



# TechNow

The web series for ServiceNow admins, builders and developers on a variety of Now Platform topics

Episode 77

## Paris platform features

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# Chuck Tomasi

- Sr. Developer Evangelist, Now Platform
- 35+ years IT experience
  - SW developer, PM, IT manager
- ServiceNow customer 2008-2010
- ServiceNow since 2010
  - PS implementations, enablement, and pre-sales
- First Innovation of the Year Award @K10
- Co-host of TechNow since 2013
- Live Coding Happy Hour guest
- ServiceNow Community leader
- Hobbies:
  - Podcasting, golf, skiing, martial arts, cosplay



# Kreg Steppe

- Program Manager, Cloud Labs
  - Support training cloud infrastructure
- Specializing in cloud automation
- ServiceNow 2014-present
  - Prior experience in PS Orchestration
- Co-host of TechNow 2016-present
- Hobbies:
  - Podcasting, photography, Linux



# Jeremy Duncan

- Platform Architect at ServiceNow
- 16 years of experience as enterprise engineer/architect
- ServiceNow experience since 2011 (pre-Aspen)
- Enterprise, federal and commercial implementations
- Knowledge attendee since 2013
  - Speaker at K13
- Degree: BBA in IS at MTSU
- Personal
  - Volunteer police officer and camping with wife and kids



# Agenda

- All the platform updates and new features we can squeeze in from Paris
- Q & A

**Note:** Ask a question in the Q & A – if we cannot answer it live, we'll post answers on the community  
[http://bit.ly/servicenow-technow \(Ep 77\)](http://bit.ly/servicenow-technow (Ep 77))



# Tell us about your app

Share your app and make a difference. For every submission, ServiceNow will donate up to \$250\* to support the UN COVID-19 Response and Recovery fund.

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# Break Point

## The ServiceNow developer podcast

### With Chuck Tomasi



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# developer.servicenow.com

- Free personal developer instance
- Early access to releases
- Free learning plans
- Script API documentation
- Developer meet-up information
- Developer events
- Developer blog
- Share content
- Videos

The screenshot shows the developer.servicenow.com homepage. At the top, there's a navigation bar with links for Learn, Reference, Guide, Connect, Design, a search bar, a location dropdown set to Orlando, and a user profile icon. Below the header, there are four cards: "Welcome, Chuck!" (a general welcome message), "COMPANY NEWS Our response to COVID-19" (with a "Read Now" link), "SITE NEWS Introducing a new look and feel" (with a "See What's New" link), and "BLOG Upgrade your instance to Orlando" (with a "Learn How" link). On the left, a sidebar titled "Your Instance" displays "INSTANCE STATUS" (Online), "INSTANCE URL" (<https://dev79000.servicenow.com/>), "RELEASE" (Orlando), and "REMAINING ACTIVITY" (304 days). It also has "Refresh Status" and "Manage" buttons. On the right, under the "Learn" section, there are four learning tracks with progress bars: "Service Portal" (2% COMPLETE), "Automating Application Logic" (6% COMPLETE), "Technology Partner Program" (2% COMPLETE), and "New to ServiceNow" (1% COMPLETE). A speech bubble icon is located in the bottom right corner of the page.

# Paris platform features

# Disclaimer

Platform features only

Not HR, IT, or CSM  
workflows

Pricing and licensing

Talk to your account team

Part of Early Access

#safeharbor

# ATF

## Custom UI versioning support

- In reality, you shouldn't notice much difference.

```
<mugshots_cache_json>
{"6403039a8dd780ce71edc9c5ff1b00b1": {"area": "default", "sn_atf_mugshot_short_description": "Image <img>: A pembroke welsh corgi!", "sn_atf_mugshot_long_description": "Image <img> [pembroke]: A pembroke welsh corgi!", "methods": [{"click": true}, {"alt": "A pembroke welsh corgi!"}, {"sn_atf_mugshot_label": "A pembroke welsh corgi!", "index": 0, "version": "18.0", "get_value_result": "\\", "sn_atf_mugshot_tag_display_name": "Image <img>\\", "sn_atf_mugshot_value": "\\\\", "tag": "img\", \"isDisabled\": false, "id": "pembroke\", \"hash\": \"6403039a8dd780ce71edc9c5ff1b00b1\""}]}
</mugshots_cache_json>
```

# ATF

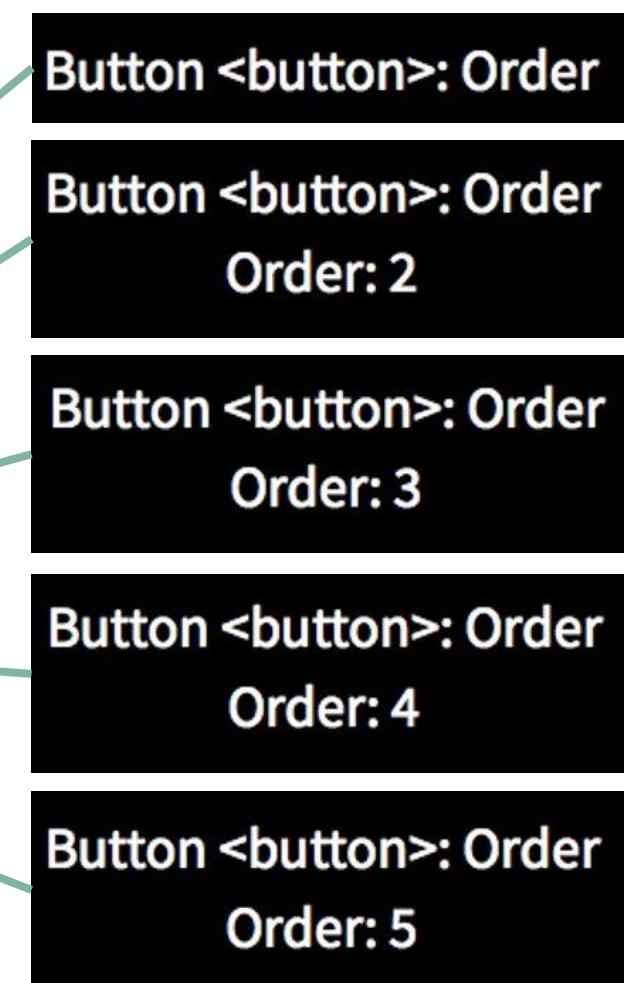
## Improved indexing

Related Search ②

Email server is down.

Knowledge & Catalog (All)

New Email Account	New Email Creation
<a href="#">Reboot Windows Server</a>	Reboot a Windows <b>Server</b> (after patching or to clear a fault) making sure that it is removed from monitoring alerts, that network attached storage is u...
<a href="#">Server Tuning</a>	Request virtual <b>server</b> tuning
<a href="#">Application Server (Standard)</a>	Dell 1950 (1U) Rack Mount <b>Server</b>
<a href="#">Database Server &amp; Oracle License</a>	Dell 6850 (4U) Rack Mount <b>Server</b>



# ATF

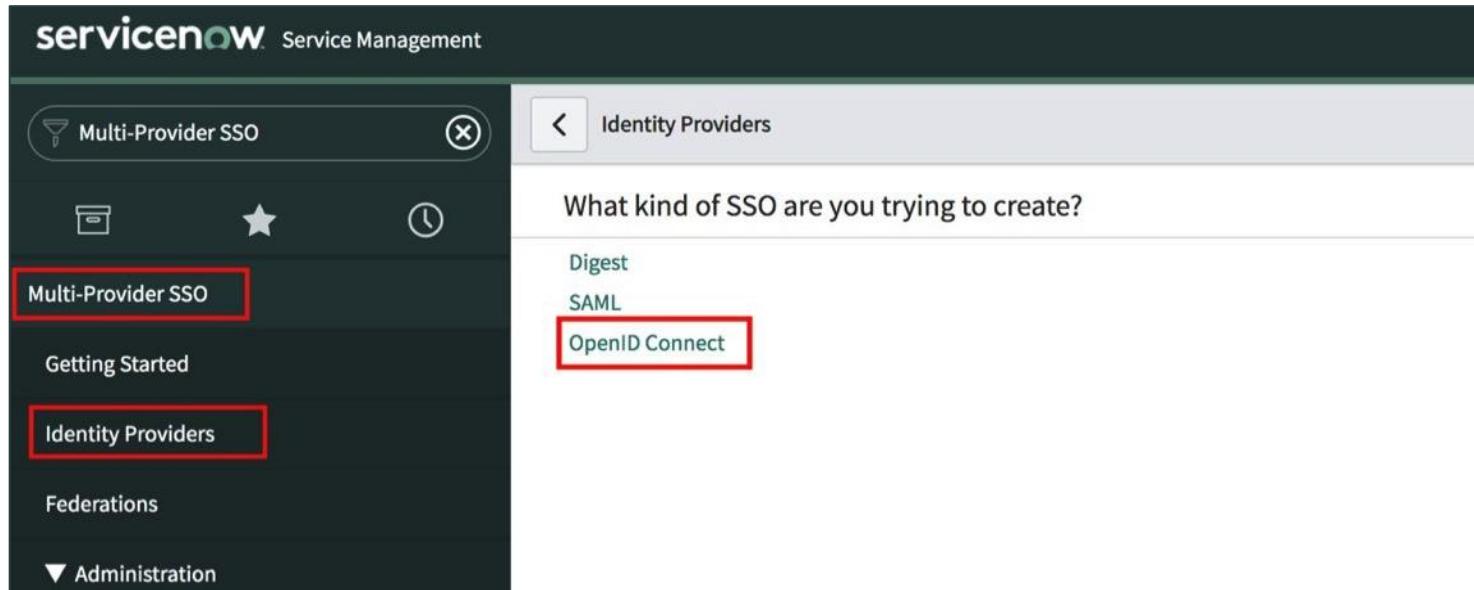
## Page inspector enhancements

The screenshot shows the ServiceNow Incident New record page with several enhancements:

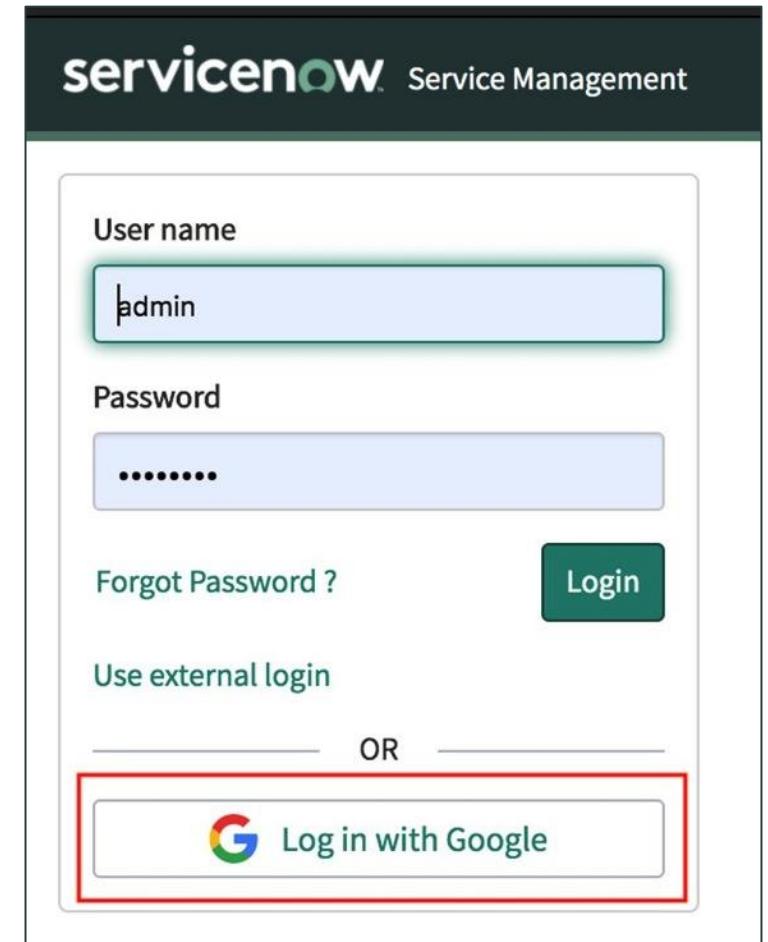
- Page Inspector Header:** A green header bar labeled "Page Inspector" is visible at the top right.
- Yellow Alert Bar:** A yellow bar at the top displays the message: "⚠️ Forms are blacklisted. Use the Form Step category to test forms".
- Search Functionality:** A search bar with a magnifying glass icon is located on the left side of the page.
- Page Type Selection:** A dropdown menu titled "Select a page type" is open, showing options: UI Pages, Standard UI, Service Portal, and Custom. The "UI Pages" option is highlighted.
- Form Fields:** The main form contains various fields such as Number (INIC0010006), Caller, Category (inquiry / Help), Subcategory, Service, Service offering, Configuration item, Short description, Description, Contact type, State, Impact, Urgency, Priority, Assignment group, and Assigned to.
- Related Search Results:** A search interface for "Related Search Results" is present, showing a search bar and a dropdown for "Knowledge & Catalog (All)". The result count is "No results to display".
- Bottom Navigation:** A navigation bar at the bottom includes tabs for Notes, Related Records, Resolution Information, Watch list, Work notes list, and Additional comments.

