How to Build Model Structure

- Packages in the Browser window -

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Who am I

Takeshi Kouno

- CEO and Founder of Sparx Systems Japan (2003-)
 - Number of Enterprise Architect users in Japan:
 - 71 in 2003
 - 60,000+ in 2021
- My first Enterprise Architect was version 3.0
- I joined the Global Summit Teams 'Sparx Systems Japan' Group. If you have any questions, please post them to the Group.

Summary of this Presentation

We usually create and use many Packages in the Browser Window, but efficiency depends on how to build the structure.

I would like to share basic information about the Browser and some key

ideas to build the structure.

In older version of Enterprise Architect, the Browser was called 'Project Browser'.

■ Model

References

Use Cases
Parametrics
Analysis
Architecture
Design
Verification

├ Transition├ Operational├ Support

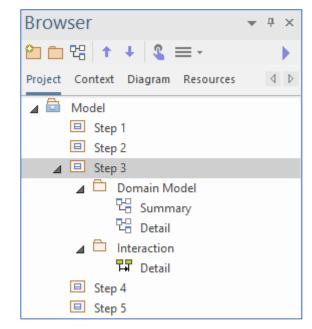
Context
Requirements

Management

Why Structure is important?

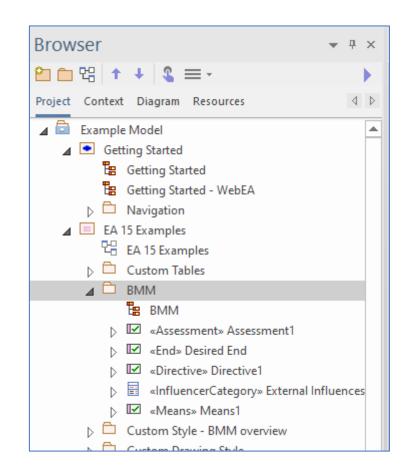
Structure in the Browser is important because of:

- 1. Efficient modelling easy to find what we want
- 2. Framework of Process and Product specify how and what we need to do
- Integrity and Consistency able to confirm/assure that all necessary information are included



Items in the Browser, 'Project' Tab

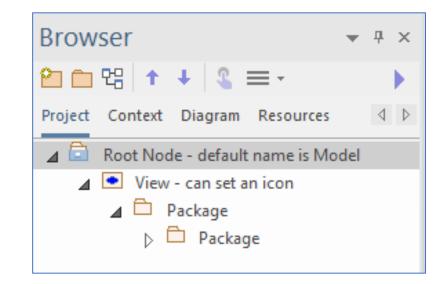
- Root Node (named 'Model')
- Package
- Diagram
- Element
 - Connectors are not shown in the Browser
 - Some types of elements (e.g. Notes, Hyperlinks) on the version 15.2
- Feature (Attribute, Operation and Reception)



Root node, View and Package

We have 3 kind of folders in the Browser:

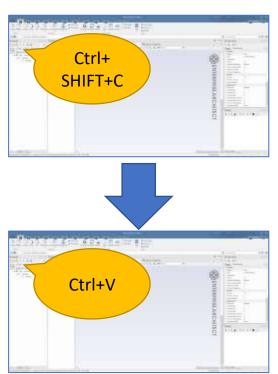
- Root Node ('Model'): top level folders
- View: child folders under Root Node
- Package: all other folders
- Root node cannot have diagrams and elements
- Two or more Root nodes can be added
- View can have a special Icon, shown in the Browser
- Why there are Views? just historical reason



