



EA Connector for Trac feature guide

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*by Sparx Systems Japan*

## EA Connector for Trac Feature Guide

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Index

1. Introduction.....	3
2. What is Trac?.....	3
3. Integration with EA and Trac.....	4
3.1. Discussion on EA elements by Trac.....	5
3.2. Information passing on the development items, based on designs of EA (ticket driven development).....	7
3.3. Utilize extensively collected Trac tickets to the designs by EA .....	9
3.4. Showing the relationships (TracLinks) between Trac tickets with the EA diagrams .....	10
4. About EA Connector for Trac .....	11
5. Usage Settings of EA Connector for Trac Trial Version.....	13
6. Usage Steps (Settings) of EA Connector for Trac Trial Version .....	14
7. Actions of EA Connector for Trac.....	15

## 1. Introduction

We introduce EA Connector for Trac in this document. EA Connector for Trac makes the correspondence between Enterprise Architect (EA) elements and Trac tickets to make a work more efficient.



<http://www.sparxsystems.jp/en/forTrac>

## 2. What is Trac?

Trac is a web-based/open source tool for a software project management and a bug tracking.

EA Connector for Trac uses Trac Lightning (2.5.3 or 3.1.1) and BitNami Trac 0.12.2-1 for the operation check.

In the below link, we are providing a Trac server for to evaluate EA Connector for Trac.

<http://trac.sparxsystems.jp/trac/SampleProject>

### 3. Integration with EA and Trac

Taking advantages of web-based tool, Trac enables many people via network to have discussions about a topic "ticket" from the various view points and to refer the discussions in list form.

On the other hand, EA works very well when displaying the base or result of discussions in structured images.

With these characteristics, it is possible to utilize the following information by corresponding Trac tickets and EA elements to make them able to synchronize each attributes interactively.

- Utilize Trac tickets information by EA
- Export EA elements to Trac tickets for discussions and publicity

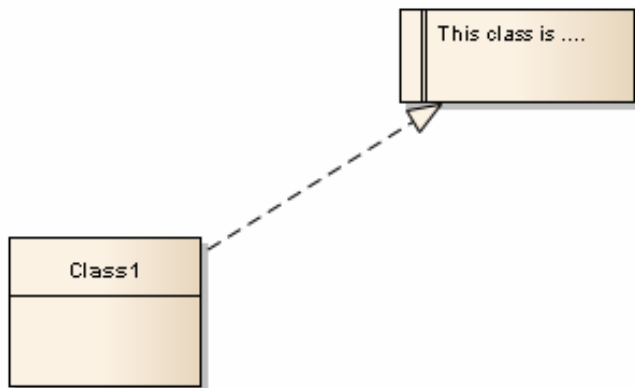
We are expecting it to be used in the following situations.

- Discussion on EA elements by Trac
- Information passing on the development items, based on the designs of EA (ticket driven development)
- Utilize extensively collected Trac tickets to the designs by EA
- Showing the relationships (TracLinks) between Trac tickets by the EA diagrams
- And so on...

