



# Washington DC Application Portfolio Management

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# Application Portfolio Management

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Use the ServiceNow® Application Portfolio Management (APM) application to gain a comprehensive understanding of the applications used in your organization so you can identify redundancies, and decrease budgetary costs. By consolidating applications within the same business function, you can identify applications to modernize or upgrade.

Watch this five-minute video to get a better overview of Application Portfolio Management.

APM helps you decide whether to invest, sustain, or replace applications based on the business need aligned towards the organization goal.

You can address business challenges such as:

- Redundant applications for similar functions.
- Increasing cost of owning and maintaining applications.
- Increasing demand to upgrade the existing applications for new functions.
- Conflict between in-house legacy applications and that of the vendors.
- Inadequate performance because of outdated applications.

Overcome these challenges, improve business functions in an efficient and smooth manner, and optimize cost with these APM processes.

	<p><b>Manage digital Integrations in APM</b></p> <p>Manage all the integrations of all your applications at a centralized space to control them in Application Portfolio Management.</p>
	<p><b>Rationalize applications by business capability</b></p> <p>Rationalize all the business applications in a specific business capability and decide whether to invest, sustain, or to replace any application by configuring multiple combinations of indicators in a bubble chart.</p>
	<p><b>Define standards for software products and products versions</b></p> <p>Define software products standards and manage unapproved software in your organization. Use the Technology Reference Model feature to define the standards for the software to be used in your organization.</p>

## Manage digital Integrations in APM

Number	Short description	Approval	IT owner	Opened by	State
DINTGREQ0001001	Request to submit a Digital Integration	● Approved	(empty)	System Administrator	Closed Complete
DINTGREQ0001001	Request to submit a Digital Integration	● Requested	Abel Tuter (Architect)	(empty)	Open
DINTGREQ0001001	Request to submit a Digital Integration	● Approved	(empty)	Application Portfolio User	Open
DINTGREQ0001002	Request to submit a Digital Integration	● Approved	(empty)	System Administrator	Closed Complete
DINTGREQ0001002	Request to submit a Digital Integration	● Approved	(empty)	Application Portfolio User	Open
DINTGREQ0001002	Request to retire a Digital Integration	● Requested	(empty)	(empty)	Open
DINTGREQ0001003	Request to submit a Digital Integration	● Approved	(empty)	Application Portfolio User	Open
DINTGREQ0001003	Request to submit a Digital Integration	● Approved	(empty)	System Administrator	Closed Complete
DINTGREQ0001005	Request to submit a Digital Integration	● Requested	(empty)	System Administrator	Open
DINTGREQ0001006	Request to submit a Digital Integration	● Requested	(empty)	System Administrator	Open
DINTGREQ0001007	Request to submit a Digital Integration	● Requested	(empty)	System Administrator	Open
DINTGREQ0001008	Request to submit a Digital Integration	● Requested	(empty)	System Administrator	Open
DINTGREQ0001009	Request to submit a Digital Integration	● Requested	(empty)	(empty)	Open
DINTGREQ0001011	Request to retire a Digital Integration	● Requested	(empty)	(empty)	Open
DINTGREQ0001101	Request to submit a Digital Integration	● Approved	Abel Tuter (Architect)	(empty)	Closed Complete
DINTGREQ0001102	Request to submit a Digital Integration	● Requested	(empty)	System Administrator	Open
DINTGREQ0001103	Request to submit a Digital Integration	● Requested	(empty)	System Administrator	Open
DINTGREQ0001104	Request to submit a Digital Integration	● Approved	(empty)	System Administrator	Closed Complete
DINTGREQ0001105	Request to retire a Digital Integration	● Approved	(empty)	System Administrator	Closed Complete

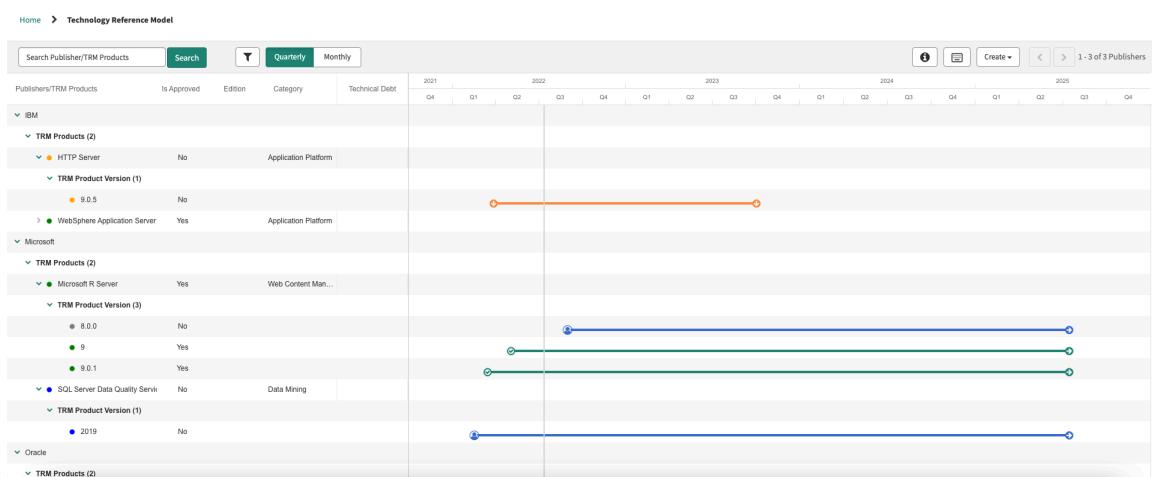
The digital integration represents integration between two business applications. In a typical scenario there would be a consuming business application, a provider business application, and an interface that is provided by the provider business application. The digital integration contains the metadata on the integration, including name, version, type, data flow direction, middleware used, owners, and so on.

## Rationalize applications by business capability

Business Cap...	Number of Apps	Cloud	Homegrown	Apps With Expiring Contract	Apps With EOI
Bu Application Category	1	-	1	-	-
Application Family	1	-	1	-	-
Adm Business Capability	1	-	1	-	-
Analyze demographics	1	-	1	-	-
Analyze financial health	1	-	1	-	-
Assess the internal environment	1	-	1	-	-
BOBJ	1	-	1	-	-
Case Management	1	-	-	-	-
Chemsoft	1	-	-	-	-
Communicate strategic initiatives to business units and stakeholders	1	1	-	-	-
Conduct pricing analysis	1	-	-	-	-
Conduct qualitative/quantitative research and assessments	1	-	1	-	-
Define the business concept and long-term vision	1	-	-	-	-
Deliver and support information technology services	1	-	-	-	-
Deliver service to customer	1	-	-	-	-
Deploy information technology solutions	2	-	-	-	-
Design and prototype products and services	1	-	-	-	-
Develop and counsel employees	1	-	1	-	-
Develop and implement security, privacy, and data protection controls	1	-	-	-	-

Evaluate business application scores in the context of business capability. Decide whether to invest, sustain, or to replace an application by configuring multiple combinations of indicators in the bubble chart.

## Define standards for software products and products versions



Use the Technology Reference Model (TRM) module to define standards for all software applications that are used in your organization. You can define the software, and software versions to be used in the production. Add new software products to the TRM library, and approve or reject requests submitted by other stakeholders. Use the technical debts page to find out unapproved software products that are being used in production.

### Applications and features

- Enterprise Architecture Workspace
- Application Portfolio Management Overview
- Application Portfolio Management portal
- Technology Portfolio Management
- Technology Reference Model
- Management of digital integrations
- Application Portfolio Management (APM) Cloud Assessment
- Architectural artifacts
- Exporting Application Portfolio Management data to Microsoft PowerPoint

## Application Portfolio Management

Application Portfolio Management (APM) provides a complete picture of the application estate, including the underlying technology relationships.

This video explains the features and benefits of Application Portfolio Management.

APM starts by building a comprehensive inventory of your business applications, providing enterprise architects, and application owners with four lenses by which to analyse the portfolio: Business Capability Planning, Application Migration & Rationalization, Technology Risk Management, and Information Usage.

With this level of visibility, architects can easily identify transformational opportunities, whether that's reducing the number of on-premise or duplicate apps, reducing spend on non-critical applications, or addressing gaps in the business capability model.

APM provides both the technology and work perspective that helps architects to easily assess the impact of any changes on the architectural state. APM also ensures what is being planned is aligned with the technology and the strategic goals of the organization.

## Get started

<p>Explore</p>  <p>Learn the key features and business value that APM offers</p>	<p>Configure</p>  <p>Configure APM</p>	<p>Integrate</p>  <p>Integrate APM with other products</p>
<p>Use</p>  <p>Learn how to use APM</p>	<p>Reference</p>  <p>Get details about components, form fields, and general guidelines of APM</p>	

## Troubleshoot and get help

- Ask or answer questions in the [Application Portfolio Management forum on the ServiceNow Community](#) ↗
- Search the Known Error Portal for known error articles ↗
- Contact Customer Service and Support ↗
- Find articles on APM learning path, implementing, and other resources. ↗

## Exploring Application Portfolio Management

Learn about the features, functionality, and the business value that Application Portfolio Management provides.

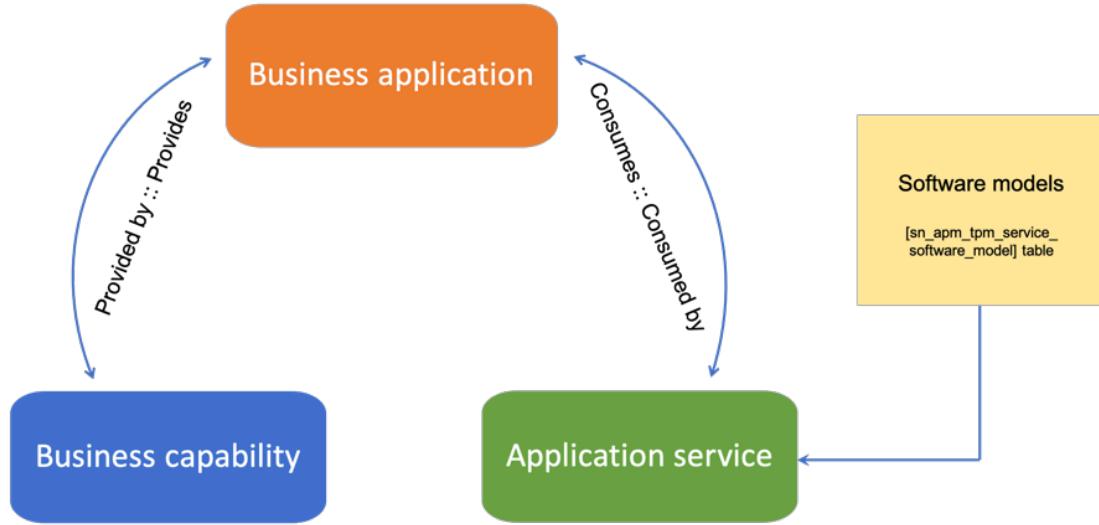
APM uses the following key solution components:

- Application Classification

- Focuses on Enterprise Business Applications, which can also include functional modules part of a larger ERP suite.
- Provides additional attributes to classify applications in a new CI class, Business application, which extends the base Configuration Management Database (CMDB) configuration item.

The configuration items used in APM are related by establishing a CMDB relationship with each other.

### APM CI relationship



- Captures phased rollout/deployment of applications by business unit or geography.
- Captures attributes from the referenced Software Model.
- Applications Assessment Framework
  - Indicators to assess the application across dimension such as cost, quality, risk, user satisfaction, and business alignment.
  - Common indicators from ServiceNow applications like Financial Management for costs, ITSM for support issues, PPM for investment details.
- Reports and Dashboards
  - Application Landscape Dashboard
  - Application 360 Dashboard
  - Application Assessment Dashboard
  - Application Strategy Recommendation (bubble chart)
  - Applications Rationalization Roadmap
  - Application Risk and Compliance Overview (role required is sn\_grc.reader)
- Integration with other applications

- Integrates with Project Portfolio Suite (PPS) to track execution of strategic goals and recommendations.
- Integrates with Financial Management to assess applications costs and associated breakdowns.
- Integrates with PPS to assess planned investments for applications.
- Integrates with ITSM to assess the incidents, problems, and changes for the applications.
- Integrates with Service Administration to generate an assessment questionnaire to a user or user group who use the business application and can assess its performance.
- Integrates with Agile Development 2.0 Digital Portfolio Management (DPM) so that the DPM managers gain a comprehensive understanding of business applications that helps in taking informed decisions to invest, sustain, or replace them. DPM provides a unified workspace for owners to view and collectively manage their services and applications through the full life cycle. For more information, see [Exploring Digital Portfolio Management](#).

## Installed with Application Portfolio Management

Several types of components are installed with Application Portfolio Management.

### Tables installed with Application Portfolio Management

Tables are added with activation of Application Portfolio Management.

Table	Description
Application Bubble Chart [apm_bubble_chart]	Bubble chart configuration.
Application Service Risk [sn_apm_tpm_business_service_risk]	Stores risks on an application service for TPM.
Application Category [apm_application_category]	Application category to which the business application belongs to.
Application Category Group [apm_application_category_group]	Group of application categories.
Application Family [apm_application_family]	All application families.
Indicator [apm_metric]	Indicator definition to capture the indicator scores.
Indicator Score [apm_app_indicator_score]	Indicator scores calculated by the engine based on the profile.
Scoring Profile [apm_application_profile]	Scoring profile definition.
Profile Indicator [apm_application_profile_indicator]	Application profile indicator with a weightage numbers to calculate the overall score of a business application.
CI Score [apm_app_score]	Overall application score calculated by the engine based on the application profile.
Business Application [cmdb_ci_business_app]	All business applications.
Application Service Software Model [sn_apm_tpm_service_software_model]	Stores the software models (technologies) underlying each application service.

Table	Description
Goal Contribution Target [goal_contribution_target]	Goal contribution of a program for the target fiscal year.
Demand Action [apm_idea_action]	Actions available for submitting a demand.
Risk Parameter [sn_apm_tpm_risk_parameter]	Stores the risk parameters in TPM.
Risk Parameter Score [sn_apm_tpm_risk_param_score]	Stores the risk parameter scores for each software model in TPM.  For example, if there are four parameters, then for each software model there are four records stored in the table.
Software Model Risk [sn_apm_tpm_software_model_risk]	Stores risks on the software models in TPM.
Hardware Model Risk [sn_apm_tpm_hardware_model_risk]	Stores risks on the hardware models in TPM.
TRM Product Lifecycle Request [sn_apm_trm_product_lifecycle_request]	Request for a TRM product lifecycle.
TRM Product Request [sn_apm_trm_product_request]	Request for a TRM product.
TRM Category [sn_apm_trm_standards_category]	TRM category.
TRM Phase [sn_apm_trm_standards_phase]	TRM phase.
TRM Product [sn_apm_trm_standards_product]	TRM Product.
TRM Product Lifecycle [sn_apm_trm_standards_product_lifecycle]	TRM Product Lifecycle.
TRM Technical debt [sn_apm_trm_standards_technical_debt]	Technical debts information for TRM products.
Architectural Artifact [sn_apm_architectural_artifact]	Name of an Architectural Artifact.
Architectural Artifact Version [sn_apm_architectural_version]	Version of an Architectural Artifact.
Architectural Category [sn_apm_architectural_category]	Category of an Architectural Artifact.
Related Entities [sn_apm_related_entities]	Related entities for Architectural Artifacts.
New Table [sn_apm_ppt_status_report]	APM PowerPoint Status Report Table.
Data Classifications [cmdb_data_classification]	List of data classifications for information objects.
Data Classification Groups [cmdb_data_classification_group]	List of data classification groups for information objects.
Data Classification Mapping [cmdb_data_classification_mapping]	Mapping details of the data classification with an information object.

## Roles installed with Application Portfolio Management

Roles are added with activation of Application Portfolio Management.

Role	Description	Contains roles
sn_apm.apm_read	<p>Access to view APM dashboards provided by the base system and the underlying tables from where the data for the dashboards are retrieved.</p>	<p>Includes pa_viewer and cmdb_read roles.</p> <p><b>i Note:</b> Activate the Notify (com.snc.notify) plugin to include the notify_view role.</p> <p>View Application 360 dashboard, Application Landscape dashboard, Application Assessments dashboard.</p>
sn_apm.apm_user	<p>Access to update applications, view landscape, and roadmap.</p>	<p>Includes pa_viewer, and certification roles.</p> <p><b>i Note:</b></p> <ul style="list-style-type: none"> <li>Activate the Notify (com.snc.notify) plugin to include the notify_view role.</li> <li>Activate PPM Standard (com.snc.financial_planning_pmo) plugin to create project/program in CBP and TPM. For information on PPM roles, see <a href="#">Plugins installed with PPM Standard (Project Portfolio Management)</a>.</li> <li>View/update applications.</li> <li><a href="#">Request to create business applications</a>.</li> <li>Create/update/delete application rollouts.</li> <li>View application landscape reports and dashboards.</li> </ul>

Role	Description	Contains roles
		<ul style="list-style-type: none"> <li>View applications roadmap.</li> <li>View Application 360 dashboard.</li> </ul>
sn_apm.apm_admin	<p>Create or update application records and access administration activities.</p>	<p>Includes sn_apm.apm_user, assessment_admin, certification_admin roles.</p> <ul style="list-style-type: none"> <li>Create/update/delete application categories.</li> <li>Create/update/delete application families.</li> <li>Create/update/delete business processes.</li> <li>Create/update/delete application indicators.</li> <li>Create/update/delete application score profile.</li> <li>Create/update/delete bubble charts.</li> <li>View application indicator scores and application scores.</li> <li>View application assessment dashboard.</li> <li>View Application 360 dashboard.</li> </ul>
sn_apm.apm_analyst	<p>Create applications and access landscape and dashboards.</p>	<p>Includes sn_apm.apm_admin and treemap_user roles.</p> <p><b>i Note:</b> Activate PPM Standard (com.snc.financial_planning_pmo) plugin to create project/program in Capability-Based Planning (CBP) and Technology Portfolio Management (TPM). For information on PPM roles, see <a href="#">Plugins installed with PPM Standard (Project Portfolio Management)</a>.</p>

Role	Description	Contains roles
		<ul style="list-style-type: none"> <li>• Create/update/delete applications.</li> <li>• Create/update/delete application indicator scores.</li> <li>• Create/update/delete application scores.</li> <li>• Create/update/delete APM programs and targets.</li> <li>• Create/update/delete goals.</li> <li>• Access the APM Service Portal pages for program navigation, category analysis, bubble chart view, application comparisons.</li> <li>• Create demand with application strategy related attributes.</li> <li>• View Application 360 dashboard.</li> </ul>

### UI policies installed with Application Portfolio Management

UI policies are added with activation of Application Portfolio Management.

UI policy	Table	Description
When data source is not PA	Application Indicator [apm_metric]	Shows the <b>Custom Script</b> field when the data source is custom script.
When query condition is data source	Application Indicator [apm_metric]	Shows the <b>Query table</b> , <b>Consolidate</b> , <b>Aggregate type</b> , <b>Aggregate</b> , <b>Conditions and Group By</b> fields when the data source is custom script.
When Assessments and Surveys are data source	Application Indicator [apm_metric]	Shows the <b>Metric Type</b> and <b>Metric Category</b> fields when the data source is assessments.
When PA is data source	Application Indicator [apm_metric]	Shows the <b>Source PA indicator</b> and <b>Frequency and Default breakdown</b> fields when the data source is custom script.

UI policy	Table	Description
When data source is custom script	Application Indicator [apm_metric]	Shows the <b>Custom Script</b> field when the data source is custom script.

### Scheduled jobs installed with Application Portfolio Management

Scheduled jobs are added with activation of Application Portfolio Management.

Scheduled job	Description
Business Application Certification On Demand	Schedules a certification task and the certification schedule is run on demand.
Business Application Certification Quarterly	Schedules a certification task and the certification schedule is run periodically every quarter.
Business Applications not related to any Business Capability audit	Checks the CI relationship [cmdb_rel_ci] table for business applications that are not related to any business capability.
Business Applications not related to any Software Model	Checks the CI relationship [cmdb_rel_ci] table for business applications that are not related to any software model.
Business Applications related to multiple Business Capabilities in the same hierarchy	Checks the CI relationship [cmdb_rel_ci] table for a possibility where the same business application is tied to multiple business capabilities at the same level of the hierarchy.
Load Application Indicators and compute Application Scores	Populates application indicator score and calculates application scores based on the scoring profile attached to the business application.
Load TPM Risk Parameters and compute Application Service Risks	Calculates the software model risk and the business application risk.
Orphaned Business Capabilities	Checks for capabilities that have neither parent capability nor child capabilities, and do not have any business applications related to it.
Software Products with no lifecycle data (for product models that are used by the business applications)	Retrieves software model records used by the business applications and then checks if life-cycle data is present for the products related to these software models.
Update Business Capability Levels and Hierarchy IDs	Updates the order and hierarchy of the business capabilities in the Capability map.
Populate TRM Technical debt for production applications	Populates data in the TRM technical debts table.

### Client scripts installed with Application Portfolio Management

Client scripts are added with activation of Application Portfolio Management.

Client script	Table	Description
Mark <b>Goal</b> mandatory with respect to APM view	Program [pm_program]	Marks <b>Goal</b> mandatory with respect to APM view.
Defaulting comments for scripted indicator	Application Indicator [apm_metric]	If the <b>Data Source</b> field is Custom script, then the <b>Custom script</b> field is populated with the sample custom script.
Populate CI manufacturer for applications	Business Application [cmdb_ci_business_app]	Populates manufacturer for business application.
Set view in APM to true	Program [pm_program]	Sets the <b>Used by APM</b> check box to true.
Set mandatory attributes for APM goals	Goal [goal]	Sets mandatory attributes for APM goals.
Restrict Sustain	Demand Action [apm_idea_action]	Restricts sustain from the list of strategies.

### Business rules installed with Application Portfolio Management

Business rules are added with activation of Application Portfolio Management.

Business rule	Table	Description
Populate <b>Short Description</b>	Goal [goal]	Populates <b>Short Description</b> of the goal based on the attributes provided.
PA Indicator frequency check	Indicator [apm_metric]	Checks the frequency of the performance analytic indicators.
Only one Enterprise rollout is allowed	Business Entity [apm_rollout_entity]	Allows only one enterprise rollout for a business application.

### Application Portfolio Management portal

The Application Portfolio Management (APM) portal gives you an enterprise-wide applications landscape view of the number of applications and other key metrics. As an enterprise architect (EA), you can view and access all the APM modules from this portal.

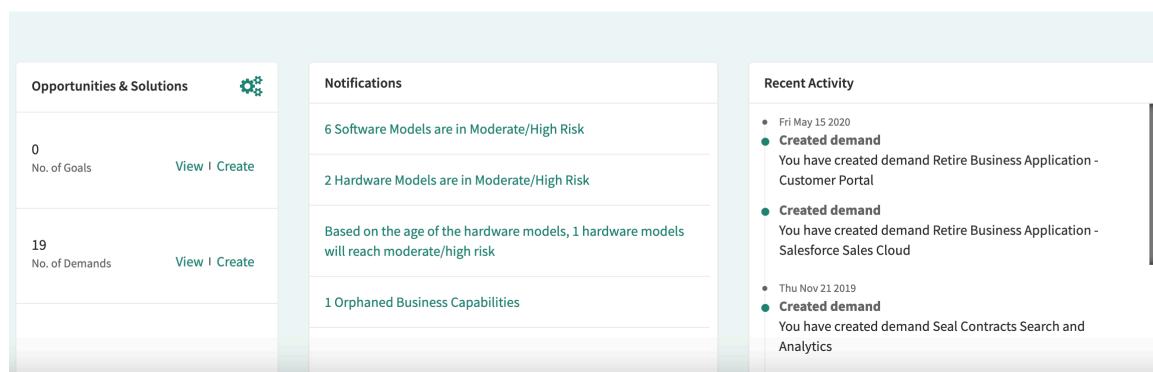
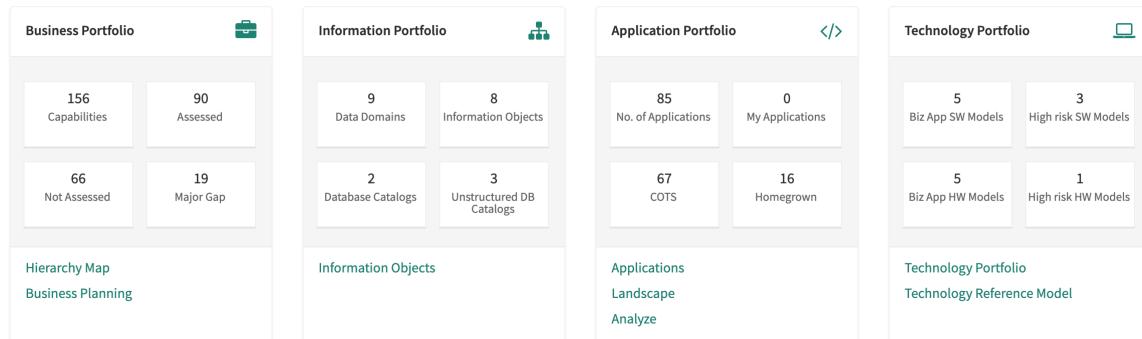
Watch this five-minute video to get a better overview of Application Portfolio Management.

You can navigate to the Application Portfolio Management portal page by clicking **Application Portfolio Management > Home**. The role required is sn\_apm.apm\_analyst.

The Application Portfolio Management portal consists of four sections. The sections provide a quick access to view the portfolios of business capability, information, application, technology, and create goals, demands, and programs.

## Application Portfolio Management portal page

### APPLICATION PORTFOLIO MANAGEMENT



### Business Portfolio

View the number of business capabilities defined by your organization that have been assessed and are yet to be assessed. View the number of business applications that support the capabilities but are at a major risk.

- Click [Hierarchy Map](#) to [view the capability map](#) in a new tab that displays the business capabilities and subcapabilities in a hierarchy.
- Click [Business Planning](#) to navigate to the business planning portal.

### Information Portfolio

Capture the information from the assets of your organization as information objects. You can connect the information object to your business applications to have a portfolio of application information, ready and accessible to use at any time. The entities in the information portfolio are either configuration items or columns of tables. They are structurally designed to relate to each other either by CMDB CI relationships or by referencing the data columns of tables.

The numbers below each entity of the Information Portfolio represent the following data:

- Data Domains: Total number of records in the Data Domain [sn\_apm\_data\_domain] table.
- Information Objects: Total number of records in the Information Object [cmdb\_ci\_information\_object] table.
- Database Catalogs: Total number of records in the Database Catalog [cmdb\_ci\_db\_catalog] table.

- Unstructured DB Catalogs: Total number of records in the configuration item tables such as:
  - configuration file (cmdb\_ci\_config\_file)
  - file system (cmdb\_ci\_file\_system)
  - exchange mail box (cmdb\_ci\_exchange\_mailbox)

**i Note:**

Your enterprise might have any number of database catalogs, but only the number of database catalogs that are linked to the information objects are displayed as counts in each of the information portfolio sections. Those information objects in turn are related to the business applications. Similarly, only those numbers of database instances that are referenced in the database catalogs are summed up as database instances.

Click the **Information Objects** link to view the details of the information objects that are related to the business applications in your enterprise. See [Information Portfolio](#).

**i Note:** The information objects must be related to the business application for you to view them in the Information Objects page that opens.

### Application Portfolio

Track the applications that support your business capabilities and manage them effectively to fulfill the goals of your organization. The portfolio provides a list of applications with information such as their category, manufacturer, and type.

- Click Applications to navigate to the list view of business applications in your organization.
- Analyze your applications by category or family and group them the way that you want them to be in the application [Landscape](#) view.
- Click Analyze to navigate to the [Group Analysis](#) page to analyze the applications and their scores.

### Technology Portfolio

View the number of hardware models and software models that are linked to your business applications. You can also get a count of the number of these models that are at high risk. Click the **Technology Portfolio** link to go to the [TPM timeline view](#) and know the status of the hardware and software models life cycle.

Use the Technology Reference Model to define the software products standards and manage unapproved software in your organization. For more information, see [Technology Reference Model](#).

### Opportunities & Solutions

View the number and click to view the list of goals, demands, and programs. Click any goal, demand, or program in the list to update its details. Use the **Create** link to directly create a goal, demand, or program.

- [Create a goal](#) to track, align, and report the progress of the work toward it. For example, a goal could be set to reduce Capex or reduce the number of applications within a target date.
- [Create a demand](#) to capture your strategic goal for the application.

To create a demand from the application menu, navigate to **Application Portfolio Management > Application Portfolio Analysis > Demands**

- [Create a program](#) to meet the goals. APM takes you through a process to add targets and identify opportunities.

**i Note:** You can view and create programs from the Program section only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

#### Notifications

View the results of [desired and scripted audits](#), the number of hardware and software models that face high and moderate risks, expiring on the current date and in the next 90 days, and pending certification instances that are open and not 100% complete. Click the notification to open the related task or the related data certification schedule instance to view the record details.

#### Recent Activity

View your most recent activity of creating a goal, demand, or program for a fiscal period.

## Management of business applications

A business application is software used by business users to perform a business function. Classify the applications to maintain an inventory and consolidate the business applications. Analyze, assess, and evaluate the applications across various dimensions and determine the action that you can take for each application.

You can record the details of a business application manually or import the list of applications from a spreadsheet or a third-party tool. To [import data](#) , define a data source and transform map, and run or schedule an import.

## Assessment of Business applications

In APM, add any business application that you want to assess and track for costs, usage, business value, functional fitment, and risks.

## Modeling platform applications and platforms

Use the Business Application form to create a record and capture the details of a platform application just as you create a record for a business application. Use the same form to create individual records of all business applications that run on the platform. This structure gives you a hierarchy of business applications associated to the platform host. The **Architecture type** field values help you to distinguish between the platform host and platform application data.

The architecture type values help in the following business cases:

- Assess the performance of the platform as a whole as well as assess the performance of individual applications running on it.
- Platform may be owned by a business owner who may not be the owner of the applications running on that platform. In such a scenario, the platform owner can assess the performance of the platform independent of the application owners, who assess the applications associated to the platform.

For example, you can create a business application record for ServiceNow® platform. Then, create individual business application records such as Application Portfolio Management,

Financial Management, and Project Portfolio Management and associate these applications to ServiceNow® platform. The distinction between the records whether it is a business application running on a host or a platform hosting the applications lies in the **Architecture type** values of platform application and platform host.

#### Related topics

- [Add or edit a business application](#)
- [Business application relationship with CIs for application information](#)
- [View business application roadmap](#)
- [Suggestions to relate technology models to an application service](#)
- [Monitor business applications with the application landscape dashboard](#)

#### **Business application relationship with CIs for application information**

Business application is a new CMDB CI class. You can create relationships between the business application and other CIs. Functionally, two applications can be integrated or connected to each other to establish a relationship between them. You can relate your business applications to other infrastructural CIs like database and webservers.

To get reports about a business application, there must be an association between the application and the CIs that make up the application. Hence, business applications have to be integrated with the other CIs to examine the CI and its relationship from a [CI relation formatter](#) .

#### **CMDB dependency views**

Dependency view graphically displays an infrastructure view for a configuration item (CI) and the business application or business services that it is part of and that it supports.

In APM, you can see the dependency views by clicking the show dependency views icon () in the related items of the Business Application form.

In addition to the existing APM-specific configuration items based on references versus relationships, a relationship is established between the Business Capability configuration item and the Business Application configuration item. A reference is also created between the **Parent** related field attribute of the Business Capability table [cmdb\_ci\_business\_capability] and the **Platform Host** related field attribute of the Business Application table [cmdb\_ci\_business\_app].

To view the mapping of the related items, navigate to **Dependency Views > Map Related Items**. The table provides a list of configuration items that are related to each other by a referenced related field, because of which the dependency view is rendered.

#### Related topics

- [Add or edit a business application](#)
- [View business application roadmap](#)
- [Monitor business applications with the application landscape dashboard](#)

#### **Suggestions to relate technology models to an application service**

Use the software models that the suggestions engine identifies and relate them to your application service, instead of manually searching and mapping them.

The business applications used in your organization consume application services to fulfill a business capability for the business enterprise.

- Various application instances of a business application run on hardware that require necessary software models to provide the business capability.
- A cmdb relationship establishes an association between the business application and the application service. But then, an application owner is required to manually associate an application service to a software model.
- For the association to be precise, your software model data for the business application must be maintained up-to-the-minute.

To avoid manual intervention and prevent association to a software model that has non-current data, the software model suggestion engine suggests possible software models to an application service. You can use the suggested software models, select those models that are appropriate, and associate them to your application services. This suggestion helps you to configure and maintain software model data for your business applications.

## Working model of the software model suggestions engine

The software model suggestions engine:

- Scans hardware configuration items consumed by Application Services. A CMDB API retrieves all hardware CIs for an application service, and a Service Mapping API retrieves the hardware CIs for application service.
- Retrieves the new software models installed on the hardware since the last run of the scheduled job.
- Populates the Retrieved Software Models [sn\_apm\_service\_software\_model\_suggestion] table with the discovered software models.
- Evaluates and compares the current software model suggestions status with the previous extracted suggestion results from the last run in the Technology Models Retrieval Logs [sn\_apm\_suggestion\_engine\_run\_log] association table.

The Technology Models Retrieval Logs [sn\_apm\_suggestion\_engine\_run\_log] table also stores the count of hardware models on which the application service is running.

- Updates status accordingly as **New, Associated, Ignored, or Deleted**.

Related topics

[Associate suggested technology models to an application service](#)

## Monitor business applications with the application landscape dashboard

View the application landscape dashboard for an overview of all the applications used in your business enterprise. The dashboard provides pre-configured reports on applications, grouped by categories. You can also configure and add reports.

### Before you begin

You must have the Performance Analytics – Content Pack – Application Portfolio Management (com.snc.pa.apm) plugin activated to use the Application landscape dashboard.

Role required: sn\_apm.apm\_user

### About this task

On the dashboard, you can view the following reports:

- Top 10 applications actively used, grouped by application category and application family.
- Applications grouped based on install type, platform, application category, manufacturer, technology stack, and so on.
- Details of number of applications by category versus the manufacturer details.
- Number of applications by application category versus the age of the applications.

## Procedure

Navigate to **Application Portfolio Management > Application Portfolio Analysis > Landscape Analysis**.

To modify the data and generate charts based on **Portfolio**, **Application Category**, **Install Type**, **Application Type**, **Business Process**, and **Business Unit**, make the appropriate selections from the dashboard filters.

### Note:

Activate PPM Standard (com.snc.financial\_planning\_pmo) plugin to apply the portfolio filter.

To save a chart in JPG or PNG format, point to the chart and then select the appropriate option from the menu that appears.

### Related topics

[Add or edit a business application](#)

[View business application roadmap](#)

[Business application relationship with CIs for application information](#)

[Suggestions to relate technology models to an application service](#)

## Management of business capability

Business capability is the ability of an organization to do its business activity successfully and fulfill its business goals. Use the business capability mapping to establish a CI relationship between the business capability and the business applications. Establish a similar relationship between business capabilities and the application technologies to ascertain the risks involved in using them.

As business organizations grow, it is imperative for an enterprise architect to constantly assess the business capabilities to know how to strengthen the business processes. Business capabilities are the abilities required to support a business process. They are assessed by indicators to provide indicator scores.

The indicator framework is enhanced to support assessment of business capabilities in addition to supporting business applications. Capture business capability as a CI type for which the score is generated.

Use the following capability assessments set of application menus to configure assessment. Access the scores for business capability, in a similar manner that you access and assess the scores of business applications:

- Create and assess CI Score for a fiscal period: **Application Portfolio Management > Capability Ratings > Capability Scores**.
- Create and update indicator scores: **Application Portfolio Management > Capability Ratings > Capability Indicator Scores**.
- Create a scoring profile and associate it with a business capability CI: **Application Portfolio Management > Administration > Scoring Profiles**.
- Create an indicator and configure the data source: **Application Portfolio Management > Administration > Capability Indicators**.

If the data source is of **Assessments** type, then you can generate survey assessments for the business capabilities in the Indicator form by clicking the **Generate Assessments** button. Apply filter conditions to the business capability table and select the users in the Generate Assessment UI. You can view the status of assessments instances in the **Assessments Instances** tab and the results in the **Metric Category Results** tab. See: [Generate survey assessments and view results within APM](#).

- Access business process capability map: **Application Portfolio Management > Capability Ratings > Capability Map**.

#### Related topics

[Assess business capability](#)

[Assess business capability](#)

[Overview of business capability planning](#)

[Rationalization of applications by capability](#)

#### Overview of business capability planning

Capability based planning directs towards planning, designing, and delivering effective plans of action to improve business capabilities in a business enterprise. The effective implementation of capability based planning lies with the roles of business personas such as the business owner, application portfolio owner, and capability planner in understanding the existing capabilities and in planning to fill the technical gaps.

Capability based planning is a mechanism to better understand how to map strategic plans to your investments. If your capabilities are well defined, then your organization structure aligns to those capabilities, because the capability defines what the organization does.

Business capability is a configuration item (CI) that helps to understand how the business capability is supported by the related applications and services.

Capability based planning is structured as a hierarchy and supports up to six levels of capabilities in its series, which means a parent capability can have six levels of sub-capabilities beneath its level. However, a capability in each level of the hierarchy can have as many capabilities as its siblings at its own level and each one can have one-to-many relationships between the levels.

#### Personas governing capability based planning

Following are the personas with appropriate roles to use capability based planning:

Business owner

As a business owner it is important that you perceive the existing capabilities and work out strategies to identify the areas that need investments to plan for better allocation of expenses on projects.

## Application portfolio owner

As an application portfolio owner, you have to identify those capabilities that impact your business applications and address them, so that the business applications function effectively.

## Capability planner

As a capability planner, you have to establish capabilities in the light of the industry norms of applying procedures that have been termed as a best practice, being most effective and yielding best results.

## What to do next

Use the [capability map](#) for planning investments in applications.

### Rationalization of applications by capability

The Analyze screen enables you to evaluate business capabilities. You can rationalize all the business applications in a specific business capability. Decide whether to invest, sustain, or to replace an application by configuring multiple combinations of indicators in a bubble chart. Bubble charts are interactive graphs that help you identify strategies by plotting capability indicator scores.

For each business capability, based on the indicator scores in the bubble chart, you can create a demand to achieve your goal. A demand is a request created by demand managers and demand users. The user submits a demand and the demand manager approves the demand.

### Analyze applications by capability

Consolidate the application details by capability. Narrow down the target applications by filtering them with the application indicator scores and values in the Group Analysis page.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### About this task

Use the bubble chart to plot the indicator scores of the applications in the X axis and Y axis. You can then use these scores to strategize goals and create a demand to invest in, replace, or sustain the application.

#### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio Analysis > Analyze**.  
The Group Analysis page is displayed.
2. From the Category list, select **Business Capability**.  
The list of capabilities is displayed.
3. In the Assessment Period section, select the **Assessment Period**.
4. In the Filter Apps section, set the application indicator scores to categorize the list of capabilities.
5. Open a capability by clicking it.

A bubble chart is opened for the capability. The bubble chart helps you to view the metrics of the application indicator scores that fall within the filtered values.

Use the **Application Analysis** section to compare applications with the selected indicators.

**6.** Optional: Change the configurations of the bubble chart.

a. Click the configuration icon (  ).

b. On the form, fill in the fields.

### Select Chart Dimensions form

Field	Dimension
X and Y	Dimension of the indicators that fall in the X and Y axes.  (Optional) Along with the pre-configured dimensions, you can also view the bubble chart that you create using the Application bubble chart form.
Bubble Size	Indicator scores determine the size of the bubble.
Display bubble labels	(Optional) Option to display the bubble labels in the Bubble chart.  This option helps you to have a clear display of bubbles, uncluttered by their labels when there are many bubbles in a quadrant.

### What to do next

Point to the bubble in the chart and click the application. Right-click the bubble and select # Create Demand# [Create a demand](#) for the application.

### Configure categories to display in Group Analysis page

Configure the categories to display in the Categories list of the Group Analysis page.

### Before you begin

Role required: sn\_apm.apm\_analyst

### About this task

Use the choices table (sys\_choice) to select or unselect the categories to show or hide in the Group Analysis page.

### Procedure

1. Navigate to All > #System Definition> Choice Lists.
2. In the Element column, search for the group\_by element type.  
The existing group\_by choices appear.

Element	Language	Value	Label	Inactive	Sequence	Updated
Search	group_by	Search	Search	Search	Search	Search
cmdb_ci_business_app	en	application_category	Application Category	false	1	2016-10-07 23:57:24
cmdb_ci_business_app	en	apm_application_family	Application Family	false	2	2022-10-06 21:28:31
cmdb_ci_business_app	en	manufacturer	Manufacture	true	3	2016-10-14 03:55:07
cmdb_ci_business_app	en	rel_parent	Business Capability	false	4	2022-10-17 21:28:34

3. From the list, select the choice item that you want to show or hide in the Categories list in the Group Analysis page.
4. Open the record to edit.
5. Hide or show the item by selecting or unselecting the **Inactive** check box to.
6. Click **Update**.

## Technology Portfolio Management

The underlying technologies of the business applications used in your business enterprise have a shelf life that must be actively managed and diligently monitored to track their versions and life cycle. Use the timeline view of the Technology Portfolio Management to track their dates, and then create a demand or a project to upgrade or retire them.

### **Important:**

Use this feature in the Enterprise Architecture Workspace. Enable the Enterprise Architecture Workspace (sn\_apm\_ws) plugin from the [ServiceNow store](#).

For more information on Enterprise Architecture Workspace, see [Enterprise Architecture Workspace for Application Portfolio Management](#).

The technology of a business application is also known as a software model. A software model is a specific version or configuration of software.

The software models used in your business applications can be operating systems, database management systems, development tools, and middleware, each of which has a life cycle. If these life-cycle stages are not tracked, there are risks where the vendor may not support them any longer and the business applications that run on these technologies are at stake.

Creating an inventory of all technologies used in the enterprise helps to:

- Track the versions of the software and manufacturer support dates for the software.
- Set an internal life-cycle guidance for the software.
- Assess the risks in using outdated software.
- Plan to retire them just like the applications they support, at a definite date.
- Support upgrade processes.

## Internal and external lifecycle stages of the software product

The business applications used in your organization are all linked to one or more application services. Each of the application services runs on one or more technologies or software models.

**Note:** In the context of Application Portfolio Management, an application instance is an application service.

The software product (each model and full version) has a sequence of life cycle stages/phases from its installation to retirement. Internally, business organizations set a date based on the life-cycle phase of the software products. These phases can be Early Adopter, Mainstream, Declining use, and Retired.

The vendor also sets a date for the software based on the vendor life-cycle phases such as Pre-release, General Availability, End of Life, and Obsolete. The support from the vendor may vary depending on the phase of the technology. When the software model reaches the stage of obsolescence, the vendor may stop supporting the technology.

**Note:** The **Publisher** choice type of the **Lifecycle type** field in the [Software Product Lifecycle](#) form is the same as the External Lifecycle that is being used in APM.

As a software asset management user or a software model manager, you can add the software product life-cycle details to the software model for each full version. To use a TPM screen with data on the timeline, ensure that the software life-cycle data is populated in the software product life-cycle table. Similarly, ensure that the hardware life-cycle data is populated in the hardware model table after the technology model suggestion engine runs.

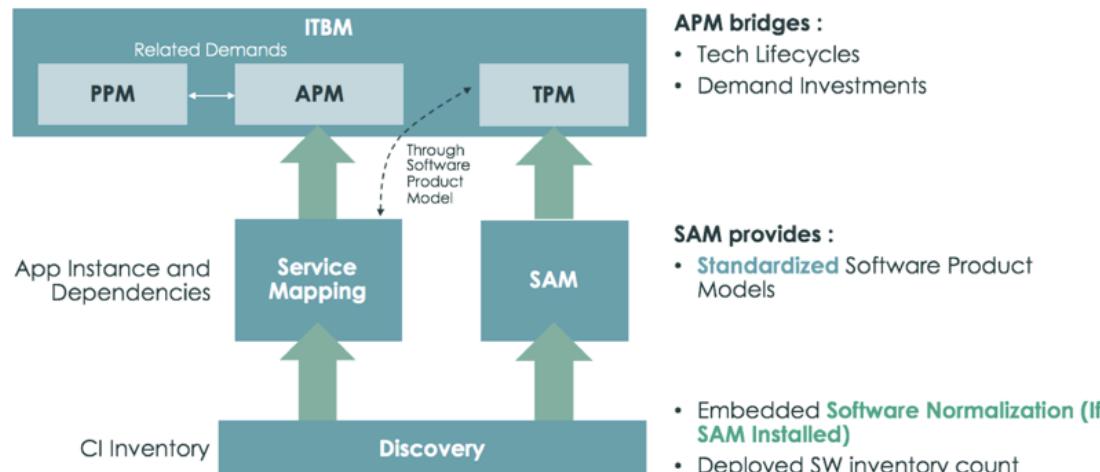
## Integration with Service Mapping to use Technology Portfolio Management

Create application instances in the Mapped Application Service [cmdb\_ci\_service\_discovered] table and relate business applications to corresponding application services.

APM no longer integrates with Service Mapping through the **Instances** tab. The application **Instances** tab has been removed and the `apm_app_instance` table has been deprecated, which is replaced by the Mapped Application Service [cmdb\_ci\_service\_discovered] table. Any data existing in the application instances table must be migrated to the application service table. If you are upgrading to the Madrid release, then contact the ServiceNow personnel for migrating the data.

**Note:** If you are using the Mapped Application Service [cmdb\_ci\_service\_discovered] table for application instances, then you can proceed to upgrade from Kingston. However, if you are using the deprecated `apm_app_instance` table to store application instances, then migrate the data in the `apm_app_instance` table to the Mapped Application Service [cmdb\_ci\_service\_discovered] table.

### Connecting software product life cycles to business application

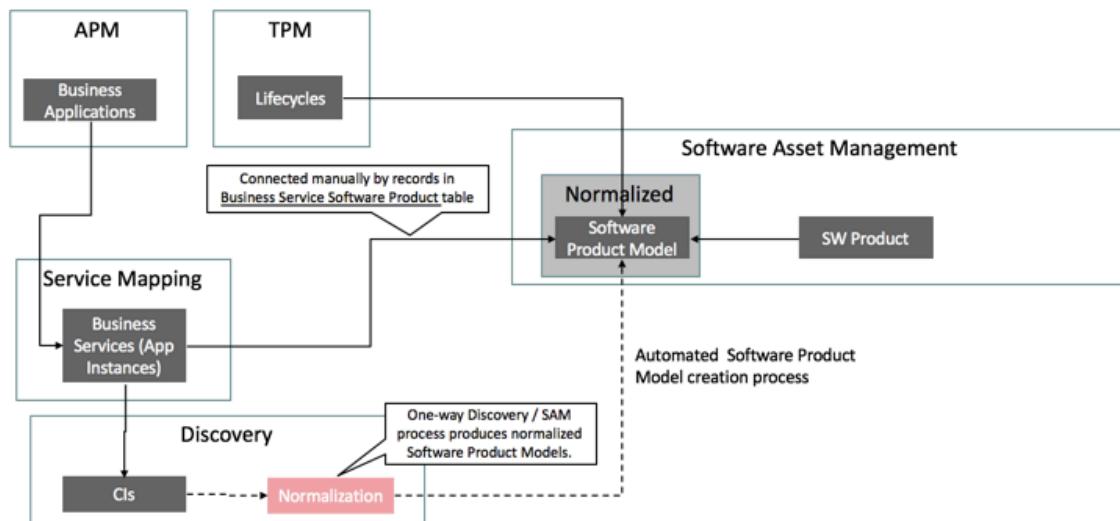


**TPM depends on Software Asset Management (SAM) to retrieve the technology information of the software product**

**⚠ Warning:** TPM and TRM require installation of either SAM Foundation or SAM Professional. Before installing the SAM Foundation plugin, carefully review the [Software Asset Management Foundation plugin migration](#) documentation. Contact ServiceNow Support if you do not have either SAM Foundation or SAM Professional installed on your instance.

You can use Technology Portfolio Management even if you do not have Software Asset Management (SAM) installed. A preconfigured Software Product Model table is available to all TPM users. You can create a list of all software models that your organization uses either manually or import from an existing database or source.

#### Connecting software product life cycles to business application



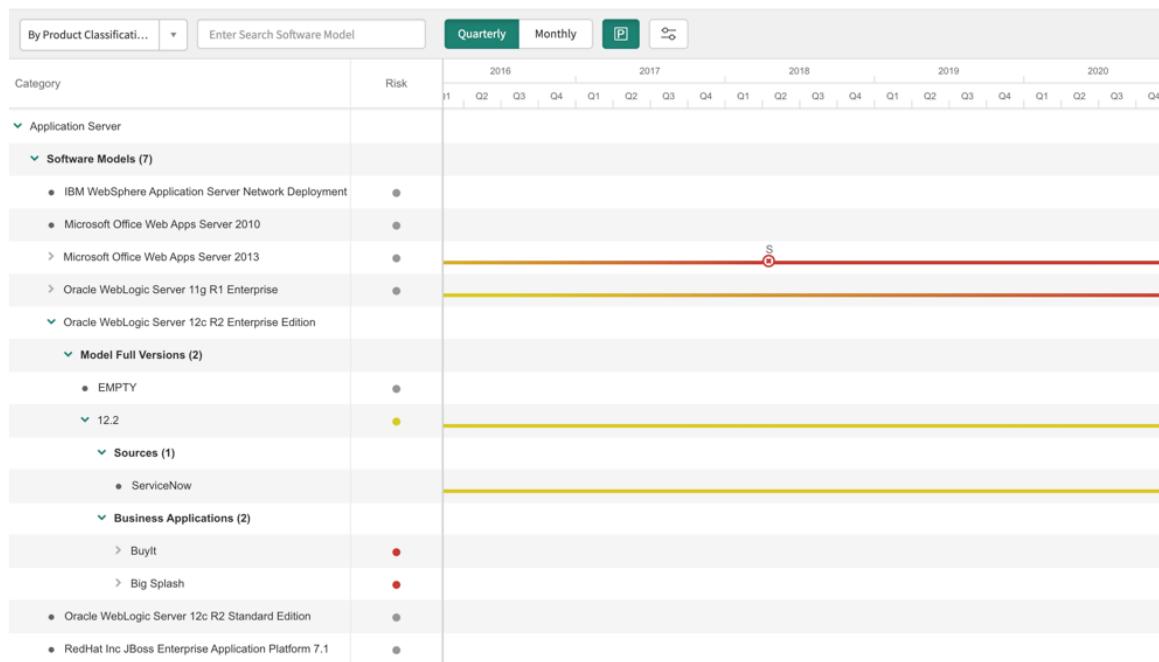
Using TPM depends on SAM plugins. The dependency is as follows:

With SAM Premium plugin

To access the Product Classification [samp\_sw\_product] table, you need the Software Asset Management Premium plugin. Reference to samp\_sw\_product\_classification is in samp\_sw\_product table. This content table is referenced in the Software Product Model [cmdb\_software\_product\_model] table to retrieve the technology information. Subscribing to the SAM Premium plugin enables you to view the applications by Business Applications as well as by Product Classification in the TPM timeline.

## TPM timeline showing By Product Classification view

Home > Technology Portfolio Management



### Without SAM plugin

Product classification is not available without this plugin. Viewing by Product Classification is not available in the TPM timeline view. Software model information is retrieved from the SW Product Model [cmdb\_software\_product\_model] table. Populate this table manually or export the content from an excel sheet.

### Related topics

[View technology risks in timeline](#)

[Relate business application to application service using CI relationship editor](#)

[Associate an application service to hardware model](#)

[Associate an application service to a software model](#)

[Create a risk parameter](#)

[Technology risk calculation](#)

[Run scheduled job to generate risk values](#)

## Technology risk calculation

Assess the technology risks of your business applications by calculating their risks at the software product (considering the model and full version) level and then at the business application level.

Technology risks are calculated at the hardware model and software product (considering the model and full version) levels to determine the risk at the business application level.

## Lifecycle stage - Internal and External

The range set for a risk value at each level such as very high, late, moderate, low, and none vary from one organization to another. You can set the risk value for each lifecycle phase based on your organizational requirements. Use the software product lifecycle form to

associate the lifecycle phase for each software model with a risk. Based on the selected risk the parameter risk is determined.

The risk values in the lifecycle table are very high, high, moderate, low, and none. Accordingly the risk is also very high, high, moderate, low, or none.

For lifecycle stage parameters, only the risk value is considered irrespective of the lifecycle phase.

## Aging - Internal and External

Similarly, the aging internal and external has the following risk values:

- 0–90 days is high risk.
- 90–180 days is moderate risk.
- More than 180 days is low risk.

Based on the internal and publisher lifecycle stages and the internal and publisher aging stages, the risk of the hardware and software models are calculated as follows:

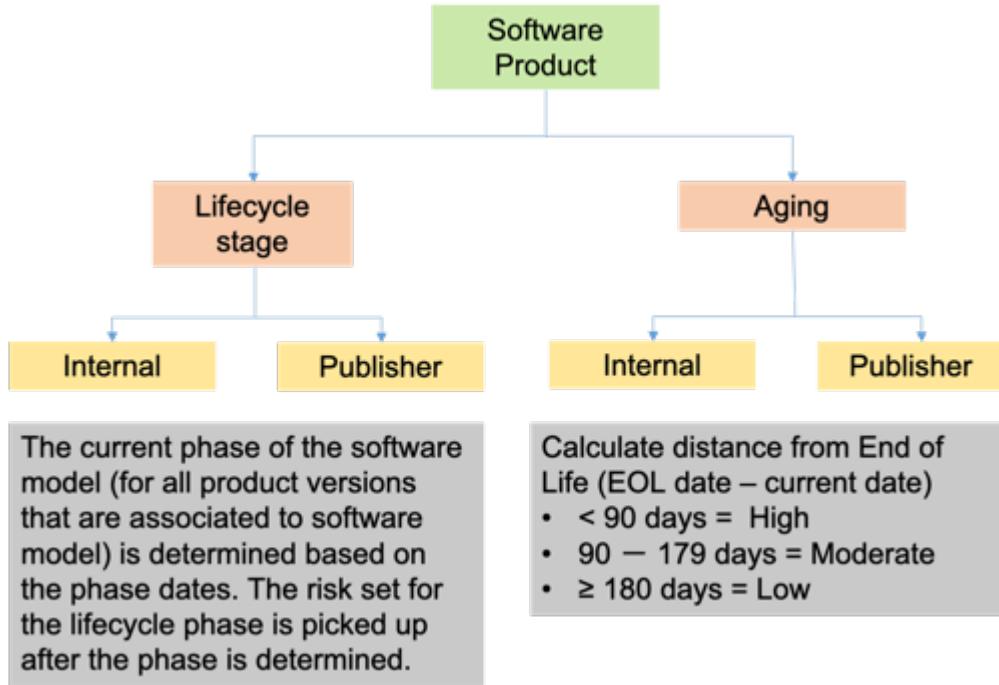
- If there is a single High risk, then the risk of the software model is High.
- If there is a single Moderate risk, then the risk of the software model is Moderate.
- The risk of the software model is Low only if the risk of all the underlying components are Low.
- If there is a single High risk, then the risk of the hardware model is High.
- If there is a single Moderate risk, then the risk of the hardware model is Moderate.
- The risk of the hardware model is Low only if the risk of all the underlying components are Low.

**i Note:** The engine first calculates the risk at the hardware and software models, it then calculates risk at the application service level, based on the risks of all the underlying hardware and software models. Finally it calculates the risk at the business application level based on the risk of the production instances which are nothing but production application service.

The risk calculation for aging parameters are scripted and you can edit as required.

## Parameters to determine software product risk

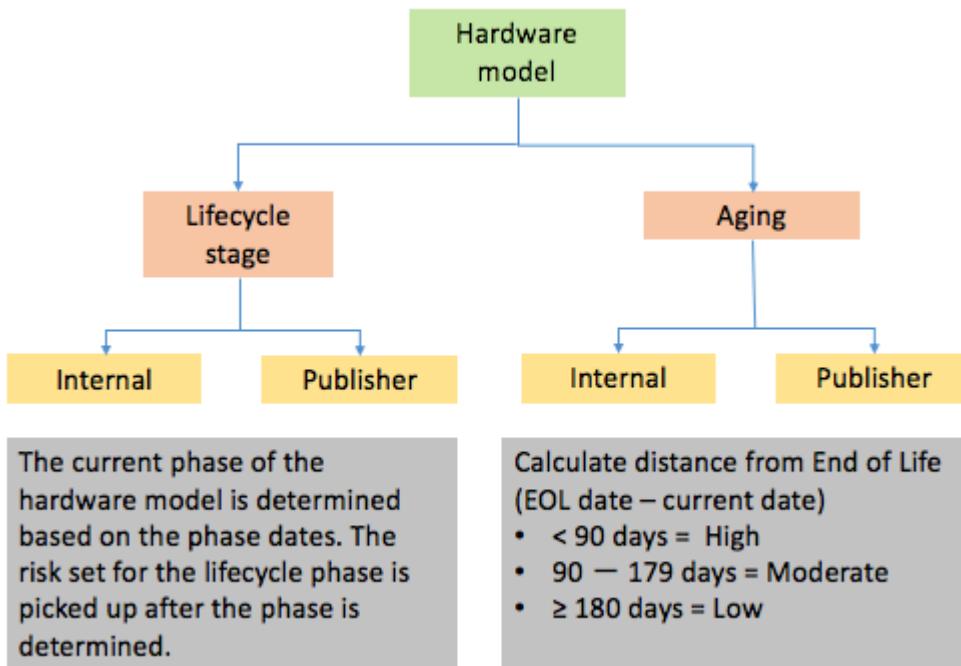
### Parameters to determine risk at software model level



Risk on a software model is calculated based on four parameters, namely internal lifecycle stage, external lifecycle stage, internal aging, and external aging.

## Parameters to determine hardware model risk

### Parameters to determine risk at hardware model level

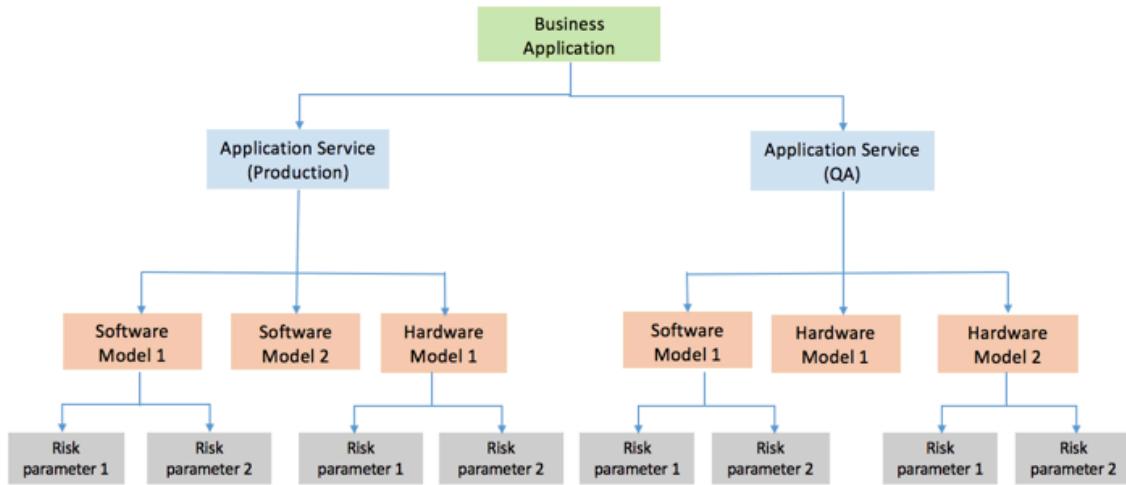


Risk on a hardware model is calculated based on four parameters. The parameters are internal stage risk, publisher stage risk, internal aging risk, and publisher aging risk.

## Calculating technology risk at business application level

A business application can run on many software models. The risk of a business application due to its underlying software models is derived from the risk of the individual software models.

### Calculating risk at the business application level



#### Risk at hardware model level

Based on the four hardware risk parameters, the technology model suggestion engine calculates the risk of the hardware model and the highest risk value is assigned to the hardware model. If the risk of hardware is high, then the risk of the application service, which runs on the hardware, is evaluated to be high. The engine stores the risk data of the hardware model in the Hardware Model Risks [sn\_apm\_tpm\_hardware\_model\_risk] table.

#### Risk at software model level

Based on the four software risk parameters, the technology model suggestion engine calculates the risk of the software model. If the risk of software is high, then the risk of the application service, which runs on the software, is evaluated to be high. The engine stores the risk data of the software model in the Software Model Risks [sn\_apm\_tpm\_software\_model\_risk] table. This data is rendered on the software model timeline.

#### Risk at application service level

If any of the hardware or software models on which the application service runs is evaluated to be on high risk, then the application service is determined to be at a high risk.

#### Risk at business application level

If the application service is of high risk, then the business application which runs on the application service is also high.

- If one of the software models is at High risk, then the business application is at High risk.
- If one of the software models is at Medium risk, then the business application is at Medium risk.
- The risk of the business application is Low only if all the underlying software models have a Low risk.
- If one of the hardware models is at High risk, then the business application is at High risk.

- If one of the hardware models is at Medium risk, then the business application is at Medium risk.
- The risk of the business application is Low only if all the underlying hardware models have a Low risk.

You can customize the script that is executed to calculate the risks at the product model risk level (hardware and software models), application service risk level, and business application risk level. For more information, see [Configure risk bubble up logic](#).

#### Related topics

[Configure script to customize risk calculation](#)

[Run scheduled job to generate risk values](#)

## Application Portfolio Management (APM) Cloud Assessment

The Cloud Assessment scoring profile in Application Portfolio Management helps you to evaluate a business application for its cloud migration readiness.

To get the cloud assessment option in the Application Portfolio Management, you must install the Application Portfolio Management Cloud Assessment application from the [ServiceNow Store](#). For instructions to download the application, see [Install Cloud Migration Readiness Application](#).

## Indicators for the Application Portfolio Management (APM) Cloud Assessment

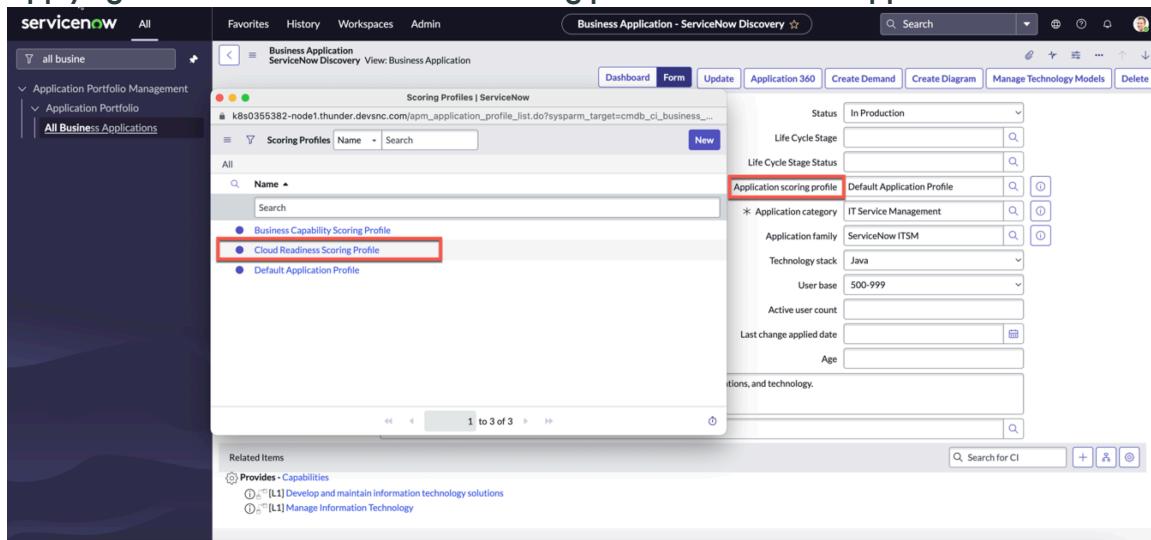
The indicators are associated with the APM Cloud Assessment scoring profile. These indicators help you to evaluate business applications for their cloud migration readiness.

To check out all the indicators, see [APM Cloud Assessment Scoring Profile](#).

## Applying the APM Cloud Assessment scoring profile to a business application

You can apply the Cloud Assessment scoring profile for a business application to assess its eligibility for cloud migration. In a business application form, you can select the APM Cloud Assessment scoring profile for the **Application scoring** profile field. For information to fill other fields, see [Add or edit a business application](#).

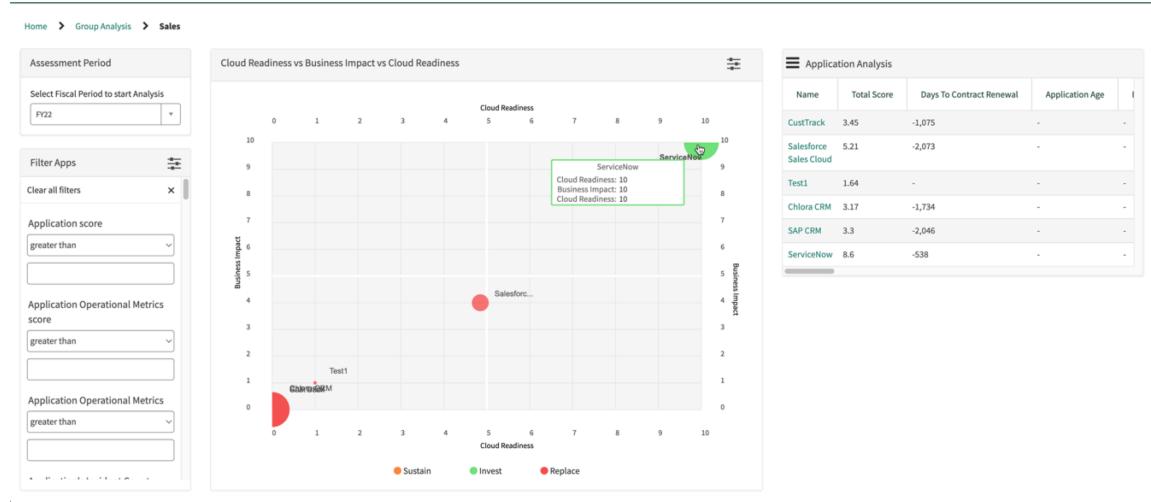
### Applying the APM Cloud Assessment scoring profile to a business application



## Analyzing the APM Cloud Assessment scoring of a business application

You can analyze and identify strategies for cloud migration of a business application by plotting application indicator scores through interactive graphs in the bubble chart. On the Group Analysis page, use the bubble chart to plot the indicator scores of the applications in the X and Y axis. You can then use these scores to strategize goals and create a demand to invest in, replace, or sustain the application. To know more about analyzing the indicators scores of a business application, see [Analyze application scores in a bubble chart](#).

### Analyzing the APM Cloud Assessment scoring of a business application



### Related topics

[Install Application Portfolio Management \(APM\) Cloud Assessment Application](#)

## Architectural artifacts

Architectural artifacts are created to describe a system, solution, or state of an enterprise. The goal of architectural artifacts in APM is to enable Enterprise Architects to create and manage artifacts in their organization.

Sometimes you may rely on external sources to keep and maintain many of your enterprise architecture elements such as diagrams, reports, and other visualizations. However, it is hard to associate these artifacts to the ServiceNow objects such as business applications or business capabilities.

Using the architectural artifacts feature, you can create and associate artifacts to an ServiceNow

As an Enterprise Architect, use the Architectural Artifacts module to perform the following tasks:

- Review and approve architectural artifacts.
- Keep track of artifacts versions.
- Relate architectural artifacts to categories that are configured to match the needs of the organization.
- Associate your architectural artifacts to your organization's business capabilities and business applications.

The Architectural Artifacts feature extends the functionality of the ServiceNow® Document Management plugin (com.snc.platform\_document\_management) and can create a relationship with ServiceNow® objects: Business Applications and Business Capabilities.

## Related topics

- [Create or edit an architectural artifact](#)
- [Associate an artifact to a business entity](#)
- [Managing categories for artifacts](#)
- [Create an artifact version](#)
- [Approve or reject an artifact version request](#)
- [Approve architecture review requests](#)
- [Application Portfolio Management \(APM\) integration with Lucidchart](#)

## Managing categories for artifacts

Categories are especially useful for grouping your artifacts into relevant sections. You can create and edit categories as required, but only one category can be assigned at any one time to an architectural artifact.

Use categories to group your# architectural artifacts more efficiently. As the artifacts administrator, you can create and edit any number of categories. The categories can contain references to the child categories and to the artifacts. When creating an architectural artifact, the category must be pre-defined to ensure it can be assigned to the artifact. The following categories are provided from the base system. These categories are aligned with the TOGAF standard.

- Application Architecture
- Architecture Vision
- Business Architecture
- Data Architecture
- Opportunities and Solutions
- Preliminary Phase
- Technology Architecture

## Business Application Lifecycle Management services

You can order a business application for your enterprise like any other service catalog item and register it as a new application in the application portfolio.

Application Portfolio Management (APM) integrates with Service Catalog to create a service catalog category called Business Application Lifecycle Management Services.

Use this service catalog category to request and register a business application in APM. As you on-board a new application into the APM inventory, the machine-learning business application solution predicts and suggests an appropriate category for the application. For more information, see [Predictive Intelligence for Application Portfolio Management](#).

Furthermore, you can also use this service catalog category to request a review of a technology change in the business application with the IT Architecture Review Board.

You can also use the business application lifecycle management service catalog to decommission an application that you no longer require. Proper decommissioning of an application takes care of:

- Archival of data generated when the application was in use.
- Uninstall all related software that the application depended on.
- Removal of any hardware dependency for the software.

#### Related topics

[Use Business Application Lifecycle Management to request or retire an application](#)

[Manage Business Application Lifecycle Management service requests](#)

[Use Business Application Lifecycle Management to request an architecture review](#)

## Application assessment

Set up indicators to measure the usability, cost, quality, performance, and risk of applications. Evaluate and score your business applications based on qualitative inputs. You can translate abstract information of applications based on surveys and assessments into more tangible concrete metrics. These assessments help you make strategic decisions on whether to replace or upgrade applications.

Watch this five-minute video to learn more about APM Scores and Indicators.

You can use existing assessment metric types or configure them per your requirements.

### Framework setup for application assessment

You can create indicators and score profiles based on which you can assess your applications. Application indicators are business metrics that help derive application scores.

Application Portfolio Management is integrated with key applications in the ServiceNow platform to provide a deep insight into the applications. These integrations help you:

#### Identify cost saving opportunities

The Hierarchy of Segments in the Financial Management application tracks the cost allocations at the application level, which provides a complete cost breakdown for the application.

#### Organize applications to determine their rationalization

You can identify multiple applications assigned to the same application category, region, or business. This information helps you to know who is using the applications, the usage frequency, the application status, and make informed decisions.

#### Identify opportunities for modernizing and investing in application

You can identify applications that have contracts to renew, low usage, or low customer satisfaction based on surveys results.

Use the preconfigured indicators or create your indicators to assess applications with dimensions such as cost, quality, technical risk, investments, user satisfaction, and business value. [Preconfigured indicators](#) are sourced from Financial Management, IT Service Management, project portfolio management, surveys, assessments, SQL queries, performance analytics, and custom scripts.

** Note:** APM supports only the Fiscal Calendar type, Standard.

## Related topics

[Create or edit an indicator to assess an application](#)

[Create an application score profile and attach profile indicators](#)

[Job schedule to compute application scores](#)

## Preconfigured indicators and their source applications

The preconfigured Application Portfolio Management indicators and the applications they have been sourced from help you to assess the applications across dimensions such as cost, quality, and risk. You can create additional indicators, apart from the preconfigured indicators, by copying and modifying them.

### Preconfigured indicators and sources

Indicator name	Frequency	Type	Source	How is it calculated?	Description	Jobs
Facilities cost	Quarter	Custom Script	ITFM product. ITFM_Allocation table	Data will be <del>on Allocated</del> in the ITFM tables only after the financial modeling process is completed	Facilities cost for business application	
Hardware cost	Quarter	Custom Script	ITFM product. ITFM_Allocation table	Data will be <del>on Allocated</del> in ITFM tables only after the financial modeling process is completed	Hardware cost for business application	
Labor cost	Quarter	Custom Script	ITFM product. ITFM_Allocation table	Data will be <del>on Allocated</del> in the ITFM tables only after the financial modeling process is completed	Labor cost for business application	
Other cost	Quarter	Custom Script	ITFM product. ITFM_Allocation table	Data will be <del>on Allocated</del> in the ITFM tables only after the financial	Other cost for business application	

## Preconfigured indicators and sources (continued)

Indicator name	Frequency	Type	Source	How is it calculated?	Description	Jobs
				modeling process is completed		
Services cost	Quarter	Custom Script	ITFM product. ITFM_Allocation table	Data will be <del>on Aggregate</del> in the ITFM tables only after the financial modeling process is completed	Services cost for business application	
Software cost	Quarter	Custom Script	ITFM product. ITFM_Allocation table	Data will be <del>on Aggregate</del> in the ITFM tables only after the financial modeling process is completed	Software cost for business application	
Application TCO	Quarter	Custom Script	ITFM product. ITFM_Allocation table	Data will be <del>on Aggregate</del> in the ITFM tables only after the financial modeling process is completed	Total application cost from all the buckets	
Application's Quarter Incident Count		Custom Script	incident	Data will be available in the incident table only after the business application is associated to the incident.	Indicator that gets the count of all incidents associated to the business application tied to the scoring profile of which the indicator is part.	

