Hewlett Packard Enterprise

HPE Value Stream

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Strategy to Portfolio Concept and Configuration Guide

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Contents

Part I: Strategy to Portfolio Concept Guide

Chapter 1: Strategy to Portfolio Value Stream Concepts

This chapter includes:

Overview

The Strategy to Portfolio (S2P) Value Stream provides a prescription for the key service life cycle data objects that IT needs to closely manage IT service demand and realization. By understanding these data objects and implementing the relationships between them, IT is equipped to control the cost, risk, and quality of new services and changes to existing services.

To accomplish this, the S2P Value Stream provides the framework for closely integrating strategic planning and business demand and executive decision support.

The S2P Value Stream starts with a business demand or a technical demand due to cost or service level requirements—for example:

- a completely new service may be needed for competitive reasons
- an existing service may need to be modernized—for example, adding or improving mobile device access
- a legacy service may need replacing
- an obsolete service may need decommissioning

In all cases, the executive decision begins the life cycle. The S2P Value Stream orchestrates the policy rationalization and transformation of demand into a high-level conceptual blueprint.

The key outputs of the S2P Value Stream are:

- the Proposal document summarizing the service transformation; including objectives, activities, processes, and outcomes,
- the conceptual service blueprint that is delivered to the next value stream—that is, Request to Deploy (R2D) Value Stream.

Key executive inputs to the S2P Value Stream are:

- Business strategy
- Decision to proceed (Initiatives)
- Policy—both business and IT
- Drive (organization and processes)

The inputs above are assessed, rationalized, and elaborated with more detail and ultimately become the conceptual service blueprint that is passed on to and consumed by the R2D Value Stream. The R2D and other value streams are responsible for bringing the conceptual service blueprint into reality.

Note: For deployment and configuration instructions, see Part III: "Strategy to Portfolio Configuration Guide" on page 53.

Who Should Read This Guide

This guide explains the motivation to install and use the Strategy to Portfolio Value Stream. It describes what the value stream implementation will achieve and describes the workflow between the products that comprise the value stream.

This guide is intended for:

- Project Managers
- IT Executives
- IT Architects
- Developers
- Deployment Technicians
- Quality Engineers
- Release Managers
- Presales and Sales personnel
- Service deployment and implementation organizations
- Anyone who wants to learn about a framework for creating, modifying, or sourcing a service

The information in this guide may duplicate information available in other Value Stream documentation, but is provided here for convenience.

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Strategy to Portfolio Value Stream Objectives

IT is expected to have a high level of understanding of the demand in order to produce a real service capable of fulfilling that demand. The S2P Value Stream is designed to ensure predictable, cost-effective, high quality management of the process.

The key objectives of the Strategy to Portfolio Value Stream are to:

- **Align Strategy**

  Services today are integrated and dependent on many variables. It is no longer an option to plan services without sensitivity to the overall business strategy. Misaligned service development can generate unnecessary and unexpected cost, risk, and delays—and may impact other services as well.

  The overarching objective of IT strategic planners is to ensure that the activities of IT—the infrastructure it operates, the technology it purchases, the software it buys, and the applications it supports—are all necessary and sufficient to the achievement of the Business Objectives of the enterprise. By sufficient, we mean that IT is providing everything the business needs to achieve its objectives. By necessary, we mean that IT is refraining from doing things that the business does not need to achieve its objectives.

  IT strategies are created and documented along with the ways and means that they relate to defined Business Objectives. Initiatives are proposed to achieve those strategic objectives and policies and standards are published to influence requirements and optimize transformation programs.

- **Support Strategic Planning**

  IT Executives formulate policy, create IT initiatives, and adapt organizations and processes to fulfill these objectives. The S2P Value Stream provides an interface and framework to document the executives' decisions and take actions.

  Information is collected that will eventually become the blueprint and Proposal.

- **Prioritize Backlog**

  Demand comes to IT from multiple sources:

  - **Business.** change requests and enhancements
  - **Strategic planning.** investment initiatives and policy decisions
  - **Production Operations.** problems and security patches
  - **IT internal.** technology modernization and transformation

  New demand is consolidated with existing backlog items and prioritized based on urgency and risk-adjusted impact to the business.

  A rationalized portfolio, when changed, generates a backlog item, even if it is not really a "backlog" in the sense of an IT delay. Rather, the backlog is seen as a business delay. Once the portfolio is rationalized, the business is now waiting on IT to deliver the new capability.

This formalization of the backlog item facilitates the flow of process in the S2P Value Stream.

- **Manage Service Portfolio**

  IT executives determine priority and resource allocation for initiatives. Service owners and IT architects review initiatives, evaluate available resources, and interpret and consolidate the executive priority into the demand backlog. The impact to available resources has a key influence in the decision-making process.

  Service owners update their Service Roadmaps based on the outcomes of the backlog prioritization, update statuses, and timelines.

- **Rationalize Portfolio**

  Business requirements drive the portfolio of services which IT provides or brokers for the business. But beyond requirements, this collection of capabilities must be rationalized to optimize cost and effort of maintenance, growth, and maturation.

  Functional requirements must be combined at the solution level—above the product level. Examples of the many rationalization vectors include:

  - **Duplication avoidance.** If three services are supporting the same business function, might one or two of them be redundant and a candidate to retire?
  - **Vendor strategy alignment.** using components in a way that the vendor is likely to continue supporting in the future
  - **Product integration strategy.** choosing solutions allowing compliant, cost-efficient integrations
  - **Platform support.** not unnecessarily expanding the scope of hardware support
  - **Version dependency chains.** avoiding long chains that require everything to be upgraded at once, or where one lack of the ability to upgrade holds back the rest of the portfolio
  - **Database requirements.** not unnecessarily expanding the scope of databases supported

  By mapping the services to the business functions they support through the enterprise architecture, managers determine if the portfolio is sufficient to meet the business' needs and constantly question the necessity of continuing any particular service.

- **Manage Investment**

  Ongoing prioritization of backlog items amounts to managing IT investment. The number of demand backlog items that are addressed at one time is limited by many constraining factors, such as:

  - Budget
  - Amount of risk the organization is comfortable taking on at any one time or at specific times of the business cycle
  - Availability of scarce resources, such as domain or technology expertise

  IT must make choices on the new investments it is able to make. The typical parameters are as follows:

  - Alignment to IT strategic objectives
  - Impact on the business

- Overall risk profile

The Proposals that rise to the top are approved for execution and become new initiatives for the Requirement to Deploy (R2D) Value Stream.

- **Monitor Policy Compliance**

  IT architects evaluate formal policy statements into service design. Service Owners and other stakeholders use policies to manage and improve services and mitigate risks. Even executive decisions are rationalized through the business and IT policies to ensure no new problems are introduced during the processes.

  Policies cover (or should cover) every aspect of a service. The following are a few examples:

  - Service Level Agreements for performance and availability
  - maintenance and support
  - portfolio compatibility and product version dependence
  - alignment with strategic roadmaps
  - vendor qualifications
  - platform and operating conditions

- **Update Enterprise Architectures and Roadmap**

  Enterprise Architects model organization and process changes to reflect the updated service backlog and roadmap. The proposed architectures are changed and the draft Proposal is refined based on the as-is / to-be architecture gap analysis, requirements, and work packages (roadmap items).

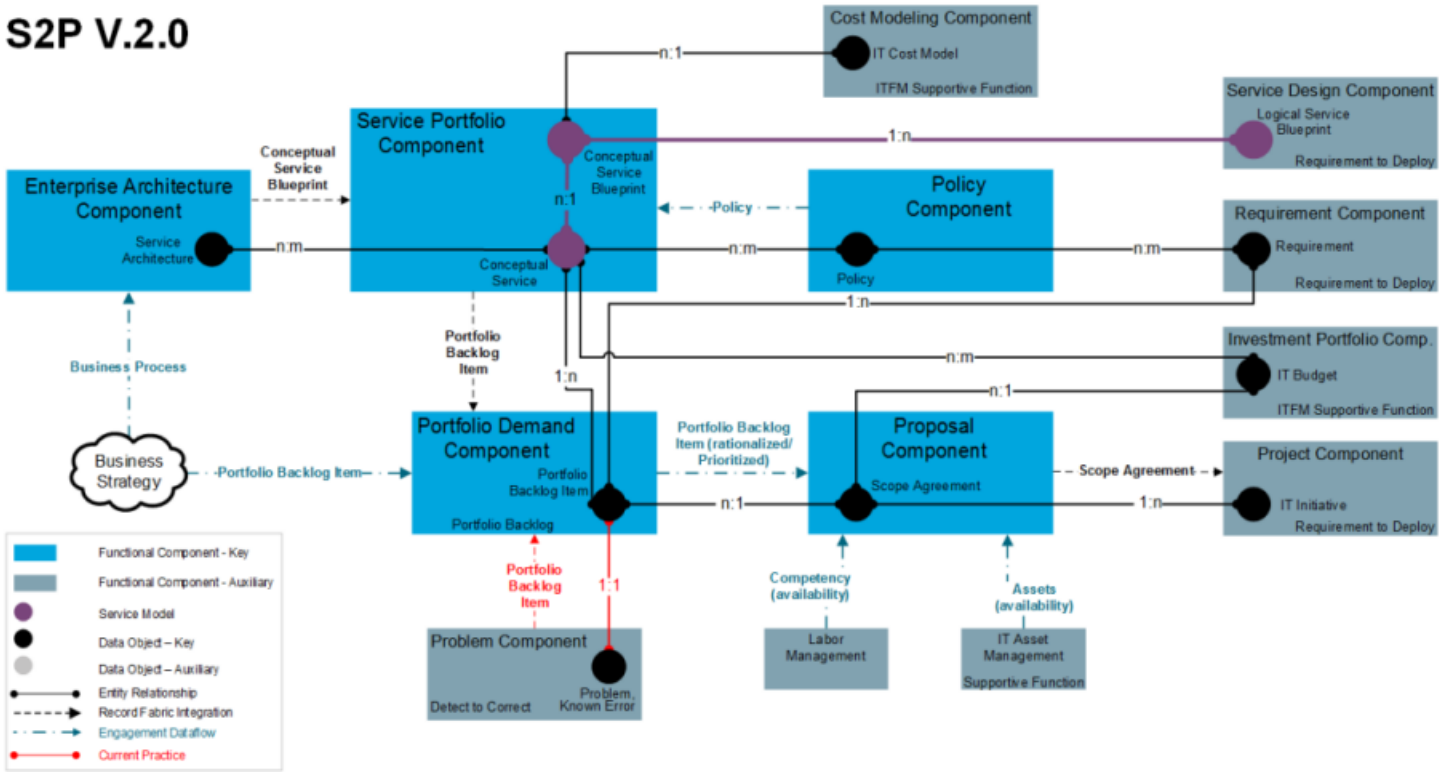
- **Generate Proposal and Conceptual Service Blueprint**

  In the final stages, the draft Proposal is refined. The Program Office may revise initial requirements, objectives, financial targets, the staffing model, or budget estimates.

  Final approval completes the scope agreement, initiates the governance processes, and delivers the Proposal and blueprint to the next value stream—Requirement to Deploy.

Strategy to Portfolio Value Stream Diagram

The following diagram illustrates the Functional Components and Data Objects that comprise the Strategy to Portfolio Value Stream as described in version 2 of the IT4IT Reference Architecture:



Strategy to Portfolio Functional Components

Of the four value streams, S2P is the first. There is no preceding value stream. Therefore, S2P starts with business strategy. The high-level business strategy directives drive the overall business and IT capabilities. Strategies may focus on:

- Least cost
- Least risk
- Latest technology
- Fastest time-to-value
- Fewest upgrades
- Specific business capabilities
- Competitive positioning

Business strategy is essentially the executive drive to operate and improve the business. To execute on a strategy and realize the benefits, the strategy must be transformed into demand.

The following functional components support the definition, development, and governance of the data objects and service model entities used in the Strategy to Portfolio Value Stream:

- **Portfolio Demand**

  When a business strategy calls for a change in the service portfolio, Portfolio Demand rationalizes the demand through the processes of policy evaluation and creates a backlog item to be included in the Proposal. The Portfolio Demand functional component consists of all of the activities required to understand the impact to the service portfolio—based on policy, resource availability, and priority.

- **Policy**

  A policy is a governance rule. The Policy functional component represents the set of all such rules and the active involvement of the set in the Service Portfolio; essentially that which ensures all of the services are in compliance—the precise services required by the business.

- **Enterprise Architecture**

  The convergence of business strategy and business process defines the Enterprise Architecture. Enterprise Architecture defines the service blueprint.

- **Service Portfolio**

  The Service Portfolio is the authoritative list of services that IT provides or brokers to the business and itself. The Service Portfolio is defined by the Enterprise Architecture generated by the business strategy and rationalized by policy. In S2P, the Service Portfolio also owns the upper layers of the conceptual service and the conceptual service blueprint. These are essentially the upper layers of the service model, consisting of Business Application and Business Service CI types.

- **Proposal**

  The Proposal is the product of all of the other functional components in the S2P Value Stream. The Proposal contains the scope agreement data object that defines what is to be done and the expected outcome. External and business factors are integrated into the technical aspects of the Proposal; such as resource availability, asset management, and IT Financial Management implications.

Strategy to Portfolio Data Objects

The Strategy to Portfolio Value Stream contains both key and auxiliary data objects that interact with the configuration items that comprise the service model backbone.

The Strategy to Portfolio Value Stream Data Objects are:

- **Service Architecture**

  Data objects managed by the Enterprise Architecture functional component. Service Architecture includes service blueprints, architecture guiding principles, and technology standards and roadmaps.
- **Conceptual Service Blueprint**

  Contains the list of all service blueprints associated with a given conceptual service. Each Conceptual Service Blueprint has a comprehensive view of the service that depicts endpoints and interfaces that are understood by architects and business relationship managers.
- **Conceptual Service**

  Root identifier of a service. The list of Conceptual Services comprises the Service Model (an authoritative list of services that the enterprise consumes) or it represents services planned, in transition, in production, or retired.
- **Policy**

  Central repository for storing and organizing all types of IT policies based on various templates and classification criteria.
- **Scope Agreement**

  Reflects budget, cost/benefit projections, scope, and other key attributes of proposed work. Views are created for specific functions, such as line-of-business; or holistically, such as company-wide. Used for building the IT investment plan of record for the company or a specific line of business or function.
- **Portfolio Backlog Item**

  Represents the repository of all incoming demands; including, but not limited to, new requests, enhancement requests, and defect fix requests.

Part II: Strategy to Portfolio Use Cases

Chapter 2: Strategy to Portfolio Use Cases

This chapter includes:

Overview

The use case in this document describes the Strategy to Portfolio Value Stream (S2P), which provides a framework that helps align IT to business goals and plans. The goal of the S2P Value Stream is to create an IT portfolio framework that allows IT organizations to optimize services provided to business by bringing together multiple functional areas.

Service Alignment to Business Objectives Use Case

This section contains the following topics:

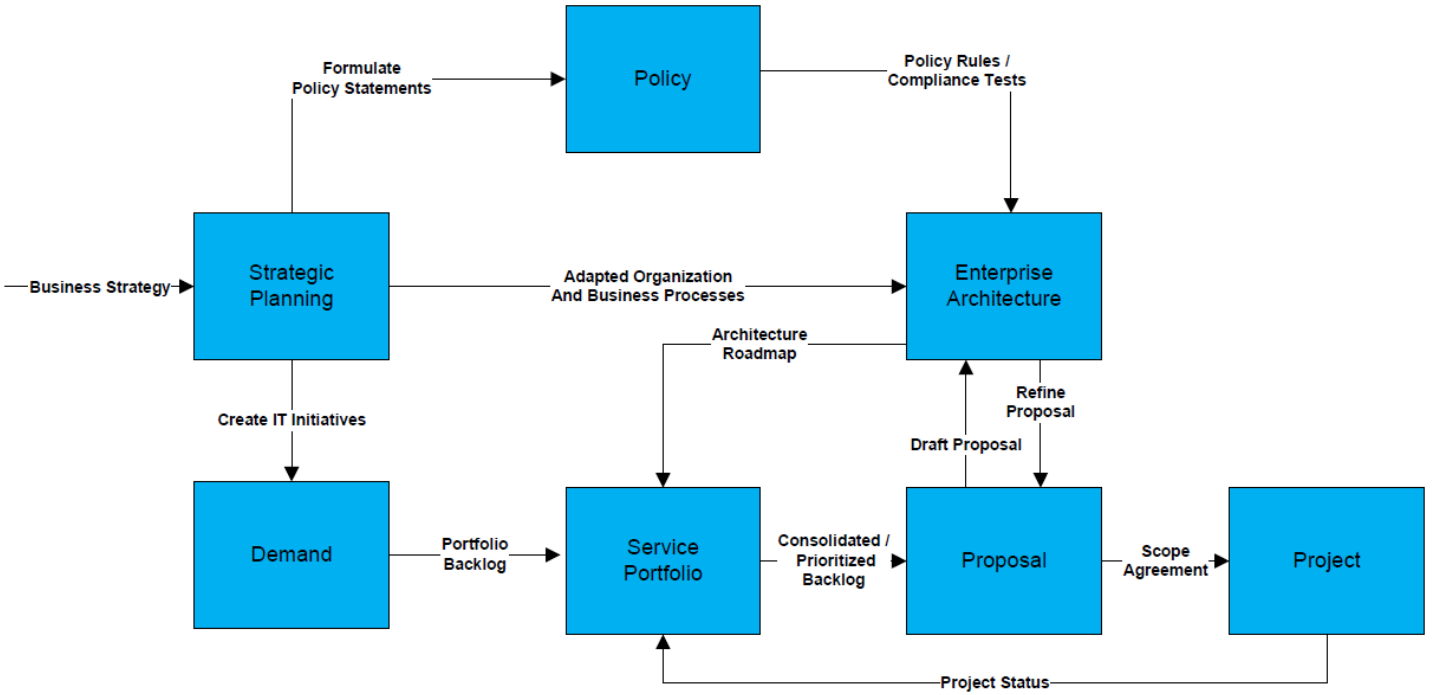
Overview

The Service Alignment to Business Objectives Use Case describes using the Strategy to Portfolio (S2P) Value Stream to modify an existing service in response to a change in strategic business plans.

The simplest use case is modifying an existing service. A running example of a service, an Employee Expense Management (EEM) system, is used to show how a service is modified in response to a change in stated Business Objectives.

Use Case Diagram

The following diagram illustrates the interactions between the S2P Functional Components as they deliver the use case to align a service to a business objective.



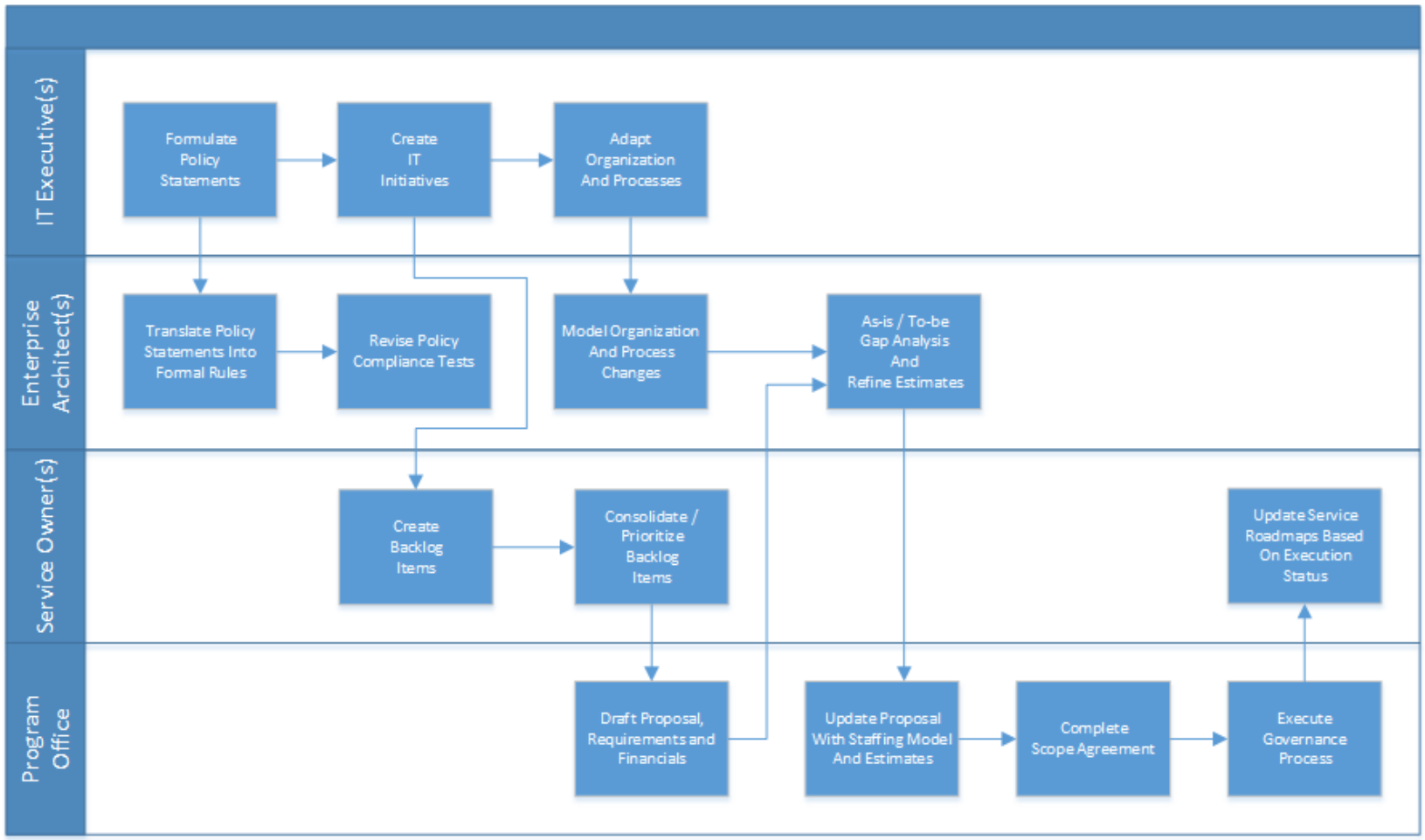
Use Case Steps

Four unique roles in the organization utilize the S2P Functional Components to carry out the steps necessary to complete the business use case.

1. IT Executives
    a. Formulate policy statements
    b. Create IT initiatives
    c. Adapt organizations and processes
2. Enterprise Architects
    a. (IT Architect) Translates policy statements into formal policy rules
    b. Revise architecture compliance tests based on policy rules
    c. Model organization and process changes
    d. Refine Proposals based on as-is / to-be architecture gap analysis, requirements, and work packages (roadmap items)
3. Service Owner(s)
    a. Review initiative's impact to services and create backlog items
    b. Consolidate and prioritize backlog items
    c. Update Service Roadmaps based on project execution status
4. Program Office
    a. Creates draft proposals, initial requirements, objectives, and financial targets
    b. Updates proposals with staffing models and budget estimates
    c. Executes governance process and completes scope agreement

Service Alignment to Business Objectives Use Case Process Diagram

This process diagram further illustrates the sequence of use case steps among the roles involved.



Example: Delivering New Mobile Employee Expense Management Service

The Deliver New Mobile Employee Expense Management Service is a real life example of the generic use case. It describes the service life cycle from the Demand phase until the Request to Deliver phase.

