# **HP Enterprise Maps**

Software Version: 2.00 Windows and Linux Operating Systems

## **User Guide**



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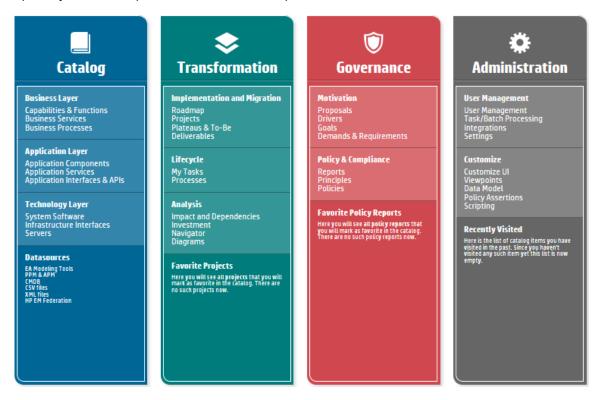
## Chapter 1: Using HP Enterprise Maps

You can use HP Enterprise Maps (HP EM) to manage your enterprise architecture. This user guide will introduce you to many of the key features, including:

- Getting Started and an overview of the user interface.
- How to create, edit, and view artifacts and relationships between artifacts and use the catalog browser.
- How to create, edit, and run reports, including heatmaps and structure maps.
- How to view the data model and select artifacts of interest within that model.
- · How to perform administration tasks.
- How to use the integrations between HP EM and key data sources.
- How to install and use the extensions for Sparx Systems Enterprise Architect and Inkscape.
- How to perform scripted XML publishing.

## Chapter 2: Getting Started

The HP Enterprise Maps home page starts you off with an easy-to-use set of panels to guide you through the enterprise architecture process. This User Guide takes you through many common tasks as well as detailed information on the integrations and instructions on how to install the extensions for Sparx Systems Enterprise Architect and Inkscape.



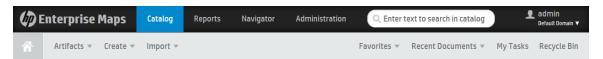
**Note:** If you are not logged in as Administrator, your home page will not include the Administration panel.

## Chapter 3: User Interface Overview

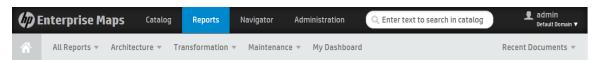
Enterprise Maps provides you with an easy-to-use user interface with the following features.

#### Menu Tabs

**Catalog**: On the Catalog tab you can access the main panels, which organize HP EM functionality through the enterprise architecture process phases, from creating artifacts by layer in the catalog, to undertaking lifecycle and analysis tasks in the transformation phase, to governance activities. You can list existing artifacts, create new ones, or import them from other repositories and data sources.



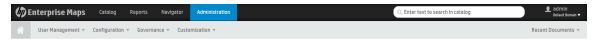
**Reports**: On the Reports tab, you can access many artifact, policy, heatmap, structure map, and custom reports. You can also view Architecture reports such as Archimate Compliance and Installed Software and Transformation reports such as Roadmaps, Investments, Project by Cost, and Applications by Cost. Maintenance reports such as Application Costs are also available, and you can also customize the reports that appear on your dashboard. For more information, see the Reports section.



**Navigator**: On the Navigator tab, you can view a diagrammatic view of your architecture and select an artifact that you wish to display as the center of the view.



**Administration**: On the Administration tab, which appears if you are logged in as Administrator, you will see many user management, configuration, governance, and customization options.



### **Navigation Tabs**

After you select and open an artifact of any type, the following navigation tabs appear on the left side of your page view:

- Overview: Shows Relationships and Latest Events.
- Documentation: Shows any documentation that you wish to add to an artifact.
- **Tree View**: Shows relationships and approvals in a tree view and provides buttons to access additional views, for example Show Impact and Navigator, which will open the related views for the selected artifact.
- Lifecycle: Shows details on the artifact's lifecycle. If there is no Lifecycle process assigned, you
  can use the Start Governance action to start it.
- **Discussion**: Add, edit, or view a comment that others will see when they access the artifact.
- Categories: Add, edit, or view a category and description.
- Specification: Add, edit, or view any associated specifications.
- Compliance: View any associated policies and the level of compliance with those policies.
- Access Rights: Add, edit, or view any associated access rights.
- **Contacts**: Lists the contacts associated with the selected artifact, for example Architect, Developer, Administrator, or Project Manager.
- History: Lists the revision history table for the selected artifact, including revision, date, actor name, lifecycle stage, and lifecycle process.
- Relationships: Lists the outgoing and incoming relationships to the selected artifact.
- **Financial Profile**: Shows financial properties of a Project or Application Component artifact. This tab is only available on the detail page of the Project or Application Component artifact

## Chapter 4: Catalog

The HP EM catalog panel is accessible to you through the Catalog tab home page. It includes the following layers and associated artifact types that you can create or modify:

- Business Layer:
  - Capabilities & Functions
  - Services
  - Processes
  - Roles
- Application Layer:
  - Services
  - Components
  - Interfaces
- Technology Layer:
  - System Software
  - Interfaces
  - Nodes & Servers

You can create or modify artifacts on each layer. Artifacts are thereby available as inputs for reports that you create by using the Reports tab features or to visualize by using the Navigator.

### **Data Sources**

HP EM includes integrations with many data sources that you can access directly from the Catalog tab catalog panel. These include modeling tools, other HP solutions such as HP PPM and HP uCMDB, as well as CSV and XML file importing, and direct imports from other HP EM instances. For more information, go to the "Integrations" on page 98 section. Data sources include:

- **EA Modeling Tools**: You can edit the whole repository in an external diagramming tool where the data will be bidirectionally synchronized between HP EM and the tool project space. Out of the box you can integrate with Sparx Systems Enterprise Architect. For more information, see "Extension for Sparx Systems EA" on page 121.
- Project & Portfolio Management: It is easy to connect HP EM to project and portfolio
  management solutions to import project and financial information, which enables you to analyze
  data in a broader IT perspective, including the application and technology layers of the enterprise
  architecture. Out of the box you can integrate with HP Project and Portfolio Management, however,
  other systems may be supported as well. Contact your HP sales representative to request an extra
  integration connector license.
- CMDB: To be able to analyze the costs, impacts, and dependencies of IT infrastructure on your business, you can integrate HP EM with a configuration management database (CMDB). This allows the system to get information about servers and software running on it as well as enabling you to connect these objects to application and business architecture. This also enables you to control the lifecycle of these entities. Out of the box you can integrate with HP Universal CMDB, however, other systems may be supported as well. Contact your HP sales representative to request an extra integration connector license.
- CSV Files: You can import CSV files into HP EM. If you have installed HP EM on your local
  machine you can find a command line tool for CSV file import in the following location: INSTALL\_
  DIR\client\bin\csvImport.bat[sh]. You can also download the dedicated CSV importer distribution,
  which will enable you to use the csvImport command line tool. Note: You can also export CSV files
  by using a context action directly from HP EM tables.
- XML Files: You can publish XML files into HP EM by using the File Import function. The XML file is
  analyzed and decomposed into artifacts based on a configuration file stored within script artifacts.
  This configuration is customizable and you can define your own for your custom XML schemas.
- **HP EM Federation:** You can selectively export some artifacts (a whole plateau for example) from another HP EM instance by selecting the desired artifacts in the catalog browser and clicking the Export context action. An archive file is produced. You can import the archive by using the Import Repository Archive feature. This enables you to transfer data between multiple, even disconnected instances of HP EM. In a similar way, you may export whole HP EM domains.

## CSV File Export and Import

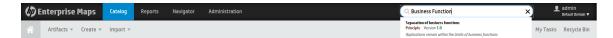
Enterprise Maps can export and import data in the Comma-Separated Value (CSV) format. This is useful if you want to consolidate data from spreadsheets or relational databases. You can also edit multiple data sets efficiently in spreadsheet format and offline and send the data back to Enterprise Maps in one step.

If you want to populate a simple collection from a spreadsheet file, a good practice to begin is to create one artifact in the HP EM collection by using the Catalog, and then you can open the collection list, select it, and then use the Save as CSV function to access the CSV file from HP EM. You can then open the result in Excel, add more data in the specified form according to the first record, and then use the CSV import tool to publish all the data inside HP EM. For more information, see the procedures listed in this section.

### **Exporting CSV Files**

#### To export CSV data from HP EM:

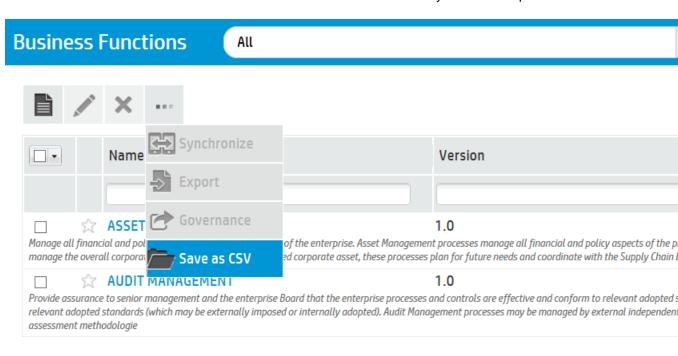
- 1. Open the Catalog in a browser.
- 2. If the collection you are interested in is empty, create the first artifact so that the exported CSV file contains an example data row.
- 3. Open the collection you are interested in either by searching for it in the Search box or by opening the collection from the Catalog panel. For example, to open the Business Function collection, select Capabilities and Functions from the Catalog panel list and perform your search by clicking the Filter menu to open the Search page. Then you can the Business Function value from the Artifact Type selector and click Search.
- · Option A: Using the Menu Bar Search Field.



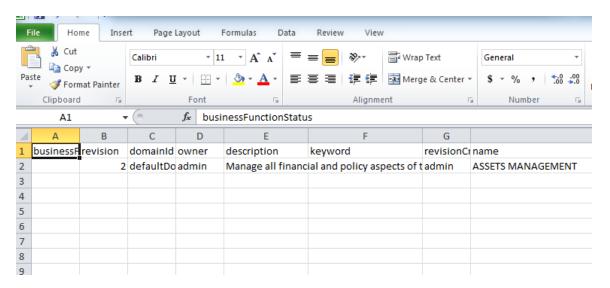
· Option B: Using the Catalog Search Page



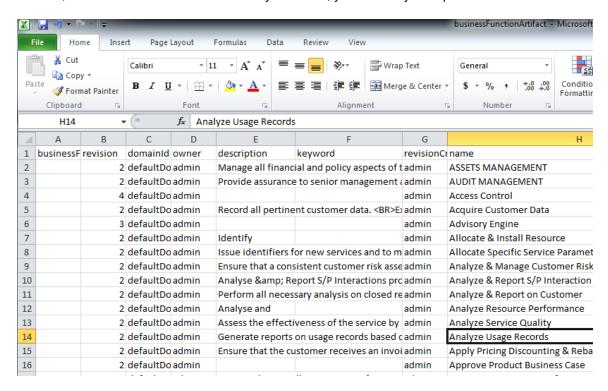
4. After you have located and opened the collection you are interested in exporting, click the More Actions button (e.g., the button with three dots next to the Edit and Delete buttons), and click Save as CSV. This will start the download of data in CSV format from the table to your local computer.



Open the downloaded CSV file in a spreadsheet editor, such as Excel. The first row is a header that specifies the mapping of data in HP EM. It helps you to learn how to link the data in specific columns to properties, relationships, etc.



6. Remove unnecessary and redundant headers. For example: delete all columns but keep the following headers: businessFunctionStatus, revision, domainId, owner, description, keyword, revisionCreator, name. Add new data to complete the collection in spreadsheet, and when you are finished, make sure to Save as CSV. Once you do this, you are ready to Import back into HP EM.



### Importing CSV Files

To import CSV files, first decide what type of information and relationship data you want to import as well as how you would like to view the results of your import mapped into HP EM repository.

If you are an administrator or have administrator role privileges you will find the CSV Importer command line tool in the EM\_HOME\client directory. If you are not an administrator, you can ask your administrator to archive the tool and share it with you so that you can access it.

#### To get the CSV Importer command line tool and then run it:

- 1. Unzip the archive and open a command-line shell and change to the client/bin directory. The tool depends on Java 1.7, so make sure you have access to the java command at the PATH variable.
- 2. Call csvimport.bat or csvimport.sh to get help messages displaying the command-line options.
- 3. Type the command with at least host, user, password, sdmName and file parameters to your environment. For instance, "csvimport -host http://hpdemo/em -user admin -password changeit -file businessFunctions.csv -sdmName businessFunctionArtifact"
- 4. The CSV import of Business Functions from CSV file starts. The tool will log all events related to the progress and status of the import.
- 5. When you refresh your browser, you can view the results imported into the HP EM collection.

## Catalog Browser

The HP EM catalog browser is the place for viewing artifacts by artifact collection type and Archimate model layer.

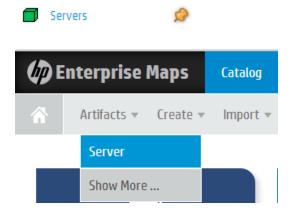
1. To open the catalog browser, click **Catalog > Artifacts >Show More**.



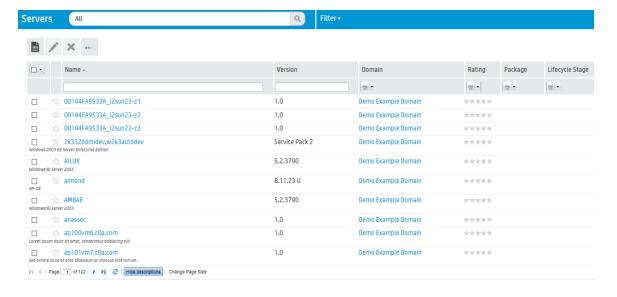
2. To open a collection of artifacts, click the type of artifact that you want to view. In this example, click Servers on the Technology Layer:



**Tip:** You can pin the Server artifact collection to your Artifact menu, by clicking the Pin next to the Server collection. Pinning a collection makes it quick and easy to select.



3. After you select the artifact collection you want to view, the collection page opens. In this example, the Server collection is shown:



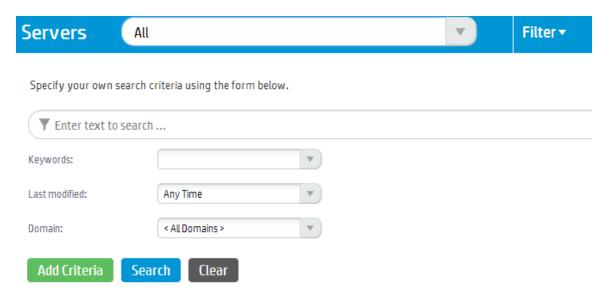
4. To customize your view, you can sort, filter, and manage columns. You can use controls at the bottom of the collection page to control the page size and amount of description displayed.



5. To perform bulk operations on artifacts in the collection, you can use the toolbar at the top of the collection page:



6. You can set up custom filters, such as a filter for favorite artifacts or artifacts that you own:

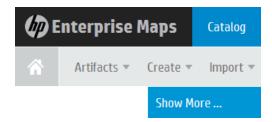


## **Creating Artifacts**

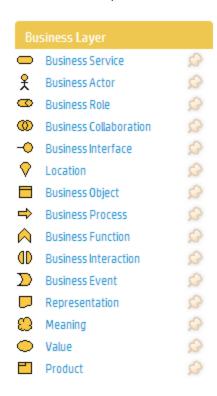
You can use HP EM to create new artifacts and the attributes and relationships that impact those artifacts.

#### To create a new artifact:

1. Click Catalog > Create > Show More to open the catalog browser Create Artifact window.



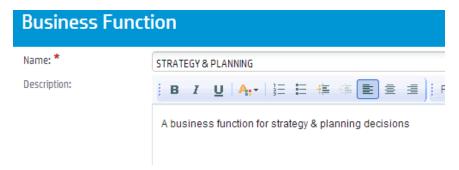
2. Select the artifact type that you want to create. The new artifact opens. In this example, select the **Business Function** artifact on the Business Layer.



3. Or you can click the **Open create dialog for this artifact** icon on Business Function collection page to create a new artifact.



4. Enter the name of your new artifact.
You can optionally add a **Description**, select a **Status**, **Investment Priority**, or **Type**.



5. In the Documentation area, you can attach or link to any associated documentation. Documents that you load are viewable on the Documentation tab.

#### Documentation



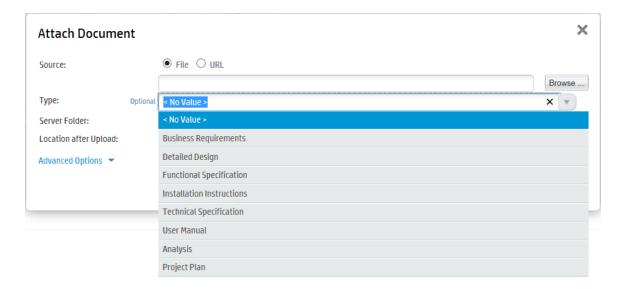
6. To add documentation from an existing artifact, click the **Add an existing artifact** icon. The Select Artifact window displays a list of documentation artifacts to choose from.



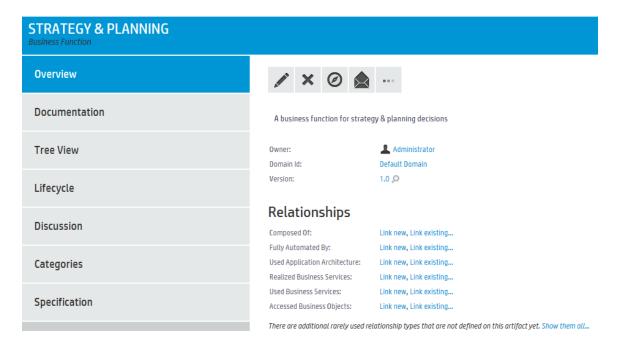
7. To add a link to documentation from a web resource, click the **Link a Web Resource** icon. The Add Document Reference window opens and you can use it to enter the document URL, the document type, and any text or keywords that you want to appear with the link.



8. To attach a documentation artifact directly, click the **Upload a Local File to the repository** icon. The Attach Document window opens and you can use it to enter the document source location, the document type, the server folder, and the location where the document should reside after upload, as well as keywords that you want to enable so that users can find the document. In this example, the document types are shown.