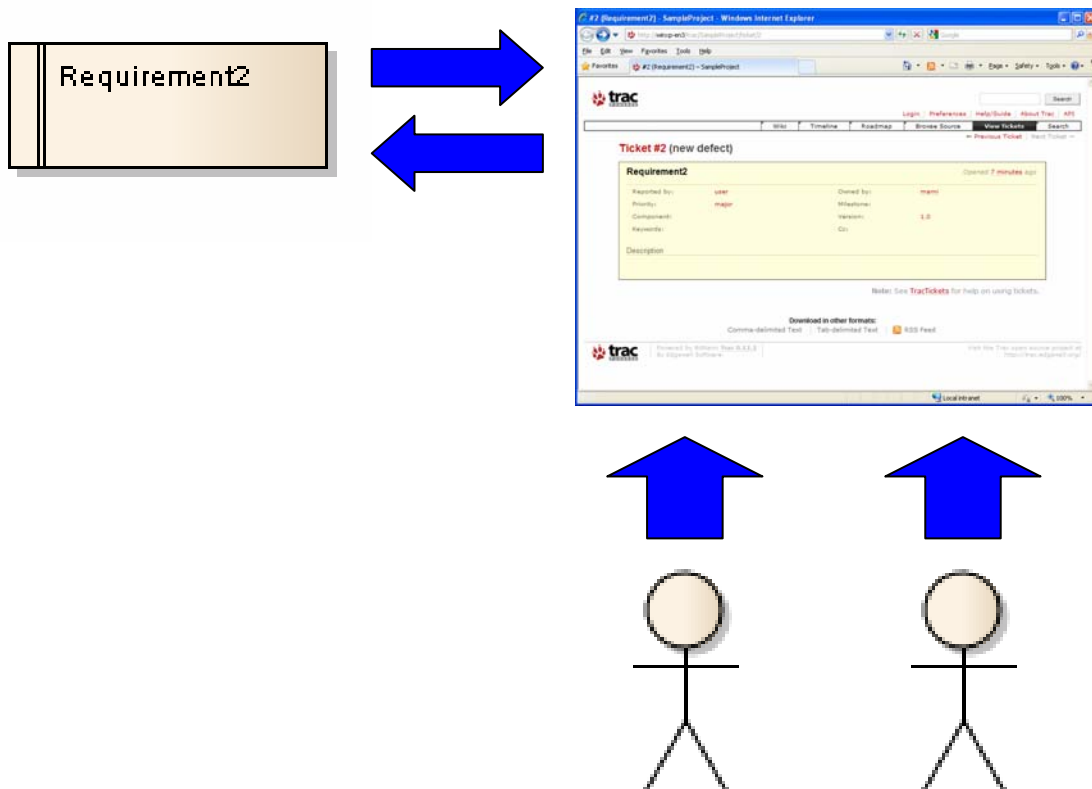
In these situations, EA Connector for Trac easily converts information of EA and Trac to one another.

### 3.1. Discussion on EA elements by Trac

When having a discussion about the elements like EA classes, the comments or discussions may be added on a requirement by relating the requirement to the EA class.

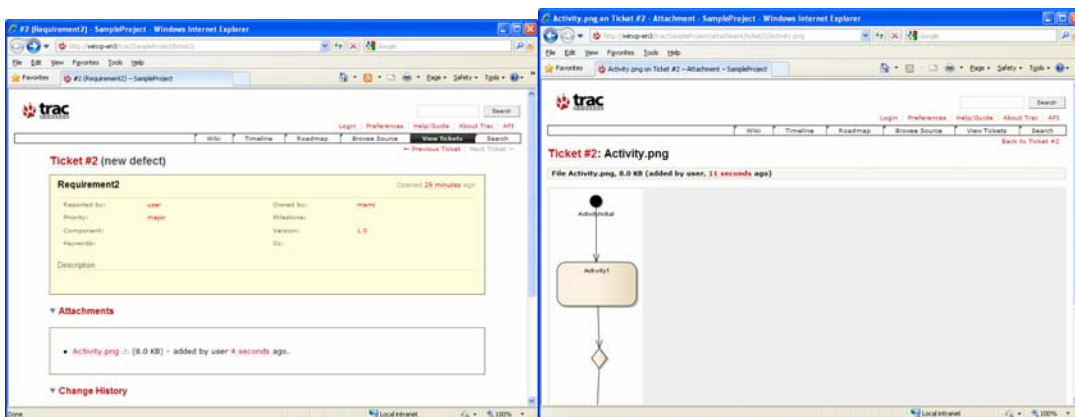


To add a comment on the requirement, it is required to "run EA where the target project can be accessed," or "have a version control of the project been done to use the exported data of the project and then merge them."



EA Connector for Trac makes it possible to add a comment within Trac by exporting requirements to Trac tickets. Trac is web-based so that referring or adding comments are available if you have the network environment.

Additionally, EA Connector for Trac makes an element diagram into an image as the attachments of Trac ticket, so that it is possible to find out which elements are linked to which elements by only looking at the ticket.