This section contains the following steps:

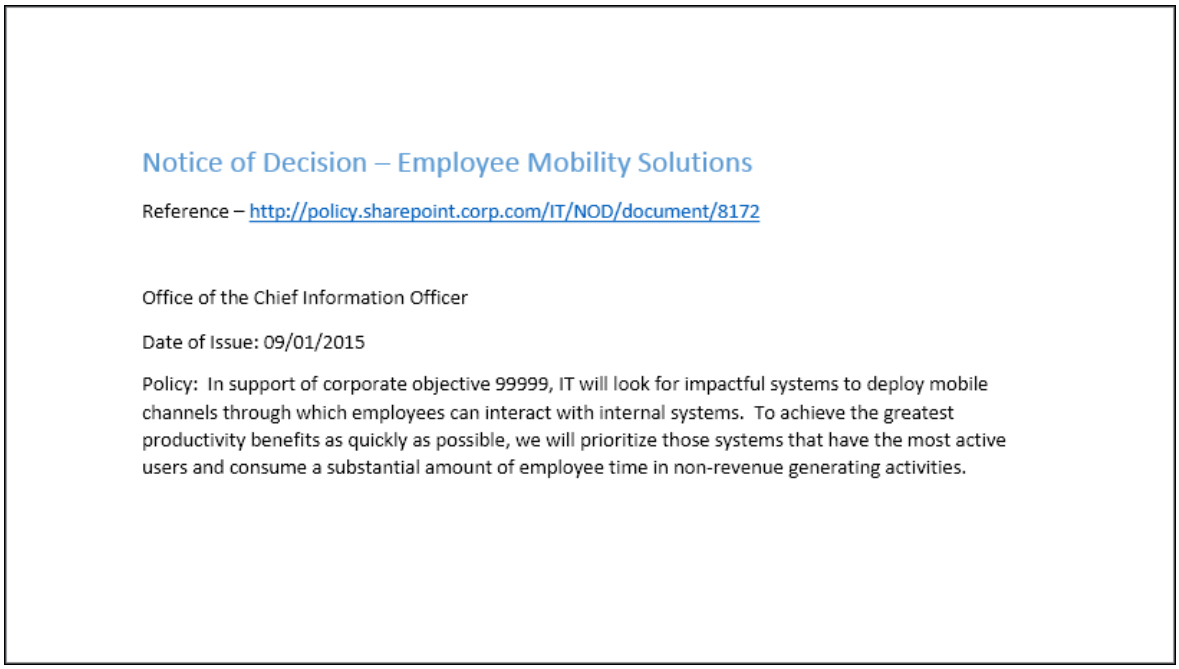
Overview

An Enterprise IT organization is adding mobile access capability to its existing Employee Expense Management service. To achieve this, in accordance with policy and portfolio rationalization requirements, the Demand needs to be captured and formalized, and a Proposal created and delivered.

Step 1. Formulate Policy Statements

The process starts by aligning IT Policies and Business Objectives with the results of the most recent Business Strategy formulation. In this example, the most recent business planning exercise produced a strategic initiative to improve employee satisfaction through mobile access to all employee facing services. In response, the IT Strategic Planning function publishes a Notice of Decision directing planners to prioritize services with large numbers of internal users for mobile capability extensions. The following example letter illustrates the executive authority and the expected return on investment (ROI) benefit for the business. This represents step 1 in the strategic planning process. This policy statement

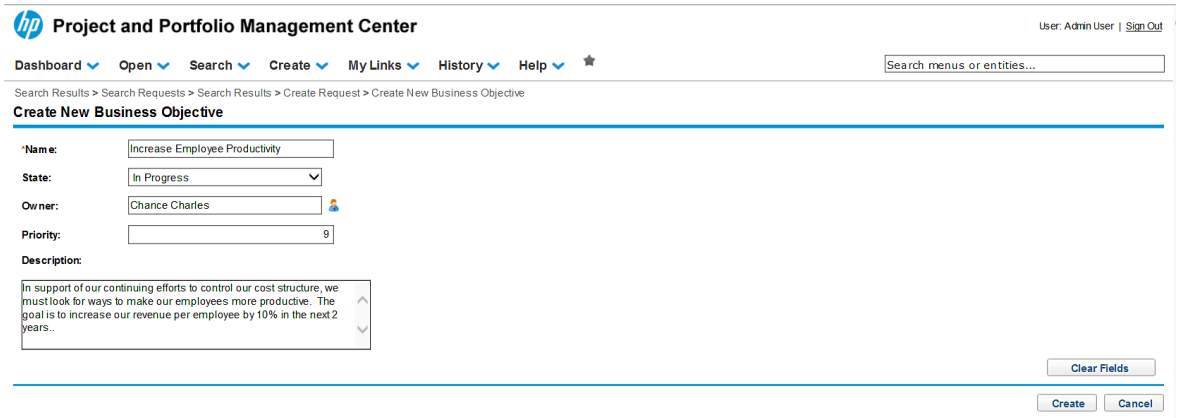
resides in a controlled document library (SharePoint) that is the central authority for the IT strategic policies of the enterprise—for example:



Step 2. Create IT Initiatives and Business Objectives

IT Executives create formal statements of business objectives and launch strategic initiatives to adapt IT to changes in business strategy. IT actions are further aligned with the strategy of the business by formally adopting a Business Objective and Evaluation Criteria within HPE Project and Portfolio Management (PPM). This objective identifies increased employee productivity as a business priority and provides a mechanism to score and prioritize project Proposals that support the objective.

When a Service Portfolio Owner wants to create a formal Business Objective to reflect the new IT policy to increase employee productivity, the Service Portfolio Owner clicks the **Open** drop-down arrow in HPE Project and Portfolio Management Center, and navigates to **Portfolio Management > Business Objectives > Create Business Objective**.

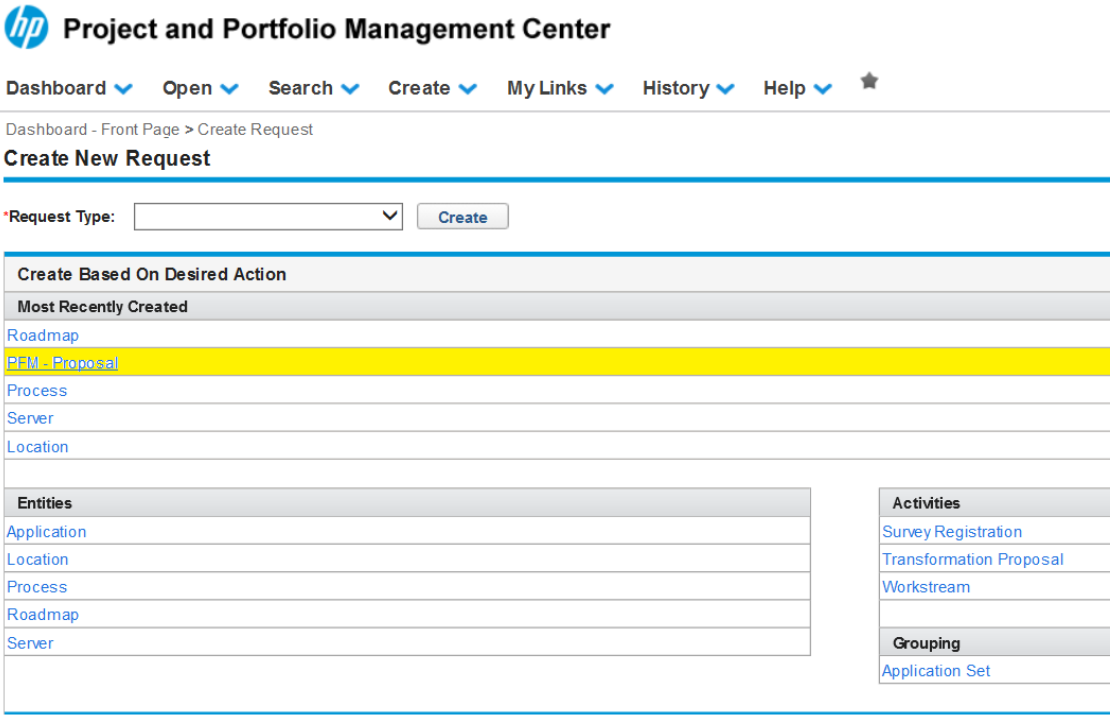


Step 3. Create Backlog Items

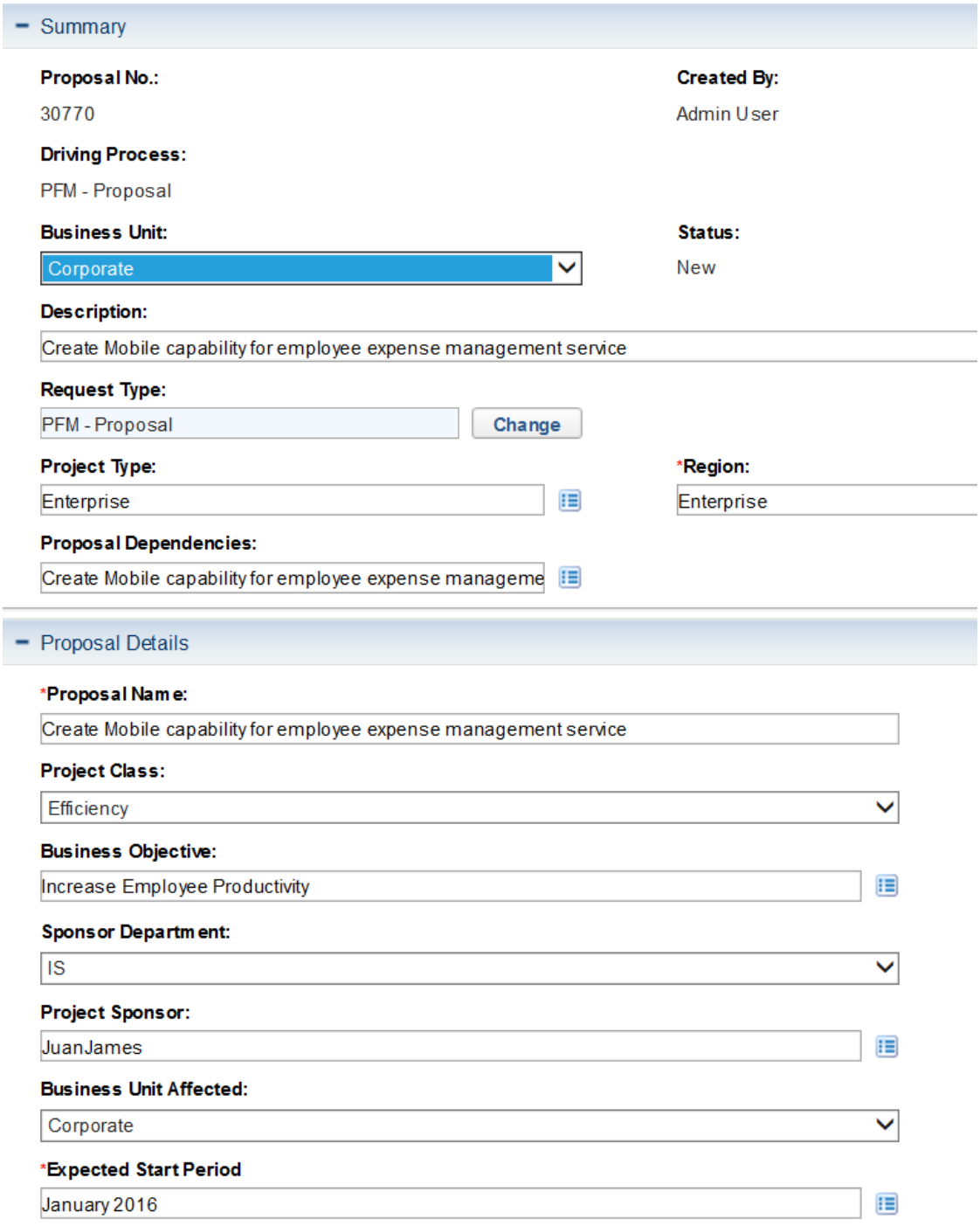
Armed with the new IT Policy Statement and Business Objective, IT strategic planners seek out the existing service with the largest internal (employee) user base and identify the Employee Expense Management service as a strong candidate for mobile enablement.

In PPM, Demand Management is used to capture this opportunity as a Portfolio backlog item.

1. In HPE Project and Portfolio Management Center, click the **Open** drop-down arrow and navigate to **Demand Management > Create Request**.
2. In the Create New Request pane, the **PPM Proposal** request type is chosen.



3. Enter a new request to add mobile capabilities to the Employee Expense Management service.



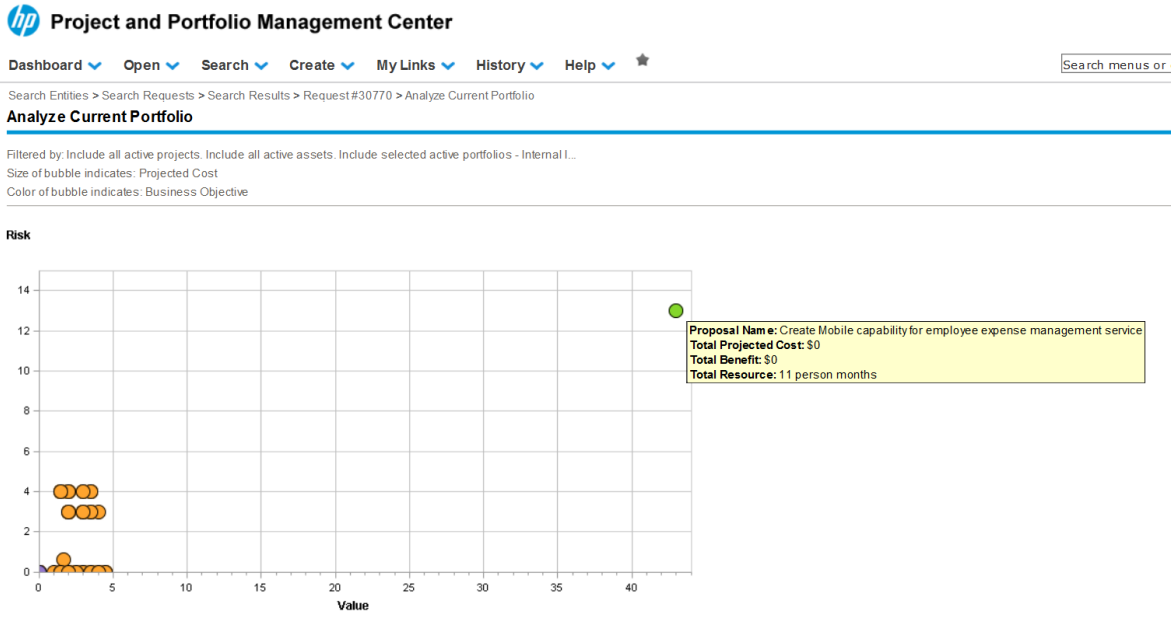
Step 4. Adapt Organizations and Processes

For purposes of the Employee Expense Management scenario, management does not have to adapt their organization or business processes.

Step 5. Consolidate and Prioritize Backlog Items

Using PPM Portfolio Management, Service Portfolio Owners analyze the consolidated list of Demand backlog items. The assessment focuses on services that have a large number of active users who are also employees. Reviewing the value, risk, and alignment to Business Objectives shows a clear choice to take a deeper look at the Proposal to add mobile capabilities to the Employee Expense Management service.

In HPE Project and Portfolio Management Center, the Service Portfolio Owner clicks the **Open** drop-down arrow and navigates to **Portfolio Management > Analyze Current Portfolio** to perform an analysis of the current Proposal and request portfolio.



Due to its strong alignment to Business Objectives, the Proposal for mobile capability for the EEM service, as shown in the graphic, stands out as a great choice for action.

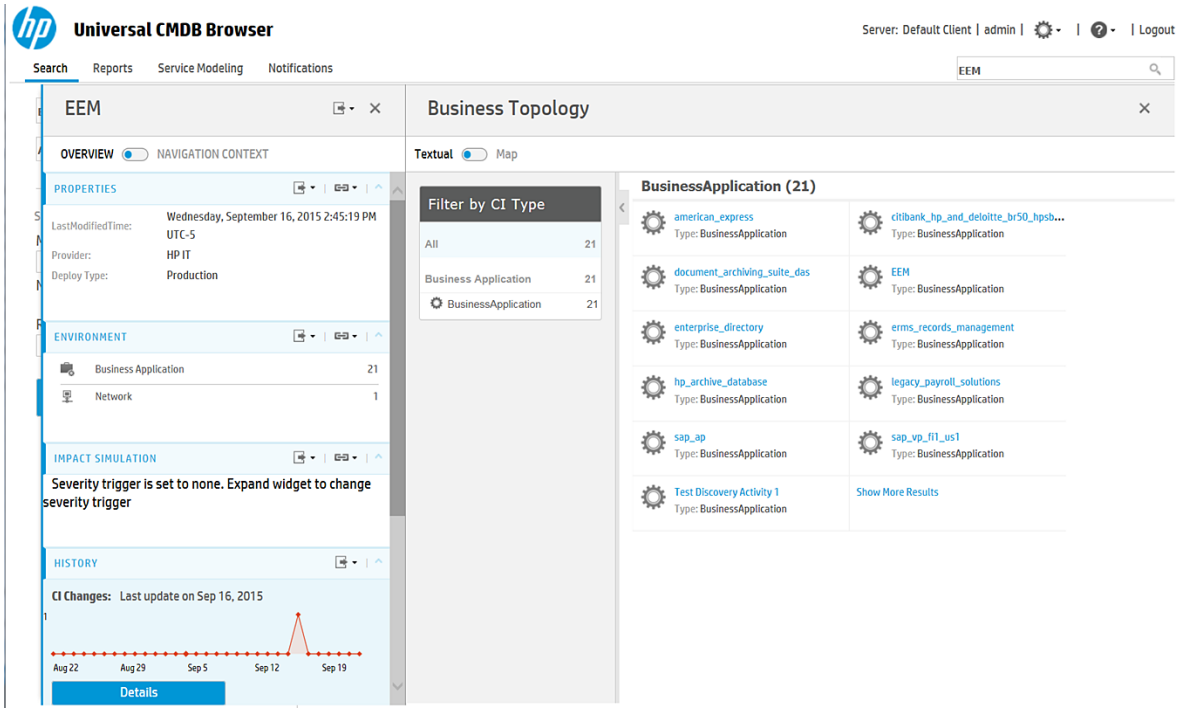
Step 6. Model Organization and Process Changes

Senior management did not need to modify the organization or its business processes. There are no model changes to be made to the Enterprise Architects in our example scenario.

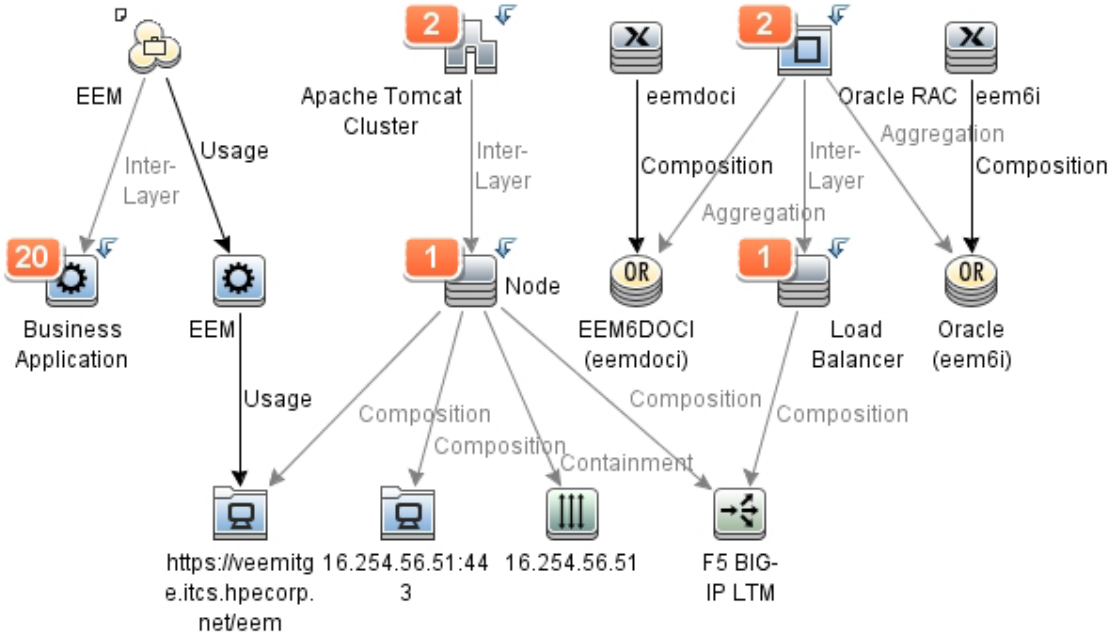
Step 7. Refine Proposal Based on As-Is / To-Be Architecture Gap Analysis, Requirements, and Work Packages (Roadmap Items)

Architects now review the draft Proposal, assemble information about the current state of the EEM service, model a future state that adds a mobile capability to this service, and documents the architecture deliverables needed to close the gaps between the as-is and to-be states. With this more comprehensive understanding of the effort needed to complete an implementation project, the Proposal is refined.

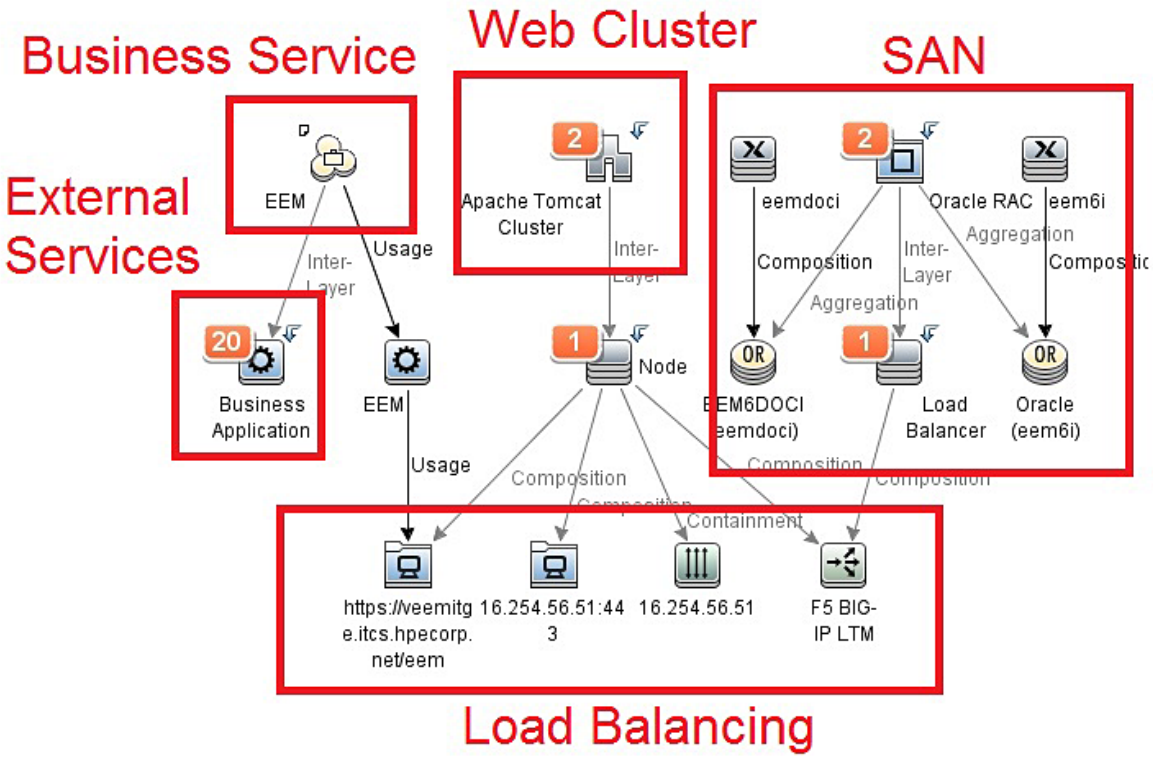
The operational EEM is managed within the enterprise configuration management system (CMS). A model of the configuration items composing that service is viewed through the HPE Universal CMDB (UCMDB) Browser. The upper layers of the EEM service model is visible in the UCMDB Browser user interface in the following screen shot.



UCMDB provides a graphical view of the configuration items that make up the EEM service. Architects use this model to better understand the architectural tiers of its service system.



The UCMDB service model of the existing EEM service is categorized for further assessment. The core EEM application component is supported by load balancers, a Web server cluster, and an Oracle database cluster. It also interfaces with 20 other business application components.