Modify Structure

Basically we can move items in the Browser by drag and drop

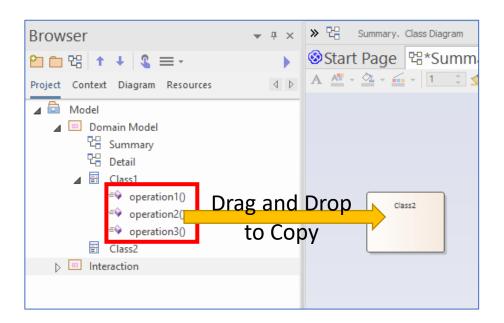
- We can NOT move diagrams and elements under a Root node
- Now we can move Views under Packages (On older versions, we couldn't)
- We can NOT copy existing structure by drag and drop
 - You can call this procedure by the context menu
 - Ctrl+SHIFT+C and Ctrl+V combination is the easiest to copy
- We can NOT change order by drag and drop
 - Toolbar buttons in the Browser
 - Ctrl+Up/Down arrow is the easiest to change



Useful Operations and Tips in the Browser

Drag from the Browser to a Diagram

- Copy features (attributes, operations and receptions) drag it onto a target in a diagram
- Create a Sequence message drag an operation onto a Sequence diagram
- Create a Realization drag a Requirement onto a element in a diagram
- Create an ActivityPartition drag a SysML Block onto a SysML Activity diagram
- and much more...



Useful Operations and Tips in the Browser

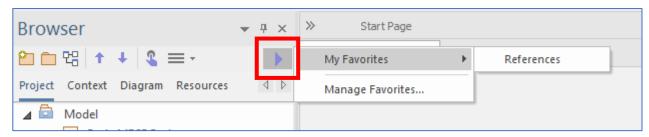
- Useful shortcuts
 - (Ctrl+SHIFT+C and Ctrl+V, Ctrl+Up/Down arrow see previous page)
 - F2 key change name
 - Ctrl+Delete keys delete from model (i.e. from all diagrams)
- Drag an element from the Toolbox onto the Browser (a Package or an Element) - create a new element

Useful Features in the Browser

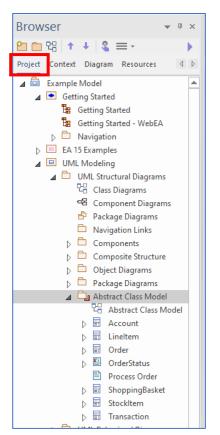
• Find Context Item button in the Toolbar 🕓