## Preconfigured indicators and sources (continued)

Indicator name	Frequency	Type	Source	How is it calculated?	Description	Jobs
Application's Quarter Instance – Incident Count		Custom Script	incident	<p>Gets incident count attached to all Application Instances, which are mapped to a business application and rolls it up to application.</p> <p>The incident count is calculated first at the application instance or application service level, and then it is rolled up to the business application level.</p>	<p>Indicator that gets the count of all incidents associated with application instances. The application instances, in turn, are associated to a business application tied to a scoring profile of which the indicator is a part.</p>	
Usage	Month	Query Condition	APM product. cmdb_ci_business table	Calculated from the <b>Active User Count</b> field	<p>Number of user sessions and users for the application for a given fiscal period.</p>	

## Preconfigured indicators and sources (continued)

Indicator name	Frequency	Type	Source	How is it calculated?	Description	Jobs
Number of Incidents via Service	Daily	Performance Analytics	Mapped to <b>Performance Analytics &gt; Indicators &gt; Automated Indicators &gt; Number of new incidents</b> Source = Incidents.New (Incident table)	Number of incidents opened today. Calculated from the Impacted Business Applications of the incident record.	Number of new incidents. Daily and historic data collection	[PA Incident] Daily Data Collection [PA Incident] Historic Data Collection
Number of Problems via Service	Daily	Performance Analytics	Mapped to <b>Performance Analytics &gt; Indicators &gt; Automated Indicators &gt; Number of new problems</b> Source = Problems.New (Problem table)	Problems created today. Calculated from the Service field of the problem record.	Number of problems opened today. Daily and historic data collection	[PA Problem] Daily Data Collection [PA Problem] Historic Data Collection
Number of Changes via Service	Daily	Performance Analytics	Mapped to <b>Performance Analytics &gt; Indicators &gt; Automated Indicators &gt; Number of new changes</b> Source = Changes.New (change_request table)	Number of changes with a registration date (change_request) on collection date. Calculated from the Impacted Business Applications of the change request record.	Number of changes opened today. Daily and historic data collection	[PA Change] Daily Data Collection [PA Change] Historic Data Collection
Customer satisfaction (CSAT)	Quarter	Assessments	Assessment Metric Type:		Template NPS	

## Preconfigured indicators and sources (continued)

Indicator name	Frequency	Type	Source	How is it calculated?	Description	Jobs
			Customer Satisfaction Assessment Metric Category: CSAT			
Functional fit	Month	Assessments	Assessment Metric Type: Functional Fit Assessment Metric Category: Functional Fit		Template Net Promoter Score (NPS)	
Technical risk	Month	Assessments	Assessment Metric Type: Technical Risk Assessment Metric Category: Performance		Technical risk captured through survey for the fiscal period. Template NPS	
Technology Lifecycle Risk	Month	Custom Script	Assessment Metric Type: Functional Fit Assessment Metric Category: Functional Fit		Get the technology lifecycle risk of a business application for a selected fiscal period.	
Business value	Quarter	Assessments	Consolidation: Average		Template NPS	
Total change hours	Month	Performance Analytics	Mapped to <b>Performance Analytics &gt; Indicators &gt; Automated Indicators &gt; Summed</b>	Script: Change.Closes All Change Requests closed today considered	Summed hours of closed changes for an application for the day	• [PA Change] Daily Data Collection

## Preconfigured indicators and sources (continued)

Indicator name	Frequency	Type	Source	How is it calculated?	Description	Jobs
			<b>duration of closed changes</b> Source = Changes.Closed (Change_Request table) Fields: Opened, Closed State = Closed, Business Application = any of the APM Business Applications, Closed today		given fiscal period. Time taken to close the changes in hours. Daily and historical data collection.	<ul style="list-style-type: none"> <li>[PA Change] Historic Data Collection</li> </ul>

**Note:** Ensure the following system properties are set to True for Incident and Change indicators.

- To set the properties, navigate to All > System Properties > All Properties and search for the following properties:
  - Populate Impacted Services based on Affected CIs (com.snc.incident.refresh\_impacted.include\_affected\_cis)
  - Populate Business Application related list for incidents (com.snc.incident.populate\_business\_application)
  - Populate the Business Application related list for change requests (com.snc.change\_request.populate\_business\_application)
- To show up the **Impacted Business Applications** tab in the **Related List** of a record, select the **Additional actions** icon and then select **Configure > Related Lists**. Select and move the **Impacted Business Applications** from the **Available** list to the **Selected** list and then select **Save**.
- To see the impacted business applications for the **Number of Incidents via Service** and **Number of Changes via Service** indicators, you must refresh the **Impacted Services and CIs** related list for that record. For instructions, see [Refresh impacted services and CIs for Change](#) and [Refresh impacted services and CIs for incident](#).

### Related topics

[Assessments](#)

[Get started with Survey Management](#)

## Performance Analytic indicators to measure application performance

Use performance analytic (PA) indicators to know the count of incidents, problems, and changes logged against a business application and use this insight to improve the performance of your applications.

Application Portfolio Management uses indicators that are sourced from Performance Analytics (PA). These indicators give a count of incidents, problems, changes, and the number of change requests that were closed on a given day. Follow the given order to run the PA jobs at the scheduled time, and get the scores of the indicators to evaluate the performance of your business applications.

## Order in which to run PA jobs and generate scores

You should run the scheduled jobs in the following order:

1. [PA Incident] Daily Data Collection.
2. [PA Change] Daily Data Collection.
3. [PA Problem] Daily Data Collection.
4. [APM Scheduled job] Load Application Indicators and compute Application Scores.

If there are historic data, then run them in the following order:

### ***(i)* Note:**

You require Performance Analytics Premium for APM (com.snc.pa.premium.apm) plugin to retrieve historic data that are older than six months.

1. [PA Incident] Historic Data Collection.
2. [PA Change] Historic Data Collection.
3. [PA Problem] Historic Data Collection.
4. Regenerate APM scores for required time period. This action deletes the existing scores including daily scores and generates new scores instead of just updating the existing scores.

## Frequency at which indicator scores are generated

Scores are generated as per the scheduled run of the job that executes the script. If the indicator frequency is:

Monthly

scores are generated only on the last day of a month.

Quarter

scores are generated only on the last day of a quarter.

Yearly

scores are generated only on the last day of a year.

***(i)* Note:** Fiscal periods should be generated in the same time zone in which the scores are generated.

## Collection of PA indicator score data

The period unit (days, weeks, or month) at which the PA indicator scores are collected and preserved depends on the frequency of the data source indicator. However, the frequency at which the application indicator collects the PA indicator data source scores varies.

In APM, the frequency of the application indicator must be greater than or equal to the frequency of the data source indicator.

The following table describes the frequency at which APM collects data from the data source indicators after the job runs:

**APM data collection frequency**

APM frequency	Data source indicator frequency
Monthly	Monthly
Quarterly	Monthly and Quarterly
Yearly	Monthly, Quarterly, and Yearly

If you are an APM customer, who has upgraded to the Washington DC release, then the **Daily** frequency of Performance Analytics data source indicator is not available.

*RemoveDailyFreqAndUpdatePAIndicator* fix script automatically removes the **Daily** frequency of PA indicators and updates the frequency to **Monthly**.

## Limitations to display application breakdowns in PA scoresheet

If there is a large number of business applications installed, then all the breakdowns are not displayed in the **Performance Analytics > Scoresheet**, as there is a limitation set in the system properties: `com.snc.pa.scoresheet.max_elements` and `com.snc.pa.scorecards.max_breakdown_elements`. To reconfigure the property limitation:

1. Navigate to **Performance Analytics > System > Properties**.
2. Enter the maximum number in the **Maximum number of elements of a breakdown in Scoresheet** field. The number must be greater than or equal to the number of business applications installed in your system.

### Performance Analytics Scoresheet

Performance Analytics

Maximum number of periods prior to today for which scores are collected and kept. The number of periods varies according to the score collection frequency, as follows: daily; weekly; bi-weekly; four weeks; monthly; bi-monthly; quarterly; fiscal quarterly; half-yearly; yearly; fiscal yearly [?](#)

732;105;53;40;60;30;20;20;10;10

Maximum number of periods prior to today for which lists of records (snapshots) related to a score are collected and kept. The number of periods varies according to the score collection frequency, as follows: daily; weekly; bi-weekly; four weeks; monthly; bi-monthly; quarterly; fiscal quarterly; half-yearly; yearly; fiscal yearly [?](#)

183;26;13;10;15;8;5;5;3;3

Start of the fiscal year of your company [?](#)

January

Default indicator target color scheme [?](#)

3 color traffic light

Default chart color scheme [?](#)

Default UI14

Maximum number of elements of a breakdown in Scoresheet [?](#)

600

Breakdown element cutoff point in visualizations [?](#)

50

Maximum number of breakdown elements in scorecard lists [?](#)

2000

3. Enter the maximum number in the **Maximum number of breakdown elements in scorecard lists** field.
4. Click **Save**.

### Job schedule to compute application scores

After you set up indicators, create score profile, and attach profile indicators, schedule a job to periodically compute the application scores.

Understand how the system calculates application scores and create your application score profile per your requirements.

The assessment framework [calculates the application score for each application](#) on a scale of 1–10, where 10 is a good score and 1 is a low score. Assessments are based on various configured indicators, which you can configure. Each of these indicators periodically captures the related application data, which is used to derive the application score. These indicators with their respective value (weightage) are added to an application profile. The application is then associated with the application profile, which calculates the application score.

### Normalization of application scores

The indicators and their respective weights are used to calculate application score profiles for each configuration item. Use the score profile to calculate application scores and assess the applications. Apply these scores to compare applications and make strategic decisions about which ones to keep, replace, maintain, or invest more in.

The preconfigured indicators or the indicators that you created retrieve their related data based on the frequency set at the indicator definition stage. This data is captured in the **Application weight** column of the Application Indicator Score [apm\_app\_indicator\_score] table. The **Target maximum** and **Target minimum** that are set while creating an application indicator are for calculating the applications normalized value.

**Note:** The **Target maximum** and **Target minimum** are not available when the data source is Assessments.

The normalized value of the application score, which is measured on a scale of 1–10, is derived from the following formula:

$$\frac{(\text{Application Weight} - \text{Target minimum})}{(\text{Target maximum} - \text{Target minimum})} * 9 + 1$$

**Note:**

- If the **Target maximum** and **Target minimum** are not set, then the maximum value within the range of applications is taken as the target maximum value. Similarly, the minimum value within the range of applications is taken as the target minimum value.
- If the **#Target maximum** and **#Target minimum** are set and the **Consider Absolute Values** check box is selected, the entered values are considered.
- If the **Target maximum** and **#Target minimum** are set and the **Consider Absolute Values** check box is cleared, the values are considered based on the following intelligent logic.

Target maximum = Minimum value of (Target maximum value defined in the Indicator [apm\_metric] table, Maximum value of Application Weights for the fiscal period)

For example, consider a scenario where:

- The application weights are 10, 20, 30,....., and 1000.
- Value entered in the Target maximum field is 100.

With these assumptions, the Target maximum value considered is 100, as the defined Target maximum value (100) is lesser than the maximum application weight (1000).

Target minimum = Maximum value of (Target minimum value defined in the Indicator [apm\_metric] table, Minimum value of Application Weights for the fiscal period)

For example, consider a scenario where:

- The application weights are 10, 20, 30,....., and 1000.
- Value entered in the Target minimum field is 100.

With these assumptions, the Target minimum value considered is 10, as the defined Target minimum value (100) is greater than the minimum application weight (10).

The **Application Weight** that is lesser than or equal to the target minimum is given the lower score, which is 1.

The **Application Weight** that is greater than or equal to the target maximum is given the maximum score, which is 10.

When you set the application indicators, you can also configure the **Direction** as Maximize or Minimize. The application with the maximum value gets the minimum score when the direction is Minimize. The application with the minimum value gets the maximum score when the direction is Maximize.

If the **Direction** in the indicator is **Minimize**:

(10 - above calculated Normalized value) + 1

Application profile weightage is then applied on the Normalized value to derive the **Indicator Score**:

Normalized Value \* Weightage as in application score profile %

After the indicator score is calculated for each of the indicators, the application score is calculated by summing up all the indicator scores used in the profile.

If the source of the indicator is **Indicators** in the **Data source** field, then the application weight is calculated as the sum of the normalized scores of all its dependent indicators.

### **Note:**

- The normalized score of the parent indicators is then calculated in a similar manner as it is calculated for all the other indicators.
- The normalized value, indicator score, application weight, target maximum, target minimum, and total weight are all rounded to two decimal places only.

In the figure, since the Cost and Incident indicators are set to minimize, the applications with lower costs and lower number of incidents have higher scores.

#### **Sample application scores**

<b>Business Application</b>	<b>Indicator</b>	<b>Application Weight</b>	<b>Normalized Value (NV)</b>	<b>Indicator Score (NV * 30%)</b>
Application A	Cost	100	10	3
Application B	Cost	150	4.5	1.35
Application C	Cost	200	1	0.3
<b>Business Application</b>	<b>Indicator</b>	<b>Application Weight</b>	<b>Normalized Value (NV)</b>	<b>Indicator Score (NV * 50%)</b>
Application A	Incidents	10	10	5
Application B	Incidents	80	3	1.5
Application C	Incidents	100	1	0.5
<b>Business Application</b>	<b>Indicator</b>	<b>Application Weight</b>	<b>Normalized Value (NV)</b>	<b>Indicator Score (NV * 20%)</b>
Application A	CSAT	10	10	2
Application B	CSAT	2	1	0.2
Application C	CSAT	3	2.125	0.425

#### **Normalized value and application score for an assessment**

If the source of the indicator is **Assessments** in the **Data source** field, then the Target maximum, Target minimum, Application weight, and Total weight values are considered as zero.

For a business application to be considered for scoring, it must be mapped to a respective application profile to which the indicator is associated. You can check the scoring profiles in the `apm_application_profile` list.

All the business application related Assessment Category Results having assessment groups created within a fiscal period are considered for calculating the score. You can check the assessment category results for a business application in the `asmt_category_result` list.

For an assessment group to be considered for computing scores, all the related assessment instances must be either in completed or cancelled state.

```
scaleFactor = (9/ scale factor on metric type)
```

```
appAsmtScoreSUM = SUM of ratings of category results groupedBY source for each assessment group
```

```
appWeight=((scaleFactor * appAsmtScoreSUM )+1;
```

Normalized value = total app weight of BA/appOccurrences.

totalIndicatorsWeightage = the sum of all indicator weightage mapped to a scoring profile.

appIndWeightage = weightage of the current indicator

Indicator Score = normalizedValue \* appIndWeightage /  
totalIndicatorsWeightage

The app occurrence is the occurrences of a business application.

### **Visualization of application performance**

Visualization of the performance of applications in different dimensions on a bubble chart, in a dashboard, and in an application 360 view helps you to take decisions on the applications.

Having set up indicators and attaching application score profiles and running the scheduled job to calculate its scores periodically, your application scores are now ready for viewing.

- Use bubble charts to visualize your business application data plotted on a chart in three dimensions, which helps you to compare and evaluate applications based on their indicator scores.
- Use Application 360 to focus on the business applications that require your attention.
- Use Application Assessments dashboard to view the trends of indicators for different applications.

Related topics

[View application indicator scores](#)

[View all application scores](#)

[Analyze application scores in a bubble chart](#)

[Monitor performance, costs, and workloads in Application 360](#)

[Assess the performance of applications in the dashboard](#)

### **Application strategy**

Formulate your decisions and align them with your organizational goals as Application Portfolio Management collects metrics on applications across various dimensions.

An application strategy portal takes you through a step-by-step process to identify opportunities to cut down the cost and create strategies for applications. It helps you to:

- Decide which application to invest, consolidate, migrate, sustain, replace, or retire based on the organization goals, application score, or indicator scores.
- Create strategic goals and track demands and programs. For example, you can set a goal and create a program to cut down the capital expense (CAPEX) of an application by 40%.
- Estimate or determine the applications assessment scores. For example, if an application score is low because of low business value and low customer satisfaction, then you can initiate a demand to invest in the application.

Related topics

[Create a goal for an application strategy](#)

[Create a demand towards achievement of goal](#)

- Create a program for an application goal  
Create a guided plan to execute a program

## Guided plan to execute a program

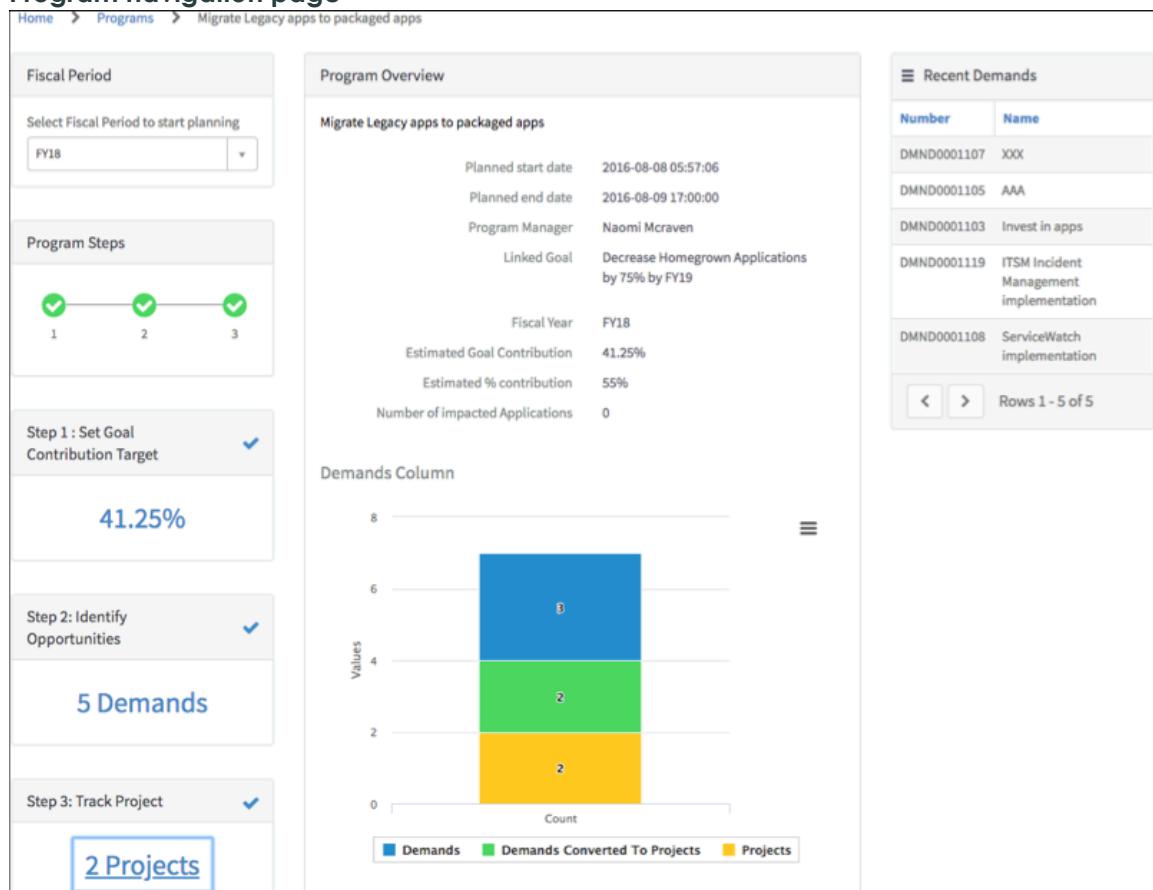
After you create a program, you can use the guided plan to formulate steps in executing the program that you have created.

### **Note:**

You can use the guided plan to execute a program only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

You can select a specific program by clicking the view link of the programs in the Opportunities & Solutions section of the Application Portfolio Management portal to open the guided program navigation page. The Program Navigation page guides you in creating a step-by-step plan to set a goal target, identify opportunities and create demands, and track the project.

### Program navigation page



The Program Navigation page is divided into these sections:

#### Fiscal Period

**Select Fiscal Period to start planning** is the fiscal period for which you set your goal, implement the demands, and achieve the target.

#### Program Steps

The section takes you through a guided step-by-step workflow to complete the tasks and achieve the target goal.

## Step 1: Set Goal Contribution Target

Use the link to set the goal contribution target for the fiscal period.

## Step 2: Identify Opportunities

Identify opportunities to meet the target by analyzing the application scores and indicator scores.

The Group Analysis page consolidates the application details by category and helps you narrow down target applications by filtering them with the application indicator scores and values.

Click open an application category. Based on the indicator scores in the bubble chart, you can create a demand to achieve your goal. Demand is an imperative rightful request created by demand managers and demand users. The user submits a demand and the demand manager approves the demand.

### Group Analysis page

Application Categories					
Application Category	Number of Apps	Cloud	Homegrown	Apps With Expiring Contract	Apps With EOL
Business Intelligence - ETL	2	-	-	-	-
Business Intelligence - Reports	4	1	1	-	-
Contracts	2	-	-	1	-
Customer Support	4	1	1	-	-
Finance	4	-	-	-	-
Human Capital Management	6	1	2	-	-
Inventory Management	4	-	1	1	-
IT Portfolio Management	5	1	1	-	-
IT Service Management	5	3	-	1	-
Logistics	4	-	1	1	-
Manufacturing	4	-	1	1	-
Marketing	3	1	-	-	-
Procurement	3	-	1	-	-
Sales	4	1	-	1	-
Sourcing	2	-	-	1	-

#### Assessment Period

**Select Fiscal Period to start Analysis** in the Group Analysis page is the fiscal period for which you have assessed the applications. Based on these assessments you can create goals and demands, and implement them for the planned fiscal period, which is **Select Fiscal Period to start planning**.

#### Filter Applications

Use the Filter Applications pane to filter the applications based on the application indicators and scores.

To clear all the existing filters in the **Filter Apps** column in one click, instead of clearing each filter attribute field individually, click **Clear all filters**. You can then set your filter criteria to sort the applications for display.

#### Application Categories

The **Application Categories** section lists the applications by their category names and the number of applications that fall within each category.

1. Click the header of a column.
2. To sort the application categories in alphabetical or reverse alphabetical order, click the arrow that appears.
3. In the other application columns, click the arrow to list the values in either ascending or descending order.

Sorting helps to find the information quickly in the list, display higher values first, and also group the applications that have similar values.



Lists the number of demands created, view them individually, and edit them in the demand form.

#### Step 4: Track Project

Track the status of the projects as the demands are approved and the projects are executed.

#### Program Overview section

Gives a brief summary about the planned start and end dates of the program, the manager who drives the program, the goal that is linked to the program with the target percentage set to achieve by the marked fiscal year. In addition, it also displays the following details:

- **Estimated Goal Contribution:** Estimated percentage of the goal that the proposed program targets to achieve.
- **Estimated % contribution:** Percentage of the goal targeted to be achieved in the selected planned fiscal period.
- **Number of impacted Applications:** Number of applications impacted by the program.

#### Demands Column

A stacked chart that represents the demands at the top layer and displays the number of demands created for the program. The middle layer displays and represents the number of demands that have been converted into projects. The bottom layer displays the number of projects created exclusively for the program, and not the demands that are converted into projects.

You can print the chart in any format using the Chart context menu at the top-right corner of the Demands Column.

#### Recent Demands

Displays the number and the name of the demands that are created for the program. To edit a demand, click the demand hypertext to open the demand in the Demand form.

If you have a long list of demands, then displaying all of them on the **Recent Demands** section may have a space limitation. Use the pagination preferences to display a short list and then click the arrows either to progress down or up the list of demands.

## Technology Reference Model

Define the software products standards for your organization and manage unapproved software in your organization. The Technology Reference Model (TRM) feature is available only for software products.

### Overview and benefits of a TRM

In your business enterprise, using an unapproved software can create a risk to the organization. The risks can include the following:

- Security risks: The software might be exposed to security issues.
- Delivery risks: There might not be sufficient knowledge on how to support the software.
- Legal risks: A business application might use the software in illegal ways.

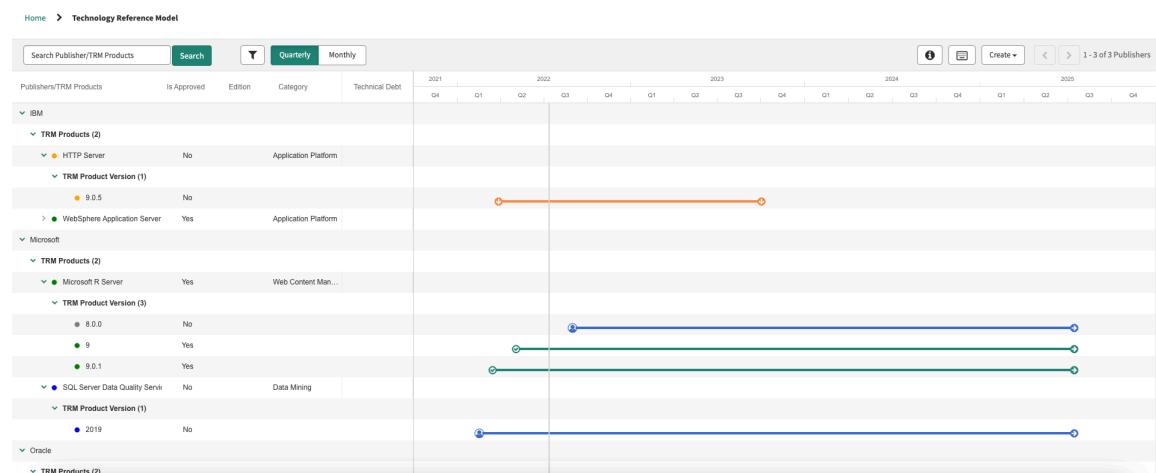
You must define the standards for the software to be used. You must define the software versions that are permitted for use in your organization. Also, you must have a way to explore when a non-permitted software is being used within the organization and in which business applications.

Use the TRM module in the Application Portfolio Management to do the following:

- Approve or restrict the use of a software product within the organization.
- Define how versions of the software can be used within the organization.
- Request an introduction of a new software or the business applications, as new requirements arise.
- Maintain TRM library for your organization.

Using the TRM module, you can manage the standards of the technology and set the right guardrail for technology usage. Setting the standards can improve the technical debt, security posture and save costs for the organization.

### TRM products view



### TRM Product Lifecycle

Each product in the TRM library is associated with a set of life-cycle phases with a start and end date. The life-cycle phases could be approved, unapproved, approved with constraints, Divest, and evaluation.

The TPM home page fetches all the business applications that are being used in your organization. It helps to review the status of the software that is being used. You can understand if any business application is using the software that is not part of the TRM or a software version that is not approved for production. For more information, see [Review the TRM lifecycle status in the Technology Portfolio Management page](#).

## TRM and other modules

**⚠ Warning:** TPM and TRM require installation of either SAM Foundation or SAM Professional. Before installing the SAM Foundation plugin, carefully review the [Software Asset Management Foundation plugin migration](#) documentation. Contact ServiceNow Support if you do not have either SAM Foundation or SAM Professional installed on your instance.

The TRM module uses a similar module to TPM to search in the TRM library. You can view the software that is part of the TRM library, and initiate a request to add the software or software version to the TRM library.

You can also use the TRM with the Software Asset Management (SAM) plugin. This plugin helps you to fetch or select the products and versions for the TRM library. You can also define your own software products when the Software Asset Management integration module is not available for your instance.

### Related topics

[Add or edit a TRM product request](#)

[Add or edit a TRM product lifecycle request](#)

[Request a TRM product using the TRM Catalog](#)

[Request a TRM product lifecycle using the TRM Catalog](#)

[Approve or reject a TRM product or product lifecycle request](#)

[Add or edit a TRM category](#)

[View and edit your product requests](#)

[View and edit your product lifecycle requests](#)

[Add or edit a TRM phase](#)

[Manage Technology Reference Model \(TRM\) technical debt](#)

[Review the TRM lifecycle status in the Technology Portfolio Management page](#)

## Manage Technology Reference Model (TRM) technical debt

Manage the TRM technical debts that are created for the products that aren't aligned with the TRM phases and standards.

### Before you begin

Role required: sn\_apm.apm\_analyst

### About this task

A scheduled job *Populate TRM technical debts in the EA Workspace* runs and creates an entry in the TRM Technical Debt [sn\_apm\_trm\_standards\_technical\_debt] table for EA Workspace. The table shows a reference to the software in any business application that is not aligned with the TRM software phases. The table shows a reference to the software in any business application that either is not defined in TRM or has TRM product lifecycles that restrict the usage of the software. To know how the technical debts are calculated, see [Manage Technology Reference Model \(TRM\) technical debt](#).

Technical debts are created at two levels if any of the following conditions are met. The Level 2 is checked only if the system property `sn_apm_trm.is_product_life_cycle_tech_debt_enabled` is set to True.

- Level 1
  - If a product is associated with a business application, but isn't part of the TRM product list. (OR)
  - If a product is associated with a business application and part of the TRM products list, but has the TRM phase's production unapproved.
- Level 2
  - If a product is associated with a business application, is part of the TRM products list, and has the TRM phase's production approved but doesn't have any associated TRM Product life cycles. (OR)
  - If a product is associated with a business application and part of the TRM products list, has the TRM phase with production approved, and the TRM product lifecycle exists, one of the following cases is considered:

Case 1: If the lifecycle full version of the Application Service Software Model is not empty.

A technical debt is created if the following condition isn't met for a TRM Product lifecycle:

- TRM phase with production approved AND
- TRM product's TRM phase with production approved AND
- Version matching the lifecycle full version of the application service software model record AND
- Phase start date <= Today's date <=phase end date.

Case 2: If the life cycle full version of the Application Service Software Model is empty.

Technical debt is created if the following condition isn't met for a TRM Product Lifecycle:

- TRM phase with production approved AND
- TRM product's TRM phase with production approval AND
- Version is/starts with (based on version operator and isSampPluginInstalled) version of the associated software model AND
- The edition is/starts with (based on edition operator and isSampPluginInstalled) edition of associated software model AND
- Phase start date <= Today's date <=phase end date.

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model (TRM) > Technical Debts**.
2. Review the list of TRM products and associated business applications details.  
You can also view the reason for the technical debt.

## Risk management for business applications

Integrate Application Portfolio Management (APM) with Governance, Risk, and Compliance (GRC) to simplify the work of application owners and risk managers by identifying the risks associated with business applications and adding the controls necessary to mitigate the risks.

ServiceNow® Application Portfolio Management integration with Risk Management enables you to determine the inherent and comprehensive risk on a business application and identify tasks to mitigate the risk.

ServiceNow® Application Portfolio Management integration with Policy and Compliance enables you to view the controls determined on a business application, verify whether those controls are compliant, and determine the tasks required to make the business application compliant with the controls.

The key benefits of this integration are:

- Reduces the time spent by risk managers and application owners on digital risks.
- Provides faster and efficient communication between the application owners and risk managers.
- Provides an overview of the digital risk posture of business applications.

## High-level workflow of the GRC and APM integration solution

The high-level workflow of the GRC and APM integration solution is as follows:

1. A business application is created.
2. Based on the GRC Profile Generation scheduled job that runs in the background, GRC detects a new business application and creates an entity in GRC.
3. When the new application is created as a GRC entity, a new risk identification record is created.
4. The risk manager can modify the configuration record and determine the workflow of the assessment. After a risk identification configuration is published, the risk manager can modify only some fields in the configuration record.
5. A questionnaire is initiated to collect details about the application from the application manager.
6. The application owner responds to the questionnaire.
7. The risk manager reviews the responses and sends the questionnaire back if further information or clarification is needed.

**i Note:** The application owner's responses are retained when the questionnaire is sent back.

8. When the risk manager is satisfied with the responses, the inherent assessment is initiated based on the risk assessment methodology configuration in GRC. For more information, see [Configure inherent assessment](#).
9. GRC maps the risks and compliance objects based on the entity types.
10. The risk manager reviews the information object mapping.
11. The system executes the recommendation engine based on the algorithm selected in the configuration.
12. The risk manager reviews and maps the recommended risks, policies, and citations based on the associated information objects.
13. The recommended controls based on associated citation policies and risks are associated.
14. The application owner manages the control life cycle by working with relevant stakeholders to implement controls.

Related topics

[Application risk assessment using Advanced Risk Assessment](#)

## Product lifecycle data on the timeline

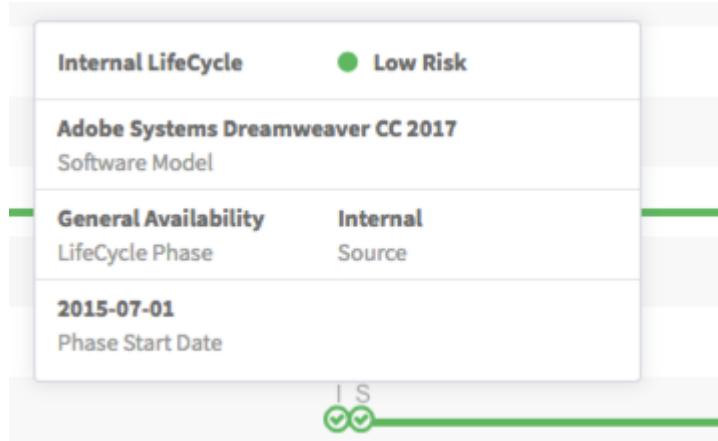
The lifecycle data of software models (of each full version) and hardware models depend on its type, phase, source, dates, and the associated risk. Understand the conditions and considerations applied to denote the software model risks on the timeline. This knowledge enables you to decode the characters on the timeline.

### Lifecycle phases on the timeline

The timeline depicts two types of lifecycles, which are publisher and internal. The Publisher Lifecycle information that is shown on the pop-up of the timeline are retrieved from the Software Product Lifecycles [sam\_sw\_product\_lifecycle] table for the software and Hardware Model Lifecycle [cmdb\_hardware\_model\_lifecycle] table for the hardware. This information is denoted as characters such as S and I on the timeline. S, for example, denotes ServiceNow and I for Internal Lifecycle.

**Note:** Both the hardware and software models are together referred to as product model.

#### Internal lifecycle information



As a SAM user or software model manager, you can [add the software product lifecycle](#) to the software product lifecycle table. This table holds the information of the software product, its lifecycle type (internal or external), full version, lifecycle phases, start date of the phase, and the risk.

As a hardware model manager, you can add lifecycle data to a hardware model.

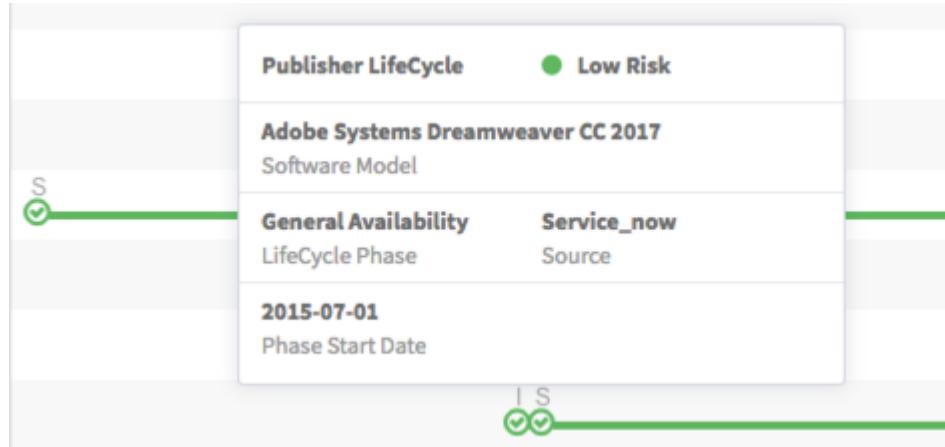
**Note:** The start date of a subsequent lifecycle phase marks the end of the previous lifecycle phase. Hence there is no phase end date specified in the lifecycle information pop-up.

If you do not want a lifecycle phase to be rendered on the TPM timeline, then set the **Active** flag of that software product lifecycle record to false. For example, you can have **General Availability**, **End of Extended Support**, and **End of Support** lifecycle phases as three records for **Oracle DB Server** software model in the Software Product Lifecycles list. However, if you do not want **General Availability** phase to be shown on the timeline, you can clear the **Active** check box in the Software Product Lifecycle form for that lifecycle phase record. As a result, the timeline starts with the End of Support phase. Although the lifecycle phase record exists for the software product lifecycle, the lifecycle data will not be rendered on the timeline. Because only active lifecycle records are considered and plotted in the TPM timeline.

## Lifecycle sources on the timeline

The sources of the publisher and internal lifecycle types are generated externally and internally, respectively. The records that are created internally are marked as **I** on the timeline and you cannot edit such product lifecycle source. But, if the publisher is external and if there are more than one publisher source for the same product model, then you can configure your preferred publisher source using the [field mapping functionality](#) ↗ to the **Sequence** field in the Choices [sys\_choice\_list] table.

### Publisher lifecycle information



The timeline shows the publisher sources that fulfill the following conditions:

- The publisher source with the least sequence number is prioritized and plotted on the timeline.
- If a product model has multiple publisher sources for its lifecycle phases, then the source with the least Sequence number alone is plotted on the timeline and the rest of the phases are not considered.
- The first alphabet in the name of the publisher source is plotted on the timeline. However, if there is more than one source beginning with the same letter, then the character is appended with a positive integer. For example, C1 for Central, C2 for Corporate.

## Date range configuration for the lifecycle phases

If you are an admin user, then you can configure the date ranges.

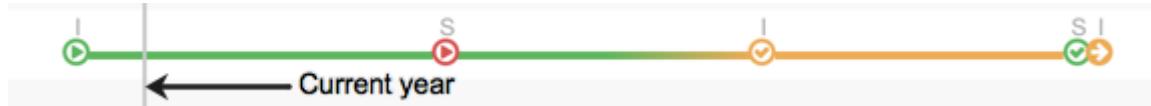
1. To configure the date ranges, navigate to **System Properties > All Properties**.
2. Click `startRangeOfTPMLifecycle` property name to open the record.
3. Enter a positive value of your choice for the start range of TPM lifecycle in the timeline.
4. Click **Update**.
5. Click `endRangeOfTPMLifecycle` property name to open the record.
6. Enter a positive value of your choice for the end range of TPM lifecycle.
7. Click **Update**.

To know more about the Date conditions and the lifecycle phases of the record, see [Date conditions](#).

## Color-coded timeline to identify product model risks

- If there are internal as well as publisher records for a phase, then internal overrides the publisher for that phase.

### Example of timeline where internal overrides external



- The last phase in the timeline takes the risk color and source of the previous phase that is not overridden.

### Example of last phase acquiring the risk color of the previous phase that is not overridden



## Assessment form for risk and control information

Risk managers use assessment forms to gather information about an application's risks and controls. System administrators must make the forms accessible through the business application so that application managers can respond.

Questionnaires initiated by risk managers are the basis for assessment forms sent to application managers to collect risk or control details about their applications. For information for risk managers about how to configure the business application form, see [Configure the business application form for risk management](#).

For information for application managers about how to respond to the questionnaire, see the [Respond to a risk assessment questionnaire](#) and [Take the control attestation survey](#) topics.

## Information portfolio

Use the information portfolio to capture information from the assets of your organization as information objects. You can categorize the information assets and determine its business application use. You can also connect the different layers where data exists and map the layers. Mapping helps to retrieve the information and track the information flow.

## Information portfolio data model

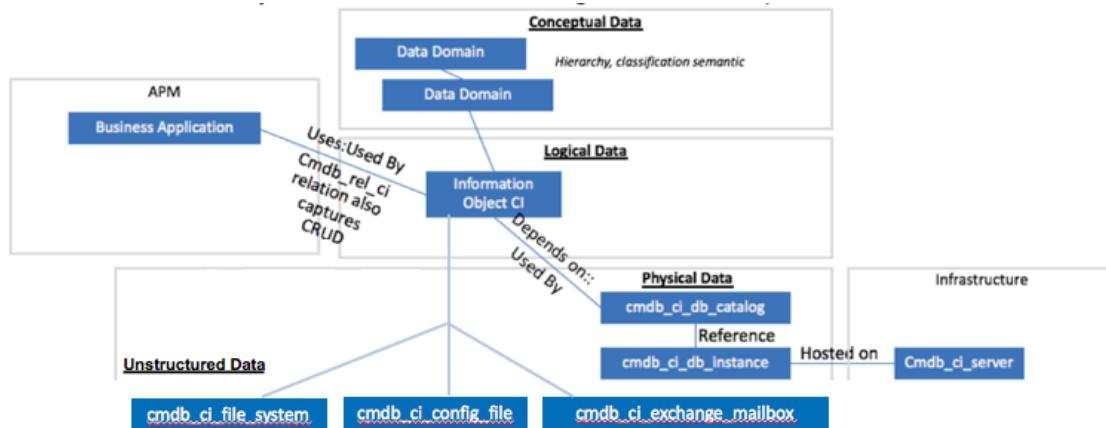
The basic data model of information portfolio is in the introduction of two tables, which are Information Object and Data Domain.

- Information object is a configuration item that displays information in an organized form. The purpose of the information object is to logically describe the type of data (or the information) that is interchanged between the application and the database. The database being the one that serves the application with data.
- Data domain is to classify or categorize the information objects.

Application Portfolio Management (APM) integrates with information portfolio by relating a business application with the database. The database provides the information to the application using an intermediary cmdb CI class called information object [cmdb\_ci\_information\_object] table.

The business application is related with the information object by establishing `Uses::Used` by cmdb CI relationship. The information object, in turn, is linked to the database catalog and instances by establishing `Depends on::Used` by cmdb CI relationship.

### Information portfolio data model



APM integrates with ServiceNow Discovery that finds database applications, database instances, and database catalog. The database catalog lists all the catalog objects, or databases, discovered for an instance of a database.

### Plugin activation procedure

CMDB plugin has the Information Object (cmdb\_ci\_information\_object) CI. When APM plugin is activated, the data domain field gets added to the cmdb\_ci\_information\_object table. The data domain field references the Data Domain table, which is included in the APM plugin.

#### Related topics

[Create a data domain](#)

[Create an information object referencing data domain](#)

[Relate a business application to an information object](#)

[Relate the information object to the database catalog](#)

[Relate a business application to another business application](#)

### Domain separation and Application Portfolio Management

Domain separation is supported in Application Portfolio Management. Domain separation enables you to separate data, processes, and administrative tasks into logical groupings called domains. You can control several aspects of this separation, including which users can see and access data.

### Support level: Basic

- Business logic: Ensure that data goes into the proper domain for the application's service provider use cases.
- The application supports domain separation at run time. The domain separation includes separation from the user interface, cache keys, reporting, rollups, and aggregations.
- The owner of the instance must set up the application to function across multiple tenants.

Sample use case: When a service provider (SP) uses chat to respond to a tenant-customer's message, the customer must be able to see the SP's response.

For more information on support levels, see [Application support for domain separation](#).

## How domain separation works in Application Portfolio Management

While domain separation in APM is at the "Data only" level, there are a few factors to help you in your use of domain separation:

- Data can be domain separated.
- The domain column is present for base system application tables and APM tables.
- Domains are created and domain-specific configuration is managed by instance owner.
- Tenant domains can manage their own application data.
- Application properties are tied to the domain.
- Business logic and processes can be domain-separated by instance owner. Business rules and policies can be created in specific domains by tenants.
- Business logic and processes can be administered by tenant domain.

Related topics

[Set up domain separation for APM users](#)

## Application Portfolio Management Platform Analytics Solutions

Platform Analytics Solutions contain preconfigured dashboards. These dashboards contain actionable data visualizations that help you improve your business processes and practices.

### Platform Analytics Solutions

Use the Platform Analytics widgets on the dashboard to visualize data over time, analyze your business processes, and identify areas of improvement. With Platform Analytics Solutions, you can get value from Performance Analytics for your application with minimal setup. You can always create your own objects as well.

**Important:** Set up and test Platform Analytics Solutions on a non-production instance before enabling them in production.

To enable the solution plugin for Application Portfolio Management, an admin can navigate to **System Definitions > Plugins** and activate the Performance Analytics - Content Pack - Application Portfolio Management plugin.

Related topics

[Platform Analytics Solutions](#)

[Activate your Performance Analytics subscription](#)

## Predictive Intelligence for Application Portfolio Management

The Predictive Intelligence for Application Portfolio Management uses machine-learning algorithms to predict, suggest, and drive the data outcome of the new application that is onboarded.

The application similarity machine-learning solution predicts and suggests the category of the business application when you enter the name and the benefit of the business application in the Register a Business Application form.

Predictive Intelligence for Application Portfolio Management has the following benefits:

- Uses the data in your instance and hence the suggestions of the machine-learning solution are more accurate.
- Provides similarity definition for new applications based on the name and description of the existing applications in the Business Application table [cmdb\_ci\_business\_app].
- Suggests categories for the application that you are onboarding to help you sort it into an appropriate category. It is important to categorize an application as it defines its purpose and key business function in the APM inventory.
- Enhances the **Register a Business Application** feature offered by [Business Application Lifecycle Management](#) services.

## Solution definitions for Predictive Intelligence of Application Portfolio Management

The solution definitions for the predictive intelligence of Application Portfolio Management are available in the Application Portfolio Management – Predictive Intelligence plugin (com.snc.apm.predictive\_intelligence). For more information, see [Activate Application Portfolio Management](#).

### Solution definition for Application Portfolio Management

Solution Definition	Solution Type	Description
Business Application Similarity	Similarity	Predicts the <b>Category of the business application</b> field from the <b>Name of the business application</b> field and the description provided in the <b>Benefit of the business application</b> field.

### Maintaining prediction accuracy

If your business applications table has more diversified data, then the chances of the machine-learning solution to collect and compare your existing records with new similar records are more. Therefore, the prediction results of categorizing the business application from the name and the description entered by the requester may be more accurate.

You can manage prediction drift by retraining the similarity definition of a business application similarity model provided by the base system. Once your machine-learning solutions are trained, you can call on the Predictive Intelligence API to make a solution prediction.

## APM Predictive Intelligence Workbench

The Application Portfolio Management (APM) Predictive Intelligence Workbench provides prebuilt use case templates that guide you through your predictive machine-learning implementation to create intelligent processes for business applications. Business process architects use prebuilt functionality, including pretrained models to get started with machine learning use cases.

The APM Predictive Intelligence Workbench includes a prebuilt use case template that systematically guides you through the following process to add value to your business applications:

- Creating and training new predictive models.
- Evaluating and testing the predictive models.
- Adding the predictive models to your business process.

Once you train your custom use cases, they are usable immediately. No prior knowledge or experience with artificial intelligence or machine learning is required when you use the APM Predictive Intelligence Workbench.

This application includes templates with prebuilt guidance to assist you in creating, training, evaluating, testing, and producing, your unique predictive models.

## Activation information

Activate the Predictive Intelligence for APM (com.snc.apm.predictive\_intelligence) plugin before using the Predictive Intelligence Workbench.

## Exporting Application Portfolio Management data to Microsoft PowerPoint

Generate and download the status reports from your Application Portfolio Management instance as a Microsoft PowerPoint file. You can share this report with stakeholders and teams for collaboration.

Stakeholders might not have access to the ServiceNow instance, or they might prefer using Microsoft PowerPoint to consume key information. You can convey critical application portfolio status and health details to stakeholders via Microsoft PowerPoint. Instead of collecting all the data manually, you can export the data from the ServiceNow instance to Microsoft PowerPoint.

**Important:** Export to PowerPoint is currently unavailable for customers in the FedRAMP, NSC DOD IL5, or Australia IRAP-Protected data centers, self-hosted customers, or in other restricted environments. Please check for availability updates in future releases.

You can export the following Application Portfolio Status data:

- Application Landscape
  - Application Portfolio by Install Type
  - Application Portfolio by Platform
  - Application Portfolio by Technology Stack
  - Application Portfolio by Category
  - Most Used Applications by Application Family
  - Application Portfolio by Install Type and Platform
- Capabilities Landscape

- Capabilities by Assessment (Top Scoring Capabilities)
- Capabilities by Assessment (Low Scoring Capabilities)

The Export to PowerPoint feature in APM uses the Export to PowerPoint for Application Portfolio Management plugin (com.snc.apm\_ppt\_export). This plugin depends on the base plugin Export to PowerPoint (com.snc.sn\_ppt\_export). Ensure that both APM and PowerPoint plugins are installed to use the Export to PowerPoint feature in APM. For more information about the base plugin, creating templates, and report types, see [Export to PowerPoint for Strategic Portfolio Management](#).

Related topics

[Export data to Microsoft PowerPoint](#)

## Configuring Application Portfolio Management

Learn about the process required to set up Application Portfolio Management to gain a comprehensive understanding of the applications used in your organization.

### Activate Application Portfolio Management

An administrator can activate the Application Portfolio Management plugin (com.snc.apm).

#### Before you begin

Role required: admin

#### About this task

The Application Portfolio Management (com.snc.apm) plugin is the basic plugin for the application.

The Application Portfolio Management plugin activates the following related plugins if they are not already active:

Plugin	Description
Application Portfolio Management – Predictive Intelligence (com.snc.apm.predictive_intelligence)	To predict application category by applying algorithms like similarity on business applications related data.
Business Planner (com.snc.apm.business_planner)	To access the Business Planning portal.
Demand Core (com.snc.demand_core)	To activate the basic core components of Demand Management.
Fiscal Calendar (com.snc.fiscal_calendar)	To create and manage the fiscal calendar.  ● <b>Note:</b> APM supports only the Fiscal Calendar type, Standard.
Performance Analytics – Content Pack – Application Portfolio Management (com.snc.pa.apm) plugin	To view the following that are developed using Performance Analytics:

Plugin	Description
	<ul style="list-style-type: none"> <li>Analyses of applications in a landscape page</li> <li>Application indicator scores in a dashboard</li> <li>Application 360</li> </ul> <p>This plugin activates the following two PA plugins:</p> <ul style="list-style-type: none"> <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>
Bubble Chart widget for Service Portal (com.snc.sp_workbench_widgets)	To access service portal components (widget and dependency) for Bubble Chart.
Tree map (com.snc.treemap)	Enables support for tree map view on any applications.

You require the following plugins for specific features in the APM module:

Application Portfolio Management – ATF Tests plugin (com.snc.apm.atf) plugin

To validate Application Portfolio Management and that it works after you make any configuration change such as apply an upgrade or develop an application.

Read only roles for Application Portfolio Management plugin (com.snc.apm\_read\_roles)

To view or read records of tables that are used to retrieve data for reports and dashboards.

Application Portfolio Management Core plugin (com.snc.apm\_core)

To register a new business application. The plugin is in base application and activating the Application Portfolio Management plugin (com.snc.apm) enhances the Register a Business Application feature to predict and suggest an application category using the machine-learning solution when you on-board an application in to the APM inventory.

Domain Support – Domain Extensions Installer system plugin

To enable the domain separation feature for APM.

Performance Analytics Premium for APM (com.snc.pa.premium.apm) plugin

To retrieve historic data that are older than six months.

Activate the following plugins for additional features:

PPM Standard (com.snc.financial\_planning\_pmo)

To activate an integrated set of applications for project portfolio management and IT software development.

Financial Management For APM (com.snc.financial\_management\_for\_apm)

To integrate Financial Management with Application Portfolio Management providing preconfigured Business Application Costing cost model and cost indicators.

This plugin also activates the following plugin to enable Performance Analytics dashboards for Financial Management associated with Application Portfolio Management:

Performance Analytics — Content Pack — Financial Management for Application Portfolio Management (com.snc.pa.fm.apm).

## Procedure

1. Navigate to **All > System Applications > All Available Applications > All**.

2. Find the plugin using the filter criteria and search bar.

You can search for the plugin by its name or ID. If you cannot find a plugin, you might have to request it from ServiceNow personnel.

3. Select **Install**, and then in the Activate Plugin dialog box, select **Activate**.

**i Note:** When domain separation and delegated admin are enabled in an instance, the administrative user must be in the **global** domain. Otherwise, the following error appears: Application installation is unavailable because another operation is running: Plugin Activation for <plugin name>.

## What to do next

Use the **APM Guided Setup** to set up the Application Portfolio Management.

## Application portfolio administration

With the sn\_apm.apm\_admin role, you can classify the applications used in the business enterprise. You can also provide privileges to users to do specific tasks, set up indicators to assess application usability, and create bubble charts to help define strategies to maintain applications.

With administrative privileges, you can set up application classification attributes to group applications, users and roles to provide level of access and assign tasks, applications assessment indicators to assess applications, and bubble charts to recommend an application strategy. Such a setup helps you to classify your applications and maintain an inventory, provide privileges to users to do specific tasks, assess the application usability by its indicators, and recommend a strategy to plan and execute organization goals.

## Application classification

Classifying applications into groups and categories helps your organization track and compare the applications. You can identify relationships and redundancies between the applications more easily. You can also build a complete applications inventory and map the applications to the business functions.

Set up these attributes for classifying and grouping applications:

Application category

This attribute is mandatory. It is a grouping attribute which you can use to make application rationalization decisions. Typically you can use this attribute to group applications used in a business process or department. The applications can have overlapping or complementary capabilities, but they are a part of the same business function and must be reviewed together during an application rationalization exercise. The summarized information at the application category level enables you to compare applications within a category using various metrics.

#### Category group

This attribute is optional. It is a grouping attribute for filtering and reporting of application categories.

#### Application family

You can use this optional attribute to group the applications by the manufacturers classification of their products into various product suites.

#### Business Process

This attribute is an optional attribute that is primarily used for filtering and reporting. Level one (L1) of a business process is a high-level representation that outlines the business operations of an organization. Ideally L1 business process can be tagged. For example, Oracle Order Management can be tagged to the business process 'Quote to Cash'. The detailed mapping between the application and the business processes can be created using the CI relationship.

#### Software Model

This attribute is available with the base instance and contains the specifications of the software such as the manufacturer, version, release date, and end of life date. Business application references the corresponding software model record to automatically pull in the software specifications.

To check out an application classification example, see [Application Classification Example](#).

### Add or edit an application category group

An application category group is a collection of application categories. Category groups help with filtering and reporting of the application categories. You can create an application category group or edit an existing one to align it with your business requirements.

#### Before you begin

Role required: sn\_apm.apm\_admin

#### Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Application Category Groups**.
2. Click **New** to create a new category group or click the name of an existing category group that you want to edit.
3. Enter a name and description for the application category group.
4. Click **Submit** or **Update**.

### Add or edit an application category

An application category is a grouping of applications by their purpose and function, fields, or areas. Such a categorization helps you to consolidate applications and rationalize decisions. You can create an application category or edit an existing one to align it with your business requirements.

## Before you begin

Role required: sn\_apm.apm\_admin

## About this task

Each application should have an application category defined. This field is used to describe the purpose of the application, and the key business function this application supports. You can keep the categorization at a high level, like a business function. For example, Sales, HR, Marketing, and Manufacturing. **Application category** field is used to filter Analysis dashboards (2x2 matrix plotting business value versus technical risk).

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Application Categories.**
2. Click **New** to create a new category or click the name of an existing category that you want to modify.
3. Enter a name and description for the application category.
4. If you want to add the category to a category group, look up and select the group from the **Category group** field.
5. Click **Submit** or **Update**.

## Add or edit an application family

An application family is an attribute to group a set of related applications based on manufacturer classification of their products into product suites. You can create an application family or modify an existing one to align it with your business requirements.

## Before you begin

Role required: sn\_apm.apm\_admin

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Application Families.**
2. Click **New** to create a new application family or click the name of an existing family that you want to edit.
3. Enter a name and description for the application family.
4. Click **Submit** or **Update**.

## Add or edit an application business process

A business process is a method of related structured tasks performed to accomplish a specific application service. The business capabilities of a business application can be modeled as a business process. Create a business process to group applications that help accomplish a specific application service.

## Before you begin

Role required: sn\_apm.apm\_admin

## About this task

You can create a business process or modify an existing one to align it with your business requirements.

Business process or capability hierarchy is an ordered grouping of business processes in a hierarchical fashion. For example, L0 and L1 processes.

Based on the requirements, business capability hierarchy can be modeled using the business process relationship. You can edit the business process records using the CI relationships to create a business process hierarchy.

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Business Processes**.
2. Click **New** to create a new business process or click the name of an existing process that you want to edit.
3. Fill in the fields.  
For field information, see [Business Process Form](#).
4. Right-click the form header and select **Save**.
5. If you want to add items to this business process, use the Related Items [CI relations formatter](#).
6. Click **Submit** or **Update**.

### Create an application portfolio

A portfolio is a collection of related projects and demands. You can create a project and execute it to rationalize and modernize the application portfolio. Create a portfolio of applications, and set demands and goals to measure the effort and progress of several projects and also create reports on these projects for analysis.

#### Before you begin

Role required: sn\_apm.apm\_admin

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Portfolio**.
2. Click **New**.
3. Enter a name and description for the portfolio.
4. In the **Portfolio manager** field, search for and select the name of the manager for this portfolio.
5. Click **Create Portfolio**.

### Add a strategy for managing applications

Demand actions are strategic decisions that you want to execute for an application. Application Portfolio Management provides preconfigured actions that help you enhance the capability of the applications. You can add new demand actions as per your requirements.

#### Before you begin

Role required: sn\_apm.apm\_admin

## About this task

Create demand actions that are aligned to the application strategy.

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Demand Actions**.
2. Click **New**.
3. Fill in the fields.

For field information, see [Demand Actions Form](#).

4. Click **Submit**.

## Manage the life cycle of a business application

Create or edit the life cycle of a business application to better manage the business application.

### Before you begin

Role required: sn\_apm.apm\_analyst and sn\_apm.apm\_user

The application model (field name: Model ID) is important to create the application model lifecycle for a business application.

Starting from the Vancouver release, the application model is automatically created, and the Model ID is added to the business application while adding the business application.

For existing business applications, you can run the *CSDM Product Model Assignment* script to generate the Model ID.

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Select the name of the business application to open the business application form.
3. In the Related Links section, select the **Application Model Lifecycle** tab.  
A list of life cycles associated with the business application is displayed.
4. Create or edit a life cycle.
  - To create a life cycle, select **New**.
  - To edit an existing life cycle, select **Edit**.
5. On the Application Model Lifecycle form, fill in the fields.

For field information, see [Application model lifecycle form](#).

6. Select **Submit**.

### Related topics

[Run a scheduled job to generate an application model for business applications](#)

## Run a scheduled job to generate an application model for business applications

Execute a script to generate the application model for existing business applications.

### Before you begin

Role required: admin

### About this task

The application model is the **Model ID** field for a business application. This model is important for creating the application model life cycle for a business application. For existing business applications, you can run the *CSDM Product Model Assignment* script to generate the Model ID.

**Procedure**

1. Navigate to **All > #System Definition > #Scheduled Jobs**
2. Find and open the *# scheduled job CSDM Product Model Assignment*.
3. Select **##Execute Now**

**Result**

After executing the script, the system automatically creates models IDs for the existing business applications for which the **Model ID** field is empty.

**Add a data classification group**

Create a data classification group to categorize data classifications.

**Before you begin**

Role required: sn\_apm.apm\_admin

**Procedure**

1. Navigate to Data Classification Group [cmdb\_data\_classification\_group] table.
2. Select **New**.
3. On the form, fill in the fields.  
For field information, see [Data classification group form](#).  
The applied tags are displayed in various colors on the top of the form.
4. Select **Submit**.

**Add a data classification**

Create a data classification to apply it to an information object. Effectively control the data used by the business applications.

**Before you begin**

Role required: sn\_apm.apm\_admin

**Procedure**

1. Navigate to Data Classifications [cmdb\_data\_classification] table.
2. Select **New**.
3. On the form, fill in the fields.  
For field information, see [Data classification form](#).  
The applied tags are displayed in various colors on the top of the form.
4. Select **Submit**.

**Apply classification tags to an information object**

Apply data classification tags to an information object to get better visibility and control over the information objects data.

**Before you begin**

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Information Portfolio > Information objects**.
2. Open an existing information object.
3. From the Select classification tag list, select the appropriate tags to classify the information object data.  
For field information, see [Information Objects form](#).  
The applied tags are displayed in various colors on the top of the form.
4. Select **Update**.

## Schedule a data certification task

Keep your business applications inventory up-to-date by certifying the data in the business applications table periodically. Keeping your business application data current helps you to assess your business applications precisely as there are indicators that are dependent on these business applications.

### Before you begin

Role required: sn\_apm.apm\_admin

### About this task

As a system administrator with the APM admin role, you can create and assign the data certification tasks to the system owners for them to certify the business applications data. You also require certification\_filter\_admin role to set filter to those fields that require certification.

Inventory of business applications is created one time. But the data on a business applications table are highly dynamic and keep changing over time. Hence, it is imperative to keep the data complete, accurate, and current. Data certification is a platform feature that helps you to keep the data up-to-date.

The Application Portfolio Management (com.snc.apm) plugin installs the Data Certification (snc.certification\_v2) plugin and requires no separate subscription.

The following preconfigured certification schedules are available for the system administrator to schedule data certification tasks. The certification schedule generates a set of certification tasks based on set conditions.

- **Business Application Certification On Demand / Business Application Certification**  
**Quarterly:** Certifies the data in the Business Application [cmdb\_ci\_business\_app] table.  
 Use **Business Application Certification On Demand** to schedule as and when required, and **Business Application Certification Quarterly** for every quarter. Use either of the schedules as per the specified time interval or on demand.
- **Application Service Software Model Certification On Demand:** Certifies the software model and full version fields in the Application Service Software Model [sn\_apm\_tpm\_service\_software\_model] table.
- **Software Product Lifecycle Internal Source Certification on Demand:** Certifies the full version field in the Custom Software Product Life cycle [sam\_custom\_sw\_product\_lifecycle] table.

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Certification Schedules**.
2. Click **New** to create a new record of certification schedule.

You can also click the preconfigured certification schedules to review the record and update the details, if necessary.

For field information, see [Certification Schedule form](#).

**3.** Click **Submit**.

**4.** Click **Update** to save the changes or **Execute Now** to execute the schedule.

When you click **Execute Now**, a certification instance is created and as a system administrator you can view it in the **Certification Instances** related list. You can also track the certification instance and the percentage of its completion.

Related certification tasks (to verify and certify the data of a business application record) are created in the **Certification Tasks** related list and is assigned to the application owner. As a system administrator you can also track the data certification progress assigned to the application owner.

When a certification task is newly assigned, reassigned, or is about to expire, you can notify the task owners about the pending status of the task at hand by an email.

Preconfigured email notifications such as **APM DC task assignment**, **APM DC task reassign**, and **APM DC task expiry** are available that you can trigger depending on the certification task when you execute a schedule by clicking **Execute Now**.

These email notifications are inactive by default, which you must activate by setting it to true.

**5.** To activate the email notifications, navigate to **Service Creator > Notifications**.

**6.** Click open the APM related notification record.

**7.** Enable the **Active** check box to activate the email notification.

## What to do next

You can review the certification tasks and update them if necessary.

### View and update the application certifications

A certification instance is a collection of certification tasks to execute a certification schedule. Review the application tasks that you created and update them if necessary.

#### Before you begin

Role required: sn\_apm.apm\_admin

#### Procedure

- 1.** Navigate to **All > Application Portfolio Management > Application Portfolio > Application Certifications**.
- 2.** Click a **Certification Instance** in the Certification Instances list.
- 3.** View and update the certification task details, if required.
- 4.** Click a certification task in the **Certification Tasks** related list.

## What to do next

You can view all the business applications that require certifications and belong to this specific certification task. As a system administrator you can also track the data certifying process and view the certification fields of the business application record that have been

certified as checked and those that have failed in certification. The IT\_application\_owner certifies the certification fields.

### Certify data in business applications table

As an application owner with the certification role you can view the certification tasks assigned to you and certify the required fields. You can also update the data in the fields and then certify them.

#### Before you begin

Role required: certification\_admin

#### Procedure

1. Navigate to **All > Data Certification > Tasks > My Tasks**.
2. Click the task number in the **Certification Tasks** list that requires your certification.
3. Click the check box to certify the fields.  
You can certify the data in the fields by any of the following methods:
  - Field wise by selecting the field level check box.
  - Column wise to certify the particular data element for all business applications by selecting the column level check box.
  - Row wise to certify all data elements for a particular business application by selecting the row level check box.
  - Entire table to certify all data elements for all business applications selecting the check box that selects all rows.

#### Methods to select fields and certify the data

Name	Application type	Business criticality	Data classification	Contract end date	Active	Active user count	Status	User base	Last change app
ServiceNow Customer Service	COTS	Medium	Internal	2019-12-25	true	2,059	In Production	1000+	
SAP Financials	COTS	High	Highly Sensitive	2017-11-02	false	32	In Production	0-49	
ServiceNow PPM	COTS	Low	Internal	2016-08-23	false	17	In Production	0-49	
Legacy Portfolio Management	Homegrown	Low	Internal	2016-09-03	false	22	In Production	0-49	

4. Click the field to update the data if it is not current.
5. Enter your comment for the fields that you have certified and click the green check mark to certify the checked elements.

A message appears to confirm your certification.

### Run audits to determine invalid and missing configuration data

Run the scripted audits and desired state audit to determine invalid and missing information in the configuration data. These audits help you find the gaps in business capability, business application, software models, and the life-cycle information.

## Before you begin

Role required: sn\_apm.apm\_admin

## About this task

You can identify records that have gaps in their relationship with other configuration items by running the scripted audits. Such gaps in establishing the following relationships cannot give you a realistic appraisal of the business capabilities and the business applications that they are tied to.

- between the business capability and the business application.
- between the business application and the software models.
- the software products with no life-cycle data.

As a user with the sn\_apm.apm\_admin role, you require all the configuration items to be related appropriately to assess your business applications and to estimate and evaluate the business capabilities of your enterprise.

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Desired State Audits or Scripted Audits**.
2. Click the audit name.
3. Click **Run Audit**.

Running the audits help you to do the following:

- Identify the records that match the respective criteria.
- Create tasks to address the disparity in the records.
- Communicate to the owners of the IT business application, software model, and the business capability through an email notification to resolve the gap or certify the data.

Application to facilitate addressing these notifications and to access the applications data, the IT business application owners, software model owners, and the business capability owners are granted the sn\_apm.apm\_user role. Users with this role can navigate to **Compliance > My Follow On Tasks** to update the data.

Hardware Models with no life-cycle data

The scripted audit retrieves records of hardware models that don't have life-cycle data, but are used by an application service and are related to a business application. The audit generates tasks and sends email notifications to the hardware model owner.

***i* Note:** The system checks only the life-cycle data for production instances of the business application. That is, it doesn't consider non-production instances such as development and test instances.

Software Products with no life-cycle data

The scripted audit retrieves software model records for all product versions used by the business applications that don't have life cycle-data such as life-cycle type, its phase, beginning and end dates of the life-cycle phase, and risk. The audit generates tasks and sends email notifications to the software model owner.

**i Note:** The system checks for the life-cycle data only for production instances of the business application. That is, it doesn't consider non-production instances such as development and test instances.

#### Orphaned business capabilities

The scripted audit checks the CI relationship [cmdb\_rel\_ci] table for capabilities that have no parent capability or child capabilities, and capabilities without any business applications tied to it. A task is created and the owner of the business capability is notified through an email about the assigned task.

#### Business applications related to multiple business capabilities in the same hierarchy

The scripted audit checks the CI relationship [cmdb\_rel\_ci] table for a possibility where the same business application is tied to multiple business capabilities at the same level in the hierarchy. For example, BA1 is tied to Cap 1.1.2 and is also tied to Cap 1.1.2.1. You can understand the hierarchy level of the capability from the Business Capability [cmdb\_ci\_business\_capability] table.

#### Business applications not related to any software model

The audit checks the CI relationship [cmdb\_rel\_ci] table for business applications that are not related to any software model. The scripted audit considers only the production instances of business services. A notification is sent to the IT application owner.

**i Note:** The system checks only for production instances of the business application and doesn't consider non-production instances such as development or test instances.

#### Business applications not related to any business capability

The desired state audit checks the CI relationship [cmdb\_rel\_ci] table for business applications that are not related to any business capability.

#### Business Applications not related to any Information Objects

The desired state audit checks the CI relationship [cmdb\_rel\_ci] table for business applications that are not related to any information object. If an unrelated business application is found, a notification is sent to the IT application owner.

#### Business Application and Information Object relation not captured in relation attributes

The desired state audit checks the CI Relation Attributes [cmdb\_rel\_attributes] table for CI relationships between the business application and the information objects. If relationship attributes are not found, a notification is sent to the business owner.

#### CRUD information not captured for Business Application and Information Object relation

The desired state audit checks the CI Relation Attributes [cmdb\_rel\_attributes] table for CI relationships between the business application and the information objects. If relationship attributes are found but the qualifier properties information for CRUD is empty, a notification is sent to the business owner.

#### Information Objects not related to any Business Application

The desired state audit checks the Information Object [cmdb\_ci\_information\_object] table for information objects that are not tied to any business application. You can run such audits on demand. If there is any

unrelated information object found, then a notification is sent to the owner of the information object mentioned in the **Assign to** field.

In addition, whenever a [certification schedule either On Demand or Quarterly](#) is executed, a notification is shown on the Application Portfolio Management home page. For each certification schedule that is executed, a corresponding notification entry appears on the home page. The notification shows open certification instances that are not 100% complete. Conversely, the home page section doesn't display certification instances that are 100% complete and have not been generated at all.

Notifications are also shown for software models that are at high and moderate risks on the current date and within the next 90 days. The risk factors of software models tied to business applications that are related to production instances are only considered. Click the notification to open the related records from the software model table.

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

## Train the similarity solution for APM to categorize applications while registering

Train the business application similarity definition included within the Predictive Intelligence for Application Portfolio Management to suggest a category for a business application when it is being registered or on-boarded.

### Before you begin

Ensure that the Application Portfolio Management – Predictive Intelligence plugin (com.snc.apm.predictive\_intelligence) is activated.

Role required: ml\_admin

### Procedure

1. Navigate to **All > Predictive Intelligence > Similarity > Solution Definitions**.
2. In the Similarity Definitions [ML view], click the Business Application Similarity (ml\_sn\_sn\_apm\_ml\_global\_ba\_similarity) label.
3. On the Similarity Definition Business Application Similarity [ML view] form, verify the default values for business application similarity.

For more information on the Similarity Definition form fields, see [Create and train a similarity solution](#).

**Note:** Set the application scope to Application Portfolio Management – Predictive Intelligence to edit the form. Click the word here at the end of the warning message that appears.

### Similarity Definition form

Field	Definition
Label	Unique name for your similarity definition.
Word Corpus	Collection of words and phrases related to the name and description of the business application that functions as the vocabulary the system uses to compare your instance records based on their textual similarity.

Field	Definition
Processing Language	Dominant language of the dataset that you are training on the solution definition. If the dataset language is Italian, choose Italian.  <b>i Note:</b> English processing is applied to all datasets by default.
Stopwords	Existing word corpus that is relevant to your solution. You can also add stopwords to the list, for example, words like Application.
Training Frequency	Option to retrain from once daily or every 30 days in three months increments up to 180 days.
Update Frequency	Frequency at which you want to refresh the data you use to retrieve your similarity results.

#### 4. Click **Update & Retrain**.

##### What to do next

You can create a similarity solution with words and phrases related to the name and description of the business application that triggers a prediction. You can also set a training frequency for your machine-learning solution to collect and compare existing records with new records for a similarity definition.

Use the similarity solution to categorize an application while it is on-boarded.

### Suggest an application category based on similar business applications

Use a guided template that walks you through training the Similar Business Applications solution definition for finding similar business applications and suggesting an application category.

##### Before you begin

Role required: piwb\_manager

##### Procedure

1. Navigate to **All > Predictive Intelligence Workbench > Use Cases > Create New from Template**.
2. Select the **Similar Business Applications** template.
3. Click **Start**.  
The use case setup window opens displaying the name and description of the use case.
4. Click **Take me there**.  
The **ServiceNow Machine Learning Solutions** page opens and displays all the available solutions.
5. Expand the Similarity solution to see the available solution definitions.

Configure or train the Similarity solution for finding similar business applications.

- To configure the Similar Business Applications solution definition (ml\_sn\_sn\_apm\_ml\_global\_ba\_similarity), click **Configure**.
- To train the Similar Business Applications solution definition (ml\_sn\_sn\_apm\_ml\_global\_ba\_similarity), click **Train**. For more information, see [Train the similarity solution for APM to categorize applications while registering](#).

## Configure script to customize risk calculation

Configure the risk calculation script at the extension points where the risks bubble up to the next level. With such configuration, the risk engine ignores the default logic of risk calculation and looks for the custom logic.

### Before you begin

Role required: script\_include\_admin

### About this task

There are three API extension points, at which the risks bubble up to the next level based on the script.

You can configure the script at the following levels:

- sn\_apm.productModelCustomRiskCalculation – Product model (hardware and software models) risk level from the risks parameters level: The level at which the risks bubble up from the risks parameters level to the product model risk level.
- sn\_apm.AppBusinessServicesCustomRiskCalculation – Application service risk level from the product models risk level: The level at which the risks bubble up from the product model risk level to the application service risk level.
- sn\_apm.BusinessApplicationCustomRiskCalculation – Business application risk level from the application service risk level: The level at which the risks bubble up from the application service risk level to the business application risk level.

### Procedure

1. Navigate to **All > System Extension Points > Scripted Extension Points**.
2. Filter Application Portfolio Management applications in the **Application** column.
3. Click the API Name.
4. Scroll down to the Implementations section and click the extension point.
5. Click the preview this record icon ( ⓘ ) next to the **Class** field.
6. In the Script Include pop-up, click **Open Record** button.

By default, the sys\_id of the function returns **False** for each of the API name and the risk engine follows the APM logic in calculating the risk.

Configure custom script to calculate risks, for example,

`sn_apm.AppBusinessServicesCustomRiskCalculation`

```

1  var productModelCustomRiskCalculation = Class.create();
2  productModelCustomRiskCalculation.prototype = {
3      initialize: function() {},
4
5      useCustomRiskForProductModel: function(productModelSysID) {
6          return false;
7      },
8
9      /*
10      productModelJson formats is as follows:
11      {
12          'productType'      : 'software_model/hardware_model',
13
14          'riskParamJson' : { 'riskParamSysID1' : 'riskValue',
15                             'riskParamSysID2' : 'riskValue',
16                             'riskParamSysID3' : 'riskValue',
17                             'riskParamSysID4' : 'riskValue'
18                         }
19      }
20      */
21      getProductModelRisk: function(productModelSysID, productModelJson) {
22      },
23
24      type: 'productModelCustomRiskCalculation'
25  };

```

7. Configure the function to return **True** based on the sys\_id of the API at the product model level, application service level, or business application level.

The risk engine then calls the API for the custom logic and calculates the risk in line with this logic, which bubbles up to the next level of risk calculation.