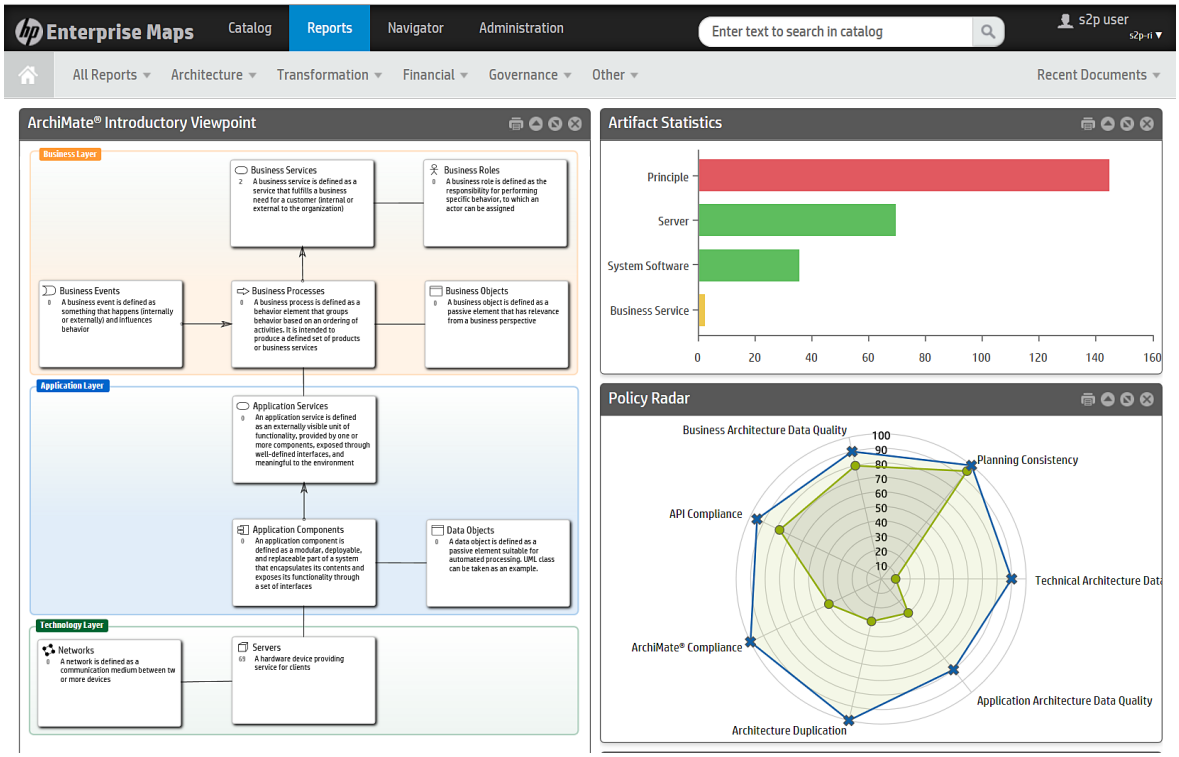


To define the future state and refine the Proposal, architects assemble the relevant information in a common platform. The architect's job is aided by the use of EM, which has the capability to import the configuration information from UCMDB and import the demand (proposal), location, and business objectives from PPM. Once the integrations are complete, the architects view all of this information within the EM user interface.

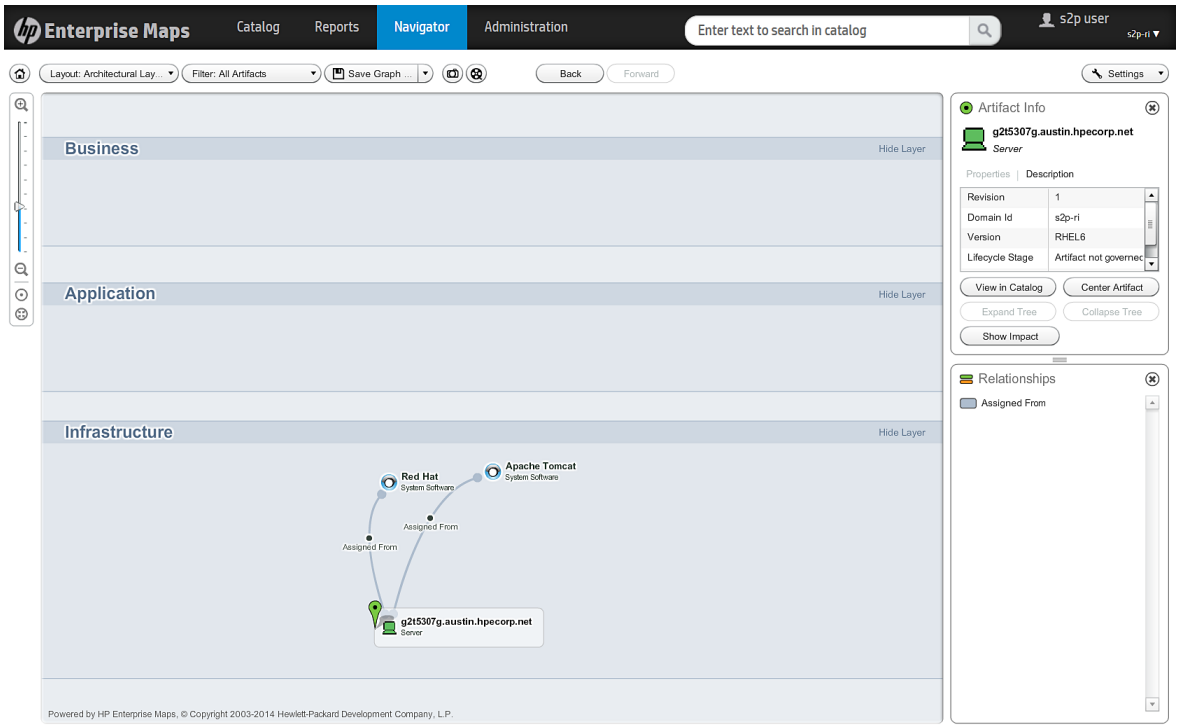
a. Synchronize Information from UCMDB into the EM Platform

Note: Details on installation and configuration of the integration are found in Part III "Strategy to Portfolio Configuration Guide" on page 53.

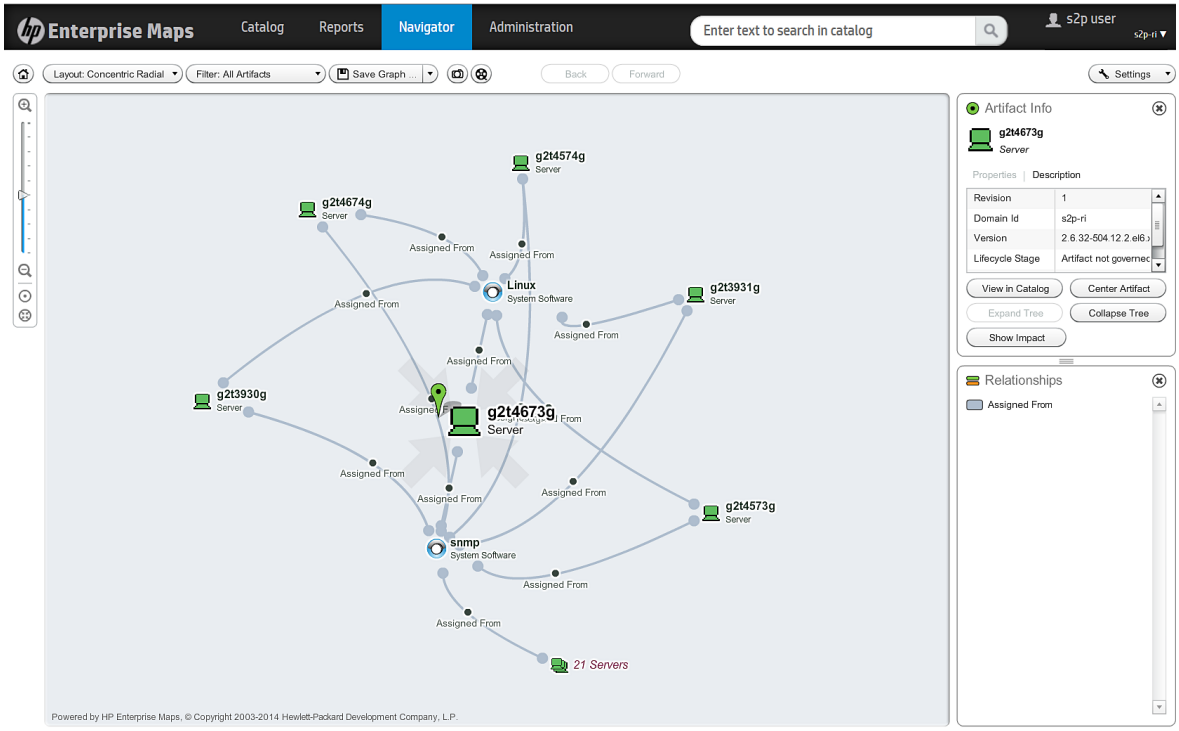
Upon completion and after running the integration, EM contains synchronized data objects from UCMDB. As a result, EM now has information about the business services and other configuration items managed in UCMDB. These are now available to be used as model elements when constructing the future state and in assessing impacts of alternative solution configurations.



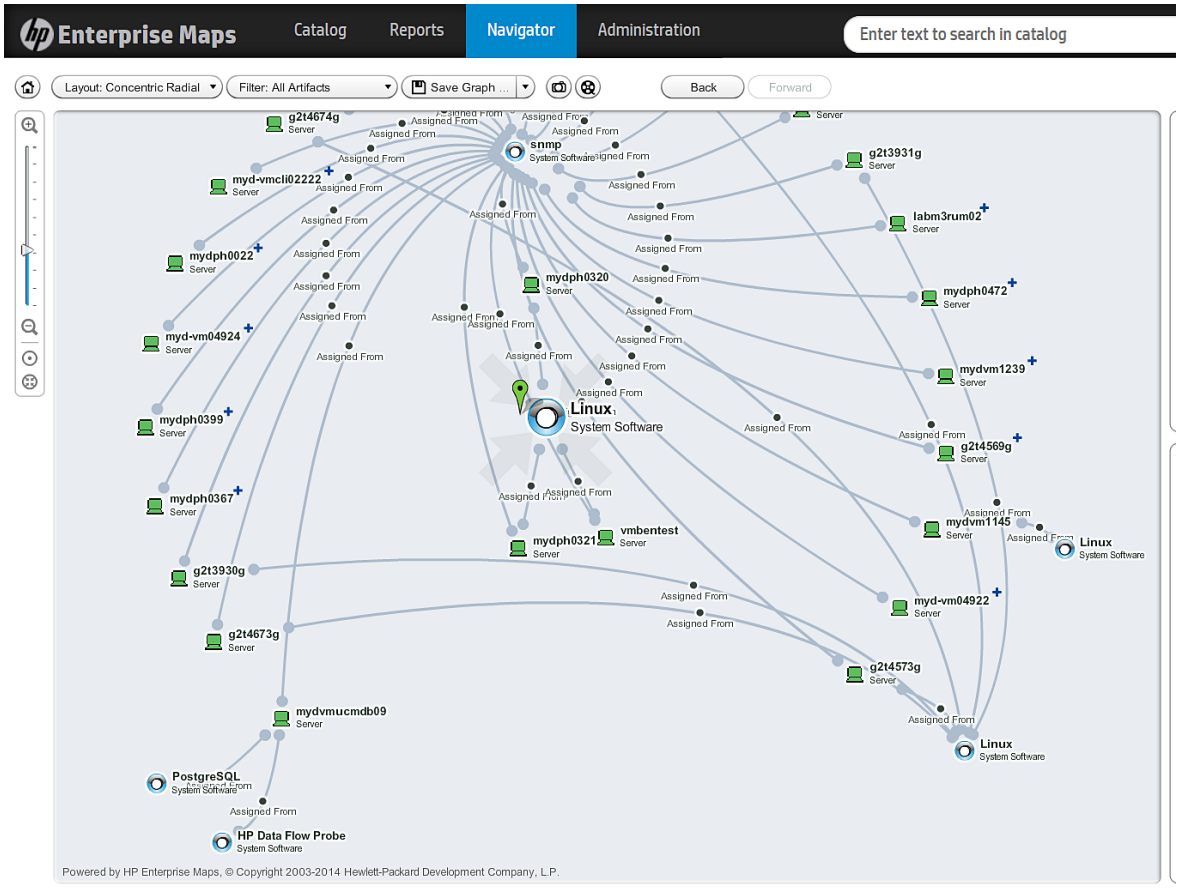
A view of the topology includes the ability to examine individual nodes and expanded connected topology views. EM offers predefined layout options to enable users to view model data objects within various contexts, including within architectural layers as shown in the following screen shot.



The radial layout view provides visibility to the relationships from a central data object to those with which it has direct and indirect relationships—for example, see the following expanded concentric radial layout view from one server



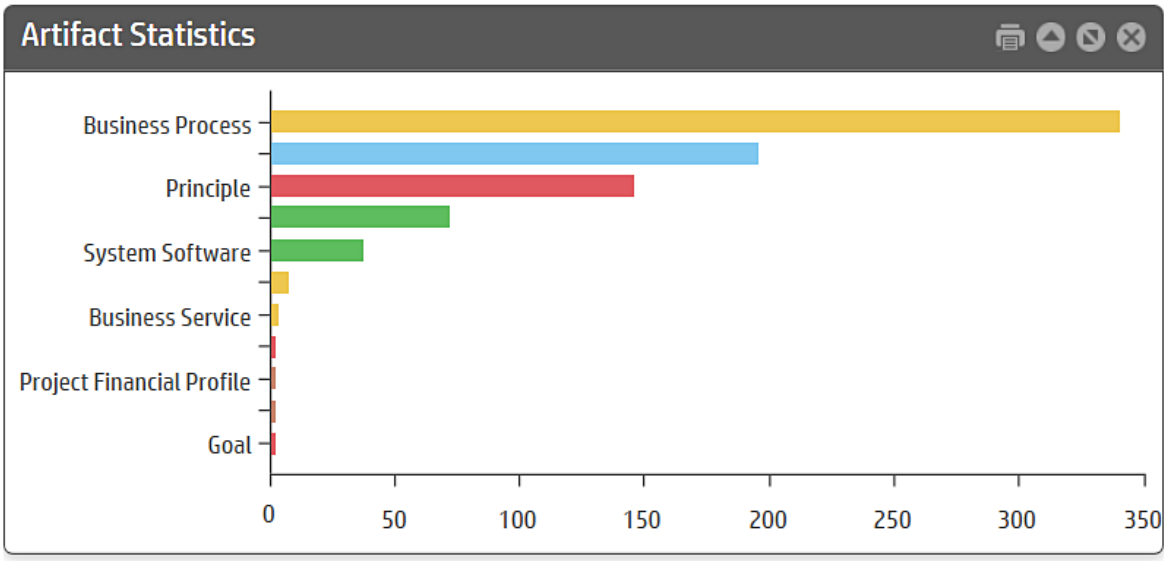
and this fully expanded concentric radial layout view:



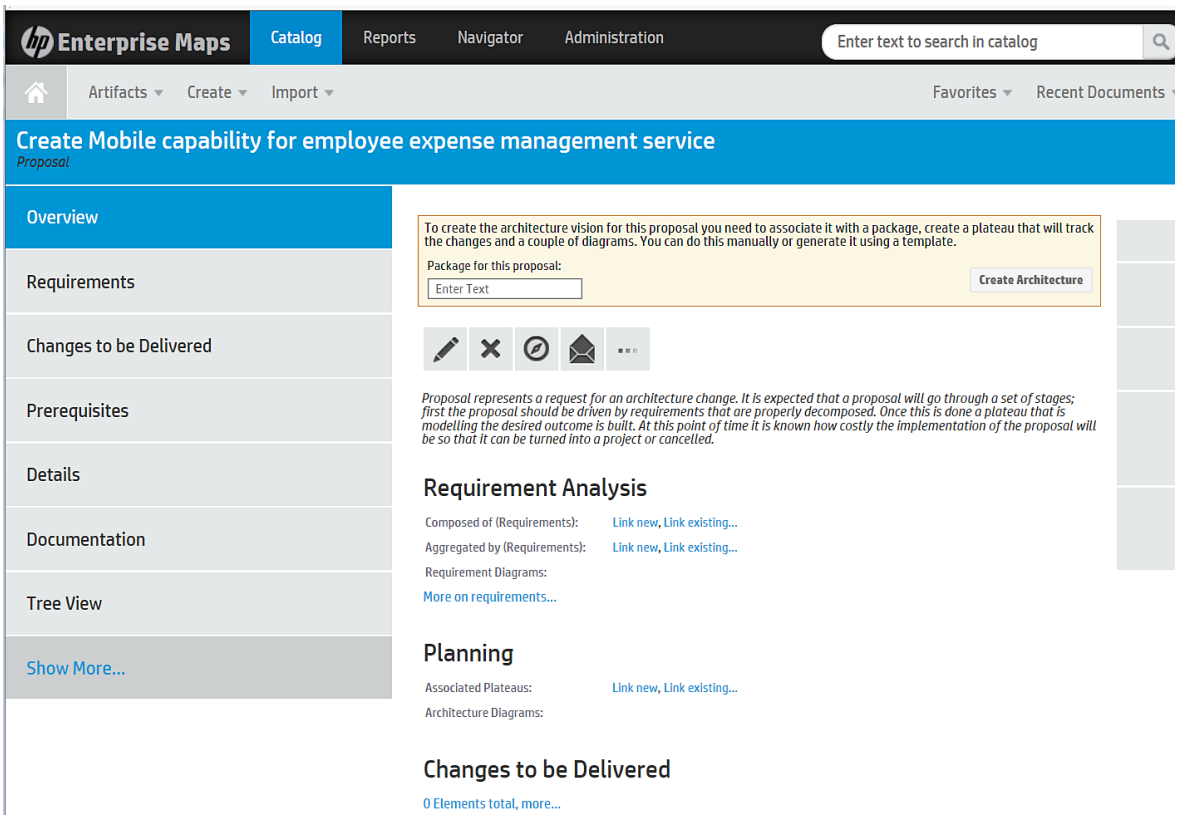
Through this combination of views, architects see the servers utilized in the existing EEM service as well as the system software they utilize.

b. Synchronize Information from PPM into the EM Platform

Information about Demand (Proposals), Business Objectives, and Locations are now imported into EM through the integration with PPM. Upon completion of that integration, EM contains the relevant information from both products on a platform the architects use to model future state scenarios. The EM browser below shows the modified data object count that now includes Goals, Proposals, Financial Profiles, Locations, and Business Process Data Objects that are now synchronized with the PPM platform.



In the Proposal user interface, detail information about the Proposal, along with its relationships to other configuration items, are viewed and managed within EM itself.



Much of the detail information about the Proposal that was created within PPM is accessible through the additional tabs in the Proposal user interface. The Detail user interface is shown below.

Version:	1.0
Owner:	s2p user
Domain Id:	s2p-ri
Asset Class:	Transactional
Internal Rate of Return:	1 - 5.99%.
Strategic Match:	Direct impact on a portion of a goal.
Competitive Advantage:	Improves operating efficiencies in strategic area.
Competitive Response:	Can be postponed for 12 months with significant effect to competitive positioning.
Productivity:	11 - 30% increase.
Organization Risk:	No risk.
Technical Risk:	Low uncertainty.
Architecture Risk:	Medium change to standard architecture.
Definition Risk:	Requirements are moderately firm. Low probability of changes.
Infrastructure Risk:	Small changes to existing infrastructure.

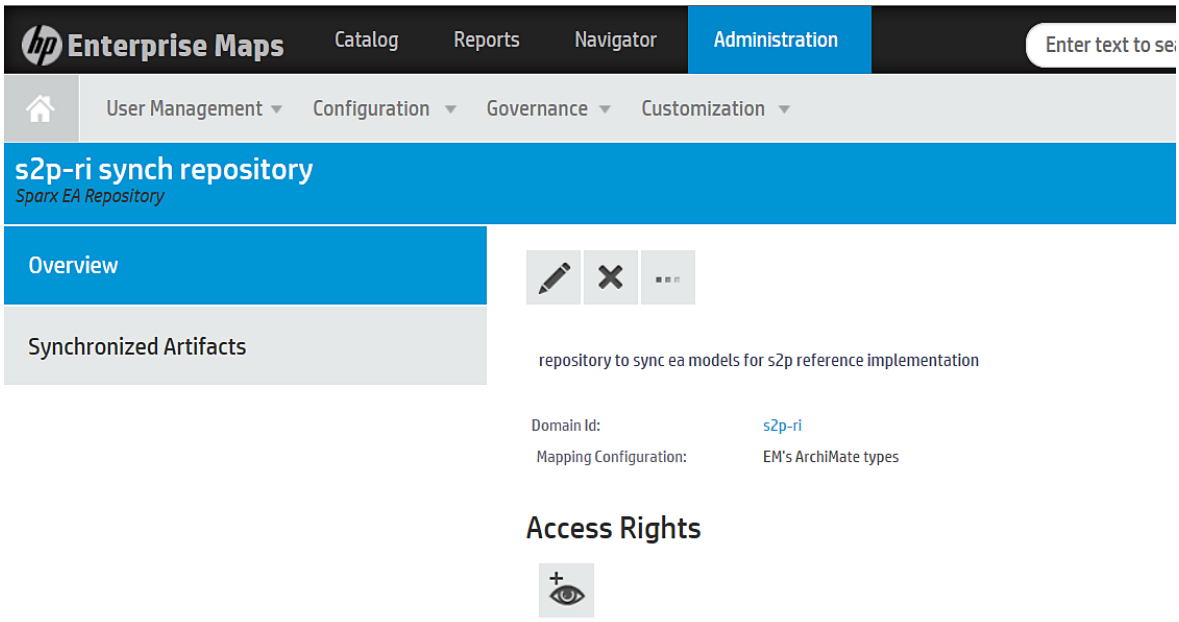
Relationships

Sub-requirements:	Link new, Link existing...
Realized Goals:	Increase Employee Productivity ...
Follows Principles:	Link new, Link existing...

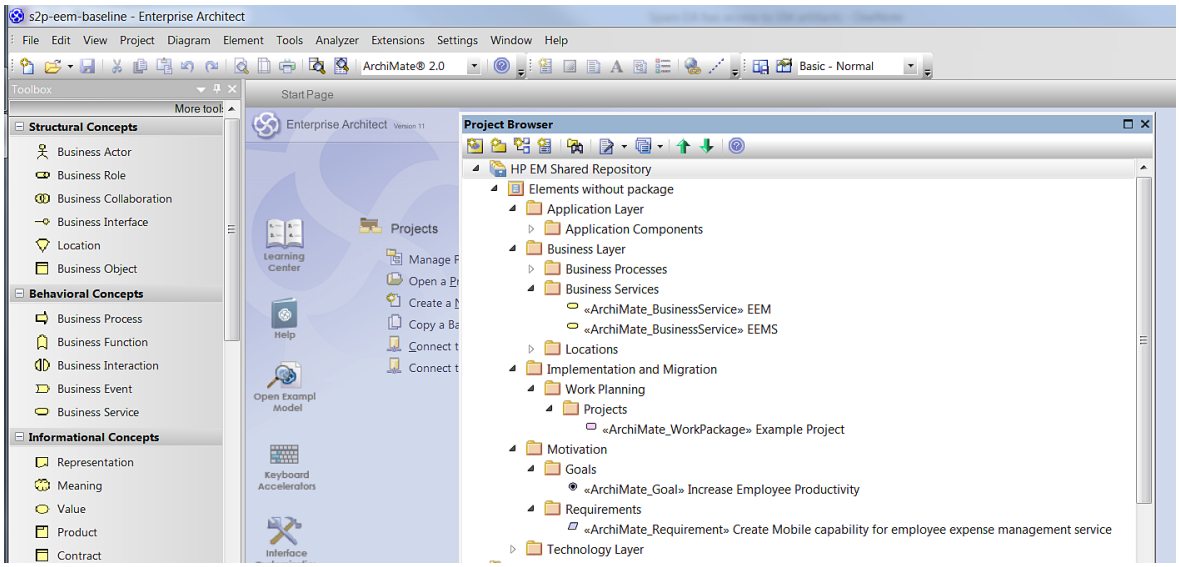
There are additional rarely used relationship types that are not defined on this artifact yet. Show them all...

c. Synchronize Information Between Sparx EA and EM Platform

Sparx Enterprise Architect (EA) is a third-party enterprise architecture modeling product. HPE created and supports an extension to Sparx EA that enables the two-way synchronization of model elements between Sparx EA and EM. Upon completion of that integration, the modeling capabilities of the Sparx EA platform are used to model the future state using model elements that reside in EM. These same elements are those that exist in EM through its synchronization with PPM, UCMDB, or other complimentary products. This positions EM as a central integration platform for a large segment of the logical and conceptual service model. The following screen shot shows the configured synchronization we created for this example.