9. Click **Save** to save the new artifact that you created. Your new artifact record is displayed and you can add or modify attributes and relationships using the tabs. Documentation artifacts are shown on the Documentation tab.

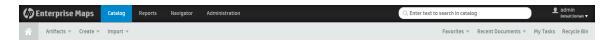


## Searching for Artifacts

HP EM enables you to perform artifact searches quickly and easily from every page.

To perform a basic search:

1. Enter the text to search for in the Search box.



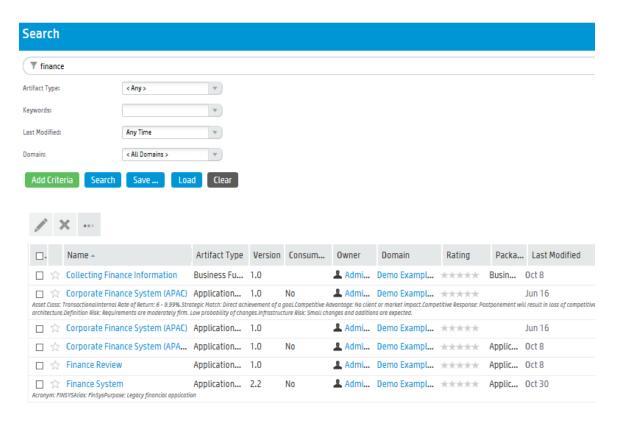
2. For example, if you search for the word "finance," a drop-down list of results is displayed.



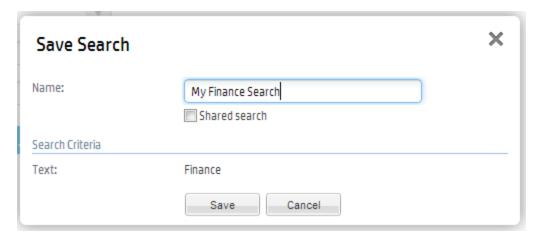
3. Click on the artifact you are interested in to open the Artifact details page.

#### To perform an advanced search:

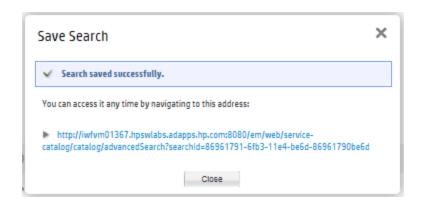
1. Enter the text to search for in the Search box and press Enter. The Search page opens showing the text you searched for. In this case, the search time "finance" is shown.



- 2. To refine your query, use the text field to add additional search terms, key words, or to add criteria.
- 3. If you want to save the Search for future use, click Save. The Save Search box opens.



4. Type the name of your search, and then click Save. You can access your search at any time by navigating to the URL address provided. You can also share the search URL with others.



Once you have saved a search, it is displayed every time you click Load in the Search page.



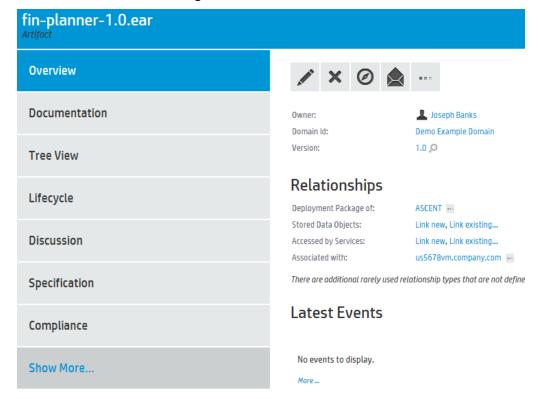
## **Artifact View Page**

Artifact View pages in the Catalog tab present comprehensive details about each object in the Catalog and provide access to the functionality required perform most of the actions related to individual artifacts.

Each artifact contains a large amount of detail, so Artifact View pages are organized into a set of tabs enabling you to focus on particular aspects of the artifact.

Access Artifact View pages by clicking the name of an artifact wherever it appears in the Catalog tab.

#### Screenshot: Artifact View Page Header



The page header displays the artifact name, artifact type, and artifact ratings. For details about ratings, see "How to Use Ratings" on page 56.

The Artifact page shows all the available tabs and clicking **Show More** displays further tabs.

**Note:** The available tabs and functionality vary according to your role, the artifact type, and your permissions.

#### **Artifact View Page Tabs**

Tabs	Description
"Overview Tab" on the next page	The most important information about the artifact, such as its major properties, the most important relationships, overviews of events, tasks, last edits, overview of policy compliance and keywords.
"Documentation Tab" on page 28	Manage the documents associated with the artifact.
"Tree View Tab" on page 29	Shows an artifact structure browser. It either displays composite structure or impact report. In addition to artifact basic information (such as name, owner and type) the browser captures lifecycle information such as the current stage.

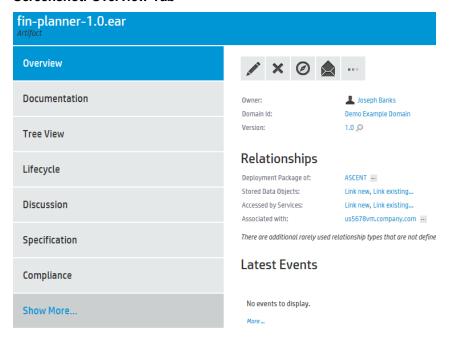
#### Artifact View Page Tabs, continued

Tabs	Description
"Lifecycle Tab" on page 30	Information related to the artifact lifecycle, including as a graphical view of the lifecycle process showing stage details.
"Discussion Tab" on page 31	A discussion forum for the artifact.
"Categories Tab" on page 32	Categorization details for the artifact.
"Specification Tab" on page 33	A page for a full specification of the artifact including edit options with rich text and HTML tagging.
"Compliance Tab" on page 34	A detailed breakdown of the current policy compliance status of the artifact.
"Access Rights Tab" on page 35	View and manage the access rights for the artifact.
"Contacts Tab" on page 36	View and manage the contacts for the artifact.
"History Tab" on page 37	Lists artifact revisions enables users to compare selected two revisions and see the differences between them.
"Events Tab" on page 38	Contains all events related to the artifact.
"Relationships Tab" on page 39	View all the incoming and outgoing relationships for the artifact.
"Financials Profile Tab" on page 39	View and manage the financial properties of a Project or Application Component artifact. This tab is only available on the detail page of the Project or Application Component artifact

### **Overview Tab**

The Overview tab is the default view of an artifact and contains the most important information about the artifact and access to the most common artifact operations.

#### **Screenshot: Overview Tab**



#### **Overview Tab Content**

Content	Description
Properties	The first section of the page displays the most important properties of the artifact including options to compare versions, and set the provider.
Relationships	The most important relationships display in the Overview tab and in case of a service, the implementations. Click <b>Show them all</b> to show the full relationships section.
Latest Events	Displays the latest actions affecting the artifact. Click <b>More</b> to open the Events tab or the Tool icon to customize the Events component content. For details, see "Events Tab" on page 38 and "How to Use Events" on page 53.

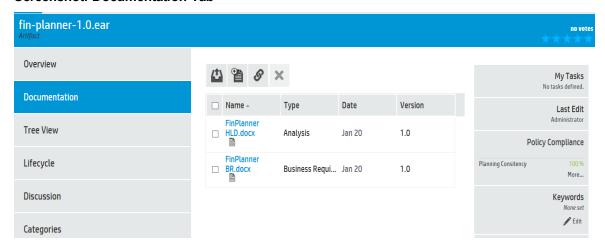
#### Overview Tab Content, continued

Content	Description
Context Actions	Displays a set of context actions for the artifact relevant to the artifact type, its current status, and your role. The available actions include the following:
	Edit - Open the Edit artifact page.
	Attach Document - Attach a local or remote document to the artifact.
	Navigator - Switch to the graphical navigator view for the artifact.
	Delete - Delete the artifact and its sub-artifacts
	Export - Create a ZIP archive for the artifact and its sub-artifacts.
	New Version - Create a new version of the artifact and its sub-artifacts.
	<ul> <li>Atom Feed - Publish a feed for artifact changes or artifact comments. For details, see "How to Use Feeds" on page 57.</li> </ul>
	Send Notification - Send an email notification to artifact stakeholders. For details, see "How to Use Notifications" on page 52.
	Change Domain - Move the artifact to another domain.
Last Edit	Displays the user and time for the last change to the artifact.
Compliance	Displays the current compliance status with an option to recalculate it.
My Tasks	Displays any actions you may be required to perform related to the artifact. For details, see "How to Use Tasks" on page 55.
Add to Favorites	Click this button to add the artifact to Favorites. Once the artifact is added, the button changes to Favorite button instead. Click this button again to remove it from Favorites.
Keywords	Displays any custom tags applied to the artifact with the option to edit them.
Contacts	Displays the contacts for the artifact with the option to edit them.

## **Documentation Tab**

The Documentation tab provides a place to view and manage the documents associated with the artifact.

#### **Screenshot: Documentation Tab**



#### **Documentation Tab Content**

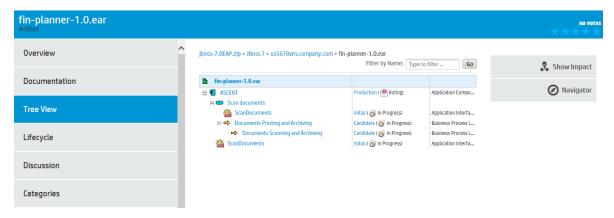
Content	Description
Documentation Table	Displays the documents associated with the artifact with functionality to manage them and add more.

### Tree View Tab

The Tree View tab allows you to explore the impact and dependency effects of the current artifact.

The default Dependency view shows the tree of artifacts that the current artifact depends on.

#### **Screenshot: Tree View Tab**



#### **Tree View Tab Content**

Content	Description
Filter	Use the filter to highlight specific artifacts from the tree.

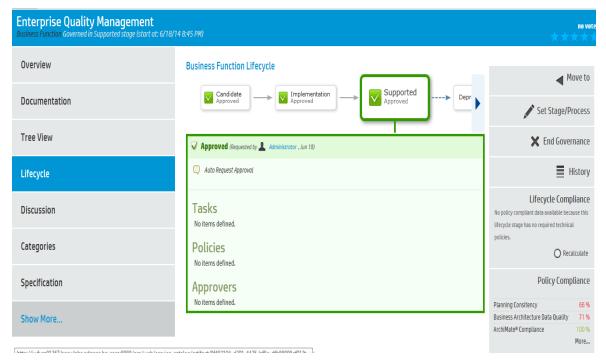
Tree View Tab Content, continued

Content	Description
Artifact Tree	The tree displays impacting artifacts in Dependency view or impacted artifacts in the Impact view, organized by artifact type. Expand groups of artifact types and click artifact names to view their details.
Show Impact	Click to see the impact the current artifact has on the tree of artifacts.
Show Lifecycle Tree	Click to switch over and view the tree of artifacts that follow the current artifact in the lifecycle process.
Navigator	Open the graphical navigator view for the artifact.

## Lifecycle Tab

The Lifecycle tab provides a visualization of the lifecycle process the artifact belongs to and the functionality required to participate in its lifecycle.

#### Screenshot: Lifecycle Tab



#### **Artifact Lifecycle Tab Content**

Description
The top part of the view displays the lifecycle stages for the lifecycle process the artifact belongs to. The larger stage box is the current stage in progress and the box highlighted in green matches the stage detail information below. Click a stage to view its details and use the arrow controls to view stages that are off the page.
The large green box displays the stage details for the stage selected above. For the current stage, the details start with a summary of the current lifecycle status. For all stages the details box displays the tasks, policies, and stage approvers. As a participant in the lifecycle you can use the stage details box to mark lifecycle tasks as complete, to validate policies associated with the stage, and to approve or reject approval requests.
<ul> <li>Displays a set of context actions for the artifact relevant to its current lifecycle status and your role. The available actions include the following:</li> <li>Start Governance - Put a non-governed artifact into an appropriate lifecycle process.</li> <li>End Governance - Remove the artifact from a lifecycle process.</li> <li>Set Stage/Process - Change the current stage and lifecycle process for the artifact (administrator only).</li> <li>Request Approval - Request approval for the current lifecycle stage for the artifact.</li> <li>Cancel Approval - Cancel an approval request.</li> <li>Notify Approvers - Send a notification email to the stage approvers.</li> <li>History - View the lifecycle history for the artifact.</li> </ul>
Displays the current compliance status with an option to recalculate it.

## **Discussion Tab**

The Discussion tab provides a forum for users to comment and discuss the artifact.

#### **Screenshot: Discussion Tab**



#### **Discussion Tab Content**

Content	Description
Discussion Threads	The main part of the page displays discussion threads and comments about the artifact with options to <b>Reply</b> , <b>Edit</b> , and <b>Delete</b> comments.
Context Actions	Displays a set of discussion context actions for the artifact. The available actions include the following:
	Show List / Threads - Organize the discussion by comments or by threads.
	Sort - In the list view, organize the comments by newest or oldest first.
	Add Comment - Start a new discussion about the artifact.
	Delete All Comments - Remove all comments and threads about the artifact (administrator only).
	<ul> <li>Artifact Comments Feed - Obtain a feed URL that you can use in a feed reader or in the Reports Tab. For details, see "How to Use Feeds" on page 57.</li> </ul>

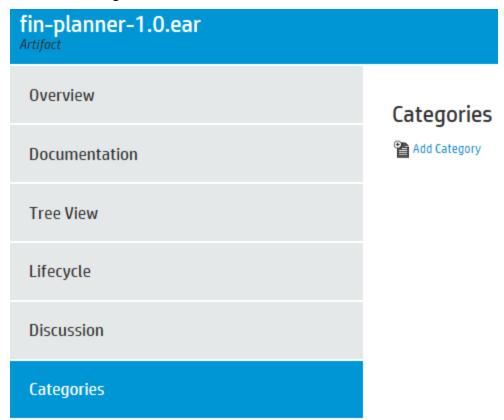
For details about using the Discussion features, see "How to Use Comments" on page 51.

## Categories Tab

The Categories tab provides a place to view and manage the categorizations applied to the artifact.

**Note:** This tab is not visible by default.

#### **Screenshot:Categories Tab**



#### **Categories Tab Content**

Content	Description
Categories Component	The Categories component displays the categorizations applied to the artifact and if you have permissions enables you to modify them or add more categories.

## **Specification Tab**

The Specification tab provides a place to view and manage a detailed description of the artifact including rich text and HTML support.

#### **Screenshot: Specification Tab**

## fin-planner-1.0.ear Artifact **Overview** Account Service Features: Documentation · Balance Check · Cash Withdrawal Tree View Savings · Bank Transfers · Overdraft Facilities · 24 hrs Account Access Lifecycle Discussion Categories **Specification**

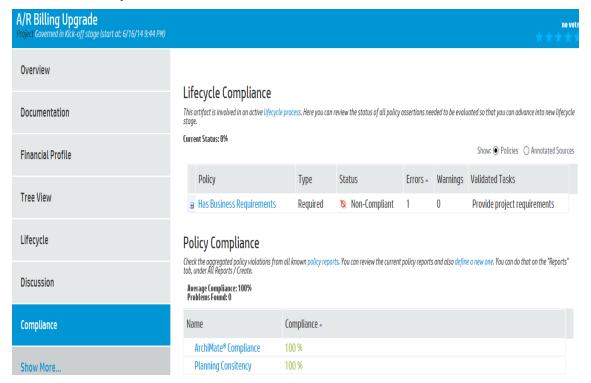
#### **Specification Tab Content**

Content	Description
Detailed Description	Displays the full description for the artifact.
Edit Specification	Changes the Detailed Description area to an input form with rich text and HTML support.

## Compliance Tab

The Compliance tab provides a detailed view of the policies that apply the current lifecycle stage that the artifact belongs to with an option to view the XML representation of the resources that the policies validate.

#### **Screenshot: Compliance Tab**



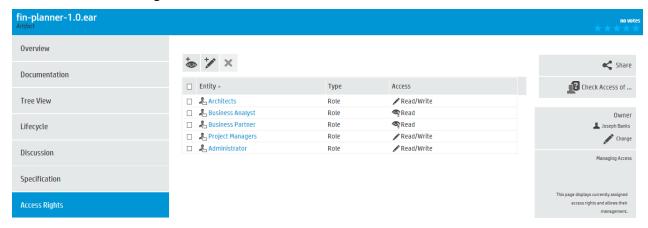
#### **Compliance Tab Content**

•	
Content	Description
Show	Switch between the Policies view and the Annotated Sources view.
Policies	The table of currently applicable policies, their type, and current status.
Annotated Sources	Provides a detailed XML view of the relevant resources that the policies validate. This view is most useful to assertion and WSDL developers resolving validation errors.

## **Access Rights Tab**

The Access Rights tab provides a detailed view of the users, groups, and roles with permissions for the artifact and access management actions for users with appropriate permissions.

#### Screenshot: Access Rights Tab



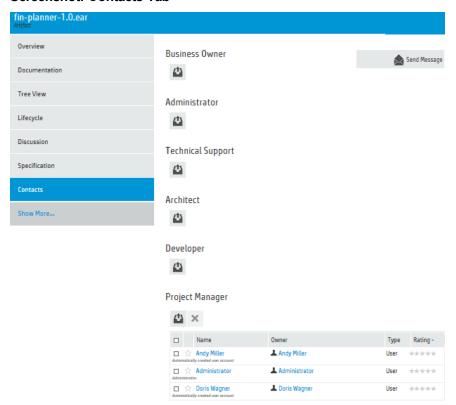
#### **Access Rights Tab Content**

Content	Description
Access Rights Table	Displays the users, groups, and roles with permissions for the artifact and their rights. Users with appropriate permissions can manage the access rights using the table actions.
Context Actions	Displays a set of discussion context actions for the artifact depending on your role and artifact permissions. The available actions include the following:
	Share - Make the artifact visible to all users by giving them all read permission. For details, see "How to Share Artifacts" on page 59.  Check Access Of Worlfy the access rights for a particular user.
	Check Access Of - Verify the access rights for a particular user.
Owner	Displays the current user, group, or role ownership for the artifact with the option to change it for users with appropriate permissions.

### **Contacts Tab**

The Contacts tab provides a detailed view and management options for contacts for the artifact organized by their contact type.