# Authentication

## OpenID Connect SSO



The screenshot shows the ServiceNow Multi-Provider SSO configuration interface. On the left, a sidebar lists "Multi-Provider SSO", "Getting Started", "Identity Providers", "Federations", and "Administration". The "Identity Providers" item is highlighted with a red box. The main panel title is "Identity Providers" with a back arrow. It asks "What kind of SSO are you trying to create?" and lists "Digest", "SAML", and "OpenID Connect", with "OpenID Connect" also highlighted with a red box.



The screenshot shows the ServiceNow login screen. It features fields for "User name" (containing "admin") and "Password" (containing masked text). Below these are links for "Forgot Password ?" and "Login". Further down, there's a "Use external login" section with an "OR" separator and a button labeled "Log in with Google", which is also highlighted with a red box.

# Authentication

## External self-user registration

servicenow Service Management

External user

User Registration Configuration  
New record

Name: Register

Roles assigned to provisioned users: snc\_external

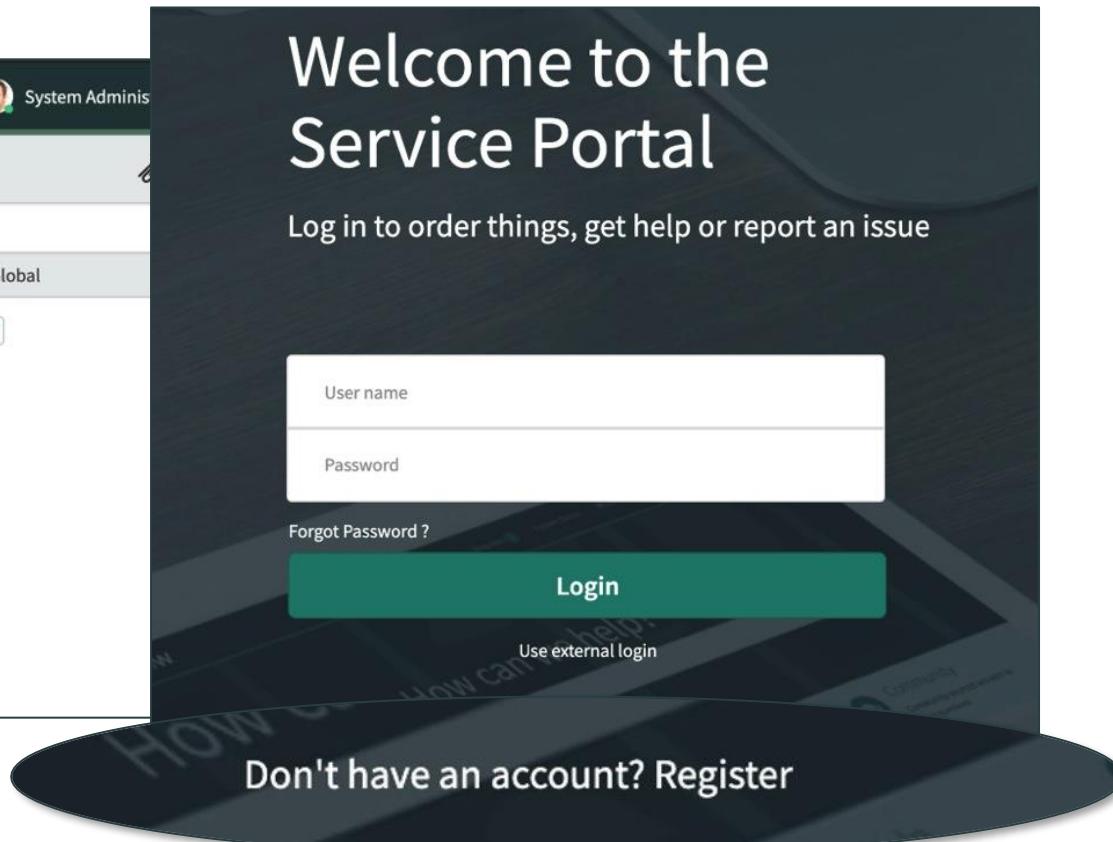
Enable terms and conditions:

Terms and condition URL: <https://www.example.com/privacy-statement.html>

Application: Global

Enable CAPTCHA:

Submit Save



# Core platform

## Business calendar offset

The screenshot shows the 'Schedule Item' form in ServiceNow, specifically for a 'New record'. The form has two main sections: 'General' and 'Advanced' (which is currently collapsed). The 'General' section contains fields for Name, Next action, Calendar, Job ID, State, Parent, and System ID. The 'Advanced' section, which is circled in the diagram, contains fields for Trigger type, Business calendar, Offset type, and Offset. The 'Trigger type' is set to 'Business Calendar: Entry Start', 'Business calendar' is set to 'Quarter', 'Offset type' is set to 'Future', and 'Offset' is set to 'Days: 00' and 'Hours: 2'. At the bottom of the form are buttons for 'Execute Now' and 'Submit'.

Field	Value
Name	(empty)
Next action	(empty)
Calendar	(empty)
Job ID	RunScriptJob
State	Ready
Parent	(empty)
System ID	-- None --
Trigger type	Business Calendar: Entry Start
Business calendar	Quarter
Offset type	Future
Offset	Days: 00 Hours: 2

# Core platform

## Performance dashboard – instance view



# Core platform

Robust transformation engine

- Wildcards
- Nested structure

ETL Entity fields (5) Robust Transform Engine Entity O...

ETL Entity fields New Search Name ▾ Search

Robust Transform Engine Entity = Import Entity

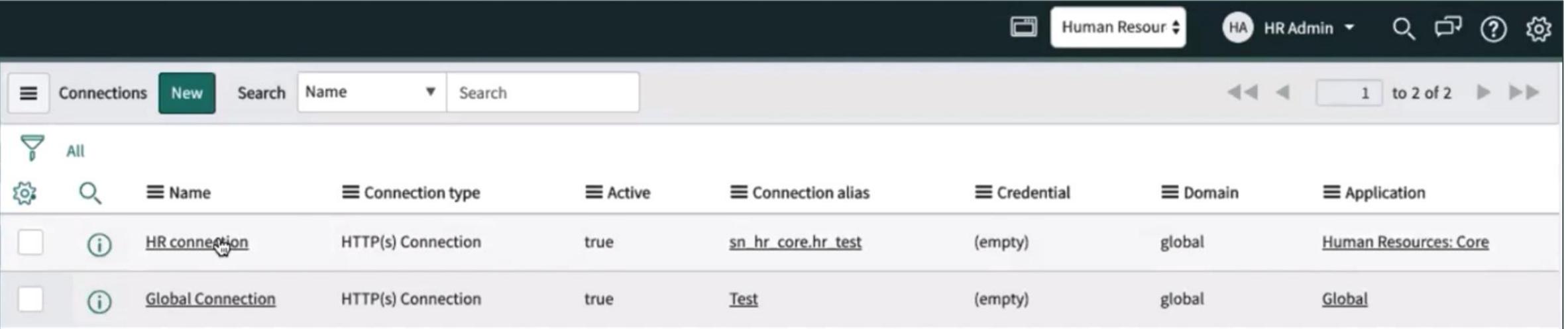
Name ▾

	Field Path
<input type="checkbox"/>	Import: Computer Id
<input type="checkbox"/>	Import: Computer OS
<input type="checkbox"/>	Import: Disk Size
<input type="checkbox"/>	Import: Disk Type
<input type="checkbox"/>	Import: Location

```
{  
  "name": {  
    "first_name": "Abel",  
    "last_name": "Tuter"  
  },  
  "address": [  
    {  
      "street": "123 St, San Deigo",  
      "zipcode": "92022",  
      "state": "CA"  
    },  
    {  
      "street": "4810 Eastgate Mall, San Diego",  
      "zipcode": "92121",  
      "state": "CA"  
    }  
  ]  
}
```

# Core platform

Scoped data administration



The screenshot shows a list of connections in the ServiceNow Core platform. The top navigation bar includes 'Human Resour' (dropdown), 'HR Admin' (user icon), and various system icons. The main interface has a header with 'Connections', a 'New' button, and search fields. The table below lists connections with columns for Name, Connection type, Active, Connection alias, Credential, Domain, and Application.

	Name	Connection type	Active	Connection alias	Credential	Domain	Application
<input type="checkbox"/>	<a href="#">HR connection</a>	HTTP(s) Connection	true	<a href="#">sn_hr_core.hr_test</a>	(empty)	global	<a href="#">Human Resources: Core</a>
<input type="checkbox"/>	<a href="#">Global Connection</a>	HTTP(s) Connection	true	<a href="#">Test</a>	(empty)	global	<a href="#">Global</a>

# Domain separation

Application properties (sys\_application\_property)

Name	Default Value	Description	Property	Type	Usage Notes	Application ▲
<a href="#">test-global-scope</a>	global-scope-value	test	(empty)	string	notes-here	<a href="#">Global</a>
<a href="#">auxdb.db.url</a>	jdbc:mysql://localhost/	Auxiliary database URL	<a href="#">auxdb.db.url</a>	string		<a href="#">Global</a>
<a href="#">sn_ui_timeline.scoped_prop</a>	value	desc	<a href="#">sn_ui_timeline.scoped_prop</a>	string		<a href="#">sn-component-timeline</a>
<a href="#">sn_ui_timeline.testing_scoped_app</a>	testing-scoped-app	some-description	(empty)	string		<a href="#">sn-component-timeline</a>

OLD

```
gs.getProperty("com.snc.incident.incident_task.closure") == "true"
```

NEW

```
GlideApplicationProperty.getValue("com.snc.incident.incident_task.closure") == "true"
```