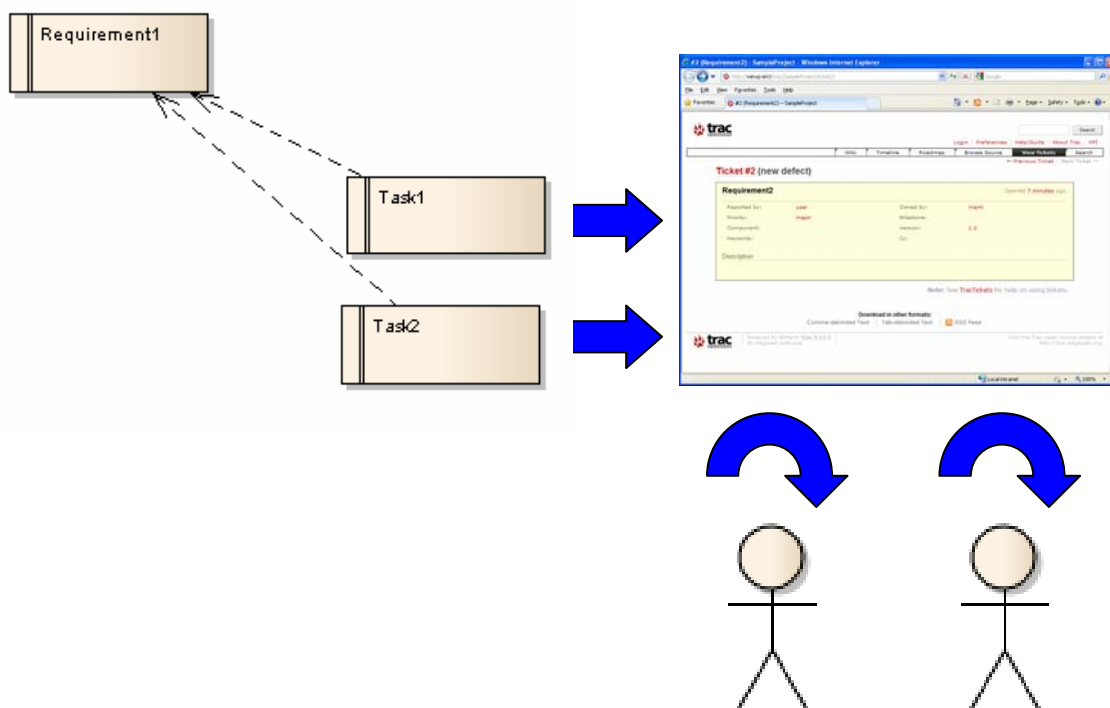
The comments added on Trac tickets are referable by using EA Connector for Trac to open the corresponding Trac tickets of requirements, or to restore the attributes of Trac tickets to EA requirements.

### 3.2. Information passing on the development items, based on designs of EA (ticket driven development)

The ticket driven development is described as "a development style which divides efforts into tasks to allocate them to the tickets of BTS, such as Trac, and manage them."

Recognizing the idea of ticket driven development, the list of efforts and tasks are created by EA, based on the designs of EA.

EA Connector for Trac exports the tasks, created within EA, to Trac tickets.



(In the same manner as 3.1., EA Connector for Trac makes the elements diagrams into the images as the attachments of Trac ticket so that it is possible to know which elements are related to which elements by only looking at the Trac ticket.)

This enables the actual developers pursue their works only by referring the development items on Trac tickets.

During the development work, the developers need to change the statuses of development items (tickets) of Trac.

Trac is also possible to gather the statuses of development items to show them as a project status.

Additionally, EA Connector for Trac imports the statuses of Trac tickets as the statuses of EA elements so that EA shows each status of development items or the statuses of original requirements to the development items. This unifies the valuable information to enhance the projects management.