#### **Screenshot: Contacts Tab**



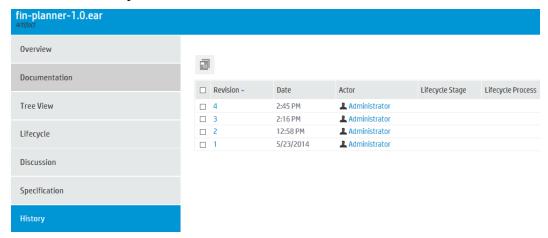
#### **Contacts Tab Content**

Content	Description
Contacts	The set of contacts for the artifact organized by contact role. Users with appropriate permissions can manage the contacts.
Send Message	Send a notification email to selected users. For details, see "How to Use Notifications" on page 52.

# **History Tab**

The History tab provides a detailed view of the revisions of the artifact with functionality to compare revisions.

### **Screenshot: History Tab**



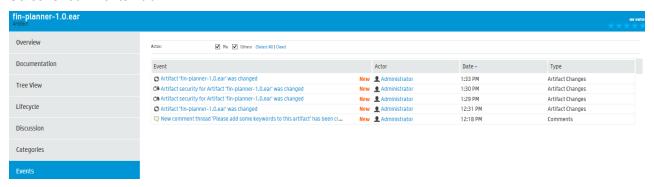
### **History Tab Content**

Content	Description
Revisions Table	Displays a list of the revisions with details about the time of the change, who performed it, and lifecycle details. Click a revision number to view its details including options to revert to that revision or use the <b>Compare Revisions</b> action to examine the changes in detail.

## **Events Tab**

The Events tab provides a detailed view of the actions performed on the artifact.

#### **Screenshot: Events Tab**



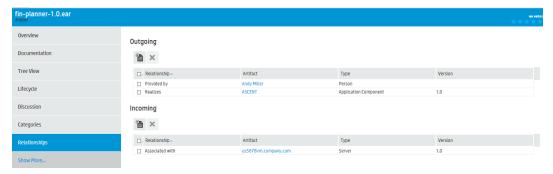
#### **Events Tab Content**

Content	Description
Events Table	Displays a list of the actions performed on the artifact with details about the time of the change, who performed it, and the type of action. Click an event to view the relevant artifact details or use the <b>Actor</b> filter to reduce the set of events to those you performed or those performed by other users.

# Relationships Tab

The Relationships tab provides a detailed view of the related artifacts organized by outgoing and incoming relationships.

### **Screenshot: Relationships Tab**



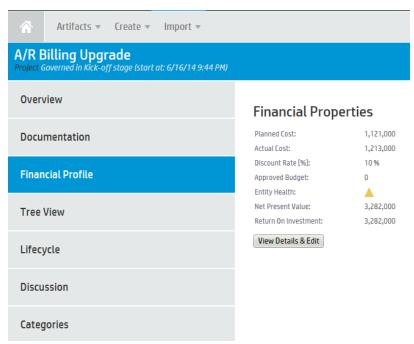
### **Relationships Tab Content**

Content	Description
Relationship Tables	Displays the set of outgoing and incoming relationships with details of the related artifact, its type and version, and the relationship type.

## Financials Profile Tab

The Financials Profile tab provides a place to view and manage the financials associated with the artifact.

#### **Screenshot: Financials Profile Tab**



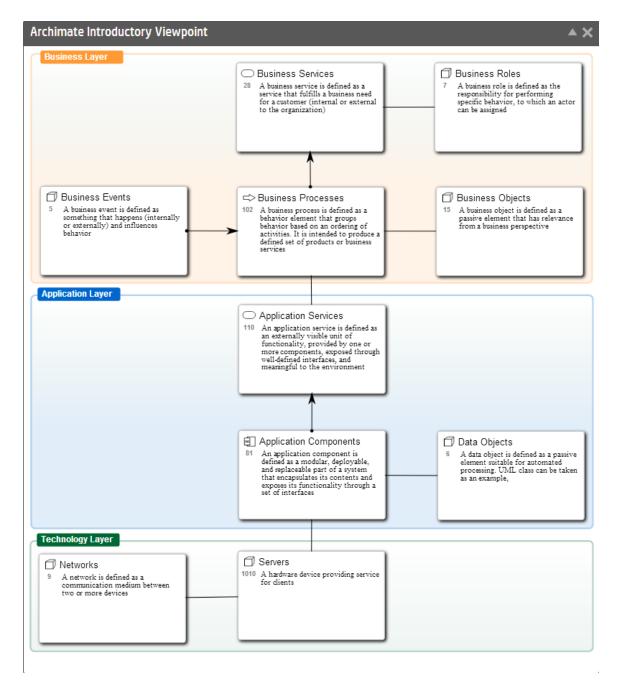
#### **Artifact Financials Profile Tab Content**

Content	Description
Financials ProfileTable	Shows the financial properties of a project or application component artifact. This tab is only available on the detail page of the project or application component artifact.

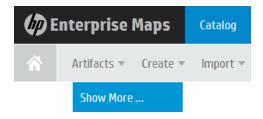
# Viewing Artifacts in the Data Model

The HP EM data model is based on the Archimate modeling language specification and consists of artifacts grouped by type and layer, as well as artifact properties and relationships.

You can view the data model by logging in to HP EM and viewing the Archimate Introductory Viewpoint that displays the model's layers and selected artifact types.



You can view a complete list of artifacts by accessing the catalog browser. Select **Catalog>Artifacts>Show More**.



The catalog browser opens and displays all of the data model's artifact types grouped by Archimate layer.

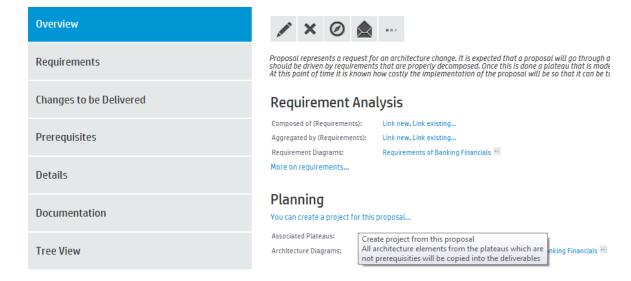


# Creating Project from Proposal

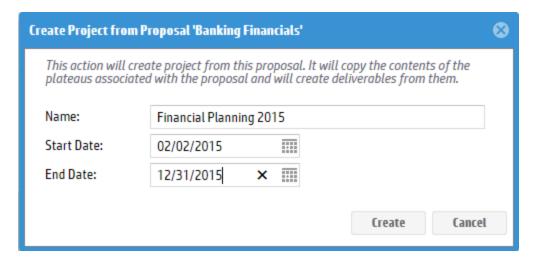
The HP EM proposal page allows you to automatically create a project and the associated deliverables.

To achieve this, perform the following steps:

1. Open the proposal and in the Overview tab click the link 'You can create a project for this proposal...'. This link is available only for an empty proposal; it does not have association with any project as such.



2. Enter the project name, start date and end date.



This action creates a project linking it with the current proposal and for each plateau associated with the current proposal, a realizing deliverable. All elements aggregated in a plateau of proposal are also aggregated by the corresponding deliverable of the project created.

# Relationship Editor

The HP EM relationship editor enables you to view and modify artifact relationships directly. Relationships can be those predefined within the ArchiMate model or you can add new relationships. Both ArchiMate and non-ArchiMate relationships are shown on the Overview tab view. You can add new or manage relationships by using the Relationship tab view.

## Creating and Managing Artifact Relationships

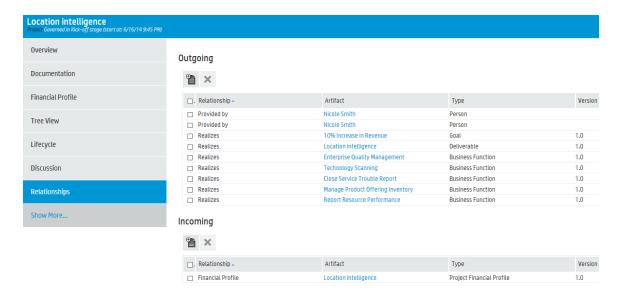
Relationships are created according to the HP EM data model. Each relationship that you create will have another paired artifact and each member of the paired relation is assigned a unique name, representing the outgoing and incoming relation between artifacts.

An outgoing relation between A and B automatically implies the corresponding incoming relation between B and A. Outgoing relations are properties of source artifacts (A), whereas incoming relations are projections of outgoing relationships to target artifacts (B).

You may want to assess the outgoing and incoming relationships listed for a selected artifact in order to navigate in the data and learn the relationship structures of the artifact.

#### To view the outgoing and incoming relationships of a selected artifact:

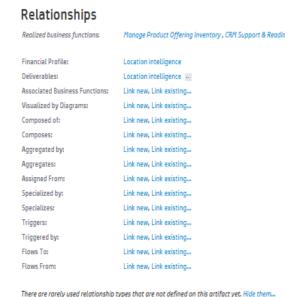
- Select the artifact in the Catalog Browser or in the Navigator, and then open the artifact.
- 2. Click the Relationship tab. The artifact's relationships are shown, grouped by direction.



## Create Artifact Relationships

To add relationships to existing artifacts or create new artifacts to relate to:

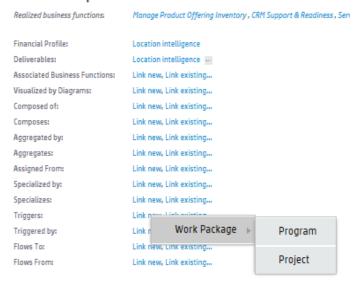
- 1. Select the artifact in the Catalog Browser or in the Navigator, and then open the artifact.
- 2. There are Link new and Link existing buttons available next to the relationship type that you can use to create a new artifact or link to existing artifacts.



3. When you click the Link new button, the available artifact types will appear in a menu. Only an applicable artifact type is visible when you click the Link new or Link existing buttons. After establishing a relationship to one or more artifact(s), the menu is replaced with a list of the existing relationships.

For example, when you click Link new on the Triggers relationship type, the available type menu might display Work Package consisting of Program and Project as available artifact types.

### Relationships



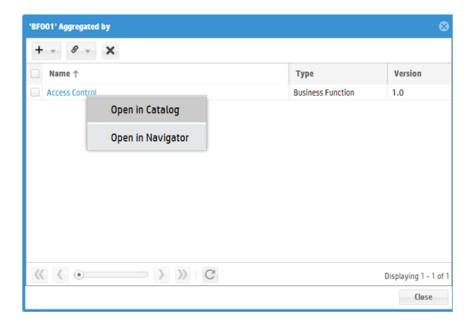
There are rarely used relationship types that are not defined on this artifact yet. Hide them...

4. For artifact types that already contain data, the Link new and Link existing buttons will be hidden from view. You can add more artifacts to this relationship type by clicking on the relationship type name. You will see a separate menu for managing the relationship, which includes the option to view the relationships in a table view:

### Relationships



If you choose to view in Table View, each row has a context menu to open an artifact in the Catalog or Navigator:



## Remove Artifact Relationships

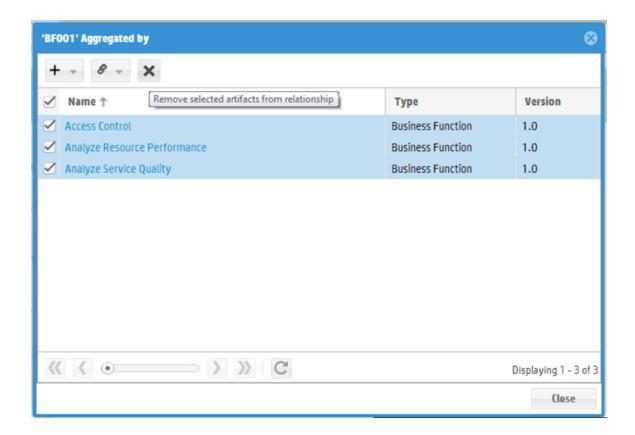
#### To remove existing artifact relationships:

- 1. Select the artifact in the Catalog Browser or in the Navigator, and then open the artifact.
- 2. From the Overview tab, you are able to remove the link between the selected artifact and another artifact. For removing a specific artifact link from a current artifact, right-click on the artifact you want to remove, then remove it by selecting the 'Unlink from this artifact' option.

### Relationships



3. You can also remove a set of artifacts linked to a the selected artifact while in the Table view, simply by selecting each artifact you wish to remove from the list.



# Non-Compliant Relationships

HP EM enables you to create relationships between compliant and non-compliant artifacts. Artifacts that are non-compliant with the Archimate-based HP EM data model are shown in the artifact view. However some of the relationships can be non-compliant according to the data model. These are shown in the Relationship Editor component, but with red color:

# Non-compliant Relationships

There are relationships that are not compliant with the current data model. By using those you risk that certain reports won't work correctly. To handle this, you can:

- Re-enter those into the system properly while following the current model.
- 2. Declare this kind of relationship as a shortcut if you want to keep them in the repository as is.

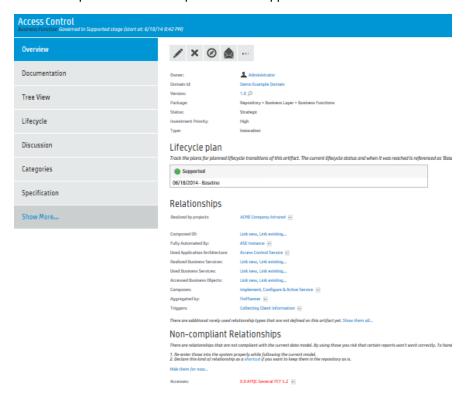
Hide them for now...

Accesses:

0.0 APQC General PCF 5.2 ...

## Relationships: Overview Tab View

The Overview tab shows you two types of relationships: Archimate standard relationships in the Relationships area, and Non-Archimate standard relationship in the Archimate Non-compliant Relationships area. The example shows an application service artifact.

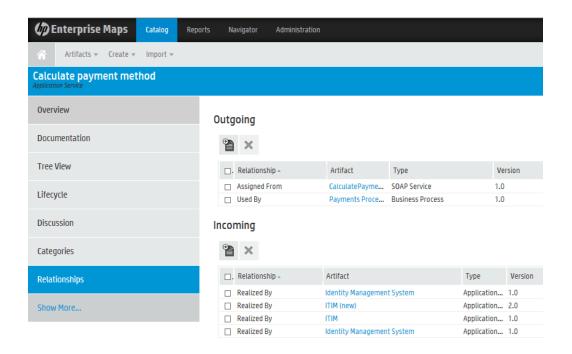


If you have many relationships defined by a single relationship type, only a few artifacts are shown on the artifact overview page. If you want to show more relationships, you can click the **More...** button to show 10 artifacts at one time.

The most recently modified artifact will be displayed first on the list of relationship artifacts. The quantity of displayed artifacts after clicking More is decided by a system property titled platform.ui.relationship.artifact.max in system properties. Changing this value determines how many artifacts is shown.

# Relationships: Relationships Tab View

The Relationships tab shows you lists of an artifact's relationships by Outgoing and Incoming. The example shows an application service artifact.



# **Chapter 5: Collaboration Overview**

HP EM is a collaborative platform enabling you to actively participate and provide information to other users throughout the service lifecycle.

This part contains the following topics:

#### **Tasks**

- "How to Use Comments" on the next page
- "How to Use Notifications" on page 52
- "How to Use Events" on page 53
- "How to Use Tasks" on page 55
- "How to Use Ratings" on page 56
- "How to Use Feeds" on page 57
- "How to Share Artifacts" on page 59

HP EM provides the following collaboration features:

#### Comments

The Artifact View page provides a Discussion area where you can start threads and respond to other comments. For details, see "How to Use Comments" on the next page.

#### Notifications

You can send e-mail notifications about an artifact to specified stakeholders. For details, see "How to Use Notifications" on page 52.

#### Events

Events keep you up-to-date with changes to artifacts that you are a stakeholder in and user actions that may impact you. For details, see "How to Use Events" on page 53.

#### Tasks

Tasks provide you with updates for lifecycle and contract tasks assigned to you. For details, see "How to Use Tasks" on page 55.

#### Ratings

You can apply an individual rating to an artifact, contributing to an overall rating that enables other users to select the best artifacts. For details, see "How to Use Ratings" on page 56.

#### Feeds

HP EM provides artifact and search feeds that enable you to track changes and discussions about artifacts in your feed readers and in the Reports tab. For details, see "How to Use Feeds" on page 57.

#### Sharing

HP EM provides a simple action to provide all users with read access to an artifact, making it visible across the whole user-base. For details, see "How to Share Artifacts" on page 59.

HP EM is also a collaborative platform in combination with your development environments. HP Software provides plug-ins for widely used IDEs that enable your developers to collaborate using the discovery and publishing features of HP EM directly from their IDE.

### How to Use Comments

HP EM provides an artifact discussion forum where you can make comments about particular artifacts.

The Artifact View page Overview tab includes a Discussion component showing the last few comments.

**Screenshot: Artifact Detail Discussion Component** 

### Discussion

Comments for Artifact (1 Comment)
Last Comment: Administrator, 3:27 PM

**Enter Discussion** 

Click a thread title to enter that discussion or click **Enter Discussion** to open the Artifact Details Discussion tab.

You can browse all comments in the Artifact Details Discussion tab.

#### Screenshot: Artifact Detail Discussion Tab



You can organize the Artifact View Discussion tab using **Show Thread** and **Show List** with an option to sort the list view by oldest or newest comment first.

Start a new discussion thread using Add Comment.

**Tip:** In the Add Comment dialog, click to provide a reference link to another artifact in your comment.

Respond to a particular comment using by clicking **Reply** for that comment.

If these are no replies to your thread or comment, you can **Edit** and **Delete** your comments.

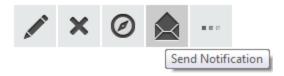
The Artifact Comments Feed context action provides a URL that you can use in feed readers or in the Reports Tab to keep up-to-date with any new comments about the artifact. For details, see "How to Use Feeds" on page 57.

### How to Use Notifications

HP EM enables you to send e-mail notifications to artifact stakeholders.

#### To Send Manual Notifications:

1. In the Artifact Details page Overview tab, click the **Send Message** context action for the artifact you want to send the notification for, to open the Send a Message page.