8. Click **Update**.

### Run scheduled job to generate risk values

The risks on the product model and business application is time dependent. Based on the external and internal lifecycles the risk changes every day, hence the risk must be calculated daily. A scheduled job is created that runs daily and calculates the risks of the software model and the business application.

#### Before you begin

Role required: admin

#### About this task

**Load TPM Risk Parameters and compute Application Service Risks** scheduled job must be run daily to calculate the product model risk. The scheduled job executes the script generating the application service risk values. You can configure the time in the script as per your preference. Run the back-end job to get the real-time status of the applications risk and store the risk data in the business application risk table.

## Procedure

1. Navigate to **All > System Definition > Scheduled Jobs**.
2. Select the **Load TPM Risk Parameters and compute Application Service Risks** scheduled job.

### Note:

The job is inactive by default. Select the **Active** check box to run the scheduled job at the scheduled time.

3. Click **Execute Now**.

- a. To configure the time in the script, navigate to **System Scheduler > Scheduled Jobs > Scheduled Jobs**.

If a job is active, then you can schedule a time to run the job.

- b. Select *Load TPM Risk Parameters and compute Bus.*

- c. Click **Configure Job Definition** related link.

- d. Click the link at the top panel to edit the record.

- e. Click **Execute Now**.

After executing the scheduled job, the engine automatically stores the risk values in the Business Application Risk [sn\_apm\_tpm\_business\_application\_risk] table. It updates the values in the table each time after you run the job.

- f. Navigate to **Application Portfolio Management > Technology Portfolio Management (TPM) > Business Application Risk Values**.

- g. View the risk record of each business application in the table.

The risk values are:

High

One or more than one associated application service is at high risk.

Medium

One or more than one associated application service is at medium risk.

Low

One or all the associated application services are at low risk.

Not Assessed

Either the business application does not have any application service associated to it or the associated application service is not of production type.

## Result

The TPM risk engine loads the risk parameters, runs, and generates the risk parameter scores, software model risk values, hardware model risk values, and application service risk values.

## What to do next

Navigate to the following tables to view the risk values and scores:

- Navigate to **Application Portfolio Management > Technology Portfolio Management (TPM) > Risk Parameter Scores** to view the scores of the risk parameters.
- Navigate to **Application Portfolio Management > Technology Portfolio Management (TPM) > Hardware Model Risk Values** to view the risks of the hardware models.
- Navigate to **Application Portfolio Management > Technology Portfolio Management (TPM) > Software Model Risk Values** to view the risks of the software models.
- Navigate to **Application Portfolio Management > Technology Portfolio Management (TPM) > Application Service Risk Values** to view the risks of the application services.

The risk values of the business applications, application services, hardware, and software models are rendered on the [Technology Portfolio Management timeline](#).

## Install Application Portfolio Management (APM) Cloud Assessment Application

Install the APM Cloud Assessment application (app-apm-cloud-readiness) from# the #ServiceNow Store.

### Before you begin

Role required: admin

### Procedure

1. Navigate to the [ServiceNow Store](#) ↗.
2. Search for#Application Portfolio Management Cloud Assessment application.
3. Click the application tile.

You can view detailed information about the application.

**i Note:** Consider reading the **Requirements and Dependencies** sections, as applicable.

4. Click#Get# and enter your#Now Support login credentials.
5. Click#Buy.
6. Enter the#Instance Name and#Reason for the instance and click#Validate Instance.
7. Click#Request.

You receive an email with detailed installation instructions.

8. Log in to the instance on which you want to install the Application Portfolio Management Cloud Assessment.
9. Navigate to# System**Applications**# >**Applications**.
10. Locate the application, select it, and click#Install.

### What to do next

You can [add or edit a business application](#) to assign the Cloud Assessment scoring profile to a business application. After you apply the scoring profile, [schedule a job to calculate application scores #periodically](#) And you can [view all application scores](#) and [analyze application scores in a bubble chart](#).

## Schedule a job to compute application scores

Enable the *Load Application Indicators and compute Application Scores* scheduled job to regularly compute the application and indicator scores.

### Before you begin

Role required: admin

### About this task

The job recalculates the scores of all indicators, the scoring profiles to which these indicators are attached, and the business applications that are associated to these scoring profiles.

The job generates scores for indicators according to the time period that is set in the **Frequency** field of the Indicator form. The job generates scores on the last day of the fiscal period set as frequency. That is, if the current day is the last day of the fiscal period, only then it generates the scores.

For example, if the **Frequency** option set for the **Functional Fit** indicator is monthly, then the scores for this indicator are generated on the last day of the month. If the frequency set for the **CSAT** indicator is quarter, then the scores for CSAT are generated on the last day of that quarter. Similarly, if the frequency for **Business Value** indicator is set as year, then the scores are generated on the last day of the year.

**Note:** If your frequency is yearly, then the scores of the indicators are generated on the last day of the year. Furthermore, scores are generated for the last quarter and the last month of the year as well, which are also inclusive of the last day of the year when the scores are generated.

However, if you want to generate scores, on demand, on any day and for a particular period of time, then you can generate scores using the **Regenerate Indicator score** option in the Indicator form of a particular indicator. This action does not update the existing scores but deletes them and generates new scores. See: [Create or edit an indicator to assess an application](#). You can also use the **Regenerate scores** option of the Scoring Profile form that generates scores for all indicators attached to that scoring profile. See: [Create an application score profile and attach profile indicators](#).

### Procedure

1. Navigate to **All > System Definition > Scheduled Jobs**.
2. Find and select the *Load Application Indicators and compute Application Score* scheduled job.
3. On the form, fill in the fields.  
For field information, see [Scheduled Script Execution form](#).
4. Right-click the form header and click **Save**.
5. Click **Execute Now**.  
The job executes at the scheduled date and time.

### What to do next

Understand what the job does and how the assessment framework [normalizes the application scores](#).

## Set up domain separation for APM users

Application Portfolio Management supports domain separation for managed service providers (MSPs) to protect the sensitive data of each customer. The protection also ensures

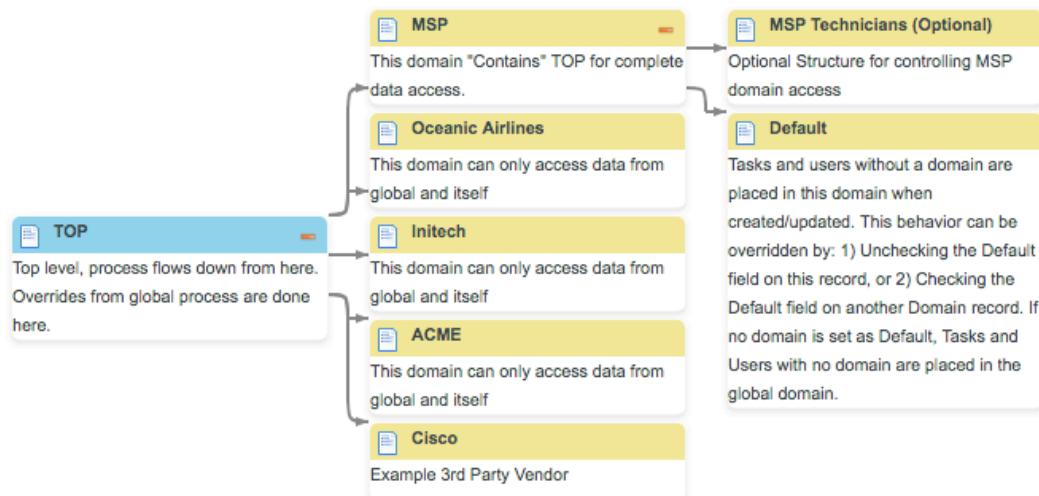
inability to view business application data of one customer by another customer and also secures the data within the domain.

## Before you begin

Role required: admin

## About this task

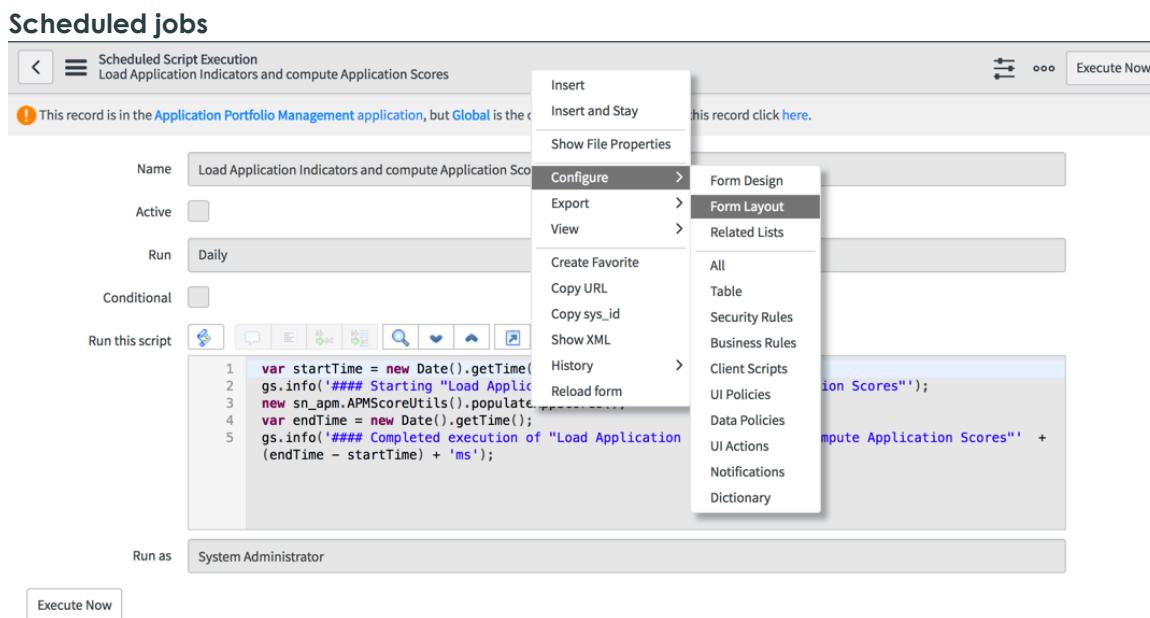
### Illustration of a sample domain map



## Procedure

1. Install the Domain Support – Domain Extensions Installer system plugin to enable the domain separation feature for APM.
2. Create an administrator role at each domain level.  
The administrator can only configure and run the scheduled jobs.
3. Create all your application portfolio data entities in the domain, specific to the enterprise, and not at the global level.
4. Create indicators at the domain level.  
Do not create them at the global level and reuse the indicators for every customer under the parent level. Data is not visible at the global level.
5. Create user groups and assign roles to users at the domain level, so that they can view only the data of the enterprise they belong to.
6. Execute jobs for domain separated data.

You can execute scheduled jobs, certification schedules, and assessments of indicators and scores at the domain level using the Run as role. Configure the Scheduled Script Execution form layout to add the **Run as** field from the Context menu.



## Run scheduled jobs for CMDB Query Builder reports

Schedule a job to run at a scheduled time or on a recurring schedule for CMDB query. Ensure to do this action in global scope.

### Before you begin

Role required: sys\_admin

### Procedure

1. Navigate to **All > System Definition > Scheduled Jobs**.
2. Search and click the relevant scheduled job.
3. Select the frequency at which to run the scheduled job in the **Run** field.
4. Click **Execute Now**.

**Note:** As a system administrator you must run these scheduled jobs from Global scope only.

Select and run the scheduled jobs for the following CMDB Query Builder reports that the base system offers:

- Business Capabilities provided by Business Application
- Application Services consumed by Business Application
- Business Applications providing a Business Capability
- Business Services provided by a Business Capability
- Business Applications using an Information Object
- Information Objects used by a Business Application
- Demands on a Business Application
- Projects on a Business Application

## Schedule a job to generate TPM lifecycle data

Enable the *#Populate TPM Discovered Technologies and Lifecycles* scheduled job to regularly compute the technology lifecycle risks.

### Before you begin

Role required: admin

### Procedure

1. Navigate to **All > System Scheduler > #Scheduled Jobs > #Scheduled Jobs**
2. Find and select the *#Populate TPM Discovered Technologies and Lifecycles* scheduled job.
3. In the **Next action** field, select a date and time to run the job.
4. Click **#Update**.

### Result

The job will run as scheduled to generate the TPM lifecycle data.

**Note:** You can also run the job on-demand. For details, see [Run a scheduled job to generate TPM lifecycle data](#).

## Run a scheduled job to generate TPM lifecycle data

Run a scheduled job to fetch the technology lifecycle data for your technology portfolio.

### Before you begin

Role required: admin

### About this task

The scheduled job *Populate TPM Discovered Technologies and Lifecycles* is created to fetch the technology lifecycle data for your technology portfolio. This job can be run on-demand to calculate the technology lifecycle risk. The scheduled job executes the script generating the lifecycle risk dates, including end of support date, end of extended support date, and end of life date for your software and hardware models.

### Procedure

1. Navigate to **All > #System Definition > #Scheduled Jobs**
2. Find and open the *# scheduled job Populate TPM Discovered Technologies and Lifecycles*.
3. Select **##Execute Now**

### Result

After executing the scheduled job, the engine automatically stores the technologies and lifecycle values in the TPM Technology Lifecycle [sn\_apm\_tpm\_technology\_lifecycle] table. It updates the values in the table each time after you run the job.

### What to do next

To know the status of the scheduled job, refer to the TPM Discovered Technology Run Logs [sn\_apm\_tpm\_discovered\_technology\_run\_log] table. To view the technology lifecycle information, refer to the TPM Technology Lifecycle [sn\_apm\_tpm\_technology\_lifecycle] table. You can view the results in the Portfolio > Technology Portfolio Management > Logs page.

## Schedule a job to generate TPM technology risk

Execute the `#Populate Technology Lifecycle Risks` scheduled job. Generate the TPM technology lifecycle risks and populate the result in the TPM Technology Lifecycle Risks [sn\_apm TPM\_technology\_risk] table.

### Before you begin

Role required: admin

### Procedure

1. Navigate to **All > System Scheduler > #Scheduled Jobs > #Scheduled Jobs**
2. Find and select the `#Populate Technology Lifecycle Risks` scheduled job.
3. Select **#Execute Now**.

## Using Application Portfolio Management

Learn how to use the features of Application Portfolio Management to identify business applications inventory, measure the applications by gathering metrics, evaluate the usage, and decide to maintain, replace, or retire the applications.

### Add or edit a business application

Use the Business application form to add the applications that your organization uses based on their functions and the business process they fulfill. In APM, add any business application that is used to assess and track costs, usage, business value, functional fitment, and risks.

### Before you begin

If you have an APM user role (sn\_apm.apm\_user), use the Business Application Life-cycle Management services to request, add, or retire a business application.

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Click **New** to add a new application or click the name of an existing application that you want to edit.
3. On the form, fill in the fields.  
For field information, see [Business Application Form](#).
4. Click **Submit** or **Update**.
5. To relate a business application to an application service using the CI relationship editor, Click the Add CI relationship (+) icon in the **Related Items** section.
6. To view the roadmap of the business application and its related data, click **View Application Roadmap**.
7. To get all the available and significant information of a business application, click [Application 360](#).
8. To know the application cost in the last period, manage application cost as percentage of total spend, determine its future trend, and provide a cost-effective business application, click **Application TCO**.

For more information, see [Application TCO](#).

### Note:

The link to Application TCO dashboard works when you use the preconfigured **Business Application Costing** cost model. The integration works when you activate the Application Portfolio Management plugin (com.snc.apm) and Financial Management for APM (com.snc.financial\_management\_for\_apm) plugin. By default, the Performance Analytics – Content Pack – Application Portfolio Management (com.snc.pa.apm) plugin gets activated as part of the Application Portfolio Management plugin (com.snc.apm) activation.

For the Financial Management For APM (com.snc.financial\_management\_for\_apm) plugin, reach out to one of the Partner Store Apps. Your ServiceNow implementation partner could help you with the Partner Store App details.

9. To raise a demand for the business application, click **Create Demand**. The Demand form that opens up populates the related business application in the **Business Applications** field.
10. To retrieve [software models associated to the business application](#), click **Manage Technology Models**. It also retrieves the log of software models that the software models suggestion engine retrieved when the scheduled job was last executed.
11. To navigate to the timeline view of the business application and to view the timeline of all its associated epics, stories, enhancements, other stories, projects, and demands, click the additional actions icon () and configure UI actions to display the **View Application Backlog** button.

Click the button to go to the Application backlog view of the timeline.

For more information on this timeline view, see [Application Backlog view](#).

### What to do next

To have a complete view of the business applications, click the [Application 360 dashboard](#).

## View business application roadmap

Use the graphical, high-level overview of the application roadmap to view the investments made in the business application.

### Before you begin

 **Note:** Activate PPM Standard (com.snc.financial\_planning\_pmo) plugin to view the business application roadmap.

The projects and demands must be tied to business applications for the investment portal view to work.

Role required: it\_project\_manager and sn\_apm.apm\_user

### About this task

The application roadmap takes you to an investment portal of the business application. The portal is exclusive to Application Portfolio Management.

## Procedure

1. Navigate to the Application Roadmap using one of the following options:
  - To view the roadmap of any specific business application, navigate to **Application Portfolio Management > Application Portfolio > All Business Applications**.
    - a. Click the name of the business application to open it in form view.
    - b. Click the **View Application Roadmap** button to open the business application record within a portal with all its investment details.
  - To view the roadmap of the applications that you own, navigate to **Application Portfolio Management > Application Portfolio > My Applications Roadmap**.

### Application roadmap in an investment portal

Name	Type	Program	Bus...	De...	Strategies	Goals	Pri...	Planned start...	Planned end...	Bus...	% Complete	State	Overall Status	Sch...	Res...	Cost	Scope	Status
Employee Workbook Upgr...	Project		HR	HR	People, Culture...	4 - Low	2018-12-01	2018-08-01	Manag...	0	Pending	<span style="color: green;">✓</span>						
Integrate HR Portal with Tr...	Project	Cloud Transformation 2020	HR	HR	People, Culture...	4 - Low	2018-08-09	2018-08-10	Manag...	0	Pending	<span style="color: green;">✓</span>						
Employee Agreements	Demand		HR	HR	People, Culture...	1 - Crit...	2019-04-01	2019-09-30	Devel...		Completed							
HR Service Portal	Demand		HR	HR	People, Culture...	1 - Crit...	2019-01-01	2019-10-01	Devel...		Approved							

2. Use the widgets on the top panel to view the following details:
  - The total number of investments planned on the business application, which also indicates the number of projects and demands separately.
  - The total number of projects and demands that impact the business application in the current and future fiscal years.
  - The color-coded status of the projects and demands indicating high, medium, and low risks correspond to the colors red, yellow, and green, respectively.

3. To configure the view in the portal, click the configuration widget ().

- a. Select the check box in the ITEM COLUMNS to add the columns that you require. Clear the check box to remove columns from the portal view.

4. To save your configurations, click the save icon (). Your preferences are set when you open the investment portal the next time to view the application roadmap. The settings are retained not only for the original business application for which you configured, but also for any other business application that you open.

5. Use the **Overview** tab to view the:

- Names of the projects and demands the application is tied to.
- Program that the projects and demands are part of. Projects and demands may or may not be associated to a project.
- Business units to which the projects and demands are attached.
- Business capabilities to which the projects and demands render support.

- Strategies and goals of the projects and demands.
- Planned start and completion dates.
- Overall status of the projects and demands.

**6.** Use the **Timeline** tab of the portal to view the timeline in a:

- Grid view that shows start and end dates, possible risks, and issues.
- Gantt view that indicates the schedule of the projects and demands.

#### Related topics

[Add or edit a business application](#)

[Monitor business applications with the application landscape dashboard](#)

## Associate suggested technology models to an application service

As an application owner, you can run the software model suggestions engine to fetch software models. These models can be related to an application service instead of mapping them manually.

### Before you begin

Role required: sn\_apm.apm\_user

The APM user has read-only permission to access the following tables:

- Hardware [cmdb\_ci\_hardware]
- Hardware Model [cmdb\_hardware\_product\_model]
- Hardware Model Lifecycle [cmdb\_hardware\_model\_lifecycle]
- Software Discovery Model [cmdb\_sam\_sw\_discovery\_model]
- Software Installation [cmdb\_sam\_sw\_install]
- Software Model [cmdb\_software\_product\_model]
- Software Model Lifecycle [sam\_sw\_model\_lifecycle]

### Procedure

- 1.** Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.  
You can follow one of the following options:
  - Right-click the name of a business application and click **Manage Technology Models** option.
  - Click the name of the business application to open the record in the form view. Then click **Manage Technology Models** button.
- 2.** Right-click the application service record in the Technology Models Retrieval Logs list.
- 3.** Click **Fetch Product Models** option.
- 4.** To fetch all the hardware models on which the business application runs, select the **Hardware Models Only** check box in the Fetch Product Models pop-up that opens. The technology models suggestions engine retrieves only the hardware models.
- 5.** To fetch all the hardware and the software, select the **Hardware and Software Models** check box.

**Note:**

The **Hardware and Software Models** check box appears when you activate Software Asset Management Professional (com.snc.samp) plugin.

The hardware product models that are associated to the application service are listed in the Application Service Hardware Models [sn\_apm\_tpm\_app\_service\_hardware\_model] mapping table. The Technology Models Retrieval Logs [sn\_apm\_suggestion\_engine\_run\_log] table lists the number of hardware models on which an application service runs. The software models associated to the application service are listed in Application Service Software Models [sn\_apm\_tpm\_service\_software\_model] database table.

By default, the technology models suggestion engine checks only the hardware and hardware installed with new software installs since the last run of the job. However, if you require the engine to check all hardware irrespective of its last run, then enforce a check on all installs.

- Select the **Force Check All Installs** check box to check all hardware irrespective of the check until the last run of the job.

The engine retrieves different application instances for that business application.

**Force Check All Installs** option also scans and suggests updated software models when there are variations in the mapping between the discovery model and the software models. Variations occur when the software models are either updated manually or through normalization rules.

- Click **OK**.

In the Technology Models Retrieval Logs list, you can view the:

- Progress of the engine in the **Percent Complete** column corresponding to the application service record. A message, Progress Worker to Fetch models is submitted successfully for Attendance Management Service is also displayed at the top.
- Number of the software models that the engine suggests in the **Software Model Suggestions Count** column.
- Number of hardware models on which an application service runs in the **Hardware Model Count** column.

- Check the **Status** for the selected application service.

The **Percent Complete** should be 100%. Or, click the information icon ( ⓘ ) to view the log status of the application service.

- Click the application service record in the Technology Models Retrieval Logs list view.

**Retrieved Software Models** tab lists all the software models retrieved from the associated hardware of the application instance in the Technology Models Retrieval view. You can also view the total number and names of the software models that the engine suggests associating with the application service.

- Select the check box adjacent to the software model and click **Associate Software Models** action from the **Action on selected rows** list to associate the software model to the application service.

The status of the software model changes to **Associated**. A record is created in the Application Service Software Models mapping table. You can also view the associated software models in the **TPM timeline** view.

When you run the job for the first time, all the extracted software models are in status **New**. However, the status of the suggested software model changes based on the actions taken on the previous run of the job.

In the Actions choice list below the software model list, you can select an action.

For information about the status of the software models, see [Status of the Software models](#).

11. Click the **Application Service Software Models** tab to view the list of software models associated to the application service.  
To delete an application service software model record, select the record to mark for deletion and click delete in the **Action on selected rows** list. To associate an application service to a software model, see [Associate an application service to a software model](#).
12. Click the **Application Service Hardware Models** tab to view the hardware product models that are associated to the application service.  
The Application Service Hardware Models [sn\_apm\_tpm\_app\_service\_hardware\_model] mapping table stores the data. To associate an application service to a hardware model, see [Associate an application service to hardware model](#).

## Assess business capability

Assess the business capabilities within the indicator framework and based on the score you can make strategic decisions on the business applications that support the business capability.

### Before you begin

Role required: sn\_apm.apm\_admin

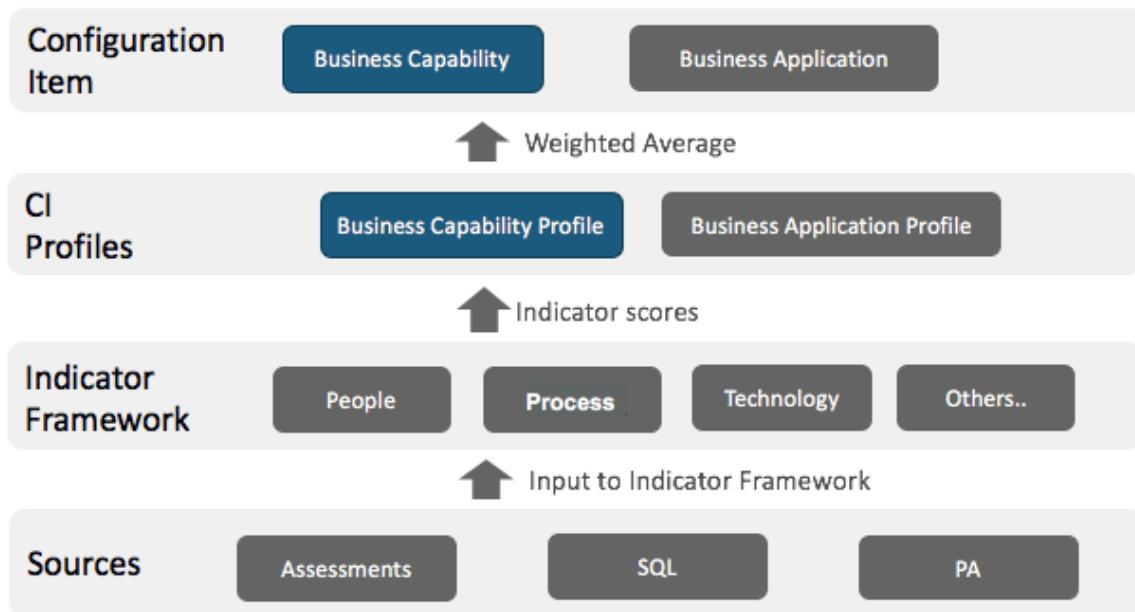
### About this task

Each business application and business capability have a unique identity as a configuration item (CI). Such a distinction helps to establish a relationship between these independent configuration items. The CI relationship helps to establish a parent-child relationship between business capability and business application, and business application and business capability.

The configuration items must be associated to a set of indicators to generate a weighted score for evaluation. Preconfigured indicators such as people, process, and technology are used to assess business capability.

## Business capability scoring framework

## Business Application/Capability scoring framework



The indicator scoring framework also supports scoring of business capability in addition to business application. Within this framework the preconfigured indicators including people, process, and technology, as well as the indicators that you have created, are evaluated to give the indicator scores. For business applications you can create multiple scoring profiles. Each scoring profile can contain multiple indicators. But for capabilities you can create only one scoring profile and not multiple scoring profiles.

### Procedure

1. Create CI relationships or edit the existing relationships using [CI relationships in the CMDB](#).
2. Relate business capabilities and business applications using the following pre-determined CI relationship types:

#### Relationship types

Parent	Type	Child
Business Capability	Provided By::Provides	Business Application
Business Application	Provides::Provided by	Business Capability

**Note:** Both the business capability and the business application are configuration item entities.

The parent column of the capabilities table is used to create the capability hierarchy.

### What to do next

[Create a business capability](#) and relate the capability to a business application using the CI relationship editor.

### Create business capability and relate the capability with an application

Business capabilities are the abilities of an organization to do an activity to fulfill its business goals. Align your organization goals with business capabilities by creating capabilities.

## Before you begin

Role required: sn\_apm.apm\_admin

## About this task

Use the Business Capability form to create and update a business capability. If you add a new capability, update an existing capability, delete a capability at a leaf node level, then the levels of all the capabilities and the leaf node in that hierarchy must be updated accordingly. Click the **Update Capability Level and HierarchyID** related link to update the levels in the hierarchy so that the capability map reflects the updates. The **Leaf Node** and the **Level** fields are rendered uneditable to you, yet you can view the level of the capability if it is at leaf node and its position in the hierarchy.

Following are the conditions to update or delete a capability:

- When you add a capability, the level of the new capability in the hierarchy is automatically assigned based on the level of the parent capability that is attached.
- If a parent capability is updated in the hierarchy, then the levels of all its child capabilities are recalculated. Otherwise, a capability can only be updated of its name, description, or parent.
- While adding or updating a capability the total number of levels cannot exceed more than six in the hierarchy. For example, the levels can be from 0 to 5, where 0 is the root level.
- You can delete capabilities that are at the leaf node level only. Or, a capability that does not have a child capability of its own.
- Do not create circular relationships. In creating a parent capability, a child capability cannot be its parent.

## Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Business Capabilities**.

You can also navigate to **Organization > Business Capabilities**.

2. Select **New**.
3. Fill in the form fields.  
For field information, see [Business capability form](#).
4. Click **Submit**.

If a root or a level-0 capability is created or if the parent field of a capability is rendered null, then a message prompts you to run the business capability update levels job to recalculate the hierarchy IDs.

5. To make the **Hierarchy ID** field editable, navigate to **System Properties > All Properties**.

- a. Click the `use_business_capability_custom_hierarchy_id` system property in the `sys_properties.list`.
- b. Enter true in the **Value** field.
- c. Click **Update**.

**i Note:** Since the hierarchy ID is customized, the system does not check for any conflicts in the number or value that you set.

6. To create child capabilities for the capability that you created, open the record and click **New** button in the **Capabilities** related list of the Business Capability form.
7. In the related links, click **Update Capability Level and HierarchyID** to update the levels in the hierarchy.  
Clicking the **Update Capability Level and HierarchyID** link executes the **Update Capability Level and HierarchyID** scheduled script. You can [view the updated hierarchy in the capability map](#).

If you had navigated to the Capability Hierarchy Map after updating the parent, order, or hierarchy ID but without running the update capability levels job, then a message prompts you to run the Update Capability Levels job and relaunch the page to render the capability hierarchy map with the latest change.

8. To relate the capability with an application, click open the business capability.

9. Click the Add CI relationship (+) icon in the **Related Items** section of the business capability form to launch the relationship editor and create the [CI relationship](#).

The relation between a business capability and business application must always be of type provided by::provides.

## What to do next

View [capability based planning](#) to understand the hierarchy of capabilities mapped with its related applications and [plan investments](#) in applications if the technology of the applications is at a risk.

## Use capability map for planning

Capability-based planning helps you to understand your business capabilities, and the business applications that support them, to achieve your business goals.

### Before you begin

Role required: sn\_apm.apm\_analyst

### About this task

Capability map is a pictorial representation of the capability-based planning displaying capabilities in a hierarchy. The hierarchical structure helps you to easily drill down to the lowest level and identify major and minor gaps. With this map, you get a complete view of all the capabilities, the applications associated to each of the capabilities, and the indicator scores of each business application in association with the capability.

The capabilities are color coded which enables you to identify, in a glimpse, those capabilities that have major, medium, and minor gaps. Since you have visibility of the business applications that support the capabilities, you can create goals, demands, or programs to improve the performance of the applications.

### Procedure

1. Navigate to **All > Application Portfolio Management > Capability Ratings > Capability Map**.

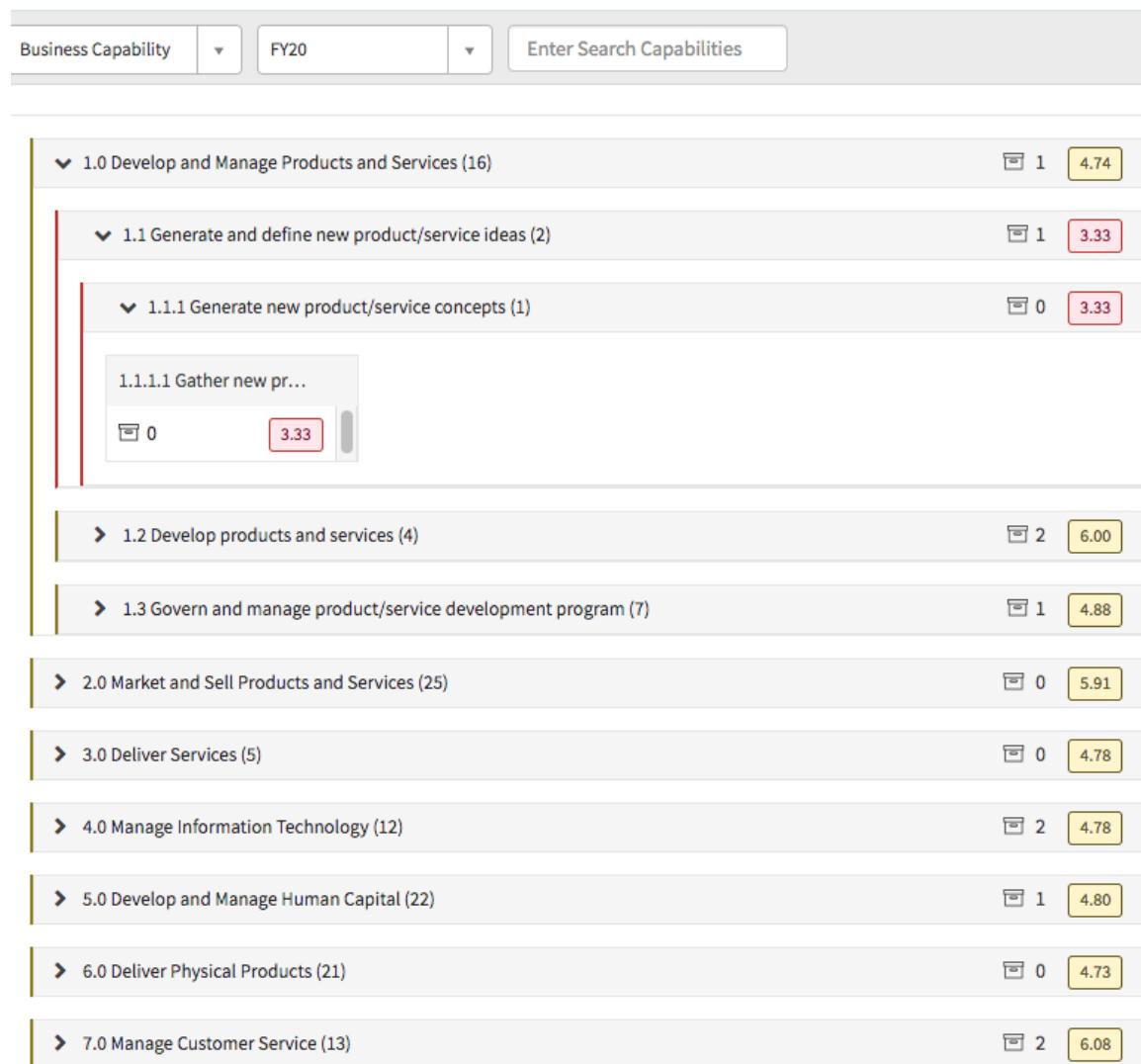
The left pane lists all parent capabilities in the hierarchy. By default, the first business capability in the hierarchy at level 0 expands to display its immediate child capabilities at level 1. For subsequent business capabilities and child capabilities, click the ➞ icon to expand and view its sub-capabilities at each level. This view is similar across Business Capability, Technology Risk, and also in Manage Capability Hierarchy views.

The left pane also displays the total count of sub-capabilities below each parent capability, the total number of business applications directly related to each capability, and their capability score. Similarly, on expanding a parent capability, you can see the number of subcapabilities, the total count of business applications that are directly related to the sub-capability at that level.

The right pane displays the overall capability summary of the business capabilities in your enterprise with the following details. It shows the overall capability risk summary if you toggle to the technology risk view.

### Capability-based planning view

Home > Capability Details



#### Capabilities

Total number of business capabilities that are displayed in the list on the left pane. The total number of capabilities is displayed for both **Business Capability** and **Technology Risk** views.

#### Leaf Capabilities

Total number of capabilities at the leaf level (that has no child capabilities of its own) in all the hierarchies of the business capabilities listed in the left pane.

#### Assessed

Total number of assessed business capabilities.

Not Assessed

Total number of capabilities that have not been assessed.

Major Gap

Total number of capabilities whose score fall within the range of 1-4.

The Technology Risk view displays the number of capabilities that use applications whose technologies are at a greater risk.

Medium Gap

Total number of capabilities whose score fall within the range of 4-7.

For Technology Risk view, it displays the number of capabilities that use applications whose technologies are at a medium risk.

No Gap

Total number of capabilities whose score fall within the range of 7-10.

For Technology Risk view, it displays the number of capabilities that use applications whose technologies have no risk at all.

## 2. By default the overall summary of capabilities is displayed.

Use one of the following choices to configure the view, and the details that you want to see in the capability map:

- **Business Capability** view: Selecting **Business Capability** enables the scores view. It displays the capabilities and applications associated with it.

With this view, you have the following search option:

**Fiscal period:** Select a fiscal period to view the capability scores generated for that fiscal period. If the capability is not assessed for the fiscal period, then it displays as **Not Assessed**. Conversely, you must also select a fiscal period to view the capability details, otherwise the system alerts you with an error message.

- **Technology Risk** view: Select the **Technology Risk** view to know the capabilities that are at risk due to their end of life or expired technologies. It displays the overall summary of business capabilities and the technology risk of each business application. It also shows the capabilities that are impacted as a result of the technology risk. The technology risk on the capability is derived from the technology risk on a business application.

Enter Search Capabilities

Use the **Enter Search Capabilities** field to enter a text and search a business capability that you are looking for.

Legend (  )

Lists the categories in color legends and the corresponding description. Also lists icons used in the map.

Create

Click the list to [create a demand](#), a goal, or a program for the capability that you have currently selected.

Similarly, toggle over to the technology risk view to raise a demand, create a goal, or a program for the underlying technology of an application if the technology is at risk.

**Note:** The Program option is available only when you activate the PPM Standard (com.snc.financial\_planning\_pmo) plugin.

### Manage Capability Hierarchy

Enables you to create a level-0 capability, add a child capability, edit an existing capability, and also to delete a leaf-level capability in the capability map. You can manage all the **business capability relationship** in the UI without having to navigate to the Business Capability form to do these functions.

3. Expand each business capability to view the capability details and technology risk details.

For more information, see [View business capability details in capability map](#) and [View technology risk details in capability map](#).

### View business capability details in capability map

Use the capability map to assess capabilities on dimensions such as people, process, and technologies and plan investments accordingly. View the current trend of your business applications and plan to potentiate them by creating goals, demands, and programs and track their progress in the map.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Capability Ratings > Capability Map**.
2. Select the **Business Capability** view.
3. Click each capability to view the sub-capabilities and their details.

The left pane of the map displays the capabilities along with the following information:

#### Number of sub-capabilities

At each capability level, the total count of sub-capabilities and their subsequent level of sub-capabilities is listed within brackets next to the name of the capability. That is, at the parent capability level, the total number of child capabilities and their direct child capabilities is listed.

#### Number of applications linked to the capability

The applications icon (  ) displays the total count of applications that are related to that capability.

#### Capability score

The capability score for the business capability, rounded to two decimal places only, is displayed in a color-coded box next to the application count. The colors indicate:

- Major gap: red color, scores in the range of 1–4.
- Medium gap: orange color, scores in the range of 4–7.
- No gap: green color, scores in the range of 7–10.

The capability is assessed for the selected fiscal period of the business capability and the score data is retrieved from the apm\_app\_score table.

The overall score of parent capability is the average sum of the scores of all the direct child capabilities. That is:

Score of parent capability = Score of all child capabilities / total number of child capabilities

If the parent capability is not assessed and displays (n/a) instead of a score, then it means that all its child capabilities are not assessed. However, if one of the child capabilities is not assessed, then the parent capability score is calculated based on the scores of the other child capabilities that have been assessed.

### Capability levels and assessment

The map displays capabilities up to six levels. The capability that is at the lowest level or the capability that does not have a child is called the **leaf** level. Only the leaf level capabilities are assessed on the dimensions of people, process, and technology. The capability in the hierarchy that does not have a parent is the level 0 or root capability.

The right pane of the map displays the details of the capability selected on the left pane, and all the business applications that are related to that capability.

### Details

With the **Business Capability** view, all the data of the selected capability are displayed in the **Details** tab.

Details			Business Applications			Services		
Develop and Manage Products and Se... Capability			4.74					
3.4 People	3.6 Process	4.3 Technology	0 Project	0 Demand	\$0.00 Total Project Investments			

- **Capability:** Displays the name of the business capability that is selected. Click the capability name to navigate to the Business Capability form and view the record details of the selected capability.
- **Capability Score:** Displays the capability score of the selected business capability and the individual indicator scores based on the dimensions of people, process, and technology.

**Note:** If the business capability is at the leaf level, with no sub-capabilities, then the capability score is clickable. On clicking the link, the CI Scores form opens to display the score of the business capability configuration item for the fiscal period selected in the capability map.

Similarly, the indicator scores of People, Process, and Technology are clickable if they are for the leaf capabilities only. Clicking each of these links opens the Indicator Scores form of the business capability configuration item for the relevant indicator and the fiscal period selected in the capability map.

- **Project:** Displays the total number of projects that the selected business capability is part of. The project attached to a sub-capability rolls up to its parent. Likewise, the projects of all the sub-capabilities in a hierarchy rolls up to the root, level 0, capability.

Clicking the number of projects opens the Projects form with the project details for the business capability.

- **Demand:** Displays the total number of demands created for the selected business capability. The demand created for a sub-capability rolls up to its parent. Like manner, the demands attached to all the sub-capabilities in a hierarchy rolls up to its root, level 0, capability in the hierarchy.

When you select a capability or a sub-capability in the left pane of the map, the total number of demands and projects created or added to the capability, sub-capability, or its technology is displayed on the right pane. Selecting a parent capability displays the consolidated total number of demands created either for the parent or for its child capabilities.

Clicking the number of demands opens the Demands form showing the demand details for the business capability.

- **Total Project Investments:** Displays the total amount invested on the selected business capability in the selected fiscal period. Total project investments are the consolidated amount of investments made on the capability through one or more projects. You can create a project to achieve an objective of one or more business capabilities. Similarly, you can have a business capability tied to more than one project to achieve the goal of the business capability.

**Note:** The Project and Total Project Investments details are available only when you activate the PPM Standard (com.snc.financial\_planning\_pmo) plugin.

If a project is created to achieve the goals of any two business capabilities, then the **Total planned cost** of the cost plans attached to the project is split equally between the two business capabilities. For example, if \$100 is invested on project P1, which impacts business capabilities BC1 and BC2, then the invested amount of \$100 is split as \$50 each between BC1 and BC2, respectively.

The investment made on a child capability rolls up to its parent. Likewise, the investments made on all the sub-capabilities in a hierarchy rolls up to the level 0 capability in the hierarchy.

## Business Applications

Displays the names of the applications that are directly and indirectly related to the capability and their overall scores.

Directly related applications are those applications that are directly related to the capability. Indirectly related applications are those applications that are related to another capability in that capability hierarchy. That is, the application is related to either any of the parents or any of the children in that hierarchy.

Both the **Business Capability** and **Technology Risk** views have the option to display direct and indirect business applications. However, the details displayed regarding the applications slightly vary.

**Business Capability** view: Displays the names of the business applications on the right pane, which are related to the selected business capability on the left pane, and the overall score of each individual application.

#### Business application overall score view

Details	Business Applications	Services
Indirect Applications		
		▼
		Overall Score
<b>Application Name</b>		
Fast Man	7.01	
Fast Man	7.01	
Inventory Management	3.07	
LogiMan	5.90	
MM Plus	6.80	
Procure It	6.98	

Click the business application hypertext to navigate to the Business Application form and view the record details.

Click the information icon ( ) of an application to view the following details:

## Business application indicator score

The screenshot shows a dashboard with various metrics and a detailed view of a business application. On the left, there are four main sections: Project Investments (\$0.00), Production Instances (4), Demands (0), and Projects (0). Below these are Score Indicators (14) with sub-categories: Application (1), Faciliti... (1), Other co... (9.92), Software... (4.42), Business (4.29), Function... (3), and Application (6, 8.88). On the right, a detailed view of the 'Buylt' application is shown with an Overall Score of 3.75.

Application Name	Overall Score
Buylt	3.75

- **Project Investments:** Displays the total amount invested in the selected business application for the stipulated fiscal period. Project investments are the consolidated amount of investments made on a business application through one or many projects. You can create a project to fulfill an objective of one or more business applications. Similarly, you can have a business application tied to more than one project to achieve the goal of the business application.

If a project impacts one or more business applications, then the **Total planned cost** of the cost plans attached to the project is split equally among the business applications. For example, if \$100 is invested on project P1, which impacts business applications, BA1 and BA2, then the invested amount of \$100 is split equally as \$50 each between BA1 and BA2, respectively. Similarly, you can invest in one or more projects that can be tied to one business application (BA1). The invested amount is split equally among the applications tied to each of these projects. The resultant consolidated amount from different projects is the project investment of the business application (BA1).

**Note:** The Project Investments and Projects are available only when you activate the PPM Standard (com.snc.financial\_planning\_pmo) plugin.

You cannot roll up cost in the case of business applications as it is an independent entity and is not hierarchical, whereas investment rollup is possible in business capabilities.

Project investments cannot be made for both business capability and business application within a project. Total planned cost of a project is considered either for business capabilities if you are investing in business capabilities or for business applications if you are investing in business application, and not for both.

- **Production Instances:** Number of application services of the production type that the business application is related to.

The data is retrieved from the CI Relationships [cmdb\_rel\_ci] table based on the consumes::consumed by relationship between the business application and the application service.

- **Demands and Projects:** The number of demands and projects created at the business application level.
- **Score indicators:** The number of indicators on which the business application is assessed. It also displays the individual score of each indicator.
- **Capabilities supported:** Scrolling down in the pop-up you can also view the number of capabilities the business application supports and the name of each of the capabilities.

The association between the business capability and the business application is based on the provided by::provides relationship type in the CI relationships table.

Use the pagination option to display business applications attached to the business capability that you select on the left pane. You can view a maximum number of 10 business application records related directly and indirectly to the capability. Click the left or right arrow to continue to view the previous or next set of records. The pagination option is available for all levels of a capability. The option is helpful to view the business applications of all the capabilities consolidated at the root level capability, especially when there are many applications attached to it.

## Services

The tab displays the names of the services that are related to the selected parent business capability on the left pane. You can sort services in alphabetical or reverse order, search for a service, and view only a selected number of services using the pagination option.

Click the service hypertext to navigate to the service record and edit the record. The business capability is related to the service by establishing Provided by::Provides CI relationship.

## What to do next

[View technology risk details in capability map](#)

### View technology risk details in capability map

Use the technology risk view of the capability map to know the risk profiles of the technologies that support the business capability.

### Before you begin

Role required: sn\_apm.apm\_analyst

### About this task

Enabling the **Technology Risk** view displays the number of underlying technologies of the selected business capability that are at low, medium, and high risks.

### Procedure

1. Navigate to **All > Application Portfolio Management > Capability Ratings > Capability Map**.
2. Select the **Technology Risk** view.

The **Technology Risk** view displays the business capabilities (on the left pane) with the overall capability risk summary (on the right pane). Expand the parent capability to view its sub-capabilities and its associated risk details on the right pane.

## Details

The tab shows the number of technologies underlying the selected capability at high, medium, and low risks. Click the capability name to navigate to the Business Capability form and view the record details of the selected capability.

### Technology risk profile of a business capability

[Home](#) > [Capability Details](#)

Details	Business Applications	Services
Develop and Manage Products and Se... Capability	0 Low Risk	0 Medium Risk
		1 High Risk

### Business Applications

You can view the technology risk at a business application level. The risk profile of the business application is stored and retrieved from the Business Application Risk [sn\_apm\_tpm\_business\_application\_risk] table.

### Business application risk profile

Details	Business Applications	Services
Indirect Applications		
Application Name		Risk Profile
① Big Splash		
① M-Advertize		
① Market Pro		
① MyReporting		
① OBIEE		

- Click the information icon (  ) of an application to view the number of capabilities the business application supports and the names of the capabilities.
- To view the application record details, click the business application hypertext and navigate to the Business Application form.
- Click the view list of related technologies icon (  ) to navigate to the Technology Portfolio Management timeline view to view the risk profile of the business application. Filter the applications to take an active measure on the underlying technologies that are at risk.

## Services

The tab displays the names of the services that are related to the selected parent business capability on the left pane. You can sort the services in alphabetical or reverse order, search for a service, and view only a selected number of services using the pagination option.

Click a service hypertext to navigate to the service record form to edit the record. The business capability is related to the service by establishing Provided by::Provides CI relationship.

### Manage capability hierarchy in the capability map

Create a root-level capability, add a child capability to a parent, edit a capability, and delete a leaf capability, and manage the relationships between the capabilities in the capability map.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### About this task

When you add a child capability or update its order in the hierarchy, you can view the effect of your changes immediately in the hierarchical tree view of the capability map by refreshing or reloading the page. Whereas, when you add or edit a level-0 capability the **Update Business Capability Levels** scheduled job that updates the business capability levels is automatically executed to update the order and hierarchy of the capabilities in the map. Updating your business capabilities in the capability map saves your time and gives quick access to the updated data in the map.

#### Procedure

1. Navigate to **All > Application Portfolio Management > Capability Ratings > Capability Map**.
2. Click **Manage Capability Hierarchy** button.  
The capability map opens up in the edit mode.
3. To create a level-0 capability, click **New Capability** button.
4. On the form, fill in the fields.  
For field information, see [Business capability new record form](#).
5. Click **Submit**.
6. To add a child to a root capability, click the ellipses (  ) icon adjacent to the root-level business capability for which you intend to add a child capability.
7. Click the **Add Capability** button and fill in the Business Capability New Record form fields.

**Note:** The **Parent** field is auto-filled with the name of the selected root capability.

**8. Click **Submit**.**

**9.** To edit a capability, click the  icon adjacent to the root-level business capability.

**10. Click the **Edit Capability** button and fill in the Edit Business Capability form fields.**

**Note:** The **Name** field is auto-filled with the name of the root capability. You can do the following with the edit option:

- Edit the name and description of a capability.
- Move a root-level capability as child capability in a different hierarchy.
- Edit a child capability to make it as a new root-level capability.
- Move a child capability from one root to another root.

You can either enter a new name or keep the same name to the capability and add a parent to move the root-level capability from the existing hierarchy to a different hierarchy as a child capability. In a business scenario, this functionality is especially useful when you have to move a business capability from one business unit to another. For example, if your organization decides to move the Reward and Retain employees business capability from Finance to HR, then the business capability (along with its child capabilities) can be moved from Finance and appended in the HR business capability hierarchy.

**11. Click **Submit**.**

**12.** To delete a leaf capability, go to the leaf capability click the  icon adjacent to the leaf capability.

**13. Click the **Delete Capability** button.**

**Note:** The **Delete Capability** button is available only for a leaf-level capability. A leaf-level capability is the one that does not have a child of its own.

**14. Click **Delete**.**

**Note:** Delete action removes the capability from the business capability [cmdb\_ci\_business\_capability] table. It also removes the relationship that the capability has with the other configuration items in the CI relationship table.

**15.** Refresh or reload the page, for the map to reflect the changes that you made.

## View technology risks in timeline

View the internal and external life-cycle phases of all technologies or the product models that are used in your organization in the Technology Portfolio Management timeline. You can identify the stages at which the technology is, in terms of the risk factor by their color code.

### Before you begin

To view your data in the TPM timeline view:

- Create an [inventory of business applications](#).
- Relate the [business application with an application service](#).

- Associate the [application service with the software models](#).
- Associate the [application service with the hardware models](#).

The Enterprise Architect (EA) can use the timeline view to track the versions and life cycles of technologies, and the number of applications running on those technologies. EA can assess risks on a business application due to its end of life, and create demands and projects as needed.

The lines in the TPM screen indicate the life cycles of the product models. The lines are color coded, which indicates the stages of risk the software model is in, at that quarter or year.

**Note:** In the context of Application Portfolio Management, business services are referred to as application services. Application services are created based on the service [cmdb\_ci\_service] table.

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Portfolio Management (TPM) > Technology Lifecycles**.
2. Select a view grouped By Business Application, By Product Classification, By Software Model, or Application Backlog.
3. By default, the **Quarterly** button is enabled to show the timeline for the four quarters of a year.

See [views in TPM timeline](#).

Click the **Monthly** button to toggle and view the timeline across all the months in a year. The monthly view helps you to track the risk stage of an application for any specific month in a year.

4. Click the production icon () to view the production instances that are liable to risks in the current quarter or month.
5. The lifecycle data sources of software models can be displayed in either of the following two ways:
  - To display the lifecycle data sources of a particular software model, click the expand icon () of the software model.
  - To display the lifecycle data sources of all software models related to a business application, click show all lifecycle data sources icon () . Use the icon to toggle between show and hide the data sources.

You can view the timelines of life-cycle data sources in By Business Application, By Product Classification, By Software Model views, and Application Backlog view. All available sources for a software model are queried and retrieved from the Software Product Lifecycle [sam\_sw\_product.lifecycle] table. The Choices [sys\_choice\_list] table lists all the sources of the software models corresponding to the Software Product Lifecycle [sam\_sw\_product.lifecycle] table.

The sources of software life-cycle data can be internal and can also come from multiple external sources. The life-cycle phase information of the internal data with one external publisher data, with the least sequence number from the Choices [sys\_choice] table, is collated and displayed for each of the software models in the timeline. The other external publisher data sources, if present, are not shown in the timeline. Moreover, the overlapping

of internal and the external publisher information in the software model timeline can make the phases indistinguishable between the two sources.

Showing all lifecycle data sources helps in displaying all the publisher data sources for the product model as separate timelines instead of one with the least sequence number. The life-cycle information for each of the sources, whether internal or external, are shown separately. In the presence of more than one external publisher source, the sources displayed are in alphabetical order. As the life-cycle phase information is not merged or collated, the phase details for each source are comprehensible on the timeline.

6. Click the legend icon ( ⓘ ) to understand the indications of the markings on the timeline, and the color-coded lines.  
The gradation in color denotes risks, gradually phasing out from one stage to the phasing in of the next stage. You can view the legend for projects only when you activate the PPM Standard (com.snc.financial\_planning\_pmo) plugin.
7. Click **Create** list to [create a demand](#) or a project.

**ⓘ Note:**

Project in the list appears only when you activate the PPM Standard (com.snc.financial\_planning\_pmo) plugin.

8. To view and edit the application services, hardware and software models, projects, and create demands associated with the business application, click to expand a business application in the **Application** column.

See [Perform application-related tasks from timeline](#).

**ⓘ Note:**

You can create a project for a business application only when you activate the PPM Standard (com.snc.financial\_planning\_pmo) plugin.

9. Point to the risk bubble in the **Risk** column to view the risk of each business application.

You can also view the underlying technology risk status of a business application in the By Business Application view.

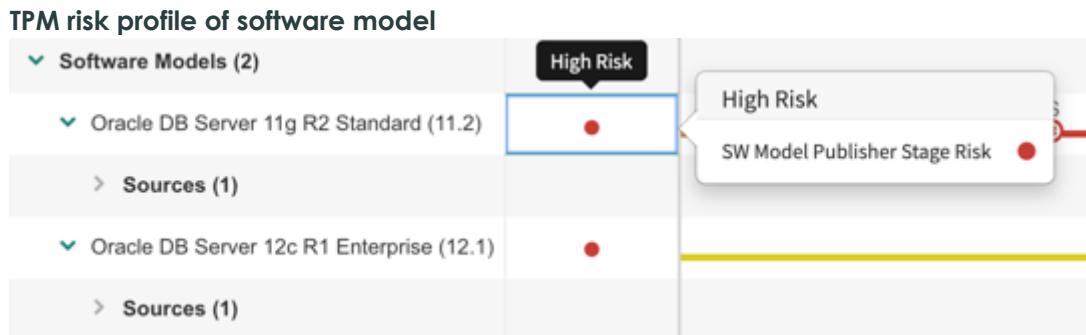
Risk information is retrieved from the business application risk table.

Risk is calculated for all business applications that are active. A business application that consumes an application service is said to be active, and the relationship between the two is established in the CI Relationships [cmdb\_rel\_ci] table. The engine evaluates the risk of each application service (of production type only). It also evaluates the risks of all the application services consumed by a business application collectively from the Application Service Risk [sn\_apm\_tpm\_business\_service\_risk] table. If the risk of any one of the application services is at a higher level, then the overall risk is high.

Formerly business application risks were calculated dynamically while loading the TPM timeline. To reduce the load to the risk engine, the engine now calculates the risk of each business application and stores the information in a Business Application Risk [sn\_apm\_tpm\_business\_application\_risk] table.

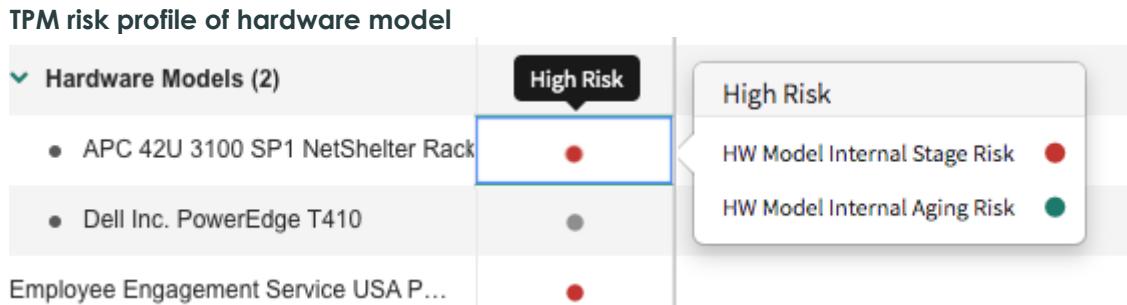
Run the [Load TPM Risk Parameters and compute Application Service Risks scheduled job](#) daily to obtain the risk status of the application services on which the business applications run.

10. Click the risk bubble of a software model to view the scores at the risk parameter level.



You can configure the scripts of the preconfigured risk parameters to evaluate your own risk values, which are stored in the Risk Parameter Score [sn\_apm\_tpm\_risk\_param\_score] table.

11. Click the risk bubble of a hardware model to view the breakdown of its risks.



12. Use the pagination option to populate the first 15 business applications, along with their related application services and software models.

As a maintenance user, you can configure it to load up to 20 or 25 business applications in the Application column.

- Navigate to **System Properties > All Properties**.
- Click `sn_apm.noOfBusinessAppsPerTPMPage` to update the value.
- Click **Update**.

13. Click the life-cycle phase icon (⌚) on the hardware or software timeline to view the life-cycle information of the hardware or software model in a pop-up.

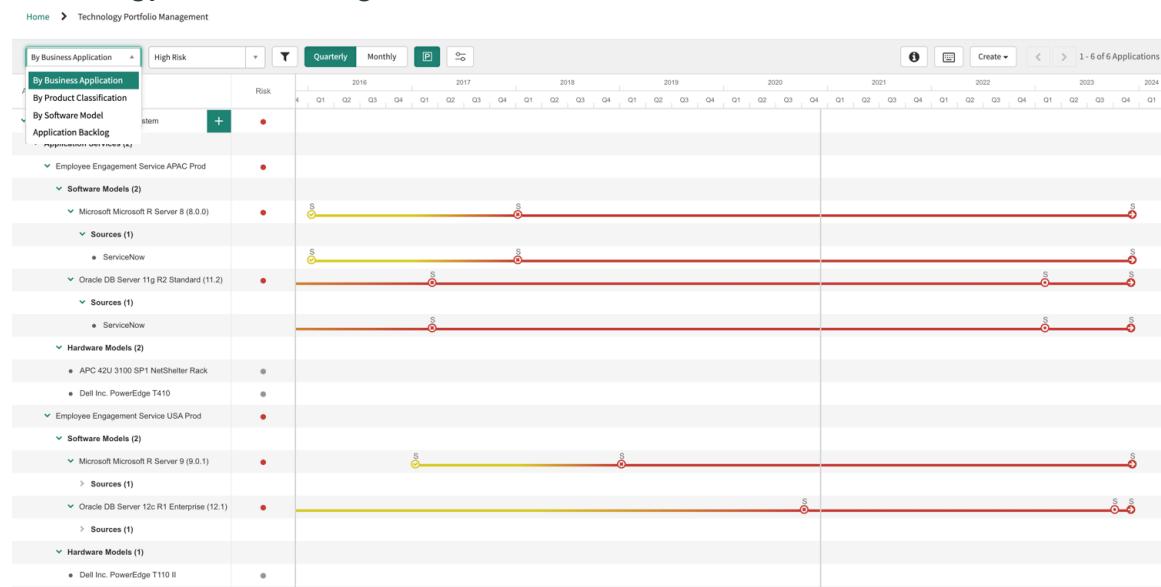
The vertical line on the timeline indicates the current quarter that you are in. See [Software product lifecycle data on the timeline](#).

### Multiple views in TPM

Multiple views within a TPM timeline screen facilitate users to view the risks of business applications in the way they want. Views can be a simple list of applications, categorizing the applications by products based on their functions, or by the underlying technology of the applications.

In each of these views, you can drill down to the respective underlying application service that is supported by the application, the underlying technology on which the application runs, or the business application that is used.

## Technology Portfolio Management timeline view



### By Business Application view

The By Business Application view displays all the software models and hardware models that are tied to the application services of a business application.

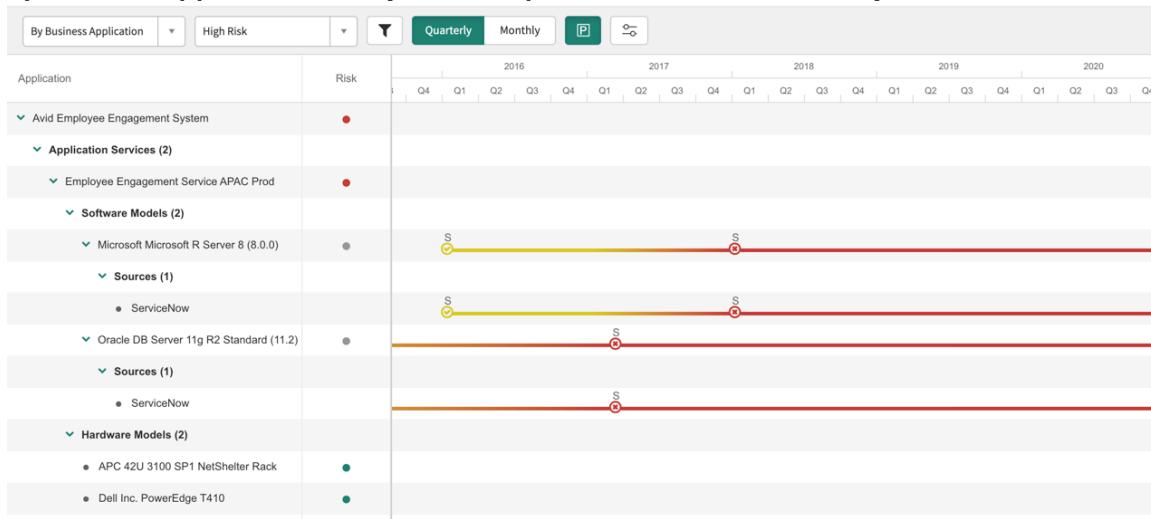
If CSDM v4.0 is implemented, the By Business Application view displays the **Business Applications > SDLC Components > Application Services > Hardware Models**, and **Software Models** or the technology structure in a succession. If CSDM v4.0 is not implemented, the By Business Application view displays the **Business Applications > Application Services > Software Models**, and **Hardware Models** or the technology structure in a succession. You can also view the applications by their manufacturers (for example, Oracle, SAP).

In the By Business Application view, you can do the following:

### By Business Application view (with the implementation of CSDM v4.0)

By Business Application		High Risk	Filter	Quarterly	Monthly	P	Print
Application	Risk	2020					
		Q1	Q2	Q3			
Avid Employee Engagement System	●						
SDLC Components (1)							
Avid SDLC							
Application Services (1)							
Employee Engagement Service APA	●						
Software Models (2)							
Hardware Models (2)							
APC 42U 3100 SP1 NetShelter Rack	●						
Dell Inc. PowerEdge T410	●						

## By Business Application view (without implementation of CSDM v4.0)



- Use the business application risk filter to filter the business applications based on their risk factor. By default, the timeline view displays business applications with production instances that are of **High Risk**. Select **Show All Risks** option to display business applications with all types of risks (high, medium, low, and not assessed). You can also filter business applications that have not been assessed. Based on the filtered criteria, you can view most or all business applications in the **Application** column.
- Use the filter icon ( ) to search and filter applications using any attribute that is present in the business application table. Use the condition builder in the Set Business Application filter dialog box to define the filter. You can set as many conditions that you may require to filter the records appropriately using the **New Criteria** button. If you log in again with the same user credentials, your filter preferences are saved for future, unless you edit or clear the filter conditions.
- Add a new demand or project to the business application. Point to the business application and click the add new project or demand icon ( ) that appears next to the application name. The demand or the project form has the name of the business application populated in the **Business Applications** field for which you are creating the demand or project.

**Note:** You can add a project to the business application only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

## By Product Classification view

With the By Product Classification view, you can see the technology **Category > Software Models > Business Applications > Application Services** structure in a succession.

This view also lists applications by technology category. For example, data technology, server technology, network technology, and application technology.

This view displays all software models including those software models that are not associated with a business application.

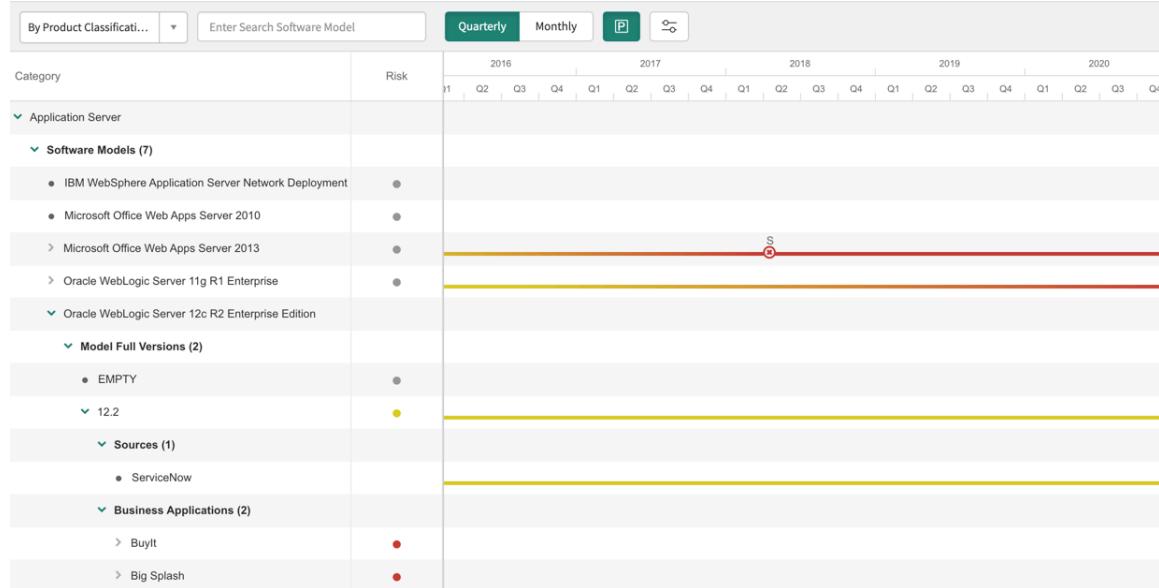
You can select this view to dynamically load all technology categories. Expand a technology category to load all the software models associated to the category. Similarly, expand a software model to view its full versions, expand a version to view its associated business applications, and expand a business application to view its related application services, demands, and projects.

## **i Note:**

You can view projects only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

With the By Product Classification view, you can perform the following search:

### By Product Classification view



Use the **Enter Search Software Model** field to enter the name and search a software model from the list in the **Category** column.

### By Software Model view

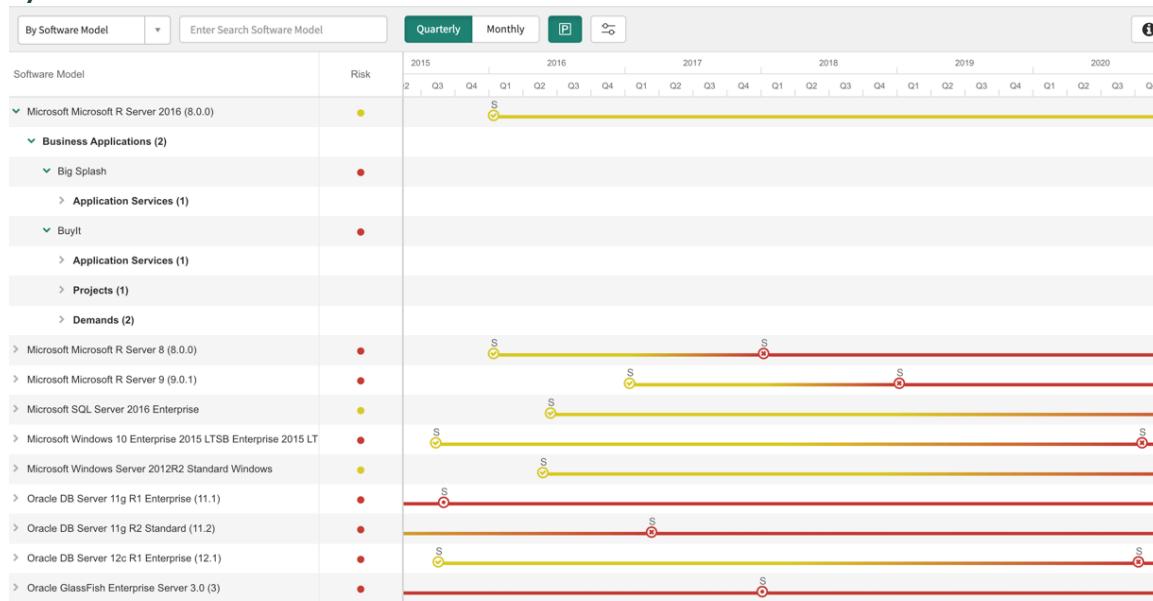
The By Software Model view displays the **Software Models > Business Applications > Application Services**.

By this view you can view the list of all software models along with the full version. When you click to expand the software model, you can view all the business applications that run on that software model. On further expansion of the business application, you can view all the application services that the business applications support.

There is no direct cmdb CI relationship between a business application and a software model. Whereas a business application and an application service are related by cmdb relationship. For the application service, there are related software models that are stored and retrieved from the Application Service Software Models [sn\_apm\_tpm\_service\_software\_model] table. Hence, the advantage of the By Software Model view is that you can directly view all the business applications that run on that software model and its full version.

By this view, you can only view the software models that have at least one or more business applications running on it.

## By Software Model view



You can also do the following:

- Search the software models.
- Set conditions to filter the software models.
- Display a selected number of software model records using the incremental pagination option.
- Add a demand or project to the software model. Point to the software model and click the icon that appears next to the software model name. The demand or the project form that opens has the names of the business applications that run on the selected software model, populated in the **Business Application** field.

**Note:** You can add a project to the software model only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

## Application Backlog view

As an enterprise architect this view helps you to understand the epics, stories, and enhancements, which are the units of work in scrum, that impact your business application.

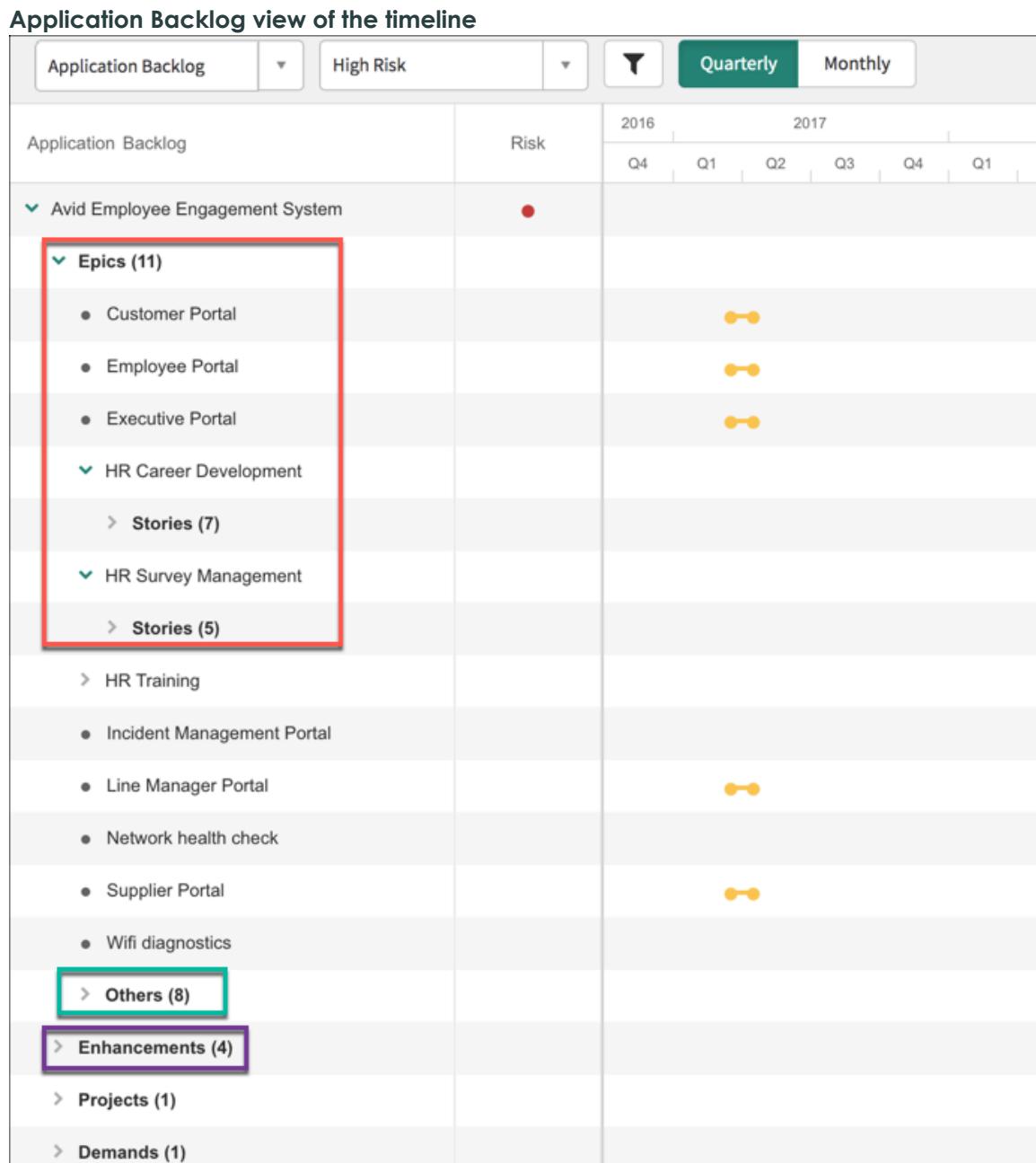
**Note:** Activate Agile Development 2.0 (com.snc.sdlc.agile.2.0) plugin to get the Application Backlog view in the TPM timeline.