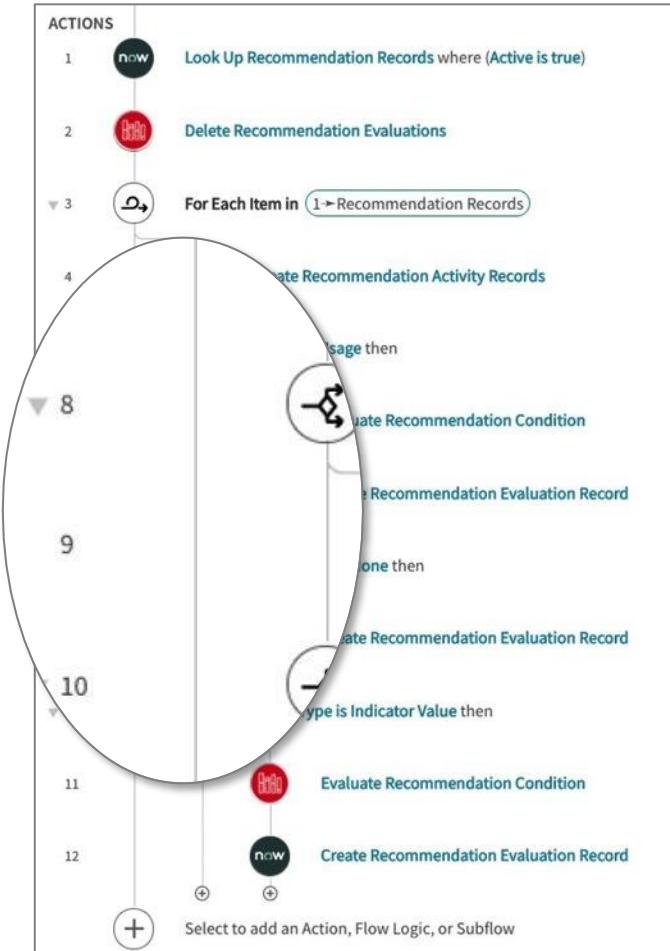
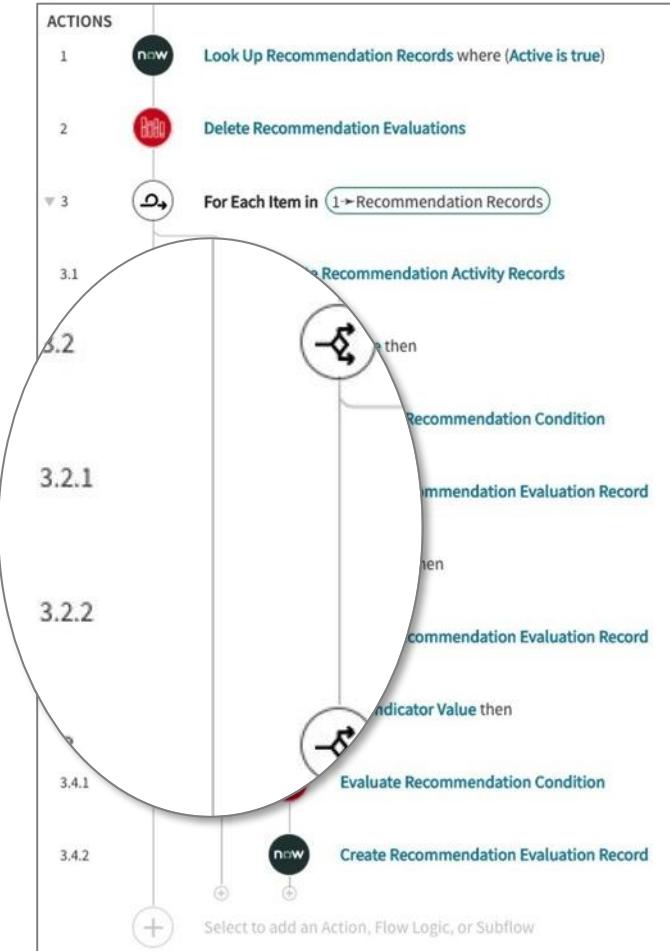
# Domain separation

Domain iterator for script jobs

① Domain Iterator	<input checked="" type="checkbox"/>
* Domain Source Table	.NET Application [cmdb_ci_appl_dot_net]
Domain Source Filter	<a href="#">Add Filter Condition</a> <a href="#">Add "OR" Clause</a>
	-- choose field -- ▼ -- oper -- -- value --

# Flow Designer

## Action instance order renaming



# Flow Designer

## Duplicate actions instance

The screenshot shows the ServiceNow Flow Designer interface. On the left, under 'TRIGGER', there is a 'now' icon and the text 'Incident Created'. Below it, under 'ACTIONS', there is a single action instance labeled '1 now Log'. The 'Log' action has three configuration fields: 'Action' (set to 'Log'), 'Level' (set to 'Info'), and 'Message' (containing the expression 'Trigger->Incident Record->Description'). To the right of the message field is a red box highlighting the 'Duplicate Action Instance icon' (a copy symbol). The interface also includes a 'Data' panel on the right side showing various triggers and logs.

# Flow Designer

## FlowAPI and FlowScriptAPI

OLD

```
var outputs = sn_fd.FlowAPI  
  .executeSubflow('scope.name', inputs);
```

NEW

```
var result = sn_fd.FlowAPI  
  .getRunner()  
  .subflow('scope.name')  
  .inForeground()  
  .withInputs(inputs)  
  .run();  
var outputs = result.getOutputs();
```

Domain Separation

```
var result = sn_fd.FlowAPI  
  .getRunner()  
  .subflow('scope.name')  
  .inForeground()  
  .inDomain('SOME_DOMAIN') // name or sysid  
  .withInputs(inputs)  
  .run();  
var outputs = result.getOutputs();
```

```
FlowScriptAPI.getContextID()
```

# Flow Designer

## Ghost actions

The screenshot shows the ServiceNow Flow Designer interface. On the left, a flow diagram is displayed with a trigger "Incident Updated" and two actions. Action 1 is highlighted with a red border and contains the text "--- This action's definition is missing ---". Action 2 is a "Log" action. A red arrow points from this missing action to a callout box labeled "Ghost Action". Another red arrow points from the "Warning message pop-up" at the bottom right to the same callout box. On the right, a "Data" panel lists the flow's variables and records, including the missing action definition and the log entry.

TRIGGER

Incident Updated

ACTIONS

1 --- This action's definition is missing --- Ghost Action

2 now Log

Select to add an Action, Flow Logic, or Subflow

Data

- Trigger - Record Updated
- ▶ Incident Record Record
- ▶ Changed Fields Array.Object
- ▶ Incident Table Table
- ▶ Run Start Time Date/Time
- ▶ 1 - --- This action's definition is missing ---
- ▶ 2 - Log

Warning message pop-up

Missing action definitions

This flow contains at least one action with missing definitions. These actions must be fixed before you can save or activate the flow.

# Flow Designer

## Make a decision flow

- Turn off branches
- Avoid repetitive “Update record” actions by applying the answer data



**ACTIONS**

1  **Make a decision** + Delete

Decision Label:

\* Decision Table: TestDTFromO X ▾ Search + Info

Execution: First decision that matches ▼

Use Branches:

**1 - Make a decision**

- ▶ User Record Record
- ▶ User Table Table

**2 - Get Applications**

**Subflow Outputs**

**ACTIONS**

1  **Make a decision** + Delete

Decision Label:

\* Decision Table: TestDTFromO X ▾ Search + Info

Execution: Run all decisions that match ▼

Use Branches:

**1 - Make a decision**

- ▶ User Table Table
- ▶ User Records Records
- ▶ Count Integer

**2 - Get Applications**

**Subflow Outputs**

# Flow Designer

## Multi-row variable set support

The screenshot shows the ServiceNow Flow Designer interface. A specific step in a flow is highlighted, demonstrating how to handle multi-row variable sets.

**ACTIONS**

1 now Get Catalog Variables from Corporate Mobile Devices - Bulk Orders

Action: Get Catalog Variables

\* Submitted Request [Requested Item]

1 ➔ Requested Item Record

Use the following to generate outputs for use in the flow

\* Template Catalog Item [Catalog Item]: Corporate Mobile Devices - Bulk Orders

Catalog Variables: Available

No available values

Catalog Variables: Selected

department  
business\_justification  
mobile\_devices\_set

The 'mobile\_devices\_set' variable is highlighted with a gray background.

A large callout bubble provides detailed information about the 'mobile\_devices\_set' variable:

- 1 - Get Catalog Variables
- ▶ department
- business\_justification
- Multiple Line Small Text Area
- ▼ mobile\_devices\_set
- Mobile Devices Set
- Quantity
- Storage
- Device Type
- Color
- Choice
- Choice
- Choice
- Choice
- Choice
- Subflow Outputs

Reference: Array.Object

Done

# Flow Designer

Run with roles

### Flow Properties

X

\* Name: 01test      Protection: -- None --

Application: Global

Description: Describe your flow

Run As: User who initiates session

Run with role(s): document\_management\_admin X    cloud\_admin X

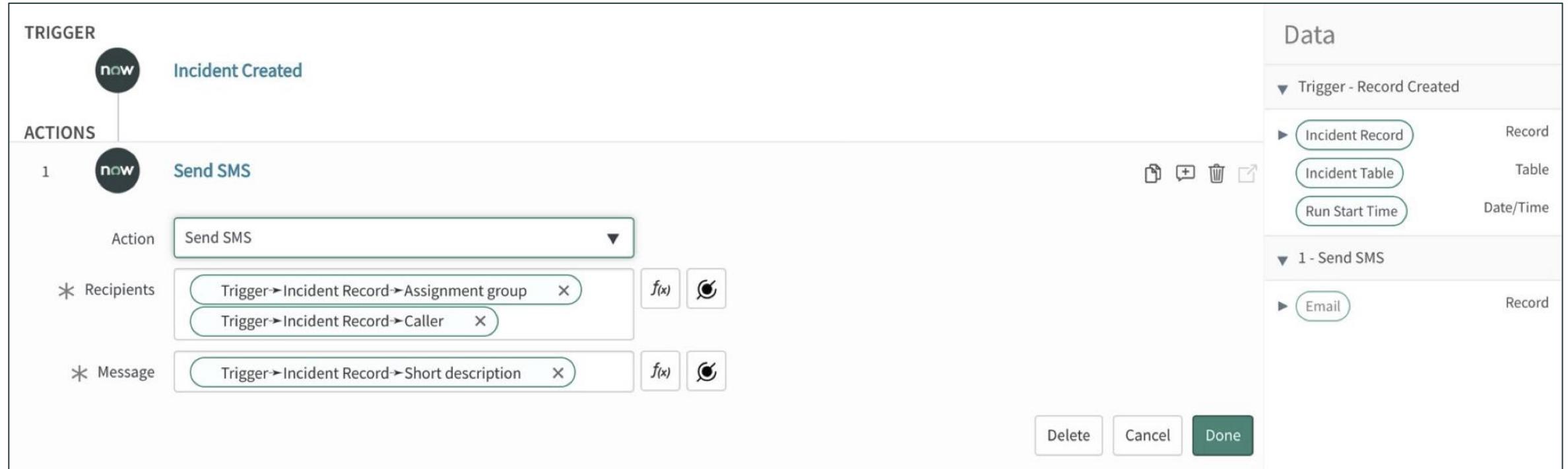
Cancel    Update

document\_management\_admin X    cloud\_admin X

Q

# Flow Designer

## Send SMS action



# Flow Designer

## Submit catalog item request action

ACTIONS

1  **Submit Catalog Item Request** Submit Catalog Item Request

Action

\* Catalog Item [Catalog Item]

Quantity   

Special Instructions   

Delivery Address   

Requested for [User]   

