in the service catalog is insufficient.  
 Difficult to see screen content on high input focus.  
 Focus around Request Number and associated Favorite icon is difficult to perceive.  
 Focus indication is inadequate.

## Service Mapping

Cannot navigate date-picker on timeline with keyboard.  
 Page does not go to the Explorer when a new asset should.  
 Page elements are not honored in Windows High Contrast mode: ITOM Service Mapping

## Service Portal

Reference pickers do not have labels (icon).  
 Search field related to the attachment button is missing a description.  
 Search button inadequately labeled.  
 When a user creates a new incident through Service Portal, the confirmation message stating that the incident was created lacks context.  
 Date/time picker button is not accessible with keyboard.  
 Difficult for keyboard users to navigate to Chart.  
 Unable to close dialog windows by keyboard.  
 Disabled Service Capability map does not have sufficient color contrast.  
 Insufficient contrast ratio for text in To Do page.  
 Benchmark Dashboards do not meet contrast minimums.  
 Benchmark scaling is disabled in Community.

## Service Workspace

Color is the only distinguishing indication that the blue article numbers are links.

## Software Asset Management

Active Proceed button does not meet contrast minimum.

## Survey Management

Malformed landmarks

## System Applications

Popup for removing files has malformed heading/title structure.

## Templates

Template links have an insufficient contrast ratio.

## UI Components

Flayouts do not hold input focus

Focus management is inadequate when the user is minimizing/maximizing the navigation pane.

In the new notification preference modal, user cannot tab back into the IFrame after tabbing out.

Pop out panels are inaccessible using keyboard.

The icon for the notification associated with configuration item is not accessible by keyboard alone.

User notification notification does not expand/collapse within system settings.

System settings tab is not accessible using arrow keys.

Global navigation does not accessible using arrow keys.

Focus does not move to the first item on the menu when the menu expands.

Connect Support module does not have sufficient contrast.

Test in General header does not meet color contrast ratio requirements.

Unable to visually distinguish when some focusable elements are selected in High Contrast mode.

Canvas - Hide Widget Header has weak indication of visible keyboard focus.

Sufficient visual focus is not provided for certain user interface elements.

## User Experience engineering

In General settings, focus remains on save button.

Color branding settings focus remains on save button.

The custom radio buttons in the Export to PDF dialog box are not honored correctly in Windows High Contrast mode.

## Password Reset Application

The state of the progress indicator is not included when JAWS is describing the indicator.

Arrow key navigation between on heading is not properly defined as a heading.

Submit button has insufficient color contrast when enrolling in password reset.

Mandatory asterisk ( \*) marker has an insufficient contrast ratio with the white color background.

No focus indicator on Enrollment tab.

The mandatory marker for Retype Password is missing until the field gains focus.

## UI Pages/Macros

Response time text has an insufficient contrast ratio.

## Continual Improvement Management (CIM)

There is a focus order issue when user moves from Planning to Overview.

## Section 508 302.3 Without perception of color

### Activity Stream

Activity stream contents do not have a sufficient contrast ratio

### Application Navigator & Banner Frame

All radio buttons appear to be selected when in Windows High Contrast mode.

### Benchmark application

Color contrast is insufficient  
Insufficient contrast ratios for text on the Benchmarks Dashboard page.

### Chat

Conversation icons in the Connect sidebar disappear when in Windows High Contrast mode

Contrast between the foreground color and background color is insufficient.  
Elements in DFO - Connect - Landing page do not have sufficient contrast ratio.  
The color used to identify unread chat messages does not reflect the current theme

### Customer Service Management

Elements do not have sufficient color contrast on several elements on the Agent dialog box.

### Domain Support

Domain Configuration does not have sufficient contrast.

### Field Service Management

Information is conveyed by color alone in Field Service Management - Field Service - Agent - My Schedule

### Flow Designer

AutomationHub Branching Creating Approval Action does not have sufficient contrast.

### Guided Setup

Elements have insufficient color contrast

### Guided tours

The color of the Delete button does not have sufficient contrast.

## Incident Management

Insufficient color contrast ratio for Major Incident Management Workbench.

## Performance Analytics

Color contrast is insufficient for certain elements of Detail Scorecard.

## Reporting

Many controls in the report creator do not show focus when using Windows High Contrast mode

## Service Analytics

Some icons rely on color to indicate selection in ITOM - Metric Explorer.