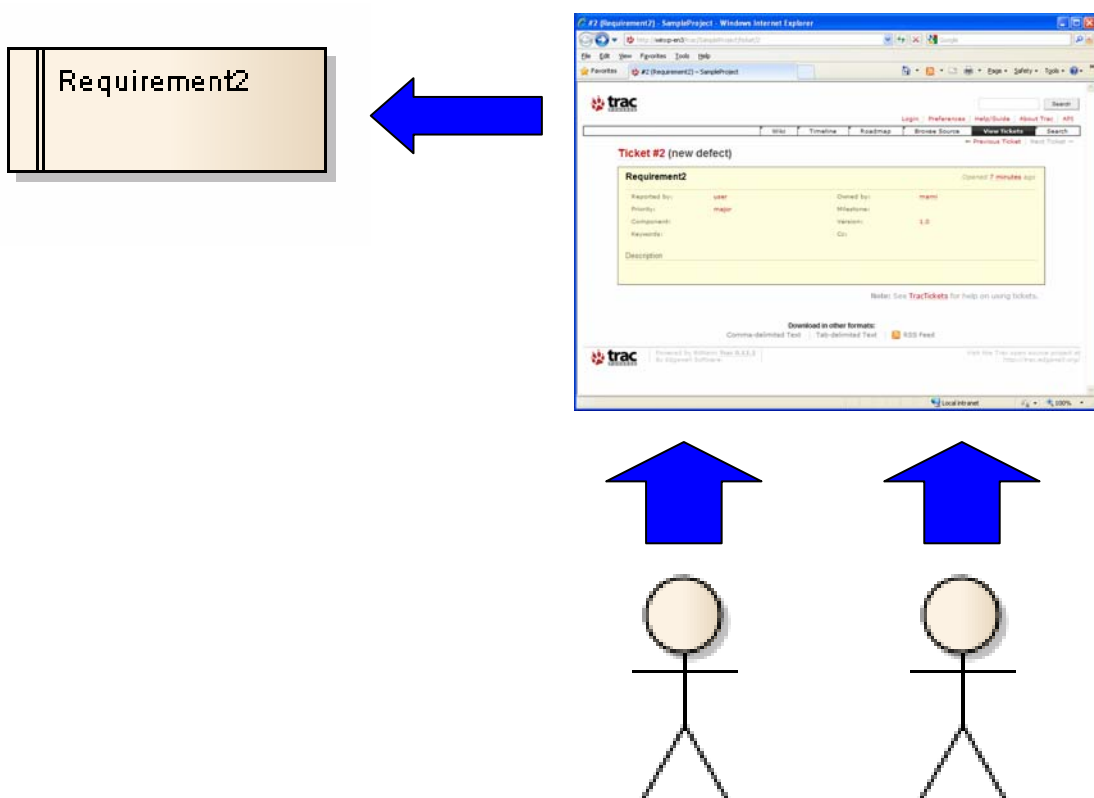


### 3.3. Utilize extensively collected Trac tickets to the designs by EA

Bugs and requests, during the system development or the system operations & maintenance, arise/come up with no matter the situations or places, so that they are managed by tickets of web-based system like Trac, frequently.

These bugs and requests, gathered extensively and managed as the Trac tickets, are used as a base of consideration to the system amendments or new system creation.

Thus, the base information which is used for the designs by EA is the Trac ticket.

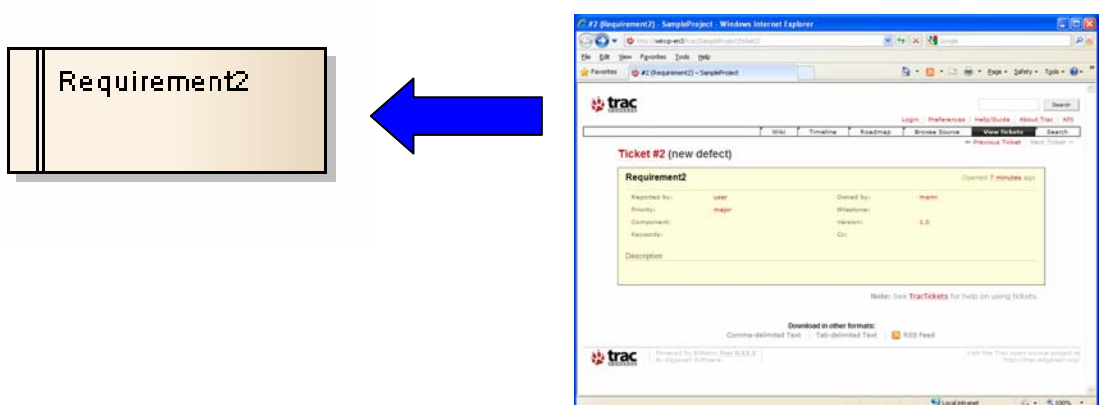


With that, it is efficient to use EA Connector for Trac to create a requirement within EA from the requests (tickets) gathered in Trac regarding the system, and later proceed the designing based on the requirements elements within EA.

