Transforming EA Specific Data

On this page

- Constraints
- Requirements
- Scenarios
- Files
- Requirements (external)
- Changes
- Issues

In addition to UML data, each EA-exported XMI contains EA-specific information. The Enterprise Architect Import can transform this information into UML elements with the stereotypes applied if you include EA-specific data before importing the XMI file. This data includes:

- Constraints: name, description, type, weight, and status.
- Requirements: name, description, type, status, difficulty, priority, and last update.
- Scenarios: name, description, type, and weight.
- · Files: file path type.
- Requirements (External): type, status, difficulty, priority, last update, created, and note.
- Changes: type, status, difficulty, priority, last update, created, and note.
- Issues: type, status, difficulty, priority, last update, created, and note.

Note can access and specify the EA information in the Property dialog in EA.

To include EA-specific data in the transformation process, a set of stereotypes and tag definitions are created as the EA Profile.

```
EA Profile [EA_Profile.mdzip]
   ⊕.../ Relations
   Ė--- 

□ FAActor [Class]
       -base_Class: UML Standard Profile::UML2 Metamodel::Class [1]
   Ė··· «» EAChange [Class]
       --- O -status : String [1]
        ---- • -type : String [1]
        .... 🔷 -difficulty : String [1]
         ... O -priority: String [1]
        --- 🔷 -last update : String [1]
         --- O -base_Class: UML Standard Profile::UML2 Metamodel::Class [1]
       -created : String [1]
   --- «» EAConstraint [Constraint]
       --- 0 -type : String [1]
        --- 🔷 -weight : String [1]
         --- 🔷 -status : String [1]
        -base Constraint : UML Standard Profile::UML2 Metamodel::Constraint [1]
   — «» EADiagram [Diagram]
      --- 🔷 -base_Diagram : UML Standard Profile::UML2 Metamodel::Diagram [1]
        .... O -Version: String [1]
   ⊟…«» EAIssue [Class]
        -- O -base_Class: UML Standard Profile::UML2 Metamodel::Class [1]
        - o -status : String [1]
        --- 🔷 -type : String [1]
         ... O -difficulty: String [1]
        --- O -priority : String [1]
        --- 🔷 -last update : String [1]
       -created : String [1]
   - «» EARequirement [Class]
       --- O -base_Class: UML Standard Profile::UML2 Metamodel::Class [1]
        --- 🔷 -name : String [1]
         --- 🔷 -description : String [1]
        --- 🔷 -type : String [1]
        .... 🔷 -status : String [1]
        .... 🔷 -difficulty : String [1]
         ··· 🔷 -priority : String [1]
        --- 🔷 -last update : String [1]
       .... o -created : String [1]
   Ė··· «» EAScenario [Element]
        --- 🔷 -base_Element : UML Standard Profile::UML2 Metamodel::Element [1]
        --- 0 -name : String [1]
        --- 0 -type : String [1]
       -weight: String [1]
   i ← «» entity [Lifeline]
       -base Lifeline: UML Standard Profile::UML2 Metamodel::Lifeline [1]
```

The EA Profile in a treeview.

Constraints

Each EA constraint will be transformed into a UML constraint and «EAConstraint» will be applied to the constraint. The properties of an EA constraint will be mapped either to the properties of a UML constraint or to the tag values of «EAConstraint». The following table shows the constraint mapping details.

| EA | Modeling tool by NoMagic |
|------|--|
| name | The name property of a UML constraint. |

| description | EAConstraint::type tag value. |
|------------------|---|
| type | EAConstraint::weight tag value. |
| weight | EAConstraint::status tag value. |
| constraint owner | Constrained Element property point to the constraint owner. |

Requirements

Each EA requirement will be transformed into a UML Class. Because a requirement cannot be created in an element that is the owner of a Class in EA, the transformed requirement will be kept in a separate Package, named **EA Requirement**. A Realization will then be created from the owner of the requirement into a transformed requirement. See the following table for details.

| EA | Modeling tool by NoMagic |
|-------------|--|
| name | EARequirement :: name tag value |
| description | EARequirement :: description tag value |
| type | EARequirement :: type tag value |
| status | EARequirement :: status tag value |
| difficulty | EARequirement :: difficulty tag value |
| priority | EARequirement :: priority tag value |
| last update | EARequirement :: name update value |

Scenarios

Each EA scenario will be transformed into a UML Comment and «EAScenario» will be applied to the comment. The properties of a scenario will be mapped either to the properties of each UML Comment or to the tag values of «EAScenario». See the following table for details.

| EA | Modeling tool by NoMagic |
|-------------|--|
| name | EAScenario::name tag value |
| description | The Body property of a UML Comment. |
| type | EAScenario :: type tag value |
| weight | EARequirement :: weight tag value |
| subject | An annotated Element property pointing to an EA subject element. |

Files

EA can add files to a UML element. The information will be transformed into a Hyperlink in a UML model.

| EA | Modeling tool by NoMagic |
|-------------|--------------------------|
| Local file | File |
| Web address | Webpage. |

Requirements (external)

An EA-created Requirement differs from the one you create as an internal element for each element. EA requirements will appear in the Model Browser and can be pasted on a diagram. Each EA Requirement will be transformed into a Class and «EARequirement» will be applied to the requirement.

| EA | Modeling tool by NoMagic |
|------------|---------------------------------------|
| type | EARequirement :: type tag value |
| status | EARequirement :: status tag value |
| difficulty | EARequirement :: difficulty tag value |
| priority | EARequirement :: priority tag value |

| last update | EARequirement :: last update value |
|-------------|------------------------------------|
| created | EARequirement :: created tag value |
| note | Documentation |

Changes

EA can create a Change and will export it as a Class. The Class information will be transformed into the «EAChange» tag values. See the following table for details.

| EA | Modeling tool by NoMagic |
|-------------|----------------------------------|
| type | EAChange :: type tag value |
| status | EAChange :: status tag value |
| difficulty | EAChange :: difficulty tag value |
| priority | EAChange :: priority tag value |
| last update | EAChange :: last update value |
| created | EAChange :: created tag value |
| note | Documentation |

Issues

EA can create an Issue and will export it as a Class. The Issue information will be transformed into the «EAIssue» tag values. See the following table for details.

| EA | Modeling tool by NoMagic |
|-------------|---------------------------------|
| type | EAlssue :: type tag value |
| status | EAlssue :: status tag value |
| difficulty | EAlssue :: difficulty tag value |
| priority | EAlssue :: priority tag value |
| last update | EAlssue :: last update value |
| created | EAlssue :: created tag value |
| note | Documentation |