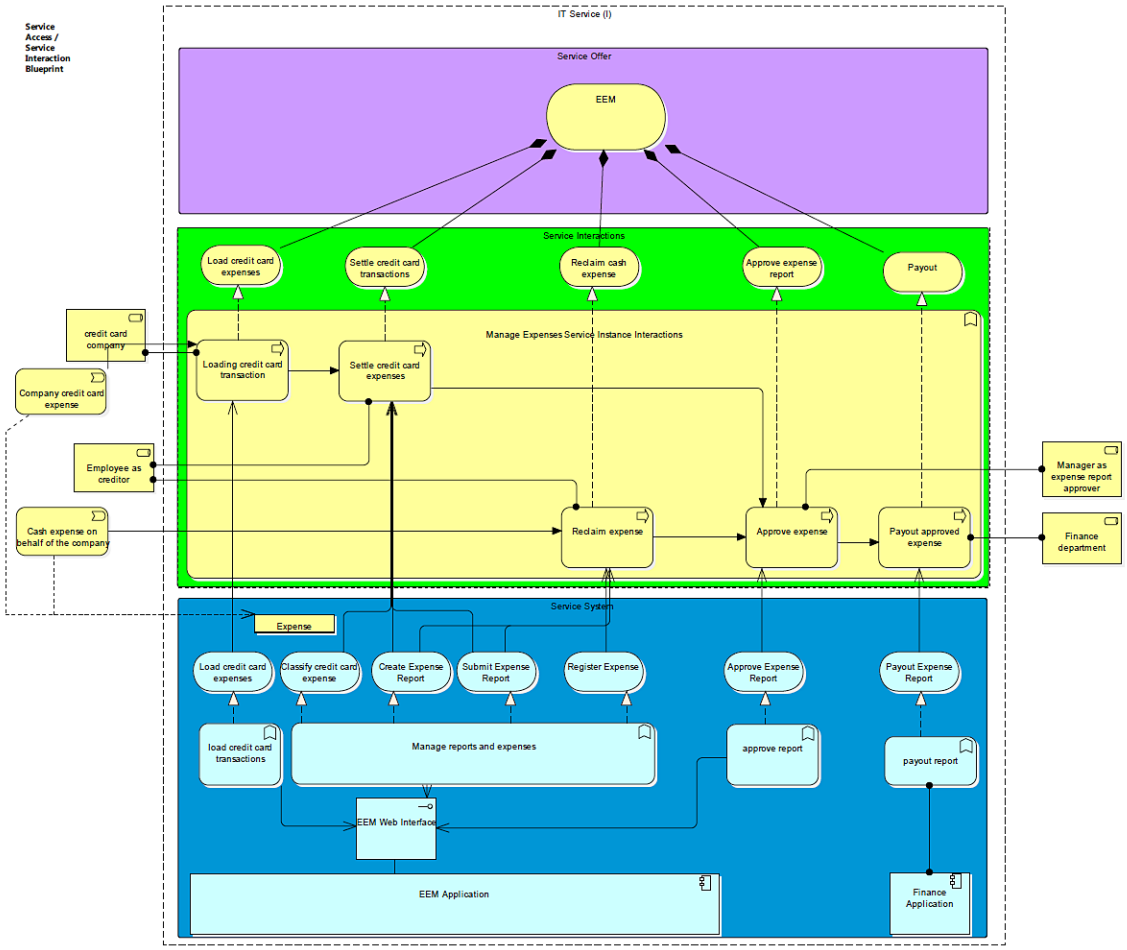
After configuring the synchronization repository within EM, the synchronization is executed and the model data objects within EM are available to the modeler using Sparx EA. The following screen shot of the Sparx EA user interface shows architecture elements sourced through its integration with EM.



d. Model the As-Is State with Sparx EA

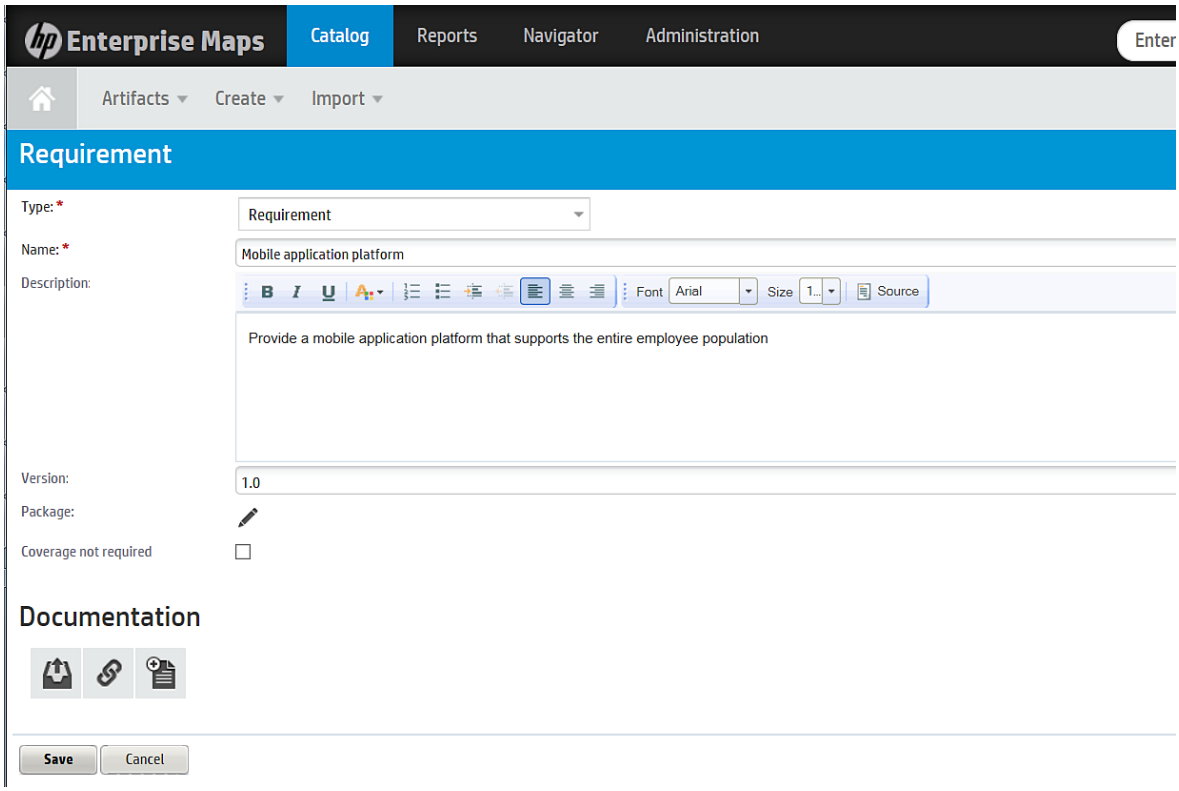
Sparx EA is now equipped to be the modeling platform for the future state of the EEM solution.

The architects use Sparx EA to create a baseline model (shown in the following screen shot) of the as-is EEM solution. This model may already exist from a previous modeling exercise of the EEM service. If not, a current state architecture vision must be created.

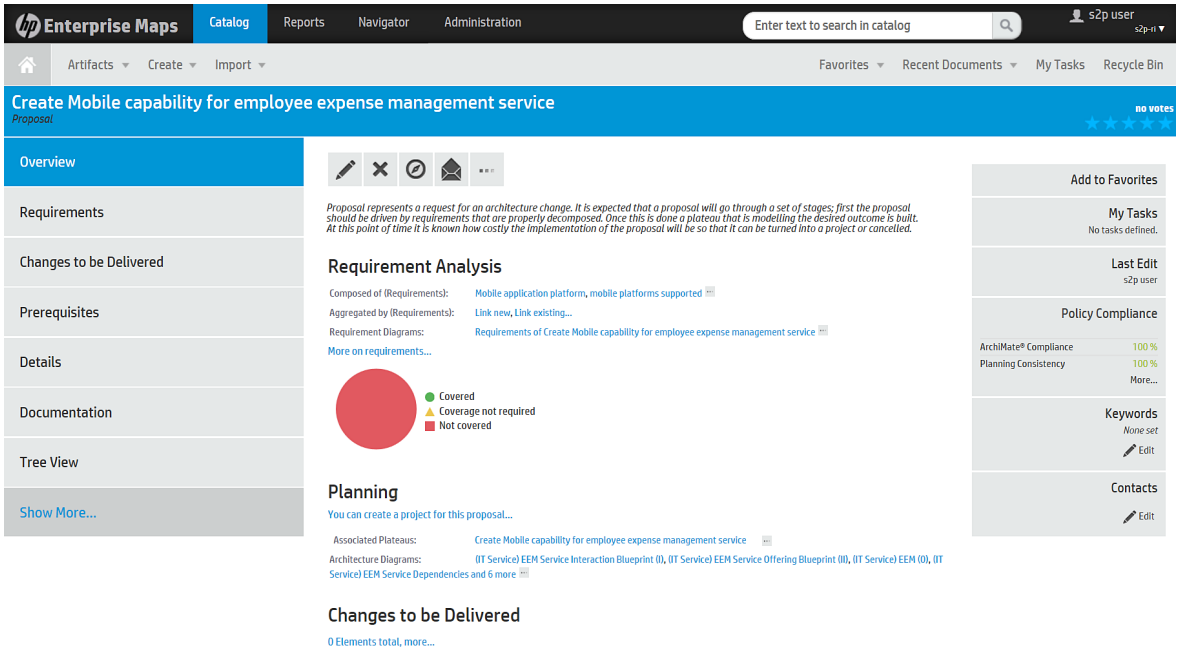


The baseline model above contains the application and business layer model elements of the existing EEM service using ArchiMate® compliant modeling elements. The business services and business processes are modeled in the service interactions layer. The application services, functions, interfaces, and components are modeled in the service system layer.

Once the baseline is documented, the architects return to EM to create the motivation elements and requirements for the to-be state solution.

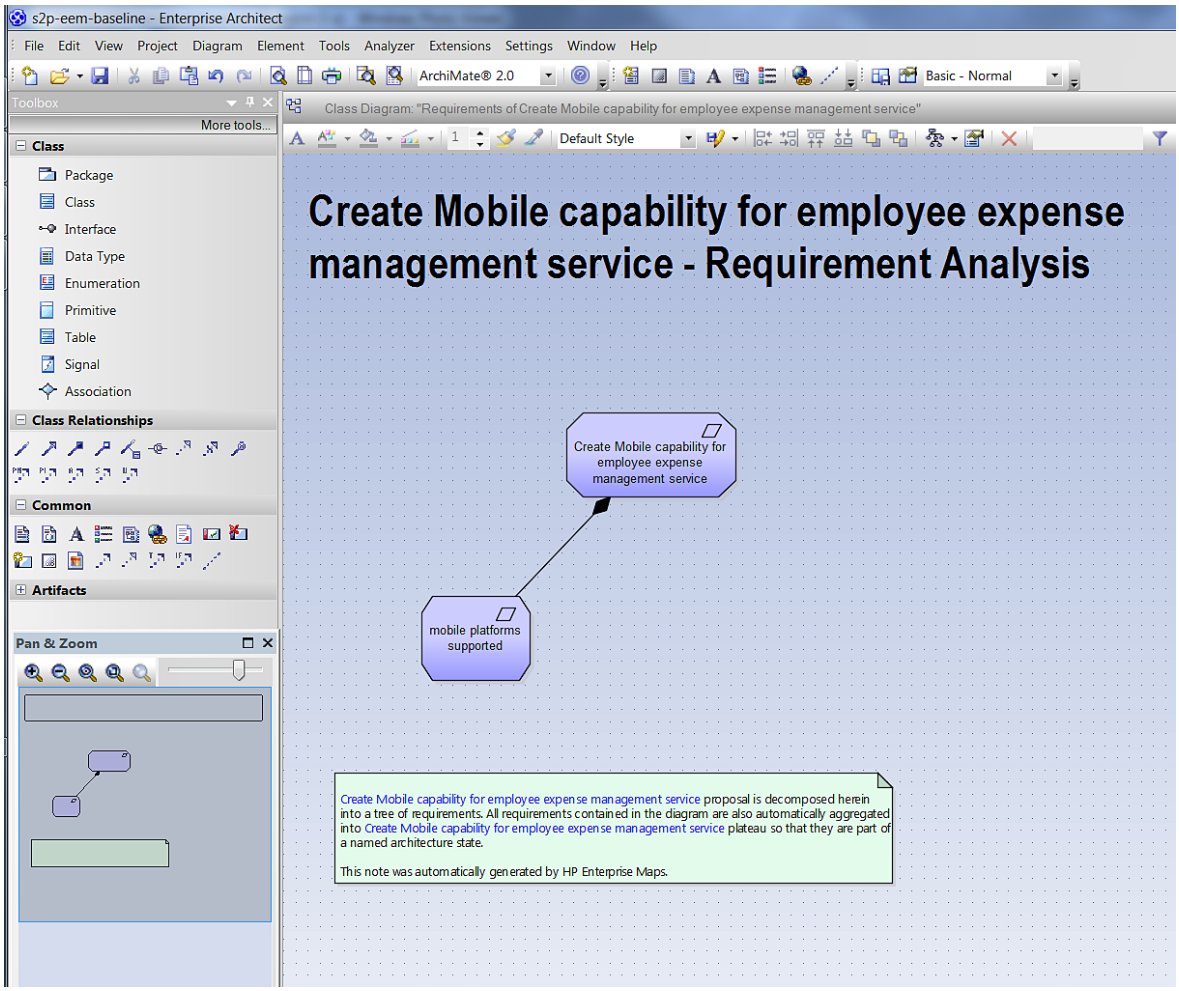


Using the Proposal user interface, they then associate a package, the requirements, and a plateau with the Proposal.



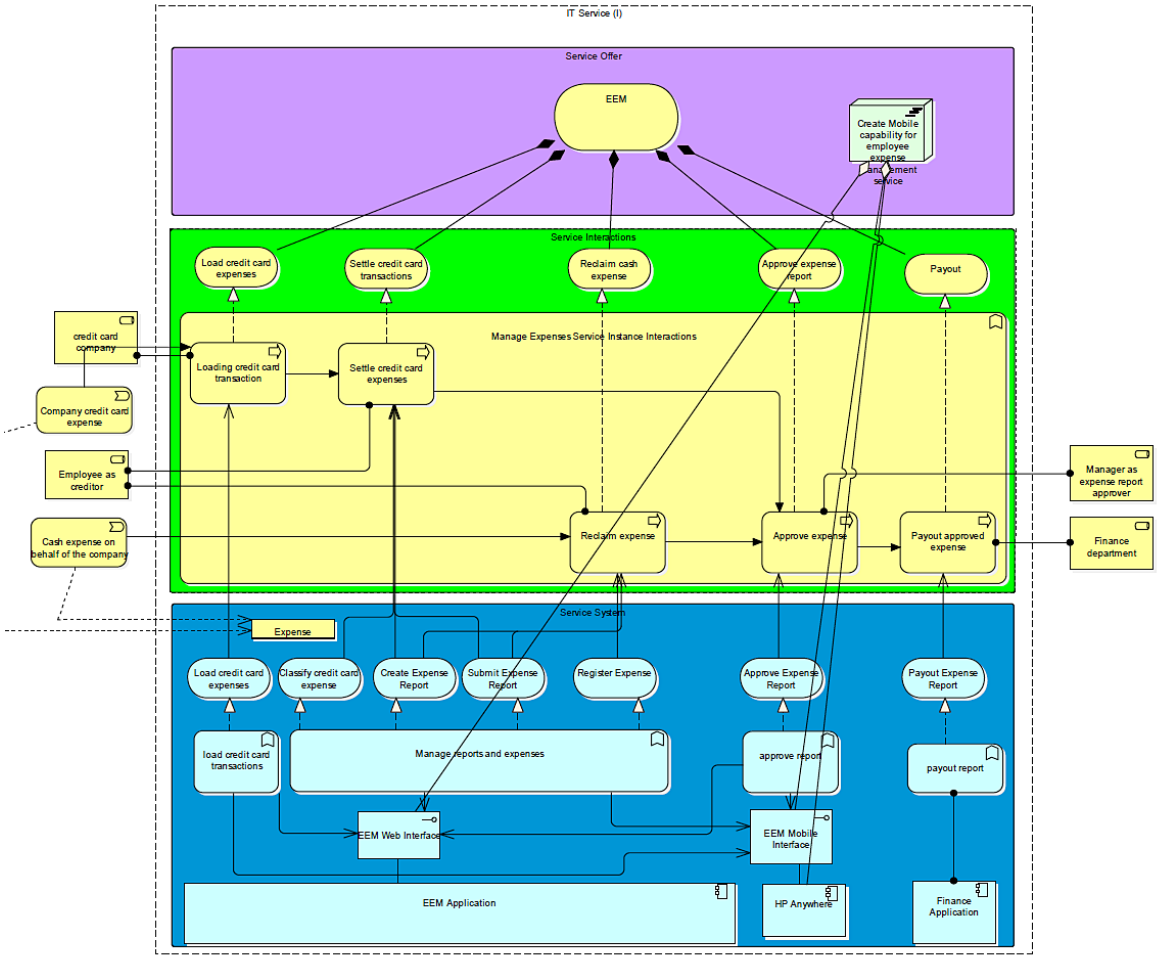
e. Model the Future State with Sparx EA

The architects then return to Sparx EA to create a to-be state model. A requirements model (shown in the following screen shot) is created showing the decomposition of requirements to be addressed in the new plateau.

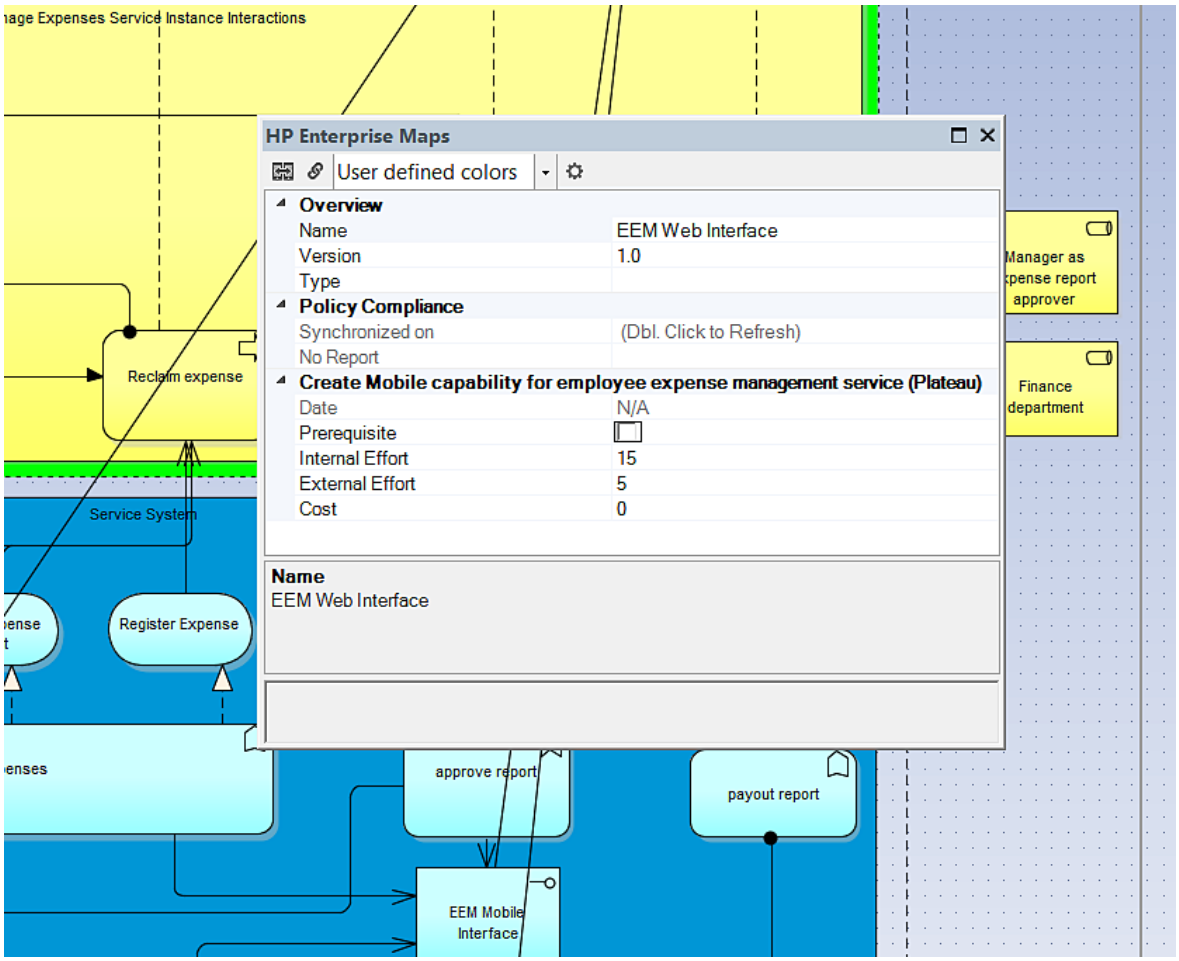


The baseline EEM model is modified by adding a new application interface, as well as the HP Anywhere application component. These are the essential new architectural elements needed to implement the mobile solution.

By dragging the plateau element from the Sparx EA user interface onto the diagram, the affected model elements are related to the plateau automatically. The following diagram illustrates the EEM to-be model showing the impacted model elements.

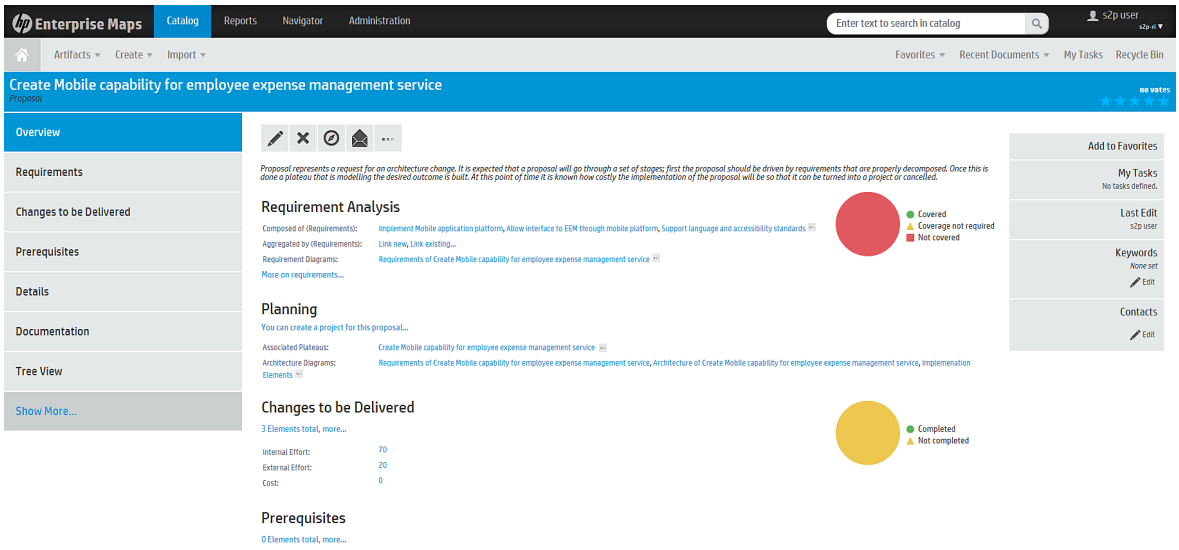


Architects use the Sparx Extensions window for EM to enter estimates for the effort needed to make the architectural changes they have identified. Here they add the internal and external effort needed to update the application components and interfaces needed, as well as the new HP Anywhere components.

