Manually Providing the REST Interface

This page explains the **REST Adapter** in Bridge context. If you were looking for the same information regarding the PAS Designer, refer to REST Adapter in the Designer guide.

It may be that the import of the YAML file fails or the REST service provides no description file at all. In this case, you can draw the REST interface definitions manually. On REST Import Rules you can find an overview on how OpenAPI entities are mapped to UML elements.

Example File (Builder project Add-ons/REST):

<your example path>\Add-ons\REST\uml\accessJIRAviaRestAdapter.xml

On this Page:

Related Pages:

- REST Import Rules
- Importing OpenAPI Files (REST)

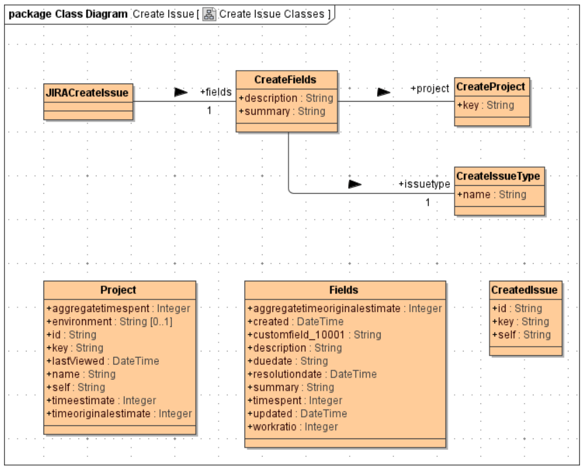
REST Alias

Add a REST alias to your component diagram. How to manually create an alias is described on Backend Components > Creating an Alias. Apply stereotype <<RESTAlias>> and provide the necessary tagged values as described on REST Adapter Reference > <<RESTAlias>>.

API Classes

Collect all parameter and type information from the REST API documentation, draw the necessary classes and their relations. If you have an XML Schema (XSD) of the classes, you can import the XSD. The E2E REST Importer would import the type information to a package **<your API name>/Types** and we recommend to do the same.

Figure: JIRA Create Issue Classes



You do not need to depict the complete interface - it is sufficient to draw the needed classes for the resources you want to access and the properties you want to deal with.

If the REST service provides additional error information in his response, create an error class, too, and apply stereotype <<RESTError>>.

API Interface

Collect all needed information on the REST resources you want to access from the documentation of the REST service.

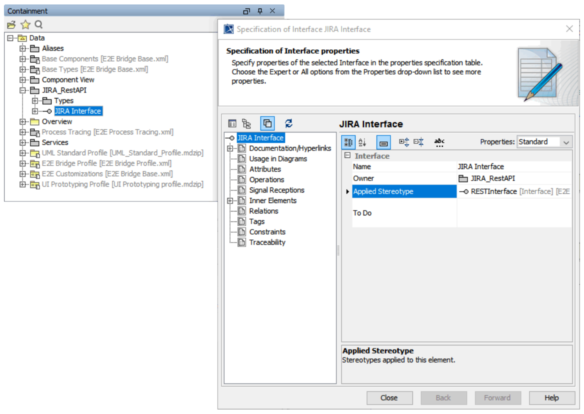
Defining a REST interface to access a REST service with the REST Adapter resembles defining the interface of a REST service itself. You can find more information on that on Defining a REST Service Interface. You need to create all service elements that are listed as mandatory in the table below.
A REST interface consists of:

Element	Stereotype	Mandatory	Tagged Values Reference Link
a REST interface UML package	<<RESTInterface>>	✓	<<RESTInterface>>
REST resource classes	<<RESTResource>>	✓	<<RESTResource>>
REST operations	<<REST>>	✓	<<REST>>
REST parameters	<<RESTParameter>>	(✓)	<<RESTParameter>>
REST error class(es)	<<RESTError>>	✗	<<RESTError>>
REST response definitions	<<RESTResponseDefinition>>	✗	<<RESTResponseDefinition>>

REST interface documentation and tags as described on Defining a REST Service Interface are not relevant in this case and you can leave them out.