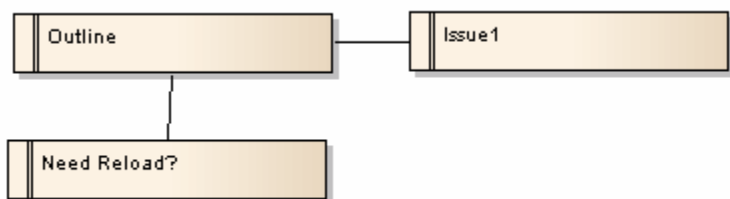
### 3.4. Showing the relationships (TracLinks) between Trac tickets with the EA diagrams

As we write in the 3.3., bugs and requests during the system development or system operation & maintenance arise/come up with no matter the situations or places, so that they are managed by tickets of web-based system like Trac, frequently.

To describe the related tickets of a ticket, the ticket information such as IDs are added in the comment. By Trac, however, it is difficult to see the backward direction or the whole structure.



EA Connector for Trac imports Trac tickets to EA. By doing so, the add-in connects the elements with the associate relationships. EA makes the correspondence with the elements by referring the related IDs in the comments of tickets when importing them.



EA figures the relationships between tickets as an image of EA to increase understandings.

## 4. About EA Connector for Trac

EA Connector for Trac is an add-in to link UML Modeling Tool EA elements, such as requirements, changes, Use Cases, test items, issues, user functions and tasks to Trac tickets, and then copy the attributes bi-directionally.

EA Connector for Trac is created as an add-in for EA.

EA Connector for Trac has the following functions:

- Exporting elements made by EA to Trac tickets
- Importing Trac tickets to EA elements
- Converting the links, which have "#" or "ticket:" in the fields of description and comment, to the relationships of EA when importing or synchronizing Trac tickets to EA elements.
- Synchronizing attributes of EA elements and Trac tickets
- Converting child diagrams of EA elements to attachments as images.
- Outputting a link with "#" in it, when the elements, connected to the EA elements by relationships, are linked to Trac tickets.

EA Elements Attributes	Direction	Trac Tickets Attributes
Name or Short Description	Bidirectional	Summary
Notes	Bidirectional	Description
Notes	←	Change History
Author	Bidirectional	Owned by
Version	Bidirectional	Version
Key Words	Bidirectional	Keywords
TracReporter (tagged value)	←	Reported by
TracMilestone (tagged value)	Bidirectional	Milestone
TracComponent (tagged value)	Bidirectional	Component
TracCC (tagged value)	Bidirectional	CC
TracType (tagged value)	←	Type
Priority	←	Priority
TracPriority (tagged value)	Bidirectional	Priority
Status	←	Status
TracStatus (tagged value)	Bidirectional	Status
Child diagram	→	Attachments
Linked document	→	Attachments

## EA Connector for Trac Feature Guide

Associate Relationships	←	Link to tickets in the description/comment
Associate Relationships	→	Description

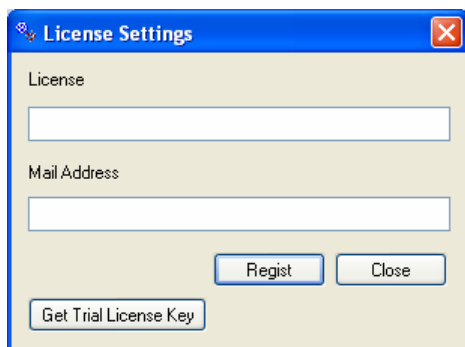
## 5. Usage Settings of EA Connector for Trac Trial Version

1. Downloading the installer:

<http://www.sparxsystems.jp/bin/IntegTrac.exe>

2. Obtaining the trial license key

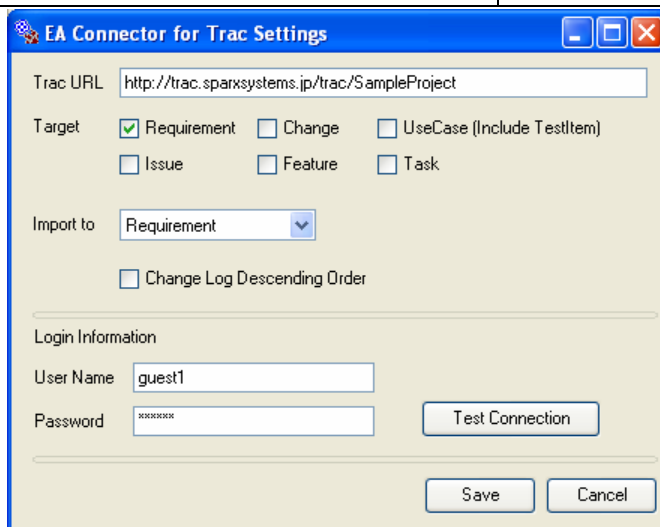
After the installation of add-in, click on the "Get Trial License Key" button to open the web page and get a license key.