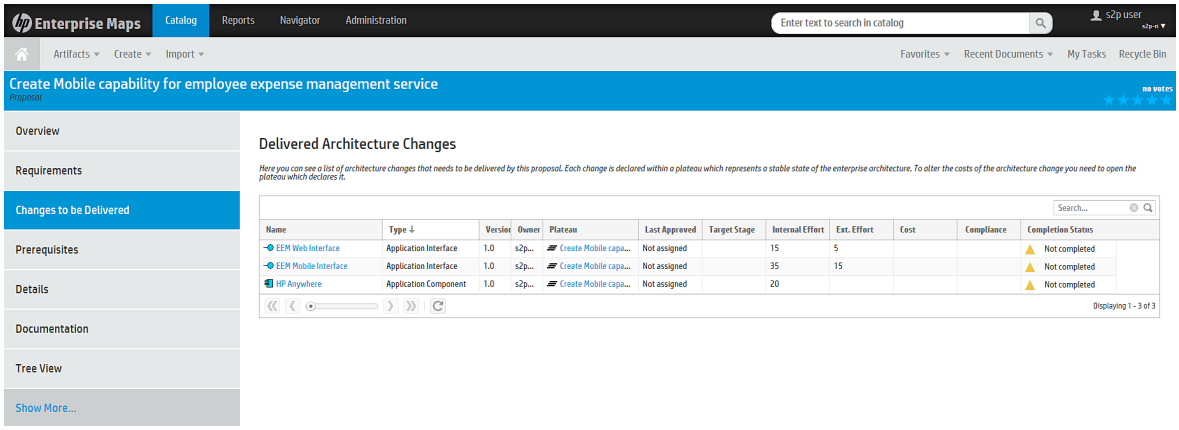


Following a synchronization with EM, all of this information is now available to the HPE Enterprise Maps product.

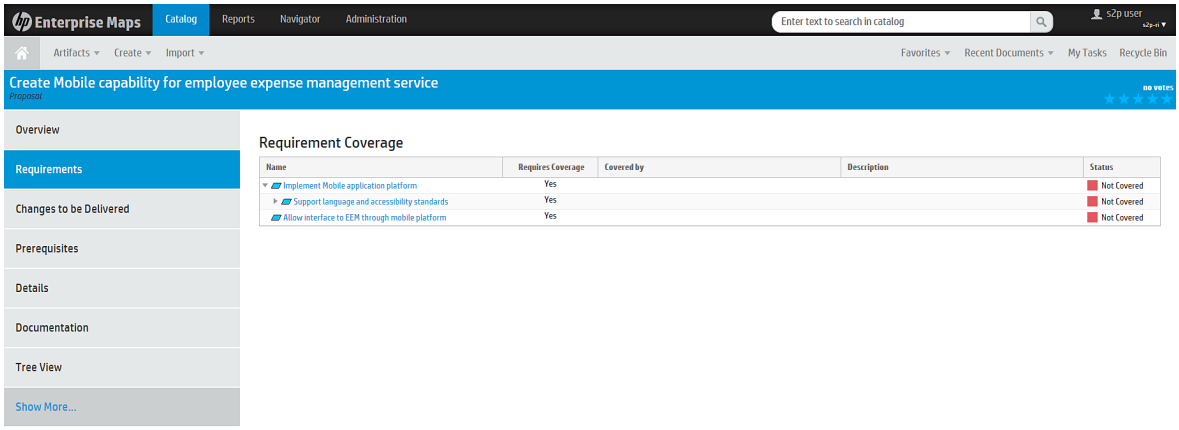
Returning to EM and opening the original Proposal user interface, in the **Overview** we see that all of the requirements and architectural changes for the new plateau are represented (including the effort estimations made in Sparx EA).



In the pane on the left of the same Proposal user interface, click **Changes to be Delivered** to see the deliverables and estimates that were captured in Sparx EA.



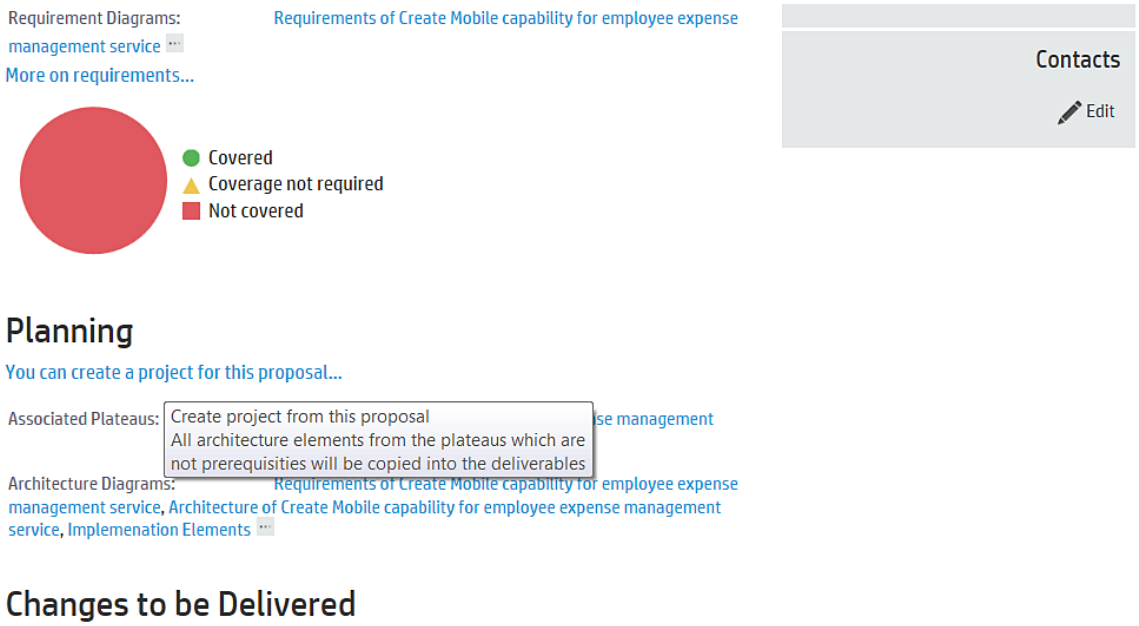
Next click **Requirements** for additional details.



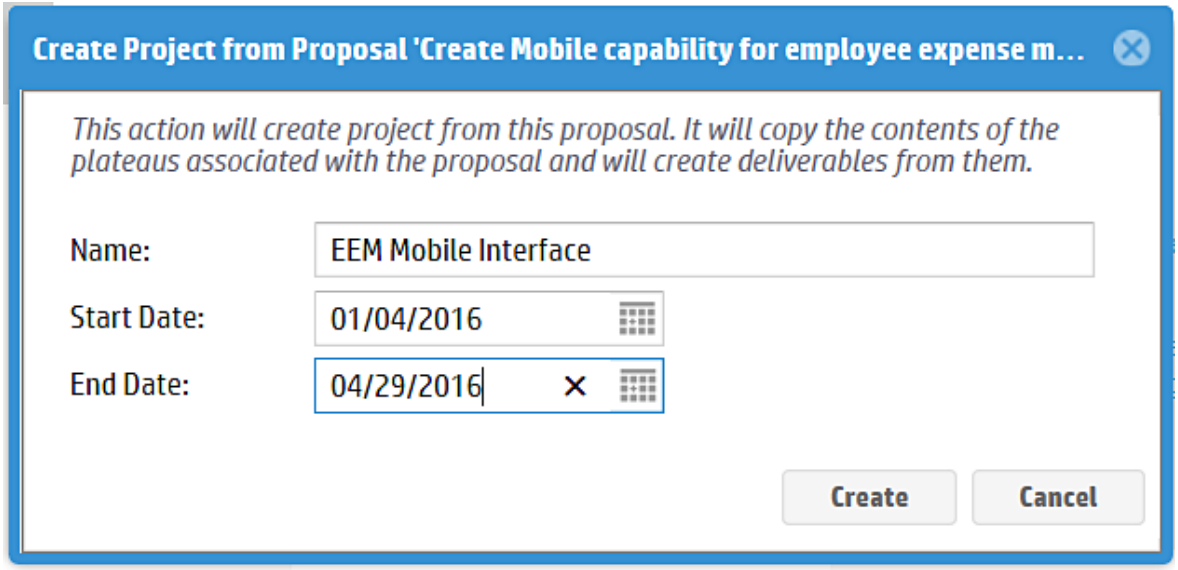
According to the Requirements Coverage pane, the requirements associated with this Proposal are not considered covered by a work package at this time.

In EM, the work package is also called a **Project**.

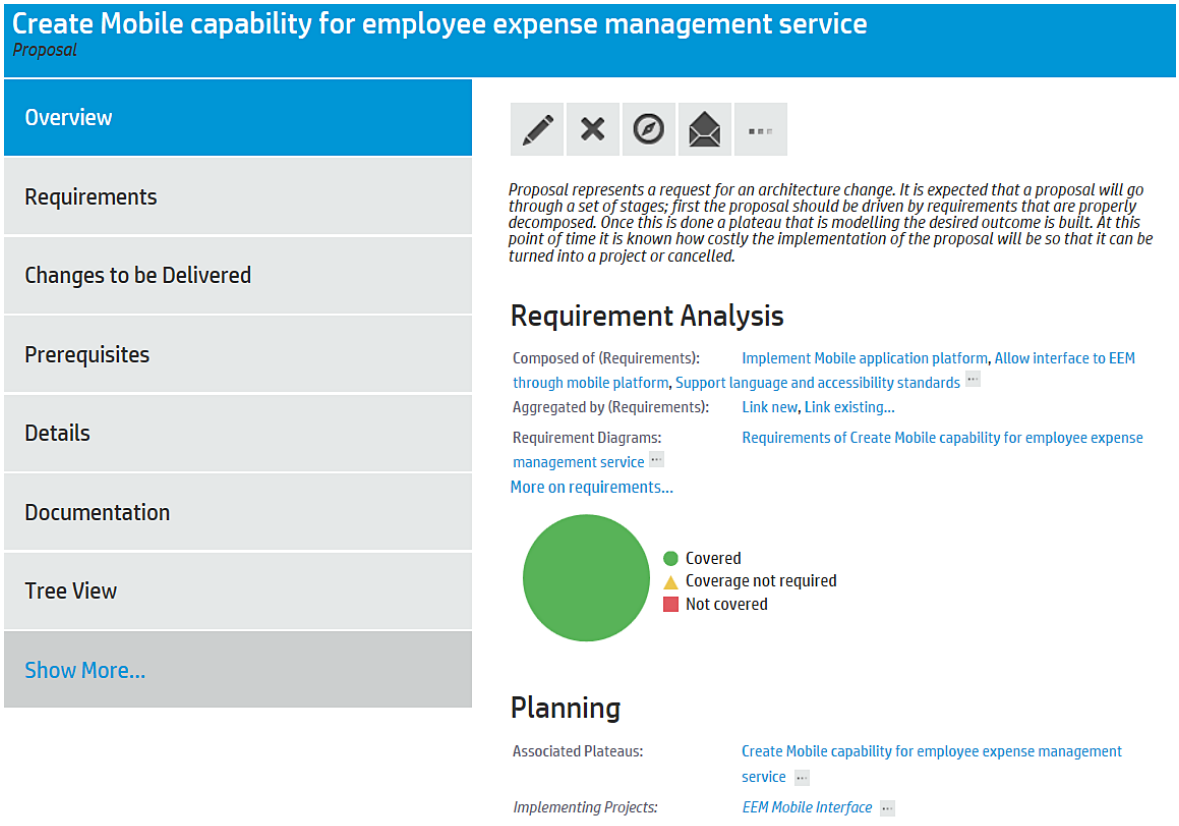
To create a covered work package, return to the **Overview** of the Proposal. There is a link in the **Planning** section that offers a place to create a project to realize the Proposal. Hover the mouse over the link for an explanation of the function.



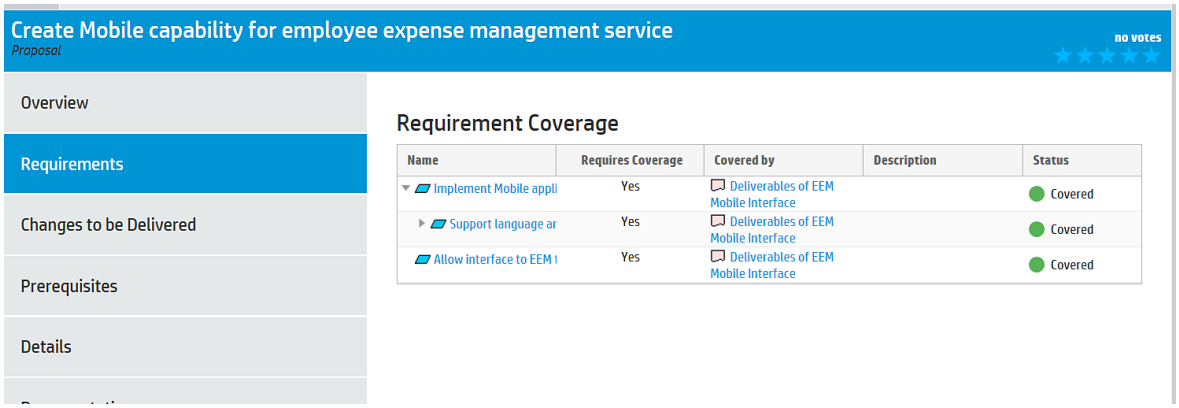
Clicking this link produces a dialogue box that captures the **Name** of the new project and its **Start** and **End** dates.



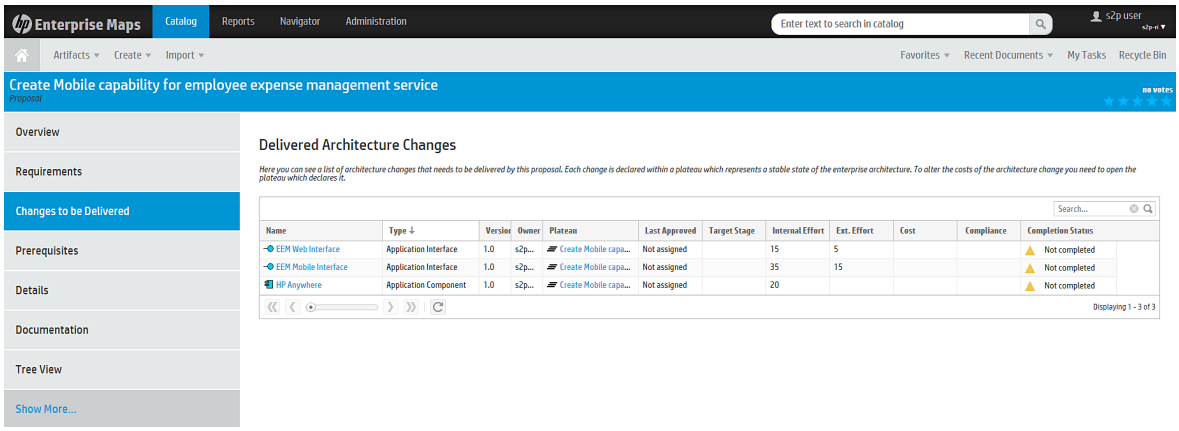
After creating the project, the Proposal and associated requirements are considered **covered** by it.



Requirements now shows the requirements are covered by the deliverables of the new project.



Changes to be Delivered shows the architectural deliverables along with their effort estimate that was captured in Sparx EA.



f. Start Governance of the Work Package

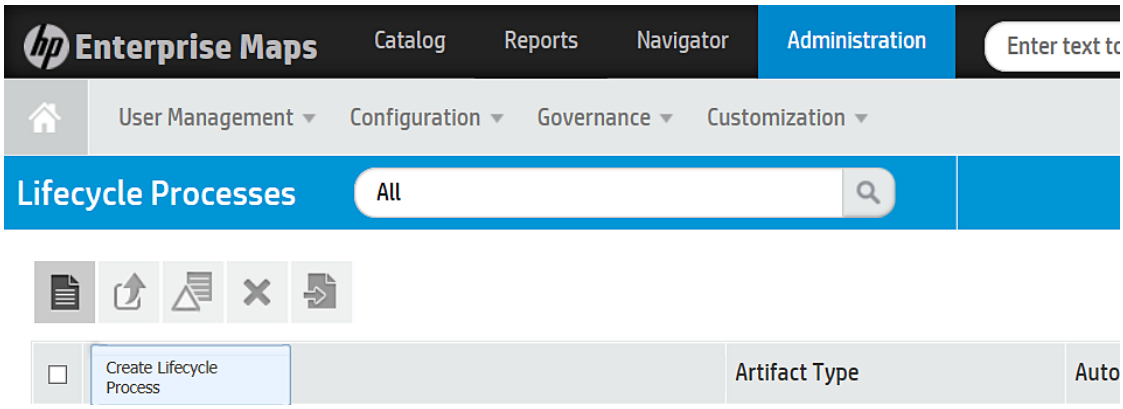
With the work package defined and estimates completed, the role of the architects becomes one of governing the transformation of architectural elements as deliverables are completed by the implementing IT Initiative.

Lifecycle Governance

The HPE Enterprise Maps product allows architectural data objects to be placed under the governance of a life cycle. Each life cycle stage represents an important milestone. Depending on the configuration of the life cycle stage, the completion of a stage requires the completion of tasks, the validation of policies, and possibly the consent of an approver.

In order to start governance of our new project, we need a defined life cycle process for data objects of the **Project** type.

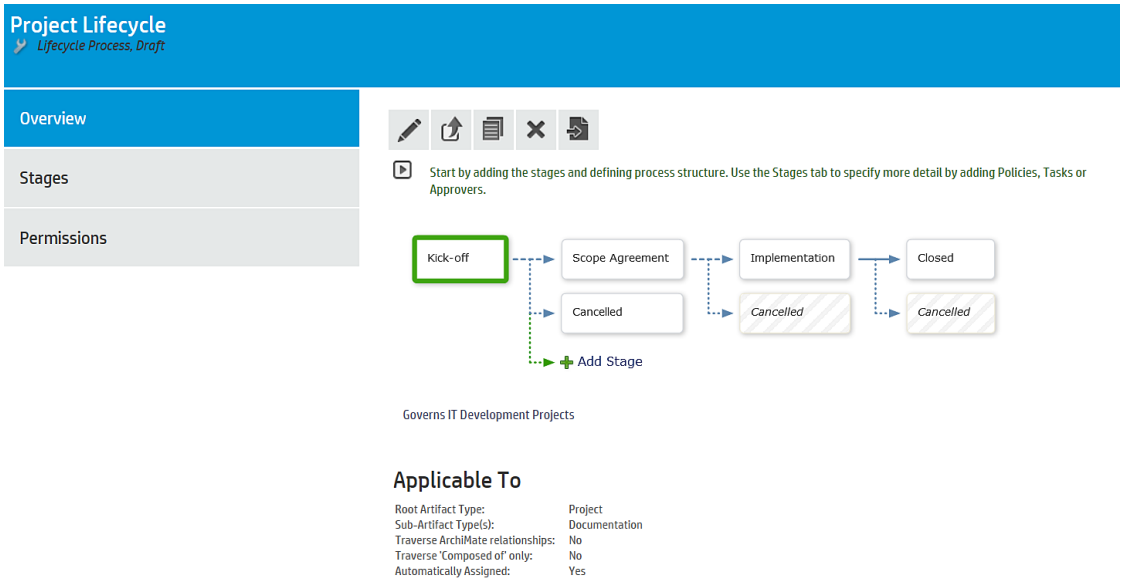
1. Navigate to **Administration > Governance > Lifecycle Processes**.
2. In the Lifecycle Processes pane, click the **Create Lifecycle Process** button.



The Lifecycle Process user interface leads the user through the actions of naming the new life cycle, associating it with a primary data object (the **Project** data object in this case), creating the stages of the life cycle and associated tasks, validation policies, and approvals.

We create the initial structure of the life cycle. It is rooted in a **Project** data object with a **Documentation** data object as a sub-data object. The stages are built sequentially; beginning with the **Kick-off** stage, followed by the **Scope Agreement** stage, the **Implementation** stage, and finally the **Closed** stage. At each transition, the life cycle could optionally branch to the **Canceled** stage.

The completed life cycle is displayed in the Project Lifecycle user interface.



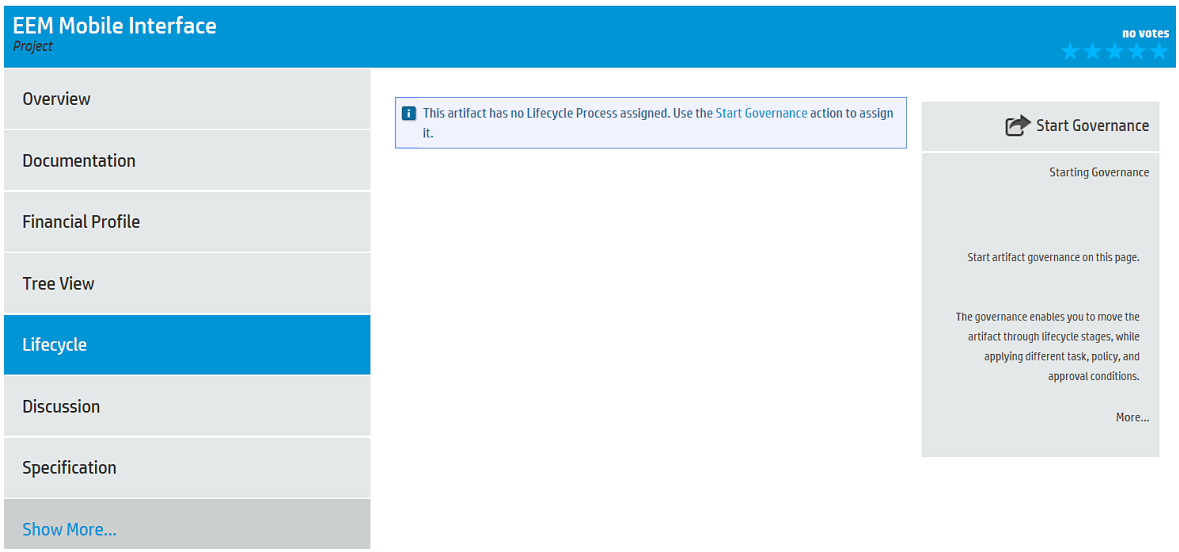
3. Click the **Publish**  icon to make the completed project life cycle available for use in governance.

With a default life cycle for **Project** data objects created, we return to the **Lifecycle** tab of the **EEM Mobile Interface** Project and place it under governance.

1. Navigate to the **Catalog** page.
2. In the **Transformation** column, click the **Projects** hyperlink.
3. Search for the **EEM Mobile Interface** project.
4. When the Project user interface appears, navigate to the **Governance** tab and click **Start Governance**.

This results in the project being placed in the **Kick-off** stage.

Enterprise Architects now use the life cycle to ensure required tasks are completed and policies are complied with as the architectural elements are delivered by the project.