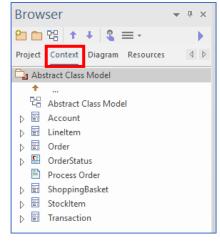


Favourite Packages from the Toolbar button

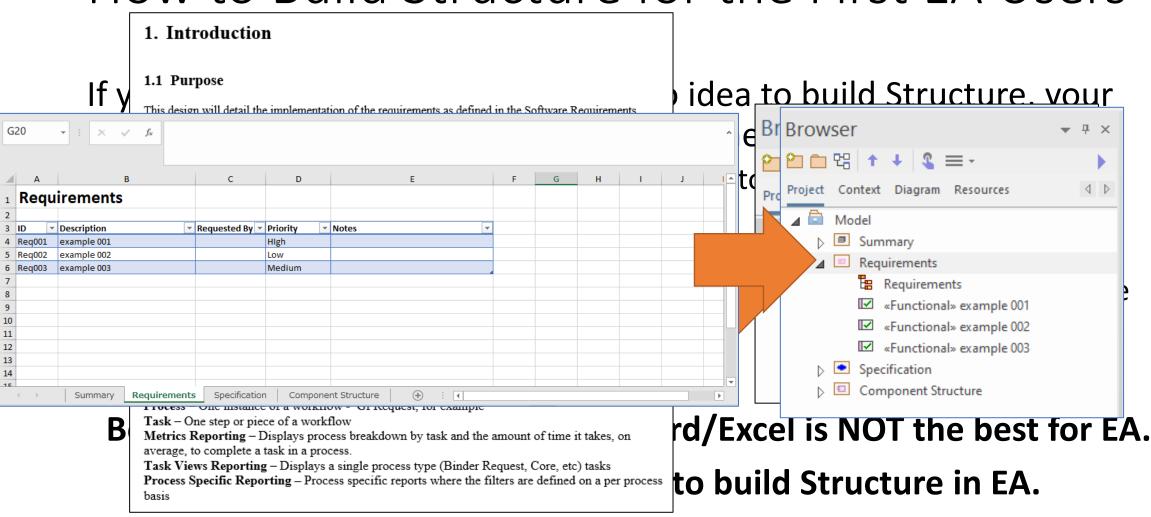


 Context tab - show items only in the target Package



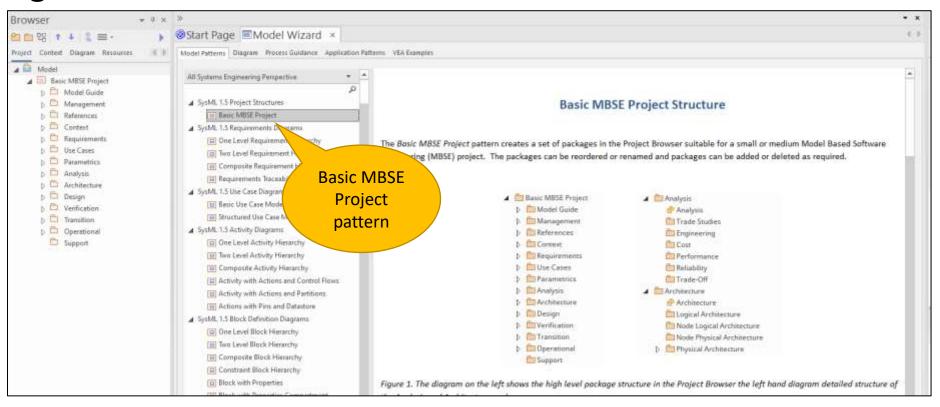


How to Build Structure for the First EA Users



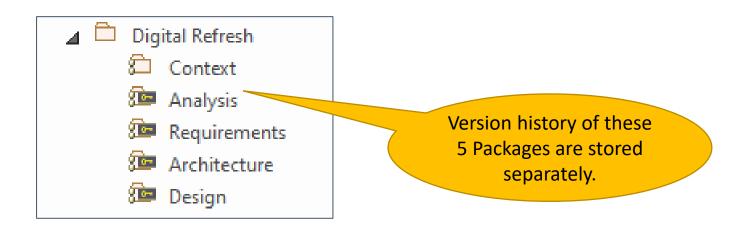
How to Build Structure for the First EA Users

 Some profiles (modelling languages) offer Patterns which are blank packages structure



How to Build Structure for the First EA Users

- Packages are target of many EA features, so it is a good idea to consider which EA features you use
 - source code generation, document generation, relationship matrix, specification manager, ...



Tips to Build better Structure

• Specify order in Packages rule to find items/missing items Example:

• About Sequence diagrams in a Package, normal case is the first, then

alternative cases are next, sorted by possibility of each case

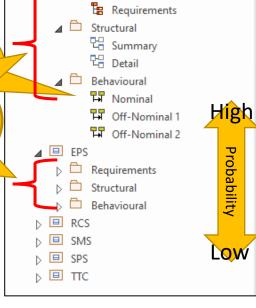
• Specify each Package Structure and Package naming rules

Examples:

First level Packages (i.e. Views) are Components

 Each first level Package has three child Package 'Structural' and 'Behavioural'

- 'Structural' package has Class diagrams ('Summary' and 'Detail')
- 'Behavioural' package has Sequence diagrams



Requirements

Model

■ AOCS

Same Package

structure, Same

Diagram type and

name in each

Package

Tips to Build better Structure

- It is difficult to find best structure when you use EA initially
 - Because contents are not fixed yet, i.e. you cannot fix what kind of diagrams and elements are necessary to describe (visualise) your target
 - In the first use of EA, create Packages as you feel, then re-structure Packages (and add/remove Packages) to be better
 - You can find structure after three (3) project, then create your own Pattern

Thank you!

I hope this session could help your better Enterprise Architect life.

- I will share this slide soon at the Sparx Systems Japan Teams channel
- Please drop a post in the Teams channel or email to tkouno@sparxsystems.jp if you have any questions, comments, ideas.