3. Settings

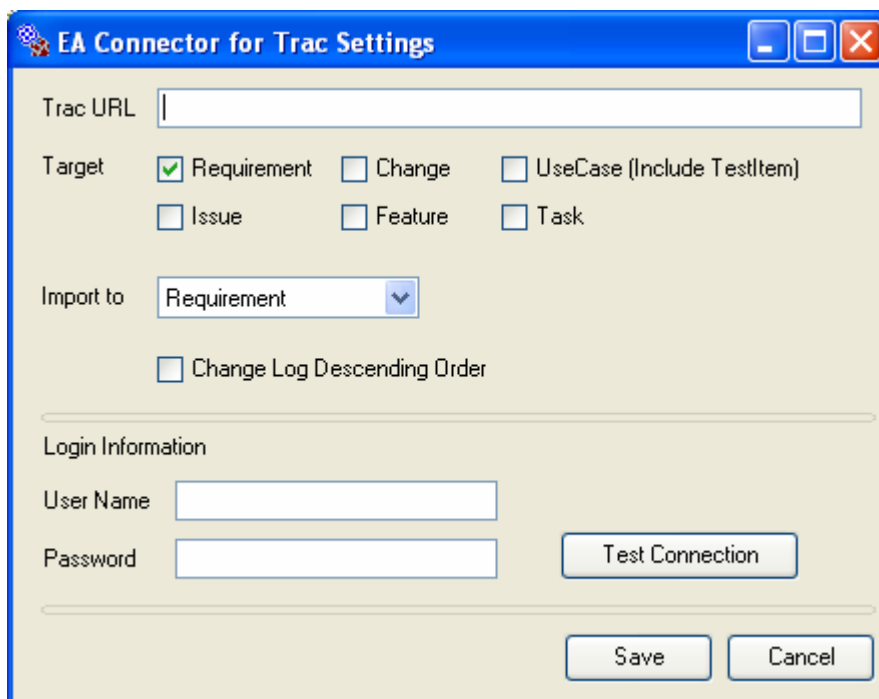
You can use the following settings to evaluate Trac of Sparx Systems Japan.  
(Data will be cleared every Monday.)

Trac URL	http://trac.sparxsystems.jp/trac/SampleProject
Target type	Arbitrary
Importing	Arbitrary
Log-in information	guest 1 to guest 3 (passwords are the same as the log-in name)



## 6. Usage Steps (Settings) of EA Connector for Trac Trial Version

1. Set the permission for a relevant user of a relevant Trac project so that the user can use XML-RPC.
2. Run EA and open a project.
3. Select Main Menu | Extensions (Add-Ins) | EA Connector for Trac | EA Connector for Trac Settings to set and save the following items.
  - Trac URL (`http://<host_name>/trac/<project_name>`)
  - User name/password



The screenshot shows the 'EA Connector for Trac Settings' dialog box. It has a blue title bar with the EA logo and window control buttons. The main area is light beige and contains the following fields and controls:

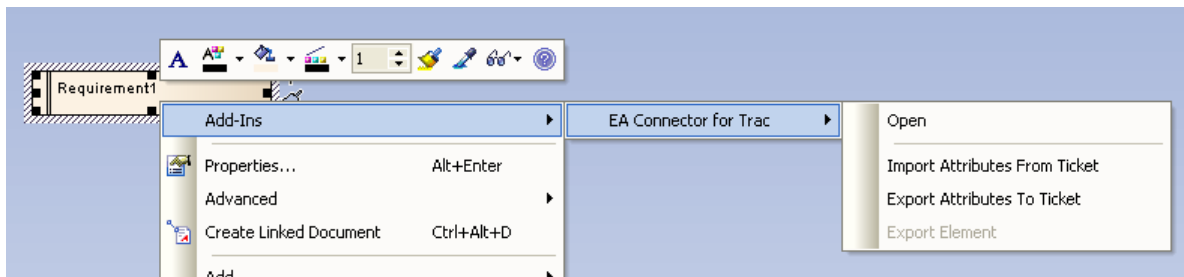
- Trac URL:** A text input field.
- Target:** A group of checkboxes:  Requirement,  Change,  UseCase (Include TestItem),  Issue,  Feature, and  Task.
- Import to:** A dropdown menu currently showing 'Requirement'.
- Change Log Descending Order
- Login Information:** A section header.
- User Name:** A text input field.
- Password:** A text input field.
- Test Connection:** A button.
- Save:** A button.
- Cancel:** A button.