Application Backlog view helps you to look into the centralized backlog of records that are of different task types such as epics, stories, and enhancements. This view facilitates prioritizing and sequencing of different task type records in one location, saving you from sorting and filtering them in many steps. In this view, you can:

- View all applications (first column) that are at a high risk by default, however you can filter based on the intensity of their risk in the second column.
- Filter the application records by any attribute in the business application table. Switch to either quarterly or monthly view of the timeline (third column).
- Create a project or demand to add to the application.

- Paginate the number of applications to be displayed in a single view.
- Expand the business application to view its unified backlog of epics, stories, enhancements, projects, and demands attached to the application. You can also see the total number of these entities within brackets.

You can view the following application backlog entities on the timeline in addition to the projects and demands attached to the application:



## Epics

The high-level business goal of the application is broken down into one or more epics. Epics organize the work required to complete parts of the application goal in small pieces. Epics are further broken down to stories, which are fundamental units of work, that describe the business requirement briefly and can be completed within a sprint. The timeline for the epics is displayed based

on the planned start date and planned end date of the epic. The status of epics must not be in **Complete** or **Canceled** state.

#### Stories

Stories usually are part of an epic. The stories contained in the epic attached to the business application that are not in **Complete** or **Canceled** state are displayed in the timeline. The timeline starts with the planned start date and ends with the planned end date of the sprint to which the story is tagged.

#### Others

There can be stories that are not attached to an epic but directly associated to the business application itself. Such stories are listed within the epics as **Others** and displayed in the timeline.

#### Enhancements

Enhancements are special requests that come from users with non-scrum role. A scrum product owner reviews these requests and creates one or more user stories. Enhancements in **Closed Complete**, **On Hold**, and **Canceled** state are not displayed in the timeline. The enhancement timeline runs from the Planned start date to its end date when the sprint work is scheduled to begin and end.

#### Projects

If the PPM Standard (com.snc.financial\_planning\_pmo) plugin is activated, then you can add a project to the business application.

#### Demands

If the PPM Standard plugin is not activated, then by default, a demand is created.

**i Note:** For the timeline to display the epics, stories, and enhancements, each of these records should reference the business application attached to it. See [Associate epic to business application](#) for more information.

#### Application column

All the epics, stories, enhancements, projects, and demands listed in the application column are clickable. Clicking each of them opens the record in a new tab that the clickable field points to.

#### Risk column

Shows the risks of the business applications only and not the risks of epics, stories, enhancements, projects, or demands.

#### Timeline column

The start and end dates of the units of work attached to the business application are plotted as a continuous line. However, if only one date is present, either the start or end date, then just that date is plotted as a filled circle.

### [Associate epic to business application for Application Backlog view](#)

An epic must reference the business application for it to be displayed in the Application Backlog view of the timeline.

#### **Before you begin**

Role required: admin, scrum\_user, or scrum\_admin

## Procedure

1. Navigate to **All > Agile Development > Epics**.
2. Click update personalized list icon (  ) in the Epics list view.
3. Move **Business Application** to the Selected list.
4. Click **OK**.
5. Double-click the Business Application column of the epic and add the business application.
6. Click the **Save** icon.

In a similar way, you can add a business application to Stories and Enhancements in their respective list view of the Agile Development application.

## By SDLC Component view

The By SDLC Component view displays the **#SDLC Components > Application Services > Hardware Models** and **#Software Models** structure in a succession. Also, the business applications are shown with the same indentation level of application services in the Business Application section.

With this view, you can view all the SDLC components along with the associated application services and business applications. You can also view the underlying software and hardware models that are associated to the application services. When you expand the software and hardware models, you can view their sources. The By SDLC Component view is available when ServiceNow® Common Service Data Model v4.0 is implemented.

The SDLC component is a configuration item that represents a unique code development effort. The purpose of the SDLC component is to represent the parts of a larger business application or digital product broken down into its individually developed components. An SDLC component is a software part or element of a larger whole for an application or technology.

There are two SDLC component types, Application and Infrastructure. Examples for type “Application” could be micro services and examples for type “Infrastructure” could be database configurations and security configurations. A deployed instance of an SDLC component of type “Application” would be an Application Service. A deployed instance of an SDLC component of type “Infrastructure” would be any infrastructure CI for which the SDLC component represents that snapshot of its configuration details.

A CMDB relationship between a business application, application service, and SDLC component can be created using the CI relationship [cmdb\_rel\_ci] table. To create a CMDB relationship with the compliance of CSDM v4.0, a relationship between an application service and an SDLC component and then between the SDLC component and the business application must be created.

The advantage of the By SDLC Component view is that you can directly view all the application services and business applications that are related to an SDLC component. For information on how to create a CMDB relationship, see [Relate business application to application service using CI relationship editor](#).

**Note:** With this view, you can only view the application services that have at least one SDLC component associated.

With the By SDLC Component view, you can perform the following search:

## By SDLC Component view

SDLC Component	Risk	2021
		Q3
▼ Avid SDLC		
▼ Application Services (1)		
▼ Employee Engagement Service APAC Prod	●	
● Software Models (2)		
▼ Hardware Models (2)		
● APC 42U 3100 SP1 NetShelter Rack	●	
● Dell Inc. PowerEdge T410	●	
▼ Business Applications (1)		
● Avid Employee Engagement System	●	

Use the **Enter Search SDLC Component** field to enter the name and search an SDLC component from the list in the SDLC Component column.

### Use timeline to execute your application strategy

**Application** column of the By Business Application view lists all the business applications that are used in your organization. If you toggle to the By Product Classification view, you can view all the technologies in the **Category** column. In the By Software Model view, you can view all the software models for each full version.

### Before you begin

Role required: sn\_apm.apm\_user

### About this task

By default, the TPM timeline view expands the first business application in the list to display its associated application services at the first level. It then displays the software and hardware models underlying the application service at the next level.

For the subsequent list of business applications, click to expand the arrow of the business application label to see the count and list of application services that are tied to the application. You can also view the underlying software and hardware models that are associated to the business application.

Application Services, Software Models, and Hardware Models headers are in bold font to distinguish them from the application service, software, and hardware model labels that are in hypertext.

### Procedure

- To navigate to the Business Application form and view the record details and update, click the business application label.
- To navigate to the Application Service form and update the record details, click the application service label.
- To navigate to the Software Model form directly from the TPM timeline, click the software model label.  
You can modify the lifecycle details of the software product (product models of each full version) in the form.

4. To navigate to the Hardware form and to add or update the hardware lifecycle details in the Hardware Model Lifecycles related list, click the hardware label.
5. To add a demand or project to a particular business application (in the By Business Application view) or to a software model (in the By Software Model view), point to the application or the software model and click the add new project or demand icon (+) that appears next to the application or software model name.

** Note:**

You can create a project for a business application only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

In the New Demand form, you can see the business application name being auto-populated in the **Business Applications** field.

You can add a demand to more than one business application. A demand (that may or may not be initially attached to a business application) can be attached to another business application as well.

To add a demand to a business application, and view the demand in the timeline view of the TPM page:

- a. Navigate to **Application Portfolio Management > Application Portfolio Analysis > Demands**.
- b. Click open the demand.
- c. Select the business application in the **Business Applications** choice list of the Demand form to which you want the demand to be added.
- d. **Save or Update** the record.
- e. Navigate to **Application Portfolio Management > Technology Portfolio Management (TPM) > Technology Lifecycles** and refresh the timeline view of the TPM page.

You can view the number of demands that are added to the business application. Click the arrow to expand and view the demand names.

** Note:** The start and end date of the demand that is attached to a business application is plotted on the demand timeline. If only one date of the demand is present, either the start or end date, then that date is plotted as a point.

## Relate business application to application service using CI relationship editor

Business applications can have multiple instances. Application instances are nothing but application services. Relate business applications to instances by relating business applications to application services. Business application and application service are two different configuration items which must be related through a CI relationship.

### Before you begin

Role required: sn\_apm.apm\_user

### Procedure

1. Navigate to **All > Application Portfolio Management > All Business Applications > Business Applications**.
2. To relate the business application with an application service, click open a business application.

3. Click the Add CI relationship (+) icon in the **Related Items** section of the business application form to launch the relationship editor and create the [CI relationship ↗](#).
4. Select one or more application services from the **Configuration Items** section.

Integration with Service Mapping is through the CI relationship editor creating direct relationship between the configuration items.

5. Click the (+) icon in the **Relationships** section.  
By default **Consumes::Consumed by** relationship type is selected.

You can relate two configuration items using the suggested relationship type of CMDB. It not only selects the relationship type automatically but also ensures consistency in the relationship. The suggested relationship is established between capability and application AND between application and service.

6. Click **Save and Exit**.

### What to do next

You have created a relationship between a business application and an application service, you can now [associate the application service to a software model](#).

## Associate an application service to hardware model

Track your equipment assets such as computers and servers using hardware models.

### Before you begin

Role required: sn\_apm.apm\_user

### About this task

Hardware models are configuration items with specifications for a given device model. Specifications can be size, depth, image, model, and power of the device.

**Note:** In Application Portfolio Management, only computers and servers are tracked as hardware or hardware models. Other types of hardware such as printers, network gear, peripherals, or UPS are not tracked for an application service.

Your business applications may run on multiple application services, which in turn can be installed on different types of hardware. Therefore associating application services with hardware models helps to know the risk on the Application Service due to underlying hardware.

When you run the Fetch Product Models job, the application service is automatically associated with a hardware model. The application service and the hardware product model are mapped and a record is created in the Application Service Hardware Models [sn\_apm\_tpm\_app\_service.hardware\_model] table. However, you can also manually associate an application service to all hardware models, including the hardware.

After the Load TPM Risk Parameters and compute Application Service Risks scheduled job is executed, the technology risk data of the hardware model are generated and stored in Hardware Model Risks [sn\_apm\_tpm.hardware\_model\_risk] table.

**Note:** As an APM user, your access to the hardware product model risk table is limited to read-only. However, if you are an APM administrator you can create, modify, and delete the hardware model risks in the table. Access is also read-only to Hardware [cmdb\_ci\_hardware], Hardware Model [cmdb\_hardware\_product\_model], and Hardware Model Lifecycle [cmdb\_hardware\_model\_lifecycle] tables.

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Portfolio Management (TPM) > Application Services**.
2. Click the service record, which is the application service, to which you want to associate a hardware model.
3. Click the **Application Service Hardware Models** related list.
4. Click **New**.

The Application service hardware models database table stores the application service hardware model information. You can also navigate directly to the Application Service Hardware Models table from the application navigator.

5. On the form, fill in the fields.  
For field information, see [Application Service Hardware Models form](#).
6. Click **Submit**.

## Associate an application service to a software model

Business applications have multiple instances such as development, QA, and production. Instances are nothing but application services. Application services must be associated with software models (to the respective full versions) to know the risk of the application service.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Portfolio Management (TPM) > Application Services**.
2. Select the service record, which is the application service, to which you want to associate the software models.
3. Select the **Application Service Software Models** related list.
4. Select **New**.

The Application Service Software Models [sn\_apm\_tpm\_service\_software\_model] database table stores the application service software model information. You can also navigate directly to the Application Service Software Models table from the application navigator. Data from this table is rendered as the software model timeline in the By Software Model view of the TPM screen.

5. On the form, fill in the fields.  
For field information, see [Application Service Software Model form](#).
6. Select **Submit**.

## What to do next

[Create risk parameter scores](#) to evaluate the risk of the software model. Based on the risk of the software model you can calculate the risk of the application service. Finally, based on the risk of the application service you can evaluate the risk of the business application.

## Create a risk parameter

The risk on a software model is calculated based on four preconfigured parameters such as external aging risk, internal aging risk, external stage risk, and internal stage risk.

**Before you begin**

Role required: sn\_apm.apm\_admin

**About this task**

In addition to the preconfigured parameters, you can also create risk parameters as per your business application requirements and the software models that it is based on. However, if you create a parameter, then you must also write a script with the logic to calculate that parameter risk.

**Procedure**

1. Navigate to **All > Application Portfolio Management > Administration > TPM Risk Parameters**.
2. Click **New** or open a record.
3. Fill in the form fields.  
For field information, see [Risk Parameter form](#).
4. Click **Submit** or **Update**.

**What to do next**

After creating the risk parameters [run the TPM risk engine](#) to load the risk parameters and [compute the application service risks](#).

**Create or edit an architectural artifact**

Create or edit an architectural artifact to align it with your business requirements.

**Before you begin**

Role required: sn\_apm.apm\_user

**Procedure**

1. Navigate to **All > Application Portfolio Management > #Architectural Artifacts > Artifacts**.
2. Create or edit an artifact.
  - To create an artifact, click **New**.
  - To edit an existing artifact, click the name of that artifact.
3. On the form, fill in the fields.  
For field information, see [Architectural artifact form](#).
4. Click **Submit** or **Update**.

**Associate an artifact to a business entity**

Associate an architectural artifact to existing elements in the Now Platform, such as business capabilities or business applications. The association creates a relationship between the artifact and related entities.

**Before you begin**

Role required: sn\_apm.apm\_user

**Procedure**

1. Navigate to **All > Application Portfolio Management > #Architectural Artifacts > Artifacts**.
2. Click the name of the artifact for which you want to add a related entity.
3. In the displayed details form, click the **#Related Entities** tab.

4. Click **New**.
5. On the form, fill in the fields.  
For field information, see [Related Entities form](#).
6. Click **Submit**.

### Manage the artifacts of a business capability

View and manage the artifacts that are associated with a business capability.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Business Capabilities**.
2. Click the name of the business capability to view the associated artifacts.
3. In the Related Links section, select the **Architectural Artifacts** tab.  
A list of artifacts associated with the business capability is displayed.
4. Create or edit an existing artifact.
  - To create an artifact, click **New**.
  - To edit an existing artifact, click **Edit**.

You can also download or remove the selected artifact as per your requirement.

### Manage the artifacts of a business application

View and manage the artifacts that are associated with a business application.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Click the name of the business application to view the associated artifacts.
3. In the Related Links section, select the **Architectural Artifacts** tab.  
A list of artifacts associated with the business application is displayed.
4. Create or edit an artifact.
  - To create an artifact, click **New**.
  - To edit an existing artifact, click **Edit**.

You can also download or remove the selected artifact as per your requirement.

### Create or edit an artifact category

Create# or edit an artifact category. Assign the category to an architectural artifact. Categories enable you to categorize and manage artifacts more efficiently.

#### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > #Architectural Artifacts > Categories**.
2. Create or edit an architectural category.
  - To create a new architectural category, click **#New**.
  - To modify an existing category, click the name of the category.
3. On the form, fill in the fields.  
For field information, see [Architectural category form](#).
4. Click **Submit** or **Update**.

## Create an artifact version

Create multiple versions of the architectural artifacts and send for approval. There can be only one approved version for each artifact.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > #Architectural Artifacts > Artifacts**.
2. Select an architectural artifact for which you want to create an artifact version.
3. Select the **Architectural Artifacts Versions** tab.
4. Click **New**.
5. On the form, fill in the fields.  
For field information, see [Architectural artifacts version form](#).
6. Click **Submit**.

## Download an artifact version

Download an approved artifact version to view the architectural diagram in it.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Architectural Artifacts > Versions**.
2. Select the architectural artifact version that you want to download.
3. Click **Download Artifact**.

**Note:** You cannot download an unapproved artifact version or an artifact version that is a URL. If you try to download these, you get an error message.

## Result

An approved version of the document is downloaded.

## Request approval for an artifact version

Send an architectural artifact version for approval to an Enterprise Architect user. The user reviews and approves the request.

**Before you begin**

Role required: sn\_apm.apm\_user

**Procedure**

1. Navigate to **All > #Architectural Artifacts > Artifacts**.
2. Select the architectural artifact for which you want to send the artifact version for approval.
3. Select the **Architectural Artifacts Versions** tab.
4. Click the version number of the record to open it.
5. Select **Request Approval**.

**Result**

The record version is submitted for the approval to an Enterprise Architect. An email notification is sent to the approver.

**Approve or reject an artifact version request**

As an Enterprise Architect, create, edit, and approve or reject architectural artifacts version requests that are submitted by other users.

**Before you begin**

Role required: sn\_apm.apm\_analyst

**About this task**

When a user requests an artifact, an email notification is received by the approver.

**Procedure**

1. Navigate to **All > Service Desk > My Approvals**.
2. Select the artifact request that you want approve or reject.
3. Select **Approve** or **Reject**.

**Result**

The requester receives an email notification for the approval or rejection.

**Approve architecture review requests**

You can approve an architecture review request if you are part of the Enterprise Architect Group.

**Before you begin**

Role required: sn\_apm.apm\_analyst

**About this task**

An approver in the group need not necessarily be an APM user nor have an APM role. However, the approver must be a user listed in the user table [sys\_user]. Any approver from the Enterprise Architect Group can approve the architecture review request.

To add or modify the members in the group, navigate to **Application Portfolio Management > Administration > Services Approval Group**.

## Procedure

1. Navigate to **Application Portfolio Management > Business Application Lifecycle Management > Service Requests**.
2. Click the task number.
3. Scroll down to the Approvers related list and click the state of the approval.
4. Select **Approved** or **Rejected** in the **State** field.
5. Click **Update**.

The requester receives an email notification once you approve or reject an ARB request. An automated flow designer process is also created. You can navigate to **Application Portfolio Management > Administration > Services Flow Designer** to see the flow.

## Create a Lucidchart diagram for a business application

Create a diagram in Lucidchart for your business application hierarchy and associate it with an architectural artifact.

### Before you begin

Ensure the following ServiceNow Store apps are installed:

- Lucidchart Diagramming Spoke
- Lucidchart Integration

Ensure a connection is established with Lucid. For details, see [Create OAuth 2.0 Client in Lucidchart](#) and [Create a connection and credential alias for the Lucidchart diagramming spoke](#).

Role required: Member of the Enterprise Architect group

## Procedure

1. Navigate to the Business Application diagrams.
  - Navigate to **All > Application Portfolio Management > #Architectural Artifacts > #Diagrams**
  - Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications** and select a Business Application.
2. Click **Create Diagram**.
3. On the form, fill in the fields.

**Note:** Use the authorization link on the Create Diagram window, to generate an authentication token and fetch your Lucid folders to save the diagram.

For field information, see [Create diagram form for business application](#).

4. Click **Create Diagram**.

### Result

After a successful submission, a link to the newly created Lucid diagram appears on top of the screen. You can select the link to navigate to the diagram. The Architectural Artifacts page shows the link to the Lucidchart diagram and an artifact name associated with it. You can select the respective link to access the artifact or diagram.

## Create a Lucid diagram for a business capability

Create a diagram in Lucidchart for your business capability maps and associate it with an architectural artifact.

### Before you begin

Install the following store apps:

- Lucidchart Diagramming Spoke
- Lucidchart Integration

Ensure a connection is established with Lucid. For details, see [Create OAuth 2.0 Client in Lucidchart](#) and [Create a connection and credential alias for the Lucidchart diagramming spoke](#).

Role required: Member of the Enterprise Architect group

### Procedure

1. Navigate to the Business Capabilities diagrams in one of the following ways:
    - Navigate to **All > Application Portfolio Management > #Architectural Artifacts > #Diagrams**
    - Navigate to **All > Organization > Business Capabilities** and select a Business Capability.
  2. Click **Create Diagram**.
  3. On the form, fill in the fields.
- Note:** Use the authorization link on the Create Diagram window, to generate an authentication token and fetch your Lucid folders to save the diagram.
- For field information, see [Create diagram for a business capability](#).
4. Click **Create Diagram**.

### Result

After a successful submission, a link to the newly created Lucid diagram appears on top of the screen. You can select the link to navigate to the diagram. The Architectural Artifacts page shows the link to the Lucidchart diagram and an artifact name associated with it. You can select the respective link to access the artifact or diagram.

## Use Business Application Lifecycle Management to request or retire an application

If you are an APM user, you should use the Business Application Lifecycle Management services to request or register a new business application for your business. You can request a business application like you place an order for any other service catalog item.

### Before you begin

Role required: sn\_apm.apm\_user

### About this task

The base system also offers **Register a Business Application** as a service to all Now Platform customers. The Application Portfolio Management Core plugin (com.snc.apm\_core) provides this service and the plugin is available on new and restarted instances. Customers who do not have the Application Portfolio Management application can avail this service to request a new business application. However, activating the Application Portfolio Management plugin (com.snc.apm) enhances this service to predict and set application category using the machine-learning solution.

For more information on the plugin, see [Activate Application Portfolio Management](#). See [Predictive Intelligence for Application Portfolio Management](#) to know more about machine-learning solution for business applications.

## Procedure

1. Navigate to **All > Application Portfolio Management > Business Application Lifecycle Management > Business Application Catalog**.

Business Application Lifecycle Management Services opens in a service catalog page.

2. Click the **Register a Business Application** card or click **View Details** in the Register a Business Application card to register a new business application.

3. Enter the details in the Register a Business Application form.

Name of the business application is mandatory. Mandatory fields have a red asterisk (\*) beside them.

4. Click **Submit**.

The system validates your request to check if a business application with the same name exists. If yes, then an error message is displayed. If no, then a flow is triggered and a request to register a business application is created.

The approval request is sent to the Business Application Registration Approval Group. After a member of the group approves your request, the business application gets created as a record in the business application table. You will receive an email notification for the same.

5. To retire a business application that you no longer require, click the **Retire a Business Application** card or click **View Details** in the Retire a Business Application card.

- a. Select the name of the application from the list of values in the Retire a Business Application form.

Conditions to retire a business application:

- Only if you are an IT owner of the application, business owner, or a user who supports the application, you can request to retire an application.
- You require sn\_apm.apm\_user or sn\_apm.apm\_analyst role to retire a business application.
- As an APM user, you cannot delete a business application record or mark the application as **Inactive**. However, you can raise a new request to decommission an application.
- The business application that you choose to retire must not be in **Retired** status nor the application record **False** (inactive) in the **Active** field.

- b. Click **Submit**.

## Manage Business Application Lifecycle Management service requests

You can approve requests raised by an APM user either for a new business application or retire an application that the user no longer requires.

### Before you begin

Role required: sn\_apm.apm\_analyst

The approver (apm\_analyst) must also be a part of the Enterprise Architect Group. To add or modify the members in the group, navigate to **Application Portfolio Management > Administration > Services Approval Group**.

## Procedure

1. Navigate to **Application Portfolio Management > Business Application Lifecycle Management > Service Requests**.

All requests related to the Business Application Lifecycle Management services are stored as tasks in the Business Application Requests table [business\_app\_request].

Note the tasks that are in your queue for your approval.

2. Select the task number.
3. Scroll down to the Approvers related items.
4. Select the state of the approval task.
5. Select the appropriate state from the list in the **State** field.
6. Enter a comment if required.
7. Select **Update**.

Once you approve or reject a request, a corresponding flow is triggered. Select the **Show flow engine context** related link to view the flow engine context of the request. You can also navigate to **Application Portfolio Management > Administration > Services Flow Designer** to see the flow in the flow designer.

If you approve a Register a Business Application request

- The approved business application is created as a record with an identification number in the business applications table [cmdb\_ci\_business\_app]. The status of the application is in the **Implementing** state.
- An email is sent to the requester notifying the approval of the business application.

If you approve a Retire a Business Application request

- Based on the value selected in the system property, *sn\_apm.retireBusinessApplicationTaskType*, a project, or demand is created. If the value is set as project, then a project template defined in the system property, *sn\_apm.retireBusinessAppProjectTemplate*, is applied.

The base system of Application Portfolio Management offers a project template called **Retire Business Application** with eight different pre-defined project template tasks for proper decommissioning of the application.

After the project is created and a project manager is assigned to the project, the project manager can review, edit, or add tasks as required. For more information on project templates, see [Project templates](#). To understand the project tasks, see [Project tasks](#).

- If the value in the *sn\_apm.retireBusinessApplicationTaskType* system property is set as demand, then a demand is created.

Unlike a project, APM doesn't generate a demand from a template with pre-configured demand tasks. Instead the demand is created with certain values auto-populated in mandatory fields.

To view the demand that is created to retire an application, navigate to **Application Portfolio Management > Application Portfolio Analysis > Demands**.

For field information, see [Demand form to retire an application](#).

- If you approve a request for which a project or demand is already in place, then another project or demand will not be created for the request.
- If the request to retire an application is rejected, then an email notification is sent to the requester. However, the status of the business application isn't updated irrespective of it being approved or rejected.
- You can delete a business application record or mark an application as **Inactive** as an APM admin or analyst.

## Use Business Application Lifecycle Management to request an architecture review

You can request a review of your new architecture design proposal on the technology of a business application by presenting it to the architecture review board.

### Before you begin

Role required: sn\_apm.apm\_user

### About this task

As an application owner you can propose a modification to the underlying technology of a business application, modification to network design, or propose a new service, solution, or hardware standard.

Your design proposal is reviewed by a team of enterprise architects forming an Architecture Review Board with goals to:

- Align development with IT strategies.
- Improve the product quality through the design review process.
- Provide guidance on recommended practices for specific design questions.
- Act as a referral team for security, performance, UI design to review upcoming features that may be impacted.

### Procedure

1. Navigate to **All > Application Portfolio Management > Business Application Lifecycle Management > Business Application Catalog**.
2. Click the **Request Architecture Review** link or **View Details** in the Request Architecture Review card to request an architecture review.
3. On the form, fill in the fields.

Name of the business application is mandatory. Mandatory fields have a red asterisk (\*) beside them.

#### Note:

You must be the business owner, IT Application owner, or one who supports the application to request an architecture review.

For field information, see [Request Architecture Review form](#).

**4. Click **Submit**.**

On submission, an approval request is sent to the members of the Enterprise Architect Group. An email notification is sent to you as soon as your request is approved by the review board. You shall be notified even if your request is rejected.

## Create or edit an indicator to assess an application

Application indicators are business metrics that assess the applications across dimensions such as cost, quality, technical risk, investments, user satisfaction, and business value.

### Before you begin

Role required: sn\_apm.apm\_admin

### About this task

Each indicator periodically captures related application data which is used to calculate the application score. The assessment of applications is done on an extensible framework, which is based on the various configured indicators. If you require indicators other than the preconfigured ones to calculate the application score, then you can create an indicator based on your business requirements.

### Procedure

**1. Navigate to **All > Application Portfolio Management > Administration > Application Indicators**.**

**2. Click **New** or click an existing application indicator to edit.**

**3. On the form, fill in the fields.**

For field information, see [Indicator form](#).

**4. Click **Submit**.**

**5. To regenerate the indicator score of an application, click open an indicator.**

**a. Click the **Regenerate indicator score** option in the context menu.**

The action deletes the existing scores and generates new scores instead of just updating the existing scores for that indicator. This indicator may be attached to one or more scoring profiles, and therefore recalculates the scores of all business applications that are associated to this scoring profile.

**b. Select the Fiscal Period in the Regenerate application indicator scores dialog box.**

**c. Click **OK**.**

**d. Click **Update**.**

**6. To create a dependent indicator, click open the indicator.**

If you had selected Indicators in the **Data source** field, then when you open that indicator record, the Indicator Dependencies related list is displayed.

**i Note:** An indicator which has its data source as indicator cannot be added as a dependent child indicator.

**a. Click **New** in the Indicator Dependencies related list.**

The parent indicator auto-populates in the Parent Indicator field.

**b.** Select a dependent indicator in the **Child Indicator** field.

**c.** Click **Submit**.

**7.** To assess the business application, click **Generate Assessments**.

### What to do next

Use the [preconfigured indicators](#) to assess the applications based on cost, quality, and risk.

#### Generate survey assessments and view results within APM

Within APM you can assign an assessment questionnaire to a user who uses a business application and get the feedback about the application.

#### Before you begin

Role required: sn\_apm.apm\_admin

#### About this task

APM integrates with Assessments and Surveys to evaluate business applications and business capabilities based on assessment metric types. Application indicators that are sourced from assessments can only be assessed using the assessment metric.

An **assessment metric** is a trait or value that is used to evaluate a business application.

Related metrics are grouped under an **assessment metric category**, which can be used to evaluate business applications for that category only. Whereas a **metric type** can comprise many metric categories that define a set of criteria an organization uses to evaluate its business applications.

For example, an organization may employ assessment metric types such as customer satisfaction, business value, technical risk, and functional fit to evaluate its business applications. Further, the organization can assess a group of business applications based on one assessment metric category, such as CSAT category for customer satisfaction. Within this CSAT category, you can define an actual assessment metric such as a question in an assessment questionnaire, *How likely is it that you would recommend this application to others?*

Your business application is the assessable record and it is linked to a metric type. Use the custom UI to set conditions based on the columns of the business application table that meet your criteria and filter the applications. Select either a user group or selective users as target assessors and send out the questionnaires for them to take the survey. View the assessments and their status in the **Assessment Instances**, and the results in the **Metric Category Results** tabs of the **Indicator** related lists.

#### Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Application Indicators**.
2. Click open an indicator whose data source is assessments.
3. Click the **Generate Assessments** button.
4. To filter the business applications that should be assessed, set your conditions in the **Field**, **Operator**, and **Value** fields of the condition builder in the Generate Assessment UI that opens up.

## Generate Assessment UI

[Generate Assessment](#)

## Conditions

[Table](#)[Business Application](#)**Preview**[Clear All](#)

All of these conditions must be met

<b>AND</b>	Active	is	true	OR	AND
	Application type	is	COTS	OR	AND
<b>or</b>					
<a href="#">New Criteria</a>					

## Select Target Assessors

 By User Group By User Field[\[U\] All Users](#)

## Available

Antony Thierauf  
Application Portfolio Analyst  
Approver User  
Aqib Mushtaq  
Armando Kolm  
Armando Papik  
Arya Hajarha  
Ashley Leonesio  
Asset Manager  
ATF Change Management  
ATF User

## Selected

Abel Tuter  
Application Portfolio Administrator  
Application Portfolio User



Your filter criteria are applied on all records in the business application [cmdb\_ci\_business\_app] table and you can filter applications by any column of the table.

5. To add dependent condition, click **AND** or **OR** next to the condition.
6. To add a top-level condition or multiple filter criteria, click the **New Criteria** button.
7. To clear existing filter conditions and set a new condition, click the **Clear All** button.
8. Select users in the **Select Target Assessors** region to send the assessment questions.

You can either select a user group or move individual application users to the Assessors list.

9. Click **Send Assessments**.
10. Click **OK** to confirm in the Send Assessment dialog box.

The user can view and take the assigned assessments by navigating to **Self-Service > My Assessments & Surveys**.

For more information, see [Take a survey](#).

After the user submits the assessments, the **State** of the assessment instance in the **Assessments Instances** tab changes to **Complete**.

11. Click the **Assessments Instances** tab to view the instances of assessments that have been created, the total number of assessments that have been sent out to users who fit in the filter criteria, and the status of the assessment instances.

Each occurrence of a questionnaire assigned to one user is an assessments instance.

**Note:**

Indicator score and the corresponding application score are calculated only when all the users in the assessment group have completed the assessment.

12. Click the **Metric Category Results** tab to view the weight, rating, and normalized value of each business application that was assessed by the user or the user group.

For more information, see [View an assessment category result](#) to know how the assessment results are calculated.

## Create an application score profile and attach profile indicators

You can create an application score profile and update the default application profile with new profile indicators per your requirements. After you create a score profile, you have to associate it with indicators.

### Before you begin

Role required: sn\_apm.apm\_admin

### About this task

You can create or update the scoring profile with new indicators and associate it with the business application. You can also use the same indicators within many scoring profiles, which generate indicator scores unique to that scoring profile.

### Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Scoring Profiles**.
2. Click **New**.
3. On the form, fill in the fields.  
For field information, see [Scoring Profile form](#).
4. Right-click the form header and click **Save**.

After creating a score profile, you must associate a profile indicator to the score profile.

5. In the Profile Indicators related list, add indicators.

- a. Click **New**.

- b. On the form, fill in the fields.

## Profile Indicator form

Field	Description
Profile	Name of the application profile.
Indicator	Name of the application indicator.
Evaluate within Application Scoring Profile	<p>Option for considering the business applications tied to the selected scoring profile in the evaluation of scores.</p> <p>Clearing the check box entails evaluation of all business applications within the enterprise or across all scoring profiles.</p>
Domain	The domain to which this indicator belongs.
Used in CI score calculation	Option for using the application indicator in calculating the application score.
Weightage	<p>Numerical for the indicator.</p> <p>Weightage provided in the application score profile for an indicator contributes to the total score of the application.</p>

An indicator that is added to the profile can be a parent indicator with dependent child indicators. When such a parent indicator is added to a scoring profile, then all its dependent child indicators are also added with weightage 0, if they are not already present in the scoring profile.

For more information on how to create a dependent indicator, see [Create or edit an indicator to assess an application](#).

c. Click **Submit**.

### What to do next

**Regenerate scores:** Click the **Regenerate scores** button to regenerate the scores of all the indicators attached to the scoring profile. This action deletes the existing scores and generates new scores instead of just updating the existing scores. Therefore, the scores of all the business applications that are associated to this scoring profile are also recalculated.

You can [schedule a job to calculate application scores](#) periodically.

### View application indicator scores

View the application indicator scores that are sourced and computed based on the sourcing setup defined for the application indicators. The assessment framework calculates the score only for those indicators which are attached to at least one scoring profile. The indicator scores help you to evaluate the applications and make strategic decisions on them.

### Before you begin

Role required: sn\_apm.apm\_analyst

## About this task

You can view the application indicator score details of the business applications for a fiscal period.

## Procedure

### 1. Navigate to **All > Application Portfolio Management > Application Ratings > Indicator Scores.**

The applications are listed showing the indicators, indicator scores, normalized value, application weight, and total weight for each fiscal period. The normalized value, indicator score, application weight, target maximum, target minimum, and total weight are all rounded to two decimal places.

### 2. Click a business application in the list to view the details of the application.

Related topics

[Create or edit an indicator to assess an application](#)

## View all application scores

View the application scores that are computed as a weighted sum of the application indicators on the application scoring profile. The application scores help to evaluate the applications and make strategic decisions on them.

## Before you begin

You can create the scores manually, but it is recommended that the assessment framework computes the scores.

Role required: sn\_apm.apm\_analyst

## About this task

You can view the application score for a particular business application in a fiscal period.

## Procedure

### 1. Navigate to **All > Application Portfolio Management > Application Ratings > All Application Scores.**

The applications are listed with their respective scores for each fiscal period. The scores are rounded to two decimal places.

### 2. Click a business application in the list to have a detailed view of the application.

Related topics

[Normalization of application scores](#)

## Analyze application scores in a bubble chart

Bubble charts are interactive graphs that help you identify strategies by plotting application indicator scores. You can evaluate applications for a category and decide whether to invest, sustain, or to replace an application by configuring multiple combinations of indicators in the bubble chart.

## Before you begin

Role required: sn\_apm.apm\_analyst

## About this task

Use the bubble chart to plot the indicator scores of the applications in X and Y axes. You can then use these scores to strategize goals and create a demand to invest in, replace, or sustain the application.

## Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio Analysis > Analyze**.

The Group Analysis page is displayed.

The Group Analysis page has the following sections:

Assessment Period

The fiscal period for which the analysis of applications is done.

Filter Apps

Helps filter the application categories based on the criteria set on the application indicator scores.

Categories drop-down

Helps to filter application by groups such as Application Family, Application Category, and Capability.

2. Select **Application Category** from the Category drop-down list.

List of capabilities is displayed.

3. Click an application category to open it.

A bubble chart is opened for the application category. The bubble chart helps you to view the metrics of the application indicator scores that fall within the filtered values.

Use the **Application Analysis** section to compare applications with the selected indicators. It shows the total score of the application rounded to two decimals, along with contract renewal details, its life-time details, and the different costs associated with the application. You can analyze to know which applications to invest further and that which are not really useful. To view the business application record details in the Business Application form, click the name of an application in the list. To view the application details in a dashboard view, click the [Application 360](#) tab in the Business Application form.

4. To change the configurations of the bubble chart, click the configuration icon (  ) icon and then fill in the fields on the Select Chart Dimensions form.

For field information, see [Select Chart Dimensions form](#).

## What to do next

Point to the bubble in the chart and click the application or right-click the bubble and select **Create Demand** to [create a demand](#) for the application.

## Create or edit a bubble chart for application strategies

Set up a bubble chart to compare and evaluate the relative standing of applications in selected categories. The chart helps you determine which applications to invest more in, keep, replace, or eliminate.

## Before you begin

Role required: sn\_apm.apm\_admin

If you require new indicators, create the application indicators before you create the application bubble chart for which the application framework calculates the scores.

### About this task

You can configure existing application bubble charts or create them to align with your business needs.

### Procedure

1. Navigate to **All > Application Portfolio Management > Administration > Bubble chart**.
2. Click **New** to create a new chart or click the name of an existing chart that you want to edit.
3. On the form, fill in the fields.  
For field information, see [Application bubble chart form](#).
4. Click **Submit**.

### What to do next

To view the bubble chart, go to the [Group Analysis](#) page.

## Monitor performance, costs, and workloads in Application 360

Application 360 dashboard performs as a reporting tool and uses Performance Analytics to provide a decision-making approach to Application Portfolio Management by identifying which business application requires focus and attention. The dashboard helps you to analyze the indicator scores and execute effective decisions.

### Before you begin

In the Business Application choice list, select an application to monitor its performance, costs, and workload in the following tabs and sections within the application 360 dashboard:

- **Overview:** Review the overall application score for the fiscal period.
  - **Application Indicator Scores:** View the trend and distribution for the different indicators of the selected fiscal period.
- **Costs:**
  - **Total Costs Fiscal Quarterly:** View the details of the total cost incurred in the quarterly fiscal period.
  - **Scorecard:** Ascertain the cost details and ratings over time, comparing them over different quarters.
- **Workload:** View the graphical illustration of the number of new incidents, problems, and changes over the selected fiscal period and the workload trend.

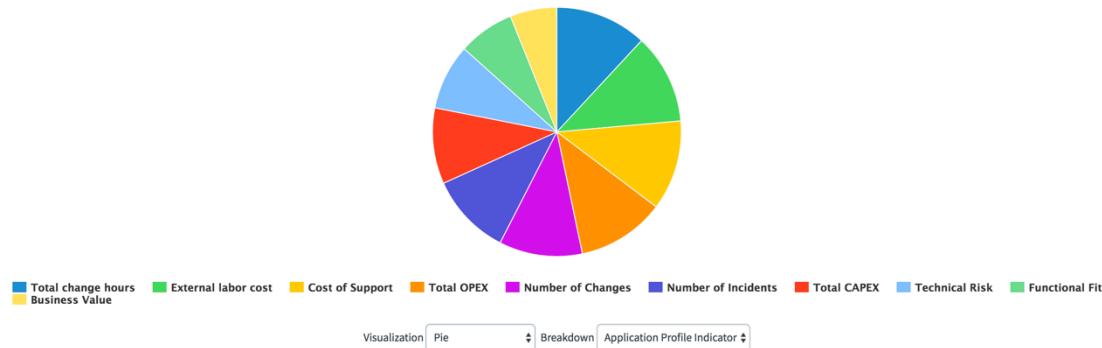
Role required: sn\_apm.apm\_analyst

### Procedure

Navigate to **All > Application Portfolio Management > Application Portfolio Analysis > Application 360**.

## Application indicator scores

Application Indicator Scores



### Related topics

[Getting started with reports](#) ↗

[Create and use dashboards](#) ↗

## Assess the performance of applications in the dashboard

Use the Application Assessments dashboard for an overview of reports on the performance of the business applications. The spline chart gives you a trend of the application indicators against the normalized value over different quarters in a fiscal period.

### Before you begin

You must have the Performance Analytics – Content Pack – Application Portfolio Management (com.snc.pa.apm) plugin activated before you can use the Application assessments dashboard. The plugin gives you access to the APM application indicator scores used in Performance Analytics (PA) reports and dashboards.

Role required: sn\_apm.apm\_user

### About this task

Application Portfolio Management provides preconfigured reports in the Application Assessments dashboard. You can configure these reports using dashboards. You can also filter data on the dashboard.

The Application Assessments dashboard is a responsive dashboard that provides a complete view of applications. You can share widgets with different indicators and indicator scores. The PA widgets on the dashboard visualize data over time, helping you analyze business processes and identify areas for improvement.

The following reports are provided on the dashboard to help you analyze trends:

- **Customer satisfaction trend:** Level of customer satisfaction over time with the various applications that belong to the application family. The normalized value is derived by computing the maximum and minimum application weight values.
- **Usage trend:** usage of applications over time.
- **Business value trend:** business value of the applications over time.
- **Cost of support trend:** cost of the applications over time.
- **Total changes trend:** total changes over time.
- **Technical Risk Trend:** Technical risk the applications may have over time.

## Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio Analysis > Dashboard**.
  2. To save a chart as a JPG or PNG file, point to the chart and click the menu icon that appears.
  3. To filter the data in the spline charts, select options from the **Application Category**, **Portfolio**, **Business Process**, and **Business Unit** lists.
- Note:** Activate PPM Standard (com.snc.financial\_planning\_pmo) plugin to apply the portfolio filter.

### Related topics

[Getting started with reports](#)

[Create and use dashboards](#)

## Create a goal for an application strategy

After assessing the applications and deciding on strategies, set concrete goals to maximize or minimize depending on the indicators for the selected fiscal period.

### Before you begin

Role required: user\_admin, pps\_admin

### About this task

To understand how your organizational strategies are performing, see the [Strategic Spend Tracking for PPM dashboard](#) topic. It provides comprehensive visualization to help you understand how the planned costs, actual costs, and benefits for projects aligned to your organization's strategies trend over time.

## Procedure

1. Navigate to **All > Application Portfolio Management > Home** and click **Create** in the **Opportunities & Solutions**, Goals section.

You can also navigate by any of the following steps:

- **Application Portfolio Management > Application Portfolio Analysis > Goals** and click **New**.
- **Organization > Goals** and click **New**.

2. Fill in the form fields.

For field information, see [New Goal form](#).

3. Click **Save**.

4. In the Recent Goals section, click the goal that you created and update the following fields:

For field information, see [Update Goal form](#).

5. Click **Save**.

You can view all the goals from the list in the Recent Goals section of the portal by clicking **View all**.

### What to do next

You can [create a program](#) to execute the goal.

Related topics

[Allocate or modify the strategy and goal percentage for a project](#)

## Create a demand towards achievement of goal

Use a demand as a step to identify cost saving opportunities on the applications and to meet the target. The strategy that you associate with the demand action decides the strategy for the application.

### Before you begin

Role required: sn\_apm.apm\_analyst

### About this task

Create a demand to capture details like action, start and target fiscal period, application, program, and so on.

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio Analysis > Demands** and click **New**.

You can also navigate to the Demand form from any of the following portals:

- [Application Portfolio Management Home page](#)
- [Capability Based Planning map](#)
- [Bubble chart](#)
- [Technology Portfolio Management timeline](#)

2. On the form, fill in the fields.

For field information, see [Demand form](#).

3. To submit the record and go back to the list view, click **Submit**.

4. Click **Save** to save the record and remain on the same form to add more details to the demand.

## Create a program for an application goal

Create a program, link it to the goal that you created, and associate a program manager to the program. After you create a goal, you should have a program to achieve the goal that you created.

### Before you begin

#### Note:

You can create a program only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Home**.

You can also navigate to **Application Portfolio Management > Application Portfolio Analysis > Programs** and click **New**.

2. Click **Create**.

3. On the form, fill in the fields.  
For field information, see [New Program form](#).

4. Click **Save**.  
You can view all the programs in the Programs list section of the portal.

### What to do next

Learn about and [create a guided plan](#) to execute the program that you have created or any other program in the list.

## Create a guided plan to execute a program

Create a guided plan by setting goals, identifying opportunities, creating demands, and tracking the projects. The guided plan helps you to implement the program that you created.

### Before you begin

You can create a guided plan to execute a program only when you activate PPM Standard (com.snc.financial\_planning\_pmo) plugin.

You should have created a program before you create a guided plan for the program.

Role required: sn\_apm.apm\_analyst

### About this task

The Program Navigation page guides you in setting a goal target for the fiscal years to achieve the goal. You can also view the application rationalization roadmap at any stage of creating the program.

1. Navigate to **Application Portfolio Management > Home**.
2. Click **View** in the **No. of Programs** pane of the **Opportunities & Solutions** section.
3. Click a program in the Programs list.
4. Click the **Select Fiscal Period to start planning** choice list in the **Fiscal Period** section and select the financial year to start with the program steps.

### Procedure

- **Step 1: Set Goal Contribution Target**

1. Click **Set target**.
2. On the form, fill in the fields.  
For field information, see [Goal Contribution Target form](#).
3. Click **Save**.  
The **Step 1: Set Goal Contribution Target** shows the percentage of the goal that you want to achieve in the selected fiscal period. For example, if your goal is to maximize cloud applications by 40% in FY18 and you set the **Target Goal Contribution %** as 50%, then the **Set Goal Contribution Target** displays 20%.

- **Step 2: Identify Opportunities**

1. Click **Identify Opportunity** in the Program Navigation page.

On the **Group Analysis** page, review the assessment period, analyze the application categories, and assess the number of applications against each category.

2. Click the **Select Fiscal Period to start Analysis** choice list in the **Assessment Period** section and select a fiscal period for which you would like to analyze the applications.
3. Use the **Filter Apps** pane to set your filter conditions based on the application indicators and scores.
4. Compare and analyze the applications by category name in the **Application Categories** section.
5. Click an item in the **Category Name** column.

6. Right-click a bubble in the [bubble chart](#) and click the **Create Demand** prompt to [create a demand](#).

For example, if your goal is to invest more on a category, then click the invest bubble to achieve that goal.

After you save the demand, the bulb icon  on the top-right corner of the page displays the number of demands that are created.

- **Step 3: Track Project**

1. Click the projects link to track the status of the project anytime.

The [Program Workbench](#)  opens up, which is a central location for creating and managing projects. As the demand manager approves the demands and the projects are executed, you can navigate to the program workbench to track the status of the projects.

## Add a TRM product

As an Enterprise Architect, you can add a new TRM product to the TRM library.

### Before you begin

Role required: sn\_apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > Products**.
2. Click **New**.
3. On the form, fill in the fields.  
For field information, see [New TRM product form](#).
4. Click **Submit** or **Update**.

## Add or edit a TRM product request

Add a new request or edit an existing request to include a new software or hardware product to the TRM library.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > Product Requests**.
2. Create or edit a request.
  - To create a TRM product request, click **New**.
  - To edit an existing TRM product request, click the name of the product request.
3. On the form, fill in the fields.  
For field information, see [TRM Product Request form](#).
4. Click **Submit** or **Update**.

## Add or edit a TRM product lifecycle request

Add a new request or edit an existing request to create a lifecycle for a TRM product.

### Before you begin

Role required: sn\_apm.apm\_user

### About this task

In the TRM library, each product is associated with a set of phases such as Approved, Approved with Constraints, Divest, Evaluation, and Unapproved.

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > Product Lifecycle Requests**.
2. Create or edit TRM product lifecycle.
  - To create a new TRM product lifecycle, click **New**.
  - To edit an existing TRM product lifecycle, click the name of the life cycle.
3. On the form, fill in the fields.  
For field information, see [TRM Product Lifecycle Request form](#).
4. Click **Submit** or **Update**.

## Request a TRM product using the TRM Catalog

Request a TRM product using the TRM catalog to add a new software to the TRM library.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > TRM Catalog**.  
The Technology Reference Model Management page opens in the Service Catalog page.
2. Click the **Request TRM Product** card.
3. On the Request TRM Product form, fill in the fields.  
For field information, see [TRM Product Request using catalog form](#).
4. Click **Submit**.

## Request a TRM product lifecycle using the TRM Catalog

Request a TRM product lifecycle using the TRM catalog to add the lifecycle for a TRM product.

### Before you begin

Role required: sn\_apm.apm\_user

### Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > TRM Catalog**.  
The Technology Reference Model Management page opens in the Service Catalog page.
2. Click the **Request TRM Product Lifecycle** card.
3. On the Request TRM Product Lifecycle form, fill in the fields.  
For field information, see [TRM Product Lifecycle Request form](#)
4. Click **Submit**.

## Approve or reject a TRM product or product lifecycle request

As an Enterprise Architect, approve or reject a TRM product version request submitted by other users.

### Before you begin

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

### About this task

When an APM user requests for TRM product or TRM product lifecycle approval, an email notification is received by the approver. The approver belongs to the Enterprise Architect group.

### Procedure

1. Navigate to **All > Service Desk > My Approvals**.
2. Select the TRM product or product lifecycle request for which you want to provide approval.
3. Select **Approve** or **Reject**.

### Result

The requester receives an email notification for the approval or rejection.

## Add or edit a TRM category

Add a new request or edit an existing request to create a TRM category.

### Before you begin

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

- Note:** The user (sn\_apm.apm\_analyst) must be part of the Enterprise Architecture Group.

## About this task

A TRM category is a grouping of TRM software products by their purpose and function. The categorization helps you to consolidate TRM products and rationalize decisions. You can create a TRM category or edit an existing one to align it with your business requirements. You can define categories or rely on the Software Asset Management product classification.

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > Categories**.
2. Create or edit a category.
  - To create a category, click **New**.
  - To edit an existing category, click the name of the category.
3. On the form, fill in the fields.  
For field information, see [TRM Category form](#).
4. Click **Submit** or **Update**.

## View and edit your product requests

View all your product requests, track their statuses, and edit your existing requests. You can also manage the approvers for your request.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > My Product Requests**.  
You can see all your product requests and their approval status.
2. Click the name of an existing product request that you want to edit.
3. On the Request TRM Product form, fill in the details.  
For field information, see [TRM Product Request form](#).
4. In the Approvers section, add or edit approvers for your request.
  - To add a new approver, click **New**.
  - To manage approvers for your request, click **Edit**.
5. Submit the changes by clicking **Update**.

## View and edit your product lifecycle requests

View all your product lifecycle requests, track their status, and edit your existing requests. You can also manage the approvers for your request.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > My Product Lifecycle Requests**.  
You can see all your product life-cycle requests and their approval status.
2. Click the name of an existing product request that you want to edit.

3. On the Request TRM Product Lifecycle form, fill in the fields.  
For field information, see [TRM Product Lifecycle Request form](#).
4. In the Approvers section, add or edit approvers for your request.
  - To add a new approver, click **New**.
  - To manage approvers for your request, click **Edit**.
5. Submit the changes by clicking **Update**.

## Add or edit a TRM phase

Define your own TRM phase or edit an existing TRM phase.

### Before you begin

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

### About this task

The color and shape of a phase are used to represent the phase of the TRM product.

### Procedure

1. Navigate to **All > Application Portfolio Management > Technology Reference Model > Phases**.
  2. Create or edit a TRM phase.
    - To create a TRM phase, click **New**.
    - To edit an existing TRM phase, click the name of the phase.
- The following TRM phases are available from the base system:
- Approved: The technology is approved for use.
  - Approved with Constraints: The technology can be used within the specified constraints specified in the comments.
  - Divest: A decision was taken to divest from the use of the technology.
  - Evaluation: This technology is being evaluated and cannot be used to production purposes.
  - Unapproved: The technology is not permitted to be used.
3. On the form, fill in the fields.  
For field information, see [TRM Phase form](#).
  4. Click **Submit** or **Update**.

## Review the TRM lifecycle status in the Technology Portfolio Management page

View the TRM lifecycle information along with the risk and technical debt information in the Technology Portfolio Management page.

### Before you begin

Role required: sn\_apm.apm\_analyst

### About this task

The lines in the TPM screen indicate the life cycles of the product versions. The lines are color coded, which indicates the stages of risk that the software model is in, at that month

or quarter. The TPM page helps you to view the status of business applications and their technical debts.

## Procedure

1. Navigate to **All > Application Portfolio Management > Technology Portfolio Management (TPM) > Technology Lifecycles**.
2. Select a view grouped by Business Application or Software Model.
3. View the timeline across all the months in a year by clicking the **Monthly** button.  
By default, the **Quarterly** button is enabled to show the timeline for the four quarters of a year. Instead, the monthly view helps you to track the risk stage of a business application or software model for any month in a year.
4. Click the production icon () and view the production instances that are liable to risks in the current quarter or month.
5. Display the life-cycle data sources of software models.
  - To display the life-cycle data sources of a particular software model, click the expand icon () of the software model.
  - To display the life-cycle data sources of all software models related to a business application, click show all life-cycle data sources icon ()

Use the icon to toggle between show and hide the data sources.

## Configure the business application form for risk management

Configure the business application form to enable application managers to provide risk and control information associated with a business application through a risk assessment questionnaire or a control attestation survey.

### Before you begin

Role required: admin

## Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Open a business application.
3. Click the **Additional actions** icon and select **Configure > Related Lists**.
4. Add **Risk Questionnaire**, **Risk Summary**, **Risk Response Tasks**, **Control Attestations**, **GRC Issues**, and **GRC Issue Remediation Tasks** to the **Selected** list and click **Save**.
5. Add the Take attestation column to the **Risk Questionnaire** and **Control Attestations** related lists.
  - a. Click either the **Risk Questionnaire** or **Control Attestations** tab to access the associated related list.
  - b. Click any of the columns and select **Configure > List Layout**.
  - c. Add **Take attestation** to the **Selected** list and click **Save**.
  - d. Repeat the steps for the other related list.

### What to do next

[Respond to a risk assessment questionnaire or control attestation survey](#)

## Respond to a risk assessment questionnaire

Respond to a risk questionnaire to provide risk-related information for your business application to a risk manager.

### Before you begin

Role required: grc\_business\_user

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Open a business application.
3. Select the **Risk Questionnaire** related list.
4. Click the **Take assessment** link.
5. Enter your responses in the form.
6. Click **Submit**

## Take the control attestation survey

Return the control attestation survey to provide information to verify that a control is implemented for a business application.

### Before you begin

Role required: grc\_business\_user

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Open a business application.
3. Select the **Control Attestations** related list.
4. Click the **Take assessment** link.
5. Enter your responses in the form.
6. Click **Submit**

## Create a data domain

Data domain is a collection of information objects. Relate an information object to the database catalog of a database instance to collect the physical data. ServiceNow Discovery finds database catalog that lists all the catalog objects, or databases, discovered for an instance of a database.

### Before you begin

Role required: sn\_apm.apm\_user

Although an Application Portfolio Management user (sn\_apm.apm\_user) can create a data domain, the access control on the Data Domain [sn\_apm\_data\_domain] table is limited to its different users.

- The Application Portfolio Analyst and Application Portfolio Administrator with sn\_apm.apm\_admin role have create, write, and delete privileges.
- The Application Portfolio User with sn\_apm.apm\_user role has read access only.

## Procedure

1. Navigate to **All > Application Portfolio Management > Information Portfolio > Data Domains**.
2. Click **New**.
3. On the form, fill in the fields.  
For field information, see [Data Domain form](#).
4. Click **Submit**.

## What to do next

Create an information object and link the data domain with the information object.

## Create an information object referencing data domain

Create an information object to capture the logical data for the business application. This data becomes information when it is applied to the business application.

### Before you begin

Role required: sn\_apm.apm\_user

The Application Portfolio Analyst and Application Portfolio User can create information object, relate business application to information object, and relate information object to database catalog.

## Procedure

1. Navigate to **All > Application Portfolio Management > Information Portfolio > Information objects**.
2. Click **New**.
3. On the form, fill in the fields.  
For field information, see [Information Objects form](#).
4. Click **Submit**.

## What to do next

After creating an information object, you must [relate a business application to the information object](#) with the cmdb CI suggested relationship.

## Relate a business application to an information object

Relate a business application to an information object using the CI relationship [cmdb\_rel\_ci] table of type Uses::Used by. Use this suggested relationship to get the logical data of the information object, which can be used to leverage the business application.

### Before you begin

Role required: sn\_apm.apm\_user

## About this task

### Note:

Use the custom-built Add Relationship UI to relate the business application with the information object because this UI also captures the attributes in the relationship between the two configuration items. You should not use the CMDB relationship editor to associate the two configuration items because the create, read, update, and delete (CRUD) attributes of the relationship cannot be captured in the relationship editor.

## Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Open a business application record.
3. To relate the business application with an information object, click the Information Object Attributes related list.
4. To add an information object, click **Add**.
5. On the form, fill in the fields.  
For field information, see [Add relationship form](#).

By adding an information object to the business application, not only a record is created in the CI relationship [cmdb\_ci\_rel] table, but the CRUD attributes are also captured in the CI Relation Attributes [cmdb\_rel\_attributes] table.

6. Click **Save**.

To edit the CRUD relationship of an information object, select the record and click **Edit**. In the Manage Relationship pop-up, update the CRUD details.

To delete the relationship between the business application and an information object record, select the record and click **Delete Relationship**. This action deletes the relationship record from the CI relationship table and also deletes the qualifier properties, if any, that are set in this relationship between the business application and the information object, which are captured in the CI Relation Attributes table.

To check for information objects that are not linked to any business applications, run the Information Objects not related to any Business Application desired state audit on demand. For more information, see [Information Objects not related to any Business Application](#).

## What to do next

Relate the information object to the database catalog.

### Relate the information object to the database catalog

The information object draws the physical data from the database catalog, which references the database instances. Hence, create a relationship that is suggested between the information object and the database catalog.

#### Before you begin

Role required: sn\_apm.apm\_user

#### About this task

Suggested cmdb CI relationship, Depends on::Used by, relates the information object to the database catalog. The relationship works by drawing the physical data from the database and stores it as logical data in the information object table, which references the data domain.

For example, employee payroll details depends on Oracle database instance. If the relationship is reversed between the configuration items, then Oracle database instance is used by employee payroll.

- IT Operations Management Discovery discovers all servers, instances, and databases.
- Database Catalog is a list of all the databases.

- The Database Catalog (cmdb\_ci\_db\_catalog) lists all the catalog objects or databases that are discovered from an instance of a database. For example, Oracle catalog and MySQL catalog are child tables of the database catalog.
- The Database Instance (cmdb\_ci\_db\_instance) is the parent table. Oracle Instance (cmdb\_ci\_db\_ora\_instance) and MySQL instance are child tables of the Database Instance.
- The reference between a database instance and a database catalog is one to many.
- Since the database instance is hosted on the Server (cmdb\_ci\_server), it can access all the underlying configuration items.

**Note:**

You may have applications, the data of which are not stored in a conventional database. You can also track such unstructured data stored in configuration item tables such as configuration file (cmdb\_ci\_config\_file), file system (cmdb\_ci\_file\_system), and exchange mail box (cmdb\_ci\_exchange\_mailbox). Use the same Depends On::Used by relationship type between the information object and the unstructured data sources to track the data.

## Procedure

1. Navigate to **All > Application Portfolio Management > Information Portfolio > Information Objects**.
2. To create a suggested relationship between the information object and the database catalog, open the information object record.
3. In the Related Items section of the Information Object form, click the add CI relationship icon (+) to launch the relationship editor and create the CI relationship. The filter is automatically applied on the database catalog.
4. Select the Depends on::Used By suggested relationship type.
5. In the Configuration Items section, select the record that is of a catalog class.
6. In the Relationships section, click the CI relationship icon (+).
7. Click **Save and Exit**.

Ensure that the database catalog table has a reference of the database instance.

## What to do next

Click the show dependency views icon ( ) in the **Information Object** related items to view the dependency of the business application that is using the information object, which is running on a database server.

### Dependency view of the information object



Apply the information portfolio for auditing. [Integrate with GRC](#) (Governance, Risk, and Compliance) and use the information object as an entity. GRC uses any entity such as a database, server, or a business application to audit. Associating the information object as an audit entity gives you the complete profile of the business application that uses the information object and its source of data.

## Relate a business application to another business application

Relate a business application to another business application using the CI relationship [cmdb\_rel\_ci] table of type Interfaced by::Interfaces. Use this suggested relationship to get the information of other business applications, which are interfaced with the business application.

### Before you begin

Role required: sn\_apm.apm\_user

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications.**
2. To create a suggested relationship between the business applications, open a business application record.
3. In the Related Items section of the Business Application form, click the add CI relationship icon (+) to launch the relationship editor and create the CI relationship. The filter is automatically applied on the business application.
4. Select the Interfaced by::Interfaces suggested relationship type.
5. In the Configuration Items section, select the record that is of a business application.
6. In the Relationships section, click the CI relationship icon (+).
7. Click **Save and Exit.**

### What to do next

Click the show dependency views icon (grid icon) in the **Business Application** related items to view the dependency of this business application interfacing or interfaced by other business applications.

## Visualize APM reports using CMDB Query Builder

APM uses CMDB Query Builder to query on a list of configuration items used in Application Portfolio Management and visualize them as reports.

### Before you begin

Role required: sn\_apm.apm\_user

### About this task

APM takes advantage of CMDB Query Builder to build complex queries and retrieve data from CMDB CI classes, APM tables, and configuration items that are associated to each other by different CMDB CI relationships.

Before launching the reports that fetch data from the tables and CMDB CI classes, you must run the respective scheduled jobs. These jobs are set as active with frequency as **On Demand**. However, update the frequency as per your requirement to daily, weekly, monthly, periodically, once, on demand, Business Calendar – entry start, or entry end, based on how often the data for the report should be updated. Set the frequency of these scheduled jobs accordingly. For more information, see [Run scheduled jobs for CMDB Query Builder reports](#).

- Note:** Ensure to run these scheduled jobs from **Global** scope only. Only a system administrator can run these scheduled jobs from global scope. However, as an APM user you can view the reports.

## Procedure

**1. Navigate to All > Application Portfolio Management > CMDB Query Builder.**

All reports that the base system offers are provided as menu options in the application navigator under CMDB Query Builder.

**2. Click the relevant CMDB query builder name for which you want to view the report.**

The report opens in a new tab and is rendered as a bar chart, by default. You can view and save the report for future use.

**i Note:** The data displayed on the report is retrieved from the latest execution of the scheduled job run on demand.

**3. Click each option to view the respective report.**

**i Note:** You must activate the PPM Standard plugin to generate Projects on a Business Application CMDB query builder report.

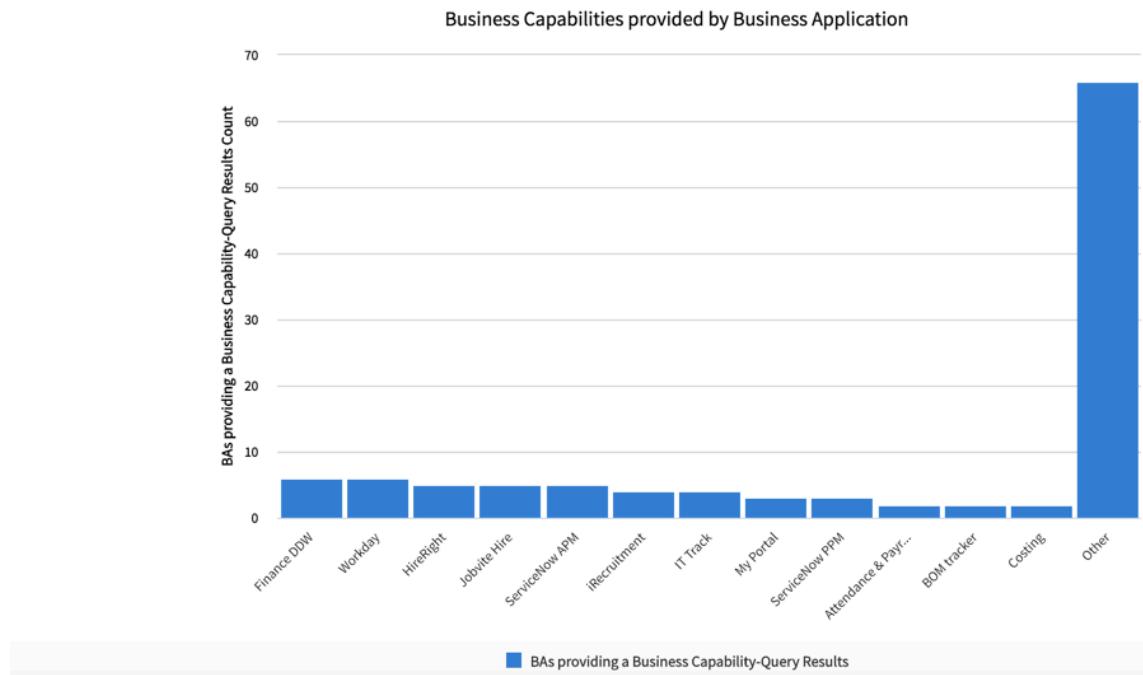
APM base system provides the following list of queries to generate APM reports:

Business Capabilities provided by Business Application

### Report showing business capabilities provided by business application

Table: BAs providing a Business Capability-Query Results

All > Query Sys ID = 0a5e66b31b8810107a0bfd961a4bcbea

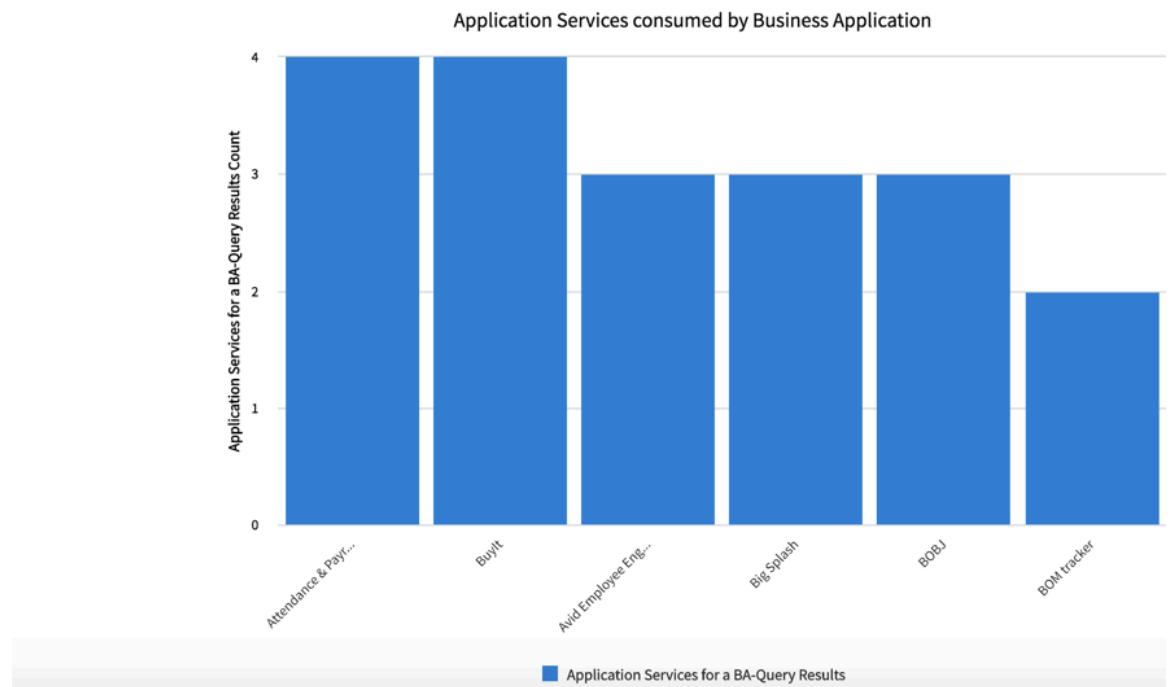


### Application Services consumed by Business Application

## Report showing application services consumed by business application

Table: Application Services for a BA-Query Results

All > Query Sys ID = 121eaab7db0810108979186c1396192f

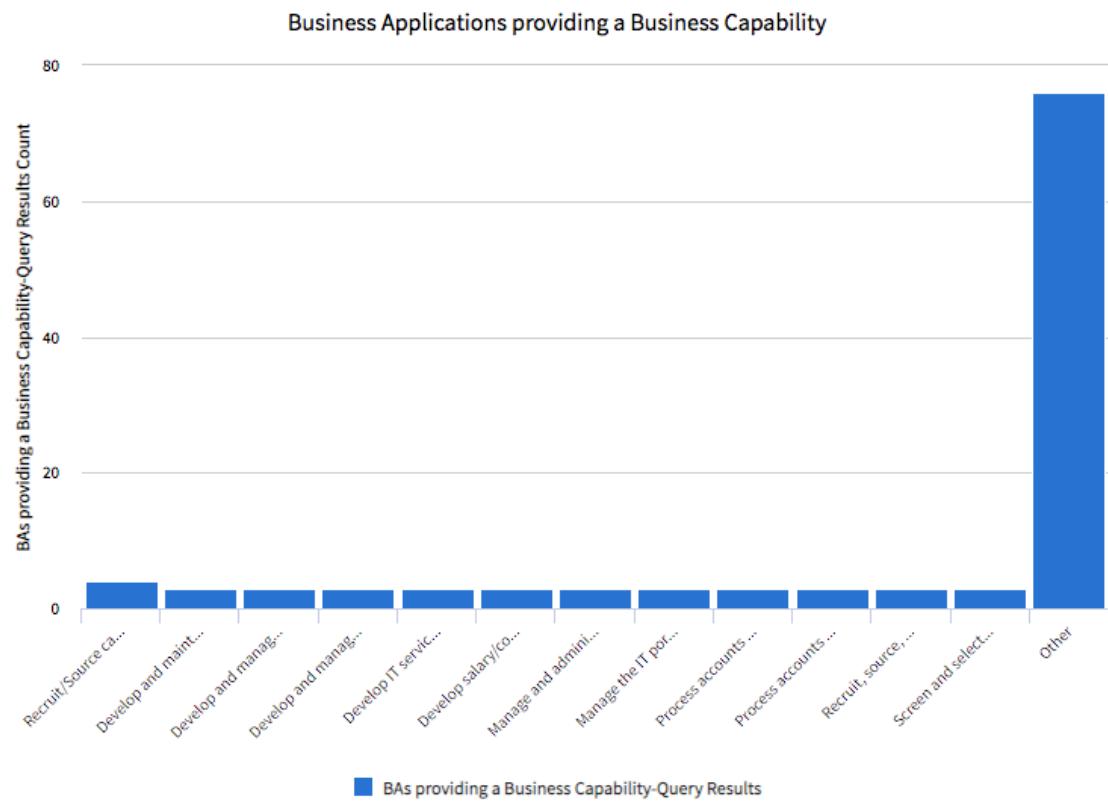


Business Applications providing a Business Capability

## Report showing business applications providing a business capability

Table: BAs providing a Business Capability-Query Results

All > Query Sys ID = 0a5e66b31b8810107a0bfd961a4bcbea

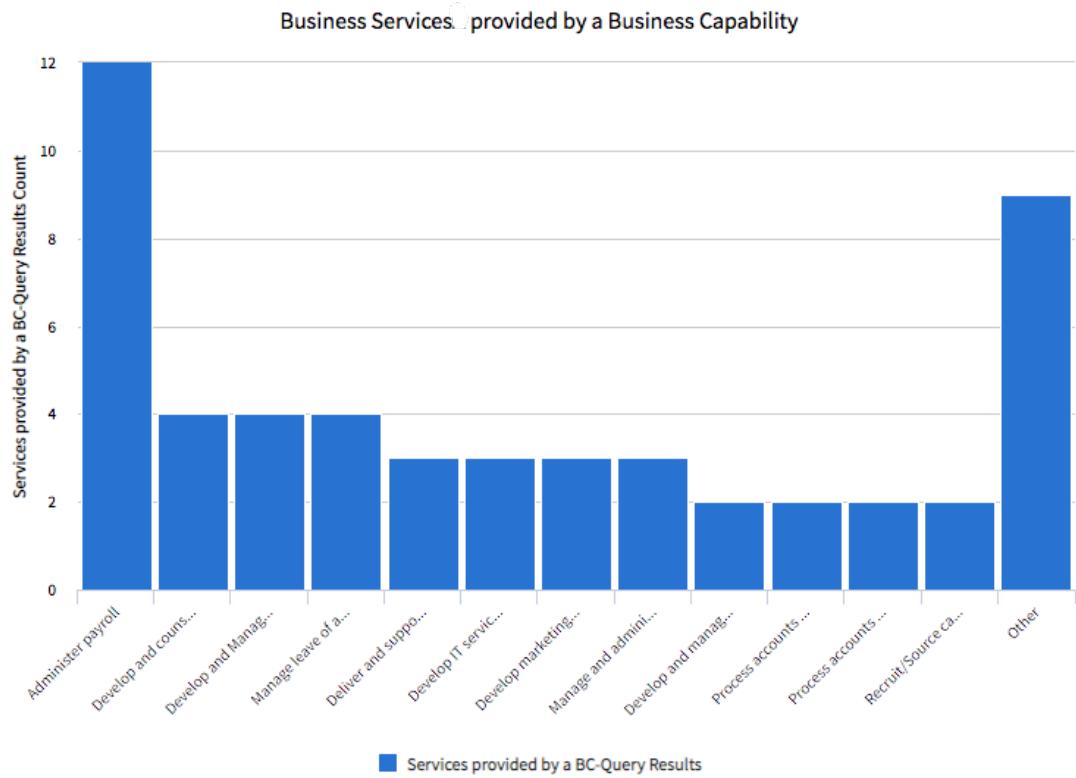


### Business Services provided by a Business Capability

## Report showing business services provided by a business capability

Table: Services provided by a BC-Query Results

All > Query Sys ID = b339eef3db0810108979186c1396195d

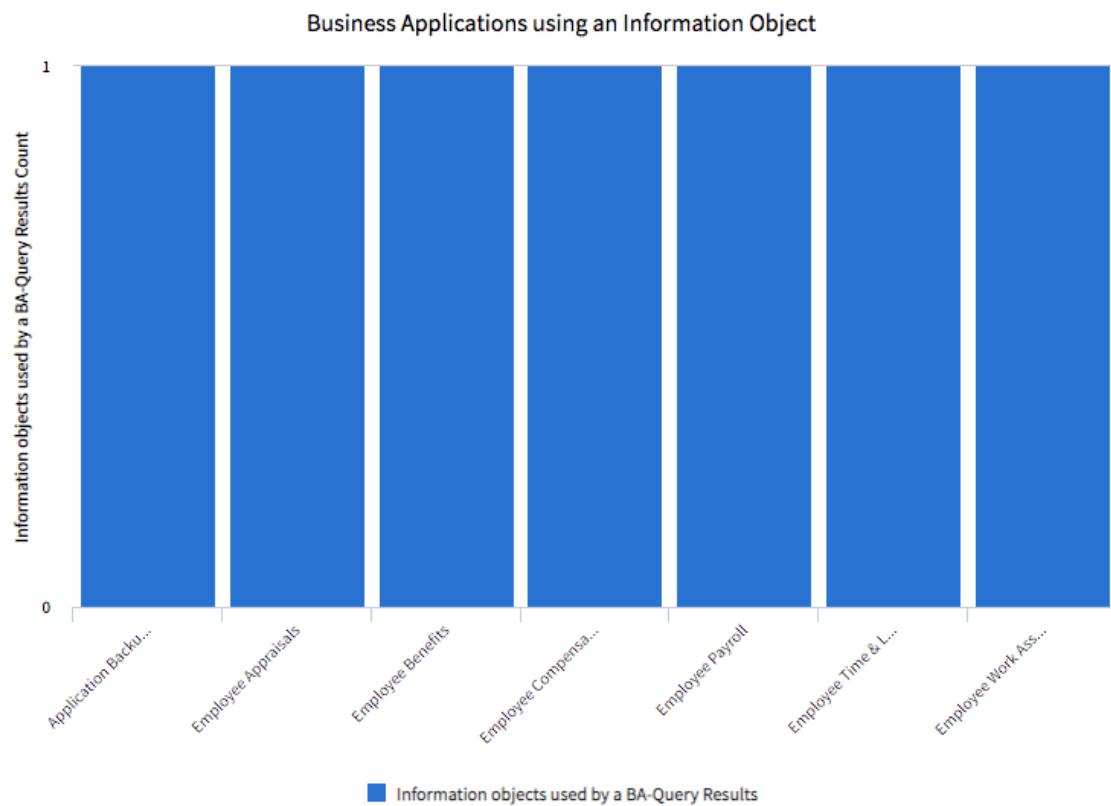


## Business Applications using an Information Object

## Report showing business applications using an information object

Table: Information objects used by a BA-Query Results

All > Query Sys ID = 3eaf6af7db0810108979186c1396194e

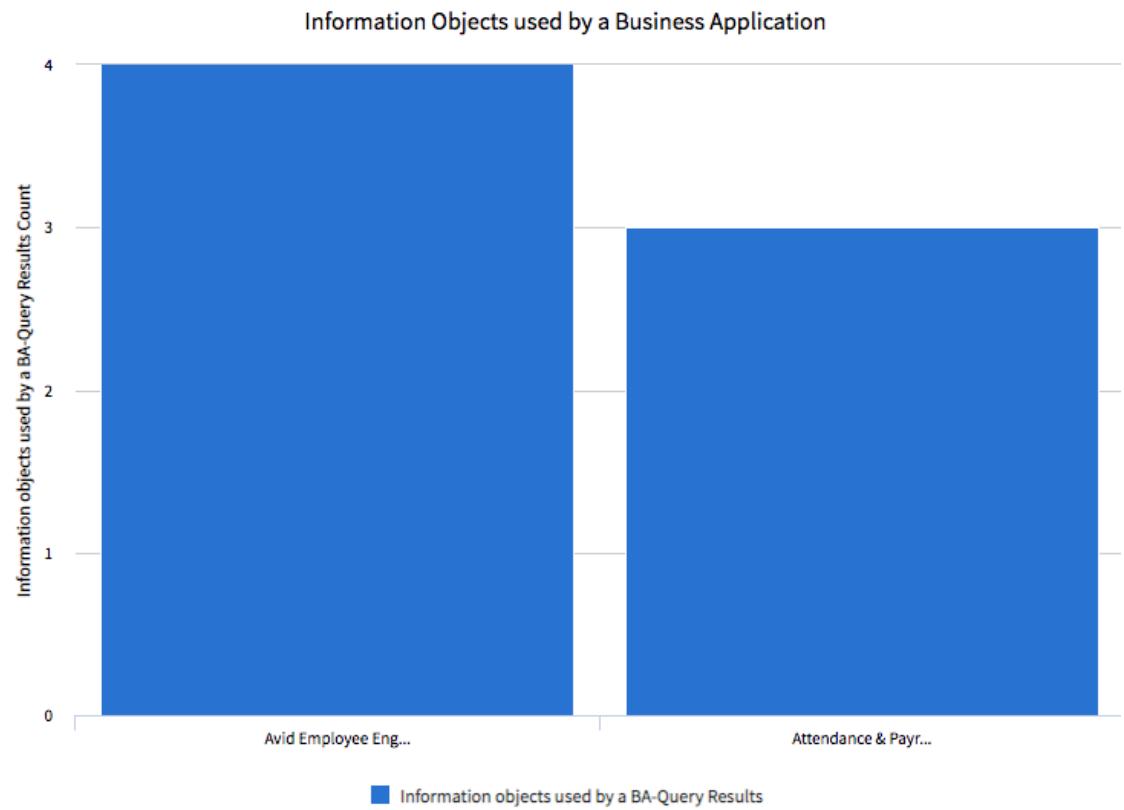


Information Objects used by a Business Application

## Report showing information objects used by a business application

Table: Information objects used by a BA-Query Results

All > Query Sys ID = 3eaf6af7db0810108979186c1396194e



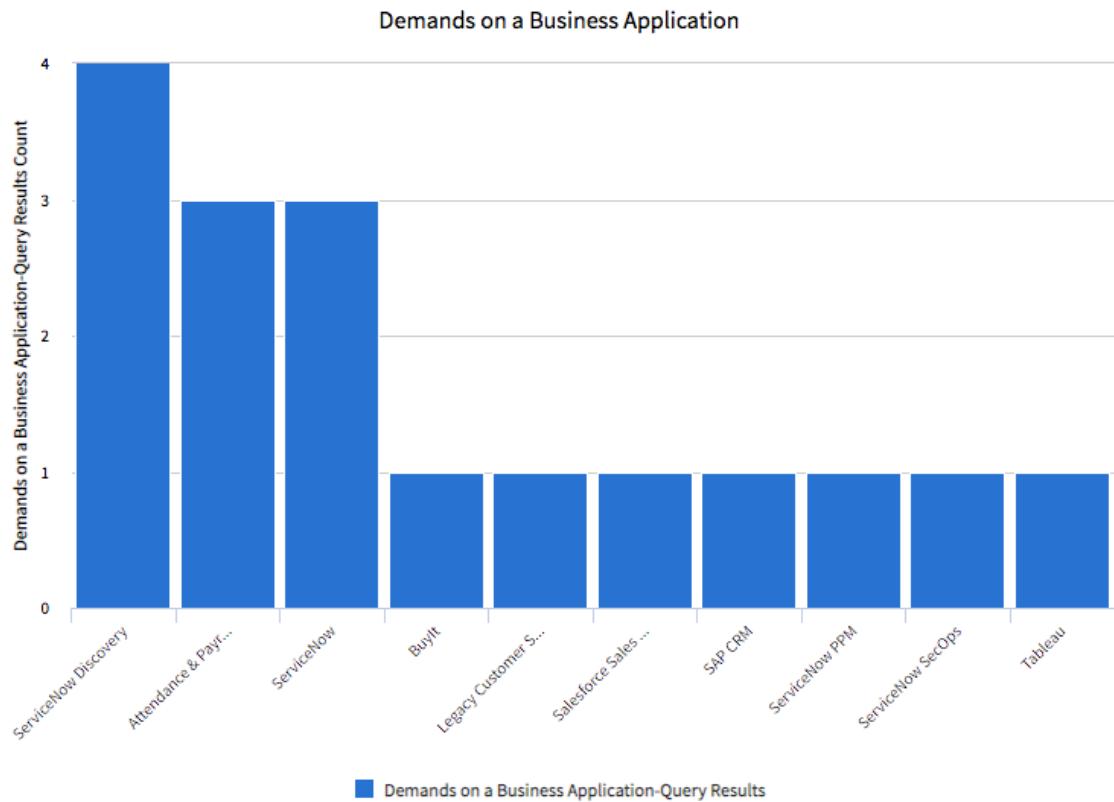
## Demands on a Business Application

## Report showing demands on a business application

Table: Demands on a Business Application-Query Results



All > Query Sys ID = 0eefe6f31b8810107a0bfd961a4bc6c6

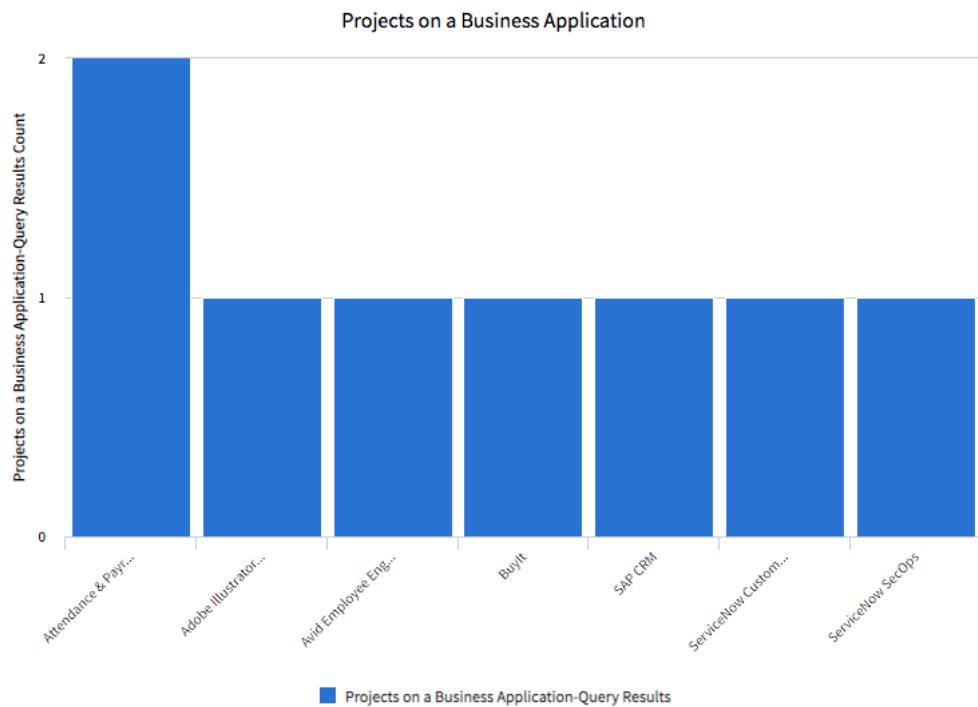


## Projects on a Business Application

### Report showing projects on a business application

Table: Projects on a Business Application-Query Results

All > Query Sys ID = d2107af31b8810107a0bfd961a4bcb9f



#### Related topics

[Run scheduled jobs for CMDB Query Builder reports](#)

## Export data to Microsoft PowerPoint

Export the Application Portfolio Status data to Microsoft PowerPoint. Share the data with other stakeholders in the organization, like business owners, managers and solution architects.

#### Before you begin

**Important:** Export to PowerPoint is currently unavailable for customers in the FedRAMP, NSC DOD IL5, or Australia IRAP-Protected data centers, self-hosted customers, or in other restricted environments. Please check for availability updates in future releases.

Role required: sn\_apm.apm\_user

#### Procedure

1. Navigate to All > Application Portfolio Management > Application Portfolio Analysis > **Export to PowerPoint for APM**.
2. Select a template from the drop-down list.  
The APM Report template is provided from the base system.
3. Click **Download**.

## Result

A PowerPoint deck with the Application Portfolio Status details is downloaded.

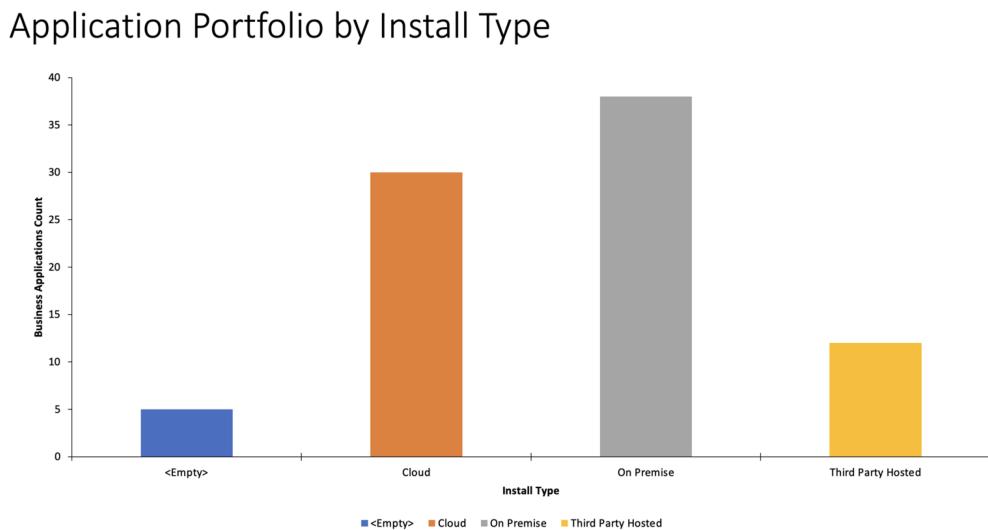
### Application landscape reports

When you export the Application Portfolio Status data to Microsoft PowerPoint, the following Application Landscape report types are exported to the PowerPoint deck.

### Application Portfolio by Install Type

The Application Portfolio by Install Type report shows a graphical representation of the number of applications installed and the type of installation, such as Cloud, On premise, and so on.

#### Application Portfolio by Install Type

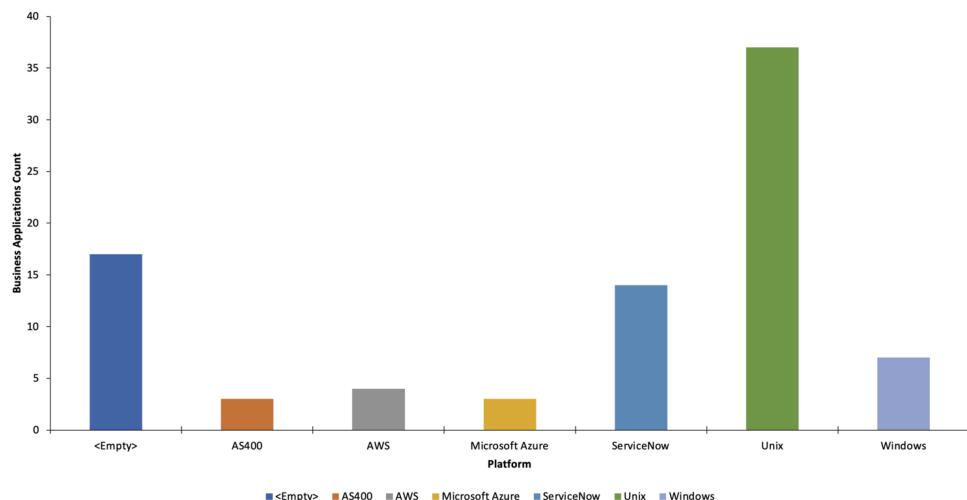


### Application Portfolio by Platform

The Application Portfolio by Platform report shows a graphical representation of the number of applications categorized by their platform type, such as AWS, Microsoft Azure, ServiceNow, and so on.

## Application Portfolio by Platform

### Application Portfolio by Platform



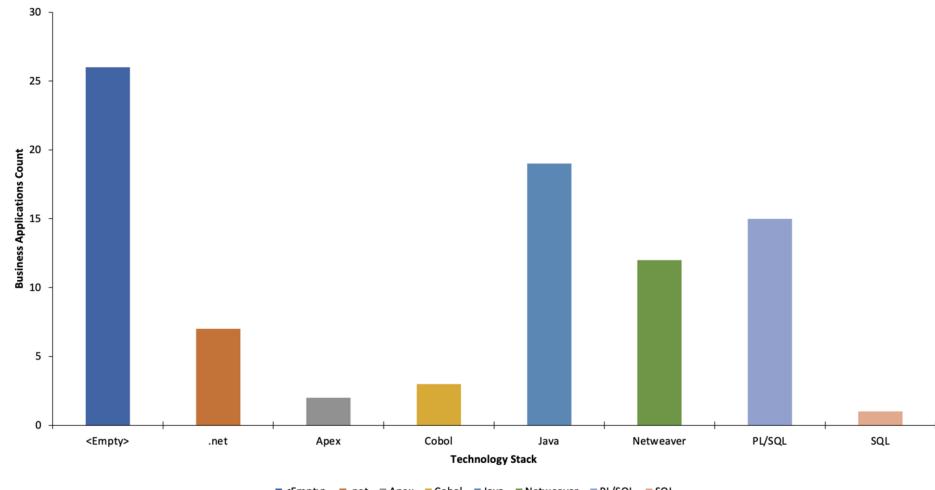
## Application Portfolio by Technology Stack

The Application Portfolio by Technology Stack report shows a graphical representation of the number of applications categorized by their technology, such as Java, SQL, and so on.

**Note:** The applications with no technology stack are displayed as <Empty>.

### Application Portfolio by Technology Stack

#### Application Portfolio by Technology Stack

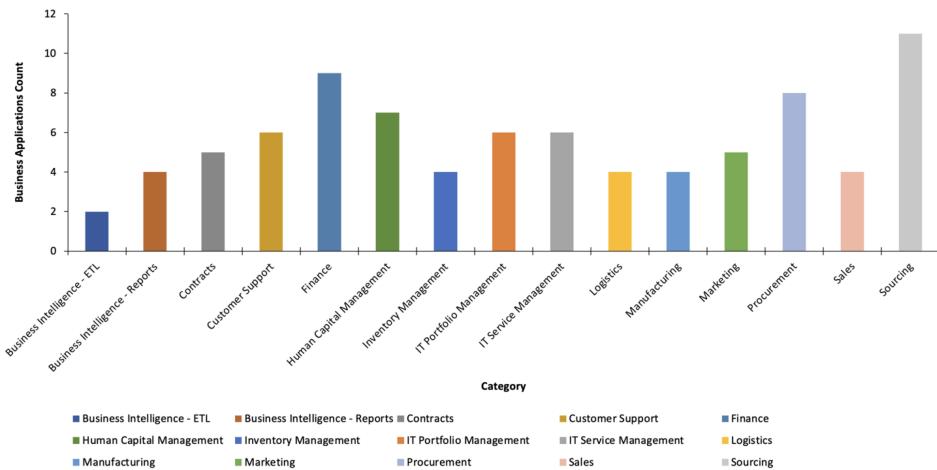


## Application Portfolio by Category

The Application Portfolio by Category report shows a graphical representation of the number of applications and their categories, such as Customer Support, Finance, Marketing, and so on.

## Application Portfolio by Category

### Application Portfolio by Category



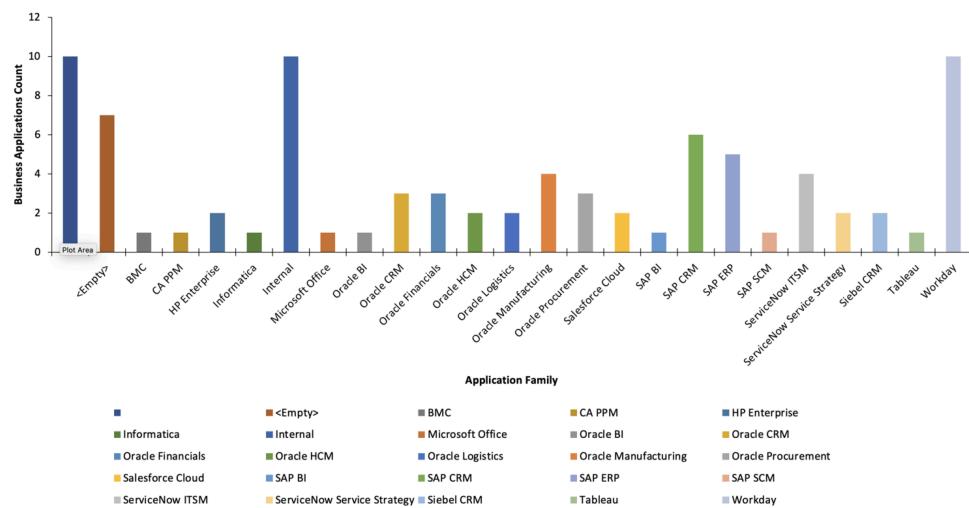
## Most Used Applications by Application Family

The Most Used applications by Application Family report shows a graphical representation of the number of applications categorized by their organization, such as BMC, Microsoft Office, SAP BI and so on.

**Note:** Currently, the Application Portfolio by Application Family report displays 30 categories. Out of these 30 categories, 29 stacks show category names, and 1 stack is displayed as others (cumulative of remaining applications).

### Most Used applications by Application Family

#### Most Used Applications by Application Family

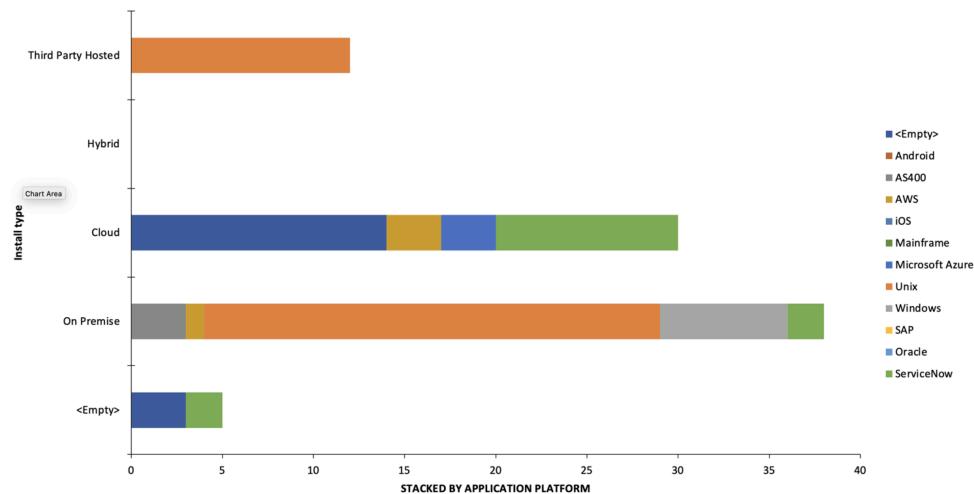


## Application Portfolio by Install Type and Platform

The Application Portfolio by Install Type and Platform report shows a graphical representation of the number of applications and their install type, stacked by their platform.

## Application Portfolio by Install type and Platform

### Application Portfolio by Install Type and Platform



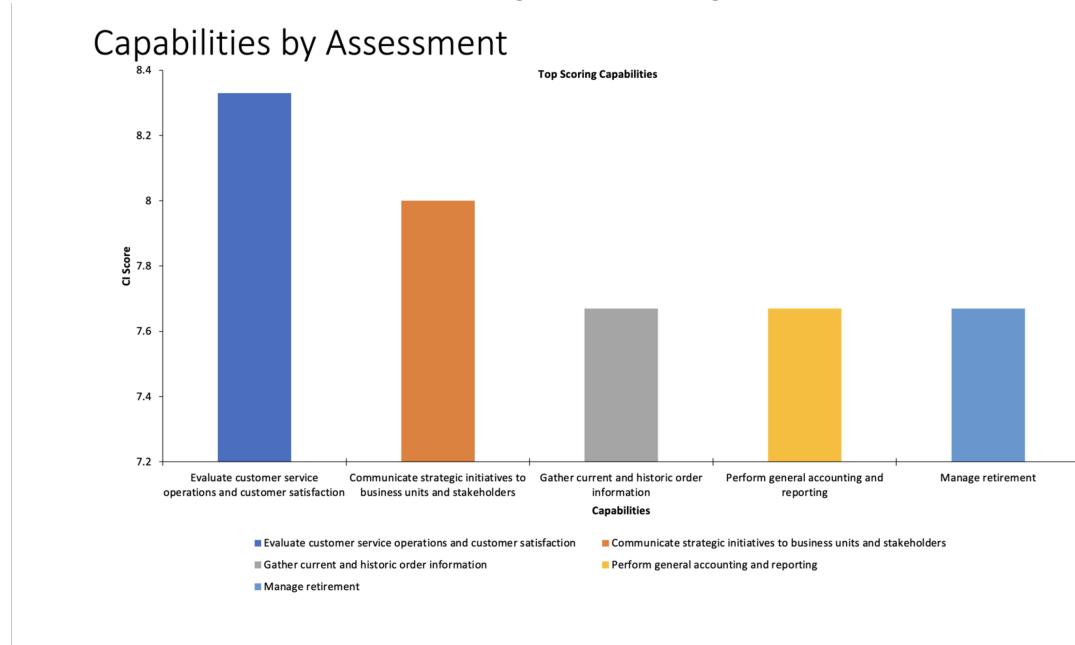
## Capabilities landscape reports

When you export the Application Portfolio Status data to Microsoft PowerPoint, the following Capabilities Landscape report types are exported to the PowerPoint deck.

### Capabilities by Assessment (Top Scoring Capabilities)

The Capabilities by Assessment (Top Scoring Capabilities) report shows a graphical representation of the five top scoring capabilities of the organization.

#### Capabilities by Assessment (Top Scoring Capabilities) graph

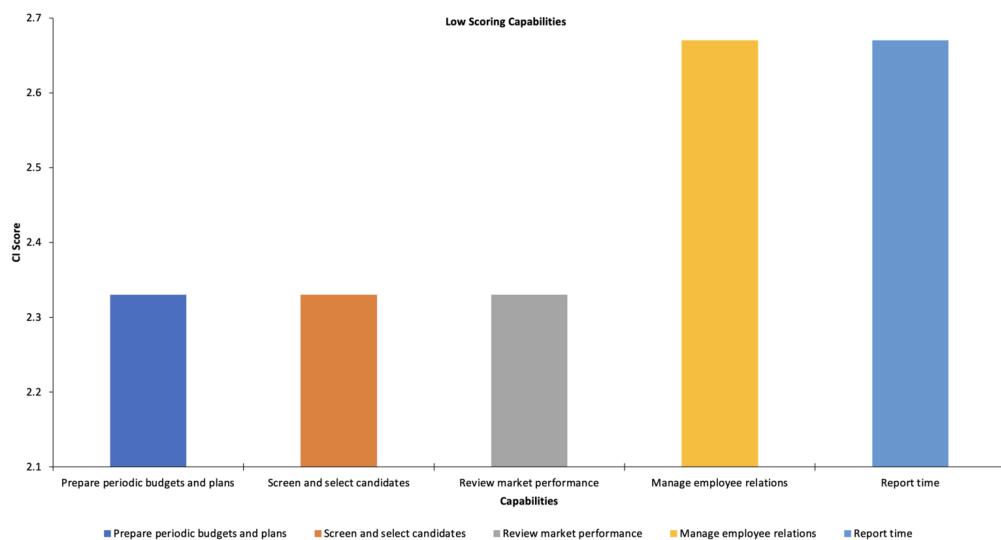


## Capabilities by assessment (Low Scoring Capabilities)

The Capabilities by Assessment (Low Scoring Capabilities) report shows a graphical representation of the five low scoring capabilities of the organization.

## Capabilities by assessment (low scoring capabilities)

### Capabilities by Assessment



## Integrating Application Portfolio Management with other applications

Understand the process required to set up Application Portfolio Management to work with key applications in the ServiceNow platform to provide a deep insight into the applications.

### Integrate with Governance, Risk, and Compliance to identify application risks and controls

Application Portfolio Management (APM) integrates with Governance, Risk, and Compliance (GRC) to help identify and assess risks on business applications.

#### Before you begin

Role required: admin

#### About this task

Using GRC application, you can analyze the risks associated with assets such as hardware, software, and business application. You can also identify and test controls associated with those risks as well as look at the audits that were conducted on those assets. This analysis helps the application owners to understand the risk of the business application effectively.

The application owner can identify significant risks and compliance issues that the business applications are exposed to, without having to engage an external auditing system and run the applications through the auditing process.

Activate the following plugins to integrate APM with GRC.

#### Procedure

1. Navigate to **All > System Definition > Plugins**.
2. Install the GRC: GRC Profile Dependencies (`com.snc.grc_profile_dep`) plugin.
3. Install the GRC: Vendor Risk Management Dependencies (`com.snc.grc_vrm_dep`) plugin.
4. Install GRC: Policy and Compliance Management Dependencies (`com.snc.grc_policy_dep`) plugin.

This also requires installation of app-compliance from the ServiceNow app store.

- Note:** The integration also requires certain applications that should be installed from the ServiceNow app store. See [Request apps on the Store](#) for instructions to download and activate them.

## What to do next

Create an entity referencing the business application. Attach the entity to an audit.

### Create an entity for audit referencing business application

Create an entity with reference to the business application table and its specific application record. Use the entity to scope risk exposure and perform risk assessments on business applications.

#### Before you begin

Role required: sn\_audit.admin or sn\_audit.manager

#### About this task

GRC uses the term, **entity**, instead of profile. An entity can be anything such as a database, server, or a business application that can be audited.

#### Procedure

1. Navigate to **All > Audit > Scoping > All Entities**.
2. Click **New**.
3. On the form, fill in the fields.  
For field information, see [Entity Form](#).
4. Click **Submit**.

For more information, see:

- [Create a profile](#).
- [Establish profile types, profile classes, and profiles](#).

#### Associate a risk to the entity

Attach the entity to a risk and create a risk record. Assess and identify risks that can adversely affect your business applications.

#### Before you begin

Role required: sn\_risk.admin and sn\_risk.manager

#### Procedure

1. Navigate to **All > Risk > Risk Register > All Risks**.
2. Create a risk in the Risk form.

See: [Create a risk manually](#).

**Note:**

Relate the risk to the entity in the **Entity** field.

## Add business application entity to an engagement

The entities are assessed and evaluated for audit engagement. After which the entities that are scoped for audit engagement and validated are associated to an audit.

### Before you begin

Role required: sn\_audit.manager or sn\_audit.admin

To add a business application entity to an engagement, you should have created an entity referencing the business application in the **Entity** field of the Entity form. See: [Create an entity for audit referencing business application](#).

### Procedure

1. Navigate to **All > Audit > Engagements > All Engagements**.
2. To add the business application entity to the engagement, click **Add** button in the **Entities** related list.

**Note:** The engagement must be in **Scope** or **Validate** state.

See: [Add profiles to an engagement scope](#).

When an application profile is attached to an engagement, an engagement record with the associated profile is created in Profile to Engagements [sn\_audit\_m2m\_profile\_engagement] table.

## Add a control to the business application entity

Associate a control to a business application entity that might be at risk. It is mandatory that you set effective control on the business applications to mitigate risks and protect your business. As you upgrade your business applications, you can replace your outdated controls.

### Before you begin

Role required: admin

You should have created an entity before associating a control to it. Controls are created in GRC.

### Procedure

To create a control and add an entity to the control, see [Create a control](#).

- The entity that you select from the Controls [sn\_compliance\_control] table must be a business application and the entity **Class** of the record must be application.
- The control record can be either in the **Draft** or **Retired** state. However, controls in such states are not visible in Application Portfolio Management to be associated to a business application.

## View Governance, Risk, and Compliance risks and engagements for business application

As an application owner, you can view the risks that a business application is exposed to. Governance, Risk, and Compliance (GRC) audits the business application entity and the audited risks and engagements are captured as scripted related lists in the business application form.

### Before you begin

Role required: sn\_apm.apm\_user, sn\_apm.business\_stakeholder\_apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > All Business Applications**.
2. Click **GRC Risks** related item.
3. View the name of the risk statement, its description, the category of risk (legal, financial, operational, and so on), inherent impact that indicates the levels of risk, and inherent likelihood that indicates the likelihood of the risk occurring.  
See: [Manage risks, risk statements, and risk frameworks](#)
4. Click **Engagements** related item.
5. View the name of the engagement, the user to whom it is assigned, the state in which the engagement is, planned start date on which the activity should begin, its end date, the percentage of engagement completed, and the actual cost of the engagement.  
See: [Manage engagements](#)
6. Click **Controls** related item.
7. View the name of the control, its owner, status of the control whether it is compliant or not, the classification of the control whether it is preventive, corrective, or detective, and the attestation frequency at which the scheduled job runs.  
See: [Manage controls](#)
8. Click display/hide hierarchical lists arrow beside a risk record in the GRC Risks related list to view all the controls that you have associated to the risk of the business application.

When you associate a control to a risk, the control with its associated risk is created in Risk to Control [sn\_risk\_m2m\_risk\_control] table.

Name	Owner	Category	Inherent score	Residual score	Calculated score	Response	Description
Business app risks	(empty)	(empty)	1 - Very Low	1 - Very Low	1 - Very Low		
Update associated documentation after th...	System Administrator	Compliant	Preventive				
Update the system's backup procedures af...	System Administrator	Compliant	Preventive				
Establish and maintain records managemen...	Rob Woodbyrne	Compliant	Preventive				
Implement approved changes.	System Administrator	Compliant	Preventive				

## Use similarity solution to categorize applications and integrate with service catalog

Use the machine-learning engine to suggest a category for a business application that you are registering into the APM inventory.

### Before you begin

Role required: sn\_apm.apm\_user

## About this task

Using the Register a Business Application form to on-board an application in APM is similar to requesting an item from Service Catalog category.

## Procedure

1. Navigate to **All > Application Portfolio Management > Business Application Lifecycle Management > Business Application Catalog**.
2. Click the **Register a Business Application** card to register a new business application.
3. Enter the details in the Register a Business Application form.

Mandatory fields have a red asterisk (\*) beside them.

### Register a Business Application form

Field	Description
Enter the name of the business application	Name of the business application that you are requesting or registering.
Benefit or use of the business application	Purpose of the business application.
IT Owner of the Business Application	Name of the IT owner of the application.
Business Owner of the Business Application	Name of the business owner of the application.

### Register a business application

The screenshot shows the 'Register a Business Application' form in ServiceNow. At the top, there's a green header bar with the text 'Category of Business application suggested by ML prediction'. Below the header, the page title is 'Register a business application'. The main content area has a heading 'Register a Business Application' and a sub-instruction 'Register a new business application into Application Portfolio Management'. The form contains several input fields: 'Enter the name of the business application' (with a value 'PeopleSoft HR - Training & Development'), 'Benefit or use of the business application' (with a value 'PeopleSoft HR - Training & Development'), 'IT Owner of the Business Application' (a dropdown menu), 'Business Owner of the Business Application' (a dropdown menu), 'Category of the business application' (a dropdown menu with 'Workforce' selected), and 'Type of application' (a dropdown menu with 'COTS' selected). On the right side of the form, there's a 'Submit' button and a note 'Required information' with 'IT Owner of the Business Application' highlighted. The overall interface is clean and modern, typical of ServiceNow's design.

As you enter the name and the benefit of the business application, the similarity solution of the machine-learning algorithm is triggered to search for a similar business application from the business applications table [cmdb\_ci\_business\_app]. Once the engine finds similar records, you can see a message on top of the form indicating that the ML found similar records in the applications table. Based on the findings the engine suggests a category for the application that you are registering. It also displays the suggested category in

the **Category of the business application** field under which the business application can possibly be grouped.

If you choose to select the category predicted and suggested by the machine-learning solution, then the application category is stored in the **ML Predicted Category** field of the Business Application Requests table [business\_app\_request] for future analysis.

4. Select the ML suggested category if it is suitable.
5. Click **Submit**.

## Application Portfolio Management (APM) integration with Lucidchart

Create enhanced architectural diagrams for your Business Applications and Business Capabilities in Lucidchart and access them from your ServiceNow instance.

You can model your organization's architecture in a visual way, by including the current and future state in the Lucidchart application. You can then associate these diagrams to Architectural Artifacts in APM.

As an Enterprise Architect, use the integration to perform the following tasks:

- Push a Business Application hierarchy to Lucidchart.
  - Select the entities to be included in the chart.
  - Customize the shapes and colors of the entities how they appear in the chart.
  - Keep a reference of the diagram as an Architectural Artifact version.
  - View and edit the diagrams in Lucidchart.
- Push Business Capabilities maps to Lucidchart.
  - Select one or more capabilities including their child capabilities and business applications to include in the chart.
  - Keep a Lucidchart reference of the diagram as an Architectural Artifact version.

The Lucidchart integration enhances the Architectural Artifacts functionality to associate a Lucidchart diagram as a URL for an artifact. The current integration works only one way to push the diagrams from the ServiceNow instance and model them in Lucidchart.

To create a diagram in Lucidchart and associate it with an Architectural Artifact in Application Portfolio Management, you must install the following store applications from [ServiceNow Store](#):

- [Lucidchart diagramming spoke](#) - Helps to establish a connection between ServiceNow and Lucidchart. It provides an action to create Lucidchart diagrams in Application Portfolio Management. The Lucidchart Diagramming spoke requires creating a workspace and custom app in your Lucid account to generate OAuth 2.0 tokens to authenticate ServiceNow requests. Also, you must create a connection and credential record for the Lucidchart application to authorize the create diagram action from Application Portfolio Management. For detailed information, see [Lucidchart diagramming spoke](#), [Create OAuth 2.0 Client in Lucidchart](#), and [Create a connection and credential alias for the Lucidchart diagramming spoke](#).
- Lucidchart Integration – Helps to create Business Application or Business Capability diagrams in Lucidchart. You can also configure the shapes and colors of the entities to appear in Lucidchart. Install the application from [ServiceNow Store](#)

## Install Application Portfolio Management integration with Risk Management and Application Portfolio Management integration with Policy and Compliance

Install Application Portfolio Management integration with Risk Management and Application Portfolio Management integration with Policy and Compliance from the ServiceNow Store.

### Before you begin

Role required: admin

Before installing Application Portfolio Management integration with Risk Management and Application Portfolio Management integration with Policy and Compliance, download and activate the Governance, Risk, and Compliance (GRC) application from the ServiceNow Store. For more information, see the [Download a GRC application from the ServiceNow Store for the first time](#) topic.

### About this task

Activate the following plugins:

Name	Description
Application Portfolio Management integration with Risk Management (com.snc.apm_risk_assessment)	Activates the Application Portfolio Management integration with the GRC Risk Management plugin.
Application Portfolio Management integration with Policy and Compliance (com.snc_apm_control_management)	Activates the Application Portfolio Management integration with the GRC Controls plugin.

### Procedure

1. Navigate to **System Applications > All Available Applications > All**.
2. Find the application using the filter criteria and search bar.  
You can search for the application by its name or ID. If you cannot find an application, you may have to request it from ServiceNow store.

Visit the [ServiceNow Store](#) website to view all the available apps and for information about submitting requests to the store. For cumulative release notes information for all released apps, see the [ServiceNow Store version history release notes](#).

3. Click **Install**.
4. In the Application installation dialog box, review the application dependencies.

Dependent plugins and applications are listed if they will be installed, are currently installed, or need to be installed. If any plugins or applications need to be installed, you must install them before you can install GRC - Application Risk Assessment.

5. Optional: If demo data is available and you want to install it, click **Load demo data**.

(Optional) Demo data comprises sample records that describe application features for common use cases. Load demo data when you first install the application on a development or test instance.

**Important:** If you don't load the demo data during installation, it's unavailable to load later.

6. Click **Install**.

## Governance, Risk, and Compliance (GRC) roles required for Application Portfolio Management (APM)

Add roles to the sn\_apm.apm\_user role to be able to access GRC information from APM.

Role	Description
risk_reader	Enables read access to the GRC Risks, Risk Summary, and Risk Response Tasks tabs.
compliance_reader	Enables read access to the Controls, GRC Issues, and GRC Issue Remediation Tasks tabs.
sn_audit.user	Enables read access to the Audit Engagements tab.
grc_business_user	Enables an application owner to respond to a risk assessment questionnaires and control attestation surveys.

For information on how to assign a role to a user, see the [Assign a role to a user](#) topic.

## Application Portfolio Management reference

Reference information to provide additional details about Application Portfolio Management such as the fields, user roles, tables, guidelines, and domain separation information.

### Business stakeholder role for APM

For APM users, Business Stakeholder (com.snc.business\_stakeholder) plugin contains the business stakeholder role for APM. Users with this role can approve, view or read records of tables that are used to retrieve data for reports and dashboards. Customers can assign this role to any user who is a business stakeholder to review and approve reports.

### Upgrade information

#### Upgrade customer

If you are upgrading to Washington DC, the business stakeholder role for APM is available only when you activate Read only roles for Application Portfolio Management (com.snc.apm\_read\_roles) plugin.

#### New customer

If new customer, the Read only roles for Application Portfolio Management (com.snc.apm\_read\_roles) plugin is activated on zBoot. However, the business stakeholder role for APM is available only when you install APM plugin.

### Why business stakeholder read-only role

Analyst (sn\_apm.apm\_analyst) role in Application Portfolio Management is a licensable role that requires subscription. Users with this role can access all APM PA dashboards and this role contains APM administrator role who has different levels of access not only to read but to approve and update information data. Organizations procure this licensable role in limited numbers as it comes with a price. Business stakeholder role comes with a similar function but access is controlled at read-only level. Users with this role can access reports to review and approve only.

### Share dashboards with business stakeholder read-only users

APM users with Business stakeholder role for APM (sn\_apm.apm\_read) role have read-only access to dashboards and reports and all the underlying tables of the dashboards.

The base system provides access to users with this role to view **Application Landscape**, **Application 360**, and **Application Assessments** dashboards. You can also access all the tables from where the data are retrieved for these dashboard reports.

However, you can also configure your custom-created dashboards and reports to provide users with business stakeholder role. To provide read-only access to a business stakeholder, follow the steps in [Share a responsive dashboard](#)

## Share widgets in dashboards with business stakeholders

To share individual widgets in the dashboard with the user who has the business stakeholder read-only role,

1. Navigate to **Application Portfolio Management > Application Portfolio Analysis > Dashboard**
2. Click the add widgets icon ().
3. Click the edit content icon () of the widget that you want to share.
4. Click the sharing icon ()
5. Click the **Share** option in the Sharing section.
6. Search for **business\_stakeholder** in the search field and click to add the role in the Sharing settings window.
7. Click **OK**.

## APM tables accessible to users with business stakeholders role

Users with Business stakeholder role for APM can access the following tables that store the data to load the widgets in the APM dashboards:

### APM tables

Label	Table name
Business Application	cmdb_ci_business_app
Business Capability	cmdb_ci_business_capability
CMDB Relationship	cmdb_rel_ci
CI Score	apm_app_score
Indicator Score	apm_app_indicator_score
Indicators	apm_metric
Fiscal Year	fiscal_period
Business Process	cmdb_ci_business_process
Application Family	apm_application_family
Application Category	apm_application_category
Application Category Groups	apm_application_category_group
Scoring Profiles	apm_application_profile
Portfolio	pm_portfolio

## Application Classification Example

An example of the application classification into groups and categories to identify relationships and redundancies.

### Scenario using Application Classification

The following table displays an example in which applications are classified on the basis of category, family, and software models.

Business Application	Business Process (L1)	Application Category Group	Application Category	Application Family	Software Models
Oracle EBS Order Management	Quote to Cash	Sales and Distribution	Order Management	Oracle EBS SCM	Oracle EBS R12.2 Order Management
Oracle EBS General Ledger	Financial Plan to Report	Financials	General Ledger	Oracle EBS Financials	Oracle EBS R12.2 Financials

Related topics

[Application classification](#)

## Business Process Form

A Business process is a method of related structured tasks performed to complete a specific application service.

### Business Process Form Fields

Field	Value
Name	Unique name for the business process.
Asset tag	Alphanumeric tag assigned by the organization to the asset.
Assigned to	Person using or responsible for the item.
Category	Category of the business process.
Fault count	Number of faults.
Status	Status of the business application.

Related topics

[Add or edit an application business process](#)

## Demand Actions Form

Demand actions are strategic decisions that you want to execute for an application. Application Portfolio Management provides preconfigured actions that help you enhance the capability of the applications.

## Demand Actions Form Fields

### Demand Actions form

Field	Description
Action	Decision taken on the application.
Description	Description of the action.
Strategy	Plan to implement the action.

### Related topics

[Add a strategy for managing applications](#)

## Certification Schedule form

A system administrator with APM admin role can create and assign data certification tasks to the system owners for certifying business application data.

### Certificate Schedule form fields

Field	Description
Name	Name of the certification schedule.
Filter	Select a filter for the table data.
Table	The table consisting the data that is to be certified. Defaults to cmdb_ci_business_application table.  <b>i Note:</b> Data certification can be applied only on one table at a time. Create another table if you require data certification on that table.
Display fields	Select the fields to be displayed from the business application.  <b>i Note:</b> Display fields cannot be the same as Certification fields. They are mutually exclusive.
Certification fields	Select fields to be displayed that require individual field certification. Specify the fields that you want to be certified.  <b>Application URL, Business criticality, Data classification, Contract end date, Active, Active user count, Status, User base, and Last change applied date</b> are some of the fields preconfigured for data certification.
Assignment type	Select a user reference field from the target table.

Field	Description
	<ul style="list-style-type: none"> <li><b>User field:</b> Select and assign a specific field in the Business application table in the <b>Assign to</b> field.</li> <li><b>Specific User:</b> Select and assign a specific user in the <b>User</b> field.</li> <li><b>Group Field:</b> Assign the certification schedule to a group in the <b>Assign to group</b> field.</li> <li><b>Specific Group:</b> Select and assign the certification schedule to a group in the <b>Group</b> field.</li> </ul>
Assign to	Owner of the application who is responsible for certifying the data of the business application.
User	Select a user to whom all the unassigned tasks will be assigned to.
Assign to group	Select a group from the business application table.
Group	Select a group from the choice list.
Assign to empty	<p>Select a value from the choice list:</p> <ul style="list-style-type: none"> <li><b>Do Not Create Task:</b> Certification task is not created for these records.</li> <li><b>Create Unassigned Task:</b> Certification task is created but is unassigned.</li> <li><b>Create Assigned Task:</b> Certification task is created and assigned to the specific user or group.</li> </ul> <p><b>Note:</b> The field is available only when you select the <b>Assignment type</b> as <b>User Field</b> or <b>Group Field</b>.</p>
Days to complete	Enter the number of days by which you require the certification to be completed.
Active	The job is inactive by default. Select the check box to run the scheduled job.
Run	Frequency with which the certification task is performed: Daily, Weekly, Monthly, Periodically, Once, On Demand.
Last run date	Defaults to the prior date when the certification was run. The field cannot be edited if the certification schedule is a new record.
Task description	Brief description of the certification task.

Field	Description
Instructions	Detailed instruction to the application owner about the task.
Certification Instances	
Number	Number of the certification instance.
Certification Schedule	Defines the information that requires certification and the frequency of execution. Defaults to the certification schedule that you selected.
State	Status of the certification: <b>Work in Progress</b> or <b>Complete</b> .
Created	Created date of the certification instance.
Complete by	The date on which the certification task is to be completed. <b>Days to complete</b> is added to the <b>Created</b> date.
Percent complete	For each field (out of the total number of certification fields) that the application owner certifies the percent is calculated. The system administrator can track the progress of the data certification task.
Short description	Brief description of the certification instance.
Certification Tasks	
Number	Number assigned to the certification task.
Assigned to	Owner of the application to whom the task is assigned and who is authorized to certify the data.
Assignment group	Task can also be assigned to users of a group.
Escalation	Defaults to Normal.

#### Related topics

[Schedule a data certification task](#)

## Business Application Form

APM helps system admins add any business application to assess and track its costs, usage, business value, functional fitment, and risks.

### Business Application Form fields

Field	Description
Name	Name of the business application.
Number	Unique, auto-generated identification number with a configurable prefix for the business application record.

Field	Description
Business process	Business process for which the application is used.
Portfolio	<p>Name of the portfolio to which the application belongs.</p> <p>This field appears when you activate the PPM Standard (com.snc.financial_planning_pmo) plugin.</p>
Application type	<p>Type of application. This field indicates whether the application is custom or commercial.</p> <ul style="list-style-type: none"> <li>• <b>Homegrown:</b> Application that is built in-house.</li> <li>• <b>End-user computing:</b> The application is used by end users to perform their daily tasks.</li> <li>• <b>Commercial off-the-shelf (COTS):</b> Application is a commercial application purchased from another company.</li> <li>• <b>SaaS:</b> Application is a cloud application managed by third-party vendor.</li> </ul>
Publisher	Name of the application publisher.
Architecture type	<p>Type of application architecture.</p> <ul style="list-style-type: none"> <li>• <b>Client Server:</b> Application structure that divides tasks between the service providers and service requesters.</li> <li>• <b>N-Tier:</b> A multi-layered architecture where presentation, processing, and data management exist as physically separate layers.</li> <li>• <b>Web-based:</b> Applications accessed over a network connection.</li> <li>• <b>Other:</b> Any other type of architecture.</li> <li>• <b>Platform Host:</b> Hardware or software that hosts the business application.</li> <li>• <b>Platform Application:</b> Application that runs on a platform and can be associated to a host.</li> </ul> <p>In this case, the business application relies on the platform for standard operations such as development tools, execution services, and data services.</p>
Platform Host	<p>A hardware or software that hosts the business application.</p> <p>This field is required if you select the <b>Platform Application</b> value in <b>Architecture type</b> field.</p>
Install type	<p>Type of install. Use the following options:</p> <ul style="list-style-type: none"> <li>• On Premise</li> <li>• Cloud</li> <li>• Hybrid</li> <li>• Third Party Hosted</li> </ul>
Platform	Applications hosted by platform.

Field	Description
Business Unit	Business unit that is associated with the selected business application.
Department	Department that is associated with the selected business application.
Installed	Date and time when the application was installed.
Status	<p>Operational status of the application. Use the following options:</p> <ul style="list-style-type: none"> <li>• Implementing</li> <li>• In Production</li> <li>• Pilot</li> <li>• Retired</li> </ul> <p>Auditing is enabled. Thus, whenever a user updates the value in this field, the <b>Activities</b> field in the <b>Activities</b> tab displays the update.</p>
Life-Cycle Stage	Life-cycle stage of the application. This field is auto-populated based on the value selected in the <b>Status</b> field. The data is fetched from the life-cycle mapping [life_cycle_mapping] table.
Life-Cycle Stage Status	Status of the life-cycle stage of the application. This field is auto-populated based on the value selected in the <b>Status</b> field. The data is fetched from the life-cycle mapping [life_cycle_mapping] table.
Application scoring profile	The profile used to calculate the application score for strategy.
Application category	The application purpose and function. Use this information to rationalize or consolidate applications.
Application family	A set of related applications that have a common platform or vendor.
Technology stack	Technology stack on which the application was built.
User base	<p>Number of users using the applications.</p> <p>Auditing is enabled. Thus, whenever a user updates the record in this field, the <b>Activities</b> field in the <b>Activities</b> tab displays the update.</p>
Active user count	Number of active users out of the overall user base. Auditing is enabled for the field.
Last change applied date	Date on which the application was last updated. Auditing is enabled for the field.
Accessibility level	<p>Accessibility level of the business application. Use the following options:</p> <ul style="list-style-type: none"> <li>• A (lowest)</li> <li>• AA (mid-range)</li> <li>• AAA (highest)</li> </ul>
Age in months	Age of the business application in months. This field is auto-populated when the date and time is entered in the <b>Installed</b> field.

Field	Description
Description	Unique description of the application.
Model ID	Product model ID of the business application.
Contract	
Vendor	Vendor details of the application.
Support vendor	Vendor who currently supports the application.
Contract end date	Expiry date of the subscription contract or the support contract. Auditing is enabled for the field.
Planned Disposition	
Planned Disposition	Planned disposition of a business application. Use the following options: <ul style="list-style-type: none"> <li>• Invest</li> <li>• Sustain</li> <li>• Migrate</li> <li>• Retire</li> </ul>
Migration Strategy	Migration strategy for the business application. This field appears only when <b>Migrate</b> is selected from the <b>Planned Disposition</b> field. Use the following options: <ul style="list-style-type: none"> <li>• Rehost</li> <li>• Replatform</li> <li>• Repurchase</li> <li>• Refactor</li> </ul>
Target Business Application	Name of the business application for which you're adding the planned disposition. This field appears only when <b>Migrate</b> is selected from the <b>Planned Disposition</b> field.
Reasoning	Reason for the planned disposition decision.
Owners	
Portfolio manager	Owner of the portfolio, typically from IT. This field appears when you activate the PPM Standard plugin (com.snc.financial_planning_pmo).
Business owner	Person who owns the application from the business side. Every application should have an assigned business owner.
Managed by	User managing the business application.
Managed by group	User group managing the business application.
IT Application owner	Person who owns the application from the IT side. The business application must have an owner assigned to it.

Field	Description
	If you're designated as the IT Application owner, then you can view all the applications for which you're the owner in the <b>My Applications</b> menu.
Last updated by	Person who last updated the application record.
Supported by	User supporting the business application.
Support group	User group supporting the business application.
Compliance	
Business criticality	How critical the application is to the business. Auditing is enabled for the field.
Emergency tier	Actions or plans executed for the application in an emergency situation.
Data classification	Security level for the data in the application. This attribute determines which Governance, Risk, and Compliance (GRC) policies are applicable to the application.  Auditing is enabled for the field.
Certified	Status of the application that it meets requirements or complies with the policies of your organization.
Activities	
Work notes	Work notes entered by you.

#### Related topics

[Add or edit a business application](#)

## Create digital integration form

Use the Create Digital Integration form to create a new digital integration between two business applications.

### Create Digital Integration form

Field	Description
Subscriber Business Application	Name of the subscriber business application that will subscribe for the integration.
Subscriber Digital Interface	Name of the digital interface that will subscribe for the integration.
Provider Business Application	Name of the provider business application that will provide the integration.
New Provider Digital Interface	Option to create a new digital interface.
Provider Digital Interface	Name of the digital interface.
IT Owner	Name of the IT owner for the integration.
Description	Description of the digital integration.

## Create Digital Integration form (continued)

Field	Description
Digital Integration Name	<p>Name of the digital integration.</p> <p>This field is auto-populated when the <b>Subscriber Business Application</b>, <b>Provider Business Application</b>, and <b>Digital Interface</b> fields are selected. You can modify the auto-populated name.</p>
Type	<p>Type of the integration.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Data Integration</li> <li>• Process Integration</li> <li>• User Interface Integration</li> </ul>
Subtype	<p>Subtype of the integration.</p> <p>This field appears only when <b>Data Integration</b> is selected from the <b>Type</b> field. Use the following options:</p> <ul style="list-style-type: none"> <li>• Process configuration</li> <li>• Foundation data</li> <li>• Configuration items</li> <li>• Events</li> <li>• Reporting</li> <li>• Sys log</li> </ul>
Trigger	<p>How to trigger the integration.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Manual</li> <li>• Scheduled</li> <li>• Process Driven</li> <li>• Event</li> </ul>
Interval	<p>Frequency to trigger the integration.</p> <p>Options for the interval are as follows:</p> <ul style="list-style-type: none"> <li>• Seconds</li> <li>• Minutes</li> <li>• Hours</li> <li>• Days</li> <li>• Weeks</li> <li>• Months</li> <li>• Quarters</li> </ul>

## Create Digital Integration form (continued)

Field	Description
	<ul style="list-style-type: none"> <li>Years</li> <li>On Demand</li> <li>Real Time</li> </ul>
Business Owner	Business owner of the integration.

Related topics

[Create a digital integration](#)

## Update digital integration form

Use the digital integration form to update the digital integration between two business applications.

### Digital Integration form

Field	Description
Name	Name of the digital integration.
Number	Number of the digital integration. This field is automatically generated and can't be edited.
Provider Digital Interface	Name of the digital interface. This field can't be edited.
Provider Business Application	Name of the provider business application that will provide the integration. This field can't be edited.
Subscriber Digital Interface	Name of the subscriber digital interface that will subscribe for the integration.
Subscriber Business Application	Name of the subscriber business application that will subscribe for the integration. This field can't be edited.
Type	<p>Type of the integration.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>Data Integration</li> <li>Process Integration</li> <li>User Interface Integration</li> </ul>
Subtype	<p>Subtype of the integration.</p> <p>This field appears only when <b>Data Integration</b> is selected from the <b>Type</b> field. Use the following options:</p> <ul style="list-style-type: none"> <li>Process configuration</li> <li>Foundation data</li> </ul>

**Digital Integration form (continued)**

Field	Description
	<ul style="list-style-type: none"> <li>• Configuration items</li> <li>• Events</li> <li>• Reporting</li> <li>• Sys log</li> </ul>
Version	Version of the integration.
Life Cycle Stage	Life cycle stage of the integration.
Life Cycle Stage Status	Life cycle stage status of the integration.
Business Unit	Name of the business unit that the integration belongs to.
Description	Description about the digital integration.
Functional	
Data flow direction	<p>Direction of the data flow in the integration.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Outgoing</li> <li>• Incoming</li> <li>• Bidirectional</li> </ul>
Trigger	<p>How to trigger the integration.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Manual</li> <li>• Scheduled</li> <li>• Process Driven</li> <li>• Event</li> </ul>
Interval	<p>Frequency to trigger the integration.</p> <p>Options for the interval are as follows:</p> <ul style="list-style-type: none"> <li>• Seconds</li> <li>• Minutes</li> <li>• Hours</li> <li>• Days</li> <li>• Weeks</li> <li>• Months</li> <li>• Quarters</li> <li>• Years</li> <li>• On Demand</li> <li>• Real Time.</li> </ul>

**Digital Integration form (continued)**

Field	Description
Response	Type of the response received by the subscriber.  Use the following options: <ul style="list-style-type: none"><li>• Synchronous</li><li>• Asynchronous</li></ul>
Interaction type	Type of the interaction between the provider business application and the subscriber business application.  Use the following options: <ul style="list-style-type: none"><li>• Guaranteed Message</li><li>• Pub-Sub</li><li>• Pull</li><li>• Push</li></ul>
Middleware	Name of the middleware used in the integration.
<b>Business Impact</b>	
Criticality	Level of the business impact criticality.
Confidentiality	Confidentiality level of the integration.
Integrity	Integrity level of the integration.
Availability	Availability of the integration.
<b>Owners</b>	
Business owner	Business owner of the integration.
IT owner	IT owner of the digital integration.
Supported by	User name who supports the integration.
Support group	Group name that supports the integration.
<b>Activities</b>	
Work notes	Comments about the integration.

**Related topics**

[Update a digital integration](#)

**Request digital integration form**

Request a digital integration to enable integration between two business applications.

## Request a Digital Integration form

Field	Description
Subscriber Business Application	Name of the subscriber business application that will subscribe for the integration.
Subscriber Digital Interface	Name of the subscriber digital interface that will subscribe for the integration.
Provider Business Application	Name of the provider business application that will provide the integration.
New Provider Digital Interface	Option to create a new digital interface. If you select this check box, enter a name for the new interface in the <b>New Digital Interface New Provider Digital Interface Name</b> field.
Provider Digital Interface	Name of the provider digital interface.
Digital Integration Name	<p>Name of the digital integration.</p> <p>This field is auto-populated when the <b>Subscriber Business Application</b>, <b>Provider Business Application</b>, and <b>Digital Interface</b> fields are selected. You can modify the auto-populated name.</p>
IT Owner	Name of the IT owner for the integration.
Business Owner	Business owner of the integration.
Type	<p>Type of the integration.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Data Integration</li> <li>• Process Integration</li> <li>• User Interface Integration</li> </ul>
Subtype	<p>Subtype of the integration.</p> <p>When the Data Integration is selected, the <b>Subtype</b> field appears. Use the following options:</p> <ul style="list-style-type: none"> <li>• Process configuration</li> <li>• Foundation data</li> <li>• Configuration items</li> <li>• Events</li> <li>• Reporting</li> <li>• Sys log</li> </ul>
Description	Description about the integration.

### Related topics

[Use Business Application Lifecycle Management to request a digital integration](#)

## Application model lifecycle form

The application model lifecycle helps you to better manage lifecycle of a business application.

### Application model lifecycle form fields

Field	Description
Model	Model ID of the business application. This field is auto-populated from the <b>Model ID</b> field value of the business application form.
Lifecycle type	Type of the lifecycle. Use the following options: <ul style="list-style-type: none"> <li>Internal</li> <li>Publisher</li> </ul>
Lifecycle phase	Phase of the lifecycle. Use the following options: <ul style="list-style-type: none"> <li>General Availability</li> <li>End of sale</li> <li>End of support</li> <li>End of extended support</li> <li>End of life</li> </ul>
Source	Source of the lifecycle. This field is auto-generated from the business application form.
Phase start date	Start date of the business application lifecycle phase.
Phase end date	End date for the business application lifecycle phase.
Risk	Risk associated with the application lifecycle. Use the following options: <ul style="list-style-type: none"> <li>Very high</li> <li>High</li> <li>Moderate</li> <li>Low</li> <li>None</li> </ul>
Active	Option to activate the lifecycle.
Description	Short description of the application lifecycle.

#### Related topics

[Manage the life cycle of a business application](#)

## Data classification form

The data classification tags help admin users to better control the data used by the business applications.

### Data classification form fields

Field	Description
Name	Name of the data classification.
Description	Short description of the data classification.
Data Classification Group	Group name that the classification will be a part of.
Active	Option to activate the classification.
Application	Application name for which you're creating the data classification. This field is auto-populated based on the application scope set in the instance.
Order	Order of the classification to appear.
Color	Color of the classification tag.

Related topics

[Add a data classification](#)

## Data classification group form

The data classification groups help admin users to categorize the classification tags of an information object.

### Data classification group form fields

Field	Description
Name	Name of the data classification group.
Description	Short description of the data classification group.
Allow Multi Selection	Option to enable multiple data classifications selection.
Application	Application name for which you're creating the data classification. This field is auto-populated based on the application scope set in the instance.

Related topics

[Add a data classification group](#)

## Entity Form

Entity is used to scope risk exposure and perform risk assessments on business applications.

## Entity Form fields

Field	Description
Name	Name of the profile.
Owned by	Owner of the profile.
Applies to	Business application table where all the business application records are stored.  In the dialog box that opens up, enter the business application table in the <b>Table name</b> field and the business application record in the <b>Document</b> field.
Active	Check box to activate the entity.
Class	Profile class to which the application belongs.

Related topics

[Create an entity for audit referencing business application](#)

## Architectural artifact form

Architectural artifacts describe a system, solution, or state of an enterprise. The Architectural artifacts in APM enable Enterprise Architects to create and manage the artifacts used in their organization.

## Architectural artifact form fields

Field	Description
Name	Name of the artifact.
Owner	Owner of the artifact. The owner is the creator.
Reviewers	Reviewers who can review the artifact request.
Description	Description for the artifact request.
Architectural Category	Architectural category for the newly created artifact. Look up and select the architectural category
Access Settings	
By referenced records	Option to provide access to the APM users to access the artifacts by referenced records. When an artifact is associated to a business capability or business application, any APM user who can access those business entities can also have access to the artifacts associated with those business entities.

Field	Description
Admin access	Option to provide access to document management admin. The users with the document management admin role can have the access to the artifacts.
Sharing permissions	Option to provide access to share documents with other users and groups. You can provide the following permissions: <ul style="list-style-type: none"> <li>• Role Permissions</li> <li>• User Criteria Permissions</li> <li>• User Permissions</li> <li>• Group Permissions</li> </ul>

#### Related topics

[Create or edit an architectural artifact](#)

[Create architectural artifact in EA Workspace](#)

### Related Entities form

APM enables the Enterprise Architects to associate an architectural artifact to existing elements in the Now Platform, such as business capabilities or business applications. These associations creates a relationship between the artifact and related entities.

### Related Entities form fields

#### Related Entities form

Field	Description
Architectural Artifact	Name of the architectural artifact.
Entity	Type of the business entity. The entity type can be a business application or a business capability.
Target Record	Name of the particular business application or business capability to which you want to associate the artifact.

#### Related topics

[Associate an artifact to a business entity](#)

### Architectural category form

Architectural category enables Enterprise architects to categorize and manage artifacts efficiently.

## Architectural category form fields

Field	Description
Name	Name of the category.
Description	Description of the category.
Parent Category	Hierarchical category. Select the parent category from the Architectural Categories page.

Related topics

[Create or edit an artifact category](#)

[Create an architectural artifact category in the EA Workspace](#)

## Architectural artifacts version form

APM enables Enterprise architects to create multiple versions of architectural artifacts and send for approval. There can be only one approved version for each artifact.

## Architectural artifacts version form fields

Field	Description
Architectural Artifact	Name of the Architectural Artifact.
File type	<p>File type as either a URL or attachment. Do one of the following.</p> <ul style="list-style-type: none"> <li>To upload a file, select <b>#Attachment</b>, click the attachment icon (📎), and then select the file.</li> <li>To link to a document, select <b>#URL #</b> and provide the link.</li> </ul>
State	State of the artifact version. This field is automatically set to Draft.

Related topics

[Create an artifact version](#)

## Create diagram form for business application

An Enterprise architect can create a diagram using Lucidchart for a business application hierarchy and associate it with an architectural artifact.

## Create Diagram form fields

Field	Description
Diagram Name	Name of the diagram.
Diagram Type	Type of the diagram. It can be either of the following:

Field	Description
	<ul style="list-style-type: none"> <li>Business Application Hierarchy</li> <li>Business Capability Map</li> </ul> <p>This field is auto-populated when creating the diagram from a business application or business capability view.</p>
Diagramming Tool	<p>The tool that you use to create the diagram. This field is automatically set to <b>Lucidchart</b>.</p>
Business Application	<p>Name of the Business Application for which you are creating the diagram.</p> <p>This field is auto-populated when creating the diagram from a business application view.</p>
Link to Artifact	<p>Artifact to which you want to associate the diagram.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li><b>None</b>: Select to view the diagram but not associate with any artifact.</li> <li><b>New Artifact</b>: Select to create an artifact and associate the diagram.</li> <li><b>Existing Artifact</b>: Select to associate the diagram to an existing artifact.</li> </ul>
Artifact Name	<p>Name of the artifact. This field appears only when <b>New Artifact</b> or <b>Existing Artifact</b> is selected from the <b>Link to Artifact</b> field.</p>
Entities	<p>Entities that are included in the chart.</p> <p>Select the following to include in the diagram:</p> <ul style="list-style-type: none"> <li>Application Service <ul style="list-style-type: none"> <li>Hardware Model</li> <li>Software Model</li> </ul> </li> <li>Business Capability</li> <li>Demand</li> <li>Digital Integration</li> <li>Digital Interface</li> <li>Information Object</li> </ul>

Field	Description
	<ul style="list-style-type: none"> <li>Project</li> </ul> <p><b>i Note:</b> The Project option is available when the PPM Standard plugin installed.</p>
Folder	Name of the Lucid folder. Select the folder where you want to save the diagram. When you select a folder, its sub folders are displayed.

#### Related topics

[Create a Lucidchart diagram for a business application](#)

### Create diagram for a business capability

An Enterprise architect can create a diagram using Lucidchart for a business capability maps and associate it with an architectural artifact.

### Create diagram form fields

Field	Description
Diagram Name	Name of the diagram.
Diagram Type	<p>Type of the diagram. It can be either of the following:</p> <ul style="list-style-type: none"> <li>Business Application Hierarchy</li> <li>Business Capability Map</li> </ul> <p>This field is auto-populated when creating the diagram from a business application or business capability view.</p>
Include Business Applications	Option to include business applications.
All Business Capabilities	Option to include all business capabilities maps in the diagram.
Business Capabilities	<p>List of business capabilities for which you want to create the diagram. You can search and add multiple capabilities.</p> <p><b>i Note:</b> If you have selected the check box for <b>All Business Capabilities</b> in the previous step, then this field does not appear.</p>
Diagramming Tool	The tool using which you are creating the diagram. This field is automatically set to <b>Lucidchart</b> .

Field	Description
Link to Artifact	<p>Artifact to which you want to associate the diagram.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• <b>None</b>: Select to view the diagram but not associate with any artifact.</li> <li>• <b>New Artifact</b>: Select to create an artifact and associate the diagram.</li> <li>• <b>Existing Artifact</b>: Select to associate the diagram to an existing artifact.</li> </ul>
Artifact Name	Name of the artifact. This field appears only when <b>New Artifact</b> or <b>Existing Artifact</b> is selected from the <b>Link to Artifact</b> field.
Folder	Name of the Lucid folder. Select the folder where you want to save the diagram. When you select a folder, its sub folders are displayed.

#### Related topics

[Create a Lucid diagram for a business capability](#)

## Demand form to retire an application

An APM user can raise a request to retire an application if the application is no longer in use.

### Demand form fields

Field	Description
Action	Retire Application.
Name	Name of the business application to be retired.
Category	Operational.
Type	Project.

#### Related topics

[Manage Business Application Lifecycle Management service requests](#)

## Request Architecture Review form

APM users can request the architecture review board to review a new architecture design proposal based on the technology of a business application.

## Request Architecture Review form fields

Field	Description
Business Application	Name of the business application for which an architecture review is requested.
Project	Project that you can tie to this business application for which the architecture review is requested.  <b>i Note:</b> The projects that you own as a project manager appear in the list. The <b>Project</b> field appears only when the PPM Standard plugin is activated.
Short Description	A short description explaining the reason for the architecture review.
Architecture Review Requested Date	Date to hold the architecture review.  The architecture review date must be in the future.  You can attach blueprints or supporting documents for the review.

### Related topics

[Use Business Application Lifecycle Management to request an architecture review](#)

## Indicator form

Application indicators are business metrics that assess the applications across dimensions such as cost, quality, technical risk, investments, user satisfaction, and business value.

### Indicator form fields

Field	Description
Name	Name of the application indicator.
Unit	A number, currency, time, duration in minutes, hours, days, month, or quarter, or rate.  You can also create units according to your requirements.
Frequency	Frequency determines the interval at which the data for the indicator source should be collected.  The <b>Frequency</b> field isn't available when <b>Performance Analytics</b> is selected from the <b>Data source</b> list.

Field	Description
Target maximum	<p>Maximum value for the indicator.</p> <p>The <b>Target maximum</b> field isn't available when <b>Assessments</b> is selected from the <b>Data source</b> list.</p>
Active	Select the <b>Active</b> option to enable the indicator.
CI Class	CI type for which the score is generated.
Direction	Business application with maximum or minimum values. Select Minimize if lower values are better. Select Maximize if higher values are better.
Target minimum	<p>Minimum value for the indicator.</p> <p>The <b>Target minimum</b> field isn't available when <b>Assessments</b> is selected from the <b>Data source</b> list.</p>
Consider Absolute Values	<p>Option to consider values from the <b>Target maximum</b> and <b>Target minimum</b> fields.</p> <p>This field is available only when values are entered in the <b>Target maximum</b> and <b>Target minimum</b> fields.</p> <p>When the check box is cleared, values for target maximum and target minimum are considered based on the <a href="#">intelligent logic</a>.</p>
Short description	Short summary of the application indicator.
<b>Datasource Configuration</b>	
Data source	<p>Defines the location from which the indicator receives data.</p> <ul style="list-style-type: none"> <li>• <b>Performance Analytics:</b> Collects scores from indicators created in Performance Analytics. See <a href="#">Performance Analytics indicators</a>.</li> <li>• <b>Custom Script:</b> Allows you to write a script that collects data from another application. Beneath the <b>Data Source</b> field, a sample script appears. Customize the script as needed. An example custom script is:</li> </ul> <pre>var results = {}; var applications = []; var incidentCount = 0;</pre>

Field	Description
	<pre> var applicationsGr = new GlideRecord("cmdb_ci_business_ap p"); applicationsGr.addQuery('activ e', true); applicationsGr.query(); //for each application get incident count at business service level while(applicationsGr.next()) {     incidentCount = 0;      var gr = new GlideRecord("incident");      gr.addEncodedQuery("opened_atBET WEEN" + startDate + "@" + endDate);      gr.addQuery('cmdb_ci_business_ap p', applicationsGr.getUniqueValue( ));     gr.query();      incidentCount = gr.getRowCount();     var appInfo = {};     appInfo.appId = applicationsGr.getUniqueValue();     appInfo.weight = incidentCount;     applications.push(appInfo); } results.applications = applications; results; </pre>

- **Query Condition:** Allows you to select a table to run filters on to obtain data.
- **Assessments:** Allows you to evaluate, score, and rank records by assessing records in a table. See [Create metric types and generate assessable records](#). To view results of survey assessments within APM, see [Generate survey assessments and view results within APM](#).
- **Indicators:** Allows you to add dependent child indicators. Through the child indicators, data is gathered to the parent indicator.

For example, if the parent indicator is number of issues, the dependent

Field	Description
	indicators can be number of incident counts, number of problems, and changes. These dependent indicators are child indicators and the number of incidents, problems, and changes recorded are consolidated up to the parent indicator as the number of issues.
Indicator	<p>The <b>Indicator</b> field appears when <b>Performance Analytics</b> is selected from the <b>Data source</b> list.</p> <p>Indicators are statistics that are used to measure current conditions and forecast trends.</p> <p><b>i Note:</b> If the collection frequency of the application indicator isn't greater than the frequency at which the data of the Performance Analytic indicator are generated, then the system displays an error message: Frequency of the indicator must always be greater than or equal to the frequency of the datasource configuration indicator. For more information, see <a href="#">Collection of PA indicator score data</a>.</p>
Default breakdown	Name of the Performance Analytics breakdown.
Consolidation	<p>Computational method for aggregating the values, a function such as sum, average, maximum, or minimum.</p> <p>Default is Average. For example, Average is the sum of the monthly values divided by the total number of months in a quarter.</p> <p>If you select Maximum or Minimum, then it's the maximum value or the minimum value of a month in the quarter, respectively.</p> <p>If you select Sum, then it's an aggregate of all monthly values in the quarter.</p>
Assessment Metric Type	<p>Type of metric that is used to assess the indicator.</p> <p><b>Assessment Metric Type</b> field appears when the <b>Data source</b> is <b>Assessments</b>.</p>
Assessment Metric Category	Category of the metric.