Don't fail on error

Wait for Completion

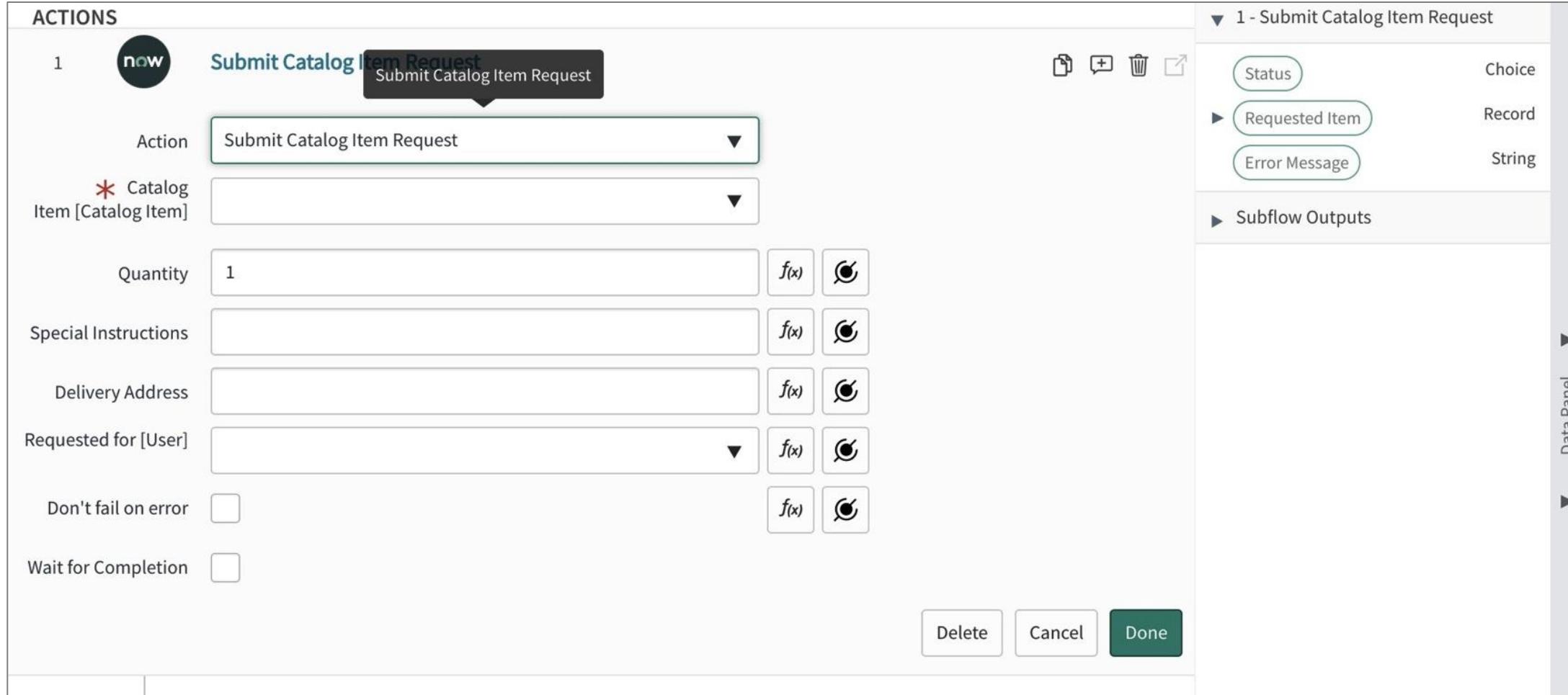
   

**Done**

▼ 1 - Submit Catalog Item Request

- Status Choice
- Requested Item Record
- Error Message String
- Subflow Outputs

Data Panel ▾



# Flow Designer

Support multiple active connections

- Perfect for flows that need to talk to multiple accounts for the same service

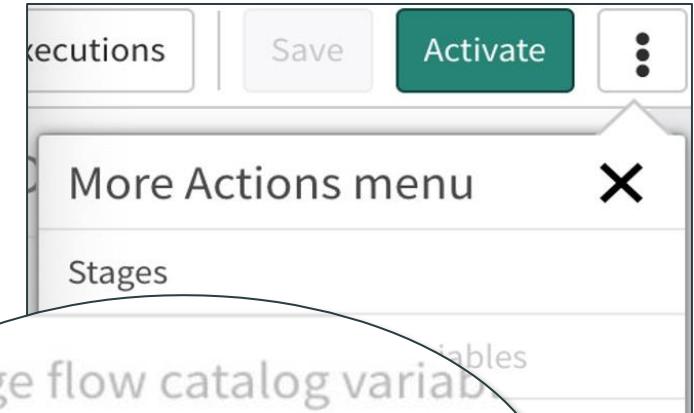
Also available from FlowAPI

```
var runner = sn_fd.FlowAPI.getRunner();

// here global is the scope and rest_action is the internal name
runner.action('global.rest_action');
runner.withConnectionAliasOverride('87160a25dbd09010219554c5dc9619c3', '6b2ca735dbdc9010219554c5dc9619b1');

runner.inForeground();

runner.run();
```



# Flow Designer

## Update and delete multiple records step

The screenshot shows the ServiceNow Flow Designer interface for creating a flow named "Update Multiple Step". The flow consists of a single step: "1. Update Multiple Records step".

**Action Outline:** The left sidebar shows the flow structure with one step selected: "1. Update Multiple Records step".

**Step Configuration:** The main area displays the configuration for the "Update Multiple Records" step.

- Table:** A dropdown menu labeled "Select a Table" with a "f(x)" and "↻" button.
- Conditions:** A dropdown menu labeled "Select a table to configure the filter" with a "f(x)" and "↻" button.
- Field Values:** A section with a dashed border containing "(Optional) Drop in a template to define your field values" and a "+ Add Field Value" button. To its right is a "Data" panel listing:
  - Input Variables:** Count (Integer), Status (Choice), Error Message (String).
  - Update Multiple Records step:** This section lists the variables defined in the step:
    - Count (Integer)
    - Status (Choice)
    - Error Message (String)
  - Output Variables:** This section lists the variables returned by the step:
    - a to z (String)
    - f(x) (Function)
    - f(x) (Function)
    - f(x) (Function)
    - f(x) (Function)
    - f(x) (Function)
- Order by:** A dropdown menu labeled "Select a field" with a "f(x)" and "↻" button.
- Sort Type:** A dropdown menu labeled "a to z" with a "f(x)" and "↻" button.
- Run Business Rules and Workflow:** A checked checkbox with a "f(x)" and "↻" button.
- Update System Fields:** A checked checkbox with a "f(x)" and "↻" button.
- Don't fail on error:** An unchecked checkbox with a "f(x)" and "↻" button.

# Flow Designer

## User access control criteria

The screenshot shows the ServiceNow Flow Designer interface with a focus on user access control criteria. On the left, the 'ACTIONS' panel displays a search bar and three tabs: 'Action' (selected), 'Flow Logic', and 'Subflow'. Below the tabs is a tree view under 'Installed Spokes': 'ServiceNow Core' is selected and highlighted in green, while 'Global' is listed below it. Under 'Not Installed Spokes', 'IntegrationHub' is listed. On the right, a list of access criteria is shown, each consisting of a checkbox, an info icon, a condition, and a value. The first row is a placeholder with 'All Action Definitions' and 'action\_designer'. The second row has a condition '(Default) Users with flow\_operator role' and a value 'true'. The third row has a condition 'Apprentice Action Designer' and a value 'true'. A vertical scroll bar is visible on the right side of the main content area.

Access Criteria		
Placeholder: All Action Definitions, action_designer		
<input type="checkbox"/>	<i>(Default) Users with flow_operator role</i>	true
<input type="checkbox"/>	<i>Apprentice Action Designer</i>	true

# Integration authentication

Connection and credential management dashboard

The screenshot shows the ServiceNow Flow Designer interface with the 'Connections' tab selected. The dashboard displays a grid of integration connections, each with a summary card.

- SCCM**: sn\_sccm\_spoke. Connections: 1 Total. Status: Not Configured. Actions: View Details, Advanced Setup.
- AzureAD**: sn\_azure\_ad\_spoke. Connections: 1 Total. Status: Not Configured. Actions: View Details, Add Connection.
- test5**: global. Connections: 3 Total. Status: Not Configured, Configured, Configured. Actions: View Details, Add Connection.
- Facebook\_Workplace**: sn\_fb\_wp\_spoke. Connections: 1 Total. Status: Not Configured. Actions: View Details, Advanced Setup.
- Infoblox**: sn\_infoblox\_spoke. Connections: 1 Total. Status: Not Configured. Actions: View Details, Advanced Setup.
- Jenkins**: sn\_jenkins\_spoke. Connections: 1 Total. Status: Not Configured. Actions: View Details, Advanced Setup.
- Jira**: sn\_jira\_spoke. Connections: 1 Total. Status: Not Configured. Actions: View Details, Advanced Setup.

Header navigation includes Flows, Subflows, Actions, Executions, Connections, Help, and a '+ New' button. A search bar and sort dropdown (A-Z) are also present.

# IntegrationHub

## Data sources – data stream

The screenshot shows the 'Data Source' configuration page for 'AWS EC2 TOI demo'. The 'Name' field is set to 'u\_instance\_indo'. The 'Type' field is set to 'Data Stream (IntegrationHub)'. The 'Application' section shows 'Global' as the application and 'Amazon EC2 Demo' as the specific stream. A note states: 'Note: Data Stream actions require a subscription for production use.' A red arrow points from this note to the 'Data Stream action' input field. Below the form, there is a green bar labeled 'Pre-import script (Paris)' containing the following JavaScript code:

```
gs.getSession().putClientData('connectionCredentialAliasOverride', 'childAliasSysId');
```

# IntegrationHub

Dynamic object support and data stream output

DATA STREAM ACTION dynamicOutputsImproveme... Status: Published | A

Action Outline Action Output

	Label	Name	Type
1 {REST} REST step REST	dynamicOutput	variable	Dynamic Object

Advanced options

Dynamic Options

Note: Requires a subscription for production use. [Read More](#)

Action: Get ServiceNow Object Schema - Dynamic

Table: tableName

Depends-On Another Input:

Inputs  
Action Preprocessing  
Request  
1 {REST} REST step REST  
Parsing  
2 Splitter step Splitter  
3 Script Parser step Script Parser  
Outputs

# IntegrationHub

## Data stream – support for outputs in script parser

DATA STREAM ACTION scriptParserImprovements

Status: Published | Application: Global | Properties | Test

Action Outline      6. Script Parser step

Script Parser Script

```
1 targetObject.input_string = inputs.fd_data._  
2 ts.targetObject.input_object = inputs.fd_data._script_step  
3 //Preprocessing Script step  
4 outputs.targetObject.prepressing_script_string = i._rest_step  
5 outputs.targetObject.prepressing_script_boolean = _splitter_step  
6 //Pagination step  
7 outputs.targetObject.pagination_setup_offset = inputs.fd_data._pagination_setup_step.pagination_variable_map  
8 ts.targetObject.pagination_setup_getnextpage = inputs.fd_data._pagination_setup_step.pagination_varia  
9  
10 outputs._  
11 //REST step  
12 outputs.targetObject.rest_error_code = inputs.fd_data._rest_step.error_code;  
13 outputs.targetObject.rest_status_code = inputs.fd_data._rest_step.status_code;
```