2. Select the recipients to notify.

#### **Notification Recipients**

Recipient	Description
Owner	The user, group, or role that owns the artifact. "How to Edit Artifact ownership" in the UG.
Maintainers	Users, groups, and roles groups with write permission for the artifact. For details, see "How to Edit Access Rights in the UG.
Contacts	Users and organizational units associated with the artifact by the contact relationship or listed in the artifact stakeholder property. For details, see "How to Manage Contacts" in the UG. The Contacts recipient group can be refined into selectable contact roles.
Other Recipients	Click <b>Add Other Recipients</b> and use the user, group, and role search feature to add any other required recipients.
Previous Stakeholders	Expand Show Advanced Options and select Include Recipients from Previous Versions to notify stakeholders from previous versions of the artifact about changes to a newer version. The stakeholders notified by this option match those for the current artifact version. For example, if Consumers is selected, then the consumers of previous versions are notified.

Note: The recipient options vary depending on the status of the artifact.

- 3. Optional: Change the subject for the mail if required.
- 4. *Optional*: Check **Lifecycle Status** to include a section containing current lifecycle status in the mail.
- 5. Enter the message text for the mail.
- 6. Click **Preview** to view a draft of the mail message.
- 7. Click **Send** to send the notification to the selected recipients.

The administrator can set up automatic notifications as part of the lifecycle process. For details, see "How to Define Automatic Actions" in the *Administration Guide*.

## How to Use Events

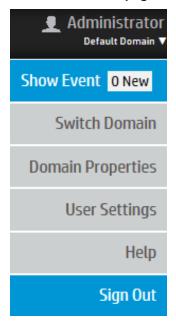
HP EM keeps you up-to-date with all actions on artifacts that are relevant to you. Actions may appear in the Events lists because you performed them, or because they affect artifacts that you are a stakeholder for.

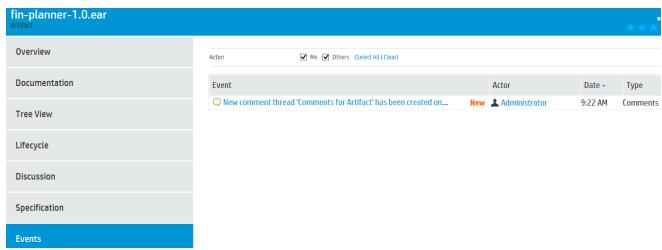
Events information appears in the following places in the UI:

- New Events notification in the Profile Status section of all pages.
- Actions on individual artifacts displayed in the Artifact Details page Events component and the Artifact Details page Events tab.

The Events components in the Artifact Detail page Overview tab display the latest actions performed in HP EM that are relevant to you.

#### Screenshot: Homepage and Artifact Overview Events Components





The Artifact Overview Events component displays actions performed on the artifact with a **More...** link to the Artifact Events tab.

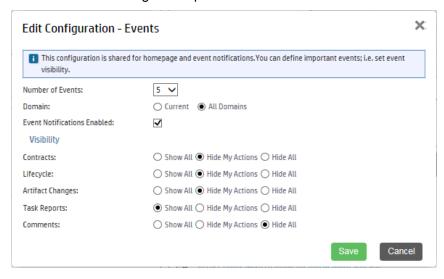
#### **Screenshot: Events Page**



You can customize the information the Events component displays.

### To Customize the Events Component:

- 1. Click the tool icon in the Events component on the home page to open the Edit Configuration Events dialog box.
- 2. Customize the following events parameters:



Click Save to apply your changes.

### How to Use Tasks

As a user in HP EM you may be required to perform actions related to contracts and the lifecycle of artifacts. Tasks may be assigned to you as an individual, a member of a group, as a user in a particular role, or because you are the owner of an artifact. The My Tasks component in the Catalog Homepage updates you with your latest tasks assignments.

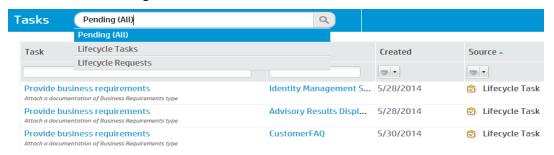
### Screenshot: Catalog Homepage My Tasks Component



Task assignments come from lifecycle or as a result of a contract request. Click the task name to open the relevant page to view the lifecycle.

To view all your outstanding tasks, click My Tasks to open the Tasks page.

#### Screenshot: Tasks Page



The Tasks page shows more details about each tasks and enables you to sort them by type or filter to find a particular task or artifact.

In addition to viewing all tasks assigned to you, Artifact Details pages contains task information specific to the artifact in the My Tasks component.

### Screenshot: Artifact Details Page Overview Tab My Tasks Component



The My Tasks component enables you to complete a lifecycle task to view its details.

For all these task displays, clicking the task opens the appropriate page to perform the required actions depending on the task type.

#### Lifecycle Tasks

Perform a task assigned to you, your group, or your role as part of a lifecycle process.

#### Lifecycle Requests

Process requests for approval of the completion of a lifecycle stage for artifacts.

# How to Use Ratings

HP EM enables you to apply a rating score to artifacts. You can apply a rating to each artifact once and change your rating at any time.

The average rating is available in Artifact Detail pages and in tables of artifacts, enabling you to choose services based on their collective rating.

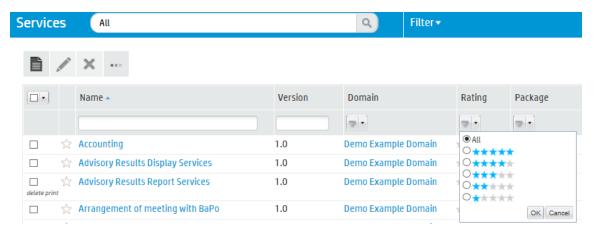
#### **Screenshot: Service Rating**



#### To Rate an Artifact:

- 1. Open the Artifact Details page.
- 2. Move the cursor over the stars and click a star to set your rating. The status next to the rating stars indicates the current status and indicates if you have previously rated the service.

Average ratings are available to filter and sort tables of artifacts. For details, see "Tables in the User Interface".



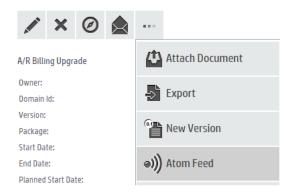
## How to Use Feeds

HP EM provides Atom feed support to enable you to track changes either with your own feed reader or using the Content Feed feature of the Reports Tab.

You can access the following feeds:

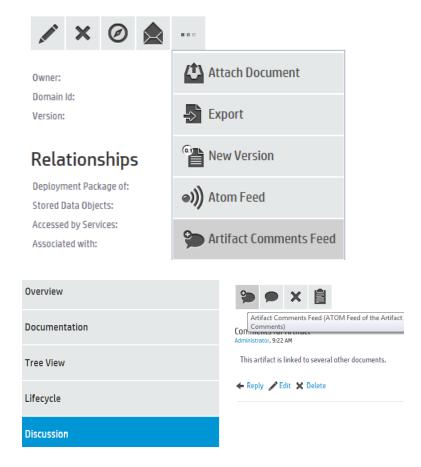
Individual Artifact Feeds

Track changes to a specific artifact. Use the **Atom Feed** context action from the Artifact Details page Overview or Details tabs to obtain the URL for the feed.



#### Individual Artifact Comment Feeds

Track the discussion about a particular artifact. Use the **Artifact Comments Feed** context action from the Artifact Details page Overview or Details tabs or the **Artifact Comments Feed** context action from the Artifact Details page Discussion tab to obtain the URL for the feed.



#### Search Result Feeds

Use the Search URL provided with saved searches to create a custom search feed. A typical example would be to create a search feed for all services. This feed would then notify you about the creation of new services.

### How to Share Artifacts

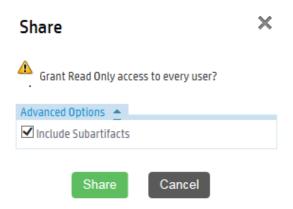
By default, the separation of the Catalog into domains and default security mean that artifacts are only visible to users who need to see them. However, there are situations where you want to make an artifact visible to all users, for example, when a service goes into Production.

HP EM provides a simple share mechanism which enables the administrator or the owner of an artifact gives all users read access to an artifact, making it visible to everyone. Share may be performed on an individual artifact or in bulk.

**Note:** The default functionality of sharing uses the system#registered group which represents all users who access HP EM. The administrator can change the users that can access shared artifacts. For details, see "How to Change the Sharing Principal" in the *Administration Guide*.

#### To Share an Artifact:

- 1. Open the Artifact Details page for the artifact and select the Access Rights tab.
- 2. Click the Share context action to open the Share dialog box.
- Optional: Expand Advanced Options and select Include Subartifacts to also share sub-artifacts in the artifact aggregate.



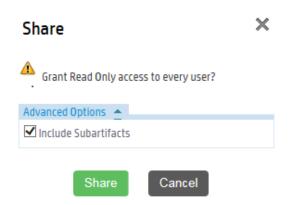
4. Click **Share** to make the artifact visible to all users.

#### To Share a Set of Artifacts:

1. From a table of artifacts, select the artifacts to change, open the **Edit** context menu, and select **Share** to open the Share dialog box.



2. *Optional*: Expand **Advanced Options** and select **Include Subartifacts** to also share sub-artifacts in the artifact aggregates.



3. Click **Share** to make the selected artifacts visible to all users.

# **Chapter 6: Transformation**

The HP EM transformation panel is accessible to you through the Catalog tab home page. It includes the following layers and associated artifact types that you can create or modify:

- Implementation and Migration:
  - Roadmap
  - Projects
  - Plateaus and To-Be
  - Deliverables
- Lifecycle:
  - My Tasks
  - Processes
- Analysis:
  - Impact and Dependencies
  - Investments
  - Navigator
- **Favorite Projects**: You can select projects of interest to you in the catalog and mark them as favorites so that they are easy to access from the home page. If you do not have any projects marked, the favorites list will be empty.

You can create or modify artifacts on each layer. Artifacts are thereby available as inputs for reports that you create by using the Reports tab features or to visualize by using the Navigator.

# Chapter 7: Governance

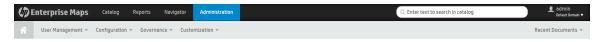
The HP EM governance panel is accessible to you through the Catalog tab home page. It includes the following layers and associated artifact types that you can create or modify:

- Motivation:
  - Drivers
  - Goals
  - Demands & Requirements
- Policy and Compliance:
  - Reports
  - Principles
  - Policies
- Favorite Policy Reports: You can select policy reports of interest to you in the catalog and mark them as favorites so that they are easy to access from the home page. If you do not have any policy reports marked, the favorites list will be empty.

You can create or modify artifacts on each layer. Artifacts are thereby available as inputs for reports that you create by using the Reports tab features or to visualize by using the Navigator.

# **Chapter 8: Administration**

On the Administration tab, which appears if you are logged in as Administrator, you will see many user management, configuration, governance, and customization options.



# **User Perspectives**

New perspectives can be granted for one or many UI Roles in HP EM.

Each unique User Perspective is defined by the Administrator, and allows access to many different views and a variety of artifacts in the UI. The Administrator can grant the User Perspective to an existing user, or can create a new UI Role and define a User Perspective for the new user.

You can do the following sequences of operations to customize your user experiences:

- Create a new UI Role, create a new Perspective, and Grant a new Perspective to an existing UI Role.
- Create a new Role and assign a new UI Role to this role.
- Create a new User and assign a new Role for the user.

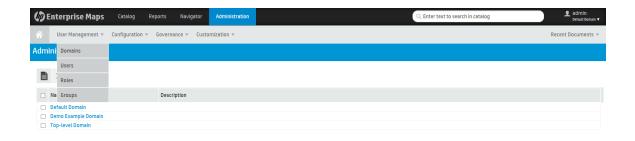
After following these steps, an assigned user will have access to a new perspective in the HP EM User Interface.

### Create New User

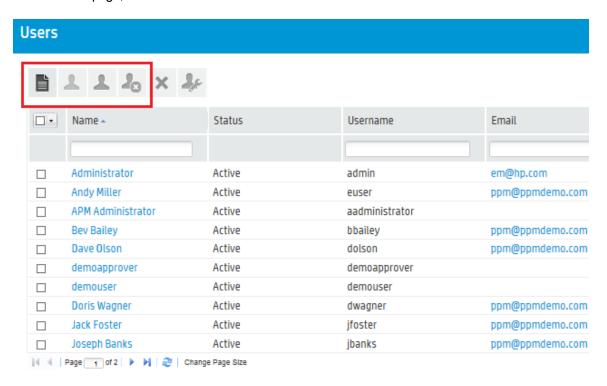
To create a new Internal User in HP EM, use the following procedure:

**NOTE**: This new user cannot log in until the Administrator creates and defines the user from LDAP or the user configuration file.

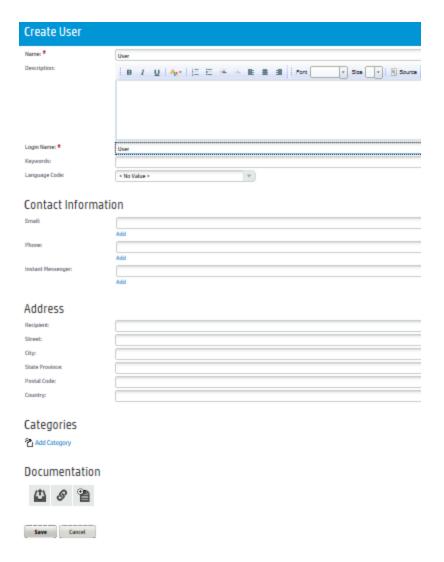
- 1. Log in as the Repository Administrator, and then navigate to the Administration tab.
- Open User Management > Users.



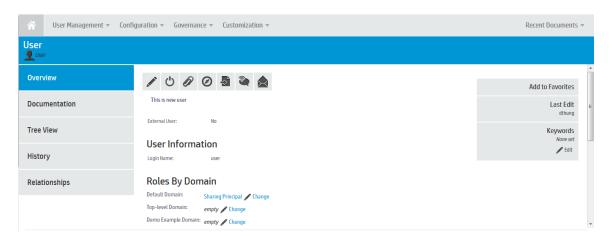
3. On the Users page, click the Create User icon to create a new user.



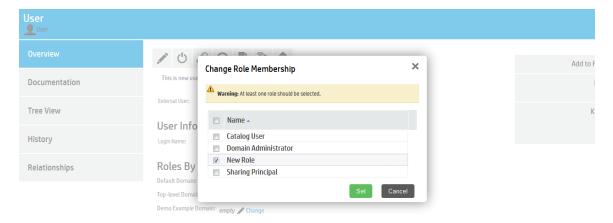
4. Enter the information about the new user such as Name, Description, Login Name, email, Contact Information, Address and Categories if required.



5. When you finish, click Save to save the new user. The resulting page will display the New User.



Now the Administrator needs to change the Role Membership of the user. On the New User view page, go to the Roles By Domain section. Find the role that the new user belongs to, and click the Change link.

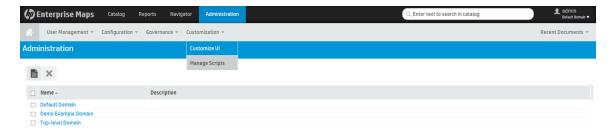


7. In the Change Role Membership dialog, select New Role, and then click the Set button to save the changes.

## Create a New User Perspective

You can create a new perspective for users in HP EM, which changes the user's view of the artifacts and the data available to that user.

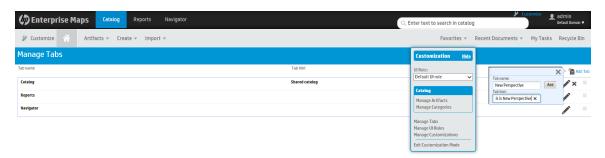
- 1. Log in as the Repository Administrator, and then navigate to the Administrator tab.
- 2. Navigate to the Customization tab and click Customize UI.



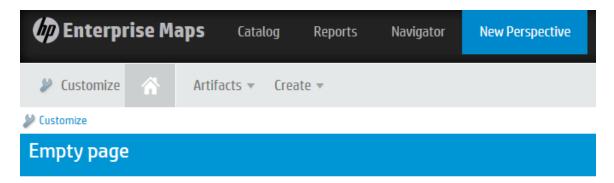
3. In the Customization menu, click Manage UI Roles.



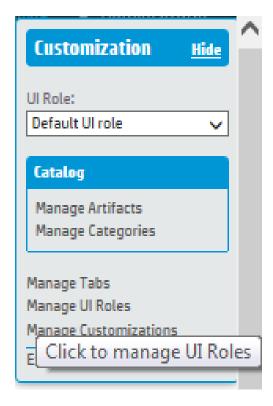
4. In the Manage Tabs page, select Add Tab > Input Tab name and Tab hint, and then click Add.

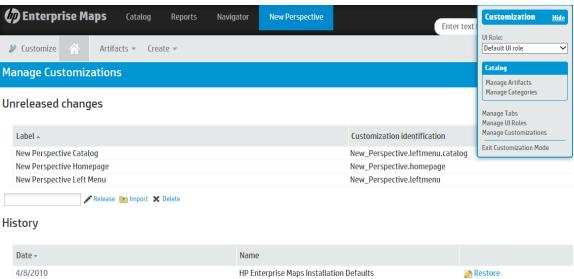


5. Navigate to the New Perspective tab. Click on the Customize icon and add the components and artifacts you want to make available in the user's new perspective.



6. Click on the Manage Customizations link in the Customization menu to open the Manage Customizations page, and then release all changes.





7. When you are finished, click Exit Customization Mode.

## Create a New UI Role

Create a new UI role in HP EM using the following steps:

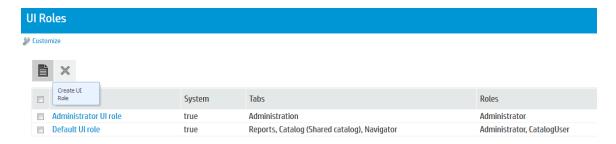
- 1. Log in as the Repository Administrator, and then navigate to the Administration tab.
- 2. Open Customization, and then click Customize UI.



3. In the Customization menu, open UI Roles.



4. In the UI Roles page, click the Create UI Roles button.



Enter the Role Name, and then select Tabs Access Granted for the tabs you wish the role to have access to.