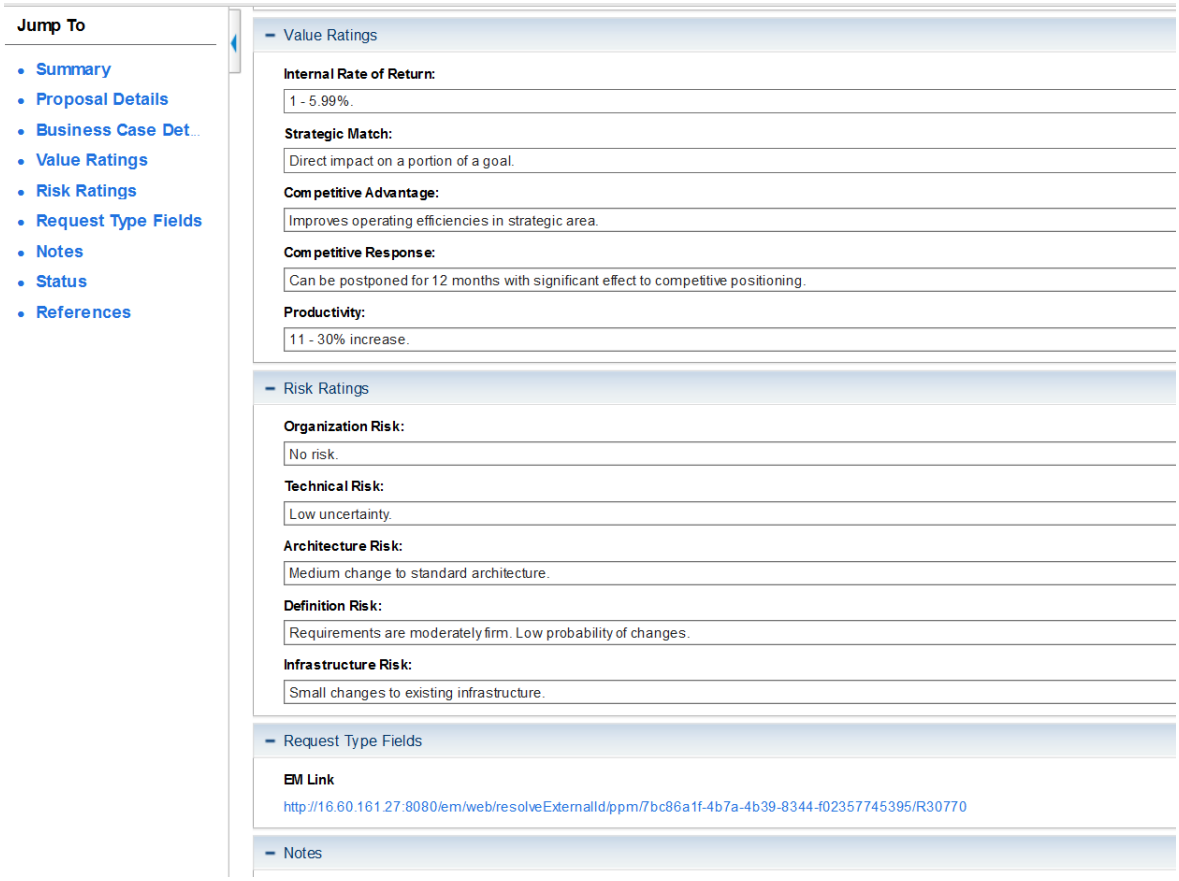
Step 8. Update Proposal with Staffing Model and Budget Estimate

This is one of the program office's tasks.

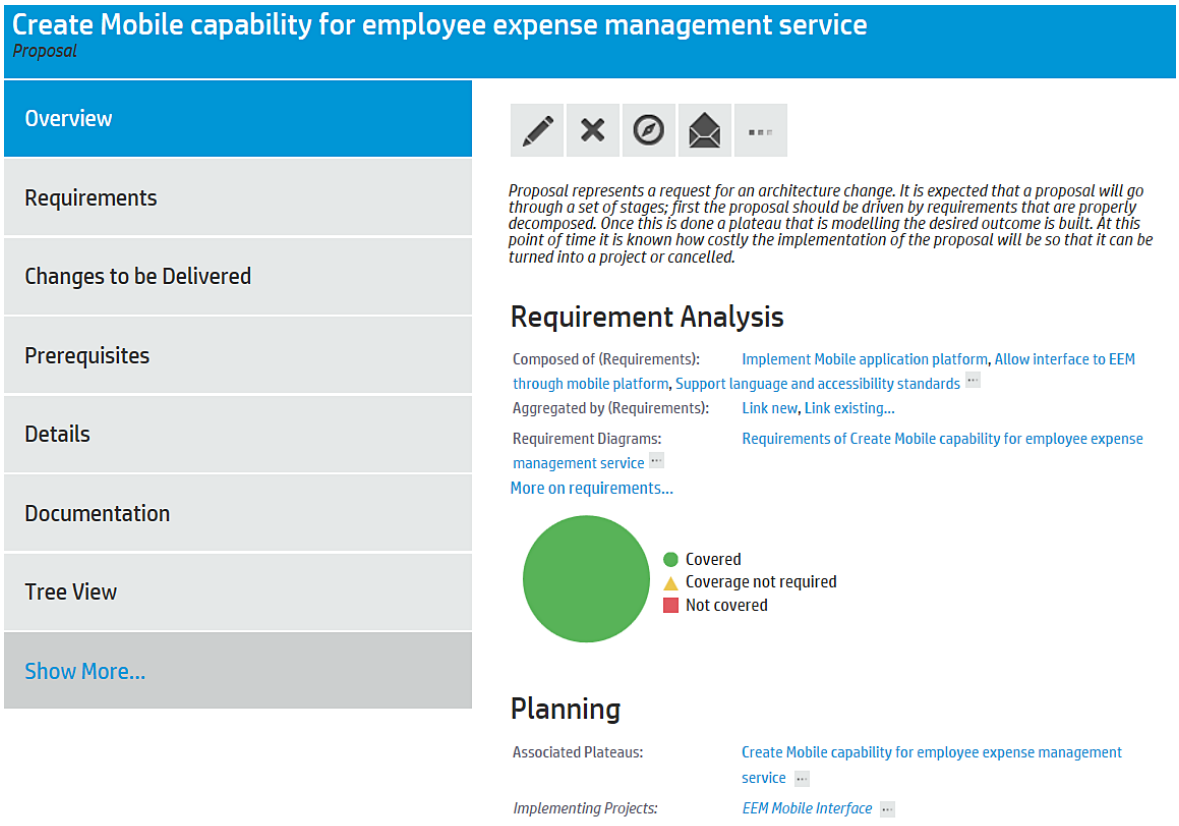
There will be no architecture milestones achieved if no actual project to achieve the plateau is executed. So the project (work package) we just conceived, from an architectural standpoint, needs to be communicated to the project office for scheduling and execution.

In order to do this, enable PPM for the synchronization of data back from EM. See Part III "Strategy to Portfolio Configuration Guide" on page 53 for details on how to install and enable this integration. Once the integration is initiated on PPM, the Project Manager opens a view directly into the EM work package from within PPM.

After opening a view of the PPM Proposal user interface (shown in the following screen shot) to add mobile capability to EEM, the document now contains a section of **Request Type** fields. The **EM Link** field is a hyperlink to the EM user interface. Click the **EM Link** hyperlink to open a new window into EM.



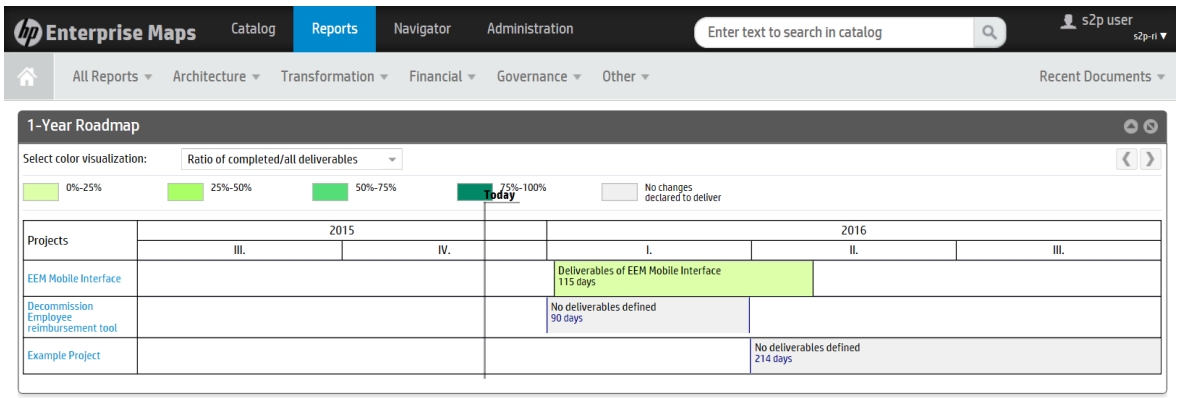
The Project Manager uses the project Proposal window to examine the requirements, the changes to be delivered, the prerequisites, and the effort estimations provided by the architect team to construct the scope agreement (project plan) needed to implement the Proposal.



Step 9. Update Service Roadmaps Based on Project Execution Status

This is the Service Owner's final task.

The resulting roadmap of the work package is now viewed in the **Reports** section of EM. This facilitates the coordination of project deliverables and milestones with other activities impacting the service through a common timeline.



Step 10. Execute Governance Process and Complete Scope Agreement

This is the program office's final task.

The program office now has all of the information necessary to complete the defined **Proposal** workflow within PPM. The workflow completes when it results in a scope agreement and project through its **Approved** workflow step, or it is placed temporarily on hold or rejected. The following are the complete workflow steps:

- Proposal Review
- Build High Level Business Case
- Level-1 Approval
- Build Detailed Business Case
- Finance Review
- Standards Committee Review
- Biz Ops Council Review
- IT Steering Committee Review
- Create Project
- Proposal Closed (Approved)
- On Hold
- Project Request Rejected

As the Proposal successfully moves through step 10, a project to implement the initiative is created and the activities within the Requirement to Deploy Value Stream are commenced.

Part III: Strategy to Portfolio Configuration Guide

Chapter 3: Strategy to Portfolio Value Stream Configurations

This chapter includes:

Overview

The balance of this guide provides the information necessary to implement the integrations needed to achieve the preferred IT management ecosystem. The user decides how many configurations to implement in order to achieve the management level required.

The entire solution can be used or a mix of the various products or just a single product to address specific management needs.

Note: Throughout this document, italicized text enclosed in angle brackets (for example, "<your_server_name>") indicates replaceable text.

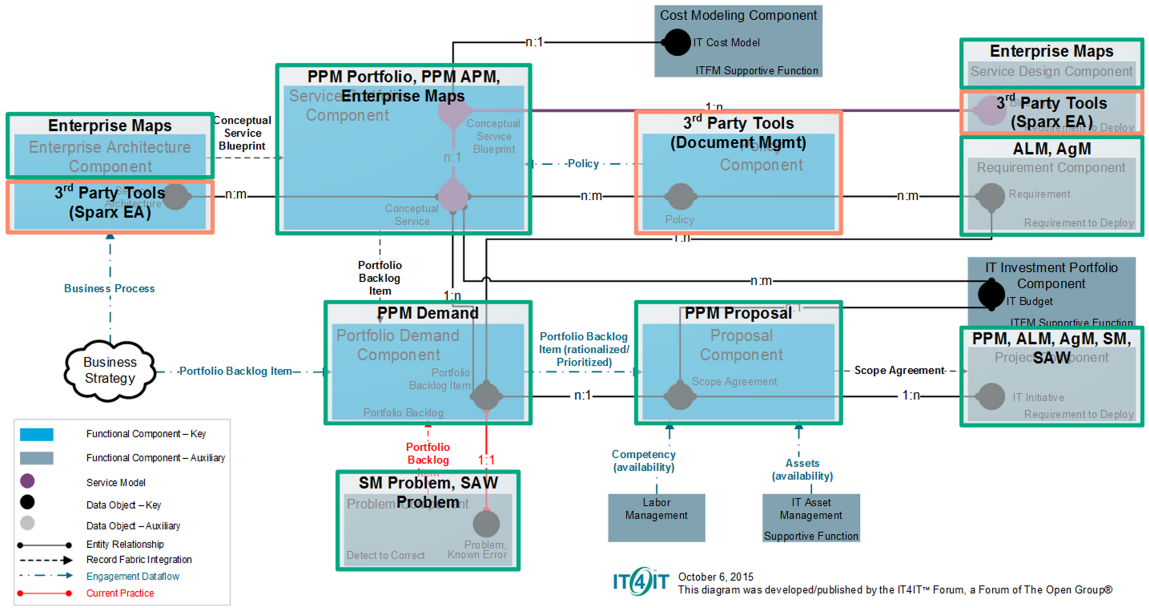
Prerequisites

This guide expects that the following products are installed and fully functional.

- **HPE Project Portfolio Management.** Foundation, Project and Portfolio Management modules installed. Server installed and ready for use.
- **HPE Enterprise Maps.** Server installed and ready for use.
- **HPE Universal CMDB and HPE Universal Discovery.** Server installed and ready for use.
- **Sparx Systems Enterprise Architect.** Client installed and ready for use.

S2P Functional Components and Product Mapping

The following diagram illustrates the mapping between the products and the Functional Components of the Strategy to Portfolio Value Stream:



Hardware and Software Requirements

This section includes the following topics:

Supported Versions

Note: The following versions are the supported versions for the S2P use case only.

For the hardware and software requirements, see the product documentation.

Product	Version	Instructions
PPM	• 9.31 or later **Recommended.** 9.31	For installation instructions, see the *HP Project and Portfolio Management Center Software Version 9.30 Installation and Administration Guide*.
Enterprise Maps	• 2.00 or later **Recommended.** 2.00	For installation instructions, see the *HP Enterprise Maps Software Version 2.00 Windows and Linux Operating Systems Installation and Configuration Guide*.
Universal CMDB	• 10.20 or later **Recommended.** 10.21 CUP1	For installation instructions, see the *HP Universal CMDB Deployment Guide Version 10.20*.
Sparx Systems Enterprise Architect	• 11.00 or later **Recommended.** 12.00	For installation instructions, see *Sparx Systems Installation*.

Note: Make sure that each application you install is up and running before you perform any configuration steps.

Enterprise Hardware and Software Requirements

Note: The following tables detail the deployment environments that have been rigorously tested by HPE quality assurance personnel.

For the complete listing of hardware and software requirements, see the relevant Support Matrix for each product.

- **HPE Project Portfolio Management.** For more information, see the *Support Matrix for PPM Center Version 9.30*.
- **HPE Enterprise Maps.** For more information, see Chapter 2 "Prerequisites and Supported Platforms" in the *HP Enterprise Maps Software Version 2.00 Windows and Linux Operating Systems Installation and Configuration Guide*.
- **HPE Universal CMDB.** For more information, see the *HP Universal CMDB Support Matrix Version 10.20*.

HPE Project Portfolio Management – Overview

HPE Project and Portfolio Management (PPM) Center standardizes, manages, and captures the execution of project and operational activities.

Most PPM Center users work in the standard user interface, which appears as a collection of specialized Web pages. These pages open in a Web browser and offer a customized view into PPM Center. From these pages, reports are run, requests are submitted, and projects are created. You can also view and use the PPM Dashboard. The PPM Dashboard is a real-time Web page view into your PPM Center system. Using portlets, important information about your work environment is viewed—from the status of requests assigned to you to comparisons between current projects and staffing profiles.

In addition to the standard user interface, some users require the PPM Workbench to accomplish certain tasks. Unlike the Web pages, which open in a Web browser, the PPM Workbench opens in its own window. Designed for more advanced users, the PPM Workbench is where much of PPM Center is configured. Configurators use the PPM Workbench to define workflows, create request types, set up automatic notifications, as well as a host of other tasks and procedures.

HPE Enterprise Maps – Overview

HPE Enterprise Maps (EM) systematically constructs enterprise architecture models aligned with projects, and enables you to capture and use information from various tools and across multiple locations. The EM tools are used to manage your architecture model and establish a solid baseline for making informed decisions about your IT assets and infrastructure.

HPE Enterprise Maps is designed according to principles and recommendations defined in The Open Group Architecture Framework (TOGAF) and other modern enterprise architecture frameworks as a Web-based enterprise-ready repository application and collaborative environment. The core functionality that EM provides includes:

- A model repository enabling revisioning and versioning of data objects
- Synchronization of EM models with extension for Sparx Systems Enterprise Architect
- Impact and dependency analysis from model as well as from instance points of view
- Architecture principles compliancy checks, harmonization, and governance
- Life cycle and contract/consumption management
- Smooth integration with external IT systems
- Document management

Use EM to answer the following types of questions:

- How is my business connected to applications and IT?
- How is my IT infrastructure compliant with corporate standards?
- What dependencies in our Enterprise Architecture cross business, application, and technological concerns?
- How do changes in applications affect business?
- How do changes in the IT infrastructure affect applications and business?
- What costs do I save by optimizing an application portfolio?
- Which applications are going to be available tomorrow or in the next three months?
- Which products do I need to buy?
- What custom solutions must be developed?
- Should we transform existing applications in clouds? If so, how and why?
- Is the current state of the IT infrastructure and application deployments matched with our architecture?

HPE Universal CMDB – Overview

HPE Universal CMDB (UCMDB) consists of a rich business-service-oriented data model with built-in discovery of configuration items (CIs) and configuration item dependencies, visualization and mapping of business services, and tracking of configuration changes.

UCMDB enables you to manage all of the CIs contained in a managed world. A managed world refers to any self-contained environment that can be described using a topology model (defined with HP's Topology Query Language (TQL)). For example, the IT infrastructure of a large business represents a managed world, where the topology comprises multiple layers such as networks, protocols, databases, operating systems, and so on. You manage views to view the information in exactly the format you require.

Additionally, the information contained in the results of each TQL is updated automatically with the latest data entering the configuration management database (CMDB). As a result, once a TQL and View have been defined, they continue to provide up-to-date information about the current state of your managed world. Views appear in multi-level maps that enable you to identify key CIs, as required. You can also create reports (in HTML, Excel, or table format) about information collected by the system.

Sparx Systems Enterprise Architect – Overview

Sparx Systems Enterprise Architect (EA) provides full life cycle modeling for:

- Business and IT systems
- Software and systems engineering
- Real-time and embedded development

With built-in requirement management capabilities, Enterprise Architect helps you trace high-level specifications to analysis, design, implementation, test and maintenance models using UML, SysML, BPMN, and other open standards.

Enterprise Architect is a multi-user, graphical tool designed to help your teams build robust and maintainable systems. Using built-in reporting and documentation, you can easily and accurately deliver a truly shared vision.

Chapter 4: Strategy to Portfolio Integration Configurations

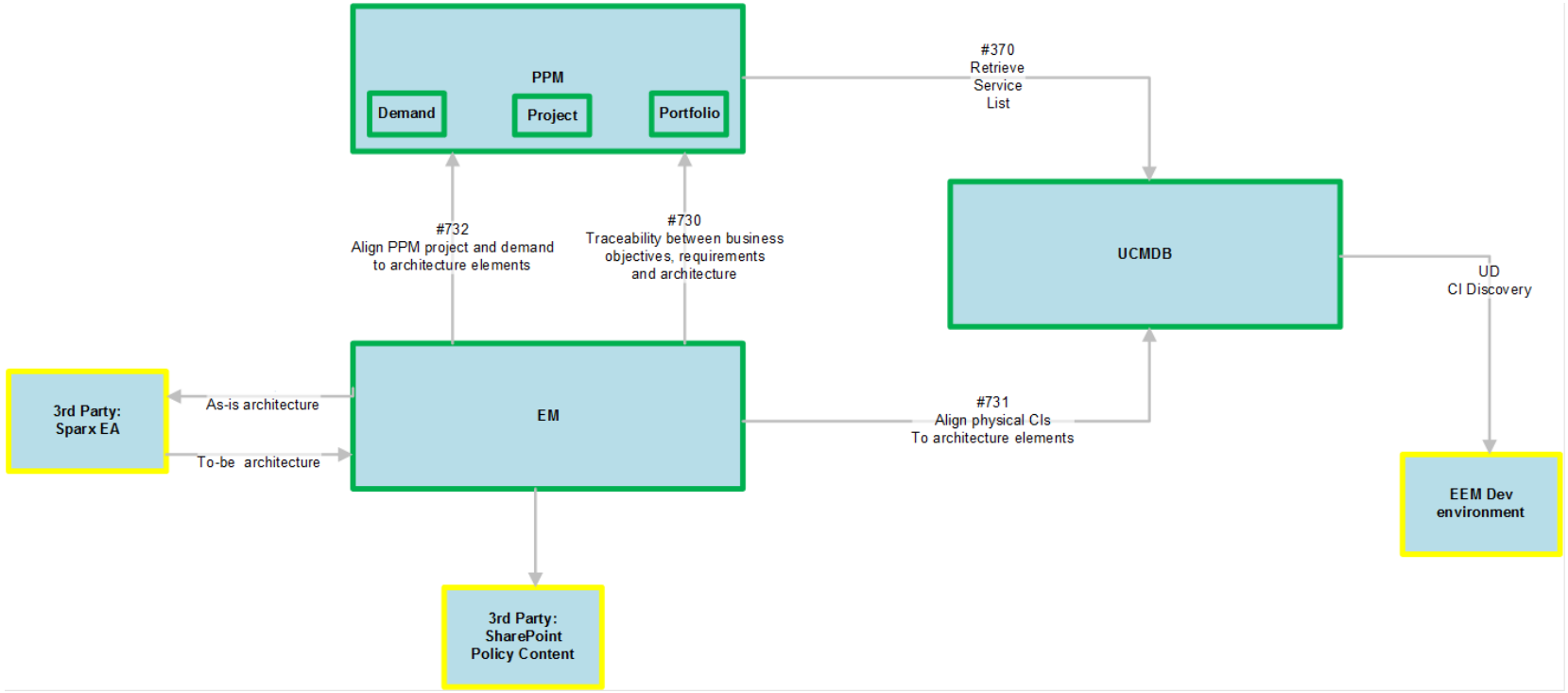
This chapter includes:

Overview

This chapter describes the set of product configurations necessary to implement the inter-product integrations that enable the Strategy to Portfolio use case documented in this guide.

Strategy to Portfolio Integration Diagram

The following Strategy to Portfolio reference implementation product mapping diagram illustrates the complete relationship between the products for this value stream:



UCMDB – EM Integration

This section covers the integration between HPE Universal CMDB (UCMDB) and HPE Enterprise Maps (EM).

This section includes the following topics:

Overview

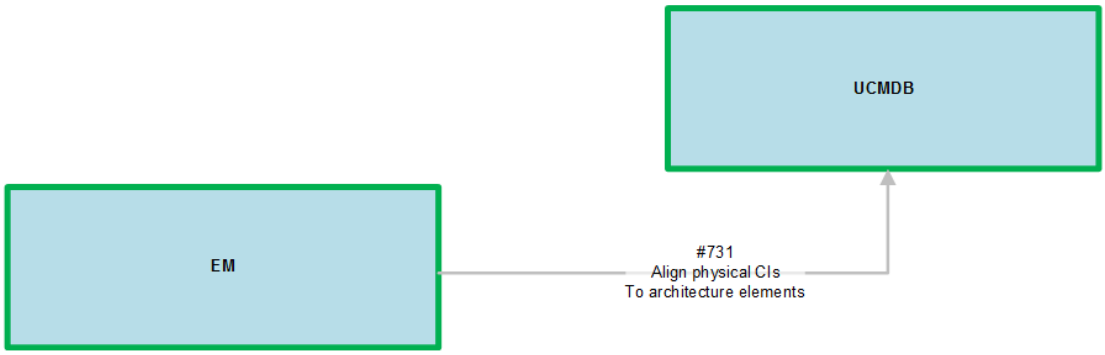
This section describes the necessary steps to configure the integration between HPE Universal CMDB and HPE Enterprise Maps.

UCMDB uses one or more discovery mechanisms to detect configuration item (CI) attribute values.

In the context of the Strategy to Portfolio Value Stream, this integration allows the synchronization of deployed system components managed within UCMDB and EM. Enterprise Maps then use those components as model elements to construct as-is and to-be architecture diagrams.

EM to UCMDB Diagram

The following diagram displays the HPE Enterprise Maps to HPE Universal CMDB integration.