Inputs

Action Preprocessing

1 Script step Script

Request

2 Pagination REST Step

3 Script step Script

4 REST step REST

Parsing

5 Splitter step Splitter

6 Script Parser step Script Parser

Outputs

Script Parser 6/

# IntegrationHub

## JSON Parser Flow Designer/IntegrationHub step

2. Parser Incident Response

Source

Source data: step > REST step > Response Body

Structured Payload View

```
1 {  
2   "result": [  
3     {  
4       "task_effective_number": "INC0000060",  
5       "state": "7",  
6       "sys_created_by": "employee",  
7       "knowledge": "false",  
8       "calendar_stc": "102197",  
9       "closed_at": "2016-12-14 02:46:44",  
10      "sys_updated_by": "employee",  
11      "description": "I am unable to connect to the email server. It appears to be  
12      \"close_notes\": \"This incident is resolved.\",  
13      \"priority\": \"3\",  
14      \"sys_domain_path\": \"/\",  
15      \"opened_at\": \"2016-12-12 15:19:57\",  
16      \"activity_due\": \"2016-12-13 01:26:36\",  
17      \"assigned_to\": {  
18        \"link\": \"https://demonightlyipaas.service-now.com/api/now/table/sys_user/51\",  
19        \"value\": \"5137153cc611227c000bbd1bd8cd2007\"  
20      },  
21      \"severity\": \"3\",  
22      \"upon_approval\": \"proceed\",  
23      \"category\": \"inquiry\"\br/>24    }  
25  ]  
26}  
27
```

Target

JSON Parser { ; }

Label	Name	Type	Mandatory
root	root	Object	<input checked="" type="checkbox"/>
result	result	Array.Object	<input checked="" type="checkbox"/>
result_object	result_object	Object	<input checked="" type="checkbox"/>
task_effecti...	task_effecti...	String	<input checked="" type="checkbox"/>
state	state	String	<input checked="" type="checkbox"/>
sys_created...	sys_created...	String	<input checked="" type="checkbox"/>
knowledge	knowledge	String	<input checked="" type="checkbox"/>
calendar_stc	calendar_stc	String	<input checked="" type="checkbox"/>
closed_at	closed_at	String	<input checked="" type="checkbox"/>
sys_update...	sys_update...	String	<input checked="" type="checkbox"/>
description	description	String	<input checked="" type="checkbox"/>
close_notes	close_notes	String	<input checked="" type="checkbox"/>

# IntegrationHub

## Payload Builder API (JSON and XML)

- Default behavior – returns string and does NOT create attachment to store JSON payload

```
var builder = new sn_ih.JSONStreamingBuilder()  
    .build();
```

- Create an attachment with the JSON payload

```
var builder = new sn_ih.JSONStreamingBuilder()  
    .withAttachment()  
    .build();
```

- Create an attachment with time to live for payload attachment

```
var ttl = new GlideDateTime("2020-01-01 12:00:00");  
  
var builder = new sn_ih.JSONStreamingBuilder()  
    .withAttachment()  
    .expireAt(ttl)  
    .build();
```

# Integration security

## Outbound IP access controls

IP Range Based Authentication  
Created 2020-06-16 07:20:41

The system only blocks an IP Address if a matching Deny rule exists and no matching Allow rule exists. [Learn more.](#)

Type	Deny	Range start	78.31.8.0
Direction	Outbound	Range end	78.31.11.255
Active	<input checked="" type="checkbox"/>	Specify ports	<input type="checkbox"/>
Enforce on MID server	<input type="checkbox"/>	Description	
		Spotify 78.31.8.0/22	

[Update](#) [Delete](#)

# Platform

## GraphQL API Framework

The screenshot displays the ServiceNow GraphQL API Framework interface, showing the configuration of a schema and a resolver.

**Schema Configuration:**

- Name:** greetings
- Application:** Global
- Active:** checked
- Schema namespace:** greetings
- Application namespace:** now

**Schema Definition:**

```
schema {
  query: Query
}
type Query {
  print: String
}
```

**User Resolver Configuration:**

- Name:** User Resolver
- Application:** Global
- Schema:** greetings

**Resolver Script:**

```
(function process(/*ResolverEnvironment*/ env) {
  var userId = env.getArguments().id != null ? env.getArguments().id : env.getSource();
  var gr = new GlideRecord('sys_user');
  gr.addQuery('sys_id', userId);
  gr.query();
  return gr;
})(env);
```

**Navigation:**

- GraphQL Scripted Resolvers (1)
- GraphQL Type Resolvers
- GraphQL Resolver Mappings (1)

**Actions:**

- New
- Search
- Name ▲
- Script
- example
- (function process(/\*ResolverEnvironment\*...)
- Actions on selected rows...

# Platform backend

## Archiving

- Multi-consumer archiving
- Related records management

Archive Log  
Created 2020-05-01 08:41:09

Archive	some_table archive
Archive run	2020-05-05 19:23:02
Restored	
Display value	Created 2020-05-01 08:41:09
Payload	<a href="#">XML</a>
<pre>&lt;?xml version="1.0" encoding="UTF-8"?&gt;&lt;u_some_table&gt; &lt;sys_created_by&gt;admin&lt;/sys_created_by&gt;&lt;sys_created_on&gt;2020-05-01 15:41:09&lt;/sys_created_on&gt;&lt;sys_id&gt;b191c2853d281010f877e822591aa00b&lt;/sys_id&gt; &lt;sys_mod_count&gt;0&lt;/sys_mod_count&gt;&lt;sys_updated_by&gt;admin&lt;/sys_updated_by&gt; &lt;sys_updated_on&gt;2020-05-01 15:41:09&lt;/sys_updated_on&gt; &lt;u_some_key&gt;3&lt;/u_some_key&gt;&lt;/u_some_table&gt;</pre>	

**Related Links**

[Restore Record](#)  
[Restore Record and Related Records](#)

Archive Destroy Rule  
New record

\* Controls archives that are destroyed based on table and duration (Inactive rules will not destroy)

\* Name

\* Table

**Destroy Related Records**

Amount of time records will stay in the system before being destroyed

Submit

A large oval highlights the "Destroy Related Records" checkbox and the "Amount of time records will stay in the system before being destroyed" input field.

# Platform backend

MetricBase - Non sys\_id based subjects for MetricBase

The screenshot shows the ServiceNow Service Management interface for configuring a Time Series Metric. The left sidebar has a 'metricbase' search bar and links for MetricBase, Trigger Flows, Time Series Metrics, MetricBase Models, Retention Policies, Retention Policy Schedule, MetricBase Triggers, and Trigger Definitions. The main panel is titled 'Time Series Metric New record'. It includes fields for Label (Turbine Rate), Table name (Turbine Data [turbine\_data]), Metric field name, Application (Global), Display duration (every hour), Subject field (turbine\_id), and Data Type (Float). A callout bubble highlights the 'Subject field' dropdown.

servicenow Service Management

System Administrator

Time Series Metric  
New record

metricbase

MetricBase

Trigger Flows

Time Series Metrics

MetricBase Models

Retention Policies

Retention Policy Schedule

MetricBase Triggers

Trigger Definitions

Label: Turbine Rate

\* Table name: Turbine Data [turbine\_data]

Metric field name:

\* Retention policy: Dense

\* Retention policy aggregator: Average

Application: Global

Display duration: every hour

Subject field: turbine\_id

Data Type: Float

# Platform backend

Instance data replication – bidirectional

The screenshot shows the ServiceNow Platform Backend interface for managing replication entries. The top navigation bar includes links for Outbound Entries (2), Inbound Entries (2), Consumer Subscriptions (2), Outbound Replication Info (1), Inbound Replication Info (2), Seeding Requests, Replication Metadata Logs (54), and Discrete Mappings (4). Below the navigation is a search bar with a 'New' button and a table listing replication entries.

Source Table Name	Filter	Include Attachments	Include fields	Entry Set
sys_user	false		calendar_integration, country, user_pass	incident-routing
incident	false		parent, made_sla, caused_by, watch_list,	incident-routing

Arrows numbered 1 through 5 point to specific UI elements:

- Outbound Entries (2)
- Inbound Entries (2)
- Consumer Subscriptions (2)
- Outbound Replication Info (1)
- Inbound Replication Info (2)

# Platform backend

Instance data replication – discrete sets

Discrete Mappings (4)				
Discrete Mappings		New	Search	Discrete Value
		Search	Discrete Value	Search
<b>Discrete Field Values</b>				
		Discrete Value	Outbound Replication Entry	Referenced Table
<input type="checkbox"/>		<a href="#">Company:walmart</a>	<a href="#">incident</a>	<a href="#">core_company</a>
<input type="checkbox"/>		<a href="#">Company:Amazon</a>	<a href="#">incident</a>	<a href="#">core_company</a>
<input type="checkbox"/>		<a href="#">Company:Amazon</a>	<a href="#">sys_user</a>	<a href="#">core_company</a>
<input type="checkbox"/>		<a href="#">Company:walmart</a>	<a href="#">sys_user</a>	<a href="#">core_company</a>

# Notifications

## Inbound/outbound email address filters

The screenshot shows the ServiceNow Service Management interface. The left sidebar includes 'System Mailboxes' and 'Administration' sections, with 'System Address Filters' selected. The main area displays a list of 'System Address Filters' with columns for Name, Active, and Type. Two filters are listed: 'Default outbound' (Active, Outbound) and 'Whitelist SN' (Active, Outbound). A callout highlights the 'Blacklist example.com' entry. A modal dialog is open for this entry, showing its details: Name is 'Blacklist example.com', Type is 'Blacklist', Domains is 'example.com', and Exceptions is 'abel.tuter@example.com'. Buttons for 'Update' and 'Delete' are at the bottom.

Name	Active	Type
Default outbound	true	Outbound
<b>Blacklist example.com</b>	true	Outbound
Whitelist SN	true	Outbound

**Email Address Filter**  
Blacklist example.com

Name: Blacklist example.com  
Type: Blacklist  
Domains: example.com  
Exceptions: abel.tuter@example.com

Update Delete

# Platform security

## Explicit roles

- Internal User Blacklist (contact customer support)

```
glide.security.explicit_roles.enable_internal_user_blacklist
```

- Mutual exclusion

✖ Operation interrupted: explicit role collision. User 'abel.tuter' has conflicting role 'snc\_internal'. All explicit role collisions in hierarchy must be addressed. See documentation for more information

```
glide.security.exclusive_explicit_roles
```

# Process Automation Designer

now | Process Automation Designer

TOI Example 1

Status: Draft Updated: 2020-05-19 11:36:54 Application: Global Deactivate **Activate**

Process Definition properties

**TOI EXAMPLE 1**

Label \* **TOI Example 1**

Description  
Simple example process that gets triggered when an incident is created with the Short Description "TOI example"

Configure process definition

Cancel Save

```
graph LR; subgraph Identification [IDENTIFICATION]; A[Confirm contact details]; end; subgraph Logging [INCIDENT LOGGING]; B[Incident categorization]; C[Incident Prioritization]; end; subgraph Response [INCIDENT RESPONSE]; D[Initial diagnosis]; E[Incident task]; end; subgraph Closure [CLOSURE]; F[Incident closure]; end; subgraph Notify [NOTIFY RES]; G[Notify incident res]; end;
```