Related topics

[Create or edit an indicator to assess an application](#)

## Scoring Profile form

Create an application scoring profile and update the default application profile with new profile indicators as per business requirements.

### Scoring profile form fields

Field	Description
Name	Name of the application profile.
Readjust Weightage	Option to adjust the weightage proportionately among the relevant indicators of the business application.
Description	Description of the application profile.
CI Class	Configuration item type for which the score is generated.

Related topics

[Create an application score profile and attach profile indicators](#)

## Scheduled Script Execution form

The script to recalculate the scores of all indicators, the scoring profiles to which these indicators are attached, and the business applications that are associated to these scoring profiles.

### Scheduled script execution form fields

Field	Description
Name	Name to identify this scheduled script execution.
Active	Option to activate the script at the scheduled date and time. By default the job is inactive.
Run	The type of schedule to execute the script on. Choices are: <ul style="list-style-type: none"> <li>• Daily</li> <li>• Weekly</li> <li>• Monthly</li> </ul>
Day	If you select Weekly or Monthly from the Run list, then the Day field appears.

Field	Description
	<ul style="list-style-type: none"> <li>If Run is Weekly, then the day of the week.</li> <li>If Run is Monthly, then the day of the month.</li> </ul>
Time	<p>Time at which the script runs on a 24-hour clock.</p> <p>If Run is Weekly or Monthly, the value includes the time of day.</p>
Conditional	Option for executing only if certain conditions are met.
Run this script	<p>The script to run at the scheduled date and time.</p> <p>You need not edit the script.</p>
Run as	Select another user to run the script execution as. Configure the form to add this field if it is not present.

Related topics

[Schedule a job to compute application scores](#)

## Select Chart Dimensions form

This form helps to change the configurations of a bubble chart.

### Select chart dimensions form fields

Field	Dimension
X and Y	<p>Dimension of the indicators that fall in the X and Y axes.</p> <p>Along with the pre-configured dimensions, you can also view the bubble chart that you create using the Application bubble chart form.</p>
Bubble Size	Indicator scores determine the size of the bubble.
Display bubble labels	<p>Enable to display the bubble labels in the Bubble chart.</p> <p>Helps to have a clear display of bubbles, uncluttered by their labels when there are many bubbles in a quadrant.</p>

Related topics

[Analyze application scores in a bubble chart](#)

## Application bubble chart form

A bubble chart helps the admin to compare and evaluate the relative standing of application in selected categories.

### Application bubble chart form fields

Field	Description
Name	Name of the application bubble chart.
Top left label	Application strategy in the top left label.
Top right label	Application strategy in the top right label.
Bottom right label	Application strategy in the bottom right label.
Bottom left label	Application strategy in the bottom left label.
Top left color	Color for the bubble in the top left quadrant. The color fields accept string inputs including hex code or RGB notation.
Top right color	Color for the bubble in the top right quadrant. The color fields accept string inputs including hex code or RGB notation.
Bottom right color	Color for the bubble in the bottom right quadrant. The color fields accept string inputs including hex code or RGB notation.
Bottom left color	Color for the bubble in the bottom left quadrant. The color fields accept string inputs including hex code or RGB notation.
Quadrant label color	Color for the label. The color fields accept string inputs including hex code or RGB notation.
X Indicator	An application indicator for the X axis. You can also create an application indicator by clicking the <b>New</b> button in the Application Indicators form.
Y Indicator	An application indicator for the Y axis.
Z Indicator	An application indicator for the Z axis.
X Label	Label for the X axis.

Field	Description
	For example, if your <b>X Indicator</b> is CSAT, then you can label it as Customer Satisfaction Score.
Y Label	Label for the Y axis.
Z Label	Label for the Z axis.

Related topics

[Create or edit a bubble chart for application strategies](#)

## New Goal form

Use the Goal form to create goals for your organizational strategic priorities.

### New goal form fields

#### Goal form

Field	Description
Name	Name of the goal.
State	State of the goal. The state can be <b>Draft</b> , <b>In progress</b> , <b>Approved</b> , <b>Complete</b> , <b>Pending</b> , <b>Achieved</b> , or <b>Not Achieved</b> .
Parent goal	Name of the parent goal that this goal contributes to.
Strategic priority	Name of the strategic priority that this goal is created for.
Start date	Start date for the goal. By default, the start date of the current quarter is populated. For a sub-goal, start date of its parent goal is populated.
End date	End date for the goal. By default, the end date of the current quarter is populated. For a sub-goal, the end date of its parent goal is populated.
Owner	Owner of the goal. By default, the name of the user creating the goal is populated.
Category	Category of the goal. The available options are: <ul style="list-style-type: none"> <li>• <b>Total Applications</b></li> <li>• <b>Total Cost</b></li> <li>• <b>Opex</b></li> <li>• <b>Capex</b></li> <li>• <b>Cloud Applications</b></li> <li>• <b>Homegrown Applications</b></li> <li>• <b>Support Cost</b></li> <li>• <b>Labor Cost</b></li> <li>• <b>Standards Compliance</b></li> <li>• <b>Strategic</b></li> </ul>

**Goal form (continued)**

Field	Description
	<ul style="list-style-type: none"> <li>• <b>Operational</b></li> <li>• <b>Tactical</b></li> </ul>
Status	Status of the goal. Status can be <b>Red</b> , <b>Yellow</b> , <b>Green</b> , or <b>None</b> .
Contributors	Users who contribute to the achievement of the goal.
Team	Assignment group responsible for different activities in achieving the goal.
Impact on parent goal	<p>A numerical value that represents the importance of this goal relative to sibling goals or other goals under its parent goal. By default, the value is (1) Neutral.</p> <p>The available options are:</p> <ul style="list-style-type: none"> <li>• <b>(0) No impact</b></li> <li>• <b>(1) Neutral</b></li> <li>• <b>(2) Moderate</b></li> <li>• <b>(3) High</b></li> <li>• <b>(4) Very high</b></li> <li>• <b>(5) Maximum</b></li> </ul> <p><b>i Note:</b> This field is available only when the <code>sn_gf.weighted_average_enabled</code> system property is set to <b>Yes</b>.</p>
Progress	<p>Percentage complete for the goal. The progress value is calculated automatically if the goal has sub-goals or/and targets.</p> <p>For more information on how the progress value is calculated, see <a href="#">Progress value calculation</a>.</p>
Assigned entity type	Entity type to which the goal is assigned. For example, Business Unit, Department, Company, or Portfolio.
Assigned entity	Entity to which the goal is assigned.
Comments	Detailed comments for the goal to facilitate collaboration.
Classification	Goal classification type. The available options are <b>Environmental</b> , <b>Social</b> , and <b>Governance</b> . This field is applicable only for the ESG Workspace users.

## Related topics

[Create a goal for an application strategy](#)

**Update Goal form**

After assessing the applications and deciding on strategies, an admin can update goals to maximize or minimize depending on the indicators for the selected fiscal period.

## Update goal form fields

Field	Description
Planned achievement	Percentage of the target that you plan to achieve.
Actual achievement till date	Current percentage achieved.
Comments	Comments, if any.

Related topics

[Create a goal for an application strategy](#)

## Demand form

Use a demand as a step to identify cost saving opportunities on the applications or capabilities and to meet the target. The strategy that you associate with the demand action decides the strategy for the application.

## Demand form fields

### Demand form

Field	Description
Action	<p>Course of action for the new demand.</p> <p><b>i Note:</b> The <b>Action</b> field is available only when you launch the form within the Application Portfolio Management module and that is when the Application Portfolio Management (APM) plugin is activated.</p>
Name	Name of the demand.
Category	<p>Category of the demand.</p> <ul style="list-style-type: none"> <li>• Strategic</li> <li>• Operational</li> </ul>
Type	<p>Type of demand:</p> <ul style="list-style-type: none"> <li>• Project</li> <li>• Enhancement</li> <li>• Change</li> <li>• Defect</li> </ul> <p>The <b>Category</b> field selection determines the options available in the <b>Type</b> field.</p>
Number	Unique, auto-generated identification number for the demand.

**Demand form (continued)**

Field	Description
Start date	Start date of the demand.
Due date	Requested completion date of the demand.
Details	
Submitted by	Name of the user who submitted the demand.
Program	Name of the program to which the demand belongs.
Demand manager	Name of the demand manager.
Collaborators	Users who can edit or contribute to the demand. A demand requester can select any user as a collaborator.
Department	Department in a business unit to which the demand submitter belongs.  If no value is chosen in this field, it's auto-populated with the name of the department to which the submitter belongs.
Business Unit	Business unit to which the demand submitter belongs.
Impacted Business Units	Business unit that is impacted by the submitted demand.
Business Capabilities	One or more business capabilities to associate the demand with.
Business Applications	Business application that you add to the demand.  You can select any business application in your enterprise, irrespective of it being related or not related to the capability that you've selected in the <b>Business Capabilities</b> field.

## Related topics

- [Create a demand towards achievement of goal](#)
- [Create a demand towards achievement of a capability](#)
- [Create a demand for a business application to achieve a goal](#)

**New Program form**

Create a program, link it to the goal that you created, and associate a program manager to the program. After you create a goal, you should have a program to achieve the goal that you created.

## New Program fields

Field	Description
Program Name	Unique name for the program.
Primary goal	Primary goal that is to be achieved for the program.
Program manager	Name of the program manager.
Portfolio	Portfolio to which the program belongs.
Number	A unique, auto-generated identification number for the program.
State	<p>State of the program. Use the following options:</p> <ul style="list-style-type: none"> <li>• Pending</li> <li>• Open</li> <li>• Work in progress</li> <li>• Closed complete</li> <li>• Closed incomplete</li> <li>• Closed skipped</li> </ul>
Description	Detailed description of the program.
Dates	
Planned start date	Intended date for the program to begin.
Planned end date	Intended date for the program to end.
Planned duration	Expected duration of the program in days and hours.
Actual start date	Date on which the program actually begins.
Actual end date	Date on which the program actually ends.
Actual duration	Duration of the program in days and hours, from its start to closure.
Financials	
Total planned cost	An estimate of the cost of the program.
Actual cost	Actual cost of the program.
Budget cost	Budgeted cost of the program.
Planned benefit	Benefit received from the program.
Planned returns	Planned financial returns of the program.
Planned ROI %	ROI percentage associated with the program.

### Related topics

[Create a program for an application goal](#)

## Goal Contribution Target form

The Program Navigation page guides you in setting a goal target for the fiscal years to achieve the goal.

### Goal Contribution Target form fields

Field	Description
Program	Name of the program.
Fiscal Year	Fiscal period for which the goal is set.
Active	Check box to enable the program.
Target Goal Contribution %	Percentage of the target goal contribution for the selected fiscal period.
Comment	Description that explains the target goal contribution for the program.

Related topics

[Create a guided plan to execute a program](#)

## Business capability form

Business Capability is a common table used within the Application Portfolio Management application.

### Business Capability form fields

Field	Description
Name	Name of the business capability.
Parent	The parent capability for the capability that you're creating.  Assigning a parent capability renders the business capability as a child capability. If no parent is assigned or if the parent is null, then the level of the capability is at 0 level or root, which means it's a root node capability. If the parent field is made null, then a message prompts you to run a scheduled job to update the business capability levels.
Level	The level at which the capability is in the hierarchy. If there's no parent capability, then the level is 0, which indicates that the capability is at the root level.  Level at which the capability is in the hierarchy. Up to six levels are supported.  If you add a capability or update it by changing its parent, then run the Update Business Capability Levels job, on demand.

Field	Description
	<p>The job determines the capability level and updates all the capabilities with the level information.</p> <p><b>Note:</b> The system updates the field and the user can't.</p>
Business Unit	Business unit that is associated with the selected business capability.
Order	<p>Assign any integer value. Applicable only for level-0 capability.</p> <p>The number you assign determines the position of the capability in the sequential order of all other business capabilities in that capability hierarchy.</p> <p>The <b>Order</b> field is available only for root node or level-0 capabilities. The scheduled job checks for conditions such as order values entered for non-root capabilities, duplicate order values, and null value and eliminates such values. It calculates and sets the level and hierarchy ID for each capability.</p>
Department	Department that is associated with the selected business application.
Leaf Node	<p>This field denotes whether the business capability is a parent of any other capability. If the option is enabled, then it means that it doesn't have child capability.</p> <p>Capabilities follow a parent-child hierarchy. The Leaf node attribute in the capability denotes that it isn't a parent of any other capability.</p> <p><b>Note:</b> The system updates the field and the user can't.</p>
Owned by	User who owns the business capability.
Hierarchy ID	<p>Hierarchy ID of the business capability. For level 0 capability, a hierarchy ID is generated based on the order. For all non-root capabilities, the hierarchy ID is generated based on the hierarchy ID of its parent. The number is prefixed to the business capability and you can view it in the capability hierarchy map.</p> <p>The capabilities are structured vertically according to their hierarchy IDs. Whenever a capability is updated such as if a parent</p>

Field	Description
	<p>is added or deleted, then the hierarchy ID is automatically updated.</p> <p><b>Note:</b> By default, the system updates the field. So, you can't edit the field.</p> <p>However, if you prefer a different number or value for the hierarchy ID from what the system generates, you can reset the system property flag to <b>True</b>. Setting the property to true makes the <b>Hierarchy ID</b> field editable in the Business Capability form and you can enter the value. By this action, the system default logic of generating the hierarchy ID is overridden by your custom hierarchy ID.</p>

Description A short description of the business capability.

#### Related topics

[Create business capability and relate the capability with an application](#)

### Business capability new record form

Create a root-level capability, add a child capability to a parent, edit a capability, and delete a leaf capability, and manage the relationships between the capabilities in the capability map.

### Business Capability New record form fields

Field	Description
Name	Unique name for the business capability.
Description	Short description of the business capability.
Parent	If the capability is to be a root level capability or at level 0, then leave the field blank.  Adding a parent renders the capability as a child and not as a root capability.

#### Related topics

[Manage capability hierarchy in the capability map](#)

[Add a business capability](#)

### Application Service Hardware Models form

Track your equipment assets such as computers and servers using hardware models.

## Application Service Hardware Models form fields

Field	Description
Application Service	Name of the application service.
Ignore Technical Risk	Option to ignore the technical risk of the hardware model.
Hardware Product Model	Name of the model category.

Related topics

[Associate an application service to hardware model](#)

## Application Service Software Model form

Business applications have multiple instances such as development, QA, and production. Instances are nothing but application services. Hence application services must be associated with software models (to the respective full versions) to know the risk of the application service.

## Application Service Software Models form fields

Field	Description
Application Service	Name of the application service.
Ignore Technical Risk	<p>Check box to ignore the technical risk of the software model.</p> <p>The risk of an application service is high even if one of its underlying software models risk is high. Hence, use this check box to ignore the risk of a software model if it is insignificant and does not contribute much to the risk of the application service.</p>
Primary Software Model	Check box to make the software model as a primary one.
Software Model	The software model that underlies the application service.
Lifecycle Full Version	The granular licensable version of the software.

Related topics

[Associate an application service to a software model](#)

## Risk Parameter form

Risk Parameter is a common table used within Application Portfolio Management application.

## Risk Parameter form fields

### Risk Parameter form

Field	Description
Name	Name of the risk parameter.
Description	A short description of the risk parameter.
Active	Enable the check box to make the risk parameter active.
Script	Create a script that calculates the risk of the software model and the risk of the business application and schedule it to run daily.

Related topics

[Create a risk parameter](#)

## New TRM product form

As a member of the Enterprise Architect group, you can add a Technology Reference Model (TRM) product to the TRM library.

### TRM Product form fields

Field	Description
Publisher	Publisher of the software or hardware product. Look up and select a publisher from the Companies page.
Type	Select the type of the product. The list includes: <ul style="list-style-type: none"> <li>• Software</li> <li>• Hardware</li> </ul> <p><b>i Note:</b> The fields <b>Is New Product</b>, <b>Software Product</b>, and <b>Hardware Product</b> are displayed only when you have the SAM Foundation plugin and the Hardware Asset Management plugin installed on your instance.</p>
Is New Product	Option to specify if it's a new product.
Software Product	Name of the software product. <p><b>i Note:</b> This field appears only when the <b>Type</b> is selected as Software and the Software Asset Management Foundation plugin is installed on your instance.</p>
Hardware Product	Name of the hardware product.

Field	Description
	<p><b>Note:</b> This field appears only when the <b>Type</b> is selected as Hardware and Hardware Asset Management plugin is installed on your instance.</p>
Name	Name of the software or hardware product. This field appears only when the <b>Is New Product</b> check box is selected.
Category	Category of the product. Look up and select a category from the TRM Categories page.
TRM Phase	Phase of the product. Use the following list: <ul style="list-style-type: none"> <li>• Approved</li> <li>• Approved with Constraints</li> <li>• Divest</li> <li>• Evaluation</li> <li>• Unapproved</li> </ul>
Investment direction	Purpose for the investment. Use the following list: <ul style="list-style-type: none"> <li>• Divest</li> <li>• Eliminated</li> <li>• Invest</li> <li>• Maintain</li> </ul>
Business Justification	Business justification for the product request.

Related topics

[Add a TRM product](#)

## TRM Product Request form

The TRM Product Request form is used for adding or editing a request to include a new software product to the Technology Reference Model (TRM) library.

## TRM Product Request form fields

Field	Description
Number	A unique, auto-generated identification number for the product request.
Publisher	Publisher of the software or hardware product. Look up and select a publisher from the Companies page.
Type	Select the type of the product. The list includes:

Field	Description
	<ul style="list-style-type: none"> <li>• Software</li> <li>• Hardware</li> </ul> <p><b>i Note:</b> The fields <b>Is New Product</b>, <b>Software Product</b>, and <b>Hardware Product</b> will be displayed only when you have the Software Asset Management Foundation plugin and the Hardware Asset Management plugin installed on your instance.</p>
Is New Product	Option to specify if it's a new product.
Software Product	Name of the software product. This field appears only when the <b>Type</b> is selected as Software and Software Asset Management Foundation plugin is installed in your instance.
Hardware Product	Name of the software product. This field appears only when the Hardware Asset Management plugin is installed in your instance.
Name	Name of the software or hardware product. This field appears only when the <b>Is New Product</b> check box is selected.
Short Description	Description about the product request.
Approval	Status of the approval. Choices include: <ul style="list-style-type: none"> <li>• Not yet requested</li> <li>• Requested</li> <li>• Approved</li> <li>• Rejected</li> </ul>
Requested TRM Phase	Phase of the product. Look up and select a phase from the TRM Phases page.
Category	Category of the product. Look up and select a category from the TRM Categories page.
Business Justification	Business justification for the product request.

#### Related topics

[Add or edit a TRM product request](#)

[View and edit your product requests](#)

### TRM Product Request using catalog form

The TRM Product Request using catalog form is used to add or edit a request for including a new software or hardware product to the Technology Reference Model (TRM) library.

## TRM Product Request form fields

Field	Description
Publisher	Publisher of the software product. Look up and select a publisher from the Companies page.
Category	Category of the product. Look up and select a category from the TRM Categories page.
Type	Select the type of the product. The list includes: <ul style="list-style-type: none"> <li>• Software</li> <li>• Hardware</li> </ul> <p><b>i Note:</b> The fields <b>Is New Product</b>, <b>Software Product</b>, and <b>Hardware Product</b> are displayed only when you have the Software Asset Management Foundation plugin and the Hardware Asset Management plugin installed on your instance.</p>
Is New Product	Option to specify if it's a new product.
Software Product	Name of the software product. This field appears only when the <b>Type</b> is selected as <b>Software</b> , and when the Software Asset Management Foundation plugin is installed on your instance.
Hardware Product	Name of the hardware product. This field appears only when the <b>Type</b> is selected as <b>Hardware</b> , and when the Hardware Asset Management plugin is installed on your instance.
Name	Name of the software or hardware product. This field appears only when the <b>Is New Product</b> check box is selected.
Requested TRM Phase	Phase of the product. Look up and select a phase from the TRM Phases page.
Short Description	Description about the product request.
Business Justification	Business justification for the product request.

Related topics

[TRM Product Request using catalog form](#)

## TRM Product Lifecycle Request form

The TRM Product Lifecycle Request form is used for adding or editing a request to create a lifecycle for a Technology Reference Model (TRM) product.

## TRM Product Lifecycle Request form fields

Field	Description
Number	A unique, auto-generated identification number for the product request.
Publisher	Publisher of the software or hardware product. Look up and select a publisher from the Companies page.
TRM Product	Name of the TRM product. Look up and select the product from the TRM Products page.
Version	Version of the TRM software product. This field appears only when a software product is selected in the <b>TRM Product</b> field.
Edition	Edition of the TRM software product. Either Standard or Enterprise. This field appears only when a TRM product of type software is selected in the <b>TRM Product</b> field.
Hardware model	Select the hardware model from the list of available hardware models. This field appears only when a TRM product of type hardware is selected in the <b>TRM Product</b> field.
Model number	Hardware model number. This field is auto-populated with a model number, when a hardware model is selected. This field appears only when a TRM product of type hardware is selected in the <b>TRM Product</b> field.
Requested TRM Phase	Phase of the product. Look up and select a phase from the TRM Phases page.
Phase start date	Start date of the product lifecycle phase.
Phase end date	End date for the product lifecycle phase.
Barcode	Barcode of the hardware model. This field is auto-populated with the barcode number, when a hardware model is selected. This field appears only when a TRM product of type hardware is selected in the <b>TRM Product</b> field.
Business Application	Name of the business application. Look up and select a business application from the Business Applications page to associate it to the TRM product lifecycle.
Short Description	Description about the product lifecycle request.
Business Justification	Business justification for the product lifecycle request.

## Related topics

- [Request a TRM product lifecycle using the TRM Catalog](#)
- [Add or edit a TRM product lifecycle request](#)
- [View and edit your product lifecycle requests](#)

## TRM Category form

Add a new request or edit an existing request to create a TRM category.

### TRM Category form fields

Field	Description
Name	A unique name of the category.
Reference Code	Reference code for the category. The reference code is used to keep reference to other authoritative data source, such as the federal TRM.
Parent Category	Select a parent category to add the category to a hierarchical structure. Look up and select a category from the TRM Categories page.
Description	Description about the TRM category.
Domain	Name of the domain. The base system sets the default domain as Global.

## Related topics

- [Add or edit a TRM category](#)
- [Create a Technology Reference Model \(TRM\) category in the EA Workspace](#)

## TRM Phase form

Define your own TRM phase or edit an existing TRM phase.

### TRM Phase form fields

Field	Description
Name	Name of the phase.
Description	Description about the phase.
Production Approved	Option to mark as approved for production or not.
Color	Color that defines the TRM phase. Select a color from the drop-down list.
Shape	Shape that defines the TRM phase. Select a shape from the drop-down list.

## Related topics

[Add or edit a TRM phase](#)

[Create a Technology Reference Model \(TRM\) phase](#)

## Data Domain form

Relate an information object to the database catalog of a database instance to collect the physical data. ServiceNow Discovery finds database catalog that lists all the catalog objects, or databases, discovered for an instance of a database.

## Data Domain form fields

Field	Description
Name	Name of the data domain.
Description	Short description of the data domain.
Parent	Parent domain of the data domain.  This is used to create a data domain hierarchy.
Leaf Node	Indicator that the data domain is at the lowest level of the hierarchy.

## Related topics

[Create a data domain](#)

[Create data domain in the EA Workspace](#)

## Information Objects form

An information object captures the logical data for the business application.

## Information Objects form fields

Field	Description
Select classification tag	Drop-down list to show the classification groups and classification that can be applied to the information object.
Name	Name of the information object.
Data classification	Category of data.  Displays the classification tags applied on the information object.
Owned by	User who owns the information object.
Business Unit	Business unit that owns the information object.
Department	Department in the business unit that actually owns the information.

Field	Description
Description	Short description of the information object.
Data domain	<p>Reference to the Data Domain table that holds the categorized conceptual data.</p> <p>The relationship between the conceptual and the logical data layers is established by referencing the data domain in the Information Object table.</p>

#### Related topics

[Apply classification tags to an information object](#)

[Create an information object referencing data domain](#)

### Add relationship form

Relate a business application to an information object using the CI relationship [cmdb\_rel\_ci] table of type Uses::Used by. Use this suggested relationship to get the logical data of the information object to leverage a business application.

### Add relationship form fields

Field	Description
Business Application	Name of the business application that auto-populates in the field.
Relationship	Type of suggested CMDB CI relationship between the business application and the information object. The field is auto-populated with Uses::Used by relationship.
Select Information Object	Table with the logical data that the business application uses.
Create, Read, Update, and Delete	<p>Options for capturing the type of operation or a combination of operations that the business application can do on the information object.</p> <p>Selecting the Create, Read, Update, and Delete (CRUD) check boxes adds qualifiers, which are properties that define the extent of the relationship between the business application CI and the information object CI.</p>

#### Related topics

[Relate a business application to an information object](#)

### Status of the Software models

An application owner can run the software model suggestions engine to fetch software models. These models can be related to an application service instead of mapping them manually. Every application service displays the status after they are mapped.

## Status of the Software models

First run of the job	Second run of the job	Conditions of association	New status of the software model
Found	Found	Yes	<b>Associated:</b> Associates the selected software model to the application service. The status is prefixed with a green bubble. In the subsequent run of the job, these software models are still in Associated state. You may choose to dissociate the software model if it has been removed or uninstalled from the hardware on which the application service runs.
Found	Found	No	<b>Ignored:</b> If no action is taken on the software models in the prior run of the job, then they are identified as <b>Ignored</b> (prefixed with a gray bubble) in the current run of the status.
Not found	Found	Not applicable	<b>New:</b> The software models that are identified in the first run of the job, and those software models that have been added after the last run but before the current run are marked with status <b>New</b> prefixed with a yellow bubble. You can associate or dissociate such software models.
Found	Not found	Yes	<b>Delete:</b> You can delete a software model that is in Associated, Ignored, or New

First run of the job	Second run of the job	Conditions of association	New status of the software model
			status. This action deletes the software model from the list of the retrieved software models, which is Retrieved Software Models [sn_apm_service_software_model_sug] table but not from the Application Service Software Model [sn_apm_tpm_service_software_model] table.
Found	Not found	No	Delete

#### Related topics

[Associate suggested technology models to an application service](#)

### Date conditions

A maintenance user can configure Date range for the lifecycle phases.

### Date conditions

#### Date conditions

Date conditions	Timeline in TPM screen
Current date, Current date –10 years, Current date + 3 years.	Default dates. Timelines of product models that fulfill the default date conditions are shown.
All phases that start before the current date –10 years and continues to the present time.	Product models with such date conditions are shown and the timeline expands itself automatically from the default (–10 years to +3 years) to accommodate the past years.
Phases that start before the current date –10 years and continue beyond the current date and may still be in progress	Product models with such phases are shown until current date + 3 years.
Lifecycle phases that start and end before the current date –10 years	Product models with such phases are NOT shown.

Lifecycle phase of record	Conditions for plotting the dates on TPM timeline
One internal and one publisher	All dates are plotted on the timeline.
Multiple publishers	Only one publisher date is plotted. The publisher that is selected for plotting depends on the <i>sequence</i> property in the

Lifecycle phase of record	Conditions for plotting the dates on TPM timeline
	source column. All sources have a sequence number attached to them. The source with the least sequence number is selected. If the source with the least sequence number does not have any lifecycle records, then the source with the next least sequence number is selected.
One internal and multiple publishers	The internal date is plotted, but only one publisher date is plotted. The publisher record that is selected for plotting depends on the <i>sequence</i> property.
Overlapping dates of two phases	Only one line is shown.
Gaps in dates	A continuous line with no gap in the timeline.

Related topics

[Product lifecycle data on the timeline](#)

## Quick start tests for Application Portfolio Management

Validate that Application Portfolio Management still works after you make any configuration changes, such as applying an upgrade or developing an application. Copy, customize, and pass these quick start tests when using your instance-specific data.

Application Portfolio Management quick start tests require enabling the Application Portfolio Management – ATF Tests plugin (com.snc.apm.atf).

### APM: Create Business application and capability test suite

Test	Description	Release version
APM: Create Business Application	Verify the creation of an application category and then the creation of a business application with users having apm_user role.	Madrid
APM: Create Business Capability	Verify the creation of a parent and child business capability and verify its field values.	Madrid
APM: Test relating Business Service, Business Application, and Software Models	Verify the creation of a business application, business service, using the existing software model, and a relationship between them.	Orlando
APM: Test for Indicator Score and Application Score generation	Verify the creation of indicator, scoring profile, and generation of indicator scores and application scores.	Paris

## APM: Create Business application and capability test suite (continued)

Test	Description	Release version
APM: Business Application with Information Object and Data Domain	Verify the creation of business application, information object, and addition of the CRUD operations in relation attributes.	Quebec

## APM TRM: Test relating TRM product and product life-cycle request test suite

Test	Description	Release version
APM: Creating and Approving Product and Product Lifecycle Request	Create and approve product TRM requests and product lifecycle requests.	Utah

Related topics

[Quick start tests](#)

## APM Cloud Assessment Scoring Profile

The Cloud Assessment scoring profile in Application Portfolio Management helps you to evaluate a business application for its cloud migration readiness.

### Indicator for APM Cloud Assessment Scoring Profile

Indicator name	Frequency	Type	Source	How is it calculated	Description
Strategic Importance	Year	Custom Script	APM product. cmdb_ci_business table	Calculated <b>Emergency tier</b> (emergency_tier field of the business application record.)	Evaluates the emergency tier of the business application.
Data Classification	Year	Custom Script	APM product. cmdb_ci_business table	Calculated <b>Data classification</b> (data_classification field of the business application record.)	Evaluates data classification of the business application.
Cloud Version Available	Year	Custom Script	APM product. cmdb_ci_business table	Calculated <b>Cloud version available</b> (cloud_version_available field of the business application record.)	Evaluates if there is an available version of this application.

Indicator name	Frequency	Type	Source	How is it calculated	Description
				field of the business application record.	that fits cloud deployment.
Core Architecture	Year	Custom Script	APM product. cmdb_ci_business table	Calculated from the <b>Core architecture</b> (core_architecture) field of the business application record.	Evaluates if this business application is part of the core architecture.
Business Criticality	Year	Custom Script	APM product. cmdb_ci_business table	Calculated from the <b>Business criticality</b> (business_criticality) field of the business application record.	Evaluates the business criticality of the business application.
Regulatory Implications	Year	Custom Script	APM product. cmdb_ci_business table	Calculated from the <b>Regulatory implications</b> (regulatory_implications) field of the business application record.	Evaluates the regulatory implications of the business application.
Business Impact	Year	Indicators	Not applicable	Calculated from the sum of the following indicators: <ul style="list-style-type: none"><li>• <b>Core architecture</b> (core_architecture)</li><li>• <b>Strategic importance</b> (emergency_tier)</li><li>• <b>Business criticality</b> (business_criticality)</li></ul>	Evaluates the business impact score for the business application, based on other indicators.
Cloud Readiness	Year	Indicators	Not applicable	Calculated from the sum of the	Evaluates the cloud readiness score for the business

Indicator name	Frequency	Type	Source	How is it calculated	Description
				<p>following indicators:</p> <ul style="list-style-type: none"> <li>• <b>Data classification</b> (data_classification)</li> <li>• <b>Cloud version available</b> (cloud_version_available)</li> <li>• <b>Complexity of integration</b> (integration_complexity)</li> <li>• <b>Regulatory implications</b> (regulatory_implications)</li> </ul>	application based on other indicators.
Complexity of Integration	Year	Custom Script	APM product. cmdb_ci_business table	Calculated from the <b>Integration complexity</b> (integration_complexity) field of the business application record.	Evaluates the complexity of integration to the business application.
User Base	Year	Custom Script	APM product. cmdb_ci_business table	Calculated from the <b>User base</b> (user_base) field of the business application record.	Evaluates the user base of the business application.
Cloud Readiness Assessment	Year	Assessments	APM product. cmdb_ci_business table	Calculated from the <b>Assessment instances</b> of the business application record.	Evaluates the cloud readiness assessment score (based on a survey).

## Related topics

[Application Portfolio Management \(APM\) Cloud Assessment](#)

## Create a digital interface form

Create a digital interface for an integration in Application Portfolio Management

## Digital Interface form fields

Field	Description
Name	Name of the digital interface.
Number	Number of the digital interface. This field is automatically generated and can't be edited.
Provider Business Application	Name of the provider business application that will be providing the integration.
Interface Type	<p>Type of API used by the interface.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Open API</li> <li>• Partner API</li> <li>• Internal API</li> </ul>
Parent	Parent interface name.
Version	Version of the interface.
Life Cycle Stage	Life cycle stage of the interface.
Life Cycle Stage Status	Life cycle stage status of the interface.
Model ID	Model ID of the interface.
Description	Description for the digital interface.
Owners	
Business Owner	Business owner of the digital interface.
IT Owner	IT owner of the digital interface.
Supported By	User name who supports the interface.
Supported Group	Group name that supports the interface.
Functional	
Protocol	Type of protocol used by the interface. Choices include REST, SOAP, LDAP, and so on.
Message Format	Format of the message in the interface. Choices include JSON, XML, CSV, and so on.
Authentication	
Authentication Type	<p>Type of authentication used to authenticate the interface.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Basic Auth</li> <li>• OpenID Connect</li> <li>• Certificate</li> <li>• WS-Security</li> </ul>

Field	Description
	<ul style="list-style-type: none"> <li>• LDAP</li> <li>• None</li> <li>• Other</li> </ul>
Authorization Type	<p>Type of authorization used to authorize the interface.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• OAuth 2.0 Token</li> <li>• JWT Web Token</li> <li>• SAML 2.0 Token</li> <li>• Other</li> <li>• No authorization</li> </ul>
Activities	
Work notes	Comments about the interface.

Create or update a digital interface

## Management of digital integrations

You can manage all the integrations and interfaces at a centralized space.

The digital integration functionality in Application Portfolio Management helps you to understand the business purposes for your applications, for their connection, and for their interaction.

You can do the following:

- Proactively find out the issues of the integrations at one place.
- Manage the information flows across your organization.
- Have complete governance over the use of interfaces for internal and external APIs.

## Digital interfaces in Application Portfolio Management

Manage digital interfaces in Application Portfolio Management.

Digital interfaces are provided as part of a business application, but they can also stand on their own. Interfaces provide a way for other business applications to interact with the applications. An interface contains the metadata about itself, such as its Name, Version, Owners, Protocol. It also contains a list of all the integrations that are using that interface.

### Digital Interfaces

Number	Name	Provider Business Application	Interface Type	Protocol	Message Format	Parent
DINTF0001101	SAP	SAP Financials	Partner API	REST	XML	(empty)
DINTF0001102	Mulesoft	HR Self Service	Partner API	REST	CSV	(empty)
DINTF0001103	Zoho	(empty)	Open API	SOAP	XML	(empty)
DINTF0001104	HP Spoke	(empty)	Partner API	REST	Parametrized URL	(empty)
DINTF0001105	SAP CRM	SAP CRM	Partner API	REST	XML	(empty)
DINTF0001106	SAP SCM	Invoice Tracker				(empty)
DINTF0001107	ServiceNow Spoke	ServiceNow Customer Service	Internal API	LDAP	File	(empty)

## Create or update a digital interface

Create a digital interface for an integration in Application Portfolio Management.

### Before you begin

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > Digital Interfaces**.
2. Select **New**.
3. On the form, fill in the fields.  
For field information, see [Create a digital interface form](#).
4. Select **Submit**.

## Delete a digital interface

Delete a digital interface that you no longer need.

### Before you begin

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > Digital Interfaces**.
2. Open a digital interface number by clicking it.
3. Click **Delete**.
4. Confirm the deletion.

## Digital integrations

Manage digital integrations in Application Portfolio Management.

The digital integration represents the integration between two business applications. In a typical scenario there would be a consuming business application, a provider business application, and an interface that is provided by the provider business application. The digital integration contains the metadata on the integration, including name, version, type, data flow direction, middleware used, owners, and so on.

An easy form for digital integration enables the creation of a digital integration from a single page, including the introduction of a new digital interface if it doesn't exist. The digital integrations are saved in the Digital Integration [sn\_apm\_di\_digital\_integration] table. After a digital integration is created, a CI relationship link gets created between the two business applications with the type of interface. This link enables you to access the integration as part of the node map for any business application. A new catalog entry is provided to request an approval for a new digital integration. After the request is approved, the integration gets created.

The Digital Integrations page displays a list of existing digital integrations and their related information. You can access the Digital Integrations page by navigating to **All > Application Portfolio Management > Application Portfolio > Digital Integrations**.

## Digital Integrations page

The screenshot shows a ServiceNow application interface titled "Digital Integrations page". At the top, there's a navigation bar with links for "servicenow", "All", "Favorites", "History", "Workspaces", and "Admin". The main area is titled "Digital Integrations" with a star icon. There are search bars for "Number" and "Name", and a "Search" button. A toolbar at the top right includes "Actions on selected rows..." and a "New" button. The table below has columns: Number, Name, Subscriber Digital Interface, Subscriber Business Application, Provider Digital Interface, Provider Business Application, Type, Trigger, and Interval. The data rows are as follows:

All	Number	Name	Subscriber Digital Interface	Subscriber Business Application	Provider Digital Interface	Provider Business Application	Type	Trigger	Interval
	Search	Search	Search	Search	Search	Search	Search	Search	Search
	DINTG0001101	Customer Service Management - SAP CRM - ...	(empty)	Customer Service Management	SAP CRM	SAP CRM	Data Integration	Scheduled	Weeks
	DINTG0001102	BuyIt-Invoice Tracker-SAP SCM	(empty)	BuyIt	SAP SCM	Invoice Tracker	Data Integration	Scheduled	Weeks
	DINTG0001103	Attendance & Payroll Management System - ...	(empty)	Attendance & Payroll Management System	Mulesoft	HR Self Service	Process Integration	Scheduled	Weeks
	DINTG0001104	Customer Portal - Zoho	(empty)	Customer Portal	Zoho	(empty)	User Interface Integration	Manual	Months
	DINTG0001105	Customer Service Management-ServiceNow C...	(empty)	Customer Service Management	ServiceNow Spoke	ServiceNow Customer Service	Process Integration		

## Create a digital integration

Create a digital integration in Application Portfolio Management, to create a connection between a consuming business application and a provider business application.

### Before you begin

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > Digital Integrations**.
2. Select **New**.
3. On the Create Digital Integration form, fill in the fields.  
For a description of the field values, see [Create digital integration form](#).
4. Select **Submit**.

### Result

On the Digital Integrations page, a success message and the link to the newly created digital integration appear.

## Update a digital integration

Update the details of an existing digital integration in Application Portfolio Management.

### Before you begin

Role required: sn\_apm.apm\_user

### Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > Digital Integrations**.
2. Open a digital integration number by selecting it.
3. On the Update Digital Integration form, fill in the fields.  
For a description of field values, see [Update digital integration form](#).
4. Select **Update**.

## Delete a digital integration

Delete a digital integration that you no longer require.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Application Portfolio > Digital Integrations**.
2. Select and open the digital integration to be deleted.
3. Click **Delete**.  
A confirmation message appears.

## Use Business Application Lifecycle Management to request a digital integration

Submit a request using the Application Lifecycle Management module to request a digital integration in Application Portfolio Management.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Business Application Lifecycle Management > Business Application Catalog**.

The Business Application Lifecycle Management Services opens in a service catalog page.

2. Register a new digital integration by selecting the **Request a Digital Integration** card or selecting **View Details** in the Request Digital Integration card.
3. On the Request a Digital Integration form, fill in the fields.  
For a description of the field values, see [Request digital integration form](#).
4. Select **Submit**.

### Result

The system validates your request to check if a digital integration with the same name exists. If yes, then an error message is displayed. If no, then a flow is triggered and a request to register a digital integration is created.

After your request is approved, the requested digital integration is created as a record in the digital integrations table.

## Use Business Application Lifecycle Management to retire a digital integration

Retire a digital integration that you no longer need. Submit a request using the Application Lifecycle Management module to retire a digital integration in Application Portfolio Management.

### Before you begin

Role required: sn\_apm.apm\_user, sn\_apm.apm\_analyst

### About this task

Based on your role, you can either directly retire a digital integration, or you can request that an approver retires the digital integration. Retiring a digital integration occurs in the following conditions:

## Conditions for retiring a digital integration

Role	Action allowed
APM user, IT owner, Business owner, or Supporter of the digital integration	Can request to retire a digital integration. The analyst then approves or rejects the request.
APM analyst	Can retire a digital integration. You can approve or reject the requests for retiring a digital integration.

### Procedure

1. Navigate to **All > Application Portfolio Management > Business Application Lifecycle Management > Business Application Catalog**.  
Business Application Lifecycle Management Services opens in a service catalog page.
2. Retire a digital integration by clicking the **Retire a Digital Integration** card or by clicking **View Details** in the Retire Digital Integration card.
3. From the list of values in the Retire Digital Integration form, select the name of the digital integration.
4. Click **Submit**.

### Approve or reject a digital integration request

As an Enterprise Architect user, approve or reject a digital integration request submitted by APM users.

### Before you begin

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Service Desk > My Approvals**.
2. Select the digital integration request that you want approve or reject.
3. Select **Approve** or **Reject**.

## Enterprise Architecture Workspace for Application Portfolio Management

The Enterprise Architecture Workspace (EA Workspace) is part of the Application Portfolio Management application. It provides an interactive user interface to enable enterprise architects to stay up to date with their tasks, get insights, and monitor the health of the portfolio from a single location.

Starting from the Utah release, the Enterprise Architecture Workspace is available on the ServiceNow Store. For installation information, see [Install Enterprise Architecture Workspace](#).

### Install Enterprise Architecture Workspace

Install the Enterprise Architecture Workspace application (sn\_apm\_ws) if you have the admin role.

## Before you begin

- Review the Enterprise Architecture Workspace application listing in the ServiceNow Store for information on dependencies, licensing or subscription requirements, and release compatibility.
- Ensure you have activated the Application Portfolio Management plugin (com.snc.apm).
- For enabling the technology portfolio management information in the Enterprise Architecture Workspace:
  - Ensure you have activated the Software Asset Management Foundation plugin (com.snc.sams).
  - Ensure you have installed the Technology Portfolio Management (sn\_apm\_tpm) store app.

Role required: admin

## Procedure

1. Navigate to **All > System Applications > All Available Applications > All**.
2. Find the application using the filter criteria and search bar.

You can search for the application by its name or ID. If you cannot find an application, you may have to request it from the ServiceNow Store.

Visit the [ServiceNow Store](#) website to view all the available apps and for information about submitting requests to the store. For cumulative release notes information for all released apps, see the [ServiceNow Store version history release notes](#).

3. Select a version from the list and select **Install**.

In the Install dialog box that is displayed, any dependencies that are installed along with your application are listed.

4. If you're prompted, follow the links to the ServiceNow Store to get any additional entitlements for dependencies.
5. Optional: If demo data is available and you want to install it, select the **Load demo data** check box.

Demo data comprises the sample records that describe application features for the common use cases. Load the demo data when you first install the application on a development or test instance.

**Important:** If you don't load the demo data during installation, it's unavailable to load later.

6. Select **Install**.

### Enterprise Architecture Workspace access roles

The following roles help you to configure and use the Enterprise Architecture Workspace application. After access has been granted to a role, all the groups or users assigned to the role are granted access. Roles can contain other roles, and any access granted to a role is granted to any other role that includes it.

## EA Workspace roles

### Enterprise Architecture Workspace Roles

Role	Description
sn_apm.apm_analyst	Create application records and access, dashboards, and associated pages.
sn_apm.apm_admin	Create or update application records and access administration activities.
sn_apm.apm_user	Access to view and update applications.

### Tables installed with Enterprise Architecture Workspace

The following tables are added with activation of Enterprise Architecture Workspace.

### Installed tables

Table	Description
Certifications Elements [cert_element]	Stores quarterly or on-demand certifications for business applications.
Follow On Tasks [cert_follow_on_task]	Stores follow-up tasks for the following: <ul style="list-style-type: none"> <li>Business applications not related to a business capability</li> <li>Orphan business capabilities</li> <li>Information objects not related to any business application</li> <li>Software models with no life-cycle data</li> <li>Business applications not related to any software models</li> <li>Hardware models with no life-cycle data</li> <li>Business applications not related to any hardware models</li> </ul>
Software Model Risks [sn_apm_tpm_software_model_risk]	Stores software models that are at risk.
Software Risk Parameter Scores [sn_apm_tpm_risk_param_score]	Stores software models that are nearing their end of life.
Hardware Model Risks [sn_apm_tpm_hardware_model_risk]	Stores hardware models that are at risk.
Hardware Risk Parameter Scores [sn_apm_tpm_hm_risk_param_score]	Stores hardware models nearing their end of life.
TPM Discovered Technologies [sn_apm_tpm_discovered_technology]	Stores hardware and software elements in your enterprise.
TPM Technology Lifecycle [sn_apm_tpm_technology_lifecycle]	Stores the technology life cycles associated with the discovered technologies.

Table	Description
TPM Technology Lifecycle Exception [sn_apm_tpm_technology_lifecycle_exception]	Stores the life cycles that were approximated or couldn't be found from ServiceNow® Software Asset Management Professional or ServiceNow® Hardware Asset Management Professional.
TPM Discovered Technology Run Log [sn_apm_tpm_discovered_technology_run_log]	Stores when ServiceNow® Technology Portfolio Management (TPM) refreshed its contents against Software Asset Management Professional and Hardware Asset Management Professional.
TPM Technology Risk [sn_apm_tpm_technology_risk]	Stores the TPM technology risk information.

### Scheduled jobs installed with Enterprise Architecture Workspace

Scheduled jobs are added with the installation of Enterprise Architecture Workspace store application.

### List of scheduled jobs for Enterprise Architecture Workspace

Scheduled job	Description

### Exploring Enterprise Architecture Workspace

The Enterprise Architecture Workspace is part of the Application Portfolio Management (APM) application. The workspace is a unified interface with multiple views that help you manage your portfolio efficiently. You can use these views to stay up to date with your tasks, insights, tasks that need attention, portfolio health, and dashboards.

### Accessing the workspace

You can navigate to the Enterprise Architecture Workspace in the following two ways:

- If Next Experience is activated on your instance, select **Workspaces** then select **Enterprise Architecture Workspace**.
- If Next Experience isn't activated on your instance, then on the left navigation bar, enter Enterprise Architecture Workspace. Select **Workspace Home** to open the Enterprise Architecture Workspace.

### Related topics

[Enterprise Architecture Workspace access roles](#)

[Tables installed with Enterprise Architecture Workspace](#)

[Enterprise Architecture Workspace Overview](#)

### Enterprise Architecture Workspace Overview

The Enterprise Architecture Workspace has a consolidated user interface and designed for different user roles.

## Highlights of the EA Workspace user interface

### Consolidated User Experience

The Enterprise Architecture Workspace home page provides visibility into your application portfolio. All the tasks that you can possibly do in the workspace are streamlined to fulfill your business goals.

### Designed for different user roles

Distinct page views for the exclusive activities of an APM Analyst or Enterprise Architect, APM administrator, and APM user. Enterprise architects can manage their tasks effectively with contextual information and targeted actions.

### Home page with different sections

The home page contains the following UI components to help you navigate through the workspace.

#### Overview

The Overview page displays the following sections:

- **Insights:** Highlights various conditions for your application portfolio, business portfolio, information portfolio, and technology portfolio such as if business applications aren't related to a business capability.
- **Needs Attention:** Lists the tasks that you must take action on.
  - The **My Requests** tab lists the requests that are waiting for your approval.
  - The **Certifications** tab lists the certification information used to keep your business applications inventory up to date by periodically certifying the data in the business applications table.
  - The **Assessments** tab lists the assessments for your applications that help you to evaluate and score your business applications based on qualitative inputs.
  - The **Technology Portfolio Audit** tab lists the hardware and software elements for which a life cycle was approximated or not found. This tab lets you review them and either accept or reject any of the elements.
  - The **Technical Debt** tab lists the TRM technical debts that are created for the products that are not aligned with the TRM phases and standards.
- **Portfolio Overview and Health:** Helps you to monitor your portfolio and its health.

## Overview page

If you're using Enterprise Architecture Workspace version 2.2.0, the EA Workspace left navigation shows options for Application

Rationalization and Dashboard pages, as shown in the following

**Insights [4]**

Last refreshed 2023-09-27 08:36:00

[Application Portfolio](#) [Business Portfolio](#) [Information Portfolio](#) [Technology Portfolio](#)

Business applications w/o demands planned for migration/retirement	Candidate business applications for migration	Candidate business applications for investment	Business applications with mismatch planned disposition
21 business applications w/o demands planned for migration/retirement	1 business application that might fit for migration based on their indicator scores	1 business application that might fit for investment based on their indicator scores	11 business applications with mismatch between their planned disposition and their indicator...
Business applications count 21	Business applications count 1	Business applications count 1	Business applications count 11
<a href="#">View list</a>	<a href="#">View list</a>	<a href="#">View list</a>	<a href="#">View list</a>

**Needs Attention**

Last refreshed 2023-09-27 08:36:36

Number	Metric type	Due date	Taken on	Assigned to
AINST0000815	Groups	2023-10-01		Bess Marso
AINST0000816	Groups	2023-10-01		Alva Pennington

[View all](#)

**Portfolio Overview and Health**

Here you can monitor your Portfolio and its Health. Leverage filters to narrow down results for both sections.

[Application Category](#) [Install Type](#) [Application Type](#) [Business Unit](#) [Business Owner](#) [IT Application Owner](#) [Capability Owner](#) [Clear All](#)

**Portfolio Overview**

Business Applications 77	Business Capabilities 156	Information Objects 61	Business Applications by Install Type 
Business Applications with High Risk 3	Business Applications with Low Score 4	Business Applications with TRM Techn... 0	

**Portfolio Health**

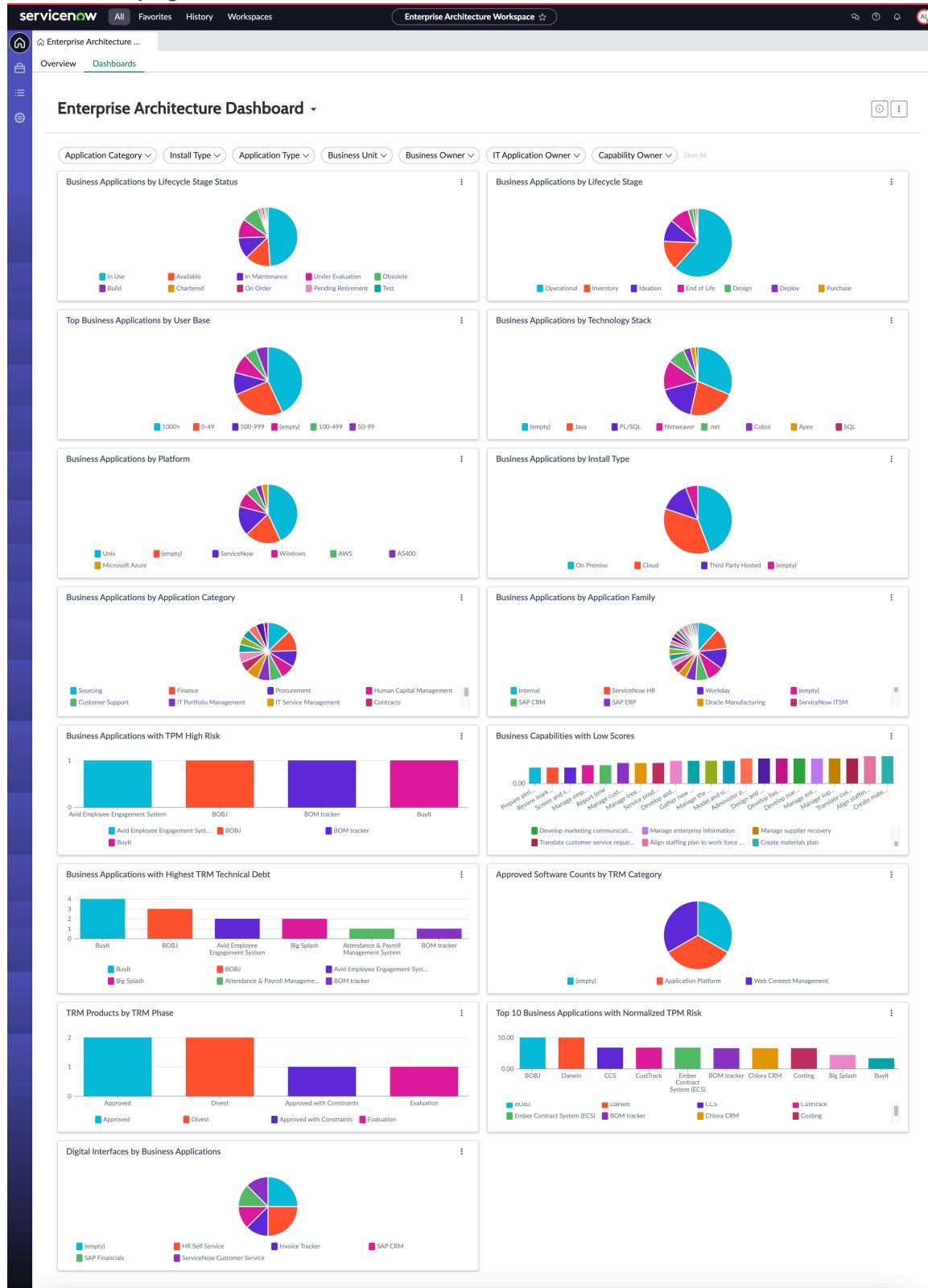
Business Applications without Capabilities 21 ! 24% of all Applications	Business Applications without Owners 0 ! 0% of all Applications	Business Applications not Assessed 29 ! 34% of all Applications	Business Applications without Application Ser... 77 ! 90% of all Applications
Business Applications without Architectural A... 75 ! 87% of all Applications	Business Capabilities without Business Appli... 77 ! 49% of all Capabilities	Business Capabilities not Assessed 66 ! 42% of all Capabilities	

image.

## Dashboards

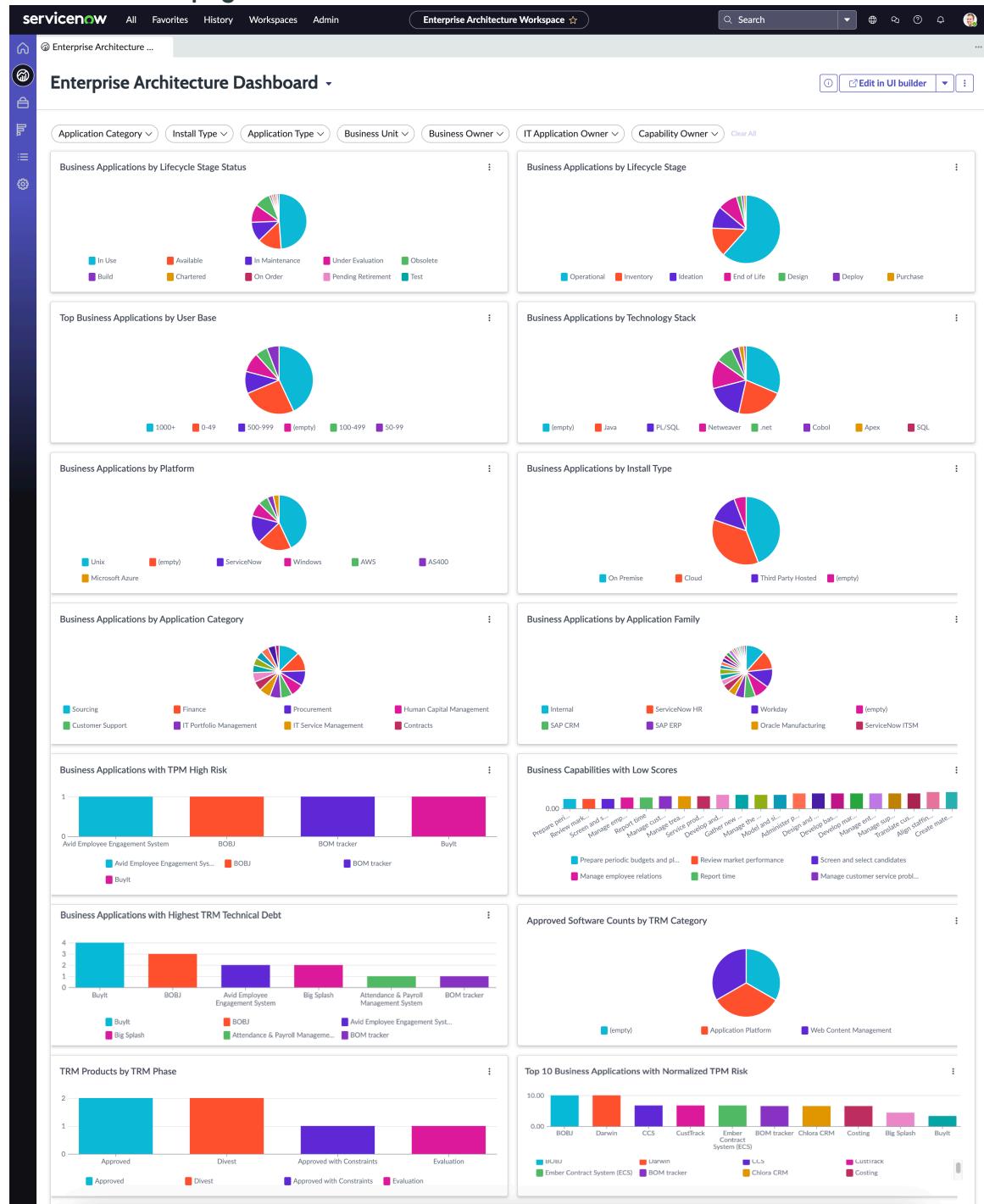
The Dashboards page provides access to the different dashboards in your portfolio.

## Dashboards page



**Note:** If you're using Enterprise Architecture Workspace version 2.2.0, the Enterprise Architecture dashboard appears as a separate page. Select the dashboard icon  to open the Enterprise Architecture dashboard page.

## New dashboard page



## Personalize the Enterprise Architecture Workspace home page

Customize the sections that you want visible on the home page by using the personalize page feature.

### Before you begin

You must have Enterprise Architecture Workspace version 2.2.0 to personalize the Enterprise Architecture Workspace home page.

Role required: sn\_apm.apm\_analyst

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Select the hide sections icon (  ) to open the Personalize Page window.
3. Use the toggle switches next to the relevant section names to conceal or display a particular section from the home page.
4. Select **Apply**.

## Viewing insights of your portfolio

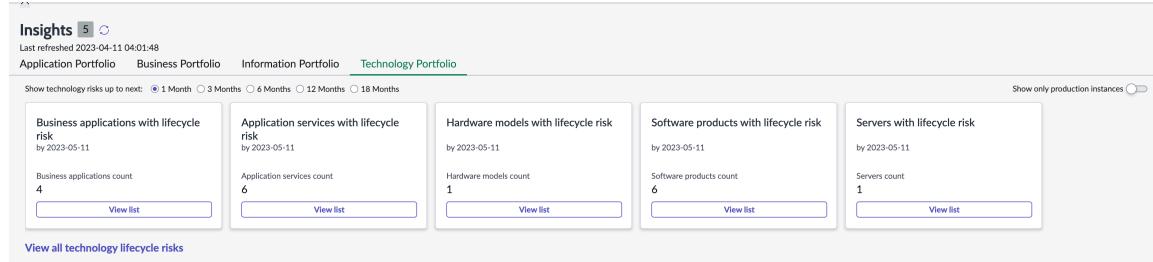
You can view the insights for your business portfolio, information portfolio, application portfolio, and technology portfolio.

You can see the details such as the following:

- Desired and scripted audits
- Hardware models
- Software products that are facing high and moderate technology risks
- Pending certification instances that are open and not 100% complete

The last refreshed time shows when the results were refreshed in your browser. You can manually refresh the results by using the refresh icon (  ). You can navigate to the full list by selecting the **View list** button. You can see the details of a record by selecting it.

### Insights view



The screenshot shows the 'Insights' view with a count of 5 risks last refreshed on 2023-04-11 04:01:48. The cards are:

- Business applications with lifecycle risk**: by 2023-05-11, Business applications count 4, View list button.
- Application services with lifecycle risk**: by 2023-05-11, Application services count 6, View list button.
- Hardware models with lifecycle risk**: by 2023-05-11, Hardware models count 1, View list button.
- Software products with lifecycle risk**: by 2023-05-11, Software products count 6, View list button.
- Servers with lifecycle risk**: by 2023-05-11, Servers count 1, View list button.

At the bottom left is a link 'View all technology lifecycle risks'.

### Application Portfolio

Track information for your business applications.

### Business Portfolio

Get insights on your business capabilities, business applications and manage them effectively to fulfill the goals of your organization.

### Information Portfolio

Track the details of the information objects that are related to the business applications and integrations in your enterprise.

### Technology Portfolio

Track the technology lifecycle risk for business applications, application services, servers, software products, and hardware models.

Track technology risks

Use this filter to see the risks for the next 1 month, 3 months, 6 months, 12 months, and 18 months. By default, the 1 month filter is applied.

Show only production instances

Use this toggle button to see only production instances that are having technology lifecycle risks. By default, this filter is off.

View all technology lifecycle risks

Select this link to see the list of all technology lifecycle risks sorted by earliest lifecycle date, which means the earliest date when a technology lifecycle risk is to happen. You can also export the Technology lifecycle risks information to Excel, CSV, JSON, or PDF as required.

The data in the Technology lifecycle risks table is fetched from the TPM Discovered Technologies [sn\_apm\_tpm\_discovered\_technology] table.

### Technology lifecycle risks

Field	Description
Earliest lifecycle date	The minimum of End of support or End of extended support or End of life dates
Business application	Name of the business application
Application service	Service associated to the business application
Type	Element type. Choices are: <ul style="list-style-type: none"> <li>• Software</li> <li>• Hardware</li> </ul>
Software product	Name of the software product
Hardware model	Model number for the hardware product
Server	Name of the server that is associated with the software product or hardware model.
End of support date	The end of support date for the software product or hardware model
End of extended support date	The end of extended support date for the software product or hardware model
End of life date	The end of life date for the software product or hardware model

## Technology lifecycle risks (continued)

Field	Description
Used for	The application service being used for. For example, production or staging.
TPM technology lifecycle	The link to the TPM technology lifecycles of the hardware model or software product.

## Managing requests, certifications, assessments, and technology portfolio audit

As an Enterprise Architect, you can manage all requests. You can view the status of the certifications, assessments, and technology portfolio audit information.

### My requests

The **My Requests** tab shows the list of requests assigned to you as an approver. By default, it shows all the requests as a paginated result. Select **View All** to see the full list. You can open a request record by selecting it to approve or reject the request.

### Certifications

The **Certifications** tab shows the list of certifications and their status. You must keep your business applications inventory up to date by certifying the data in the business applications table periodically. Keeping your business application data current helps you to assess your business applications precisely as there are indicators that are dependent on these business applications.

You can select **View All** to see the list of certifications. Select the certification number, certification schedule, and certification instance to see more details.

### Assessments

The **Assessments** tab shows the list of assessments for your applications that help you to evaluate and score your business applications based on qualitative inputs. Application indicators are business metrics that assess the applications across dimensions such as cost, quality, technical risk, investments, user satisfaction, and business value.

Each indicator periodically captures related application data that is used to calculate the application score. The assessment of applications is done on an extensible framework, which is based on the various configured indicators. If you require indicators other than the preconfigured ones to calculate the application score, then you can create an indicator based on your business requirements.

You can select **View All** to see the list of assessments. Select the assessment number and metric type to see more details.

### Technology Portfolio audit

The **Technology Portfolio Audit** tab shows audit information for your applications. An entry in this table indicates that at least one lifecycle for that software product or hardware model was either approximated, or not found, or doesn't exist. For example, if the software product full version is 9.2.1, it may be that the End of Support lifecycle version in the Software Asset Management Content library was only full version 9.2. This audit table helps you to evaluate

the lifecycle matching information based on the details of the products being used in your organization. The table helps you to identify whenever an exact lifecycle version match or no valid lifecycle version could be found against the software product or hardware model version used in your organization.

The data in the Technology Portfolio Audit table is fetched from the TPM Technology Lifecycle Exception [sn\_apm\_tpm\_technology\_lifecycle\_exception] table.

As an admin user, you can run the *Populate TPM Discovered Technologies and Lifecycles* scheduled job on-demand to calculate the technology lifecycle risk for your application portfolio. The scheduled job executes the script generating the lifecycle risk dates including end of support date, end of extended support date, and end of life date for your software products and hardware models by querying the ITAM content library. For more details, see [Schedule a job to generate TPM lifecycle data](#) and [Run a scheduled job to generate TPM lifecycle data](#). Whether the script runs on demand or scheduled, you can view the results in the Portfolio > Technology Portfolio Management > Logs page.

### Technology portfolio audit table

Column name	Description
Type	Application type. Choices are: <ul style="list-style-type: none"> <li>Software</li> <li>Hardware</li> </ul>
Software product	Name of the software product.
Product version	Version number of the product.
Product edition	Edition of the product. For example, Standard.
Product full version	Full version of the product.
Hardware model	Hardware model that is associated with the software product.
Verification status	Verification status of the product. Choices are: <ul style="list-style-type: none"> <li>Need to verify</li> <li>Verified</li> <li>Rejected</li> </ul>
Comments	Customer comments.
Lifecycle phase	Lifecycle phase of the product.
Phase start date	Lifecycle phase start date.
Edition	Edition of the lifecycle.
Full version	Full version of the lifecycle.
Match notes	Notes by the customer.
Technology lifecycle	TPM technology lifecycle information of the software product or hardware model.

## Technical Debt

The **Technical Debt** tab shows the list of TRM technical debt that are created for the products that are not aligned with the TRM phases and standards. A technical debt indicates either there is no TRM product record for a software product used by one or more business application or the TRM product has one or more internal lifecycle phases that restrict its usage.. In this table, you can view the TRM products and associated business applications details, and the reason for the technical debt. A custom scheduled job *Populate TRM technical debts in the EA Workspace* runs and creates an entry in the TRM Technical Debt table. For more details, see [Manage TRM technical debt in EA Workspace](#) and [Run a scheduled job to update TRM technical debt data in EA Workspace](#).

### Technical Debt table

Column name	Description
TRM product	Name of the TRM product. A software product that is having version specific life cycles.
Business Application	Name of the business application associated with the TRM product.
Software product model	Name of the software product model related to the TRM product.
TRM phase	<p>Phase of the TRM product. The following TRM phases are available from the base system:</p> <ul style="list-style-type: none"> <li>Approved: The technology is approved for use.</li> <li>Approved with Constraints: The technology can be used within the specified constraints specified in the comments.</li> <li>Divest: A decision was taken to divest from the use of the technology.</li> <li>Evaluation: This technology is being evaluated and can't be used to production purposes.</li> <li>Unapproved: The technology isn't permitted to be used.</li> </ul> <p><b>Note:</b> You can modify these phases from the EA Workspace &gt; Setup &gt; TRM Phases page.</p>
TRM level	The level (Product or Product Lifecycle) at which the technical debt is created.
Version	Version of the software product. Usually, the name of the Software product model contains this version.
Reason	The reason to explain why the technical debt was created.
Last run	Shows the time stamp when the custom scheduled job <i>Populate TRM technical debts in the EA Workspace</i> is run to update the table with technical debt.

### Update verification status

Change the verification status of a software product or hardware model lifecycle in the TPM technology lifecycle exception table.

**Before you begin**

Role required: sn\_apm.apm\_analyst

**About this task**

You can acknowledge a heuristic lifecycle match of a product by changing its status to verified or rejected.

**Procedure**

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. In the Needs Attention section, select the **Technology Portfolio Audit** tab.
3. Open a product type (Software or Hardware) by selecting it.
4. In the TPM Technology Lifecycle Exception form, set the **Verification Status** to either **Verified** or **Rejected**.  
If the lifecycle phase is set to **Verified**, then the exception count is reduced in the Technology Lifecycle table. If the lifecycle phase is set to **Rejected**, then the exception count is reduced and dates for that lifecycle phase will not appear in the Technology Lifecycle table.
5. Optional: Add comments in the **Comments** box.
6. Select **Save**.

**Manage TRM technical debt in EA Workspace**

Manage the TRM technical debts that are created for the products that aren't approved for the usage.

**Before you begin**

Role required: sn\_apm.apm\_analyst

**About this task**

A scheduled job *Populate TRM technical debts in the EA Workspace* runs and creates an entry in the TRM Technical Debt [sn\_apm\_trm\_standards\_technical\_debt] table for EA Workspace. The table shows a reference to the software in any business application that is not aligned with the TRM software phases. The table shows a reference to the software in any business application that either is not defined in TRM or has TRM product lifecycles that restrict the usage of the software. To know how the technical debts are calculated, see [Manage Technology Reference Model \(TRM\) technical debt](#).

**Procedure**

1. Navigate to **Workspaces > Enterprise Architecture Workspace**.
2. In the Needs Attention section, select the **Technical Debt** tab.
3. Select **View all** and see all the technical debts.

**Result**

Review the list of TRM products and associated business applications details. You can also view the reason for the technical debt.

**TRM Technical Debt calculation**

A TRM technical debt indicates the unapproved usage of a software. The technical debts table [sn\_apm\_trm\_standards\_technical\_debt], displays the TRM products and associated business applications details, and the reason for the technical debt.

Technical debts are created at two levels if any of the following conditions are met. The Level 2 is checked only if the system property `sn_apm_trm.is_product_life_cycle_tech_debt_enabled` is set to True.

- Level 1

- If a product is associated with a business application, but isn't part of the TRM product list. (OR)
- If a product is associated with a business application and part of the TRM products list, but has the TRM phase's production unapproved.

- Level 2

- If a product is associated with a business application, is part of the TRM products list, and has the TRM phase's production approved but doesn't have any associated TRM Product life cycles. (OR)
- If a product is associated with a business application and part of the TRM products list, has the TRM phase with production approved, and the TRM product lifecycle exists, one of the following cases is considered:

Case 1: If the lifecycle full version of the Application Service Software Model is not empty.

A technical debt is created if the following condition isn't met for a TRM Product lifecycle:

- TRM phase with production approved AND
- TRM product's TRM phase with production approved AND
- Version matching the lifecycle full version of the application service software model record AND
- Phase start date <= Today's date <=phase end date.

Case 2: If the life cycle full version of the Application Service Software Model is empty.

Technical debt is created if the following condition isn't met for a TRM Product Lifecycle:

- TRM phase with production approved AND
- TRM product's TRM phase with production approval AND
- Version is/starts with (based on version operator and isSampPluginInstalled) version of the associated software model AND
- The edition is/starts with (based on edition operator and isSampPluginInstalled) edition of associated software model AND
- Phase start date <= Today's date <=phase end date.

### **Run a scheduled job to update TRM technical debt data in EA Workspace**

Run a scheduled job to fetch the TRM technical debts data. You must run this job to see the products that are not approved for usage in your enterprise according to the TRM phases defined in Enterprise Architecture Workspace > Setup>TRM Phases>All. You can schedule this job to periodically update the TRM technical debt for all business applications.

### **Before you begin**

Role required: admin

## Procedure

1. Navigate to All > #System Definition > #Scheduled Jobs
2. Find and open the # scheduled job *Populate TRM technical debts in the EA Workspace*.
3. Select ##Execute Now

## Result

After executing the scheduled job, the Technical Debt [sn\_apm\_trm\_standards\_technical\_debt] table gets updated with the latest technical debt data for your application portfolio. It updates the values in the table each time after you run the job.

## Working with the Enterprise Architecture Workspace dashboard

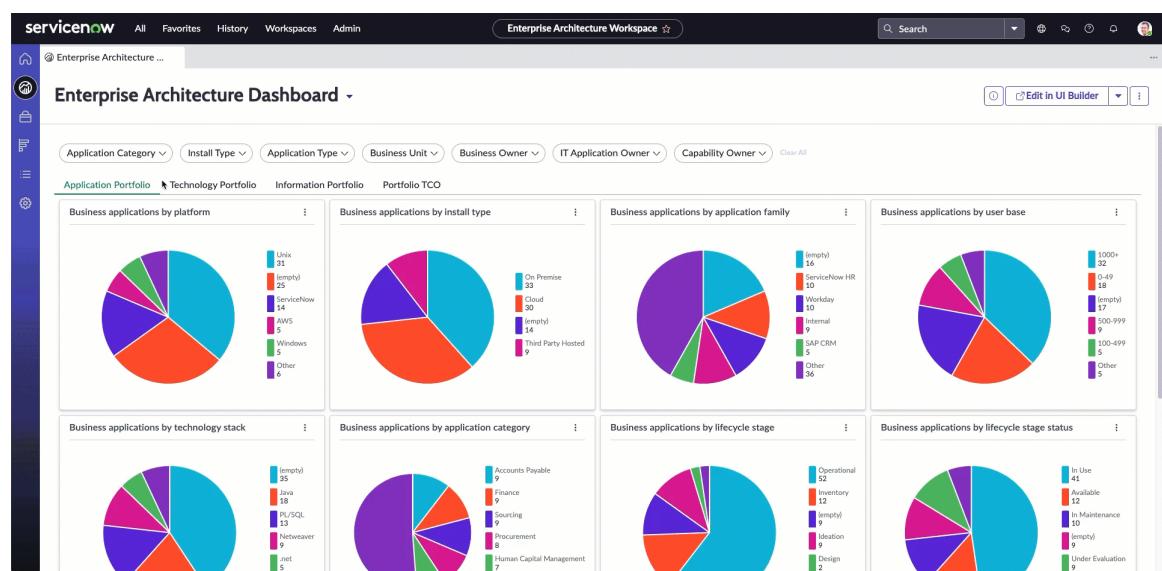
The Enterprise Architecture Workspace dashboard provides a summary of the business and application portfolio of your organization. It's arranged according to different portfolios such as application portfolio, technology portfolio, information portfolio, and so on.