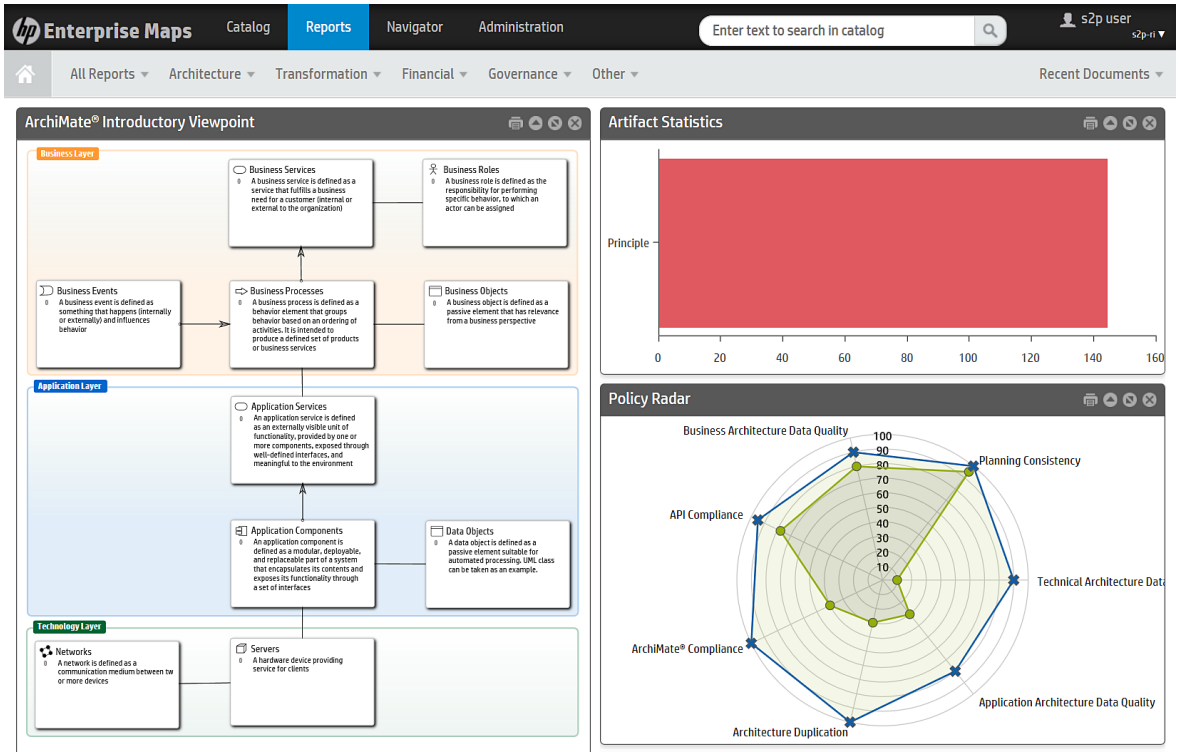
Prerequisites

Prerequisites for HPE Universal CMDB

- A service model must be present or constructed.
- Top layers may be created in HPE Enterprise Maps, Sparx Enterprise Architect (EA), or other third-party products such as Troux or Aris.

Prerequisites for HPE Enterprise Maps

- Enterprise Maps base installation must be complete, with a new domain created for the environment. In this implementation, it is called **s2p-ri**.
- Data in the EM instance must be reset so that there is nothing from the initial setup or installation validation testing remaining in the database.



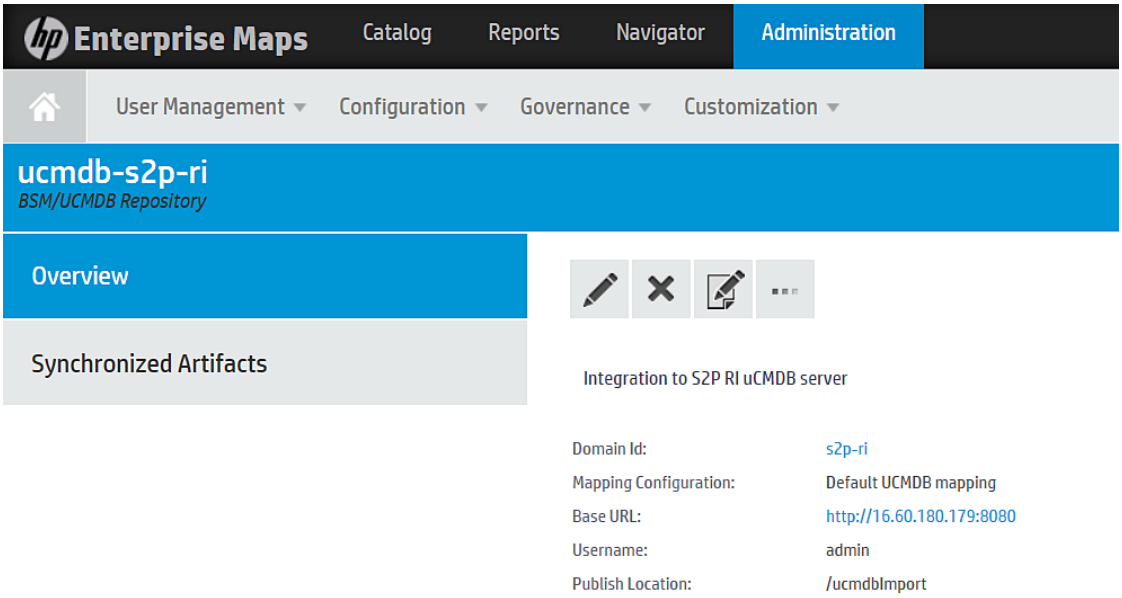
Configuring EM and UCMDB

The integration to the UCMDB server is created from within the Strategy to Portfolio—Reference Implementations (s2p-ri) domain in Enterprise Maps.

To access the s2p-ri domain in Enterprise Maps:

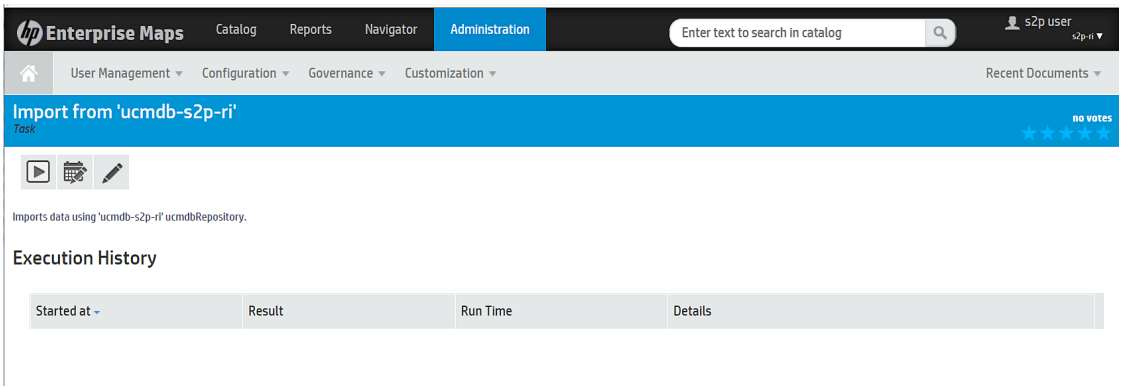
1. Log on to Enterprise Maps with administrator privileges.
2. From the Enterprise Maps menu bar, select **Administration**.
3. Select the hyperlink associated with the domain for the intended integration—in this case, it is **s2p-ri**.
4. In the resulting **s2p-ri** domain user interface, in the left column, click the **Integrations** tab.
5. In the HPE BSM/UCMDB section, click the hyperlink labeled **Add Integration**. The

BSM/UCMDB Repository Overview user interface appears.

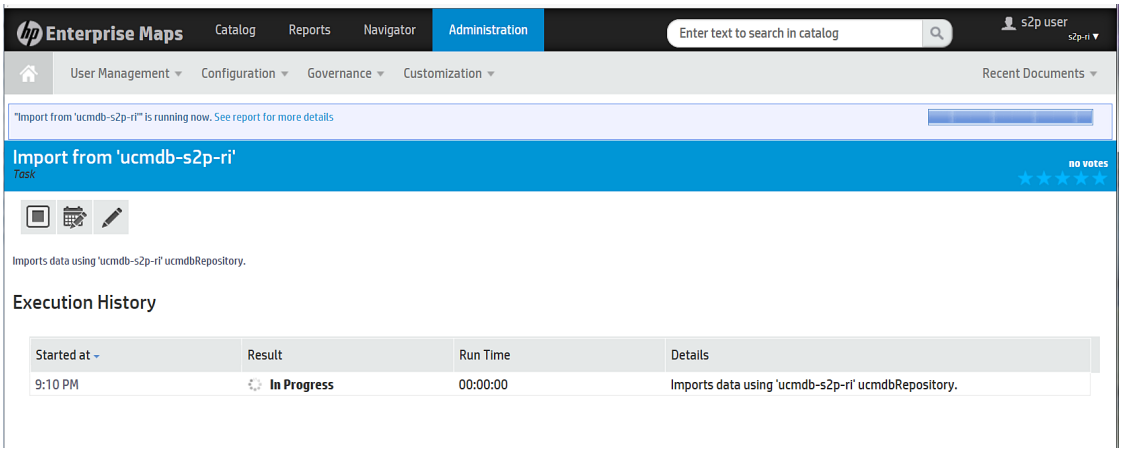


To integrate EM and UCMDB:

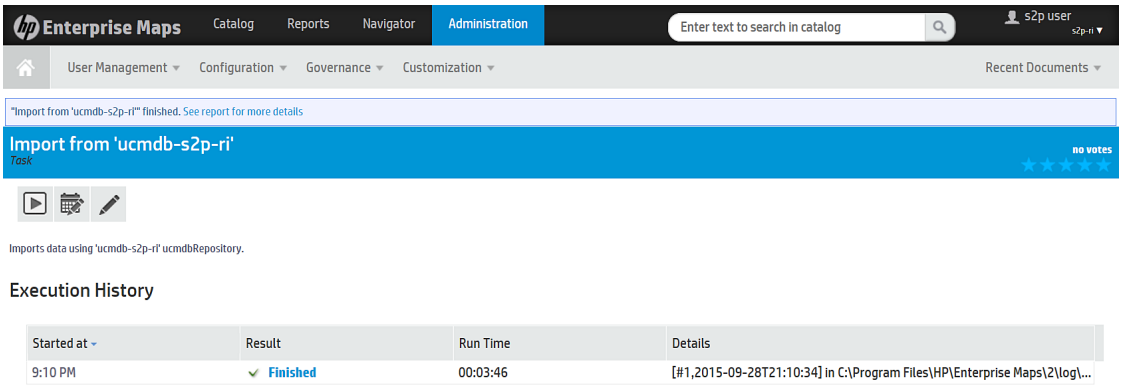
1. In the BSM/UCMDB Repository Overview user interface, click the **Associated Import Task** icon and navigate to the **Import** user interface.



2. Press the **Run**  icon to start the integration. As it runs, it reports elapsed time and the status of the import task upon completion.



Elapsed time and progress is reported as the integration executes.



The integration is complete and finishes successfully.

EM – PPM Integration

This section covers integrations between HPE Project and Portfolio Management (PPM) and HPE Enterprise Maps (EM).

This section includes the following topics:

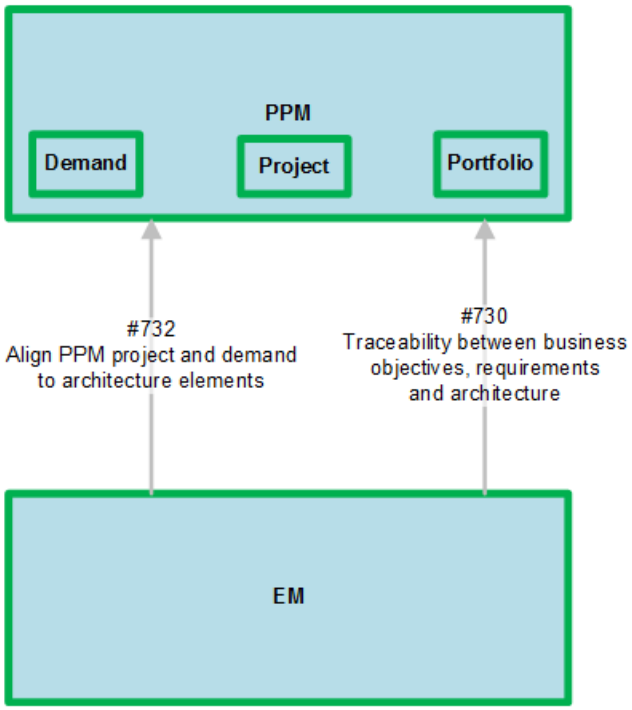
Overview

This section describes the necessary steps to configure the integration between HPE Project and Portfolio Management and HPE Enterprise Maps.

In the context of the Strategy to Portfolio Value Stream, this integration allows the synchronization of a variety of artifacts managed within PPM, including Proposals, Projects, Financial Summaries, Locations, and Business Objectives. Applications, Servers, and Business Process artifacts may be synchronized from PPM's Application Portfolio Management module. The types of artifacts integrated are configurable through XML configuration files. EM then uses these artifacts as model elements to construct as-is and to-be architecture diagrams and to create compliance policies and reports.

EM to PPM Diagram

The following diagram illustrates the HPE Enterprise Maps to HPE Project and Portfolio Management integration.



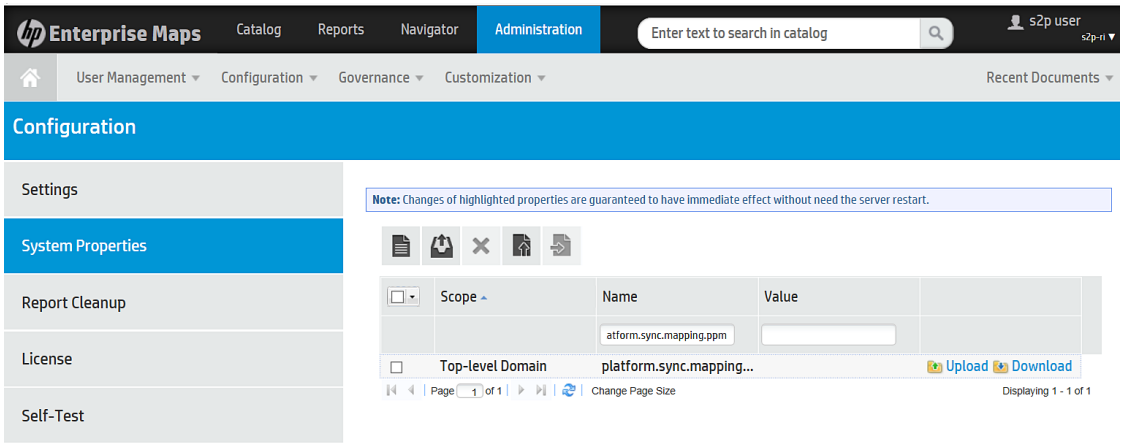
Change Mapping from PPM

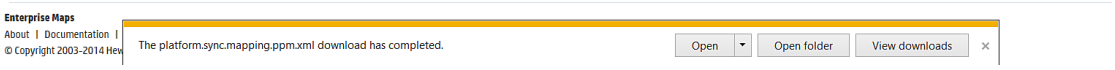
For the purpose of this use case, we do not want to duplicate the server, application, or operating system artifacts from UCMDB when data comes from PPM. This happens when the PPM team uses the PPM Push integration from UCMDB in the course of application Portfolio Management activity. To eliminate transferring those entities from PPM, edit and replace the XML file that controls the EM-PPM integration.

1. Navigate to **Administration > Configuration > Settings**.
2. Select the **System Properties** tab to navigate to that user interface.
3. Search for the **platform.sync.mapping.ppm** string.
4. The System Properties user interface offers the option to **Download** the existing or **Upload** a new **platform.sync.mapping.ppm** configuration file.

   Click the **Download** hyperlink to download the existing configuration file to your local file system for editing.

   Caution: Before editing the file, make a backup of the original file.





5. Using your preferred text editor, remove the XML entityMapping definitions for the server, application, and OperationSystem type IDs. An example of the operationSystem entityMapping definition is visible in the following file image. There is a similar definition section in the file for the system and application IDs. Remove all three sections and save the modified file.

```
      </type>
      <attribute name="REQ.KNTA_BUSINESS_OBJECTIVE" key="true"/>
      <attribute name="REQ.ASSIGNED_TO_NAME"/>
    </external>
  </entityMapping>

  <entityMapping id="operationSystem">
    <internal groupBy="key">
      <type>
        <property name="sdmName" value="systemSoftwareArtifact" />
      </type>
      <attribute name="name" key="true">
        <mapping>
          <select-attribute name="REQ.APM_OS" />
        </mapping>
      </attribute>
      <attribute name="ownerFullName" classifier="virt">
        <mapping>
          <select-attribute name="REQ.ASSIGNED_TO_NAME" classifier="self"/>
        </mapping>
      </attribute>
      <reference name="assignedFrom">
        <mapping>
          <select-reference refId="toServer" />
        </mapping>
      </reference>
    </internal>
    <external definesMapping="false">
      <type>
        <property name="Type" value="Decomposed:OS" />
        <ppm:decomposedEntity fromParentReference="" fromChildReference="toServer" idFormat="_os(id)">
              <ppm:ofType>Request:APM - Server</ppm:ofType>
        </ppm:decomposedEntity>
      </type>
      <attribute name="REQ.APM_OS" key="true"/>
      <attribute name="REQ.ASSIGNED_TO_NAME"/>
      <reference name="toServer"/>
    </external>
  </entityMapping>

  <entityMapping id="fp_pfmAsset">
    <internal>
```

6. When editing is complete, navigate to **Administration > Configuration > Settings** and select the **System Properties** tab.
7. Search for the **platform.sync.mapping.ppm** string.
8. Click the **Upload** hyperlink to import the edited file back into Enterprise Maps. There is no need to restart the EM server for the mapping changes to take effect.

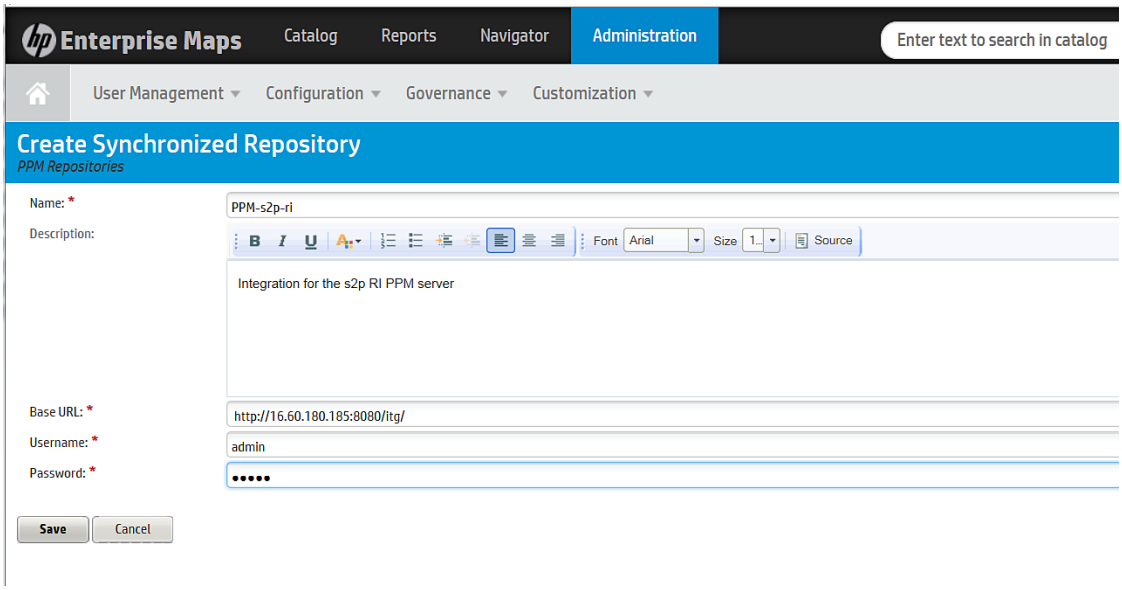
Create and Run the PPM Integration

The integration to the PPM server is created from within the **s2p-ri** domain in Enterprise Maps.

To access the s2p-ri domain:

1. Log on to Enterprise Maps with administrator privileges.
2. From the menu bar, select **Administration**.

3. Select the hyperlink associated with the domain for the intended integration—in our case, it is **s2p-ri**.
4. In the column on the left in the resulting **s2p-ri** domain user interface, click the **Integrations** tab.
5. In the PPM section, click the **Add Integration** hyperlink. This results in the **Create Synchronized Repository** user interface as in the image below.

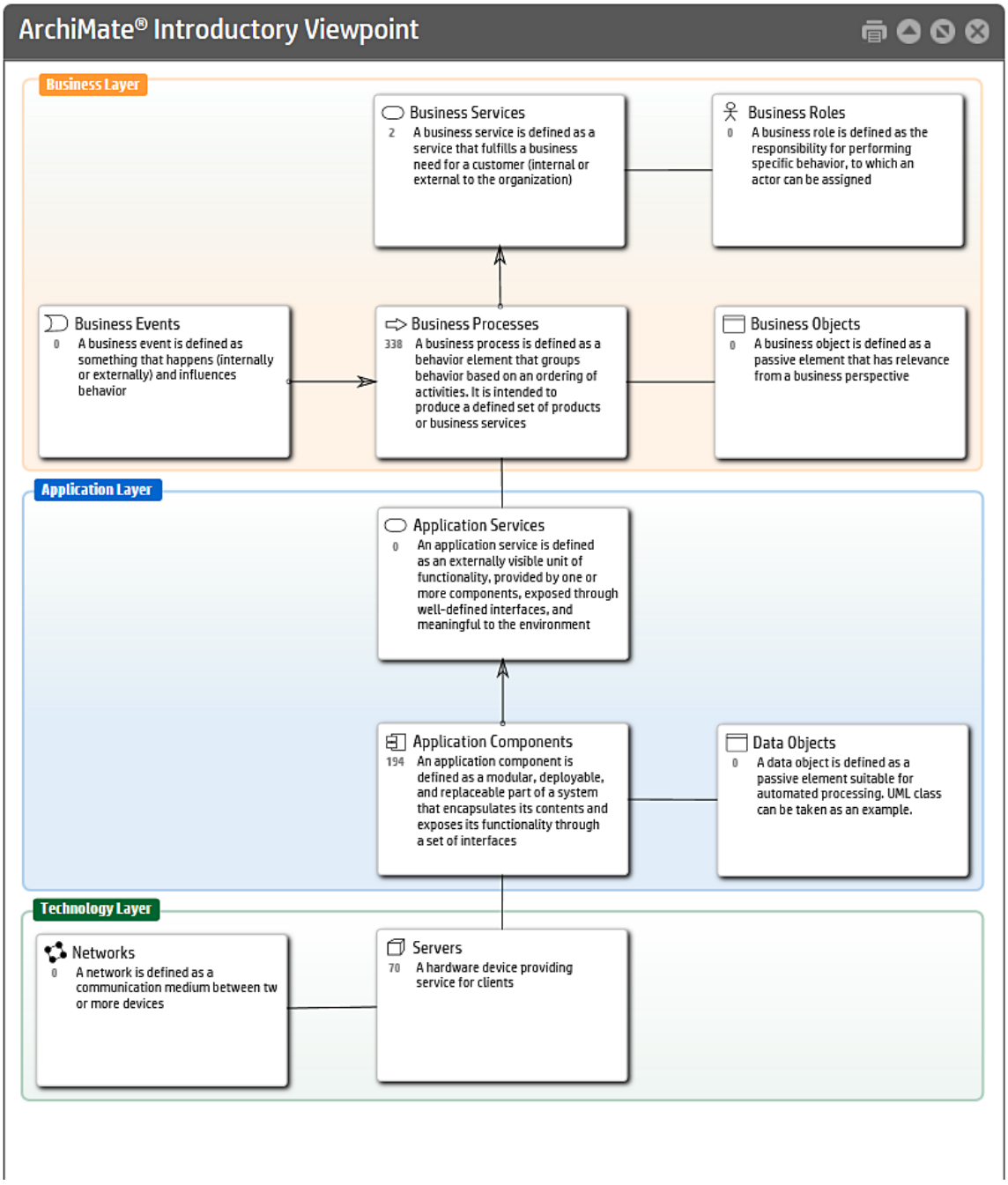


6. Name the integration, fill out a brief description, supply the base URL for the PPM server and the PPM credentials necessary to access the environment.
7. To create the integration repository, click **Save**. You will be returned to the **s2p-ri** domain integrations user interface. The PPM integration repository you created will now be visible in the PPM section of that user interface.
8. Click the hyperlink for the integration you just created—in our case, it is labeled **PPM-s2p-ri**—to navigate to the PPM Repository Overview user interface.
9. Click the **Associated Import Task**  icon to navigate to the **Import** user interface.
10. Press the **Run**  icon to start the integration. As it runs, it reports elapsed time and the status of the Import task upon completion.

