Enterprise Architect

User Guide Series

Integrate Data from External Providers

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CREATED WITH ENTERPRISE ARCHITECT

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Integrate Data from External Providers

The Pro Cloud Server helps you to integrate data from external providers into an Enterprise Architect Cloud model. A variety of third-party providers can be connected to, including:

- Application Lifecycle Management (formerly HP Quality Center)
- Jazz (Rational DOORS Next Generation)
- Jira
- Team Foundation Server
- Wrike
- ServiceNow
- Autodesk
- Bugzilla
- Dropbox and
- Other Enterprise Architect models

See the Pro Cloud Server *Integration Plugins* Help topic for information on how to configure each provider.

All integrations offer support for linking objects and elements from the external system into an Enterprise Architect client. The Integration window supports browsing the external provider's items and retrieving lists of elements and objects based on the provider's queries. Capabilities include:

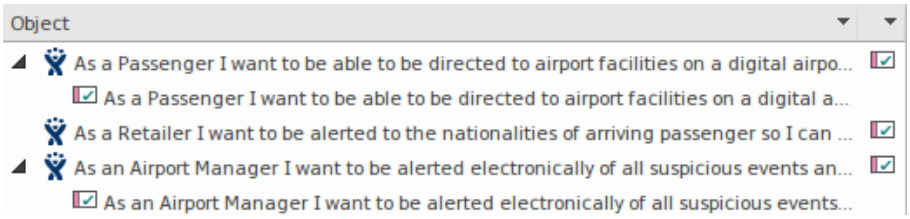
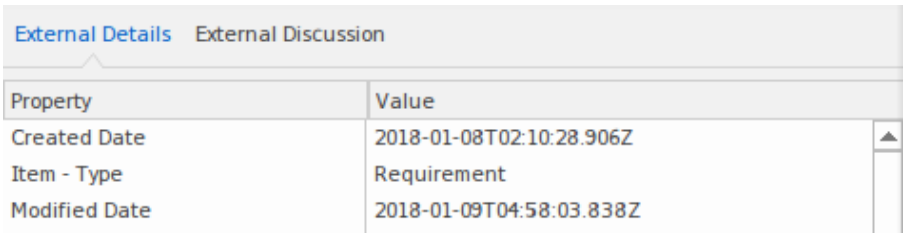
- Link an Enterprise Architect element to an external object
- View external element properties
- View and in some cases add to, external object discussions
- Export links to WebEA URL's that correspond to the current model
- Open external tools in a web browser at relevant bookmarks
- Import elements
- Export element

Access

Ribbon	Specialize > Tools > Integration To view a list of all elements that are linked to external items: Specialize > Tools > Integration > Show All Linked Items
Context Menu	In a diagram or the Project Browser, for elements that are already linked to an external item: • Right-click on element > Specialize > External Properties

Features

Feature	Description

Pro Cloud Server Configuration	Each external provider needs to be configured on the Pro Cloud Server to enable connection. Multiple configurations can be made for each provider (e.g. connect to two separate Jira servers).
Authorization	If the Integration Provider requires authorization the user will be prompted to enter their credentials. If the provider supports it, a new internet browser window will open and prompt the user to log in to the Integration Provider and allow Enterprise Architect access to its resources. Alternatively, a simple dialog will pop up asking for the user's credentials, with the option to securely store these in the current model. If stored in the model the credentials will only be used for the current user.
Navigate External Provider	Browse a list of items from the external provider. Use the navigation breadcrumb to select the Provider Type and Provider. Next, each provider type offers a slightly different navigation system: e.g. Dropbox allows for browsing the folder structure, while Jira give a list of projects followed by a list of user queries. Select 'Current Model' for a list of all local elements that are linked to an external item.
List External Items	At each navigation level, if available, a list of items corresponding to the navigation level will populate the left-hand panel. 
External Properties	Select an external item from the list to view its External Properties. This window shows all available properties of the external item, as defined by the external provider. 
External Notes	Select an external item from the list to view its External Notes. This window shows the notes or description of the external item. Note that not all external providers have a notes or description field.
External Discussions	Select an external item from the list to view its External Discussions. This window shows the discussions or comments of the external item. New discussions can be posted by typing into the top box and pressing 'Send'. The username used will be that which is authorized on the Integration Provider.