6. When you finish, click Save to save the UI Role. The resulting page will display the new UI Role.



7. When you are finished, click Exit Customization Mode.

## Assign Users to a Role

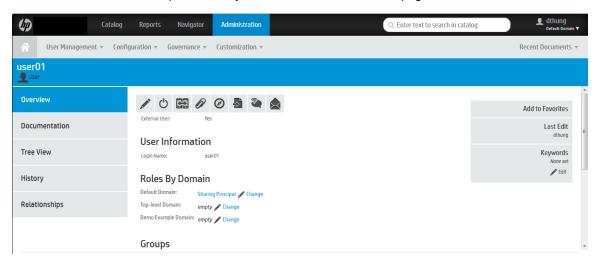
You can assign a user to a distinct role in HP EM.

Log in as the Administrator, and then click the Administration tab.

Open Customization, and then click Customize UI.

In the Customization menu, open UI Roles.

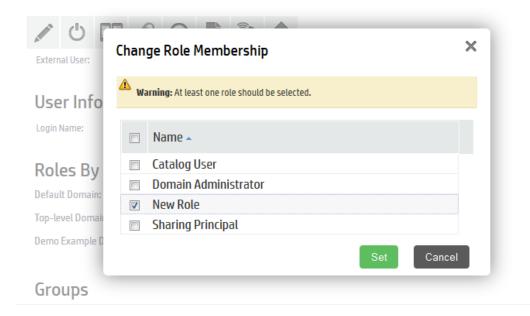
The Overview sidebar will open, where you can view the information page for the selected user.



In the Roles By Domain section, click the Change link.

**Note:** Make sure to assign each user to the correct domain.

On the Change Role Membership page, select the roles that you want the User to be assigned to, and then click Set. The user will see the new perspective in their UI the next time they sign in.

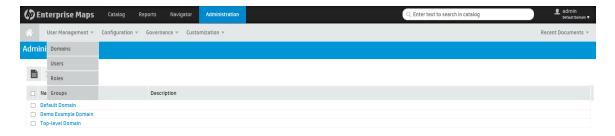


# Import External Users

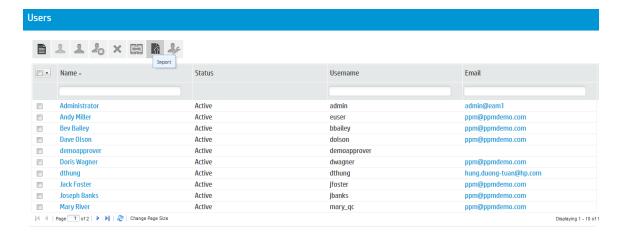
To import a new External User into HP EM, use the following procedure:

**NOTE**: This procedure is used when the HP EM server is already installed with LDAP.

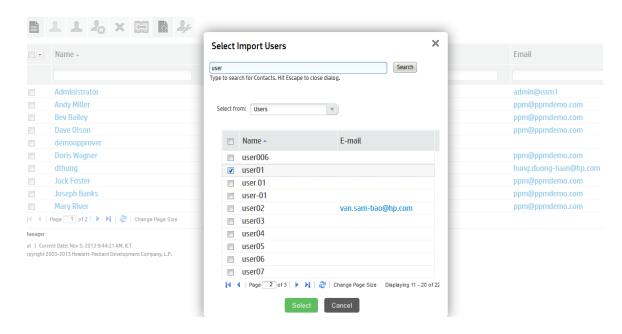
- 1. Log in as the Repository Administrator, and then click the Administration tab.
- 2. Click User Management > Users to open the Users page.



3. On the Users page, click the Import button to import users.



Select the users that you want to import, and then click the Select button to finish importing users.



# Lifecycle Overview

Artifacts in Enterprise Maps go through several stages from candidate through development, implementation, and eventually deprecation and reuse. Each stage has own specific features and each organization has different detailed requirements for these different stages. The stages can be divided into development and runtime stages. Before an artifact is allowed to move from one stage to another, all necessary policy requirements and approvals must be in place.

In Enterprise Maps lifecycle processes are defined and given policy, task, and approval requirements by an administrator. These processes are then either automatically or manually applied to artifacts. Manual lifecycle tasks can be assigned to different users and can have policies that must be validated before a task is completed. Policies as well as permissions can be associated with the lifecycle process stage.

When all the requirements and tasks are complete, the artifact owner makes a request to move the process to the next stage. If the administrator has assigned approvers, they are notified and are required to vote on approval. Depending on the transition type, the governed artifact moves to the next stage and the lifecycle automatic actions defined for these stages are triggered.

# Chapter 9: Reports

HP EM provides many reports that you can run based on the artifacts in your enterprise architecture data model. On the Reports tab, you can access many artifact, policy, heatmap, structure map, and custom reports. You can also view Architecture reports such as Archimate Compliance and Installed Software as well as Transformation reports such as Roadmaps, Investments, Project by Cost, and Applications by Cost. Maintenance reports such as Application Costs are also available, and you can also customize the reports that appear on your dashboard.

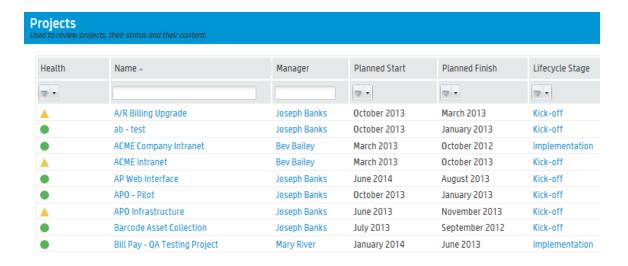
The report type that you choose depends on the results, data format, and granularity that you require. The following are the report types to choose from:

- "Artifact Reports" below
- "Policy Reports" on page 80
- "Heatmap Reports" on page 85
- "Structure Map Reports" on page 89
- "Viewpoint Portlet Reports" on page 94
- "Policy Radar Reports" on page 95
- "Custom BIRT Reports" on page 96

All reports are customizable whenever required and you can create or deploy them without needing to restart Enterprise Maps. All report types use DQL to collect by query the data to display. DQL is an SQL-like language where tables are mapped to Enterprise Maps artifact types and columns mapped to artifact properties. Using DQL is much easier than using SQL since it does not require knowledge of the Enterprise Maps database schema. DQL by default also abides by artifact access rights, so that only artifacts that the current user is permitted to view are part of the results returned by the query.

## **Artifact Reports**

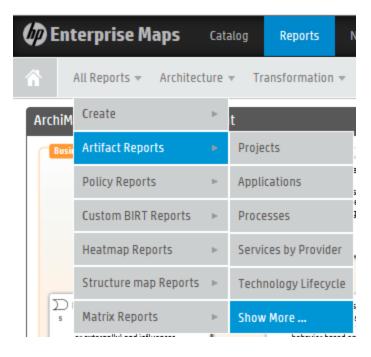
HP EM artifact reports provide table views of the artifact data contained in the HP EM repository. The report is designed and used directly in the HP EM web UI. The artifact table represents the result of a DQL query that is part of the report definition. Artifact reports are re-calculated every time the user accesses the report's web UI page.



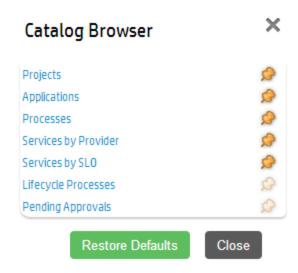
## **Viewing Artifact Reports**

#### To view artifact reports:

- Log in to HP EM and select the Reports tab.
- Select the All Reports > Artifact Reports menu, which shows any favorite reports as well as a Show More link.



2. Click Show More to open the catalog browser. The catalog browser lists all reports and also allows you to pin or unpin a particular report as a favorite onto the Artifact Reports menu.



Click Projects to view the artifact report called Projects, which is used to review projects and their status and content data. The Projects report is a table with columns that were defined by associated DQL queries.



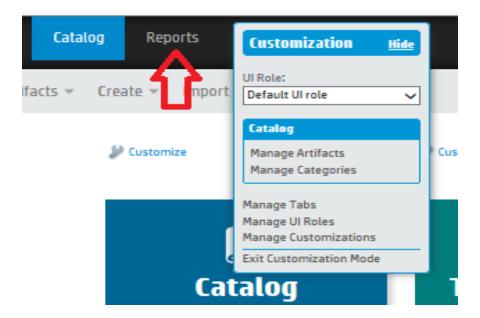
4. Make any modifications that you want. Column headers contain text fields or list boxes that allow you to perform additional filtering. A column's context menu appears when you click the right side of the column header. The menu lets you choose the sort order or make columns visible or invisible. The columns can be resized by moving the line between them. You can also reorder the columns by dragging them.

## **Defining Artifact Reports**

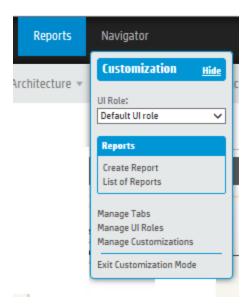
Artifact reports are defined as a part of the HP EM web UI. An administrator can change and customize the web UI directly using web UI. In this example, we will look at how to view or modify the definition of the Projects report.

#### To define an artifact report:

- Log in to HP EM as administrator and select the Administration tab, and then select the Customize UI menu item from the Customization menu. The web UI switches to customization mode, in which all pages are editable. A customization box appears on the right side of every page.
- 2. Click the Reports tab.



Once you click the Reports tab, the Customization box changes to include artifact report-related items. Click List of Reports. A list of all artifact reports is displayed; click the Projects link from the list



4. The artifact report page is shown in the customization mode. It renders the results and displays Customize links at the top of each customizable section. The Customize link above the results table opens a window that shows an XML representation of the UI customization data that defines the report.

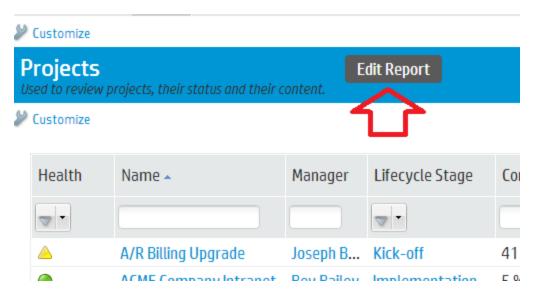
```
Artifact Report Projects Table
         <?xml version="1.0" encoding="UTF-8"?>
<customization xmlns="http://soa.systinet.hp.com/2009/02/ui/customization" xmlns:cust="http://soa.systinet.hp.com/2009/02/ui/customization" xmlns:cust="http://soa.systinet.hp.com/200
                     <datasource>
                                   <query>
  6 SELECT :columns
7 FROM projectA
  FROM projectArtifact p

LEFT JOIN contactArtifact c on bind(p.providedBy) and (p.providedBy.useType = 'projectManager')

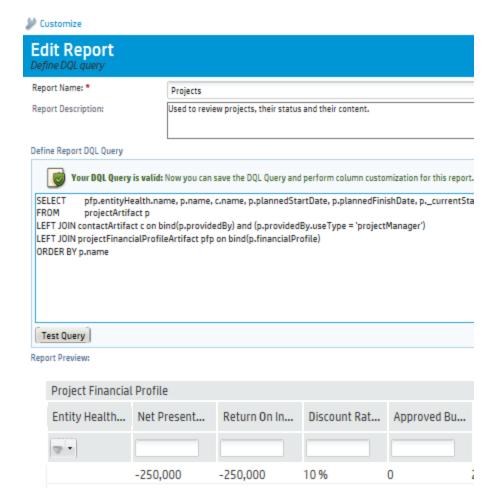
LEFT JOIN projectFinancialProfileArtifact pfp on bind(p.financialProfile)
 10 ORDER BY p.name
                                   </query>
                      </datasource>
                      18
19
20
21
22
23
24
25
26
27
28
33
33
34
35
36
37
                                   </p
                                   </column>

<
                                  </column>
                                  </column>
                                   <column id="p plannedFinishDateId" label="Planned Finish">
                                               <content queryColumn="p.plannedFinishDate"/>
                                  </column>
                                  </
                                   </column>
                                   <p
                                   </column>
 40
                                   <column id="p netPresentValueId" label="NPV">
    <
                                                                                                                                                                                                                                                                                          Save
                                                                                                                                                                                                                                                                                                                            Cancel
```

Click the Edit Report link in the header of Projects report page to access the report definition in Edit Report view.



6. In the Edit Report view, you can define and test the DQL query that creates the resulting table data. You can preview the data as you tune the query. When you finish, click the Next button at the bottom of the page below the project list.



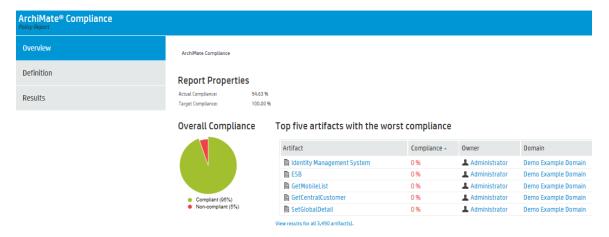
7. Specify the layout of columns of the result table. You can edit column names, organize columns in sections, reorder them, or make them visible/invisible by default. Click Next and click the Refresh button to preview the changes. When you finish, click Finish. Alternatively, if you want to have more control over when your changes are published to users, click Cancel.



8. If you click Cancel, you remain in the customization mode of the web UI. Changes that you made in the web UI are visible only to you as an administrator. If you want to make your changes visible to all users, you can release them in a page that appears when you click the Manage Customizations link in the Customization box. Click the Exit Customization Mode link when you are ready to exit customization mode.

## **Policy Reports**

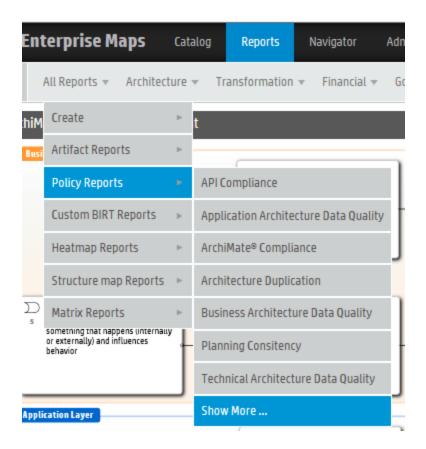
HP EM policy reports are used to report the levels of policy compliance of the artifacts in HP EM repository. The report is designed and used directly in the HP EM web UI. You can select the policies to validate as well as the filter that specifies what artifacts and data to include in the validation directly in the web UI when you define the report. The report's results are cached in the HP EM repository. Users always view results from the most recent calculation of the report.



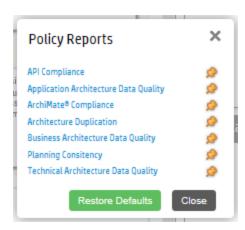
### Viewing Policy Reports

#### To view policy reports:

- 1. Log in to HP EM and select the Reports tab.
- Select the All Reports > Policy Reports menu, which shows any favorite reports as well as a Show More link.



3. Click Show More to open the catalog browser. The catalog browser lists all reports and also allows you to pin or unpin a particular report as a favorite onto the Policy Reports menu.



4. Click Archimate Compliance to view the policy report called Archimate Compliance.

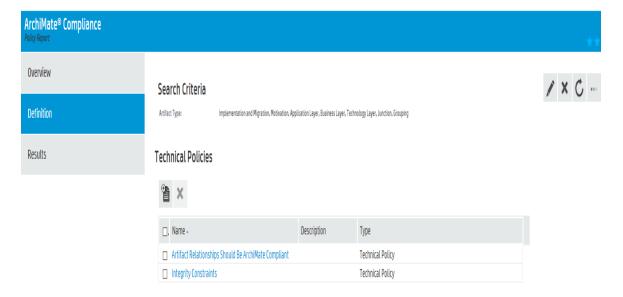
## **Defining Policy Reports**

Policy reports are defined as a part of the HP EM web UI. In this example, we will look at how to view or modify the definition of the Archimate Compliance policy report.

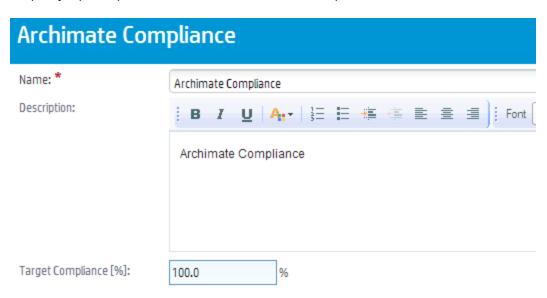
To define a policy report:

1. Click the Definition tab on the policy report page to see how the report is defined.

It shows the Search Criteria that are used to filter artifacts subject to policy validation, and a list of Technical Policies that must be validated against the artifacts. An administrator can add or remove technical policies using a toolbox that appears above the list.



Click the pen icon in the toolbox on the right side to edit the report and view other important report
definition items. The Edit page lists general fields that specify the report name, description, and
target compliance by percentage. The target compliance field is used to indicate the overall goal of
the policy report in percent of artifacts that should be compliant.



3. The Artifacts to be Validated section allows you specify a filter on which artifacts you want to

validate. You can edit, remove, add, or clear criteria using the controls in this section. By clicking the Preview Results button, you can see artifacts that match the criteria. If required, click the Save button at the bottom of the page to save your changes.

#### Artifacts to be validated Enter search criteria to specify repository artifacts to be validated or type the URL to validate the external document Criteria for Repository Artifacts Enter text to search ... External Document Keywords: $_{\mathbb{T}}$ Last Modified: Any Time Artifact Type: Implementation and Migratio Domain: < All Domains > Artifact Type Motivation Artifact Type Application Layer Artifact Type **Business Layer** Artifact Type Technology Layer ₩. Artifact Type Junction Artifact Type ₩. Grouping

4. You can also create a new policy report by selecting the Reports tab, and then clicking Create > Policy Reports. This will allow you to specify all the details of a new policy report on a single page.

Add Criteria

**Preview Results** 

Clear

### Calculating Report Results

Policy report results are cached in the HP EM repository. Depending on the number of policies and resources being validated, it can take an hour or more to calculate the results. Users who are viewing the policy report are informed that the report might not be up-to-date. Recalculation of the policy report is started in the following ways:

- Manually: the user manually recalculates the report. An associated action is available in the Overview tab of the report.
- **By Automatic Task**: HP EM starts a Policy Report Validation task every day around 2:30 AM. The actual time may depend on the time zone of the server on which the HP EM application is running.