## Service Catalog

Color contrast is insufficient.  
The contrast ratio for some items in the service catalog is insufficient.

## Service Mapping

Page elements are not honored in Windows High Contrast mode: ITOM Service Mapping

## Service Portal

Benchmark Dashboards do not meet contrast minimums.  
Business Service Capability map does not have sufficient color contrast.  
Insufficient contrast ratios for text in To Do page.

## Service Workspace

Color is the only distinguishing indication that the blue article numbers are links.

## Software Asset Management

Active Proceed button does not meet contrast minimum.

## Templates

Template links have an insufficient contrast ratio.

## UI Components

Connect Support module does not have sufficient contrast.  
Test in General panel does not have sufficient contrast ratio requirements.  
Unable to visually distinguish when some focusable elements are selected in High Contrast mode.

## User Experience engineering

The custom radio buttons in the Export to PDF dialog box are not honored correctly in Windows High Contrast mode.

## Password Reset Application

Submit button has insufficient color contrast when enrolling in password reset.  
Mandatory asterisk ( \* ) marker has an insufficient contrast ratio with the white color background.

## UI Pages/Macros

Response time text has an insufficient contrast ratio.

## Section 508 302.7 With Limited Manipulation

### Activity Stream

Focus goes to the next link in the work notes, related records etc. instead of moving inside the open filter popup.

### Application Navigator & Banner Frame

Not possible to select items in the navigation bar when using Chrome & JAWS.  
Unable to switch to the main content of the General Settings page using keyboard.  
When using Firefox browser, cannot tab past the Accessibility enabled switch in the System Settings modal if the switch is toggled off.  
The navigator default theme does not have enough contrast between the focused/non-focused state.

### Benchmark application

Tooltip in ITSM Benchmarking is not available to keyboard-only users.

### Chat

Unable to access Toggle left and right side buttons in increased zoom mode (200%) through keyboard.  
Editing the Message field is not keyboard accessible.

### Customer Service Management

Cannot remove existing skills using keyboard only.

### Field Service Management

Date and time information is not announced by the screenreader.  
No keyboard alternative to drag action for assigning tasks in Central Dispatch.  
Unable to navigate WOT on Central Dispatch.  
Unable to tab to tasks/ team tabs in settings popover.  
Unable to tab to the team members in the list in the Central Dispatch User Interface.

### Flow Designer

On IE11 Focus is not properly visible when user navigates to certain sections.

## Forms and fields

Users cannot get focus with a keyboard in Tag Details if they access it from the Show related Lists pop-up.  
 Tooltips for mandatory field indicators are not keyboard accessible.  
 Cannot close the More Options popup menu.  
 The Form Favorites dialog does not get focus when selected.  
 When tabbed forms are disabled, the buttons that expand or collapse form sections are not accessible with a keyboard.

## Guided Setup

Focus indication is inadequate for some links.

## Guided tours

Alerts cannot be dismissed with keyboard.

## Knowledge Management

Static header for Read and Rate a Question page poses visibility issues for keyboard.

## Lists

Header menu list is not accessible with a keyboard.

## On-call scheduling

The date picker in the ITSM on-call calendar is not accessible with keyboard.

## Performance Analytics

Drag functionality is not available to non-mouse users.  
 Keyboard only accessibility issues in Pa Scoresheet.  
 Nodes are not focusable or actionable in IE or Microsoft Edge, and cannot be actioned when using NVDA in Google Chrome.  
 While an indicator is provided, the contrast between focused and non-focused nodes is extremely low.  
 Focus is not visible on some header elements of Detail Scorecard.

## Reporting

Edit Widget and Close links are not part of the tab order.  
 Focus is not properly visible on the Click to expand the chart data button present under the Pie and Bar chart.  
 Focus is not visible on the selected tab present in the Style tab section in the page for the bar and pie chart.

## Service Catalog

Difficult to see which control has input focus.  
 Focus around Request number and associated Favorite icon is difficult to perceive.

## Service Mapping

Cannot navigate date-picker on timeline with keyboard.

## Service Portal

Date/time picker button is not accessible with keyboard.  
 Difficult for keyboard users to navigate to chart.  
 Unable to use drop down with the keyboard.

## UI Components

PAR Canvas - Hide Widget Header has weak indication of visible keyboard focus.  
 Pop out panels are inaccessible using keyboard.  
 Sufficient visual focus is not provided for certain user interface elements.  
 System settings tab is not accessible using arrow keys.  
 Global Navigator is not accessible using arrow keys.