Steps to Create a REST Interface

1. Create a package <your REST interface> under package <your API name> and assign stereotype <<RESTInterface>>.


Containment
Data
Aliases
Base Components [E2E Bridge Base.xml]
Base Types [E2E Bridge Base.xml]
Component View
JIRA_RestAPI
Types
JIRA Interface
Overview
Process Tracing [E2E Process Tracing.xml]
Services
UML Standard Profile [UML_Standard_Profile.mdzip]
E2E Bridge Profile [E2E Bridge Profile.xml]
E2E Customizations [E2E Bridge Base.xml]
UI Prototyping Profile [UI Prototyping profile.mdzip]
Specification of Interface JIRA Interface
JIRA Interface
Documentation/Hyperlinks
Usage in Diagrams
Attributes
Operations
Signal Receptions
Inner Elements
Relations
Tags
Constraints
Traceability
Close
Back
Forward
Help

Specification of Interface properties
Specify properties of the selected Interface in the properties specification table. Choose the Expert or All options from the Properties drop-down list to see more properties.

JIRA Interface

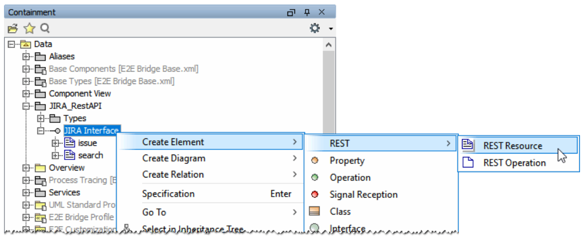
Properties: Standard

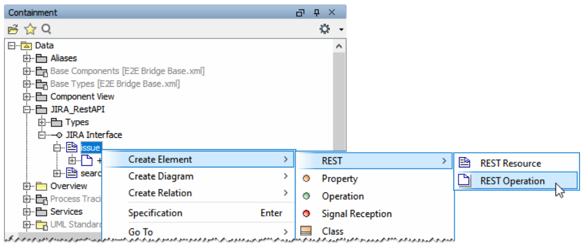
Interface

Name	JIRA Interface
Owner	JIRA_RestAPI
Applied Stereotype	RESTInterface [Interface] [E2E
To Do	

Applied Stereotype
Stereotypes applied to this element.

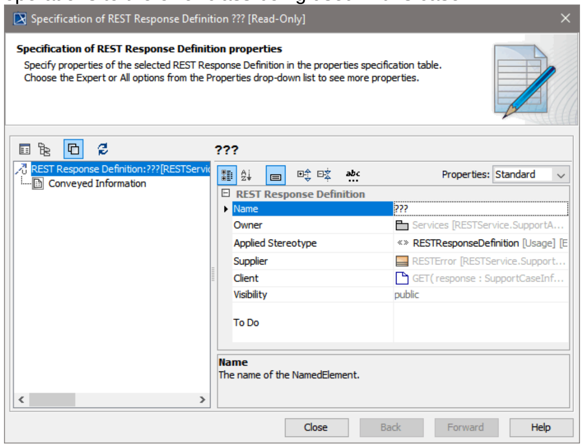
2. In this package, create REST resources (stereotype <<RESTResource>>) and their operations (<<REST>>) and parameters (<<RESTParameter>>) according to the REST service documentation.





If the REST operation path contains fix segments (like e.g. `date=`) that should not be URL encoded by the E2E xUML Runtime before accessing the resource, set tagged value **isVerbatimPath** to **true**. Refer to REST Adapter Reference for more details on this.
If a REST parameter has an ugly name that would have to be escaped, use tagged value **externalName**. Refer to REST Adapter Reference for more details.

3. If the REST service provides additional error information in his response, you need to create use dependencies (stereotype <<RESTResponseDefinition>>) from the defined REST operations to the error class being used in this case.


Specification of REST Response Definition ??? [Read-Only]

Specification of REST Response Definition properties
Specify properties of the selected REST Response Definition in the properties specification table.
Choose the Expert or All options from the Properties drop-down list to see more properties.

REST Response Definition:???[RESTServic
Conveyed Information

???

Properties: Standard

REST Response Definition

Name	???
Owner	Services [RESTService.SupportA…
Applied Stereotype	RESTResponseDefinition [Usage] [E
Supplier	RESTError [RESTService.Support…
Client	GET(response : SupportCaseInf…
Visibility	public
To Do	

Name
The name of the NamedElement.