To check automatic Policy Report Validation task details:

- 1. Log in to HP EM as administrator and select the Administration tab, and then select the Tasks menu item on the Configuration menu.
- Click the Policy Report Validation Task link on the Tasks page. If you cannot see it on the page, switch to a table view by using the associated Show Task List toolbar action. The Policy Report Validation Task page shows that the task is scheduled along with a table of the execution history.
- 3. Click Edit Schedule on the toolbar to open the Edit Schedule dialog in which you can view and change the scheduling details of the task.

### **Archimate Compliance Report Structure**

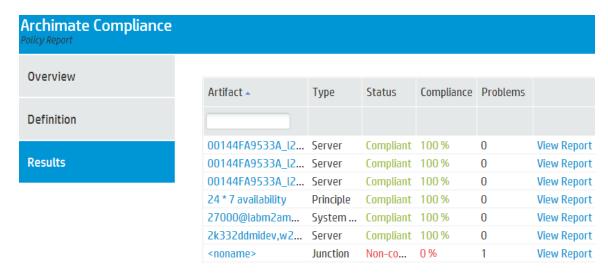
The Archimate Compliance policy report consists of three subreports:

Overview: shows the percentage of compliant and non-compliant artifacts in a pie chart as well as a
list of the top 5 artifacts with the worst compliance level. It is accessible when you click the
Overview on the left side of the report page.



Results: shows an index table with columns containing clickable artifact names, artifact types, compliance status (Compliant/Non-Compliant), artifact compliance (0 – 100 percent), number of problems found, and a link to details about policy calculations. It is accessible when you click the

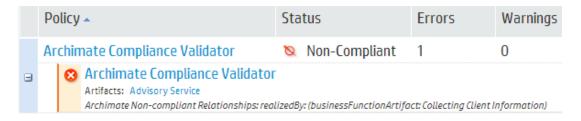
Results tab on the left side of the report page.



Artifact Results: shows a table with policy calculation details by artifact. Each row of the table
represents a technical policy included in the report definition. It contains a clickable name,
compliance status, and the number of errors and warnings. It is accessible when you click on the
View Report link in any Results row or the Overview subreport.



Each row starts with a clickable plus symbol (+). When clicked it expands a row to show a full textual description of all errors are warnings.



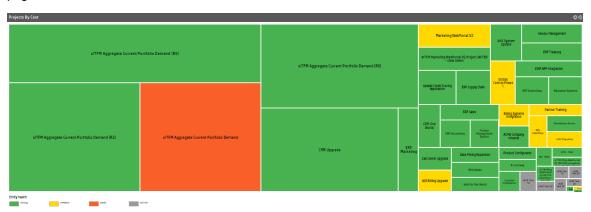
## **Heatmap Reports**

You can use the HP EM heatmap portlet to create graphs of your data where individual values contained in a matrix are represented as colors. Planned cost is shown by the relative size of the

rectangular areas and project health is shown by the color shading of the rectangles. Heatmap reports are updated immediately when there is a change in the data reported. HP EM provides three Heatmap reports out of the box:

- Applications by Cost report -- shows the Annual Cost Total(s) of selected projects.
- Projects by Cost report -- shows Planned Cost of selected projects (shown).
- Installed Software report -- shows Lifecycle Stage of selected System Softwares.

A heat map is defined in the web UI using a managed server-side script that specifies how the data and its two dimensions (that is, planned cost and project health) are calculated and visualized. The heat map is also shown directly in the web UI, either as a portlet (an area of the HP EM home page) or as a standalone report. Heat map reports are recalculated every time the user accesses the report's web UI page.



### Create or Edit a Heatmap Portlet

When you create a Heatmap portlet, you first need to create a Data Source Definition script to define a set of data. Then you create a Heatmap Portlet script in **JavaScript** with **Heat map** as the **Execute on** type.

#### To create a Heatmap portlet:

- 1. On the Administration tab, select Customization > Manage Scripts.
- 2. Create a data source:
  - a. Click **Data Sources** in the left panel and click the **Create new data source script** icon. This opens the Data Source Definition editor.



 Add a unique name and select XML as the Script language and DataSource Definition as the Execute on option. Click Save. There are two options for creating a data source script: Closure Definition-Based\_Data\_ Sources, or DQL-Based Data\_Sources (see "Data Sources" in the Developer Guide for details).

- 3. Create a heatmap portlet:
  - a. Click **Reports & Portlets** in the left panel and click the **Create new portlet** icon. This opens the Portlet Script editor.
  - b. Add a unique name and select **Javascript** as the **Script language** and **Heat map** as the **Execute on** type. Click **Save**.
- 4. Click **Edit Script** to add the script content in **JavaScript** and click **Save**. The following is a content example:

#### Edit script

5. Click Save.

After you save your new Heatmap Portlet script, you can go to the Dashboard and add the Heatmap Portlet to your dashboard view using the Dashboard menu.

#### To edit a Heatmap Portlet:

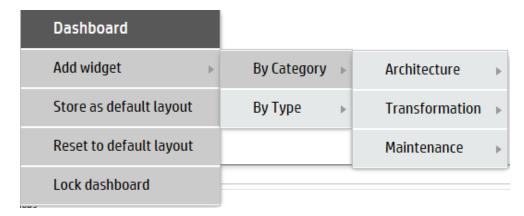
- On the Administration tab, select Customization > Manage Scripts.
- 2. Select **Reports & Portlets** in the left panel to view all the reports.
- 3. Click the Heatmap portlet you want to edit.

- 4. Click **Edit Script** to open the Edit script page and edit the script.
- 5. Click Save.

### Add a Heatmap Portlet to Your Dashboard View

To add a Heatmap Portlet to your dashboard:

- 1. Right-click from your dashboard to open the Dashboard menu
- 2. Select the Heatmap portlet to add it to your dashboard.



### Create or Edit a Heatmap Report

You can create a customized Heatmap report after you create a Heatmap portlet's embedded script. The new report will appear on the Reports menu under Heatmap Reports.

#### To create a Heatmap report:

- 1. On the **Administration** tab, select **Customization > Manage Scripts**.
- 2. Create a heatmap portlet script:
  - a. Click **Reports & Portlets** in the left panel and click the **Create new portlet** icon. This opens the Portlet Script editor.
  - b. Add a unique name and select **Javascript** as the **Script language** and **Heat map** as the **Execute on** option. Click **Save**.
- 3. Click Edit Script to add the script content and click Save.
- Open the Customization mode by selecting the Administrator tab > Customization >
   Customize UI.
- 5. Customize the Dashboard menu by adding a new item for the Heatmap Reports group. The following is a content example:

```
<parameter name="collectionid">hpsoaBirtReports</parameter>
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
               </aroup>
               vgroup id="reports.artifacts" label="Artifact Reports" styleClass="systinet-horizontal-menu-dir">

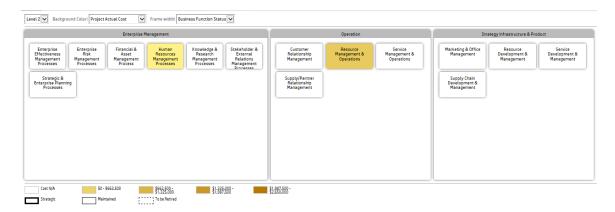
<component componentName="core/catalog/menultemCatalogRenderer" id="reports.artifacts.browse">
                    <parameter name="customizationid">reports.leftmenu.artifactReportCatalog</parameter>
<parameter name="browseArtifact">true</parameter></parameter>
                                <parameter name="rendersCustomizeLinks">true</parameter>
                 </component>
              </group>
               group id="reports.policy" label="Policy Reports" styleClass="systinet-horizontal-menu-dir">
                 Add new report into Heatmap Reports
                           </component>
               </aroup>
                                                                                                                                                                                                  group
               \rightarrowspace{\text{sysumps}}
\text{group id="reports.birt" label="Custom Reports" styleClass="systinet-horizontal-menu-dir">
\text{component Component Name="/reports/catalog/birtReportBrowser" id="reports.birt.browse">
\text{component Component Name="/reports/catalog/birtReportBrowser" id="reports.birt.browse">
\text{component Name="/reports/catalog/birtReportBrowser" id="reports.birt.browser">
\text{component Name="/reports/catalog/birtReportBrowser" id="reports.birt.browser">
\text{component Name="/reports/catalog/birtReportBrowser" id="reports.birt.browser">
\text{component Name="/reports/catalog/birtReportBrowser" id="reports.birt.browser">
\text{component Name="/reports/catalog/birtReportBrowser" id="reports/catalog/birt.browser">
\text{component Name="/reports/catalog/birt.browser" id="reports/catalog/birt.browser"
\text{component Name="/reports/catalog/birt.browser" id="reports/catalog/birt.browser" id="reports/c
                                 </component>
               <task id="reports.heatmap.applications" label="Applications By Cost" taskLocation="/reports/impl/heatmap">
                         <parameter name="scriptLocation">/scripts/Applications By Cost</parameter>
                <task id="reports.treemap.applications" label="%customization.ReportsCustomizationMessages$reports_leftmenu_reports_heatmap_applicationsBy</p>
```

## Structure Map Reports

As an HP EM administrator, you can use HP EM to create a structure map of artifacts by business function, which allows you to view the relationships between artifacts and the status of each artifact. Users can group artifacts by defining DQL queries and colors, and can modify the way that artifacts are displayed by using a color renderer and legend renderer.

Another way to characterize structure map reporting is as a boxed visualization of a data tree structure. You can use a structure map to model business capabilities, but the visualization itself is not restricted to business capabilities. Each rectangular area contains boxes that can be nested several levels. Boxes can be decorated to show dimensions of input data by using background colors or border lines of varying widths. Unlike the heap map report, the area size of a box is calculated to fit. Several levels of boxes are shown at the same time.

For example, an out-of-box Capabilities to project mapping structure map report shows business functions as nested boxes. The box's background color represents the cost of the projects allocated to a business function. The box's bold frame indicates that the function is going to retire.



A structure map is defined in the web UI using a managed server-side script that specifies how the data and its dimensions are calculated and visualized. The structure map is shown directly in the web UI, either as a portlet (an area of the HP EM home page) or as a standalone report. Structure map reports are recalculated every time the user accesses the report's web UI page.

## **Creating Structure Maps**

You can use HP EM to create structure maps, an important tool to help manage infrastructure, reduce ongoing costs, and increase areas of investment within your enterprise architecture.

To create a Structure Map portlet, first create an embedded script with Structure Map execution on type.

- 1. On the **Administration** tab, select **Customization > Manage Scripts**.
- 2. Create a data source:
  - a. Click Data Sources in the left panel and click the Create new data source script icon. This
    opens the Data Source Definition editor.



- b. Add a unique name and select **XML** as the **Script language** and **DataSource Definition** as the **Execute on** option. Click **Save**.
  - There are two options for creating a data source script: Closure Definition-Based\_Data\_ Sources or DQL-Based Data\_Sources (see "Data Sources" in the Developer Guide for details).
- Create a Structure map:
  - a. Click **Reports & Portlets** in the left panel and click the **Create new portlet** icon. This opens the Portlet Script editor.
  - b. Add a unique name and select **Javascript** as the **Script language** and **Structure Map** as the **Execute on** option. Click **Save**.

4. Click **Edit Script** to add the script content in **JavaScript** and click **Save**. The following is a content example:

```
/* The script creates Structure Map Portlet. */
     id: 'capabilityToProjectMapping',
[dataSource: '/scripts/BusinessFunctions.xml',] refer to DataSource Script
dataSource: //scripts/susinesstunctions.xml', refer to DataSource Scri
dataSourceExtragrams: {
    plateauArtifactUnid: 'ac4d3412-a45f-474f-b711-be6de01229e7'
    /* optional setting
    maxDepth: number,
                                maxResults: number
                                 seed: 'uuid seed artifact' for specifying root node
                  },
/* optional setting - default value */
/*
                    layers : {
label: '',
names: ['Level 1', 'Level 2', 'Level 3'] — Level 1
                    drillDown: true,
                                                                                                 Level 2
                  visualizations: [{
    label: 'Background Color', —
                                                                                                                      Background Color: Project Planned Cost
                                             type: 'EA.portlets.visualization.MoneyBasedColorVisualization', field: 'plannedCost', name: 'Project Planned Cost'
                                             type: 'EA.portlets.visualization.MoneyBasedColorVisualization',
field: 'actualCost',
name: 'Project Actual Cost',
/* styleSchema - optional setting
* Predefined styleSchemas:
* 'pastel-colors': yellow, green, sky-blue, sea-blue, orange, pink
* 'bright-colors': light-green, light-blue, light-pink, light-yellow, light-orange, light-re
* 'blue-gradient': white to deep blue
* 'yellow-gradient': white to dark yellow
*/
                                             styleSchema: 'blue-gradient'
                                              \label{type: 'EA.portlets.visualization.LifecycleBasedBackgroundColorVisualization', field: 'lastApprovedStage', name: 'Lifecycle Stage'
                                              type: 'EA.portlets.visualization.LifecycleBasedBackgroundColorVisualization',
field: 'tobeArchitectureStage',
name: 'To Be Architecture Stage'
                               3.3
                                                                                                                     Frame width: Business Function Status 🔻
                                label: 'Frame width'. ----
                                             type: 'EA.portlets.visualization.CategoryBasedBorderVisualization', field: 'businessFunctionStatus', name: 'Business Function Status'
                                              type: 'EA.portlets.visualization.CategoryBasedBorderVisualization', field: 'investmentPriorit
field: 'investmentPriority',
name: 'Investment Priority',
```

5. After you save your new structure map portlet script, you can go to the Dashboard and add the structure map portlet to your Dashboard view using the Dashboard menu.

### **Customizing Structure Maps**

You can use HP EM to show the ongoing cost and areas of investment within your enterprise architecture. Structure maps are a unique visual tool that highlight these features and more.

As an HP EM administrator, you can use HP EM to customize the look and feel of the structure maps that you or other users create.

To customize structure maps:

- On the Administration tab, click Customization > Manage Scripts. The Managed Scripts page opens.
- 2. Find the Structure Map script, and then open it.
- 3. You can customize the following properties:

**[Required]** Id: Identification of map, using different values to enable the user to add capability map instances on the HP EM home page.

**[Required]** Datasource: closure datasource or dql datasource to select data for the map and the maximum depth of the tree view.

[Optional] dataSourceExtraParams: parameters for the datasource script.

[Required] Visualizations: Array of node visualization settings. Structure:

```
visualizations [{
    label: visualization name,
    items: [
        [Required]
        type: visualization class,
        [Required]
        field: field name of data,
        [Required]
        name: name of field
        [Optional]
        styleSchema: string name of predefined schema or JSonObject
]
},
...
]
```

### **Embed Structure Map Components**

You can define a structure map's component to refer to the configuration of an existing structure map portlet script in managed scripts.

#### To embed structure map components:

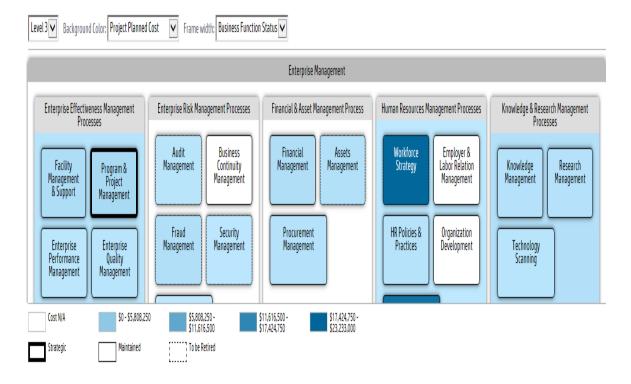
- 1. On the Administration tab, click Customization > Customize UI.
- 2. Place a component into your working customization xml file such as the following example:

```
<component componentName="/report/impl/structureMap" id="capaMapComponent">
    cparameter name="scriptLocation">/scripts/CapabilityToProjectMapping.js
```



You can also create a new StructureMap portlet then use its script location for the **scriptLocation** parameter.

The resulting artifact page shows the embedded structure map component like this:



3. To add a menu link to a structure map page that will display in the Reports tab, add this code to the script:

```
<task id="reports.structuremap.bftoproj" label="Capabilities to project</pre>
```

```
Reports Homepage

//task>
//group>
// coroup id="report.structuremap" label="Structure map Reports" styleClass="systinet-horizontal-men / coarameter name="scriptLocation">/scripts/CapabilityToProjectMapping.js</parameter>
//group>
//gro
```

Your new menu link will appear when you access the Reports tab.

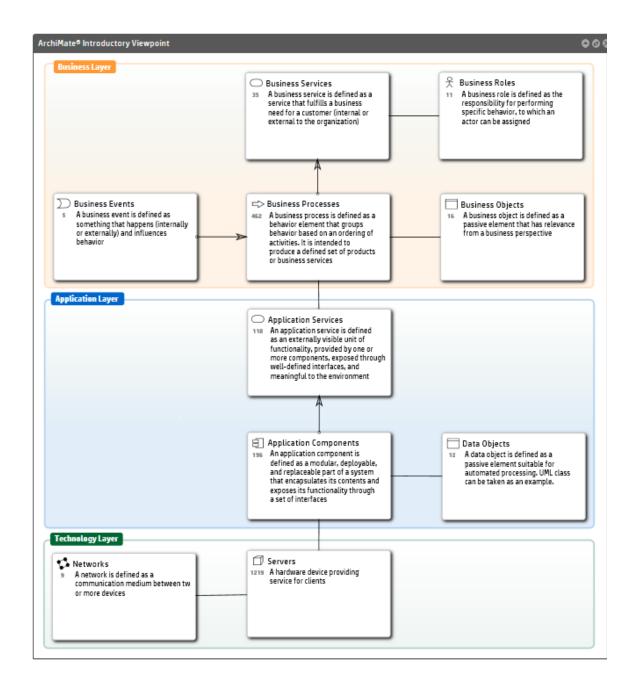
4. To add a menu link to a structure map page that will display in the Catalog tab, add this code to the script:

Your new menu link will appear when you access the Catalog tab.