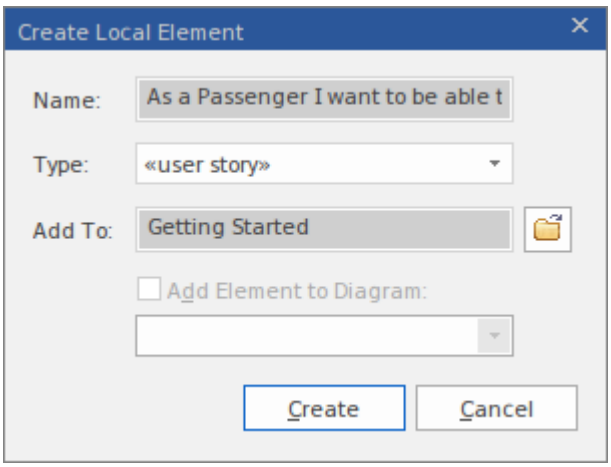
Note that:

- To post an external discussion the Integration Provider must be configured to allow this on the Pro Cloud Server (allowed by default)
- Not all external providers have discussions or comments

Create Linked Element in Enterprise Architect

To create a new element in the Enterprise Architect model linked to the external item:

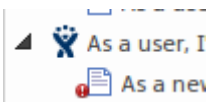
- Right-click on an external item in the list.
- Select Create Local Element
- Select either the default type or «External Reference»
- Select which Package the element will be created in
- Optionally add the new element to an open Diagram



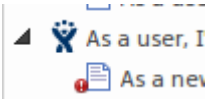
Note: Select multiple items to create multiple elements at the same time. All elements will be created with either the default type or «External Reference»

Update Local Element (Pull Changes)

If either the local element or external item have been modified since the items were created or linked, an indicator will be shown on top of the item's icon. Right-click on the Enterprise Architect element and select the 'Pull - Update Local Element with External Data' option.



If the local element has been modified since the link was created then its changes will be overwritten with the external data.

Update External Item (Push Changes)	If either the local element or external item have been modified since the items were created or linked, an indicator will be shown on top of the item's icon. Right-click on the Enterprise Architect element and select 'Push - Update External Item with Local Data'.  If the external element has been modified since the link was created then its changes will be overwritten with the local data. Note that to update an external item the Integration Provider must be configured to allow this on the Pro Cloud Server (disallowed by default).
Add WebEA Link	Right-click on an linked element in the list and select 'Add WebEA Hyperlink to External Object'. This will update the external item with a link to the WebEA element that is linked to it. Note that not all provider types have a 'link' mechanism. Where none exists some providers might allow adding the link as a comment on the item.
Show Items Linked to Current Context	In the integrations menu, select 'Items Linked to Current Context' to show only the external items that are linked to the currently selected local element. i.e. select an item in the Project Browser and see the external items that are linked to it.
Configuration	Each integration provider comes with a set of default mapping values which determines what type of local element is created in Enterprise Architect, as well as which fields are copied to the new element. These mappings are configurable via the 'Configure' option on the Integration window toolbar menu.
Troubleshooting	• The System Output window will show any errors while attempting to retrieve data from the external providers • The Pro Cloud Server outputs log files for each external provider

Notes

- 'Integration' requires a Pro Cloud Server and is only available to Cloud models
- 'Integration' is currently provided with the Ultimate edition of Enterprise Architect; in the future, a Data Bridge for Enterprise Architect will be available for separate purchase for use with the Corporate and Unified editions
- If you select two or more elements at the same time, you can perform an operation on all of the selected elements at once

Configuration

Each integration provider comes with a set of default mapping values which determines what type of local element is created in Enterprise Architect, as well as which fields are copied to the new element. These mappings are configurable for each client model.

Access

Integration window toolbar	Menu > Configure

Mapping

Configure	Details
Type Mapping	This defines the element type that will be created when 'Create Local Element' is selected. To create a new mapping, select the External Type, and use the toolbox selector to select the local element type.
Field Mapping	This defines how the external items details will be used to populate the local element when 'Create Local Element' is selected. To open the field mapping, first open the Type Mapping, select the Provider and External Type to configure, then click 'Configure Field Mapping...' To create a new mapping, select the External Field to map and select the local field type to map to. Select 'Tagged Value' to create a new tagged value with the Provider Type as a prefix, e.g. "Jira Modified Time".

Notes

- Each mapping can be reset to default values by clicking 'Reset to Defaults'.
- If no type mapping is specified for a specific type, then the mapping for type 'Default' will be used.