Start: Immediate Record

Remind the agent to categorize the incident

Start: Immediate Record

Set the impact and urgency

Start: After Previous Record

Start: After Previous Record

Provide agent simple instructions to troubleshoot caller issue

Start: After Previous Record

Specify incident resolution

Start: Immediate Record

Start: Immediate

+ Add an activity

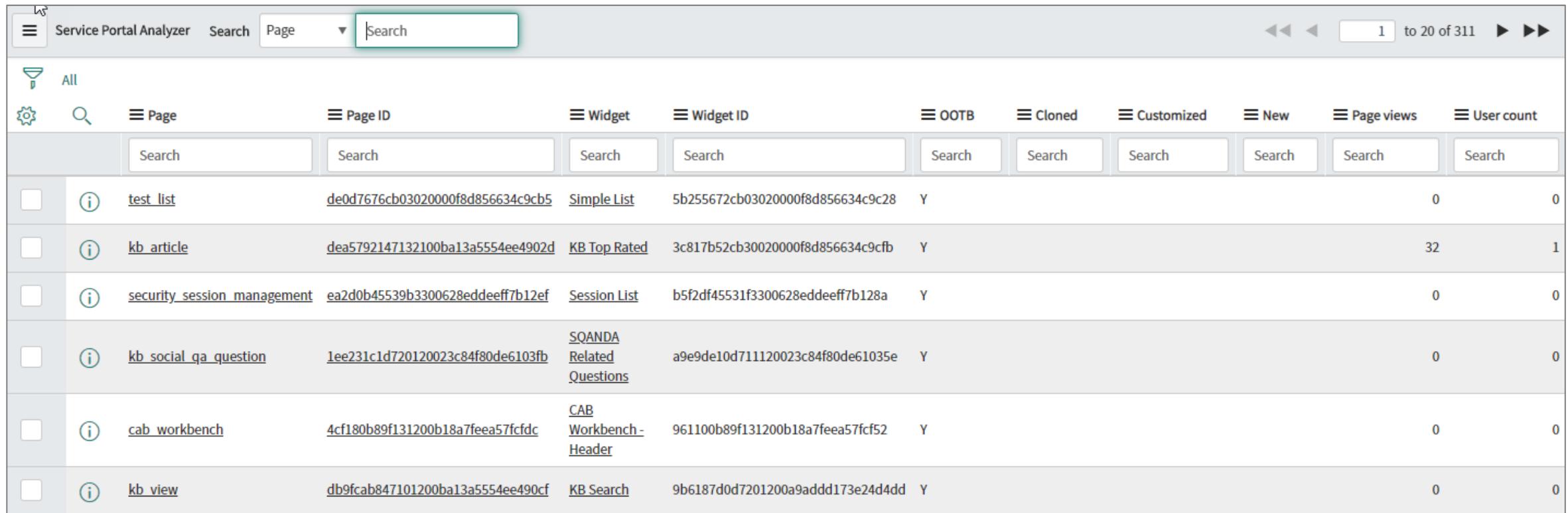
# Playbook experience

- Visualization of Process Automation Designer workflows
- Easily see where you are in the process

The screenshot shows the ServiceNow 'now' interface with a dark theme. On the left is a vertical sidebar with icons for Home, Lists, and Details. The main area is titled 'Playbook' and displays a 'Playbook Title' field with a search icon. Below it are sections for 'Disabled Stage' (3 of 3 complete) and 'Completed Stage' (0 of 4 complete). A detailed view of a step is shown, with a title 'This is the step name' and an identifier 'Activity #1 Name'. The description says 'Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut.'. There are five columns for 'Label Value Pair'. Another step below it has an identifier 'Activity #2 Name' and a 'To-Do' button. The bottom of the screen shows a list of steps with titles like 'Stage Title' and 'Stage Title'.

# Service Portal

## Portal Analyzer

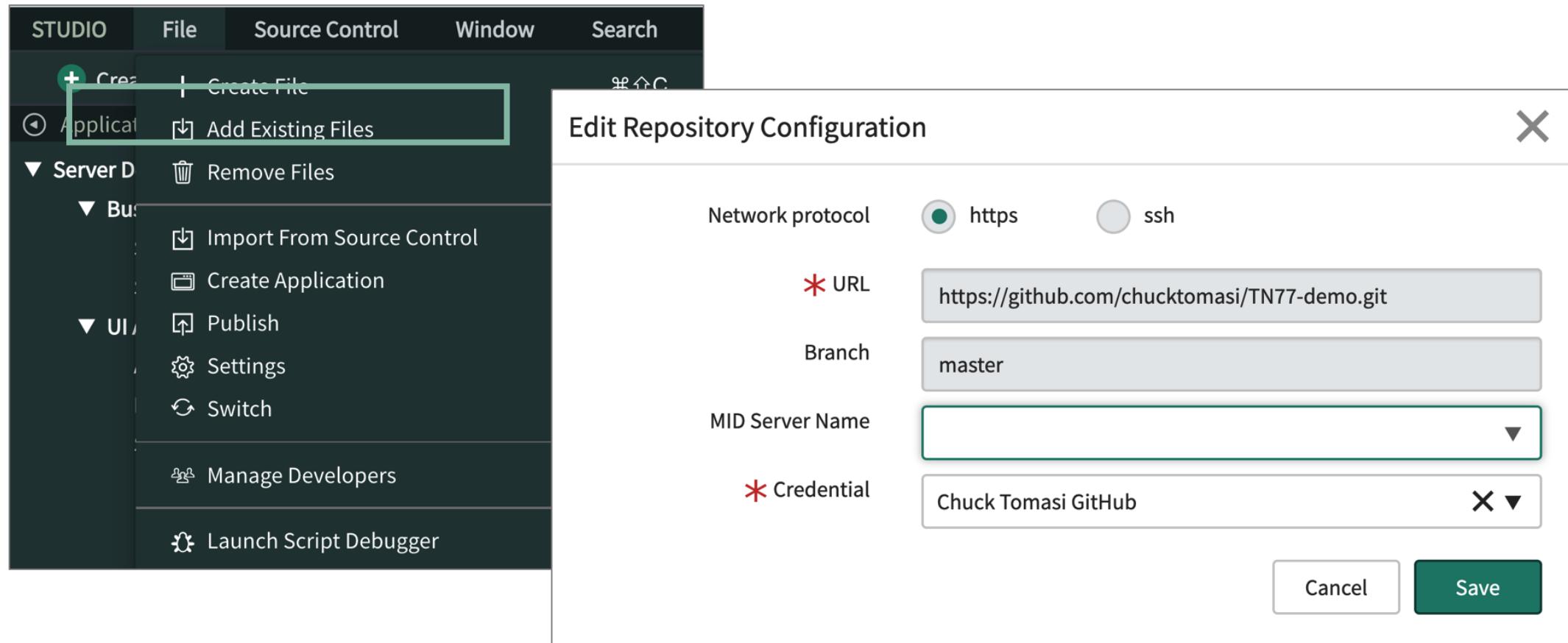


The screenshot shows a table with columns for Page ID, Widget, Widget ID, OOTB, Cloned, Customized, New, Page views, and User count. The table lists six items, each with a checkbox, an information icon, and a link to the page or widget.

	Page ID	Widget	Widget ID	OOTB	Cloned	Customized	New	Page views	User count
<input type="checkbox"/>	<a href="#">test_list</a>	<a href="#">Simple List</a>	de0d7676cb03020000f8d856634c9cb5	Y				0	0
<input type="checkbox"/>	<a href="#">kb_article</a>	<a href="#">KB Top Rated</a>	dea5792147132100ba13a5554ee4902d	Y				32	1
<input type="checkbox"/>	<a href="#">security_session_management</a>	<a href="#">Session List</a>	ea2d0b45539b3300628eddeff7b12ef	Y				0	0
<input type="checkbox"/>	<a href="#">kb_social_qa_question</a>	<a href="#">SQANDA Related Questions</a>	1ee231c1d720120023c84f80de6103fb	Y				0	0
<input type="checkbox"/>	<a href="#">cab_workbench</a>	<a href="#">CAB Workbench - Header</a>	4cf180b89f131200b18a7feea57fcfd	Y				0	0
<input type="checkbox"/>	<a href="#">kb_view</a>	<a href="#">KB Search</a>	db9fcab847101200ba13a5554ee490cf	Y				0	0

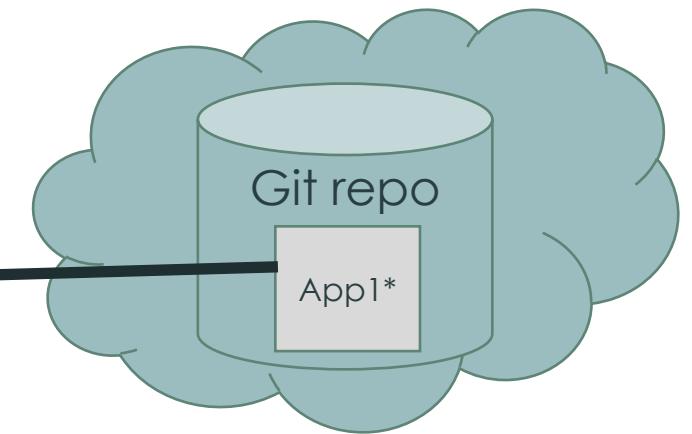
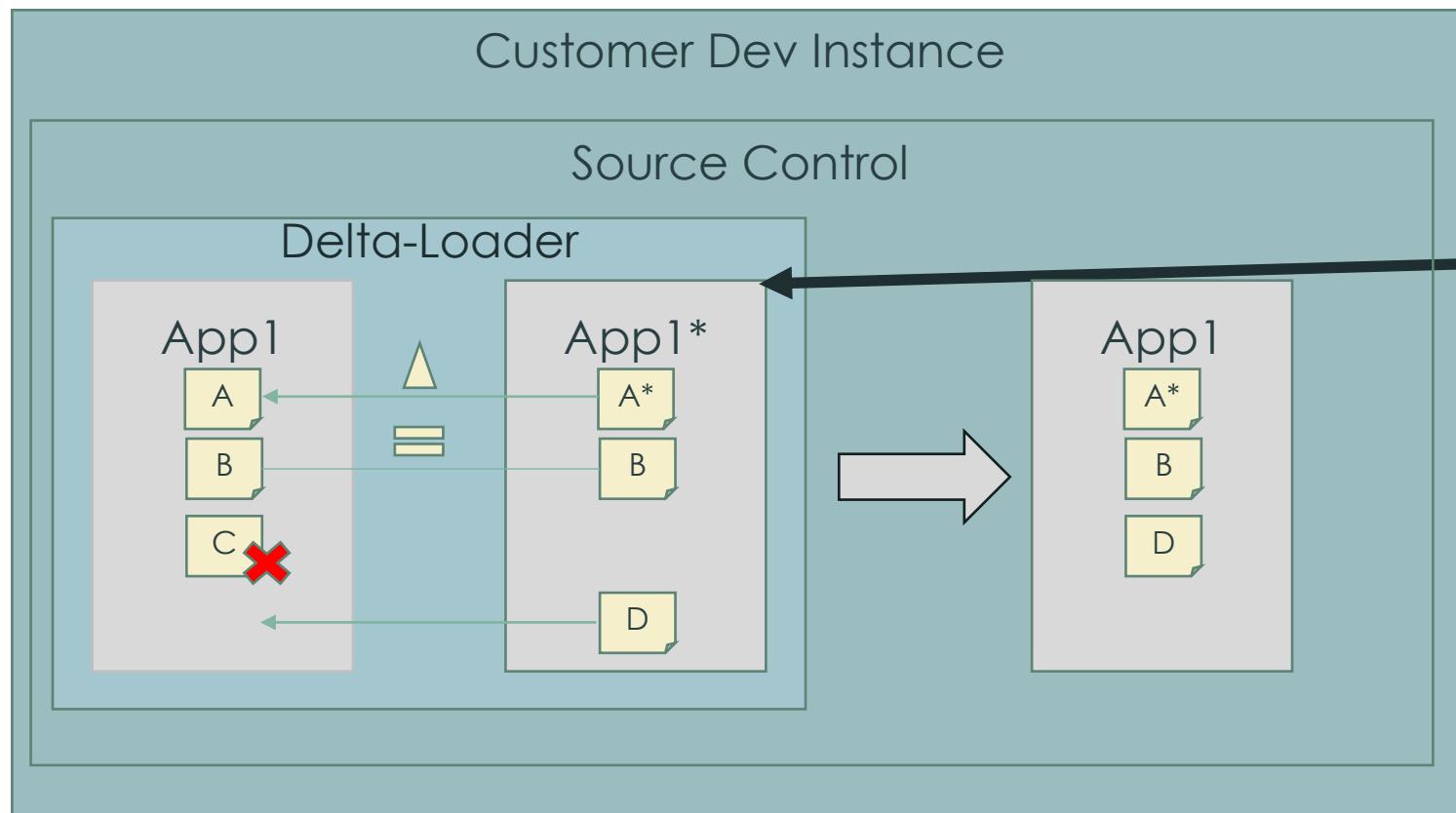
# Source control