## Viewpoint Portlet Reports

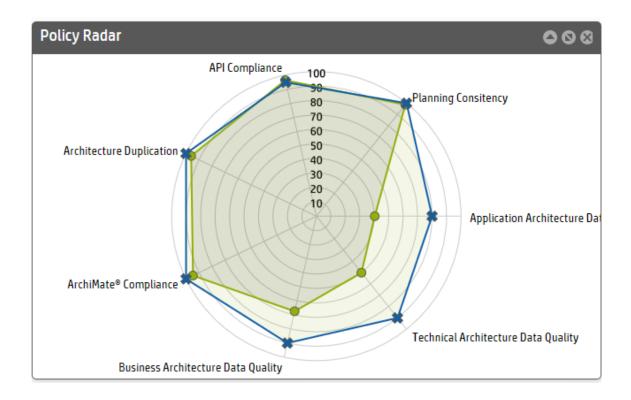
HP EM viewpoint portlet reporting is displayed directly in the web UI to visualize pre-defined artifact types along with the dependencies between those artifacts. It provides a view to the HP EM repository artifact types and each type is displayed as a box with a number of matching artifacts. The lines between the boxes represent relationships between artifact types. The boxes are clickable to show the artifacts in a dialog window in which a selected artifact can be used to run impact or dependency analysis that is then visualized directly in the viewpoint portlet.

Viewpoint portlets are defined by HP EM managed server-side scripts. The layout of the viewpoint is specified by using an SVG file that you can create in Inkscape (see <a href="https://www.inkscape.org">www.inkscape.org</a>). If you have installed the HP EM Extension for Inkscape, which provides a seamless integration between Inkscape and HP EM, you can create an SVG file that can be used as a viewpoint. For more information, see "Installing the HP EM Extension for Inkscape" in the Developer Guide.



## **Policy Radar Reports**

HP EM policy radar reporting is a web UI portlet that displays a radar chart showing the difference between the policy report's actual and target compliance. By default, the policy radar displays all policy reports available HP EM. The layout and contents of the radar can be customized using a managed server-side script.



## **Custom BIRT Reports**

You can use the HP EM Workbench to design custom reports. The reports are defined and executed using Eclipse's BIRT, which is a very powerful reporting system that includes the reporting features such as report layout, data access, and scripting. For more information, see http://www.eclipse.org/birt/ where you can find details about the technology used and a few report examples.

BIRT report definitions can be deployed and used in HP EM. The BIRT execution engine is part of HP EM and the report definitions are executed to create a custom report. Custom reports are cached in HP EM and you can access them directly in the HP EM web UI. Unlike other reports, custom reports are provided as standalone documents (PDF or HTML) that can be easily downloaded from HP EM.

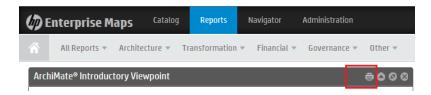
# Chapter 10: Print Portlet Content

HP EM provides the option to print dashboard portlet contents from the Reports tab. This is useful as you can convert the report to PDF for instance.

As of now, this option is available for Viewpoint Model, Artifact Statistic and Policy Radar on the Reports home page. Other reports that can be printed are Structure map Reports, Heatmap Reports, Data Matrix Reports and Rating Reports under drop-down for different sub-menu options.

To print, the instructions are as follows:

- 1. Select the report you wish to print.
- 2. Click the print icon to preview and print the report.



- 3. Ensure that **Print Background Colors and Images** is selected for IE and **Background Graphics** for Chrome to get a complete output.
- 4. Select **Shrink To Fit** on Print dialog or Printing Preferences to print the entire portlet content on a single page.

**Note:** For print preview in IE, click **Internet Options > Security > Custom level**. Scroll down for the option **Initialize and script ActiveX controls not marked as safe for scripting** and select **Prompt**. Restart your machine and click the print icon to see the print preview.

For Chrome the print preview shows automatically upon clicking the print icon. Firefox does not support print preview.

# Chapter 11: Integrations

HP EM integrates by importing and synchronizing with the following products:

- HP Project & Portfolio Management (PPM), see "PPM Integration" below
- HP Universal Configuration Management Database (UCMDB), see "BSM/UCMDB Integration" on page 116

## **PPM Integration**

HP EM integrates (imports and synchronizes) the following areas of the HP PPM (Project & Portfolio Management) software with Enterprise Architecture: Project, Financial and Demand Management.

The PPM software is a primary source of financial and project information about applications in the corporation. The HP EM integration and synchronization with PPM provides useful financial insights into enterprise architecture. HP EM can generate views showing architecture aligned with demand management, project, and asset management, including financial views from PPM.

Further, a bi-direction integration is provided between HP EM and PPM. This integration brings about an effective way of providing a transparent control over architecture solution that is required in order to accept the proposal, estimate its costs and also estimate the time required to realize the change.

In addition, Application and Portfolio Management (APM) has been supported for integrating by enhancing the built-in PPM mapping to support the basic APM types and the relationships between them. APM which is a PPM product module helps with optimization of application portfolio based on business goals. It determines the feasibility of applications with the objective of eliminating application redundancy.

**Note:** HP APM is commonly referred as a shortcut for Application Performance Management which is a completely different product.

You can also customize the HP EM synchronization with other PPM software vendors. HP EM synchronization is not limited to one PPM endpoint. See "Customize and Export PPM Synchronized Data" on page 112 for details.

Only the Administrator role can synchronize HP EM with HP PPM.

## Import and Synchronize PPM Data

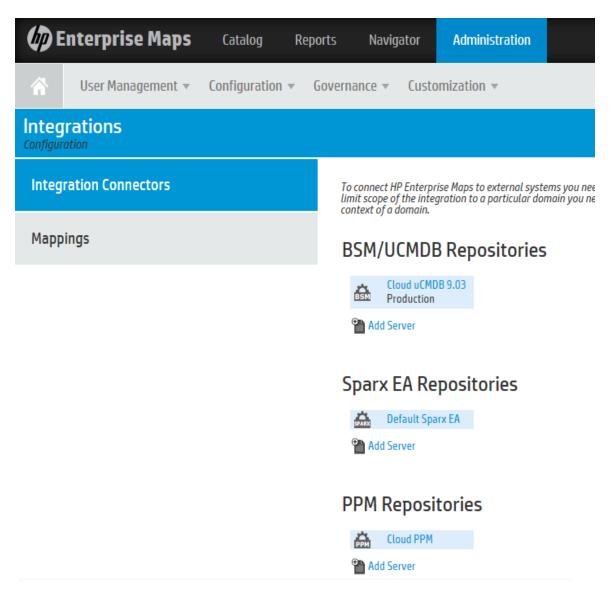
You can import and synchronize the associated PPM data with HP EM.

To import and synchronize PPM data with HP EM:

1. Select the **Administration** tab > **Configuration > Integrations**.



2. Click **Add Server** inside the PPM Repositories section to create a new PPM repository for the PPM synchronized data. The PPM Repository opens.



- 3. Enter the following information:
  - Name (Required): Server name
  - Description (Optional): Enter a description of the PPM repository.
  - Base URL (Required): PPM Server URL
  - Username (Required): Server login username
  - Password (Required): Server login password
- 4. Click Save.
- 5. Click the Associated Import Task icon. The Import page opens.



6. Click the Run icon to start the synchronization, and confirm the decision. The import runs in the background, which means that you can perform other tasks without interrupting the import.

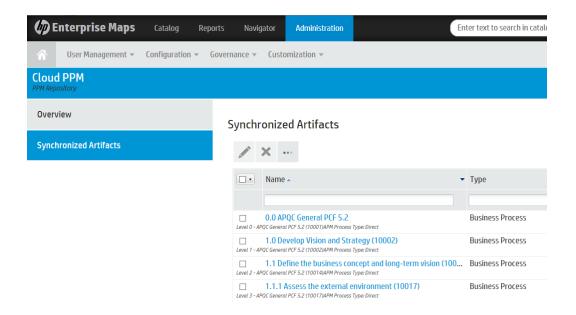


- 7. The import takes less than 10 minutes. During the import you can see the synchronized data being added in artifacts collection in the Catalog as a result of the task.
- 8. If you worked on another task during the import and want to see the import results, do the following:
  - a. Select the **Administration** tab > **Configuration > Integrations**.
  - b. Select the new PPM repository you just created.
  - c. Click the Associated Import Task icon to see the Execution History on the Import page.

## View PPM Imported Data

You can view PPM imported data in HP EM as normal artifacts in **PPM repository > Synchronized Artifacts** tab or as artifact reports (Projects or Applications). Some PPM data can also be viewed as graphical diagrams such as a Heatmaps Report showing Projects By Cost or Applications by Cost.

The Synchronized Artifacts page displays the table of synchronized data.



### PPM Mapped Data

#### **Artifacts Mapping**

The PPM data is mapped to HP EM data, with the same corresponding relationships:

- PPM assets are mapped to HP EM Application Component artifacts and corresponding Application Component Financial Profile artifacts.
- PPM projects are mapped to HP EM Project artifacts and corresponding Project Financial Profile artifacts.
- PPM business objectives are mapped to HP EM Goal artifacts.
- PPM proposals are mapped to HP EM proposal artifacts.
- APM artifacts are mapped to HP EM artifacts as follows:
  - Business process mapped to businessProcessArtifact.
  - Application mapped to applicationComponentArtifact.
  - Server mapped to serverArtifact.
  - Location mapped to locationArtifact.

You could view details of supported mapping in the Mapping Configuration page of your PPM integration instance.



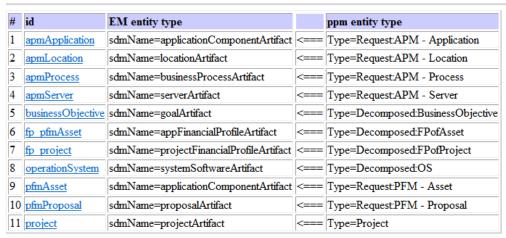
Clicking Mapping Configuration opens the following page:

### Mapping configuration reference between EM and ppm entities

Status: VALIDATION SUCCESS (Details)

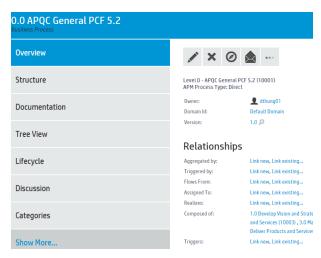
Source XML: configuration property <u>platform.sync.mapping.ppm</u>

Reference Attributes: useType
Top-level Extensions: ppm:exporter

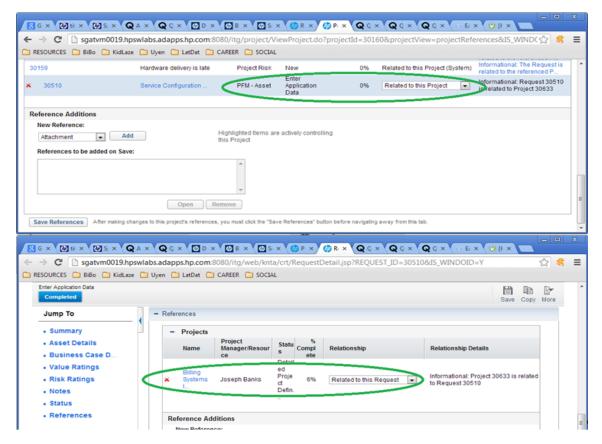


#### Relationships

On HP EM, the relationship of PPM data can be viewed in "Relationships" section of the Overview tab or in Relationship tab when you go to the view page of imported artifact.



On PPM, you can see the assets on "Project Details" or "References" section of the corresponding Project/Asset.



#### **Artifact's Owner Mapping**

For all synchronized artifacts the owner remains the same both in PPM and HP EM. This eliminates the need for the administrator to reassign the ownership manually in HP EM.

The only exceptions to the above rule are:

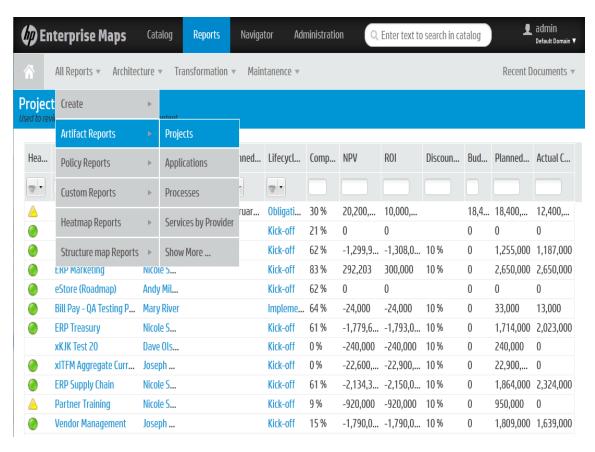
- If PPM and HP EM use different LDAP, Administrator is still the owner
- If PPM and HP EM use same LDAP, however user has not logged into HP EM yet, Administrator is still the owner
- If there are more than 2 matched full names, Administrator is still the owner
- When user creates a new artifact into mapping file, owner property has to be mapped

### **PPM Reports**

You can view imported reports of PPM projects and applications, as well as all imported PPM records as HP EM Application Component artifacts. In each case, when you click on a PPM artifact, you can then click on the PPM Link to see the artifact's corresponding asset in the PPM UI.

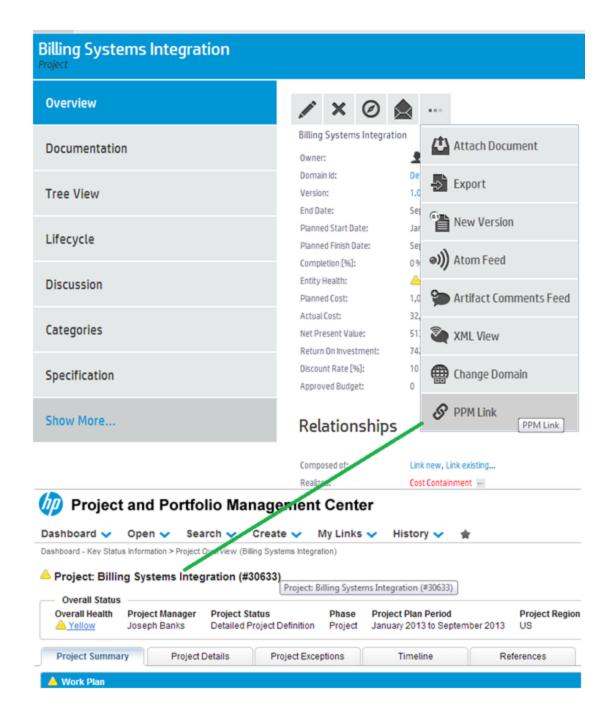
To view the PPM reports and see the corresponding asset in the PPM UI:

- 1. Open the projects, applications or imported records:
  - a. To see a list of the PPM projects, select the Reports tab > All Reports > Artifact Reports > Projects.



- To see a list of the PPM applications, select the Reports tab > All Reports > Artifact Reports > Applications.
- c. To see the list of all imported PPM records, select the Administration tab > Configuration > Integrations > PPM Repositories > <PPM\_repository>.
- 2. In any of these lists, click on a PPM artifact to open the artifact Overview page.
- 3. Click on the More icon (the last icon with three dots) to open the menu and select the PPM Link at the bottom of the menu.

The PPM UI opens on a new tab in the browser to the corresponding PPM asset information. (If you are not already logged in to PPM, you will be directed to the login page and then redirected to the corresponding PPM asset.)



## Build and Monitor Architecture from Synchronized Proposal

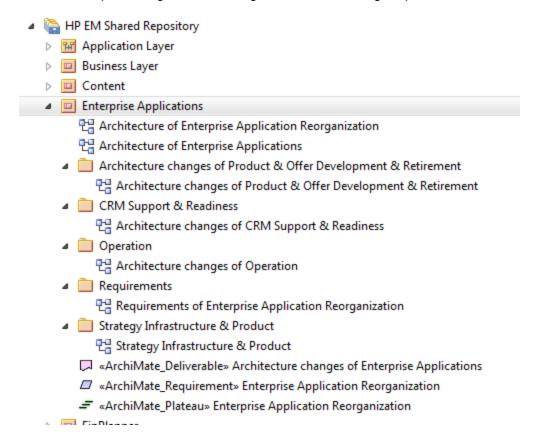
In HP EM you can create an architecture from a proposal which enables you to not only manage the demands of the users but at the same time be able to exercise better control over the project's progress.

Proposals can be automatically imported from PPM into Enterprise Maps ("PPM Integration" on page 98).

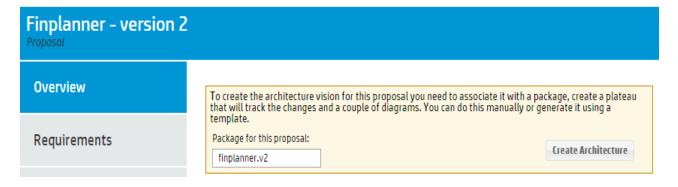
### **Build Architecture**

An enterprise architect helps build an architecture vision in the following manner:

1. Generates a basic proposal document structure, which includes a requirement structure diagram, and a solution plateau together with a diagram that is visualizing the plateau.

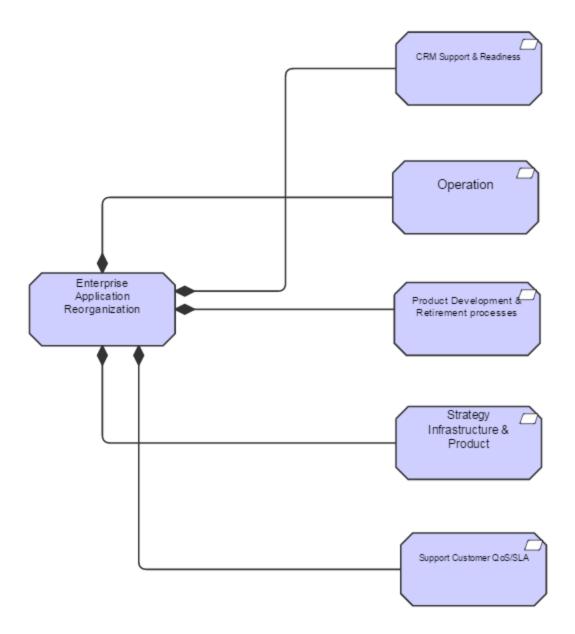


You can start by defining a package that is used as a container for data related to the proposal. The package is also represented as a package folder in the Sparx add-in later on.