(Things like Trac URL are saved per EA project. Log-in information is saved per log-in user of PC and EA project.)

4. Select one of the following:
  - Select an element, like a requirement, and then select a desired action from the context menu, Extensions (Add-Ins) | EA Connector for Trac.
  - Select an EA diagram, and then select a desired action from the context menu, Extensions (Add-Ins) | EA Connector for Trac.
  - Select a package, and then select a desired action from the context menu, Extensions (Add-Ins) | EA Connector for Trac.

## 7. Actions of EA Connector for Trac

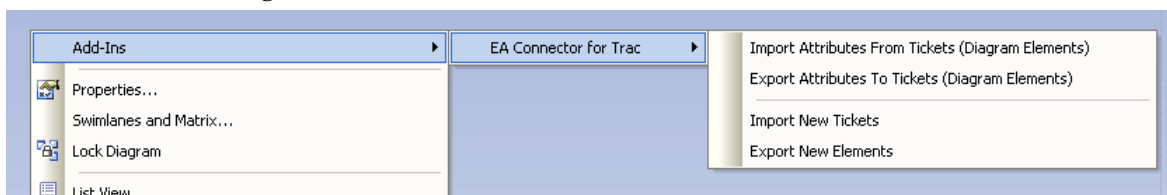
- [Actions for elements]



EA Connector for Trac has the following four menus when selecting elements.

- Open  
Open the corresponding ticket to the selected element by browser.
- Import Attributes From Ticket  
Import the attributes of corresponding ticket to the selected element.
- Export Attributes To Ticket  
Export the attributes of selected element to the corresponding ticket.
- Export Element  
Create a new ticket and correspond it to the selected element, and then export the attributes of element.

- [Actions for diagrams]



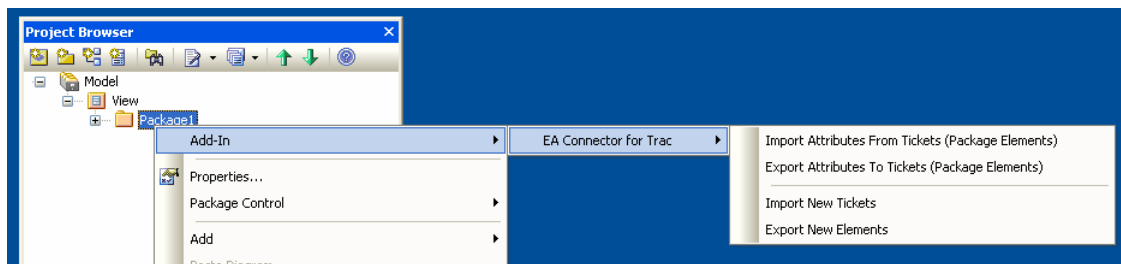
- Import Attributes From Tickets (Diagram Elements)  
Import the attributes of tickets on the diagram to their corresponding elements.
- Export Attributes From Tickets (Diagram Elements)  
Export the attributes of elements on the selected diagram to their corresponding tickets.
- Import New Tickets  
Create the new elements for the tickets which IDs are not corresponded with

any elements in the whole project of EA, and show them on the selected diagram.

➤ **Export New Elements**

Within the selected diagram, create the new tickets for non-corresponded elements to make them correspond with new tickets, and export the attributes of them.

● [Actions for packages]



➤ **Import Attributes From Tickets (Package Elements)**

Import the attributes of tickets in the selected package to their corresponding elements.

➤ **Export Attributes From Tickets (Package Elements)**

Export the attributes of elements in the selected package to their corresponding tickets.

➤ **Import New Tickets**

Create the new elements for the tickets which IDs are not corresponded with any elements in the whole project of EA, and put them in the selected package.

➤ **Export New Elements**

Within the selected package, create the new tickets for the elements with no correspondence to correspond with new tickets, and export the attributes of them.