## Global support



# Source control

## Delta loading



# Script debugging

## Console debugger

The screenshot shows the ServiceNow Script Debugger interface with the following details:

- Call Stack:** Script Include > Log
- Break Points:** (Anonymous Function) Line 10, Script Include, x\_snc\_tn77\_debug
- Log Points:** (Anonymous Function) Line 1, [Native JS Code], x\_snc\_tn77\_debug
- Script Content:**

```
2 Log.prototype = {  
3     initialize: function() {  
4         },  
5  
6     addLog : function(user, description) {  
7         var logGr = new GlideRecord('x_snc_tn77_debug_log');  
8         logGr.addQuery('number', user);  
9         logGr.query();  
10        if (logGr.get('number',  
11            17)) {  
12            logGr.set('description', description);  
13            logGr.update();  
14        }  
15    }  
16}  
17  
18
```
- Console:**

```
> var gr = new GlideRecord('incident');  
gr.query();  
gr.next();  
gr.number;  
< INC0010050  
  
> user  
< 46c9e158a9fe198101d44d0d22cb640d  
  
> user != ""  
< true
```
- Transaction Detail:**
  - url: http://demonightlyus.servicenow.com/pts.do
  - Request Parameters:
    - i=72
    - runscript: Run script
    - sysparm\_ck: 07598...
    - quota\_managed\_tr...
    - 3876a61a4bcb1
    - sys\_scope: 179e00cd
    - 6
    - record\_for\_rollback: on
    - script: new Log().addLog(g...
    - eactive');
  - instance: demonightlyus
  - address: 10.248.3.227
- Local:**
  - description: Alarm deactivated
  - logGr: ScopedGlideRecord
  - user: 46c9e158a9fe198101d44d0d22cb640d
  - this: Object
- Closures:**
  - function: Scope
- Global:**

Status: EXECUTION\_PAUSED User: Chuck Thomas

# Upgrades

Skipped update records resolution tracking

The screenshot shows the 'Customer Updates' list view in ServiceNow. The top navigation bar includes tabs for 'Customer Updates (1)', 'Update Set Logs', and 'Child Update Sets'. Below the navigation is a search bar with fields for 'Customer Updates', 'Search', 'Created', and a dropdown menu. A filter icon and the text 'Update set = Test' are also present. The main table has columns for Created, Type, View, and Target name. One record is listed: a row for '2020-05-22 10:07:22' with 'Upgrade Details' in the Type column and 'sys\_ui\_page\_62f15782ef0101002841f7f775c0fbdf' in the Target name column.

Created	Type	View	Target name
<a href="#">2020-05-22 10:07:22</a>	Upgrade Details		sys_ui_page_62f15782ef0101002841f7f775c0fbdf

# Upgrade Center

- Preview your upgrade
- Review completed upgrade
- Manage skips with VTB

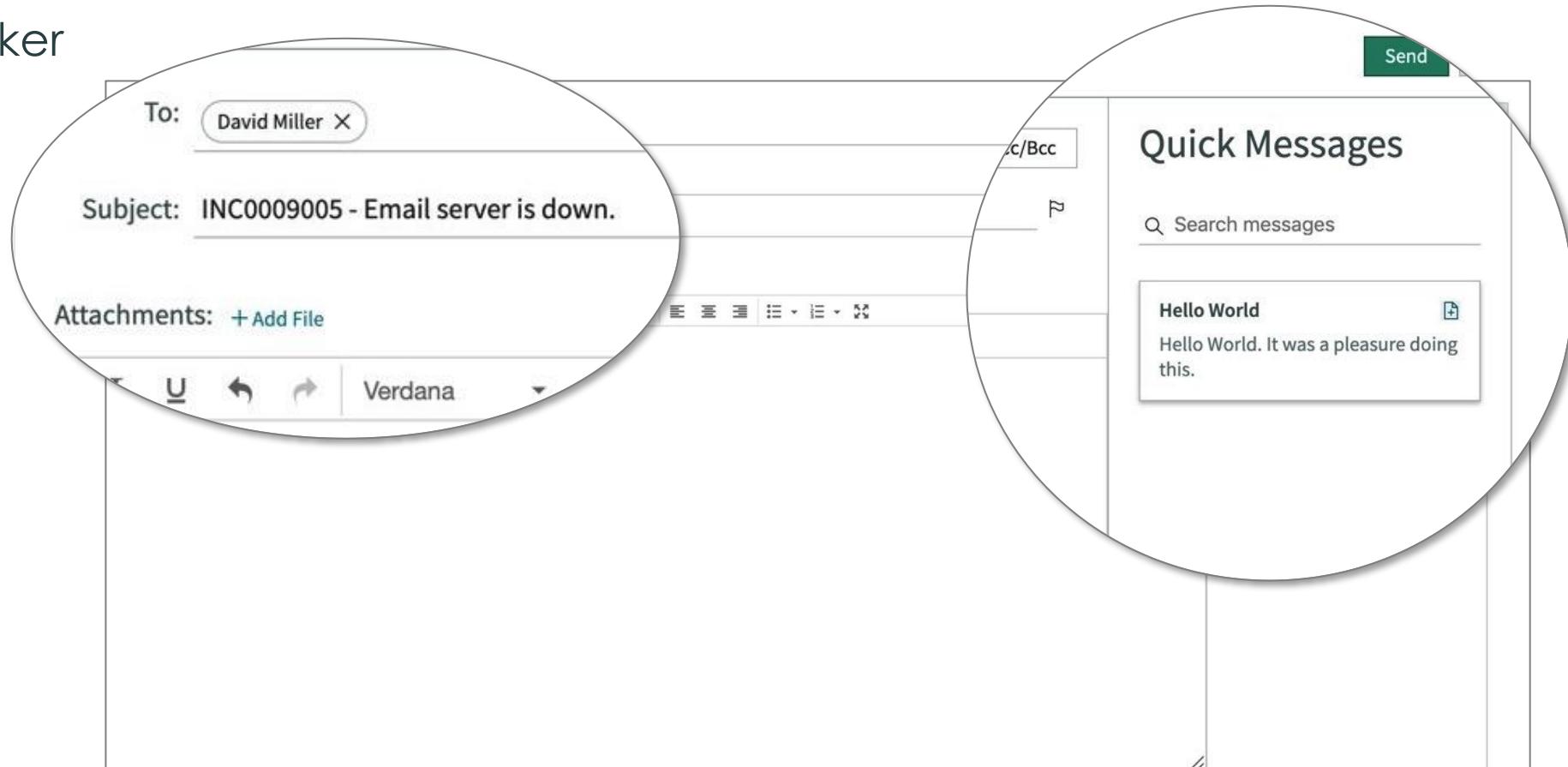
The screenshot shows the ServiceNow Upgrade Center interface. At the top, there's a navigation bar with a user icon, 'System Administrator', a search icon, and other settings. Below the header, the main content area is divided into several sections:

- Upgrade Center**: A sidebar with tabs for 'Preview' (selected), 'Upgrade Monitor', 'Upgrade History', and 'Administration'. It also features a 'Reschedule upgrade' button.
- Preview your upgrade**: Shows an upgrade from 'New York Patch 3' to 'Paris Patch 2'. It includes a 'Refresh preview' button and a 'Scheduled upgrade' section for 'Orlando Patch 4'.
- Current version**: Details about 'New York Patch 3', including 'Upgraded on' (2019-09-12) and 'End of life for this version'.
- Previewing version**: Details about 'Paris Patch 2', including 'Preview created' (2020-03-04).
- Scheduled upgrade**: Information for the next upgrade to 'Orlando Patch 4', including 'Estimated from previous upgrade', 'Estimated upgrade duration' (1 hour 5 min), and 'Next scheduled upgrade for customerdev' (2020-12-21 HH:MM:SS).
- Find out what's new and changed in Paris Patch 2**: A summary of changes from New York Patch 3 to Paris Patch 2, including problem fixes, release notes, and error articles.
- Skipped list predictions for an upgrade to Paris Patch 2**: A table showing total record changes (8,221) and predicted skipped records (59). It also includes a pie chart showing the distribution of predicted skipped records by priority.
- Prepare for your upgrade**: Tools for preparing the upgrade, including 'Automated Test Framework (ATF) results' (78% tests passed) and 'Instance cloned' (YYYY-MM-DD HH:MM:SS).

# Workspace

## Agent email client

- Recipient fields/picker
- Attachments
  - from computer
  - from record
- Quick messages



# Workspace

## Activity stream

- Filter by conversation
- Attachments
- Single scrollbars

### Compose

Comments Work notes (Private)

Type your Comments here

Everyone can see this comment

Post Comments

Clear Filter

Activity

### Activity

Fred Luddy  
2020-05-01 16:35:10 - 1

Subject INC0009005 - Email server is down.  
From demonightlyworkspace@service-now.com  
To david.miller@example.com  
CC admin@example.com

Screenshot.jpg 2.3 MB

Here's a screenshot of what I'm seeing on my side.