As an enterprise architect, use the interactive filters to generate different graphical reports of the business applications for your portfolios. You can select a pie chart slice or graph bar to open a particular page and see the list of records under that category. To hide or show a slice in the pie chart, select its colored legend. Use the **Refresh** button to refresh the results of a pie chart.

### End users and roles

End user and goal	Required role
APM Analyst- Create, configure, and share dashboards	sn_apm.apm_analyst
APM User- View dashboard	sn_apm.apm_user

### Enterprise Architecture Dashboard page



## Data visualizations

The dashboards include the following visualizations.

Tab name	Visualization title	Visualization type	Description
Application Portfolio	Business applications by platform	Pie chart 	Breakdown of the number of business applications categorized by their platform type, such as UNIX and AWS.
	Business application by install type	Pie chart 	Breakdown of the number of business applications categorized by their installation type, such as On premise, Cloud, Third-party hosted, and so on.
	Business application by application family	Pie chart 	Breakdown of the number of business applications categorized by their application family, such as Workday, Microsoft Office, ServiceNow HR.
	Business application by user base	Pie chart 	Breakdown of the business applications by the number of users using the applications.
	Business applications by technology stack	Pie chart 	Breakdown of the number of business applications categorized by their technology, such as Java, .Net, SQL.
	Business applications by application category	Pie chart 	Breakdown of the number of business applications and their categories, such as Finance, Sourcing, Procurement.
	Business application by lifecycle stage	Pie chart 	Breakdown of the number of business applications categorized by their lifecycle stage.
	Business application by lifecycle stage status	Pie chart 	Breakdown of the number of business applications categorized by their lifecycle stage status.

Tab name	Visualization title	Visualization type	Description
	Business capabilities with low scores	Bar graph 	Breakdown of the number of low-scoring capabilities of the organization.
	Digital interfaces by business applications	Pie chart 	Breakdown of the number of digital interfaces categorized by their provider business application. This pie chart is displayed only when the Application Portfolio Management Digital Integration Management plugin is installed.
Technology Portfolio	TRM products by TRM phase	Pie chart 	Breakdown of the number of Technology Reference Model (TRM) products categorized by their TRM phase.
	Approved software counts by TRM category	Pie chart 	Breakdown of the software products categorized by their approved TRM phase.
	Top 10 business applications with highest TRM technical debt	Bar graph 	The top 10 business applications having the highest TRM technical debt.
	Top 10 business applications with normalized TPM risk	Column chart 	The top 10 business applications having normalized Technology Portfolio Management (TPM) risk.
	Business applications by data classification	Pie chart 	Breakdown of the number of business applications categorized by their data classification type, such as Internal, Confidential, Highly sensitive, Public.
Information Portfolio	Information objects by data domain	Pie chart 	Breakdown of the number of information objects categorized

Tab name	Visualization title	Visualization type	Description
			by their data domain, such as Personally identifiable information (PII), Employees data, Payment card information (PCI).

Tab name	Visualization title	Visualization type	Description
Portfolio TCO  <b>i Note:</b> <ul style="list-style-type: none"><li>All monetary values are displayed in a single currency type. The currency conversion rates are contained in the Currencies table (fx_currency.list).</li></ul>	Business application TCO for FY:Q (Current quarter)	 Summary	The total cost of ownership value for all business applications, calculated for the current fiscal quarter.
	Business application TCO for FY:Q (Previous quarter)	 Summary	The total cost of ownership value for all business applications, calculated for the previous quarter.
	Business application TCO trend for year	 Line graph	The value of the total cost of ownership of business applications over a year.
	Business application TCO by application category	 Column chart	Breakdown of the total cost of ownership values of business applications grouped by their category, such as IT Service Management, IT portfolio management, Human capital management.  The chart compares the total cost of ownership for the current and previous quarter, side by side.
	Business application TCO by application planned disposition for FY:Q (Current quarter)  <i>com.glide.fiscal_calendar.fiscal.unit</i> property. To set the fiscal period duration, see <a href="#">Set the duration of a fiscal period property for TCO dashboards</a> .	 Horizontal bar graph	Breakdown of the total cost of ownership values of business applications categorized by their planned disposition status, for the current quarter.

Use the following filters to narrow down the results in the dashboard page:

- Application Category
- Install Type
- Application Type
- Business Unit
- Business Owner
- IT Application Owner
- Capability Owner

On applying any filter, the filter criteria are applied to all available widgets across all the dashboard tabs.

## Portfolio overview and health

Get an overview of your profile and monitor your portfolio health.

### Portfolio overview

The Portfolio Overview section displays the overview of your portfolio in the form of numbers on different cards. You can use the refresh button to fetch the latest results. Click the number to see the full list.

The following cards are displayed:

- Business Applications
- Business Capabilities
- Information Objects
- Business Applications with High Risk
- Business Applications with Low Score: Number of business applications with low score for a quarterly fiscal period.
- Business Applications with TRM technical debt: Number of business applications that aren't aligned with the TRM phases and standards.
- Business Applications by Install Type

Use the following filters to narrow down the results for Portfolio and Health sections:

- Application Category
- Install Type
- Application Type
- Business Unit
- Business Owner
- IT Application Owner
- Capability Owner

### Portfolio health

The Portfolio health section displays the health of your portfolio. You can see the details such as the number and percentage of business applications on different cards. Click the number or percentage to see the full list. You can use the filters to narrow down the results.

The following cards are displayed:

- Business Applications without Capabilities
- Business Applications without Owners: Number and percentage of business applications for which there is no IT application owner and business owner assigned.
- Business Applications not Assessed
- Business Applications without Application Services: Number and percentage of business applications that are not related to any application service. Business application and application service are two different configuration items which must be related through a CI relationship.
- Business Applications without Architectural Artifacts: Number and percentage of business applications that aren't associated to any architectural artifact. The association of Architectural Artifacts with business applications create a relationship between the artifact and related entities.
- Business Capabilities without Business Applications
- Business Capabilities not Assessed

The following cards are displayed only when the Application Portfolio Management Integration Management plugin (com.snc.apm\_digital\_integration) is installed:

- Digital Interfaces without Digital Integrations
- Business Applications without Digital Interfaces

## Managing a business portfolio

As an Enterprise Architect, view the capability hierarchy, manage capabilities, and assign business applications to the capabilities.

The Business Portfolio page displays the hierarchy map for your business capabilities. You can view the number of defined business capabilities and the number of business applications that support the capabilities.

A business capability is the ability of an organization to do its business activity successfully and fulfill its business goals. Use the business capability mapping to establish a CI relationship between the business capability and the business applications. You can see the list for the following items in the Business Capabilities Hierarchy page:

- Capabilities: Total number of business capabilities.
- Leaf Capabilities: Total number of capabilities at the leaf level (that have no child capabilities of its own) in all the hierarchies of the business capabilities listed.
- Assessed: Total number of assessed business capabilities.
- Not Assessed: Total number of capabilities that haven't been assessed.
- Major Gap: Total number of capabilities whose score fall within the range of 1:4.
- Medium Gap: Total number of capabilities whose score fall within the range of 4:7.
- No Gap: Total number of capabilities whose score fall within the range of 7:10.

You can create a capability or sub-capability, and then assign a business application to the capability. Business capabilities are assessed by indicators to provide indicator scores to make strategic decisions on the business applications that support the business capability. You can sort the business capabilities by their scores. By default, the first business capability in the hierarchy at level 0 expands to display its immediate child capabilities at level 1. For subsequent business capabilities and child capabilities, click the expand icon () to

expand and view its sub-capabilities at each level. You can see the total count of the sub-capabilities below each parent capability, the total number of business applications directly related to each capability, and their capability score. Similarly, on expanding a parent capability, you can see the number of sub-capabilities, the total count of business applications that are directly related to the sub-capability at that level.

### Add a business capability

Add a business capability to the capability hierarchy map.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Business Capability Hierarchy page by selecting the Business Portfolio icon ().
3. Select **New Capability**.
4. On the form, fill in the fields.  
For a description of field values, see [Business capability new record form](#).
5. Select **Create**.
6. Create a child capability for the capability that you created.
  - a. Right-click on the hierarchy ID of the capability.
  - b. Select **Create sub-capability**.

### Create a demand towards achievement of a capability

Use a demand as a step to identify cost-saving opportunities on capabilities, to meet the target. The strategy that you associate with the demand action decides the strategy for the capability.

#### Before you begin

Role required: sn\_apm.apm\_user

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Business Capability Hierarchy page by selecting the Business Portfolio icon ().
3. Select the row context menu icon ( ) and select **Create Demand**.
4. Select **Open in new tab**.
5. On the form, fill in the fields.  
For a description of the field values, see [Demand form](#).
6. Select **Save** to save the record and remain on the same form to add more details to the demand.

### Update the hierarchy of a business capability

Assign a hierarchy ID to a business capability.

## Before you begin

Role required: sn\_apm.apm\_analyst

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.

2. Open the Business Capability Hierarchy page by clicking the Business Portfolio icon ().

3. Select **Update Hierarchies**.

A scheduled job is submitted to update the business capabilities hierarchy. Use the refresh button to see the updated hierarchy.

## Result

A hierarchy ID is assigned to the newly created capability.

## Create a sub-capability

Add a sub-capability to the capability hierarchy map.

## Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.

2. Open the Business Capability Hierarchy page by selecting the Business Portfolio icon ().

3. Select the row context menu icon () and select **Create sub-capability**.

4. On the form, fill in the fields.

For a description of the field values, see [Create a sub-capability form](#).

5. Select **Create**.

## Assign a business application

Assign a business application to a capability to relate the capability with the application.

## Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.

2. Open the Business Capability Hierarchy page by selecting the Business Portfolio icon ().

3. Select the row context menu icon () and select **Assign business application**.

4. Select a business application.

5. Select **Assign**.

## Delete a capability from the hierarchy

Delete a capability that you no longer require.

**Before you begin**

Role required: admin

**Procedure**

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Business Capability Hierarchy page by clicking the Business Portfolio icon ().
3. Right-click the hierarchy ID of a capability that you want delete, then select **Delete**.
4. Confirm the deletion.

**Unassign a business application from a capability**

You can unassign a business application from a capability.

**Before you begin**

Role required: sn\_apm.apm\_user

**Procedure**

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Business Capability Hierarchy page by selecting the Business Portfolio icon ().
3. Select the expand row icon () next to the relevant business capability.
4. Select the row context menu icon () next to the relevant business application and select **Unassign business application**.

**View a roadmap of a business capability**

View the roadmap of your business capabilities and align them with the organization's strategy. Creating a portfolio plan helps you plan, prioritize, and roadmap the work for your business capability.

**Before you begin**

Ensure that the Strategic Planning plugin (com.sn\_apw\_advanced) (v4.0.2 or later) is installed.

Role required: sn\_apm.apm\_user and sn\_align\_core.apw\_user

**Procedure**

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace**.
2. Open the Business Capability Hierarchy page by selecting the business portfolio icon ().
3. Select the row context menu icon () and select **View roadmap**.

You're navigated to the Planning page of the Strategic Planning Workspace. A temporary portfolio plan is created in the Strategic Planning Workspace with all the planning items that are associated with the business capability, sub-capabilities, and associated business applications.

 **Note:** The temporary portfolio plan is meant for preview purpose only. To plan, prioritize, and roadmap the work for your business capability, copy the temporary portfolio plan or create one.

Ra...	Name	Planning state	Planning item type	MoCoW	Approved start date	Appro
1	Contract Migration Playbook & Program	Prioritized	Demand		2022-11-18	2023-
2	Seal Contracts Search and Analytics	In Review	Demand		2023-02-09	2023-
3	Replace Legacy CS with ServiceNow	Prioritized	Demand		2023-02-23	2023-
4	Develop Workday SN Integration	New	Demand		2022-11-28	2023-
5	Attendance Management System	Prioritized	Demand		2022-10-27	2023-
6	Workday Time Tracking for Employees with Temporary Work Schedules	New	Demand		2022-11-29	2023-
7	Sourcing Request Portal	New	Demand		2022-10-27	2023-
8	Offer Request Form	Prioritized	Demand		2023-01-23	2023-
9	Time & Absence Management	Done	Demand		2022-11-18	2023-
10	Employee Transfer Process Simplification	Prioritized	Demand		2022-11-12	2023-
11	HR Information System Implementation	In Review	Demand		2023-06-10	2024-
12	HR Service Portal	Prioritized	Demand		2023-02-15	2023-
13	Employee Agreements	New	Demand		2023-03-08	2023-
Total						

4. Optional: Copy the portfolio plan for your business capability to plan, prioritize, and roadmap the work for your business capability.

- a. From the portfolio plan header, select the more actions icon ( ) and then select **Copy portfolio plan**.
- b. On the Copy portfolio plan window, fill in the details.
  - i. Enter a name for the portfolio plan in the **#Portfolio plan name** field.
  - ii. (Optional) Grant access to the users of the portfolio plan by selecting the **Share with same users and groups** option.
- c. Select **Confirm**.

Alternatively, you can also create your own portfolio plan in the Strategic Planning Workspace (SPW) using the Business Capability lens. For more information, see [Create a portfolio plan in Strategic Planning](#).

## Gantt view of TPM and TRM lifecycle timelines

A Gantt chart in the Enterprise Architecture Workspace is a visual representation of the Technology Portfolio Management (TPM) and Technology Reference Model (TRM) timelines of business applications, and their associated application services like software products and hardware models.

The TPM and TRM application timelines can be viewed in the following timeline views, in the Gantt chart.

- **Day**
- **Week**
- **Month**
- **Quarter**
- **Year**
- **Autofit**

**Note:** Autofit is selected by default.

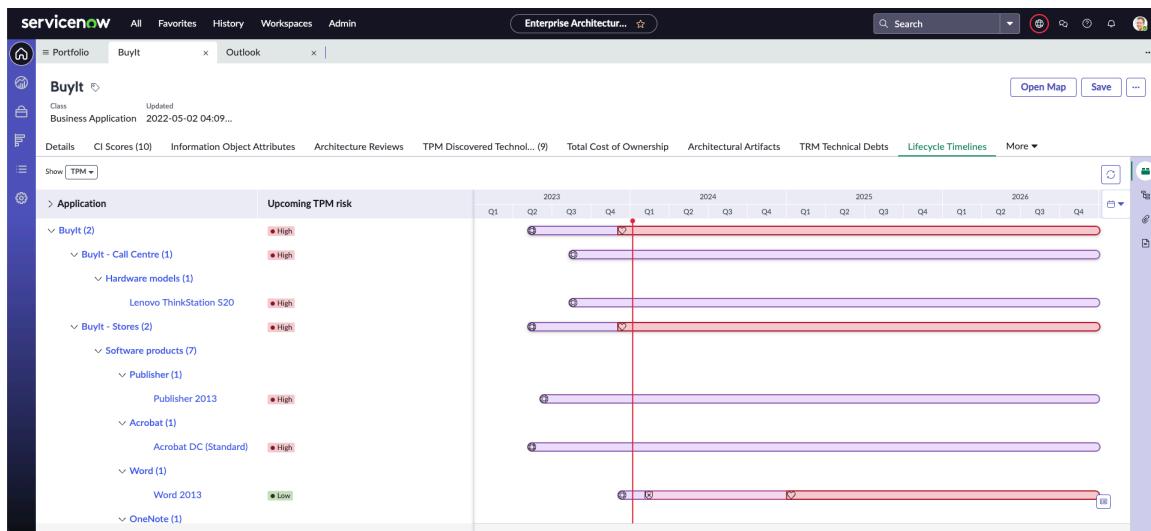


Choose the **Select time scale** button ( ) to change the view.

### TPM lifecycle timelines on Gantt chart

For Technology Portfolio Management (TPM), the business applications and their related application services (associated hardware models and software products) are displayed in a hierarchical structure. The corresponding timelines of the application services are displayed as bars on the Gantt chart.

#### TPM Gantt chart view



It displays the following TPM phase-related information:

- **End of support**
- **End of extended support**
- **End of life**

You can point to an individual bar in the Gantt chart to view the phase information.

The **Application** column values are populated from the TPM Discovered Technology table (sn\_apm\_tpm\_discovered\_technology).

All versions of a particular software product are grouped. For each software product having a unique combination of product name, product version, and product edition, their lifecycle record is created and the timelines are displayed on the Gantt chart.

#### Lifecycle end-date calculation logic

For each TPM lifecycle phase, the end date of one phase is the start date of the next phase. Assuming that there are three TPM phases that are end of support, end of extended support, and end of life, the respective phase end dates are as follows:

- The end of support phase end date will coincide with the start date of the next phase, end of extended support.
- The end of extended support phase end date will coincide with the start date of the next phase, end of life.

For example, Product A has two TPM phases that are **End of Support** and **End of Extended Support**. The start date for the **End of Support** phase is 12/01/2023 and the start date for the

**End of Extended Support** phase is 12/30/2023. No phase end date has been mentioned for the **End of Support** phase. In such a scenario, the end date of the **End of Support** phase will be considered as 12/30/2023.

If only one TPM phase is available for a TPM product, then the TPM phase lifecycle end date is calculated by adding the time value as defined in the system property `sn_apm.endRangeofTPMLifecycle` with the current date. This time value enables the Gantt chart to display only known lifecycle dates.

For example, today is 12/01/2023 and the end date value as defined in the system property `sn_apm.endRangeofTPMLifecycle` is three years from the current date. Then, the end date of the phase will be 12/01/2026.

## Application service and business application timelines

The application services (composed of software products and hardware models) have lifecycle timelines determined for them. On the Gantt chart, the earliest TPM phase start date of either the software products and hardware models are rolled up to calculate the TPM phase start date of the overall application service. That is, the earliest TPM phase start date of any software product or hardware model is taken as the TPM phase start date of the application service, overall.

For example, let's assume that all hardware models and software products have lifecycle dates for the TPM phases that are end of support, end of extended support, and end of life. Now, application service A consists of one software product and one hardware model. The end of support start date phase of the software product is 12/01/2023 and the end of support start date of the hardware model is 12/15/2023. In this scenario, the end of support start date of the software product that is 12/01/2023 will be considered as the TPM phase start date of that application service and accordingly the Gantt chart bar for that application service will start from 12/01/2023.

Similarly, the TPM phase start date of the business application is considered as the earliest TPM phase start date of any of its associated application services. For example, application X has two application services, A and B. The end of support start date of application service A is 12/01/2023 and of application service B is 12/12/2023. In this scenario, the end of support start date of application service A that is 12/01/2023 will be considered as the TPM phase start date of the business application and the Gantt chart bar for that business application will start from 12/01/2023.

## TPM risk calculation

The TPM view also displays the upcoming TPM risks associated with any application services, based on their lifecycle dates. To calculate the risk associated with an application service, run the *Populate Technology Lifecycle Risks* scheduled job. For more details, see [Schedule a job to generate TPM technology risk](#). To learn more about technology lifecycle risk, see [Technology risk calculation](#).

The hardware model and software product risk scores are derived from the TPM Technology Risk table (`sn_apm_tpm_technology_risk`). The risk values are rolled up to the application service level. The highest risk value of hardware models and software products associated with a single application service is considered the risk value of that application service. For example, application service A consists of two hardware models and three software products. The two hardware models have moderate risk while the two software products have low risk. However, one software product has high risk. In this scenario, the risk value of the application service is considered high.

Similarly, the risk values of the application services are rolled up to the business application level. The highest risk value of an application service associated with a business application

is considered the risk value of that business application. For example, business application X has three application services associated with it. The three applications services have risk values as high, moderate, and low respectively. In such a scenario, the risk value of the business application is considered as high.

## Color coding

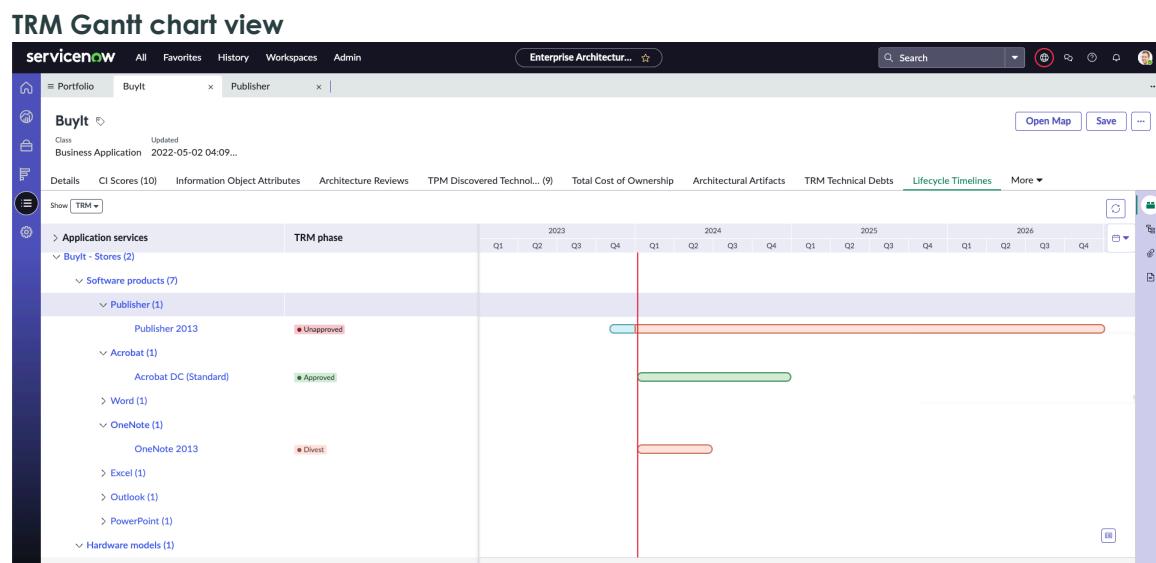
The colors of the bars on the Gantt chart are based on their TPM phase. The TPM phase and its corresponding colors are as follows.

Color	TRM Phase
	End of support
	End of extended support
	End of life

To see the colors associated with each TPM risk type in the Upcoming TPM risk column, select the legend button ().

## TRM lifecycle timelines on Gantt chart

For Technology Reference Model (TRM), the application services (hardware models and software products) are displayed in a hierarchical structure, similar to the TPM view. The corresponding lifecycle timelines of the application services are displayed as bars on the Gantt chart.



In TRM view, the lifecycles aren't aggregated to application services or business applications.

It displays the following TRM related information:

- **TRM Phase**
- **Start date**
- **End date**

You can point to an individual bar in the Gantt chart to view the phase information.

The Application services column is populated from the TPM Discovered Technology table (`sn_apm_tpm_discovered_technology`).

## TRM phase status

The TRM view also displays the status of the TRM phases of the software products or hardware models. The TRM phase column is populated from the TRM Product Lifecycle table (`sn_apm_trm_standards_product_lifecycle`).

If no TRM product lifecycle data is available for an application service, then the TRM phase for that service is displayed as **Not assessed**.

Also, if a TRM product phase doesn't have the **Production approved** check box (**Enterprise Architecture Workspace > Setup > TRM Phases**) selected, then the TRM phase column displays the status of the application service having that TRM phase as **Unapproved**. For details on how to approve a TRM phase, see [Add or edit a TRM phase](#).

Only when the TRM phase is marked as production approved and the phase start date has already passed, the TRM phase for the application service is displayed in the TRM phase column. For example, the TRM phase **Divest** is marked as production approved and has a start date of 01-12-2023. The current date is 10-12-2023. In such a scenario, all application services associated with the TRM phase have their phase status as **Divest** in the TRM phase column.

If you have TRM products that aren't aligned with TRM phases and standards, then a TRM technical debt is created in the TRM Technical Debt (`sn_apm_trm_standards_technical_debt`) table. TRM technical debts are created at two levels. The following table contains information on TRM technical debts and their associated levels.

TRM product	TRM phase	TRM level	Reason	Explanation
Not applicable	Not applicable	Product	The software isn't defined in TRM.	TRM product isn't available.
TRM Product Name	TRM Product Phase	Product	The software isn't approved for production.	TRM product isn't production approved.
TRM Product Name	Not applicable	Product lifecycle	The software version isn't defined in the TRM product lifecycle.	No TRM lifecycle is available for the TRM product.
TRM Product Name	Not applicable	Product lifecycle	The software version isn't defined in the TRM product lifecycle.	TRM lifecycle with full version information isn't available.
TRM Product Name	Not applicable	Product lifecycle	The software version isn't defined in the TRM product lifecycle.	TRM lifecycle with version information isn't available.

TRM product	TRM phase	TRM level	Reason	Explanation
TRM Product Name	Not applicable	Product lifecycle	The software version isn't defined in the TRM product lifecycle.	TRM lifecycle with version information isn't available.
TRM Product Name	Lifecycle phase	Product lifecycle	The software version isn't approved for production.	TRM lifecycle with full version information isn't production approved.
TRM Product Name	Not applicable	Product lifecycle	The software version isn't approved for production.	TRM lifecycle with full version isn't available for current date.
TRM Product Name	Lifecycle phase	Product lifecycle	The software version isn't approved for production.	TRM lifecycle with version and edition information isn't production approved.

For details on TRM technical debts, see [Manage Technology Reference Model \(TRM\) technical debt](#).

You can schedule the *Populate TRM technical debts in the EA Workspace* job to update the TRM technical debt data in the EA Workspace. For more information, see [Run a scheduled job to update TRM technical debt data in EA Workspace](#).

## Lifecycle end-date calculation logic

Entering an end date isn't required while creating a TRM product lifecycle.

For each TRM lifecycle phase, the end date of one phase is the start date of the next phase. For example, application service A has two TRM phases that are **Divest** and **Approved with Constraints**. The start date for the **Divest** phase is 01-12-2023 and the start date for the **Approved with Constraints** phase is 30-12-2023. No phase end date has been mentioned for the **Divest** phase. In such a scenario, the end date of the **Divest** phase is considered as 30-12-2023. An error message is displayed if the product lifecycle dates overlap.

For the last phase, the end date is calculated by adding the time value as defined in the system property `sn_apm.endRangeofTPMLifecycle` with the current date. For example, today is 01-12-2023 and the end date value as defined in the system property `sn_apm.endRangeofTPMLifecycle` is three years from the current date. Then, the end date of the phase will be 01-12-2026.

## Application service timelines

The TRM product lifecycle timeline bars are displayed on the Gantt chart. However, for the lifecycle timeline bars to be displayed, some criteria must be fulfilled.

- Software products: For software products, the TRM product **Name** and **Product full version** values for that particular software product as defined in the TPM Technology Lifecycle table (`sn_apm_tpm_technology.lifecycle`) should match the **TRM Product** and **Version** values that are entered while creating the TRM lifecycle for that product.

Or the TRM product **Name**, **Version**, and **Edition** values for that particular software product as defined in the TPM Technology Lifecycle table (`sn_apm_tpm_technology_lifecycle`) should match the **TRM Product**, **Version**, and **Edition** values that are entered while creating the TRM lifecycle for that product.

- **Hardware models:** For hardware models, the TRM product hardware model value for that application service should match the hardware model value that is entered while creating the TRM lifecycle for that application service.

For details on how to create a TRM product, see [Create a TRM product in the EA Workspace](#).

For details on how to create a TRM product lifecycle request, see [Create a TRM product lifecycle request in the EA Workspace](#).

For details on how to approve or reject a TRM product or lifecycle request, see [Approve or reject a TRM product or product lifecycle request](#).

## Color coding

The colors of the TRM lifecycle timeline bars are based on their TRM phase status. To see the colors associated with each TRM phase status, select the **Legend** button (  ).

You can also change the TRM phase colors according to your requirement. For details on how to modify existing TRM phase colors, see [Add or edit a TRM phase](#).

### **View TPM and TRM lifecycle timelines on the Gantt chart**

Use the Gantt chart to view and track Technology Portfolio Management (TPM) and Technology Reference Model (TRM) lifecycle timelines.

#### **Before you begin**

Role required: `sn_apm.apm_analyst`

#### **Procedure**

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by selecting the portfolio icon .
3. Next to **Business Applications**, select the expand row icon (  ) and then select **All**.
4. Select **All**.
5. Select the business application that you want to view the TPM and TRM lifecycle timelines for.
6. Select **More** if you don't see the **Lifecycle Timelines** tab.
7. Select **Lifecycle Timelines**.

The Gantt chart appears for TPM and shows the business applications along with their application services.

#### **Note:**

By default, the TPM view is displayed.

8. Next to the business application and its associated application services, select the expand row icon (  ) to see the lifecycle timeline bars in the Gantt chart.

Alternatively, you can select the expand icon (↗) next to the Application column header.

9. Open the TRM view by selecting **TRM** from the Show list.

The screenshot shows the ServiceNow interface for managing business applications. The top navigation bar includes links for Home, All, Favorites, History, Workspaces, and Admin. The main title is 'BuyIt'. Below the title, it shows the Class as 'Business Application' and the Last Updated date as '2022-05-02 04:09...'. There are tabs for Details, CI Scores (10), Information Object Attributes, and Architecture Reviews. On the left, a sidebar has icons for Home, Portfolio, and a gear. The main content area displays a tree structure of application components under 'BuyIt'. A dropdown menu labeled 'Show' is open, with 'TPM' selected. The tree items include 'BuyIt (2)', 'BuyIt - Call Centre (1)', 'Hardware models (1)' (with 'Lenovo ThinkStation S20'), and 'BuyIt - Stores (2)'. Each item has a 'High' risk level indicator. To the right, a section titled 'Upcoming TPM risk' shows a chart for Q1.

## Rationalization of business applications

As an Enterprise Architect, you can use application rationalization to evaluate your business applications.

### Application rationalization overview

Rationalize all business applications in a category and decide whether to invest, sustain, migrate, or retire an application.

Select the application rationalization icon (📘) to navigate to the Application Rationalization page.

You can perform the following using application rationalization:

- Analyze business applications based on multiple scores.
- Create a demand for a business application.
- Set the planned disposition of a business application.
- Add life-cycle details to an existing business application.

Use the following filters to narrow down the list of business applications:

- Fiscal Period
- Application Category

- Application Family
- Business Capability

**i Note:** On applying this filter, all business applications including the ones associated with the child capabilities of the parent capability are displayed.

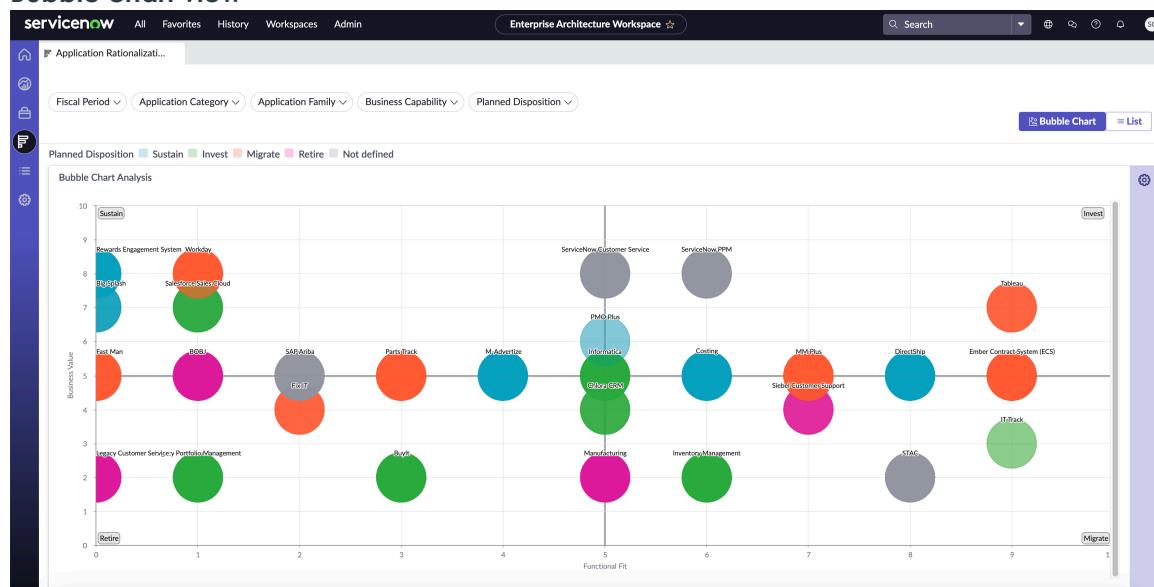
- Planned Disposition

You can view all the business applications in a bubble chart view or in a list view.

**i Note:**

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

### Bubble chart view



### List view

Name	Type	Application Category	Planned Disposition	Life Cycle Stage	Life Cycle Stage Status	Overall Score	Total Change H...	Num
Attendance & Payroll Management System (3)	Application	Human Capital Manag...	Sustain	Operational	In Use	9.10	Not Assessed	Not A
Avid Employee Engagement System	Application	Human Capital Manag...	Invest	Operational	In Use	9.10	Not Assessed	Not A
Big Splash	Application	Marketing	Invest	Operational	In Use	9.91	9.6	9.3
BOBJ	Application	Business Intelligence - ...	Retire	End of Life	Obsolete	5.45	9.5	8.5
BOM tracker	Application	Inventory Management	Invest	Ideation	Under Evaluation	9.13	9.8	8.9
BuyIt (2)	Application	Procurement	Invest	Inventory	Available	3.10	2.3	6.2
Case Management	Application	Customer Support	Sustain	Design	Chartered	Not Assessed	Not Assessed	Not A
CCS	Application	Customer Support	Sustain	End of Life	Obsolete	5.28	9.6	7.1
Chemsoft	Application	Contracts	Invest	Operational	In Use	Not Assessed	Not Assessed	Not A
Chlora CRM	Application	Sales	Invest	Operational	Pending Retirement	4.14	5.8	5.6
Cognitive SEO	Application	Marketing	Sustain	Deploy	Test	Not Assessed	Not Assessed	Not A
Costing	Application	Manufacturing	Sustain	Operational	In Use	9.05	9.6	8.6
Culture Amp	Application	Contracts	Sustain	Inventory	Available	Not Assessed	Not Assessed	Not A

## Application rationalization insights on the Enterprise Architecture Workspace home page

The application rationalization feature of Application Portfolio Management also provides insights for your business applications. To see the insight cards, navigate to **All > Application**

**Portfolio Management > Enterprise Architecture Workspace > Workspace Home** and select the Insights section. The insights cards display information based on scores derived from application rationalization. The following insight cards are available:

- **Candidate business applications for retirement**
- **Candidate business applications for migration**
- **Candidate business applications for investment**
- **Candidate business applications with mismatch planned disposition**

On selecting a particular card, the Application Rationalization page appears to display the relevant business application data, based on your selection.

All the indicator scores are displayed according to the latest fiscal period, by default. The latest fiscal period is derived from the `apm_app_indicator_score` list. The duration of a fiscal period is derived from the system property `com.glide.fiscal_calendar.fiscal_unit`.

**i Note:** To return to the main Application Rationalization page, select **Go to Application Rationalization**.

#### Bubble chart view of application rationalization

Bubble charts are interactive graphs that position applications in different quadrants, based on their indicator scores. Based on the position of the business application in the quadrants, enterprise architects can take decisions to invest in, sustain, migrate, or retire the business applications.

Use the bubble chart to view indicator scores of business applications in the X and Y axes and specify the bubble sizes. You can use these scores to measure how your applications are aligned to your business strategy and then create demands for the applications.

**i Note:**

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

You can also create your own application indicators to analyze business applications in the bubble chart. For information on how to create custom application indicators, see [Create an application indicator in the EA Workspace](#).

**i Note:**

- The created indicator must also be attached to the default application profile. For information on how to attach new profile indicators with a scoring profile, see [Attach a profile indicator with an application scoring profile](#).
- If the created indicator isn't displayed in the bubble size list, ensure that the indicator is active. For information on how to activate an indicator, see [Activate or turn off an application indicator](#).

Select the application rationalization icon ( ) to view the bubble chart view of all business applications.

The bubble chart page has the following components:

- X and Y axes: Each axis represents a metric category.
- Bubbles: Each labeled bubble represents a business application. Point to a bubble to view an assessable record score summary.

The bubble color is dependent on the planned disposition value that was already set for the business application. You can refer to the legend displayed on the bubble chart to see the significance of each color.

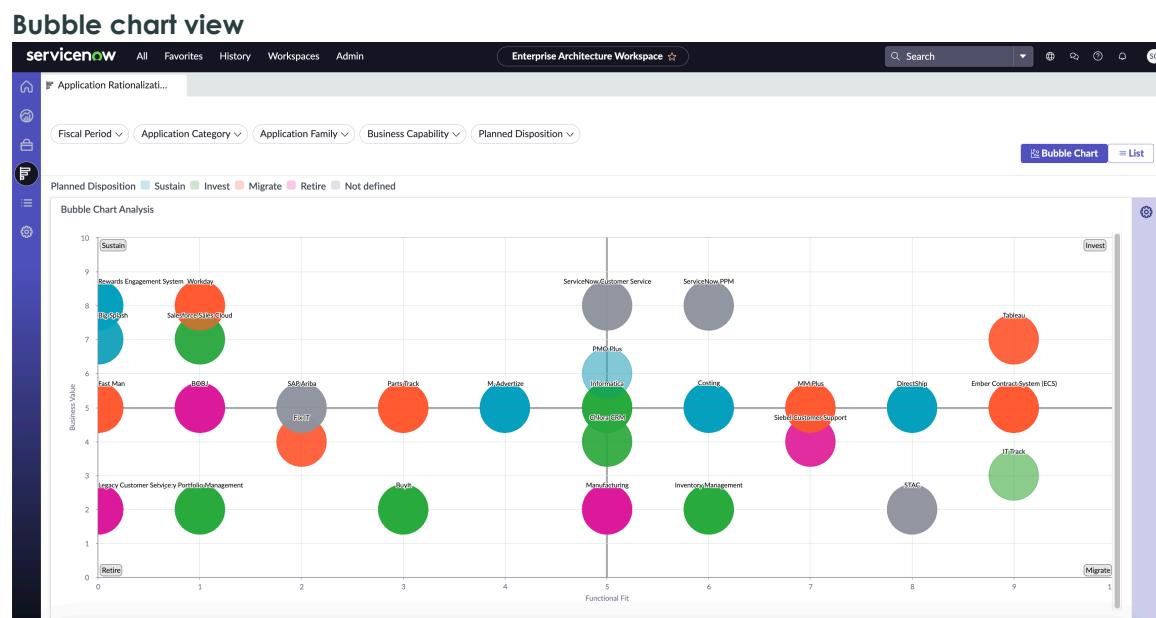
The bubbles are of different sizes, based on the indicator score values that you select.

All the indicator scores are displayed according to the latest fiscal period, by default. The latest fiscal period is derived from the `apm_app_indicator_score` list. The duration of a fiscal period is derived from the system property `com.glide.fiscal_calendar.fiscal_unit`. However, the fiscal period can be changed using the filter available on the Application Rationalization screen and other filters may also be applied.

You can perform the following by pointing to a bubble in the chart and then selecting the context menu:

- Create a demand for a business application.
- Set the planned disposition of a business application.
- Add business application lifecycle data.

The bubble chart displays up to only 100 bubbles representing business applications. If you have more than 100 bubbles, a message appears. Use the available filters to reduce the number of applications or view the data in the list view.



## Analyze applications using the bubble chart

Consolidate and analyze the business applications based on multiple scores.

### Before you begin

You need Enterprise Architecture Workspace plug-in version 2.2.0 to view the Application Rationalization page.

Role required: `sn_apm.apm_analyst`

### About this task

You can narrow down the number of business applications that may be viewed, based on their application indicator scores.

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon ().
3. Modify the bubble chart parameters as required by selecting the settings icon ().

The following settings are available for modification:

- X and Y axis: Dimension of the indicators that fall into the X and Y-axis. The available options are derived from the Application Bubble Charts table [apm\_bubble\_chart.List]. The indicator scores are gathered from the Indicator Scores table (apm\_app\_indicator\_score).

 **Note:**

- For details on how to add the X and Y-axis indicators of the bubble chart, see [Create or edit a bubble chart for application strategies](#).
- For a bubble to be displayed on the bubble chart, the indicator scores for the selected fiscal period must be available for both X and Y-axis indicators.
- Bubble size: The bubble size is based on indicators related to business applications. The indicator scores determine the size of the bubble.

You can also create your own application indicators to analyze business applications in the bubble chart. For information on how to create custom application indicators, see [Create an application indicator in the EA Workspace](#).

 **Note:**

- The created indicator must also be attached to the default application profile. For information on how to attach new profile indicators with a scoring profile, see [Attach a profile indicator with an application scoring profile](#).
- If the created indicator isn't displayed in the bubble size list, make sure that the indicator is active. For information on how to activate an indicator, see [Activate or turn off an application indicator](#).
- Bubble color: The bubble color is based on the planned disposition value of the application. You can refer to the legend displayed on the bubble chart to see the significance of each color.

 **Note:** The bubble color settings can't be modified.

- Bubble labels: Enable the toggle to display the bubble labels in the bubble chart. The bubble labels represent the business application names.

 **Note:** The bubble chart displays up to only 100 bubbles representing business applications. If you have more than 100 bubbles, a message appears. Use the available filters to reduce the number of applications or view the data in the list view.

4. Select **Apply**.

## Create a demand using the bubble chart

Create a demand for an application from the bubble chart.

### Before you begin

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

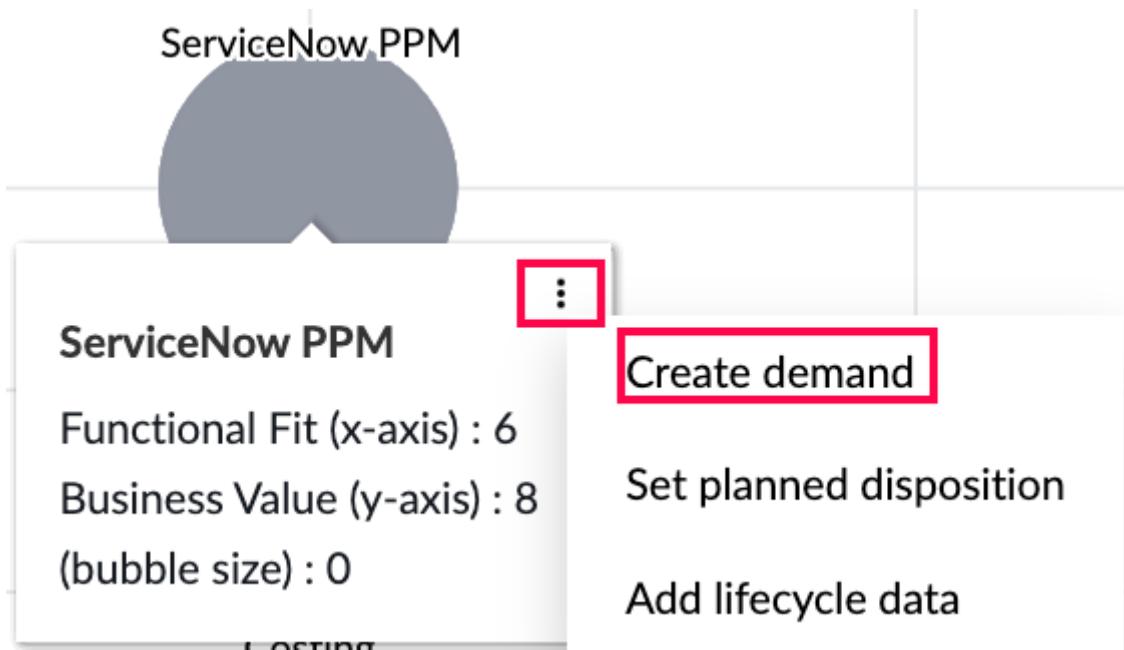
Role required: sn\_apm.apm\_analyst

### About this task

Use a demand as a step to identify cost-saving opportunities on the business applications and meet your targets. The strategy that you associate with the demand action decides the strategy for the application.

### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon (F).
3. Select the bubble for the relevant application that you want to create a demand for.
4. In the pop-up window, select the context menu icon (⋮) and select **Create demand**.



5. On the Create demand form, fill in the fields.  
For a description of the field values, see [Create demand form](#).
6. Select **Create**.

### Set the planned disposition of a business application

Set the planned disposition of a business application to track decisions on the future planning of the application.

**Before you begin**

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

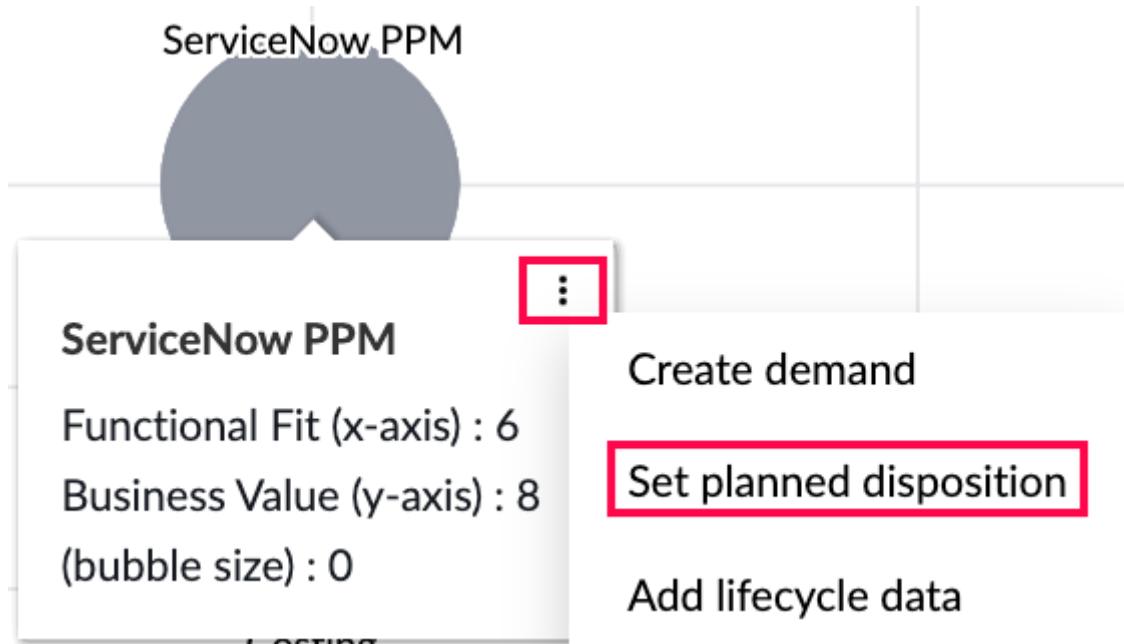
Role required: sn\_apm.apm\_analyst

**About this task**

Setting the planned disposition of a business application results in better data maintenance, improved data findability, and better management of application maintenance costs.

**Procedure**

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon (  ).
3. Select the bubble for the relevant application that you want to set the planned disposition for.
4. In the pop-up window, select the context menu icon (  ) and select **Set planned disposition**.



5. In the Set planned disposition window, do the following:
  - a. Select the planned disposition status from the Planned disposition drop-down list.
  - b. Enter the justification for selecting that planned disposition status in the **Reasoning** field.
6. Select **Update**.

**Add business application lifecycle data using the bubble chart**

Create or edit the life cycle of a business application to manage the business application.

**Before you begin**

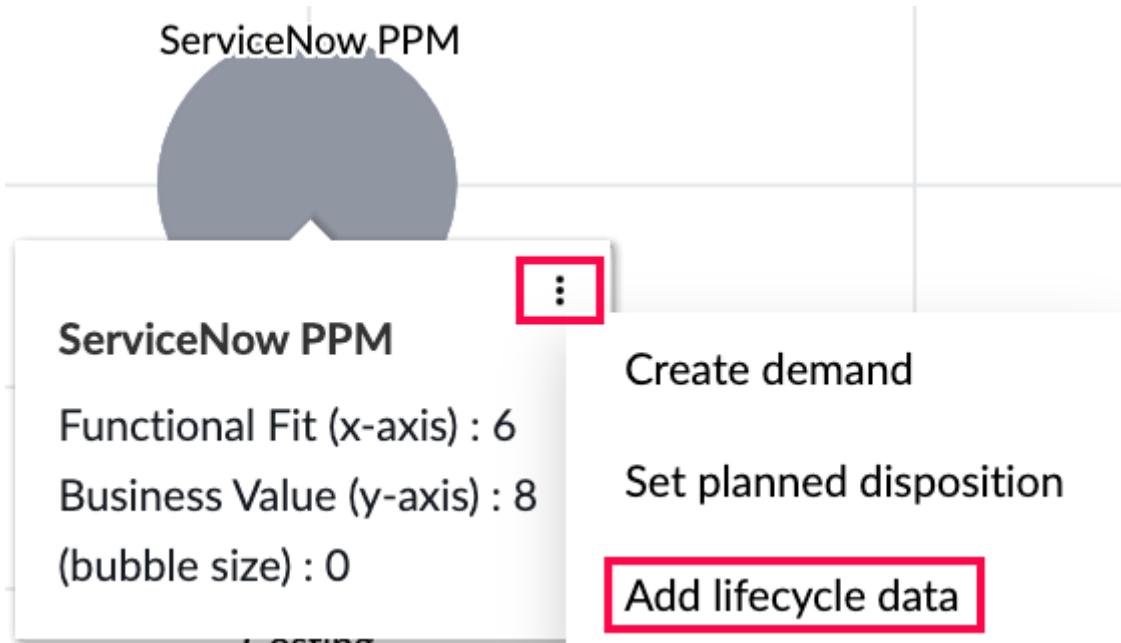
You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

The application model (field name: Model ID) is required to create an application model lifecycle for a business application. The application model ID can either be entered manually or can be automatically created and added to the business application by executing or scheduling the *CSDM Product Model Assignment* script. For details on how to run the *CSDM Product Model Assignment* script, see [Run a scheduled job to generate an application model for business applications](#).

Role required: sn\_apm.apm\_analyst

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon (F).
3. Select the bubble for the relevant application that you want to add business application life-cycle data for.
4. In the pop-up window, select the context menu icon (⋮) and select **Create lifecycle data**.



5. On the Application model life-cycle details form, fill in the fields. For a description of the field values, see [Application model life-cycle details form](#).
6. Select **Create**.

### List view of application rationalization

As an Enterprise Architect, you can view the list of all business applications.

The List view enables you to see high-level information on all your business applications and all the indicator scores that are attached to them.

You can also create your own application indicators to analyze business applications in the list view. For information on how to create custom application indicators, see [Create an application indicator in the EA Workspace](#). The new custom indicators appear as new columns in the list view.

## **Note:**

- The created indicator must also be attached to the default application profile. For information on how to attach new profile indicators with a scoring profile, see [Attach a profile indicator with an application scoring profile](#).
- If the created indicator isn't displayed in the bubble size list, ensure that the indicator is active. For information on how to activate an indicator, see [Activate or turn off an application indicator](#).

You can select the name of a business application to open it and view its associated details.

Also, you can select the expand row icon (  ) to see the demands and projects associated with that business application. On selecting a demand or a project, its details are displayed. You can modify business application details and its associated demand and project details, as required.

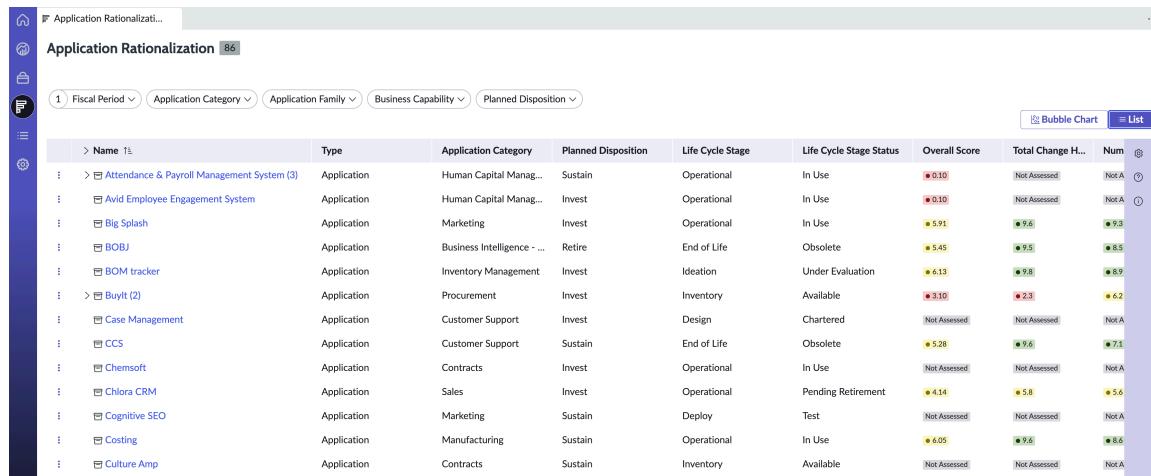
## **Note:** You need Enterprise Architecture Workspace plugin version 2.2.0 to view the Application Rationalization page.

All the indicator scores are displayed according to the latest fiscal period, by default. The latest fiscal period is derived from the `apm_app_indicator_score` list. The duration of a fiscal period is derived from the system property `com.glide.fiscal_calendar.fiscal_unit`.

You can perform the following from the list view:

- Edit business application details
- Create a demand for a business application
- Set the planned disposition of a business application
- Add the business application lifecycle data

### List view



### Create a demand using the list view

Create a demand for an application from the list view.

### Before you begin

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

Role required: `sn_apm.apm_analyst`

## About this task

Use a demand as a step to identify cost-saving opportunities on the business applications and meet your targets. The strategy that you associate with the demand action decides the strategy for the application.

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon ().
3. Select **List**.
4. Select the row context menu icon (⋮) next to the business application that you want to create a demand for and select **Create demand**.
5. On the Create demand form, fill in the fields.  
For a description of the field values, see [Create demand form](#).
6. Select **Create**.  
The new demand is displayed under the business application.

## Set the planned disposition of a business application

Set the planned disposition of a business application to track future decisions on the application.

### Before you begin

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

Role required: sn\_apm.apm\_analyst

## About this task

Setting the planned disposition of a business application results in better data maintenance, improved data findability, and better management of application maintenance costs.

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon ().
3. Select **List**.
4. Select the row context menu icon (⋮) next to the business application that you want to set the planned disposition status for and select **Set planned disposition**.
5. In the Set planned disposition window, do the following:
  - a. Select the planned disposition status from the Planned disposition drop-down list.
  - b. Enter the justification for selecting that planned disposition status in the **Reasoning** field.
6. Select **Update**.

## Add business application lifecycle data using the list view

Create or edit the life cycle of a business application to better manage the business application.

### Before you begin

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

The application model (field name: Model ID) is required to create application model life cycle for a business application. The application model ID can either be entered manually or can be automatically created and added to the business application by executing or scheduling the *CSDM Product Model Assignment* script. For details on how to run the *CSDM Product Model Assignment* script, see [Run a scheduled job to generate an application model for business applications](#).

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon ().
3. Select **List**.
4. Select the row context menu icon (⋮) next to the business application that you want to add business application lifecycle data for and select **Add lifecycle data**.
5. On the Application model lifecycle details form, fill in the fields.  
For a description of the field values, see [Application model life-cycle details form](#).
6. Select **Create**.

### Edit business application details

You can make updates to the business application record directly from the list, without leaving the list view.

### Before you begin

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon ().
3. Select **List**.
4. Select the business application that you want to edit details for.

A new pane appears on the List view screen and the details of the business application are displayed.

**Note:** Select **Full details** to view more details about the business application.

5. On the Business application form, fill in the fields.

For a description of the field values, see [Business application form](#).

6. Select **Update**.

### Edit a demand associated with a business application

Use application rationalization to edit existing demands associated with business applications.

#### Before you begin

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

You can make updates to the demand record directly from the list without leaving the list view.

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Application Rationalization page by selecting the application rationalization icon ().
3. Select **List**.
4. Select the expand row icon () next to the business application that you want to edit the associated demand details for.  
A list of demands associated with that business application is displayed.
5. Select the demand that you want to edit.  
A new pane appears on the List view screen and the details of the demand are displayed.

**Note:** Select **Full details** to view more details regarding the demand.

6. On the Edit demand form, fill in the fields.  
For a description of the field values, see [Demand form](#).
7. Select **Update**.

### Edit a project associated with a business application

Use application rationalization to edit existing projects associated with business applications.

#### Before you begin

You need Enterprise Architecture Workspace version 2.2.0 to view the Application Rationalization page.

You can make updates to the demand record directly from the list without leaving the list view.

Role required: sn\_apm.apm\_analyst

## Procedure

1. Navigate to All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home.
  2. Open the Application Rationalization page by selecting the application rationalization icon ( ).
  3. Select List.
  4. Select the expand row icon ( ) next to the business application that you want to edit the associated project details for.  
A list of projects associated with that business application is displayed.
  5. Select the project that you want to edit.  
A new pane appears on the List view screen and the details of the project are displayed.
- Note:** Select Full details to view more details about the project.
6. On the Edit a project form, fill in the fields.  
For a description of the field values, see [Edit a project form](#).
  7. Select Update.

## Portfolio list view

As an Enterprise Architect, you can view the list of all business capabilities, business applications, application services, information objects, business processes, technology portfolio management, technology reference model products, and architectural artifacts.

The Owned by me section under each category shows a list of records that you have been assigned. Click the filter icon ( ) to check the applied fields.

You can save, filter and export, or email the list. You can also create your own list and access it from the My Lists page.

**List view**

Name	Description	Parent	Leaf Node	Hierarchy ID	Level	Order
test	test	Develop and Manage Products and Services	true	1.2	1	
Develop production and materials strategies	Develop production and materials strategies	Plan for and align supply chain resources	false	5.4.3	2	
Perform quality testing	Perform quality testing	Produce/Manufacture/Deliver product	true	5.3.1	2	
Report incidents and risks to regulatory bodies	Report incidents and risks to regulatory bodies	Plan and manage customer service contacts	true	6.3.1	2	
Screen and select candidates	Screen and select candidates	Recruit, source, and select employees	true	4.6.1	2	
Plan and manage customer service work force	Plan and manage customer service work force	Plan and manage customer service contacts	false	6.3.4	2	
Survey market and determine customer needs and wants	Survey market and determine customer needs and wants	Define the business concept and long-term vision	false	7.2.1	2	
Review market performance	Review market performance	Conduct post launch review	true	1.5.2.2.1	4	
Conduct pricing analysis	Conduct pricing analysis	Define pricing strategy	true	10.5.3.1	3	
Design and manage customer loyalty program	Design and manage customer loyalty program	Develop marketing strategy	true	10.5.1	2	
Develop products and services	Develop products and services	Develop and Manage Products and Services	false	1.4	1	
Execute and measure strategic	Execute and measure strategic	Develop Vision and Strategy	false	7.1	1	

- Note:** In the Lists view, the Digital Integrations and Digital Interfaces are displayed only when the Application Portfolio Management Digital Integration Management plugin (com.snc.apm\_digital\_integration) is installed. The Diagrams under Architectural Artifacts is displayed in the list only when the Lucidchart Integration plugin (sn\_lcdchart\_int) is installed.

## Lists

The Lists view enables you to see a high-level information for all the records of your portfolio. You can select the name of a record to open it.

For each list category, you can see two subsections: All and Owned by me.

- All: Lists all the available records for the selected category.
- Owned by me: Lists the records that are assigned to you as:
  - Owned by
  - Managed by
  - Supported by
  - Business owner
  - IT Application owner
  - IT owner

You can see the following items in the **Portfolio > List** view:

- Business Capabilities
- Business Applications
- Application Services
- Digital Integrations
- Digital Interfaces
- Information Objects
- Business Processes
- Technology Portfolio Management
- Technology Reference Model Products
- Architectural Artifacts

For the Technology Portfolio Management list category, you can see three subsections: All, Indicator Scores, and Logs

The data in the All table is fetched from the TPM Discovered Technologies [sn\_apm\_tpm\_discovered\_technology] table. This table is read-only since it is automatically generated.

The data in the Logs tables is fetched from the TPM Discovered Technology Run Logs [sn\_apm\_tpm\_discovered\_technology\_run\_log] table. This table is read-only since it is automatically generated.

## My Lists

Any list that you create appear in the My Lists section. Lists in this section are only visible to you.

## Edit records in the list view

Make updates to a record directly from a list, without leaving the list view.

### Before you begin

Role required: sn\_apm.apm\_analyst

### About this task

You can revise one or more records while in the list view.

### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.

2. Open the Portfolio List view.

- a. Click the Portfolio icon ().

- b. Click the Open Preview icon ().

- c. Revise the values in the fields and click **Update**.

3. Revise multiple records at once.

- a. In list view, click the boxes to the left of all the records that you want to revise.

- b. Click **Edit**.

A preview pane opens and shows you the fields you can edit in the selected records.

- c. Revise the values in the fields and click **Update**.

### Create my list

Create your own filtered lists in the workspace and access them under the **My Lists** tab.

### Before you begin

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.

2. Open the Portfolio List view by clicking the Portfolio icon .

3. Select **My Lists**.

4. Select the Add New list.

5. Create a new list that is either from an existing list or is completely new.

- If creating a new list from an existing list, then select **Start from existing** and fill in the fields on the form.

### New List form

Field	Description
List	Existing list that you want to modify. The menu displays all available admin-defined lists for selection.

Field	Description
List Name	Name for your list. By default this field appends the following code to the list selected in the previous menu:  <div style="border: 1px solid #ccc; padding: 5px; width: fit-content;">_Copy</div> .
Select columns	Record fields to include in the list view. Columns from the list you selected appear. Add or remove columns to create the list you like as needed.
Add Filters	Condition builder to create filters that appear in your <b>My Lists</b> tab. By default, the conditions applied to the selected list appear.

- If creating a new list from nothing, then select **Create your own** and fill in the fields on the form.

### New List form

Field	Description
List Name	Name for your list.
Select Source	Table the records come from.
Select columns	Record fields to include in list view. Select the columns that display in the list. By default, this field populates with columns from a Workspace list view if one exists. If a Workspace list doesn't exist, the columns are populated with the Default list view of the table selected.
Add filters	Condition builder that is applied to the list.

### 6. Select **Create**.

#### Result

The list appears in the **My Lists** tab.

#### Create a business capability in the EA Workspace

Add a business capability in the Portfolio List view of the EA Workspace.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by clicking the Portfolio icon .
3. Select the expand row icon () next to **Business Capabilities**.

4. Select **All**.
5. Select **New**.
6. On the form, fill in the fields.

For field information, see [Business Capability form](#).

7. Select **Save**.

### Add a business application

Add the applications that your organization wants to introduce based on their functions and the business process they fulfill. In APM, add any business application that is used to assess and track costs, usage, business value, functional fitment, and risks.

#### Before you begin

Role required: sn\_apm.apm\_analyst

 **Note:** The user must be part of the Enterprise Architect Group.

#### About this task

If you have an APM user role (sn\_apm.apm\_user), use the Business Application Life-cycle Management services to request, add, or retire a business application.

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by clicking the Portfolio icon .
3. Select the expand row icon () next to **Business Applications**.
4. Select **All**.
5. Select **New**.
6. On the form, fill in the fields.

For field information, see [Business Application Form](#).

7. Select **Save**.

### View a unified map for a business application

View a unified map for your business applications in the Enterprise Architecture Workspace to better understand the current architecture and associated references.

#### Before you begin

Ensure that the CMDB Workspace plugin (com.snc.cmdb.workspace) (version 4.0.1 or later) is installed.

Role required: sn\_apm.apm\_user and sn\_cmdb\_user

#### Procedure

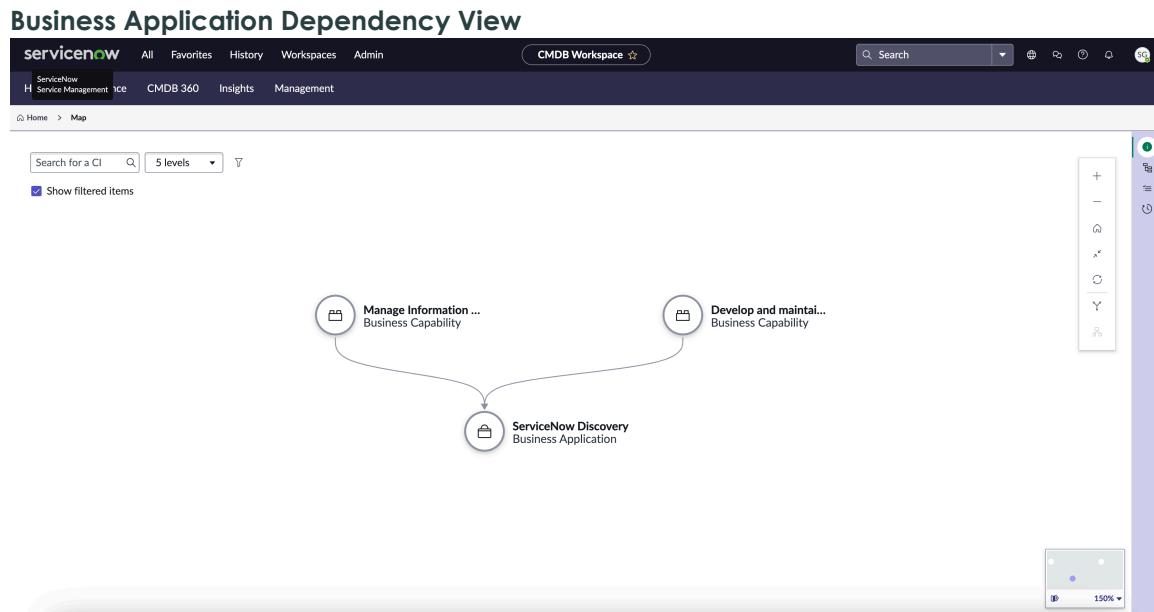
1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Business Applications**.

**3.** Select a business application to open it.

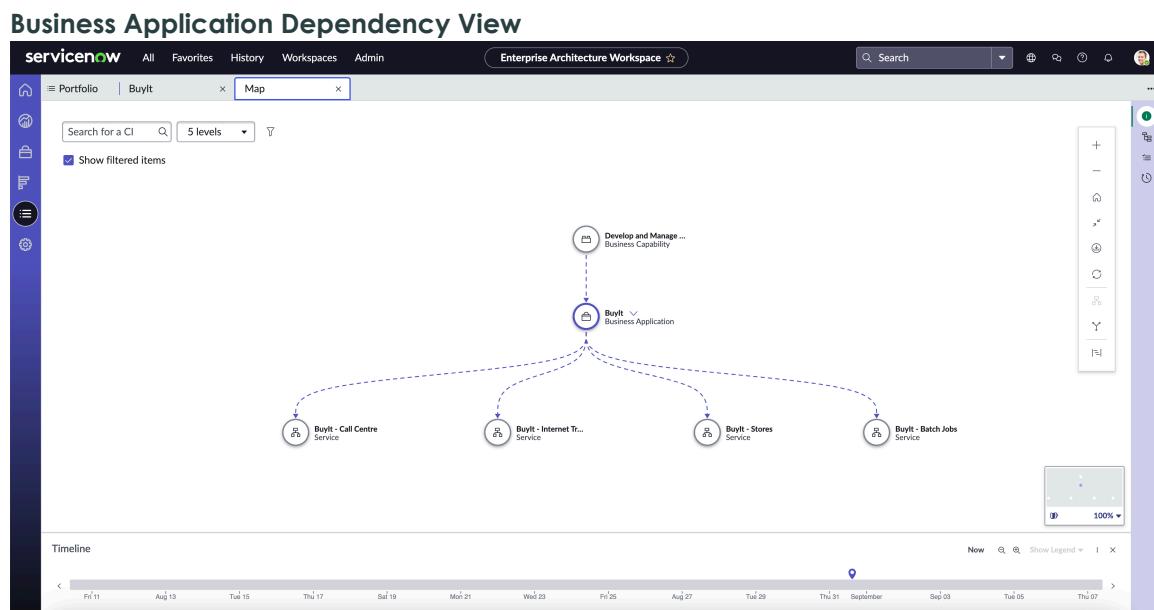
**4.** Select **Open Map**.

### Result

In the EA Workspace version 2.1.1, the unified map for the selected business application is opened in the CMDB Workspace. For more details on the unified map, see [Unified Map](#).



In the EA Workspace version 2.2.0 or later, the unified map for the selected business application is opened in a new tab within the EA Workspace.



### Open business application form in Core UI from EA Workspace

Open the business application form in Core UI from the EA Workspace to view and edit the business application form in the APM view.

### Before you begin

Role required: admin

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Business Applications**.
3. Select a business application and open it.
4. Select the more actions icon ( ) and select **View form in Core UI**.  
For field information, see [Business Application Form](#).

### Create a demand for a business application to achieve a goal

Use a demand as a step to identify cost saving opportunities on the business applications and meet your targets. The strategy that you associate with the demand action decides the strategy for the application.

#### Before you begin

Role required: sn\_apm.apm\_user

#### About this task

Create a demand to capture details like action, start and target fiscal period, application, program, and so on.

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Business Applications**.
3. Select a business application and open it.



4. Select the More Actions menu ( ) and select **Create Demand**.
5. On the Demand form, fill in the fields.  
For field information, see [Demand form](#).

6. Select **Save**.

### View roadmap of a business application

View the roadmap of your business applications and align them with the organization's strategy. Creating a portfolio plan helps you plan, prioritize, and roadmap the work for your business application.

#### Before you begin

Ensure that the Strategic Planning plugin (com.sn\_apw\_advanced) (v4.0.2 or later) is installed.

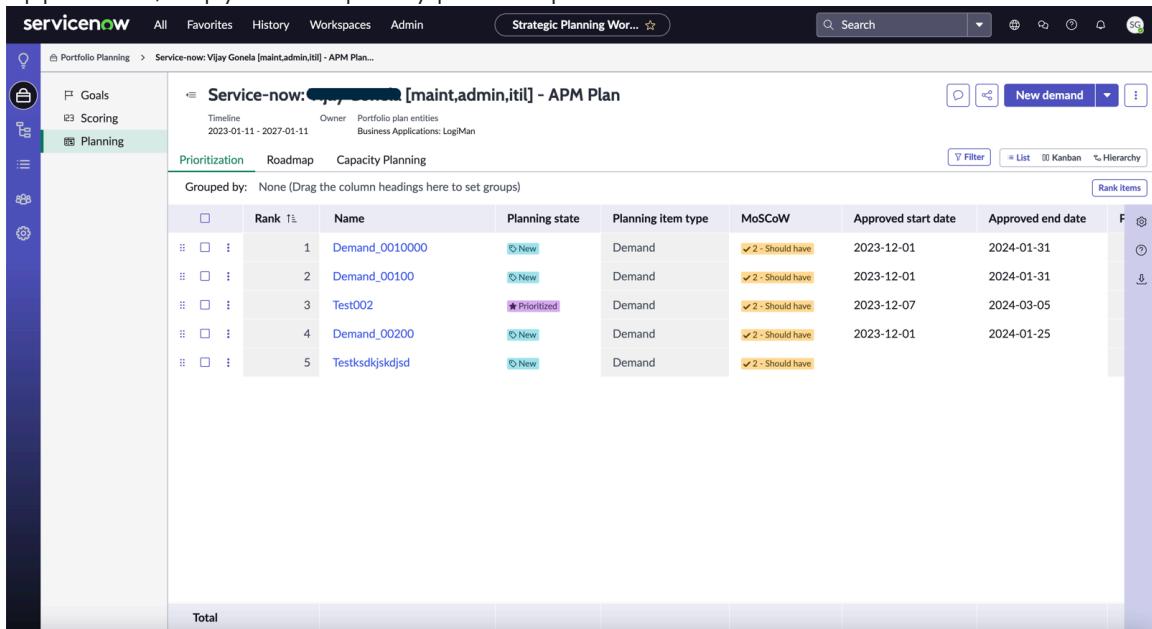
Role required: sn\_apm.apm\_user and sn\_align\_core.apw\_user

## Procedure

1. Open the **View roadmap** option using the following navigation.
  - From the Business Portfolio page:
    - a. Navigate to **Workspaces > Enterprise Architecture Workspace > Business Portfolio**
    - b. Select the expand row icon (  ) next to a business capability.
    - c. Select the row context menu icon (  ) for a business application and select **View roadmap**.
  - From the Portfolio page:
    - a. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**
    - b. Select **#Business Applications**.
    - c. Select a business application to open it.
    - d. Select the more actions menu (  ) and select **View roadmap**.

You're navigated to the Planning page of the Strategic Planning Workspace. A temporary portfolio plan is created in the Strategic Planning Workspace with all the planning items that are associated with the business application.

**i Note:** The temporary portfolio plan is meant for preview purpose only. To plan, prioritize, and roadmap the work for your business application, copy the temporary portfolio plan or create one.



The screenshot shows the ServiceNow interface for the Strategic Planning Workspace. The left sidebar has a 'Planning' tab selected. The main area displays a table titled 'Service-now: [REDACTED] [maint,admin,itil] - APM Plan'. The table has columns: Rank, Name, Planning state, Planning item type, MoSCoW, Approved start date, and Approved end date. There are five rows of data:

Rank	Name	Planning state	Planning item type	MoSCoW	Approved start date	Approved end date
1	Demand_0010000		Demand	✓ 2 - Should have	2023-12-01	2024-01-31
2	Demand_00100		Demand	✓ 2 - Should have	2023-12-01	2024-01-31
3	Test002		Demand	✓ 2 - Should have	2023-12-07	2024-03-05
4	Demand_00200		Demand	✓ 2 - Should have	2023-12-01	2024-01-25
5	Testksdkjskdjsd		Demand	✓ 2 - Should have		

2. Optional: Copy the portfolio plan for your business application to plan, prioritize, and roadmap the work for your business application.

- a. From the portfolio plan header, select the more actions icon (  ) and then select **Copy portfolio plan**.
- b. On the Copy portfolio plan window, fill in the details.

- i. Enter a name for the portfolio plan in the **#Portfolio plan name** field.
- ii. (Optional) Grant access to the users of the portfolio plan by selecting the **Share with same users and groups** option.

**c. Select Confirm.**

Alternatively, you can also create your own portfolio plan in the Strategic Planning Workspace (SPW) using the Business Capability lens. For more information, see [Create a portfolio plan in Strategic Planning](#).