## User Experience engineering

Color picker is not accessible using tab.  
 In the Branding settings, focus remains on save button.

## Password Reset Application

Arrow keys fail to move between tabs in the Enrollment page.  
 No focus indicator on Enrollment tab.

# Section 508 302.9 With Limited Language, Cognitive, and Learning Abilities

## Application Navigator & Banner Frame

The user menu remains visible when tabbing to another element.  
 Tabbing back into to the Navigator bar after tabbing out takes you to the bottom of instead of where you left off.  
 Global Search frame title is not descriptive.  
 Two unique scripted elements are named Incident.

## Benchmark application

Color contrast is insufficient.

## Customer Service Management

Focus is not trapped inside the Agent dialog box.

## Dashboards and homepages

It is possible to navigate behind the Remove Access dialog box.

## Domain Support

Some form fields in Domain Configuration do not have appropriate headings.

## Field Service Management

Button label does not adequately describe function in Central Dispatch.  
 Field Service Dispatching has unexpected focus order.  
 Purpose of skills field is not identified.  
 Purpose of task search field is not identified.  
 Selecting the settings button does not move input focus to the popup window.

## Flow Designer

Data panel does not receive keyboard focus.

## Forms and fields

Create New Template popup does not hold focus.  
When the Attachments dialog box is opened, focus does not move to the first interactive control within the dialog box (the Browse control) in any browser.  
The labels for read-only Document ID fields are not properly associated with its input.

## Guided tours

Focus does not follow logical order after deleting a step in the guided tour designer.

## Performance Analytics

When selecting Show Chart Options, the chart option expands but focus goes to the Go back button on the top of the page for Detail Scorecard.

## Reporting

Dashboards do not have h1 elements.  
On report home, cog/list configuration does not have a label.

## Security Incident Response

Tab order is not constrained to the Security Cases dialog box.

## Service Catalog

Data table rows and column headers are not identified programmatically.  
The Propose a new Standard Change Template page lacks appropriate headings.

## Service Mapping

Focus does not go to the X button after submit as it should.

## Service Portal

Reference pickers do not have labels (i icon).

## Survey Management

Malformed landmarks

## UI Components

Flyouts do not hold input focus.  
Focus management is inadequate when the user is minimizing/maximizing the navigation pane.  
In the new notification preference modal, user cannot tab back into the IFrame after tabbing out.  
The slushbucket does not trap focus.  
Focus does not move to the first item on the menu when the menu expands.



## User Experience engineering

In General settings, focus remains on save button.

## Password Reset Application

The state of the progress indicator is not included when JAWS is describing the indicator.  
The Security Questions verification heading is not properly defined as a heading

## Continual Improvement Management (CIM)

There is a focus order issue when user moves from Planning to Overview.

## Section 508 502.3.2 Modification of Object Information

### Activity Stream

Focus goes to the next link in the work notes, related records etc. instead of moving inside the open filter popup.

### Application Navigator & Banner Frame

Not possible to select items in the navigation bar when using Chrome & JAWS.  
Unable to switch to the main content of the General Settings page using keyboard.  
When using Firefox browser, cannot tab past the Accessibility enabled switch in the System Settings modal if the switch is toggled off.

### Benchmark application

Tooltip in ITSM Benchmarking is not available to keyboard-only users.

### Chat

Editing the Message field is not keyboard accessible.

### Customer Service Management

Cannot remove existing skills using keyboard only.

### Field Service Management

Date and time information is not announced by the screenreader.  
No keyboard alternative to drag action for assigning tasks in Central Dispatch.  
Unable to tab to tasks/Team tabs in settings popover.  
Unable to tab to the day/week/month selector.  
Unable to tab to the team members in the list in the Central Dispatch User Interface.

### Forms and fields

Users cannot get focus with a keyboard in Tag Details if they access it from the Show related Lists pop-up.  
Tooltips for mandatory field indicators are not keyboard accessible.  
Cannot close the More Options popover menu.  
The Form Favorites dialog does not get focus when selected.  
When tabbed forms are disabled, the buttons that expand or collapse form sections are not accessible with a keyboard.

## Guided tours

Alerts cannot be dismissed with keyboard.

## Lists

Header menu list is not accessible with a keyboard.

## On-call scheduling

The date picker in the ITSM on-call calendar is not accessible with keyboard.