Expand all posts  
Collapse all posts  
Filter by conversation

now™

57

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# Workspace

## Condition builder

▼ Incidents Conditions

All of these conditions must be met

Active is true

OR

Assignment group is ATF Service Level Management Group

and

Actual end at or before Last week

AND

Actual start between Last 2 years Next year

Category is Network

or

All of these conditions must be met

Delivery task Assigned to Building Location Co... is anything

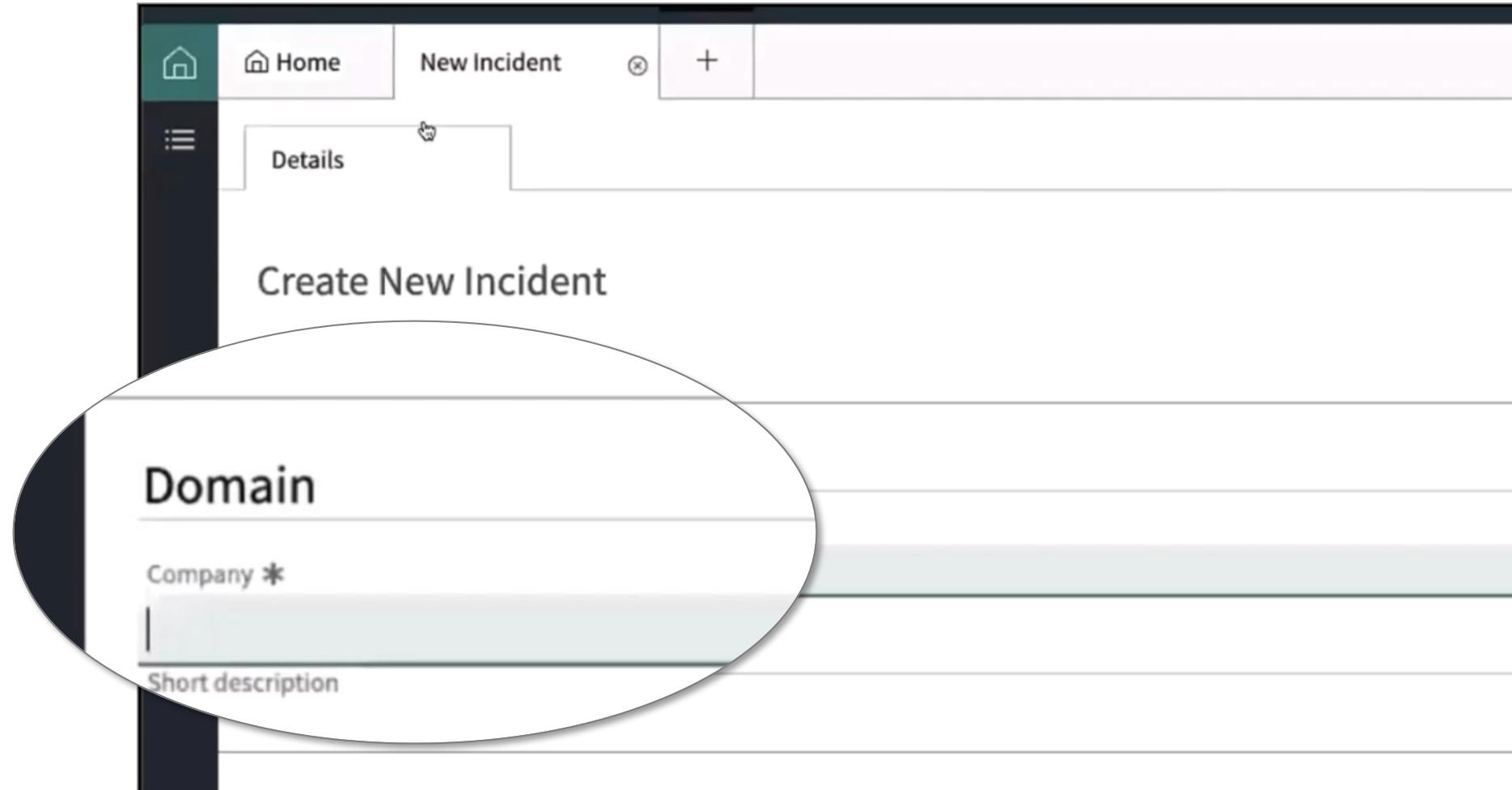
or

New Criteria

► Related List Conditions

# Workspace

Domain separation



# Workspace

## Form controls

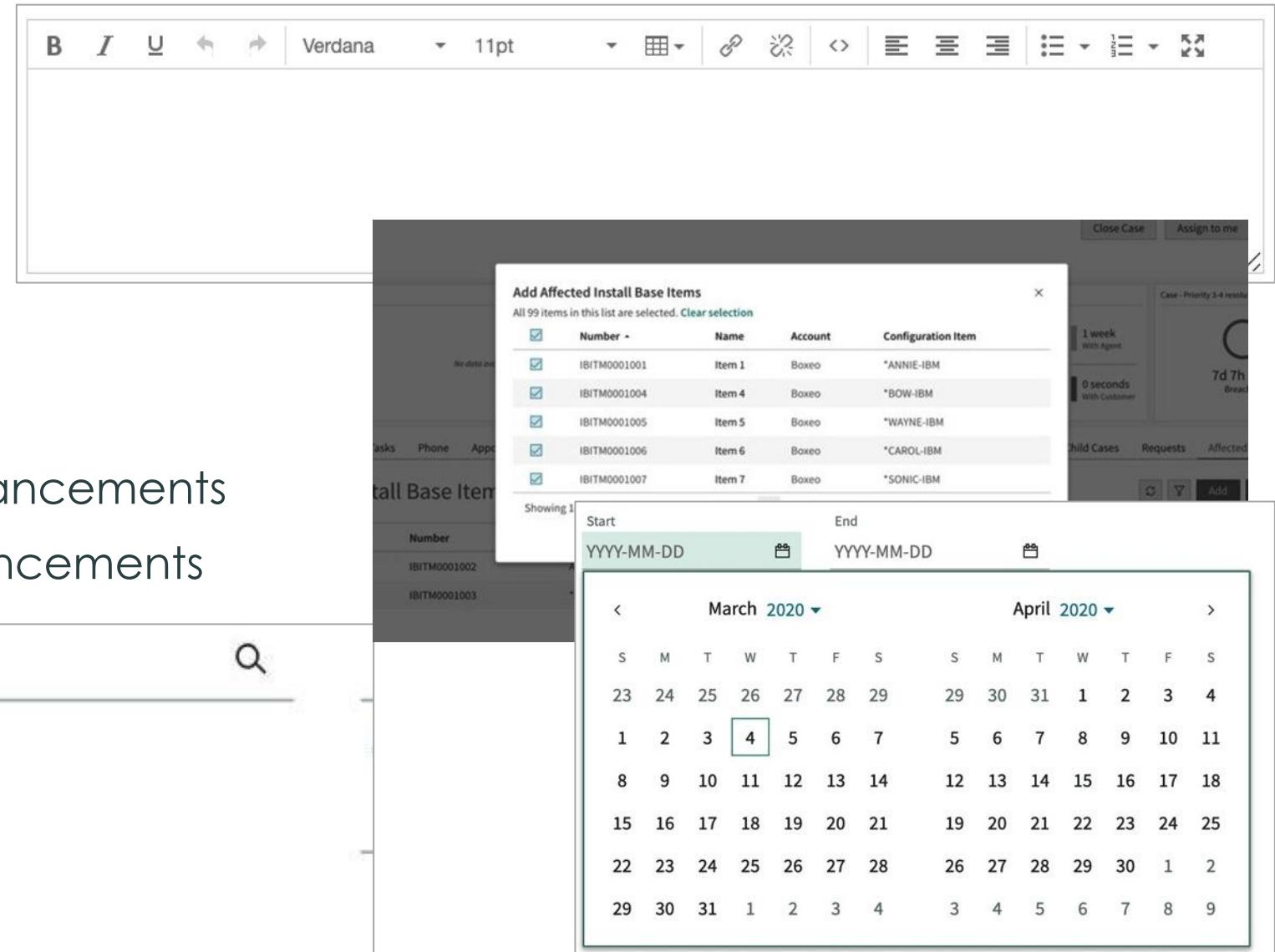
- TinyMCE icons and ordering
- New field types
  - Single File Attachment
  - Table Name field type
  - UTC Time field type
- Date/Date Range Picker Enhancements
- Multi-Record Associator Enhancements

A screenshot of a ServiceNow form. At the top is a toolbar with bold, italic, underline, left arrow, right arrow, and other icons. The font is set to Verdana at 11pt. Below the toolbar is a large text area. To the right of the text area is a modal dialog titled "Add Affected Install Base Items". The modal lists items from IBITM0001001 to IBITM0001007, each with a checked checkbox next to it. Below the list is a table with columns: Number, Name, Account, and Configuration Item. The table shows the same seven items. At the bottom of the modal is a date range picker with "Start" and "End" fields set to "YYYY-MM-DD". The calendar shows March and April 2020. The number 4 is highlighted in a green box in the March 2020 grid.

File Attachment

Attach File

Short description \*



# Workspace

## Forms

- UI Action enhancements
- Section collapsing
- Attachments to support Playbook
- Form layout preferences
- Form header enhancements
- Attachment indicator
- Form template enhancements

The screenshot shows a ServiceNow form for an incident. At the top, there is a message: "The attachments is not accessible". Below this, there are several sections: "Incident", "Notes", "Related Records", and "Resolution Information". Each section has a small downward arrow icon to its right, indicating it can be collapsed.

The screenshot displays the ServiceNow workspace interface. At the top, there are two tabs: "Lists" and "INC000001". The main area shows an incident record for "INC000001" with details: Account Avid Corporation, Contact Linda Cox, Priority 3 - Moderate, State Awaiting Info. Below this, a message states: "SAP Financial Accounting application appears inactive". The workspace includes a "Compose" section for comments and work notes, an "Activity" feed showing interactions from System Administrator and ITIL User, and a "Agent Assist" panel. On the right, a sidebar lists actions: "Create Outage", "Create Change Request", "Create Problem", and "Create Request". A red arrow points to the "Create Request" button. Red dashed arrows highlight the attachment indicator in the incident header, the collapse arrows in the form sections, and the activity feed.

# Workspace

## Lists

- UX improvements:
  - “Export” as a declarative action
  - Improvements to choice filtering
  - Usability updates
- Allow users to share lists
- Column resizing
- List refresh prompt

The image displays two screenshots of the ServiceNow workspace interface, illustrating UX improvements for list views.

**Screenshot 1 (Top):** Shows a list view titled "Open 40". The header includes "Edit", "Export", and a green "New" button. A large oval highlights the "Edit" and "Export" buttons. The list table has columns: Number, Opened, and Short description. Data rows include INC0010112 (Opened 2019-07-29 11:48:43, Short description TEST TEST TEST), INC0010111 (Opened 2019-07-22 14:04:57, Short description ATF : Test1), and INC0010001 (Opened 2020-05-01 11:15:37, Short description Test). The bottom right corner shows user details: Allyson Gillispie and Administrator.

**Screenshot 2 (Bottom):** Shows a list view titled "Open 40". The header includes "Lists" and a "+" button. A large circle highlights the header area. The list table has columns: Number, Opened, and Short description. Data rows include INC0010112 (Opened 2019-07-29 11:48:43, Short description Assessment : ATF Assessor), INC0010111 (Opened 2019-07-22 14:04:57, Short description ATF : Test1), and INC0010001 (Opened 2020-05-01 11:15:37, Short description Test). The bottom right corner shows user details: Allyson Gillispie and Administrator. The interface includes icons for refresh, gear, and search, each with a small "1" indicating notifications.

# Top takeaways

1

## Sign up

Get a PDI and  
upgrade to Paris

2

## Explore

Discover what's  
new in Paris

3

## Plan

Plan your  
organization's Paris  
upgrade and value

# Reference information

Available in the Resource widget (at the bottom of your screen)

## ServiceNow

- [docs.servicenow.com](https://docs.servicenow.com)
- [community.servicenow.com](https://community.servicenow.com)
- [developer.servicenow.com](https://developer.servicenow.com)
- [bit.ly/servicenow-technow](https://bit.ly/servicenow-technow)
- [servicenow.com/success](https://servicenow.com/success)



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- [bit.ly/servicenow-technow](https://bit.ly/servicenow-technow)
- [servicenow.com/success](https://servicenow.com/success)



Get a free personal instance

# Reference information

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- [community.servicenow.com](https://community.servicenow.com)
- [developer.servicenow.com](https://developer.servicenow.com)
- [bit.ly/servicenow-technow](https://bit.ly/servicenow-technow)
- [servicenow.com/success](https://servicenow.com/success)



Over 70 topics since 2013

# Reference information

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## ServiceNow

- [docs.servicenow.com](https://docs.servicenow.com)
- [community.servicenow.com](https://community.servicenow.com)
- [developer.servicenow.com](https://developer.servicenow.com)
- [bit.ly/servicenow-technow](https://bit.ly/servicenow-technow)
- [servicenow.com/success](https://servicenow.com/success)



Remember: Questions and answers will be posted to the community

# Q&A

Thank you for joining us



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Sr. Developer Evangelist  
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**Kreg Steppe**  
Program Manager  
Cloud Labs  
ServiceNow

**Jeremy Duncan**  
Platform Architect  
ServiceNow



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