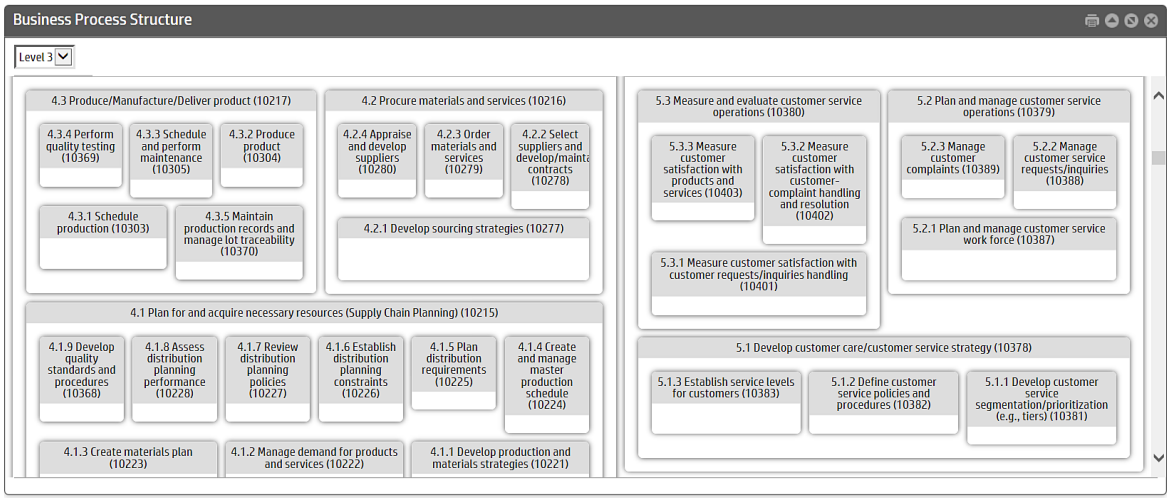
Caution: At least one project must be defined within PPM for the integration to run normally. Additionally, the user that runs the integration must be set up with an administrator role within EM.

PPM Integration Result

Upon completion, the entities that are now synchronized from PPM are visible in the top-level ArchiMate viewpoint in EM.



The Business Process model that was imported from PPM is viewed at multiple levels in EM.



PPM Integration – Visibility Through EM User Interface

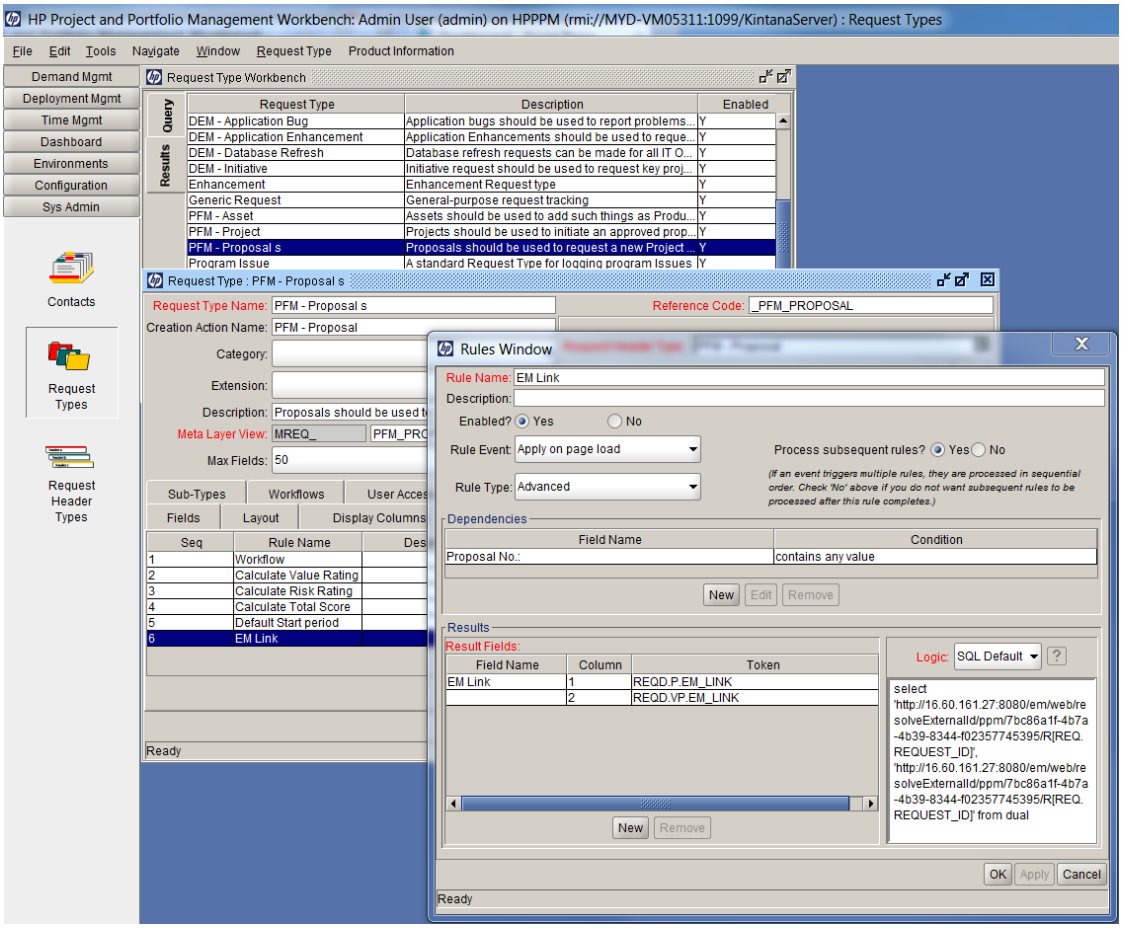
Note: This process is described in Chapter 11, "Integrations > Customize and Export PPM Synchronized Data" on page 112 in the *HP Enterprise Maps Version 2.00 User Guide*. Additional information is provided in this section.

To export information of PPM Synchronized Data, the PPM server must be customized.

To customize the PPM server in order to show a PFM Proposal link to EM:

1. Open **PPM Workbench**.
2. Click **Demand Management** > **Request Types**.
3. Open the **PFM – Proposals** request type.
4. Select the **Fields** tab and create a new field.
5. Select the **Rules** tab and create a new rule.

In the PPM Workbench user interface, the final rule looks as follows:



The statement format provided in the *HP Enterprise Maps Version 2.00 User Guide* is:

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

In our implementation, to help clarify the source of the variables, the full text of the query is as follows:

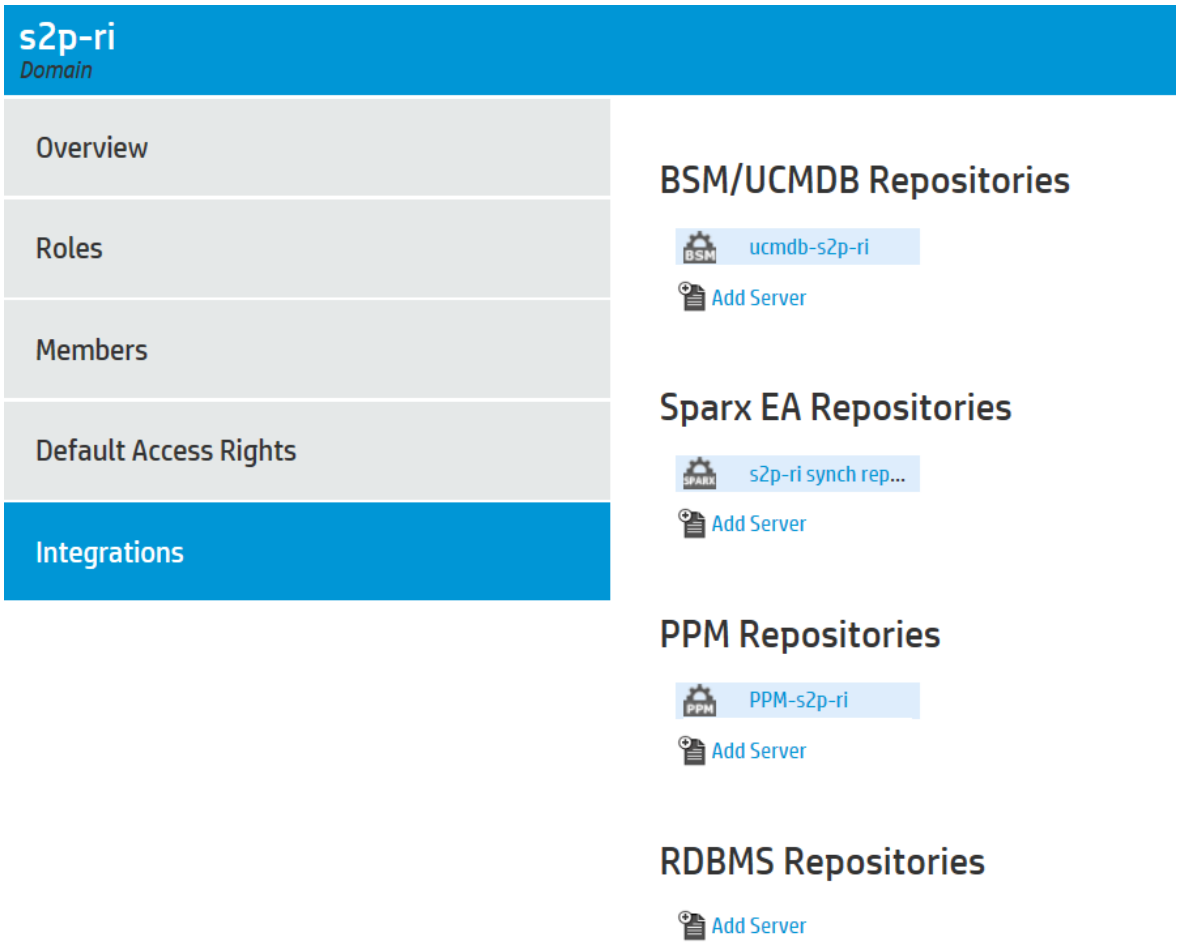
```
Endpoint: http://<hostid>:<port#>/em (use your implementation's url and port numbers in your configuration)

REPOTYPE: ppm

EXTERNALID: 7bc86a1f-4b7a-4b39-8344-f02357745395
```

The value for EXTERNALID is found by navigating within EM to the page where you configured the integration to your PPM server. In our case, this navigation is **Administration > Domain s2p-ri > Integrations**.

On the Integrations page, hover the mouse over the PPM Repositories field where PPM integration was created—**PPM-s2p-ri**. The integration is visible within the URL displayed at the bottom of the EM Integrations user interface browser window:



The **ExternalID** is the character string after **artifact/** and before **?** in the URL.

The exact query text is as follows:

```
select 'http://16.60.161.27:8080/em/web/resolveExternalId/ppm/7bc86a1f-4b7a-
4b39-8344-f02357745395/R[REQ.REQUEST_ID]',
'http://16.60.161.27:8080/em/web/resolveExternalId/ppm/7bc86a1f-4b7a-4b39-8344-
f02357745395/R[REQ.REQUEST_ID]' from dual
```

Note: The columns in the query are surrounded by single quotes.

Sparx Integration

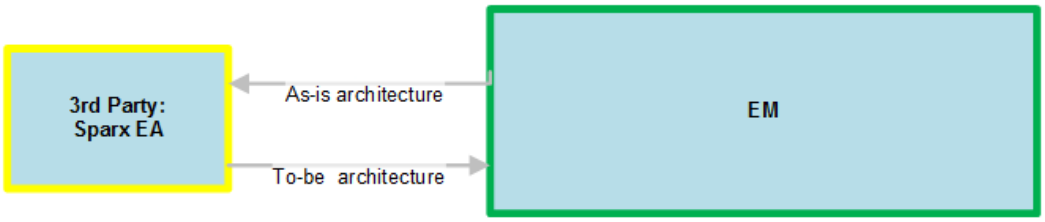
This section covers the configuration and installation of integrations between HPE Enterprise Maps (EM) and Sparx Systems Enterprise Architect (EA).

This section includes the following topics:

Overview

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

The following diagram illustrates the Sparx EA – EM integration.



This section describes the necessary steps to configure the integration between Sparx Systems Enterprise Architect and HPE Enterprise Architect.

In the context of the Strategy to Portfolio Value Stream, this integration allows the synchronization of model elements between Sparx EA and EM. The actual diagramming architecture is performed using Sparx EA. The artifact relationships represented by the diagrams becomes visible within EM and are then used to create architecture compliance policies and reports, as well as to carry out architecture governance practices.

Installing the EM Extension for Sparx Systems Enterprise Architect

Install the EM Extension for Sparx Systems EA to extend your local installation of Sparx Systems EA to synchronize models with the EM server.

Note: You must already have Sparx Systems EA Version 11 installed.

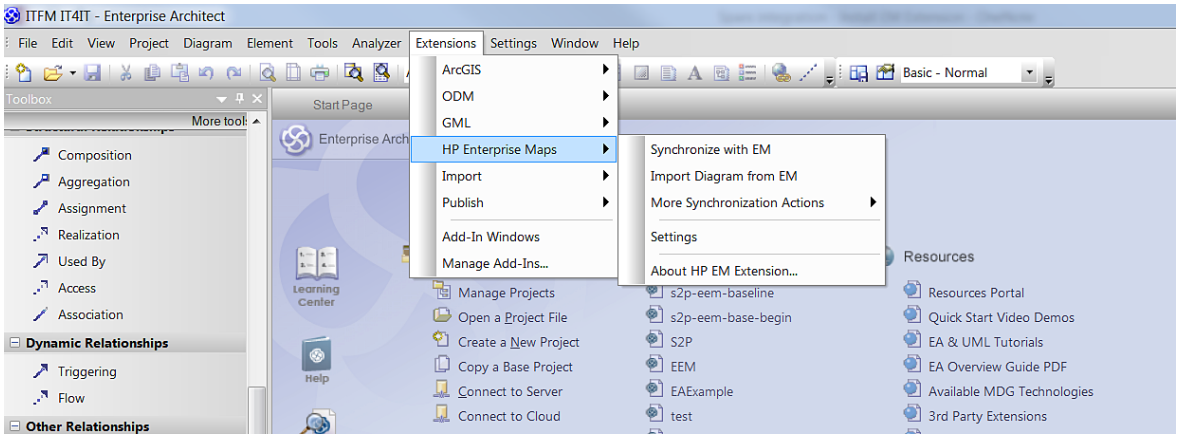
To install the EM Extension for Sparx Systems EA:

1. Close Sparx Systems EA Version 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**.

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

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

Upon completion, the HPE Enterprise Maps menu will be visible in the **Sparx EA Extensions** tab.

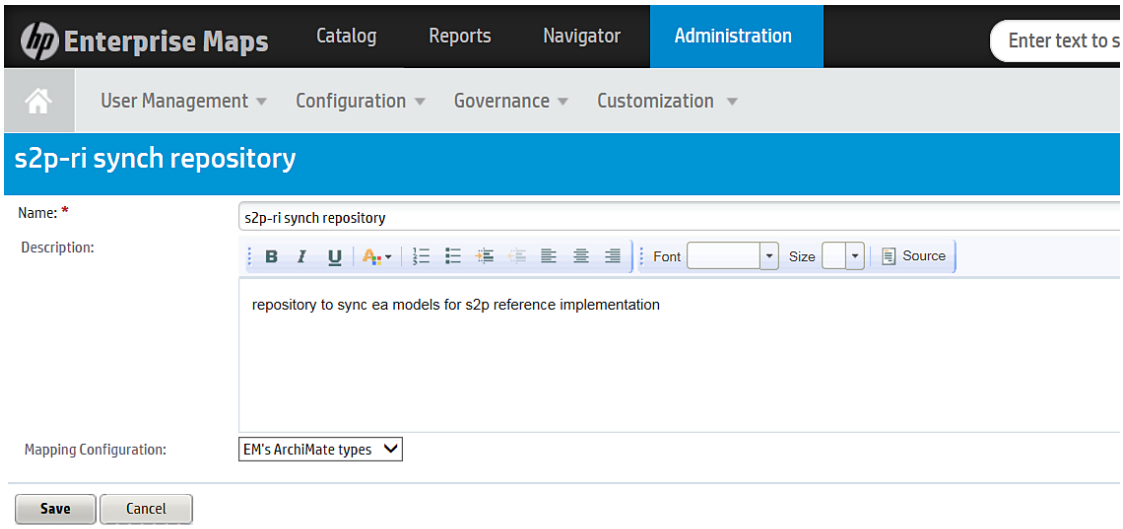


For more information, see Chapter 12, "Extension for Sparx Systems EA" on page 121 in the *HP Enterprise Maps Version 2.00 User Guide*.

Enable Sparx Integration in EM

To add an integration point for the Sparx EA extension:

1. Log on to Enterprise Maps with administrator privileges.
2. From the menu bar, select **Administration**.
3. Select the hyperlink associated with the domain for the intended integration—in our case, it is **s2pri**.
4. In the menu on the left, select **Integrations**.
5. Under **Sparx EA Repositories**, select **Add Server**. The Create Synchronized Repository user interface opens.



6. Name the integration, provide a brief description, and choose an appropriate mapping configuration from the **Mapping Configuration** drop-down list. We chose to integrate all of the Enterprise Maps artifacts that coincide with EM's ArchiMate version 2.0 types.
7. Click **Save**.

   The integration repository is created and you are returned to the **s2p-ri** domain integrations user interface. The Sparx EA integration repository is now visible in the Sparx EA section of that user interface.

   Note: There is now an integration point for the Sparx EA extension to use to synchronize data objects in the **s2p-ri** domain.

Part IV: Appendix

Appendix A: Installation Issues

This chapter includes:

Overview

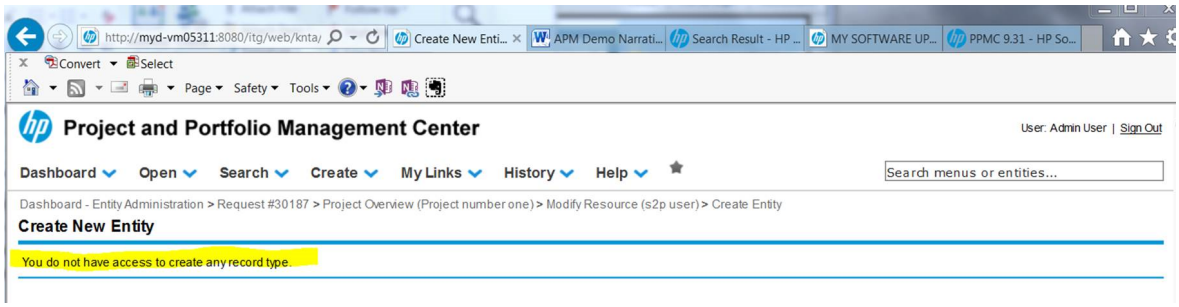
Some problems were encountered during the installations, configurations, and exercise of the use case. This section describes what was encountered, the current status, and any workarounds or additional information.

No installation issues have been encountered for HPE Enterprise Maps (EM), Sparx Systems Enterprise Architect (EA), or HPE Universal CMDB (UCMDB).

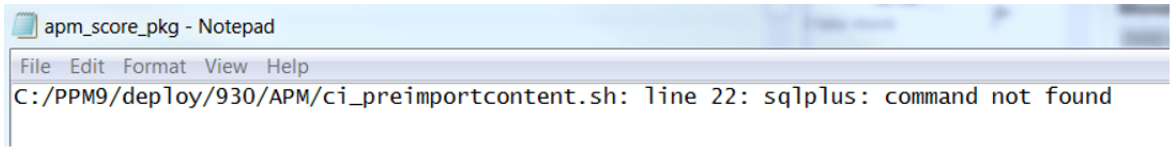
PPM Installation Issues

Upon first installation of PPM, it was not possible to create any new entities through the user interface.

When opening the Create New Entity pane, the following message appeared:



An error message was discovered in the PPM install logs as shown below:



There is a deploy script `ci_preimportcontent.sh` that does not create a path to the Oracle directory when it invokes `sqlplus`. So `sqlplus` must be in the execute path of the user running the APM install for it to work.

After adding the `sqlplus` binary directory to the user `$PATH` variable and redeploying the PPM APM module, the situation was corrected.

Appendix B: Integration Issues

This chapter includes:

Overview

Some problems were encountered during the installations, configurations, and exercise of the use case. This section describes what was encountered, the current status, and any workarounds or additional information.

No integration issues have been encountered for HPE Enterprise Maps (EM), Sparx Systems Enterprise Architect (EA), or HPE Universal CMDB (UCMDB).

PPM Integration Issues

At lease one project must exist within PPM for the integration to run. When we initially ran the integration to PPM, the **Import** task failed and no records were synchronized.

Upon inspecting the log, an error was found—highlighted below—that points to a problem with the project artifact. There were no projects defined in PPM yet. A successful work-around is to create a sample project within PPM and re-run the integration.

The original error is as follows:

Partial error log:

```
22:35:00,273 ERROR [import.ppm.PPM-s2p-ri] [#4,2015-09-28T22:34:59]  DONE -
finished with errors

22:38:02,971 INFO  [import.ppm.PPM-s2p-ri] [#5,2015-09-28T22:38:02]  import started

22:38:02,971 DEBUG [import.ppm.PPM-s2p-ri] [#5,2015-09-28T22:38:02]  Connecting to
PPM server at 'http://16.60.180.185:8080/itg' as 'admin'

22:38:04,937 DEBUG [import.ppm.PPM-s2p-ri] [#5,2015-09-28T22:38:02]  started:
PpmListImporter

22:38:04,952 DEBUG [import.ppm.PPM-s2p-ri] [#5,2015-09-28T22:38:02]  Importing data
of mapping 'project'

22:38:05,077 DEBUG [import.ppm.PPM-s2p-ri] [#5,2015-09-28T22:38:02]  finished:
PpmListImporter

22:38:05,077 ERROR [import.ppm.PPM-s2p-ri] [#5,2015-09-28T22:38:02]  null:
javax.xml.ws.soap.SOAPFaultException: No project corresponding to the search
preference has been found.

        at org.apache.cxf.jaxws.JaxWsClientProxy.invoke(JaxWsClientProxy.java:156)
```

```
        at com.sun.proxy.$Proxy221.searchProjects(Unknown Source)
        at com.hp.systinet.sync.ppm.PpmListImporter.importProject(PpmListImporter.java:78)
        at com.hp.systinet.sync.ppm.PpmListImporter.transform(PpmListImporter.java:61)
        at com.hp.systinet.sync.mapping.MappingEnginePipeline.transform
(MappingEnginePipeline.java:120)
…
```

The import of **user** artifacts from PPM failed on our initial run of the PPM to Enterprise Maps integration. The highlighted records in the partial log below point to the warning message.

Partial warnings from log:

```
22:38:05,795 ERROR [import.ppm.PPM-s2p-ri] [#5,2015-09-28T22:38:02] DONE -
finished with errors
23:14:31,090 INFO [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] import started
23:14:31,090 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Connecting to
PPM server at 'http://16.60.180.185:8080/itg' as 'admin'
23:14:32,557 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] started:
PpmListImporter
23:14:32,557 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Importing data
of mapping 'project'
23:14:33,664 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Importing data
of mapping 'pfmAsset'
23:14:36,301 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Importing data
of mapping 'pfmProposal'
23:14:36,425 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Importing data
of mapping 'apmApplication'
23:14:36,613 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Importing data
of mapping 'apmLocation'
23:14:36,753 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Importing data
of mapping 'apmProcess'
23:14:36,987 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] Importing data
of mapping 'apmServer'
23:14:37,112 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] finished:
PpmListImporter
```

```
23:14:37,112 DEBUG [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] started:
PpmEntityImporter
23:14:38,874 WARN [import.ppm.PPM-s2p-ri] [#6,2015-09-28T23:14:30] P30280 Unable
to setup PPM user 'HansonKim' in EM. Principal 's2puser' is not in role
'UserGroupManager' in domain 'topLevelDomain':
com.hp.systinet.security.exceptions.RoleException: Principal 's2puser' is not in
role 'UserGroupManager' in domain 'topLevelDomain'
at com.hp.systinet.security.role.RoleEvaluatorImpl.checkInRole
(RoleEvaluatorImpl.java:58)
at
com.hp.systinet.security.role.RoleEvaluatorImpl$$FastClassByCGLIB$$4b83c495.invoke
(<generated>)
at net.sf.cglib.proxy.MethodProxy.invoke(MethodProxy.java:149)
```

This error was caused by not having the appropriate role assigned to the user ID we were using to run the integration within Enterprise Maps.

To overcome this issue, we added the role of **administrator** to the user ID **s2puser** within the top level domain of Enterprise Maps and re-ran the integration without incident.