## Performance Analytics

Drag functionality is not available to non-mouse users.  
 Incident and premium accessibility issues that are not keyboard accessible.  
 Nodes are not focusable or actionable in IE or Microsoft Edge, and cannot be actioned when using NVDA in Google Chrome.  
 Unable to open hamburger menu with keyboard in Records table for Scorecard details.

## Reporting

Edit Widget and Close links are not part of the tab order.

## Service Mapping

Cannot navigate date-picker on timeline with keyboard.  
 Drag functionality is not accessible with a keyboard.

## Service Portal

Date/time picker button is not accessible with keyboard.  
 Filter function for keyboard users to navigate to what.  
 Unable to use drop down with the keyboard.

## UI Components

Pop out panels are inaccessible using keyboard.  
 System Settings tab is not accessible using arrow keys.  
 Global Navigator is not accessible using arrow keys.

## User Experience engineering

Color picker is not accessible using tab.  
 In the Branding settings, focus remains on save button.

## Password Reset Application

Arrow keys fail to move between tabs in the Enrollment page.

# Section 508 502.3.3 Row, Column, and Headers

## Application Navigator & Banner Frame

Global Search frame title is not descriptive.  
 Two unique scripted elements are named Incident.

## Domain Support

Some form fields in Domain Configuration do not have appropriate headings.

## Field Service Management

Purpose of Skills field is not identified.  
Purpose of Task search field is not identified.  
Button label does not adequately describe function in Central Dispatch.

## Forms and fields

The labels for read-only Document ID fields are not properly associated with its input.

## Reporting

Dashboards do not have h1 elements.  
On the report homepage, list configuration does not have a label.

## Service Catalog

Data table rows and column headers are not identified programmatically.  
The Propose a new Standard Change Template page lacks appropriate headings.

## Service Portal

Reference pickers do not have labels (i icon).

## Survey Management

Malformed landmarks

## Password Reset Application

The state of the progress indicator is not included when JAWS is describing the indicator.  
The Security Questions verification heading is not properly defined as a heading

# Section 508 502.3.5 Modification of Values

## Cloud Management application

Cannot set focus to values inside table of Quota Details dialog popup.

## Condition Builder

Malformed heading structure in the list v3 condition builder.

## Email

The structured data on the Email Diagnostics screen do not impart the clear key-value list structure to users of assistive technologies.

## Flow Designer

Screen reader is not reading Select Step to add popup  
Confirmation message is not announced when flow is saved/copied

## Forms and fields

Reference field labels are not read by screen readers  
Annotations are used to denote sections of a form is plain text rather than using header tags  
JAWS does not read or narrate the state and control types of the elements on Active Section.

## Guided tours

Steps have the incorrect heading structure.

## Incident Management

Edit Data Table Inline should allow users to edit data table inline.

## Performance Analytics

Radio buttons on the Detail Scorecard are not labeled  
Detail Scorecard: Screenreader does not announce the name of the Show more statistics button and the close/Back button in the info/scores panel of the Detail Scorecard  
The screenreader does not announce items inside menu/list/combo box when the user navigates inside an item using arrow keys in Detail Scorecards.

## Reporting

The title input is missing an accessible label in the reporting interface.

## Security Incident Response

Labels/information for filters and records in a table is not read correctly.

## Service Analytics

ITOM - Metric Explorer page has no headings

## Service Portal

Input field related to the attachment button is missing a description.  
Search button inadequately labeled  
When a user creates a new incident through Service Portal, the confirmation message stating that the incident was created lacks context.

## System Applications

Popup for removing files has malformed heading/title structure.

## UI Components

The application times out without providing a notification before timing out.  
User menu has no notification on expand/collapse.

Within System Settings, JAWS does not reveal the tab selected.

## Password Reset Application

The mandatory marker for Retype Password is missing until the field gains focus.

## Section 508 502.3.9 Modification of Text

### Cloud Management application

Cannot set focus to values inside table of Quota Details dialog popup.

### Condition Builder

Malformed heading structure in the list v3 condition builder.

### Email

The structured data on the Email Diagnostics screen do not impart the clear key-value list structure to users of assistive technologies.

### Flow Designer

Screen reader is not reading Select Step to add popup.  
Confirmation message is not announced when flow is saved/copied

### Forms and fields

Reference field labels are not read by screen readers  
Watch List Email Input has no label  
Annotations are used to denote sections of a form is plain text rather than using header tags.  
JAWS does not read or narrate the state and control types of the elements on Active Section.