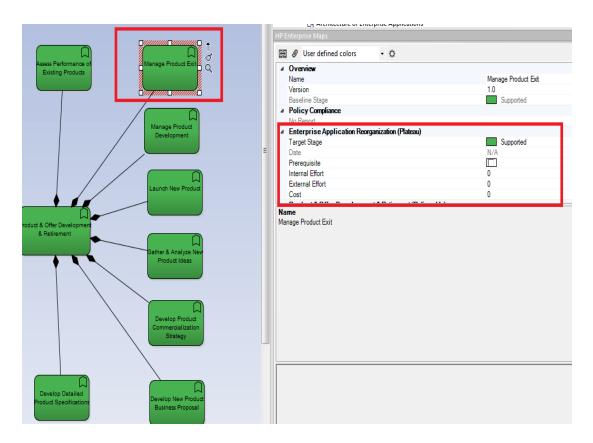


3. Once the proposal has the structure defined, the architect or the proposal owner is using the

"Extension for Sparx Systems EA" on page 121 to decompose the requirements. You can see that the aggregation/composition relationship is used for the decomposition.



4. Then, the architect defines the solution plateau using the **Sparx add-in**. While doing so you can assign the values for the estimates on the effort needed to build the solution.



The architect links the solution components to the requirements created in step 3 above. Once this is done it is possible to monitor the requirement coverage on the **Requirements** tab of the proposal.

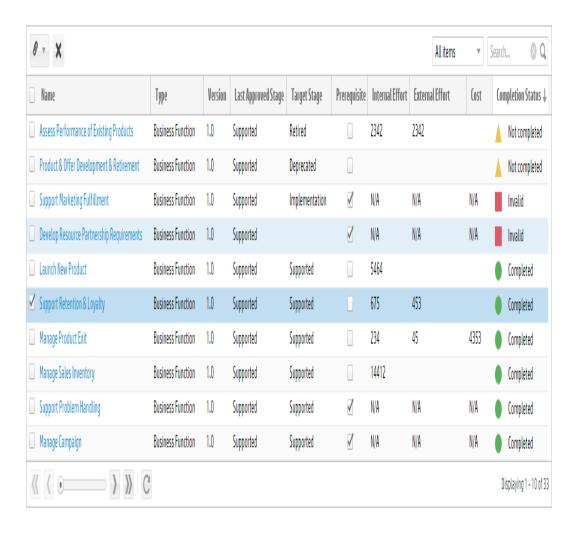
# Requirement Coverage



6. In HP EM, for each element in the plateau (on plateau catalog page) it is possible to assign a lifecycle stage that is reached when the proposal is implemented. For example: if the element is

about to be removed, the target is shown as the **retired** lifecycle stage. But if the target is a new element, it will probably be shown as the **production** stage.

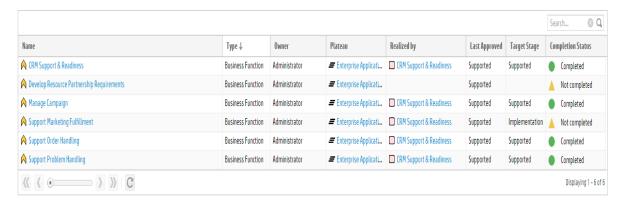
# Target Architecture Changes



7. Also, on the same page certain plateau elements can be marked as prerequisites. These elements are handled by projects other than the current proposal or projects created on behalf of it. This ensures dependencies on other proposals/projects, visible on the Prerequisites tab of the proposal.

#### **Proposal Prerequisites**

You can track dependencies of this proposal to other proposals and projects. Before all the architecture changes listed here are not completed, it is not advisable to start a project based on this proposal.



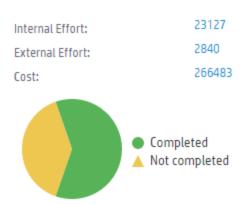
### **Monitor Architecture**

The proposal owner can monitor the following aspects:

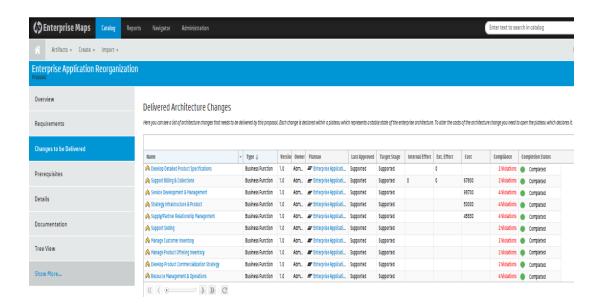
· The overall aggregated cost and effort required to implement the proposal

## Changes to be Delivered

30 Elements total, more...



- The progress of the process:
  - This is possible if a link is setup from PPM to EM ("Customize and Export PPM Synchronized Data" on the next page).
  - Monitoring compliance of the solution to company policies.



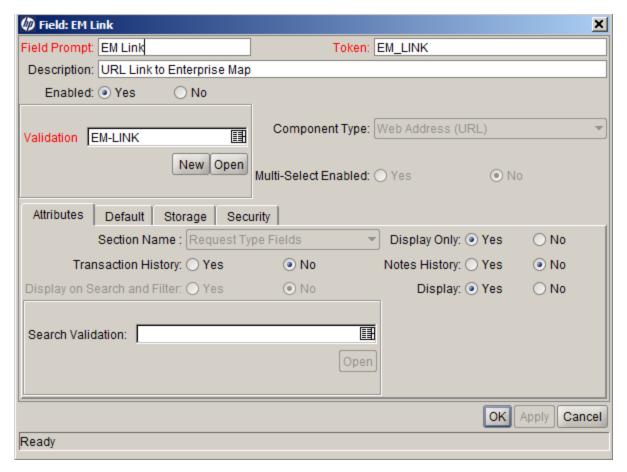
## Customize and Export PPM Synchronized Data

You can customize and export PPM synchronized data in HP EM and export the data back to PPM.

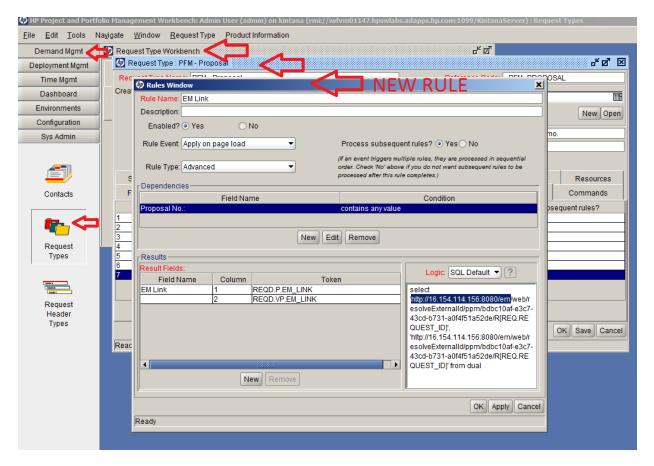
To export information of PPM Synchronized Data, we must customize PPM server. Given below are the customization steps to show a link to HP EM of PFM Proposal:

- 1. Open PPM Workbench.
- Click Demand Management > Request Types.
- 3. Open "PFM Proposal" request type.
- 4. Create a new rule in its Rules tab.
- Create a new field in its Fields tab.

#### **Field Definition**



**Rule Definition** 



The above definition ensures rendering of the following link on PPM proposal view page:



Note: The link highlighted in the image above is the HP EM repository URL.

**Note:** The PPM UI link renders properly only in a PPM supported web browser. For example: PPM 9.20 (in hp\_man\_PPM9.20\_SysReqs\_CompatMatrix\_pdf.pdf) supports IE7, IE8, IE9 and FF11+.

With PPM 9.20, the link does not render properly in Chrome.

On **HP EM side** EM provides a simple resolution service that gets a PPM request identifier and returns a page that represents an EM view of an external entity.

Endpoint: /web/resolveExternalId/{REPOTYPE}/{REPOID}/{EXTERNALID}

#### **URL Parameters:**

- REPOTYPE is a repository type.
- REPOID is a repository UUID.
- EXTERNALID is an external ID used in the EM repository during import of an external entity.

#### To modify PPM synchronized data in HP EM:

- 1. Select the **Administration** tab > **Configuration** > **Integrations**.
- 2. Click the < **PPM\_repository**> in which you want to edit an artifact's properties.
- 3. Click the artifact to be edited and click the Edit icon.
- 4. Make your changes and click Save.

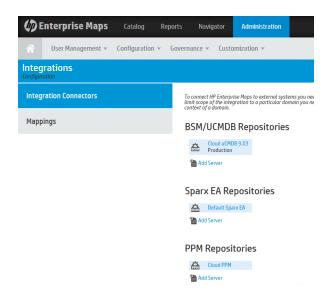
# Purge PPM Synchronized Artifacts From the PPM Repository

As the Administrator you may want to clear the data.

To purge all connected artifacts from the PPM repository:

1. Select the **Administration** tab > **Integrations** > **<PPM\_repository**>.





2. Click the Expert tools icon and select Purge All Synchronized Artifacts.



3. Click Yes to confirm the purge.

## BSM/UCMDB Integration

HP EM integrates BSM/UCMDB (Universal Configuration Management Database) software with Enterprise Architecture.

BSM/UCMDB is a primary source of information about runtime systems. (HP EM) can import and synchronize relevant data from BSM/UCMDB configuration items (CIs). This gives the architect up-to-date data about the baseline architecture at the Technology layer and brings visibility on the as-is state. The enterprise architect can reuse the imported BSM/UCMDB CIs and link them to the application architecture to provide traceability between the application and technology layer.

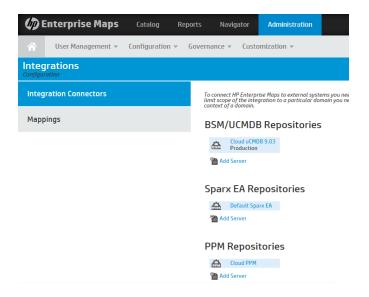
## Import and Synchronize BSM/UCMDB Data

You can import and synchronize the associated BSM/UCMDB data with HP EM.

Only the administrator role can synchronize HP EM with HP BSM/UCMDB.

To import and synchronize BSM/UCMDB data with HP EM:

- 1. Select the Administration tab > Configuration > Integrations.
- 2. Click **Add Server** under the BSM/UCMDB Repositories section to create a BSM/UCMDB repository for the synchronized data.



The BSM/UCMDB Repository opens.

- 3. Enter the following information:
  - Name (Required): BSM/UCMDB Repository name
  - Base URL: Server URL
  - Username: Server login username
  - Password: Server login password
- 4. Click Save to save the data
- 5. Click the Associated Import Task icon. The Import page opens.

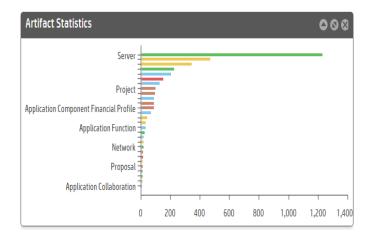


6. Click the Run icon to start the synchronization and confirm the decision.



The import starts asynchronously in the background so that you can continue with other tasks. The import takes less than 10 minutes.

7. To see the progress of the new data as it is loaded, select the Catalog tab and view the Artifact Statistics on the Catalog home page.



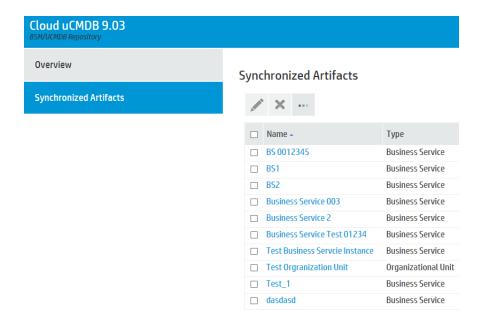
You can schedule the task to run periodically.

## View BSM/UCMDB Imported Data

BSM/UCMDB imported data is visible to Catalog user in the same domain with BSM/UCMDB repository they are imported from. Administrators however, can view imported data per BSM/UCMDB repository.

To view imported data per BSM/UCMDB repository:

- 1. Select the Administration tab > Configuration > Integrations.
- Select a repository under BSM/UCMDB Repositories section. The BSM/UCMDB repository opens.
- 3. Click Synchronized Artifacts tab.



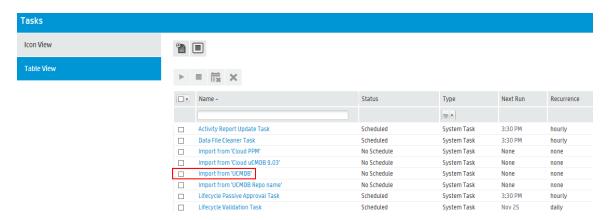
## View BSM/UCMDB Tasks

You can view the BSM/UCMDB task status or open the details of the current synchronization.

#### To view BSM/UCMDB tasks:

1. Select the Administration tab > Configuration > Tasks and click the Table View tab.

The data acquired by HP EM from the sample UCMDB server is connected with the *<UCMDB\_repository>*.



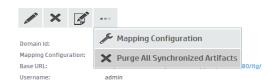
2. Click on a task to see the status.

## Purge Artifacts From the BSM/UCMDB Repository

As the Administrator you may want to clear the data.

### To purge all connected artifacts from the BSM/UCMDB repository:

- 1. Select the **Administration** tab > **Integrations** > **<UCMDB\_repository>** repository.
- 2. Click the Expert tools icon and select **Purge All Synchronized Artifacts**.



3. Click Yes to confirm the purge.

# Chapter 12: Extension for Sparx Systems EA

HP EM integrates with the widely used Sparx Systems Enterprise Architect data modeling tool via extension module. The Extension for Sparx Systems EA is a fully integrated data modeling environment for you to use with HP EM. The HP EM user is able to synchronize data models bidirectionally using the extension.

## Installing the Extension for Sparx Systems EA

You can install the HP EM Extension for Sparx Systems EA to extend your local installation of Sparx Systems EA to synchronize models with the HP EM server.

You must already have Sparx Systems EA version 11 installed.

#### To install the HP EM Extension for Sparx Systems EA:

- Close Sparx Systems EA 11 if it is running.
- 2. Run the installer hp-em-sparx-2.00.msi.
- 3. Click **Next** until the final wizard panel appears, and then click **Finish**.

**WARNING**: Extension for Sparx Systems EA stores the HP EM user password(s) using a Triple DES password encryption method.

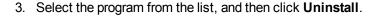
User passwords are stored outside the HP EM server, thus bypassing HP security policies. This could cause security issues such as decryption or corruption.

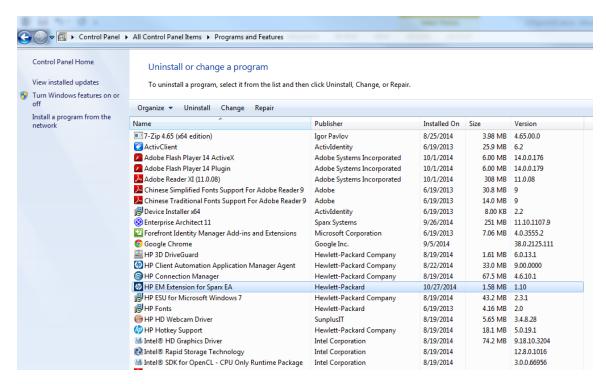
# Uninstalling the Add-In for the Extension for Sparx Systems EA

Before you install a new version of the HP EM Extension for Sparx Systems EA, it is helpful to uninstall any existing version on your system.

#### To uninstall the HP EM Add-In:

- 1. Close Extension for Sparx Systems EA 10 if it is running.
- 2. Open the Control Panel > Programs > Programs and Features.

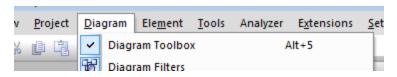




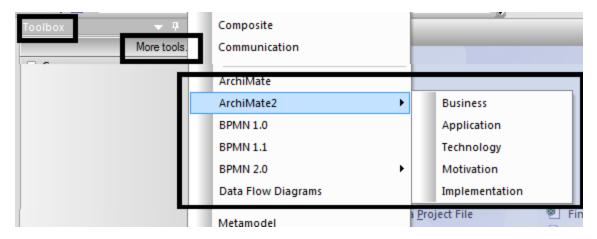
## Getting Started with the Extension for Sparx EA

When building data models in HP EM, Extension for Sparx Systems EA users can access Archimate 2.0 elements using the following steps:

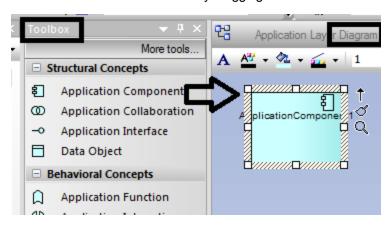
1. Display Toolbox by clicking **Diagram > Diagram Toolbox** in the Main menu.



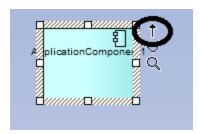
2. Display elements of an Archimate 2.0 layer by clicking More tools, and then select the layer for your model.



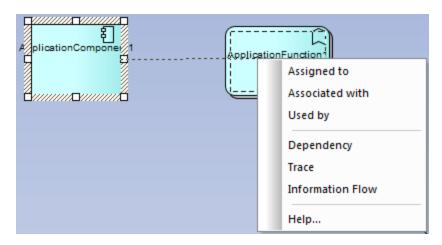
3. You can create new elements by dragging them from the Toolbox to a working diagram.



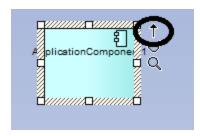
4. In a working diagram, you can create a link between elements by dragging the arrow (quick linker) from a selected element to another element.



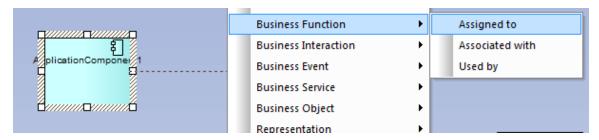
5. After linking elements, Extension for Sparx Systems EA will ask for a link type. Define the relationship between elements using the link type menu.



6. You can create a new element together with a link by dragging the arrow from a selected element to an empty area of your diagram.



7. Extension for Sparx Systems EA prompts you for a target element type and link type after you stop dragging the arrow.



8. Extension for Sparx Systems EA opens a dialog that allows you to specify element properties. After you click **OK**, the element is created along with the link.

# **Supported Versions**

The HP EM Extension for Sparx Systems EA currently supports only the Archimate 2.0 specification.

- Archimate 2.0 is now available as a feature of Extension for Sparx Systems EA version 11.
- HP EM Extension for Sparx Systems EA mapping configuration supports only synchronization elements having Archimate 2.0 stereotypes.