### Add an application service in the EA Workspace

Add an application service in the Portfolio List view of the EA Workspace.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by clicking the Portfolio icon .
3. Select the expand row icon () next to **Application Services**.
4. Select **All**.
5. Select **New**.
6. On the form, fill in the fields.

For field information, see [Application service form](#).

7. Select **Save**.

### Create a digital integration in the EA Workspace

Create a digital integration in the EA Workspace.

#### Before you begin

Role required: sn\_apm.apm\_analyst

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by clicking the Portfolio icon .
3. Select the expand row icon () next to **Digital Integrations**.
4. Select **All**.
5. Select **New**.
6. On the form, fill in the fields.

For a description of the field values, see [Digital integration form](#).

7. Select **Save**.

## Create a digital interface in the EA Workspace

Create a digital integration in the EA Workspace.

### Before you begin

Role required: sn\_apm.apm\_analyst

### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by clicking the Portfolio icon .
3. Select the expand row icon () next to **Digital Interfaces**.
4. Select **All**.
5. Select **New**.
6. On the form, fill in the fields.

For field information, see [Digital interface form](#).

7. Select **Save**.

## Create a Lucidchart diagram for a business application in the EA Workspace

Create a diagram in Lucidchart for your business application hierarchy and associate it with an architectural artifact.

### Before you begin

Ensure the following ServiceNow Store apps are installed:

- Lucidchart Diagramming Spoke
- Lucidchart Integration

Ensure a connection is established with Lucid. For details, see [Create OAuth 2.0 Client in Lucidchart](#)  and [Create a connection and credential alias for the Lucidchart diagramming spoke](#) .

Role required: Member of the Enterprise Architect group

### Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Business Applications**.
3. Select a business application to open it.
4. Select the more actions menu () and select **Create Diagram**.
5. On the Create Diagram form, fill in the fields.

**Note:** Use the authorization link on the Create Diagram window, to generate an authentication token and fetch your Lucid folders to save the diagram.

For field information, see [Create diagram form for a business application](#).

6. Select **Create Diagram**.

## Result

After a successful submission, a link to the newly created Lucid diagram appears on top of the screen. You can select the link to navigate to the diagram. The Architectural Artifacts page shows the link to the Lucidchart diagram and an artifact name associated with it. You can select the respective link to access the artifact or diagram.

### Create a Lucidchart diagram for a business capability in the EA Workspace

Create a diagram in Lucidchart for your business capability maps and associate it with an architectural artifact.

#### Before you begin

Ensure the following ServiceNow Store applications are installed:

- Lucidchart Diagramming Spoke
- Lucidchart Integration

Ensure a connection is established with Lucid. For details, see [Create OAuth 2.0 Client in Lucidchart](#)  and [Create a connection and credential alias for the Lucidchart diagramming spoke](#) .

Role required: Member of the Enterprise Architect group

#### Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Business Capabilities**.
3. Select a business application to open it.
4. Select the more actions menu  and select **Create Diagram**.
5. On the Create Diagram form, fill in the fields.

**i Note:** Use the authorization link on the Create Diagram window, to generate an authentication token and fetch your Lucid folders to save the diagram.

For field information, see [Create diagram for a business capability](#).

6. Select **Create Diagram**.

## Result

After a successful submission, a link to the newly created Lucid diagram appears on top of the screen. You can select the link to navigate to the diagram. The Architectural Artifacts page shows the link to the Lucidchart diagram and an artifact name associated with it. You can select the respective link to access the artifact or diagram.

### Create a TRM product request in the EA Workspace

Create a request to include a new software product to the Technology Reference Model (TRM) library.

#### Before you begin

Role required: sn\_apm.apm\_user

#### Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Technology Reference Model Products**.

**3. Select Request Product.**

4. On the TRM Product request form, fill in the fields.

For field information, see [Create new TRM product request form](#).

**5. Select Save.****Result**

An email notification is sent to the approver for approval. The approver belongs to the Enterprise Architect group.

Related topics

[Create a TRM product lifecycle request in the EA Workspace](#)

**Create a TRM product in the EA Workspace**

Add a software product to the Technology Reference Model (TRM) library and maintain the TRM library for your organization.

**Before you begin**

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

**Procedure**

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by selecting the portfolio icon .
3. Select the expand row icon () next to **Technology Reference Model Products**.
4. Select **All**.
5. Select **New**.
6. On the TRM Product form, fill in the fields.

For field information, see [Create new TRM product form](#).

**7. Select Save.****Result**

It creates a record directly without sending a request for approval.

Related topics

[Create a TRM product lifecycle in the EA Workspace](#)

**Create a TRM product lifecycle in the EA Workspace**

Create a new TRM product life cycle to add the life cycle for a TRM product.

**Before you begin**

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Technology Reference Model Products**.
3. Select a TRM product to open it.
4. Select **TRM Product Lifecycles** tab.
5. Select **New**.
6. On the TRM Product Lifecycle form, fill in the fields.

For field information, see [Create new TRM product lifecycle form](#).

7. Select **Save**.

## Result

Lifecycle details are added for a TRM product.

Related topics

[Create a TRM product in the EA Workspace](#)

## Create a TRM product lifecycle request in the EA Workspace

Add a new request to create a life cycle for a TRM product.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Portfolio**.
2. Select **Technology Reference Model Products**.
3. Select a TRM product to open it.
4. Select **TRM Product Lifecycles** tab.
5. Select **Request Lifecycle**.
6. On the TRM Product Lifecycle Request form, fill in the fields.

For field information, see [Create new TRM product lifecycle request form](#).

7. Select **Save**.

## Result

An email notification is sent to the approver for approval. The approver belongs to the Enterprise Architect group.

Related topics

[Create a TRM product request in the EA Workspace](#)

## Create information object

Create an information object to capture the logical data for a business application.

### Before you begin

Role required: sn\_apm.apm\_user

You can create information object, relate business application to information object, and relate information object to database catalog.

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by selecting the Portfolio icon .
3. Select the expand row icon () next to **Information Objects**.
4. Select **All**.
5. Select **New**.
6. Fill in the form fields.  
For field information, see [Create information object form](#).
7. Select **Save**.

## Create business process

A business process is a collection of related structured tasks performed to accomplish a specific application service. Create a business process to group applications that help accomplish a specific application service.

### Before you begin

Role required: sn\_apm.apm\_admin

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by selecting the Portfolio icon .
3. Select the expand row icon () next to **Business Processes**.
4. Select **All**.
5. Select **New**.
6. Fill in the form fields.  
For field information, see [Create business process form](#).
7. Select **Save**.

## Create architectural artifact in EA Workspace

Create an architectural artifact to align it with your business requirements.

### Before you begin

Role required: sn\_apm.apm\_user

## Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by selecting the Portfolio icon .
3. Select the expand row icon () next to **Architectural Artifacts**.

4. Select **All**.
5. Select **New**.
6. Fill in the form fields.  
For field information, see [Architectural artifact form](#).
7. Select **Save**.

### Create a TCO cost

Create a new entry for total cost of ownership record to evaluate the cost of your business applications.

#### Before you begin

Role required: admin

#### Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace**.
2. Open the Portfolio List view by selecting the Portfolio icon .
3. Select the expand row icon () next to **TCO**.
4. Select **All**.
5. Select **New**.
6. Fill in the form fields.  
For field information, see [New total cost of ownership form](#).
7. Select **Save**.

### Configure the Enterprise Architecture Workspace

Customize your workspace to display the components that you want to see.

#### Before you begin

Role required: sn\_apm.apm\_admin and sn\_apm.apm\_user

#### About this task

For the Insights, Overview, and Health sections, you can hide some components if you don't intend to use them.

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Configuration**.
2. On the APM EA Configurations page, select an item that you want to hide or show.
3. In the Active column, select **True** or **False** to show or hide the component in the workspace.

 **Note:** You can create a visualization configuration using the Platform Analytics Workspace. For instructions, see [Create a single score visualization in the Visualization Designer](#) .

### Create and apply a new configuration for the Overview section

Create visualization configurations for the Overview section and apply them as needed.

**Before you begin**

Role required: sn\_apm.apm\_admin

**Procedure**

1. Navigate to All > Application Portfolio Management > Enterprise Architecture Workspace > Configuration.
2. On the APM EA Configurations page, select New.
3. On the form, fill in the fields.

**New EA Configuration Record form**

Field	Description
Name	Name of the configuration.
Active	Option to make the configuration active to appear on the Overview section.
Section	Section name for which you're creating the configuration.
Order	Position of the card in the sequential order of all other cards in that section.
Configuration Type	Type of the configuration. If the <b>Section</b> field is set to <b>Overview</b> , then this field value is automatically set to <b>Visualization</b> .
Saved Visualization	Name of the configuration. Select the lookup icon (🔍) to select a configuration from the PAR Visualizations list.  ● <b>Note:</b> You can create and save a visualization configuration using the Platform Analytics Workspace. For instructions, see <a href="#">Create a single score visualization in the Visualization Designer</a> .
Manage Access	Option to provide access to the selected users and user groups. Add users or groups by selecting the lock icon (🔒) for <b>Users</b> or <b>Groups</b> .

Sample Configuration script to add a card (Business applications at the same capability hierarchy level) in the Business Portfolio tab of the Insights section:

```
responseFromScript();

function responseFromScript() {
    return {
        "title": {
            "label": "Test insight card",
            "value": "Test insight card"
        }
    }
}
```

```
        "size": "sm",
        "lines": 2
    },
    "count": "6",
    "description": {
        "label": "6 testing description",
        "lines": 2
    },
    "countLabel": "test count",
    "buttonLabel": "View list",
    "buttonTooltip": "View list for Business applications at the same capability hierarchy level",
    "border": {
        "color": "brown",
        "variant": "secondary"
    },
    "highlightedHeader": {
        "label": "Business Portfolio",
        "icon": "bag-outline"
    },
    "navigation": {
        "route": "list",
        "title": "Business applications at the same capability hierarchy level",
        "fields": {
            "table": "cert_follow_on_task",
            "listTitle": "Business applications at the same capability hierarchy level"
        }
    },
    "params": {
```

```

    "query":"sys_created_on>=2022-12-15
11:36:37^audit.sys_id=ae25162c3ba20300028fe79c83efc492^state=1",

    "listView":""

}

,

"displayText":"6 Business applications at the same capability
hierarchy level"

};

}

```

#### 4. Select **Submit**.

##### Create and apply a new configuration for the Health or Insights section

Create configurations for the Health or Insights section and apply them as needed.

##### Before you begin

Role required: sn\_apm.apm\_admin

##### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Configuration**.
2. On the APM EA Configurations page, select **New**.
3. On the form, fill in the fields.

##### New EA Configuration Record form

Field	Description
Name	Name of the configuration.
Active	Option to make the configuration active to appear on the Health or Insights section.
Section	Section name for which you're creating the configuration.
Order	Position of the card in the sequential order of all other cards in that section.
Configuration Type	Type of the configuration. If the <b>Section</b> field is set to any of the following, then this field value is automatically set to <b>Script</b> . <ul style="list-style-type: none"> <li>◦ Health</li> <li>◦ Insights - Application Portfolio</li> <li>◦ Insights - Business Portfolio</li> <li>◦ Insights - Information Portfolio</li> <li>◦ Insights - Technology Portfolio</li> </ul>
Configuration Script	Script of the configuration.

Field	Description
Manage Access	Option to provide access to the selected users and user groups. Add users or groups by clicking the lock icon for <b>Users</b> or <b>Groups</b> .

Sample Configuration script to add a card (Business Capabilities not Assessed) in the Health section:

```
function responseFromScript(filters) {
    return {"count":74,"percentage":"45","subtext":"45% of all Capabilities","query":"sys_id IN 016d2c3d18400300964f2ff0d21a4ee4,016d2c3d18400300964f2ff0d21a4eeb,016d6c3d18400300964f2ff0d21a4e00,016d6c3d18400300964f2ff0d21a4e0b,016d6c3d18400300964f2ff0d21a4e0e,056d2c3d18400300964f2ff0d21a4e0f,056d2c3d18400300964f2ff0d21a4e0g,056d2c3d18400300964f2ff0d21a4e0h,056d2c3d18400300964f2ff0d21a4e0i,056d2c3d18400300964f2ff0d21a4e0j,056d2c3d18400300964f2ff0d21a4e0k,056d2c3d18400300964f2ff0d21a4e0l,056d2c3d18400300964f2ff0d21a4e0m,056d2c3d18400300964f2ff0d21a4e0n,056d2c3d18400300964f2ff0d21a4e0o,056d2c3d18400300964f2ff0d21a4e0p,056d2c3d18400300964f2ff0d21a4e0q,056d2c3d18400300964f2ff0d21a4e0r,056d2c3d18400300964f2ff0d21a4e0s,056d2c3d18400300964f2ff0d21a4e0t,056d2c3d18400300964f2ff0d21a4e0u,056d2c3d18400300964f2ff0d21a4e0v,056d2c3d18400300964f2ff0d21a4e0w,056d2c3d18400300964f2ff0d21a4e0x,056d2c3d18400300964f2ff0d21a4e0y,056d2c3d18400300964f2ff0d21a4e0z,056d2c3d18400300964f2ff0d21a4e1,056d2c3d18400300964f2ff0d21a4e12,056d2c3d18400300964f2ff0d21a4e13,096d2c3d18400300964f2ff0d21a4e0,096d2c3d18400300964f2ff0d21a4e01,096d2c3d18400300964f2ff0d21a4e02,096d2c3d18400300964f2ff0d21a4e03,096d2c3d18400300964f2ff0d21a4e04,096d2c3d18400300964f2ff0d21a4e05,096d2c3d18400300964f2ff0d21a4e06,096d2c3d18400300964f2ff0d21a4e07,096d2c3d18400300964f2ff0d21a4e08,116d6c3d18400300964f2ff0d21a4e23,156d6c3d18400300964f2ff0d21a4e21,343ab8b1c172d700964f1c9d9204dfc4,3df0ce8111f01300964fb19f04b5016c,3eaa906187082110cb387406dabb3502,416d2c3d18400300964f2ff0d21a4eee,416d2c3d18400300964f2ff0d21a4efc,416d6c3d18400300964f2ff0d21a4e03,416d6c3d18400300964f2ff0d21a4e0a,456d2c3d18400300964f2ff0d21a4ef3,4ad8bca987482110cb387406dabb3548,4d6d2c3d18400300964f2ff0d21a4ef6,596d6c3d18400300964f2ff0d21a4e22,5d6d6c3d18400300964f2ff0d21a4e19,816b418b876f1110cb387406dabb3548,816d2c3d18400300964f2ff0d21a4eea,816d2c3d18400300964f2ff0d21a4ef8,816d2c3d18400300964f2ff0d21a4eff,856d2c3d18400300964f2ff0d21a4ee1,856d2c3d18400300964f2ff0d21a4ee8,856d2c3d18400300964f2ff0d21a4ef6,896d2c3d18400300964f2ff0d21a4ee6,896d2c3d18400300964f2ff0d21a4ef4,896d6c3d18400300964f2ff0d21a4e02,896d6c3d18400300964f2ff0d21a4e09,896d6c3d18400300964f2ff0d21a4e10,8d6d2c3d18400300964f2ff0d21a4ee4,8d6d2c3d18400300964f2ff0d21a4ee1,8d6d2c3d18400300964f2ff0d21a4ee2,8d6d2c3d18400300964f2ff0d21a4ef2,8d6d2c3d18400300964f2ff0d21a4ef9,8d6d6c3d18400300964f2ff0d21a4e00,916d6c3d18400300964f2ff0d21a4ee2,956d6c3d18400300964f2ff0d21a4e19,a770d85187046110cb387406dabb3540,c16d2c3d18400300964f2ff0d21a4eed,c16d2c3d18400300964f2ff0d21a4ef4,c16d2c3d18400300964f2ff0d21a4efb,c4c7273087442110cb387406dabb3520,c56d2c3d18400300964f2ff0d21a4ee4,c56d2c3d18400300964f2ff0d21a4e00,c56d6c3d18400300964f2ff0d21a4e0e,c96d2c3d18400300964f2ff0d21a4ee2,c96d2c3d18400300964f2ff0d21a4ee9,c96d2c3d18400300964f2ff0d21a4ef0,c96d2c3d18400300964f2ff0d21a4efe,c96d6c3d18400300964f2ff0d21a4e05,c96d6c3d18400300964f2ff0d21a4e13,cd6d2c3d18400300964f2ff0d21a4ee7,cd6d2c3d18400300964f2ff0d21a4eee,d16d6c3d18400300964f2ff0d21a4e14,e1e,d56d6c3d18400300964f2ff0d21a4e15,d56d6c3d18400300964f2ff0d21a4e1c,d026ed887d82110cb387406dabb3548,dd6d6c3d18400300964f2ff0d21a4e18,ed4b175c87902110cb387406dabb3553,efbf3eb187bb11102f631f473ccb3571","table":"cmdb_ci_business_capability","listView":"business_capability_apm_view","icon":"exclamation Fill"}}

}
```

Sample Configuration script to add a card in the Application Portfolio or Business Portfolio or Information Portfolio in the Insights section:

```
months - selected upto months filter

showProd - show only production filter
```

```
responseFromScript(months, showProd);  
  
function responseFromScript(months, showProd) {  
  
    var currentTime = new GlideDateTime();  
  
    currentTime.addMonthsLocalTime(months);  
  
    var queryDate = currentTime.getLocalDate();  
  
    var query =  
"technology_lifecycle.earliest.lifecycle_date<=javascript:gs.dateGenerate('" + queryDate + "','start')"; if (showProd) {  
  
        query = query + "^business_service.used_for=Production";  
  
    }  
  
    var productInventoryGR = new  
GlideAggregate('sn_apm_tpm_discovered_technology');  
  
    productInventoryGR.addEncodedQuery(query);  
  
    productInventoryGR.addAggregate("count(distinct",  
'technology_lifecycle.hardware_model');  
  
    productInventoryGR.setGroup(false);  
  
    productInventoryGR.query();  
  
    if (productInventoryGR.next()) {  
  
        hwProductsCount =  
productInventoryGR.getAggregate("count(distinct",  
'technology_lifecycle.hardware_model');  
  
    }  
  
    if (hwProductsCount > 0) {  
  
        var hpRiskDesc = gs.getMessage("by {0}", [queryDate]);  
  
        return {  
  
            'title': {  
  
                'label': gs.getMessage("Hardware models with lifecycle  
risk"),  
  
                'size': "sm",  
            },  
        };  
    }  
}  
};
```

```
        'lines': 2

    },
    'count': hwProductsCount,
    'description': {
        'label': hpRiskDesc,
        'lines': 2
    },
    'countLabel': gs.getMessage("Hardware models count"),
    'buttonLabel': gs.getMessage("View list"),
    'buttonTooltip': gs.getMessage("View list for hardware models with lifecycle risk"),
    'border': this.cardDetails[3].border,
    'highlightedHeader': this.cardDetails[3].header,
    'navigation': {
        "route": "list",
        "title": gs.getMessage("Hardware models with lifecycle risk"),
        "fields": {
            "table": "sn_apm_tpm_discovered_technology",
            "listTitle": gs.getMessage("Hardware models with lifecycle risk")
        },
        "params": {
            "query": query +
            '^ORDERBYtechnology_lifecycle.earliest.lifecycle_date",
            "listView": ""
        }
    },
    'ariaLabel': {
        "aria-label": gs.getMessage("View list for hardware models with lifecycle risk")
    }
}
```

```

        }

    };

}

return false;

}

```

**4. Click **Submit**.**

### Update TPM Data for a business application or application service

Manually update the TPM lifecycle data including end of support date, end of extended support date, and end of life date for your software and hardware models for your business applications and application services.

#### Before you begin

Role required: admin

#### About this task

You can refresh the TPM lifecycle data manually for a selected business application or application service. A scheduled job *Populate TPM Discovered Technologies and Lifecycles* is also run on schedule or on-demand to update the lifecycle data for all business applications and application services.

#### Procedure

1. Navigate to **All > Application Portfolio Management > Enterprise Architecture Workspace > Workspace Home**.
2. Open the Portfolio List view by clicking the portfolio icon (.
3. Expand Technology Portfolio Management and select Overview.
4. Select the business application or application service link to open it.
5. Select the three-dot menu () and select **Update TPM Data**.

#### Result

An on-demand job starts to update the TPM data.

#### Related topics

[Schedule a job to generate TPM lifecycle data](#)

[Run a scheduled job to generate TPM lifecycle data](#)

### Enterprise Architecture Workspace reference

Reference topics that provide additional details about Enterprise Architecture Workspace such as the field descriptions, user roles, tables, guidelines, and domain separation information.

#### Create diagram form for a business application

An Enterprise architect can create a diagram using Lucidchart for a business application hierarchy and associate it with an architectural artifact.

## Create Diagram form fields

Field	Description
Diagram Name	Name of the diagram.
Diagram Type	<p>Type of the diagram. It can be either of the following:</p> <ul style="list-style-type: none"> <li>• Business Application Hierarchy</li> <li>• Business Capability Map</li> </ul> <p>This field is auto-populated when creating the diagram from a business application or business capability view.</p>
Diagramming Tool	The tool that you use to create the diagram. This field is automatically set to <b>Lucidchart</b> .
Business Application	<p>Name of the Business Application for which you are creating the diagram.</p> <p>This field is auto-populated when creating the diagram from a business application view.</p>
Link to Artifact	<p>Artifact to which you want to associate the diagram.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• <b>None</b>: Select to view the diagram but not associate with any artifact.</li> <li>• <b>New Artifact</b>: Select to create an artifact and associate the diagram.</li> <li>• <b>Existing Artifact</b>: Select to associate the diagram to an existing artifact.</li> </ul>
Artifact Name	Name of the artifact. This field appears only when <b>New Artifact</b> or <b>Existing Artifact</b> is selected from the <b>Link to Artifact</b> field.
Entities	<p>Entities that are included in the chart.</p> <p>Select the following to include in the diagram:</p> <ul style="list-style-type: none"> <li>• Application Service: Server (Hardware Model or Software Product)</li> <li>• Business Capability</li> <li>• Demand</li> <li>• Digital Integration</li> <li>• Digital Interface</li> </ul>

Field	Description
	<ul style="list-style-type: none"> <li>• Information Object</li> <li>• Project</li> </ul> <p><b>i Note:</b> The Project option is available when the PPM Standard plugin installed.</p>
Folder	Name of the Lucid folder. Select the folder where you want to save the diagram.

#### Related topics

[Create a Lucidchart diagram for a business application in the EA Workspace](#)

#### Create diagram for a business capability

An Enterprise architect can create a diagram using Lucidchart for a business capability maps and associate it with an architectural artifact.

#### Create diagram form fields

Field	Description
Diagram Name	Name of the diagram.
Diagram Type	<p>Type of the diagram. It can be either of the following:</p> <ul style="list-style-type: none"> <li>• Business Application Hierarchy</li> <li>• Business Capability Map</li> </ul> <p>This field is auto-populated when creating the diagram from a business application or business capability view.</p>
Include Business Applications	Option to include business applications.
All Business Capabilities	Option to include all business capabilities maps in the diagram.
Business Capabilities	<p>List of business capabilities for which you want to create the diagram. You can search and add multiple capabilities.</p> <p><b>i Note:</b> If you have selected the check box for <b>All Business Capabilities</b> in the previous step, then this field does not appear.</p>
Diagramming Tool	The tool using which you are creating the diagram. This field is automatically set to <b>Lucidchart</b> .

Field	Description
Link to Artifact	<p>Artifact to which you want to associate the diagram.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• <b>None</b>: Select to view the diagram but not associate with any artifact.</li> <li>• <b>New Artifact</b>: Select to create an artifact and associate the diagram.</li> <li>• <b>Existing Artifact</b>: Select to associate the diagram to an existing artifact.</li> </ul>
Artifact Name	Name of the artifact. This field appears only when <b>New Artifact</b> or <b>Existing Artifact</b> is selected from the <b>Link to Artifact</b> field.
Folder	Name of the Lucid folder. Select the folder where you want to save the diagram. When you select a folder, its sub folders are displayed.

#### Related topics

[Create a Lucidchart diagram for a business capability in the EA Workspace](#)

#### Create new TRM product request form

Create a new request to include a new software product to the TRM library. An email notification is sent to the approver for approval. The approver belongs to the Enterprise Architect group.

#### TRM Product form fields

Field	Description
Number	A unique, auto-generated identification number for the product request.
Publisher	Publisher of the software product. Look up and select a publisher from the Companies page.
Is New Product	Option to specify if it is a new product.
Requested TRM Phase	<p>Phase of the product. Use the following choice list: Eliminated: Invest: Maintain</p> <ul style="list-style-type: none"> <li>• Approved</li> <li>• Approved with Constraints</li> <li>• Divest</li> <li>• Evaluation</li> <li>• Unapproved</li> </ul>

Field	Description
Category	Category of the product. Look up and select a category from the TRM Categories page.
Software product	Name of the software.
Short Description	Description about the product request.
Business Justification	Business justification for the product request.

#### Related topics

[Create a TRM product request in the EA Workspace](#)

#### Create new TRM product form

As an Enterprise Architect, you can add a new software product to the TRM library. It creates the record directly without sending a request for approval.

### TRM Product form fields

Field	Description
Publisher	Publisher of the software product. Look up and select a publisher from the Companies page.
Category	Category of the product. Look up and select a category from the TRM Categories page.
Name	Name of the TRM product.
TRM Phase	Phase of the product. Use the following choice list: Eliminated: Invest: Maintain <ul style="list-style-type: none"> <li>• Approved</li> <li>• Approved with Constraints</li> <li>• Divest</li> <li>• Evaluation</li> <li>• Unapproved</li> </ul>
Investment direction	Purpose for the investment. Use the following choice list: <ul style="list-style-type: none"> <li>• Divest</li> <li>• Eliminated</li> <li>• Invest</li> <li>• Maintain</li> </ul>
Business Justification	Business justification for the product request.

#### Related topics

[Create a TRM product in the EA Workspace](#)

## Create new TRM product lifecycle form

Add a new lifecycle for a TRM product. It creates the record directly without sending a request for approval.

### TRM Product Lifecycle form fields

Field	Description
TRM Product	Name of the TRM product. Look up and select the product from the TRM Products page.
Version	Version of the TRM product.
Edition	Edition of the TRM product. Either Standard or Enterprise.
TRM Phase	Phase of the product. Look up and select a phase from the TRM Phases page.
Phase start date	Start date of the product lifecycle phase.
Phase end date	End date for the product lifecycle phase.
Description	Description about the product lifecycle request.

#### Related topics

[Create a TRM product lifecycle in the EA Workspace](#)

## Create new TRM product lifecycle request form

Add a new request to create a lifecycle for a TRM product. An email notification is sent to the approver for approval. The approver belongs to the Enterprise Architect group.

### TRM Product Lifecycle Request form fields

Field	Description
Number	A unique, auto-generated identification number for the product lifecycle request.
TRM Product	Name of the TRM product. Look up and select the product from the TRM Product page.
Version	Version of the TRM product.
Edition	Edition of the TRM product. Either Standard or Enterprise.
Requested TRM Phase	Phase of the product. Look up and select a phase from the TRM Phases as defined in the Setup page (Enterprise Architecture Workspace > Setup > TRM Phases).
Phase start date	Start date of the product lifecycle phase.
Phase end date	End date for the product lifecycle phase.

Field	Description
Business Application	Name of the business application. Look up and select a business application from the Business Applications page to associate it to the TRM product lifecycle.
Short Description	Description about the product lifecycle request.
Business Justification	Business justification for the product lifecycle request. It helps the approver to better understand the request.

#### Related topics

[Create a TRM product lifecycle request in the EA Workspace](#)

#### New Indicator form

Application indicators are business metrics that assess the applications across dimensions such as cost, quality, technical risk, investments, user satisfaction, and business value.

#### Indicator form fields

Field	Description
Name	Name of the application indicator.
Category	
Short description	Short summary of the application indicator.
Direction	Business application with maximum or minimum values. Select Minimize if lower values are better. Select Maximize if higher values are better.
Result limit	
Unit	A number, currency, time, duration in minutes, hours, days, month, or quarter, or rate.  You can also create units as per your requirements.
Automatic refresh interval	
Order	
Frequency	Frequency determines the interval at which the data for the indicator source should be collected.  The <b>Frequency</b> field is not available when <b>Performance Analytics</b> is selected from the <b>Data source</b> list.
Target maximum	Maximum value for the indicator.

Field	Description
	The <b>Target maximum</b> field is not available when <b>Assessments</b> is selected from the <b>Data source</b> list.
Active	Select the <b>Active</b> option to enable the indicator.
CI Class	CI type for which the score is generated.
Target minimum	Minimum value for the indicator.  The <b>Target minimum</b> field is not available when <b>Assessments</b> is selected from the <b>Data source</b> list.
Consider Absolute Values	Option to consider values from the <b>Target maximum</b> and <b>Target minimum</b> fields.  This field is available only when values are entered in the <b>Target maximum</b> and <b>Target minimum</b> fields.  When the check box is cleared, values for target maximum and target minimum are considered based on the <a href="#">intelligent logic</a> .
Datasource Configuration	
Data source	Defines the location from which the indicator receives data. <ul style="list-style-type: none"> <li>• <b>Performance Analytics:</b> Collects scores from indicators created in Performance Analytics. See <a href="#">Performance Analytics indicators</a>.</li> <li>• <b>Custom Script:</b> Allows you to write a script that collects data from another application. Beneath the <b>Data Source</b> field, a sample script appears. Customize the script as needed.</li> <li>• <b>Query Condition:</b> Allows you to select a table to run filters on to obtain data.</li> <li>• <b>Assessments:</b> Allows you to evaluate, score, and rank records by assessing records in a table. See <a href="#">Create metric types and generate assessable records</a>. To view results of survey assessments within APM, see <a href="#">Generate survey assessments and view results within APM</a>.</li> <li>• <b>Indicators:</b> Allows you to add dependent child indicators. Through the child indicators, data is gathered to the parent indicator.</li> </ul>

Field	Description
	For example, if the parent indicator is number of issues, the dependent indicators can be number of incident counts, number of problems, and changes. These dependent indicators are child indicators and the number of incidents, problems, and changes recorded are consolidated up to the parent indicator as the number of issues.
Indicator	<p>The <b>Indicator</b> field appears when <b>Performance Analytics</b> is selected from the <b>Data source</b> list.</p> <p>Indicators are statistics that are used to measure current conditions and forecast trends.</p> <p><b>i Note:</b> If the collection frequency of the application indicator is not greater than the frequency at which the data of the Performance Analytic indicator are generated, then the system displays an error message: Frequency of the indicator must always be greater than or equal to the frequency of the datasource configuration indicator. For more information, see <a href="#">Collection of PA indicator score data</a>.</p>
Default breakdown	Name of the Performance Analytics breakdown.
Normalization script	
Consolidation	<p>Computational method for aggregating the values, a function such as sum, average, maximum, or minimum.</p> <p>Default is Average. For example, Average is the sum of the monthly values divided by the total number of months in a quarter.</p> <p>If you select Maximum or Minimum, then it is the maximum value or the minimum value of a month in the quarter, respectively.</p> <p>If you select Sum, then it is an aggregate of all monthly values in the quarter.</p>
Assessment Metric Type	Type of metric that is used to assess the indicator.

Field	Description
	<b>Assessment Metric Type</b> field appears when the <b>Data source</b> is <b>Assessments</b> .
Assessment Metric Category	Category of the metric.
Click Through	
Click through URL navigation type	
Click through URL script	

#### Related topics

[Create an application indicator in the EA Workspace](#)

#### Profile indicator form

You can use indicators within many scoring profiles, which generate indicator scores unique to that scoring profile.

#### Profile Indicator form

Field	Description
Evaluate With In Scoring Profile Applications	Option for considering the business applications tied to the selected scoring profile in the evaluation of scores.  Clearing the check box entails evaluation of all business applications within the enterprise or across all scoring profiles.
Profile	Name of the application scoring profile.
Domain	The domain to which this indicator belongs.
Used in CI score calculation	Option for using the application indicator in calculating the application score.
Indicator	Name of the application indicator.
Weightage	Numeral value for the indicator. The weight provided in the application score profile for an indicator contributes to the total score of the application.  All indicator weight within a scoring profile must add up to 100.

#### Create a sub-capability form

Create a sub-capability and add it to the capability hierarchy map.

## Create sub-capability form fields

Field	Description
Name	Name of the sub-capability.
Description	A short description of the sub-capability.
Parent	Name of the parent capability for the sub-capability that you're creating.

Related topics

[Create a sub-capability](#)

### Create information object form

An information object captures the logical data for the business application.

## Information Object form fields

Field	Description
Name	Name of the information object.
Data classification	Category of data.  Displays the classification tags applied on the information object.
Owned by	User who owns the information object.
Business Unit	Business unit that owns the information object.
Department	Department in the business unit that actually owns the information.
Description	Short description of the information object.

Related topics

[Create information object](#)

### Business Capability form

Business Capability is a common table used within the Application Portfolio Management application.

## Business Capability form fields

Field	Description
Name	Name of the business capability.
Parent	Name of the parent capability for the capability that you're creating.
Level	Level at which the capability is in the hierarchy. This field is auto-populated and can't be edited.

Field	Description
Business Unit	Name of the business unit in the organizational structure.
Order	Position of the capability in the sequential order of all other business capabilities in that capability hierarchy.
Department	Name of the department in the organizational structure.
Owned by	User who owns the business capability.
Leaf Node	Option to select if the capability doesn't have a child capability.
Hierarchy ID	Hierarchy ID of the capability. This field is auto-populated based on the order.
Description	A short description of the business capability.

Related topics

[Create a business capability in the EA Workspace](#)

### Digital integration form

The digital integration represents the integration between two business applications.

### Digital integration form fields

Field	Description
Subscriber Business Application	Name of the subscriber business application that will be subscribing for the integration.
Subscriber Digital Interface	Name of the digital interface that will be subscribing for the integration.
Provider Business Application	Name of the provider business application that will be providing the integration.
New Provider Digital Interface	Option to create a new digital interface.
Provider Digital Interface	Name of the digital interface.
IT Owner	Name of the IT owner for the integration.
Description	Description about the digital integration.
Digital Integration Name	<p>Name of the digital integration.</p> <p>This field is auto-populated when the <b>Subscriber Business Application</b>, <b>Provider Business Application</b>, and the <b>Digital Interface</b> fields are selected. You can modify the auto-populated name.</p>
Type	<p>Type of the integration.</p> <p>Use the following options:</p>

Field	Description
	<ul style="list-style-type: none"> <li>• Data Integration</li> <li>• Process Integration</li> <li>• User Interface Integration</li> </ul>
Subtype	<p>Subtype of the integration.</p> <p>This field appears only when <b>Data Integration</b> is selected from the <b>Type</b> field. Use the following options:</p> <ul style="list-style-type: none"> <li>• Process configuration</li> <li>• Foundation data</li> <li>• Configuration items</li> <li>• Events</li> <li>• Reporting</li> <li>• Sys log</li> </ul>
Trigger	<p>How to trigger the integration.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Manual</li> <li>• Scheduled</li> <li>• Process Driven</li> <li>• Event</li> </ul>
Interval	<p>Frequency to trigger the integration.</p> <p>Options for the interval are as follows:</p> <ul style="list-style-type: none"> <li>• Seconds</li> <li>• Minutes</li> <li>• Hours</li> <li>• Days</li> <li>• Weeks</li> <li>• Months</li> <li>• Quarters</li> <li>• Years</li> <li>• On Demand</li> <li>• Real Time.</li> </ul>
Business Owner	Business owner of the integration.

## Related topics

[Create a digital integration in the EA Workspace](#)

## Create demand form

Use a demand as a step to identify cost-saving opportunities on the business applications and meet your targets.

## Create demand form

Field	Description
Action	<p>The course of action for the new demand.</p> <p><b>Note:</b> The <b>Action</b> field is available only when you launch the form within the Application Portfolio Management module when the Application Portfolio Management (APM) plugin is activated.</p>
Name	Name of the demand.
Due date	Requested completion date of the demand.
Number	A unique, auto-generated identification number for the demand.
Start date	Start date of the demand.
Details	
Business capabilities	One or more business capabilities to associate the demand with.
Business applications	<p>Business applications that you add to the demand.</p> <p>You can select any business application in your enterprise, irrespective of it being related or not related to the capability that you've selected in the <b>Business capabilities</b> field.</p>

### Related topics

[Create a demand using the bubble chart](#)

[Create a demand using the list view](#)

### Business application form

Using the business application form, you can add any business application to assess and track its costs, usage, business value, functional fitment, and risks.

## Business application form

Field	Description
Name	Name of the business application.
Number	A unique, auto-generated identification number with a configurable prefix for the business application record.
Business process	Business process that the application is used for.

## Business application form (continued)

Field	Description
Application type	<p>Type of application. This field indicates whether the application is custom or commercial.</p> <ul style="list-style-type: none"> <li>• <b>Homegrown:</b> The application is built in-house.</li> <li>• <b>End-user computing (EUC):</b> The application is used by end users to perform their daily tasks.</li> <li>• <b>Commercial off-the-shelf (COTS):</b> The application is a commercial application purchased from another company.</li> <li>• <b>SaaS:</b> The application is a cloud application managed by a third-party vendor.</li> </ul>
Publisher	Name of the application publisher.
Architecture type	<p>Type of application architecture.</p> <ul style="list-style-type: none"> <li>• <b>Client Server:</b> Application structure that divides tasks between the service providers and service requesters.</li> <li>• <b>N-Tier:</b> A multi-layered architecture where presentation, processing, and data management exist as physically separate layers.</li> <li>• <b>Web-based:</b> Applications that are accessed over a network connection.</li> <li>• <b>Other:</b> Any other type of architecture.</li> <li>• <b>Platform Host:</b> Hardware or software that hosts the business application.</li> <li>• <b>Platform Application:</b> Application that runs on a platform and can be associated to a host. In this case, the business application relies on the platform for standard operations such as development tools, execution services, and data services.</li> </ul>
Platform host	<p>A hardware or software that hosts the business application.</p> <p>This field is required if you select the <b>Platform Application</b> value in the <b>Architecture type</b> field.</p>
Install type	Type of install. Use the following options:

## Business application form (continued)

Field	Description
	<ul style="list-style-type: none"> <li>• <b>On Premise</b></li> <li>• <b>Cloud</b></li> <li>• <b>Hybrid</b></li> <li>• <b>Third Party Hosted</b></li> </ul>
Platform	Applications hosted by platform.
Business unit	Business unit that is associated with the selected business application.
Department	Department that is associated with the selected business application.
Installed	Date and time when the application was installed.
Status	<p>Operational status of the application. Use the following options:</p> <ul style="list-style-type: none"> <li>• <b>Implementing</b></li> <li>• <b>In Production</b></li> <li>• <b>Pilot</b></li> <li>• <b>Retired</b></li> <li>• <b>Under Evaluation</b></li> </ul> <p>Auditing is enabled for this field. Thus, whenever you update the value in this field, the <b>Activities</b> field on the <b>Activities</b> tab displays the update.</p>
Life cycle stage	Life-cycle stage of the application. This field is auto-populated based on the value selected in the <b>Status</b> field. The data is fetched from the life-cycle mapping [life_cycle_mapping] table.
Application scoring profile	The profile used to calculate the application score for strategy.
Application category	The application purpose and function. Use this information to rationalize or consolidate applications.
Application family	A set of related applications that have a common platform or vendor.
Technology stack	Technology stack on which the application was built.
User base	Number of users that are using the applications.

**Business application form (continued)**

Field	Description
	Auditing is enabled for this field. Thus, whenever you update the record in this field, the <b>Activities</b> field on the <b>Activities</b> tab displays the update.
Active user count	Number of active users out of the overall user base. Auditing is enabled for this field.
Last change applied date	Date on which the application was last updated. Auditing is enabled for this field.
Accessibility level	Accessibility level of the business application. Use the following options: <ul style="list-style-type: none"> <li>• <b>A (lowest)</b></li> <li>• <b>AA (mid-range)</b></li> <li>• <b>AAA (highest)</b></li> </ul>
Age in months	Age of the business application, in months. This field is auto-populated when the date and time are entered in the <b>Installed</b> field.
Description	Unique description of the application.
Model ID	Product model ID of the business application.
Contract	
Vendor	Vendor details of the application.
Support vendor	Vendor who currently supports the application.
Contract end date	Expiry date of the subscription contract or the support contract. Auditing is enabled for the field.
Planned Disposition	
Planned disposition	Planned disposition of a business application. Use the following options: <ul style="list-style-type: none"> <li>• <b>Invest</b></li> <li>• <b>Sustain</b></li> <li>• <b>Migrate</b></li> <li>• <b>Retire</b></li> </ul>
Reasoning	Reason for the planned disposition decision.
Owners	

**Business application form (continued)**

Field	Description
Business owner	Person who owns the application from the business side. Every application should have an assigned business owner.
Managed by	User managing the business application.
Managed by group	User group managing the business application.
IT application owner	<p>Person who owns the application from the IT side.</p> <p>The business application must have an owner assigned to it.</p>
Last updated by	Person who last updated the application record.
Supported by	User supporting the business application.
Support group	User group supporting the business application.
Compliance	
Business criticality	Determines how critical the application is to the business. Auditing is enabled for this field.
Emergency tier	Actions or plans executed for the application in an emergency situation.
Data classification	<p>Security level for the data in the application. This attribute determines which Governance, Risk, and Compliance (GRC) policies are applicable to the application. Use the following options:</p> <ul style="list-style-type: none"> <li>• <b>Confidential</b></li> <li>• <b>Highly Sensitive</b></li> <li>• <b>Internal</b></li> <li>• <b>Public</b></li> </ul> <p>Auditing is enabled for the field.</p>
Certified	Status of the application that meets your requirements or complies with the policies of your organization.
Activities	
Work notes	Work notes entered by you.

**Related topics**[Edit business application details](#)

## Application model life-cycle details form

The application model life cycle helps you to better manage the life cycle of a business application.

### Application model life-cycle details form

Field	Description
Model	Model ID of the business application. This field is auto-populated from the <b>Model ID</b> field value of the Business application form.
Lifecycle type	Type of the life cycle. The available options are: <ul style="list-style-type: none"> <li>• <b>Internal</b></li> <li>• <b>Publisher</b></li> </ul>
Lifecycle phase	The phase of the life cycle. The available options are: <ul style="list-style-type: none"> <li>• <b>General Availability</b></li> <li>• <b>End of Sale</b></li> <li>• <b>End of Support</b></li> <li>• <b>End of Extended Support</b></li> <li>• <b>End of Life</b></li> </ul>
Source	Source of the life cycle. This field is auto-generated from the Business application form.
Description	Short description of the application life cycle.
Phase start date	Start date of the business application life-cycle phase.
Phase end date	End date for the business application life-cycle phase.
Risk	Risk associated with the application life cycle. The available options are: <ul style="list-style-type: none"> <li>• <b>Very High</b></li> <li>• <b>High</b></li> <li>• <b>Moderate</b></li> <li>• <b>Low</b></li> <li>• <b>None</b></li> </ul>
Active	Option to activate the life cycle.

## Related topics

[Add business application lifecycle data using the bubble chart](#)[Add business application lifecycle data using the list view](#)**Business Application Form**

APM helps system admins add any business application to assess and track its costs, usage, business value, functional fitment, and risks.

**Business Application Form fields**

Field	Description
Name	Name of the business application.
Number	Unique, auto-generated identification number with a configurable prefix for the business application record.
Business process	Business process for which the application is used.
Portfolio	<p>Name of the portfolio to which the application belongs.</p> <p>This field appears when you activate the PPM Standard (com.snc.financial_planning_pmo) plugin.</p>
Application type	<p>Type of application. This field indicates whether the application is custom or commercial.</p> <ul style="list-style-type: none"> <li><b>Homegrown:</b> Application that is built in-house.</li> <li><b>Commercial off-the-shelf (COTS):</b> Application is a commercial application purchased from another company.</li> <li><b>SaaS:</b> Application is a cloud application managed by third-party vendor.</li> </ul>
Publisher	Name of the application publisher.
Architecture type	<p>Type of application architecture.</p> <ul style="list-style-type: none"> <li><b>Client Server:</b> Application structure that divides tasks between the service providers and service requesters.</li> <li><b>N-Tier:</b> A multi-layered architecture where presentation, processing, and data management exist as physically separate layers.</li> <li><b>Web-based:</b> Applications accessed over a network connection.</li> <li><b>Other:</b> Any other type of architecture.</li> <li><b>Platform Host:</b> Hardware or software that hosts the business application.</li> <li><b>Platform Application:</b> Application that runs on a platform and can be associated to a host.</li> </ul> <p>In this case, the business application relies on the platform for standard operations such as development tools, execution services, and data services.</p>

Field	Description
Platform Host	<p>A hardware or software that hosts the business application.</p> <p>This field is required if you select the <b>Platform Application</b> value in <b>Architecture type</b> field.</p>
Install type	<p>Type of install. Use the following options:</p> <ul style="list-style-type: none"> <li>• On Premise</li> <li>• Cloud</li> <li>• Hybrid</li> <li>• Third Party Hosted</li> </ul>
Platform	Applications hosted by platform.
Business Unit	Business unit that is associated with the selected business application.
Department	Department that is associated with the selected business application.
Installed	Date and time when the application was installed.
Status	<p>Operational status of the application. Use the following options:</p> <ul style="list-style-type: none"> <li>• Implementing</li> <li>• In Production</li> <li>• Pilot</li> <li>• Retired</li> </ul> <p>Auditing is enabled. Thus, whenever a user updates the value in this field, the <b>Activities</b> field in the <b>Activities</b> tab displays the update.</p>
Life-Cycle Stage	Life-cycle stage of the application. This field is auto-populated based on the value selected in the <b>Status</b> field. The data is fetched from the life-cycle mapping [life_cycle_mapping] table.
Life-Cycle Stage Status	Status of the life-cycle stage of the application. This field is auto-populated based on the value selected in the <b>Status</b> field. The data is fetched from the life-cycle mapping [life_cycle_mapping] table.
Application scoring profile	The profile used to calculate the application score for strategy.
Application category	The application purpose and function. Use this information to rationalize or consolidate applications.
Application family	A set of related applications that have a common platform or vendor.
Technology stack	Technology stack on which the application was built.
User base	<p>Number of users using the applications.</p> <p>Auditing is enabled. Thus, whenever a user updates the record in this field, the <b>Activities</b> field in the <b>Activities</b> tab displays the update.</p>

Field	Description
Active user count	Number of active users out of the overall user base. Auditing is enabled for the field.
Last change applied date	Date on which the application was last updated. Auditing is enabled for the field.
Accessibility level	Accessibility level of the business application. Use the following options: <ul style="list-style-type: none"> <li>• A (lowest)</li> <li>• AA (mid-range)</li> <li>• AAA (highest)</li> </ul>
Age in months	Age of the business application in months. This field is auto-populated when the date and time is entered in the <b>Installed</b> field.
Description	Unique description of the application.
Model ID	Product model ID of the business application.
<b>Contract</b>	
Vendor	Vendor details of the application.
Support vendor	Vendor who currently supports the application.
Contract end date	Expiry date of the subscription contract or the support contract. Auditing is enabled for the field.
<b>Planned Disposition</b>	
Planned Disposition	Planned disposition of a business application. Use the following options: <ul style="list-style-type: none"> <li>• Invest</li> <li>• Sustain</li> <li>• Migrate</li> <li>• Retire</li> </ul>
Migration Strategy	Migration strategy for the business application. This field appears only when <b>Migrate</b> is selected from the <b>Planned Disposition</b> field. Use the following options: <ul style="list-style-type: none"> <li>• Rehost</li> <li>• Replatform</li> <li>• Repurchase</li> <li>• Refactor</li> </ul>
Target Business Application	Name of the business application for which you're adding the planned disposition. This field appears only when <b>Migrate</b> is selected from the <b>Planned Disposition</b> field.
Reasoning	Reason for the planned disposition decision.
<b>Owners</b>	

Field	Description
Portfolio manager	<p>Owner of the portfolio, typically from IT.</p> <p>This field appears when you activate the PPM Standard plugin (com.snc.financial_planning_pmo).</p>
Business owner	Person who owns the application from the business side. Every application should have an assigned business owner.
Managed by	User managing the business application.
Managed by group	User group managing the business application.
IT Application owner	<p>Person who owns the application from the IT side.</p> <p>The business application must have an owner assigned to it.</p> <p>If you're designated as the IT Application owner, then you can view all the applications for which you're the owner in the <b>My Applications</b> menu.</p>
Last updated by	Person who last updated the application record.
Supported by	User supporting the business application.
Support group	User group supporting the business application.
Compliance	
Business criticality	How critical the application is to the business. Auditing is enabled for the field.
Emergency tier	Actions or plans executed for the application in an emergency situation.
Data classification	<p>Security level for the data in the application. This attribute determines which Governance, Risk, and Compliance (GRC) policies are applicable to the application.</p> <p>Auditing is enabled for the field.</p>
Certified	Status of the application that it meets requirements or complies with the policies of your organization.
Activities	
Work notes	Work notes entered by you.

## Related topics

[Add a business application](#)

## Demand form

Use a demand as a step to identify cost-saving opportunities on the business applications and meet your targets.

## Demand form

Field	Description
Action	The course of action of the new demand.
Name	Name of the demand.
Category	Category of the demand. Use the following: <ul style="list-style-type: none"><li>• <b>Strategic</b></li><li>• <b>Operational</b></li></ul>
Type	Type of demand. Use the following: <ul style="list-style-type: none"><li>• <b>Project</b></li><li>• <b>No Conversion</b></li></ul>
Number	A unique, auto-generated identification number for the demand.
Start date	Start date of the demand.
Due date	Requested completion date of the demand.
Details	
Portfolio	Portfolio indicating the business focus of the demand.
Program	Name of the program that the demand belongs to.
Demand manager	Name of the demand manager.
Collaborators	Users who can edit or contribute to the demand. A demand requester can select any user as a collaborator.
Department	Department in a business unit that the demand submitter belongs to.  <b>i Note:</b> If you don't select a department, the value defaults to the name of the department that the submitter belongs to.
Business Unit	Business unit that the demand submitter belongs to.
Impacted Business Units	The business unit that is impacted due to the submitted demand.
Business Capabilities	One or more business capabilities to associate the demand with.

Field	Description
Business Applications	One or more business applications to associate the demand with. You can select any business application in your enterprise, irrespective of it being related or not related to the capability that you've selected in the <b>Business Capabilities</b> field.

Related topics

[Edit a demand associated with a business application](#)

### Edit a project form

Use application rationalization to edit details of an existing project associated with a business application.

### Edit a project form

Field	Description
Project Name	The name assigned to the project.
Number	Unique identification number for the demand.
Schedule	Schedule associated with the project.
Portfolio	Portfolio that the project belongs to.
Program	Program that the project is associated with.
Calculation	The type of calculation methodology associated with the project. Use the following: <ul style="list-style-type: none"> <li>• <b>Automatic</b></li> <li>• <b>Manual</b></li> </ul>
Planned duration	Expected duration of the project in days and hours.
State	State of the project. Use the following: <ul style="list-style-type: none"> <li>• <b>Pending</b></li> <li>• <b>Open</b></li> <li>• <b>Work in Progress</b></li> <li>• <b>Closed Complete</b></li> <li>• <b>Closed Incomplete</b></li> <li>• <b>Closed Skipped</b></li> </ul>
Project manager	Name of the project manager.
Description	Short description of the project.
Business Applications	One or more business applications to associate the project with. You can select

Field	Description
	any business application in your enterprise, irrespective of it being related or not related to the capability that you've selected in the <b>Business Capabilities</b> field.
Business Capabilities	One or more business capabilities to associate the project with.

## Related topics

[Edit a project associated with a business application](#)

### Digital interface form

Digital interfaces are provided as part of a business application, but they can also stand on their own. Interfaces provide a way for other business applications to interact with the applications.

### Digital interfaces form fields

Field	Description
Name	Name of the digital interface.
Number	Number of the digital interface. This field is automatically generated and can't be edited.
Provider Business Application	Name of the provider business application which will be providing the integration.
Interface Type	Type of API used by the interface.  Use the following options: <ul style="list-style-type: none"><li>• Open API</li><li>• Partner API</li><li>• Internal API</li></ul>
Parent	Parent interface name.
Version	Version of the interface.
Life Cycle Stage	Life cycle stage of the interface.
Life Cycle Stage Status	Life cycle stage status of the interface.
Model ID	Model ID of the interface.
Description	Description for the digital interface.
Owners	
Business Owner	Business owner of the digital interface.
IT Owner	IT owner of the digital interface.
Supported By	User name who supports the interface.
Supported Group	Group name which supports the interface.
Functional	

Field	Description
Protocol	Type of protocol used by the interface. Choices include REST, SOAP, LDAP, and so on.
Message Format	Format of the message in interface. Choices include JSON, XML, CSV, and so on.
Authentication	
Authentication Type	<p>Type of authentication used to authenticate the interface.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• Basic Auth</li> <li>• OpenID Connect</li> <li>• Certificate</li> <li>• WS-Security</li> <li>• LDAP</li> <li>• None</li> <li>• Other</li> </ul>
Authorization Type	<p>Type of authorization used to authorize the interface.</p> <p>Use the following options:</p> <ul style="list-style-type: none"> <li>• OAuth 2.0 Token</li> <li>• JWT Web Token</li> <li>• SAML 2.0 Token</li> <li>• Other</li> <li>• No authorization</li> </ul>
Activities	
Work notes	Comments about the interface.

#### Related topics

[Create a digital interface in the EA Workspace](#)

#### Create business process form

A business process to group applications that help accomplish an application service.

### Business Process form fields

Field	Description
Business Process	
Name	Unique name for the business process.
Parent	Parent business process

Field	Description
	<p><b>Note:</b> If the parent process exists, it creates a hierarchy of business processes.</p>
Review frequency	Frequency for reviewing the business process.
Description	Short description of the business process.
Ownership	
Managed By Group	Group that maintains the business process.
Approval group	Group that reviews and approves the business process.
Owned by	User responsible for the business process. This user is a member of the <b>Managed by Group</b> .
Business Impact	
Business criticality declared	<p>Criticality of the business process based on your subjective assessment. The available options are:</p> <ul style="list-style-type: none"> <li>• <b>1- most critical</b></li> <li>• <b>2- somewhat critical</b></li> <li>• <b>3- less critical</b></li> <li>• <b>4- not critical</b></li> </ul>
Impact to confidentiality	<p>Risk rating for the risk of loss of confidentiality. Confidentiality loss leads to leakage of confidential information. The available options are:</p> <ul style="list-style-type: none"> <li>• <b>High</b></li> <li>• <b>Medium</b></li> <li>• <b>Low</b></li> </ul>
Impact to availability	<p>Risk rating for the risk of loss of availability. Unavailability of the system may cause delays in decision making, business interruptions, loss of revenue, and customer dissatisfaction. The available options are:</p> <ul style="list-style-type: none"> <li>• <b>High</b></li> <li>• <b>Medium</b></li> <li>• <b>Low</b></li> </ul>
Business critically determined	Computed criticality of the business process based on the assessment of the sub-processes. The available options are:

Field	Description
	<ul style="list-style-type: none"> <li>• <b>1- most critical</b></li> <li>• <b>2- somewhat critical</b></li> <li>• <b>3- less critical</b></li> <li>• <b>4- not critical</b></li> </ul>
Impact to integrity	<p>Risk rating for the risk of impact to integrity. Impact to integrity has consequences for businesses and employees, including fines and damage to your brand, reputation, and people. The available options are:</p> <ul style="list-style-type: none"> <li>• <b>1- High</b></li> <li>• <b>2- Medium</b></li> <li>• <b>3- Low</b></li> </ul>

## Related topics

[Create business process](#)

## Application service form

An application service is a set of interconnected applications and hosts which are configured to offer a service to the organization. Application services can be internal, like an organization email system or customer-facing, like an organization website.

## Application service form fields

Field	Description
<b>Key Attributes</b>	
Name	Name of the application service.
Location	Set the location for the application service.
Short Description	Unique description of the application service.
Created	This is field is non-editable field.
Created by	This is field is non-editable field.
Updated	This is field is non-editable field.
Updated by	This is field is non-editable field.
Support group	Name of the user group who supports the application service.
Supported by	Name of the user who supports the application service.
Managed by	Name of the user who manages the application service.
Managed by group	Name of the user group who manages the application service.
Environment	Name of the environment such as Development, Production or Test.
Company	Name of the company.

Field	Description
Manufacturer	Name of the manufacturer.
Model ID	Model ID associated with the service.
Model number	Number of the Model.
Category	This field is auto-populated as Business Service.
Sub-category	This field is auto-populated as Service.
Department	Name of the department.
Discovery Attributes	
Discovery source	Discovery source of the application service.
First discovered	Select the first discovered date.
Most recent discovery	Select the most recent discovery date.
Correlation ID	Enter the co-relation ID.
Skip sync	Option to select to skip the sync. This is a read-only field.
Operational Attributes	
Life Cycle Stage	Select the life cycle stage of the application service.
Life Cycle Stage Status	Select the status of the life cycle stage.
Attested by	Name of the user who attested.
Attested Date	Date when the attestation is done.
Attestation Status	Select the attestation status as Attested or Rejected.
Install Status	Reason for the planned disposition decision.
Operational status	Select the operational state of the application service.
Fault count	Number of the fault count.
Maintenance schedule	Name of the maintenance schedule.
Schedule	Select the schedule for maintenance.
Requires verification	Option to select to request verification. This is a read-only field.
More Attributes	
Fully qualified domain name	Fully qualified domain name of the application service.
IP Address	Enter IP address.
MAC Address	Enter the MAC address.
Serial number	Enter the serial number.
DNS Domain	Enter DNS domain.
Attributes	Enter attributes names.
Comments	Add comments.
Monitor	Option to select monitor.
Can Print	Option to print the details.

Related topics

[Add an application service in the EA Workspace](#)

### New total cost of ownership form

Application TCO helps enterprise architects to evaluate the cost of business applications and prioritize application portfolio.

### Total cost of ownership form

Field	Description
Business application	Name of the business application for which you are creating the total cost of ownership.
Cost type	Cost type used in the TCO calculation.
Cost	Select the currency type and enter the cost of the business application.
Fiscal period	Select the fiscal period to calculate the total cost of ownership.
Billing date	Select a date for the billing.
Reference	Enter reference details.
Vendor	Select the vendor of the business application.
Source	Select the source of the TCO.
Source cost type	Select the cost type as defined in the source of the TCO. This field is editable only when a source is selected in the <b>Source</b> field.
Short description	Description of the TCO.

### Overview of the Setup page in the Enterprise Architecture Workspace

Using the Setup page in the Enterprise Architecture Workspace, as an Enterprise Architect, you can configure Application Portfolio Management (APM) features within the EA Workspace.

You can configure the following categories:

#### Application Categories

An application category is a grouping of applications by their purpose and function, fields, or areas. Such a categorization helps you to consolidate applications and rationalize decisions. You can create an application category or edit an existing one to align it with your business requirements. To create an application category, see [Create an application category in the EA Workspace](#).

#### Application Category Groups

An application category group is a collection of application categories. Category groups help with the filtering and reporting of the application categories. To create an application category group, see [Create an application category group in the EA Workspace](#).

#### Application Families

An application family is an attribute to group a set of related applications based on manufacturer classification of their products into product suites. To create an application family, see [Create an application family in the EA Workspace](#).

#### Indicators

Application indicators are business metrics that assess the applications across dimensions such as cost, quality, technical risk, investments, user satisfaction, and business value. To create an application indicator, see [Create an application indicator in the EA Workspace](#).

#### Scoring Profiles

The application scores help you to evaluate the applications and make strategic decisions on them. To create a scoring profile, see [Create new scoring profile](#).

#### TRM Phases

Define TRM phases for your TRM products. The color and shape of a phase are used to represent the phase of the TRM product. To create a TRM phase, see [Create a Technology Reference Model \(TRM\) phase](#).

#### TRM Categories

A TRM category is a grouping of TRM software products by their purpose and function. The categorization helps you to consolidate TRM products and rationalize decisions. You can create a TRM category or edit an existing one to align it with your business requirements. You can define categories or rely on the Software Asset Management product classification. To create a TRM category, see [Create a Technology Reference Model \(TRM\) category in the EA Workspace](#).

#### Information Data Domains

Data domain is a collection of information objects. Relate an information object to the database catalog of a database instance to collect the physical data. ServiceNow Discovery finds database catalog that lists all the catalog objects, or databases, discovered for an instance of a database. To create a data domain, see [Create data domain in the EA Workspace](#).

#### Architectural Artifact Categories

The architectural artifact categories enable you to categorize and manage artifacts more efficiently. To create an architectural artifact category, see [Create an architectural artifact category in the EA Workspace](#).

#### TCO

The Application total cost of ownership (TCO) feature helps you to leverage application costs to prioritize the application portfolio and align with the business strategy. For more details, see [Application total cost of ownership \(TCO\) in Enterprise Architecture Workspace](#).

## Setup EA Workspace

The screenshot shows the ServiceNow interface for the Enterprise Architecture workspace. The left sidebar has a 'Setup' section with links like Application Categories, Application Category ..., Application Families, Indicators, Scoring Profiles, TRM Phases, TRM Categories, Information Data Do..., Architectural Artifact ..., TCO, Sources, and Cost Types. The main area is titled 'Application Categories - All' with 47 items. It includes columns for Name, Category group, Description, and Domain. The data table lists various categories such as Accounts Payable, Business Intelligence - ETL, Business Intelligence - Reports, Consolidation, Contracts, Corporate Communications, Customer Analytics, Customer Care, Customer Sales, Customer Support, Enterprise Knowledge Management, Equipment, Facilities, and Finance. Each row shows its category group (e.g., Finance, Business Intelligence), description (e.g., ATUM, Business Intelligence - ETL), and domain (global). At the bottom, it says 'Showing 1-20 of 47' and has a page navigation bar.

Name	Category group	Description	Domain
Accounts Payable	Finance	ATUM	global
Business Intelligence - ETL	Business Intelligence	Business Intelligence - ETL	global
Business Intelligence - Reports	Business Intelligence	Business Intelligence - Reports	global
Consolidation	Finance	ATUM	global
Contracts	Supply Chain Management	Contracts	global
Corporate Communications	Cross-Function Capabilities	ATUM	global
Customer Analytics	Sales & Marketing	ATUM	global
Customer Care	Customer Service	ATUM	global
Customer Sales	Sales & Marketing	ATUM	global
Customer Support	Customer Support	Customer Support	global
Enterprise Knowledge Management	Cross-Function Capabilities	ATUM	global
Equipment	Facilities & Assets	ATUM	global
Facilities	Facilities & Assets	ATUM	global
Finance	Finance	Finance	global

### Create an application category in the EA Workspace

Create an application category or edit an existing one to align it with your business requirements. An application category is a grouping of applications by their purpose and function, fields, or areas. Such a categorization helps you to consolidate applications and rationalize decisions.

#### Before you begin

Role required: admin

#### About this task

Each application should have an application category defined. This field is used to describe the purpose of the application, and the key business function this application supports. You can keep the categorization at a high level, like a business function. For example, Sales, HR, Marketing, and Manufacturing. The **Application category** field is used to filter Analysis dashboards. A dashboard is a 2x2 matrix plotting business value versus technical risk.

#### Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **Application Categories**.
3. Select **New**.
4. Set the name, group, and description for the application category.
5. Select **Save**.

### Create an application category group in the EA Workspace

Create an application category group and align it with your business requirements. An application category group is a collection of application categories. Category groups help with the filtering and reporting of the application categories.

#### Before you begin

Role required: admin

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **Application Category Groups**.
3. Select **New**.
4. Enter a name and description for the application category group.
5. Select **Save**.

### Create an application family in the EA Workspace

Create an application family and align it with your business requirements. An application family is an attribute to group a set of related applications based on the manufacturer classification of their products into product suites.

#### Before you begin

Role required: admin

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **Application Families**.
3. Select **New**.
4. Enter a name, description, and domain for the application family.
5. Select **Save**.

### Create an application indicator in the EA Workspace

Create an application indicator to assess the application across dimensions such as cost, quality, technical risk, investments, user satisfaction, and business value.

#### Before you begin

Role required: sn\_apm.apm\_admin

#### About this task

Each indicator periodically captures related application data, which is used to calculate the application score. The assessment of applications is done on an extensible framework, which is based on the various configured indicators. If you require indicators other than the preconfigured ones to calculate the application score, then you can create an indicator based on your business requirements.

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **Indicators**.
3. Select **New**.
4. On the New Indicator form, fill in the fields.  
For field information, see [New Indicator form](#).

### Create new scoring profile

Create an application score profile and update the default application profile with new profile indicators per your requirements. After you create a score profile, you have to associate it with indicators.

**Before you begin**

Role required: admin

**About this task**

You can create or update the scoring profile with new indicators and associate it with the business application. You can also use the same indicators within many scoring profiles, which generate indicator scores unique to that scoring profile.

**Procedure**

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **Scoring Profiles**.
3. Select **New**.
4. Enter a name, description, and select a CI class as Business Application or Business Capability.
5. Select **Save**.

**Attach a profile indicator with an application scoring profile**

You must associate scoring profiles with profile indicators.

**Before you begin**

Role required: sn\_apm.apm\_admin

**About this task**

You can create or update the scoring profile with new indicators and associate it with the business application. You can also use the same indicators within many scoring profiles, which generate indicator scores unique to that scoring profile.

**Procedure**

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Under **Scoring Profiles**, select **All**.
3. Select the scoring profile that you want to associate with a profile indicator.
4. Associate an application indicator on the **Profile Indicators** tab by selecting **New**.
5. On the Create a new profile indicator form, fill in the fields.  
For a description of the field values, see [Profile indicator form](#).
6. Select **Save**.

**Activate or turn off an application indicator**

Enable or disable application indicators according to your business requirements.

**Before you begin**

Role required: sn\_apm.apm\_admin

**Procedure**

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Under **Indicators**, select **All**.
3. Double-click the Active column value for a particular indicator.
4. Select the relevant state for that indicator.  
Available options:

- **true:** This state denotes that the indicator is calculated and used in the overall score calculation by fiscal period.
- **false:** This state denotes that the indicator is turned off and isn't used to calculate the overall application score by fiscal period.

**5. Select OK.**

### Create a Technology Reference Model (TRM) phase

Define your own TRM phase for the TRM products.

#### Before you begin

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

#### About this task

The color and shape of a phase are used to represent the phase of the TRM product.

#### Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **TRM Phases**.
3. Select **New**.

The following TRM phases are available from the base system:

- Approved: The technology is approved for use.
- Approved with Constraints: The technology can be used within the specified constraints specified in the comments.
- Divest: A decision was taken to divest from the use of the technology.
- Evaluation: This technology is being evaluated and can't be used to production purposes.
- Unapproved: The technology isn't permitted to be used.

4. On the TRM Phase form, fill in the fields.  
For field information, see [TRM Phase form](#).

5. Select **Save**.

### Create a Technology Reference Model (TRM) category in the EA Workspace

Add a TRM category to group the TRM software products.

#### Before you begin

The user must be part of the Enterprise Architect Group.

Role required: sn\_apm.apm\_analyst

#### About this task

A TRM category is a grouping of TRM software products by their purpose and function. The categorization helps you to consolidate TRM products and rationalize decisions. You can create a TRM category or edit an existing one to align it with your business requirements. You can define categories or rely on the Software Asset Management product classification.

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **TRM Categories**.
3. Select **New**.
4. On the TRM Category form, fill in the fields.  
For field information, see [TRM Category form](#).
5. Select **Save**.

## Create data domain in the EA Workspace

Relate an information object to the database catalog of a database instance to collect the physical data.

### Before you begin

Role required: sn\_apm.apm\_admin

### About this task

A data domain is a collection of information objects. ServiceNow® Discovery finds the database catalog that lists all the catalog objects, or databases, discovered for an instance of a database.

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **Information Data Domains**.
3. Select **New**.
4. On the Data Domain form, fill in the fields.  
For field information, see [Data Domain form](#).
5. Select **Save**.

## Create an architectural artifact category in the EA Workspace

Create# or edit an artifact category. Assign the category to an architectural artifact. Categories enable you to categorize and manage artifacts more efficiently.

### Before you begin

Role required: sn\_apm.apm\_admin

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **Architectural Artifact Category**.
3. Select **New**.
4. On the Architectural Category form, fill in the fields.  
For field information, see [Architectural category form](#).
5. Select **Save**.

## Application total cost of ownership (TCO) in Enterprise Architecture Workspace

The Application Total Cost of Ownership (TCO) plugin helps Enterprise Architects to evaluate the cost of business applications and leverage the application costs to prioritize the application portfolio and align with the organization's business strategy.

### Application TCO indicators

The following indicators are added for Application TCO.

Indicator name	Description
Portfolio TCO	This indicator collects the total cost for a business application for a fiscal period.

You can view the assessment score of the Portfolio TCO indicator in the Application Rationalization List view.

### Tables installed with Application TCO

The following tables are installed with the Application TCO plugin:

Table	Description
Total Cost of Ownership - sn_apm_tco	Stores total cost of ownership details for all the business applications. You can see the details such as Cost type, Expense type, Cost, Fiscal period, Billing date, Vendor, Source, and Source cost type.
TCO Cost Type - sn_apm_tco_cost_type	Stores the TCO cost types within Enterprise Architecture Workspace for analysis and reporting.
TCO Source - sn_apm_tco_source	Stores the name of the TCO source.
TCO Source Cost Type - sn_apm_tco_source_cost_type	Stores the cost types used in the source.

### Business rules added for Application TCO

The following business rules are added for Application TCO:

Business rule	Table	Description
Check for duplicate cost type	TCO cost type [sn_apm_tco_cost_type]	Checks for the duplicate name and expense type entry in the TCO cost type table.
Check for duplicate source name	TCO source [sn_apm_tco_source]	Checks for the duplicate source name entry in the TCO source table.
Check for duplicate source cost type	TCO source cost type [sn_apm_tco_source_cost_type]	Checks for the duplicate source and source cost type

Business rule	Table	Description
		entry in the TCO source cost type table.

## TCO dashboards

The **Portfolio TCO** tab in the **Dashboards** page displays the following dashboards for Application TCO:

- Business Application TCO for current quarter and previous quarter
- Business Application TCO trend for year
- Business Application TCO by application category for current quarter and previous quarter.
- Business Application TCO by application planned disposition for current quarter

For more details, see [Working with the Enterprise Architecture Workspace dashboard](#).

## Application TCO insights

The Insights section in the Enterprise Architecture Workspace home page displays insights for your business

The screenshot shows the 'Insights' section of the EA workspace. It includes a header with 'Last refreshed 2024-01-02 06:43:14' and tabs for 'Application Portfolio', 'Business Portfolio', 'Information Portfolio', and 'Technology Portfolio'. Below are four cards:

- Candidate business applications for retirement:** 24 business applications that might fit for retirement based on their indicator scores. Business applications count: 24. [View list](#)
- Candidate business applications for migration:** 20 business applications that might fit for migration based on their indicator scores. Business applications count: 20. [View list](#)
- Candidate business applications for investment:** 7 business applications that might fit for investment based on their indicator scores. Business applications count: 7. [View list](#)
- Business applications w/o cost data:** 69 business applications w/o cost data. Business applications count: 69. [View list](#)

applications.

## Install the Application Total Cost of Ownership (TCO) plugin

Install the Application TCO store application that you purchased from the ServiceNow Store to make it available on your instance.

### Before you begin

**Note:** The Application TCO plugin automatically gets installed when you install the Enterprise Architecture Workspace plugin.

Role required: admin

### Procedure

1. Navigate to **All > System Applications > All**.
2. Find the application using the filter criteria and search bar.

You can search for the application by its name or ID. If you can't find an application, you may have to request it from the ServiceNow Store.

Visit the [ServiceNow Store](#) website to view all the available apps and for information about submitting requests to the store.

3. Select a version from the list and select **Install**.
4. Select the **Load demo data** check box to install the demo data.

Demo data comprises the sample records that describe application features for the common use cases. Load the demo data when you first install the application on a development or test instance.

**5. Select **Install**.**

### Create a source for an Application TCO

Create a source for an Application Total Cost of Ownership (TCO). Specify the source of cost being ingested in Enterprise Architecture Workspace.

#### **Before you begin**

Role required: admin

#### **Procedure**

- 1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.**
- 2. Select **TCO**.**
- 3. Select **Sources**.**
- 4. Select **New**.**
- 5. Enter a name for the source.**
- 6. Select **Save**.**

### Create a TCO source cost type

Create a source cost type for the TCO source. Specify the type of cost being ingested in Enterprise Architecture Workspace.

#### **Before you begin**

Role required: admin

#### **About this task**

After a source is created for the TCO, you can create a source cost type from the related list.

#### **Procedure**

- 1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.**
- 2. Select **TCO**.**
- 3. Select **Sources**.**
- 4. Select a source to open it.**
- 5. Select the **TCO Source Cost Types** tab.**
- 6. Select **New**.**
- 7. Enter a name and domain for the source cost type.**  
The **Source** field is auto populated with a source name.
- 8. Select **Save**.**

### Create a cost type for Application TCO in Enterprise Architecture Workspace

Create a cost type as capital expense (Capex) or operating expense (Opex) for Application TCO. Specify the type of cost being ingested in Enterprise Architecture Workspace.

#### **Before you begin**

Role required: admin

## Procedure

1. Navigate to **Workspaces > Enterprise Architecture Workspace > Setup**.
2. Select **TCO**.
3. Select **Cost types**.
4. Select **New**.
5. Enter a name and select the expense type (Capex or Opex).
6. Select **Save**.

## Set the duration of a fiscal period property for TCO dashboards

Set the system property (`com.glide.fiscal_calendar.fiscal.unit`) to view TCO dashboards for a specific duration of the fiscal period in the Dashboard page of the Enterprise Architecture Workspace.

### Before you begin

Role required: admin

## Procedure

1. Navigate to **All > System Properties > All Properties**.
2. Search and open the `com.glide.fiscal_calendar.fiscal.unit` property.
3. Update the **Value** field according to your requirement.  
You can update the value to Quarter or Month or Week.
4. Select **#Update**.

The Portfolio TCO dashboard page shows the data according to the specified duration of the fiscal period. For more details, see [Working with the Enterprise Architecture Workspace dashboard](#).