### Guided tours

Steps have the incorrect heading structure.

### Incident Management

Edit Data Table Inline should allow users to edit data table inline.

### Performance Analytics

Radio buttons on the Detail Scorecard are not labeled.  
Detail Scorecard: Screen reader does not announce the name of the Show more statistics button and the close/Back button in the info/scores panel of the Detail Scorecard.  
The screenreader does not announce items inside menu/list/combo box when the user navigates inside an item using arrow keys in Detail Scorecards.

### Reporting

The title input is missing an accessible label in the reporting interface.

## Security Incident Response

Labels/information for filters and records in a table is not read correctly.

## Service Analytics

ITOM - Metric Explorer page has no headings

## Service Portal

Input field related to the attachment button is missing a description.  
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When a user creates a new incident through Service Portal, the confirmation message stating that the incident was created lacks context.

## System Applications

Popup for removing files has malformed heading/title structure.

## UI Components

The application times out without providing a notification before timing out.  
User menu has no notification on expand/collapse.  
Within System Settings, JAWS does not reveal the tab selected.

## Password Reset Application

The mandatory marker for Retype Password is missing until the field gains focus.

## Section 508 502.3.12 Focus Cursor and 502.3.13 Modification of Focus Cursor

### Application Navigator & Banner Frame

The user menu remains visible when tabbing to another element.  
Tabbing back into to the Navigator bar after tabbing out takes you to the bottom of instead of where you left off.  
The navigator default theme does not have enough contrast between the focused/non-focused state.

### Benchmark application

Content behind the graph is focusable when the View Trend controls are activated in the User UI Dashboard.

### Customer Service Management

Focus is not trapped inside the Agent dialog box.

### Dashboards and homepages

It is possible to navigate behind the Remove Access dialog box.

## Field Service Management

Day/Week buttons are not part of the tab order.  
Selecting the settings button does not move input focus to the popup window.

## Flow Designer

Data panel does not receive keyboard focus.  
On LHM Focus is not properly visible when user navigates to certain sections.

## Forms and fields

Create New Template popup does not hold focus.  
When the Attachments dialog box is opened, focus does not move to the first interactive control within the dialog box (the Browse control) in any browser.

## Guided Setup

Focus indication is inadequate for some links.

## Guided tours

Focus does not follow logical order after deleting a step in the guided tour designer.

## Knowledge Management

Static header for Read and Rate a Question page poses visibility issues for keyboard.

## Performance Analytics

When selecting Show Chart Options, the chart option expands but focus goes to the Go back button on the top of the page for Detail Scorecard.  
While an indicator is provided, the contrast between focused and non-focused nodes is extremely low.  
Focus is not visible on some header elements of Detail Scorecard.

## Reporting

Focus is not properly visible on the Click to expand the chart data button present under the Pie and Bar chart.  
Focus is not visible on the selected tab present in the Style tab section in the page for the bar and pie chart.

## Security Incident Response

Tab order is not constrained to the Security Cases dialog box.

## Service Catalog

Difficult to see which control has input focus.  
Focus around Request Number and associated Favorite icon is difficult to perceive.

## Service Mapping

Focus does not go to the X button after submit as it should.

## UI Components

Flayouts do not hold input focus.  
 Focus management is inadequate when the user is minimizing/maximizing the navigation pane.  
 In the new notification preference modal, user cannot tab back into the IFrame after tapping out.  
 Canvas - Hide Widget Header has weak indication of visible keyboard focus.  
 Sufficient visual focus is not provided for certain user interface elements.  
 The slushbucket does not trap focus.  
 Focus does not move to the first item on the menu when the menu expands.

## User Experience engineering

In General settings, focus remains on save button.

## Password Reset Application

No focus indicator on Enrollment tab.

## Continual Improvement Management (CIM)

There is a focus order issue when user moves from Planning to Overview.

# Section 508 502.3.14 Event Notification

## CSM Communities

Individual errors for each field are not described in text: color alone (a red border) is placed around the field to indicate an error.

## Knowledge Management

Search Knowledge error messages are not read by assistive technologies.

## UI Components

At initial login screen, the instructions for the wrong username/password error message is not associated with the form field.

## Password Reset Application

JAWS incorrectly notifies the user that there is an error before the user begins to enter values to field.  
 Error messages are not announced when they appear on the page.  
 Editable fields are incorrectly described as password fields.