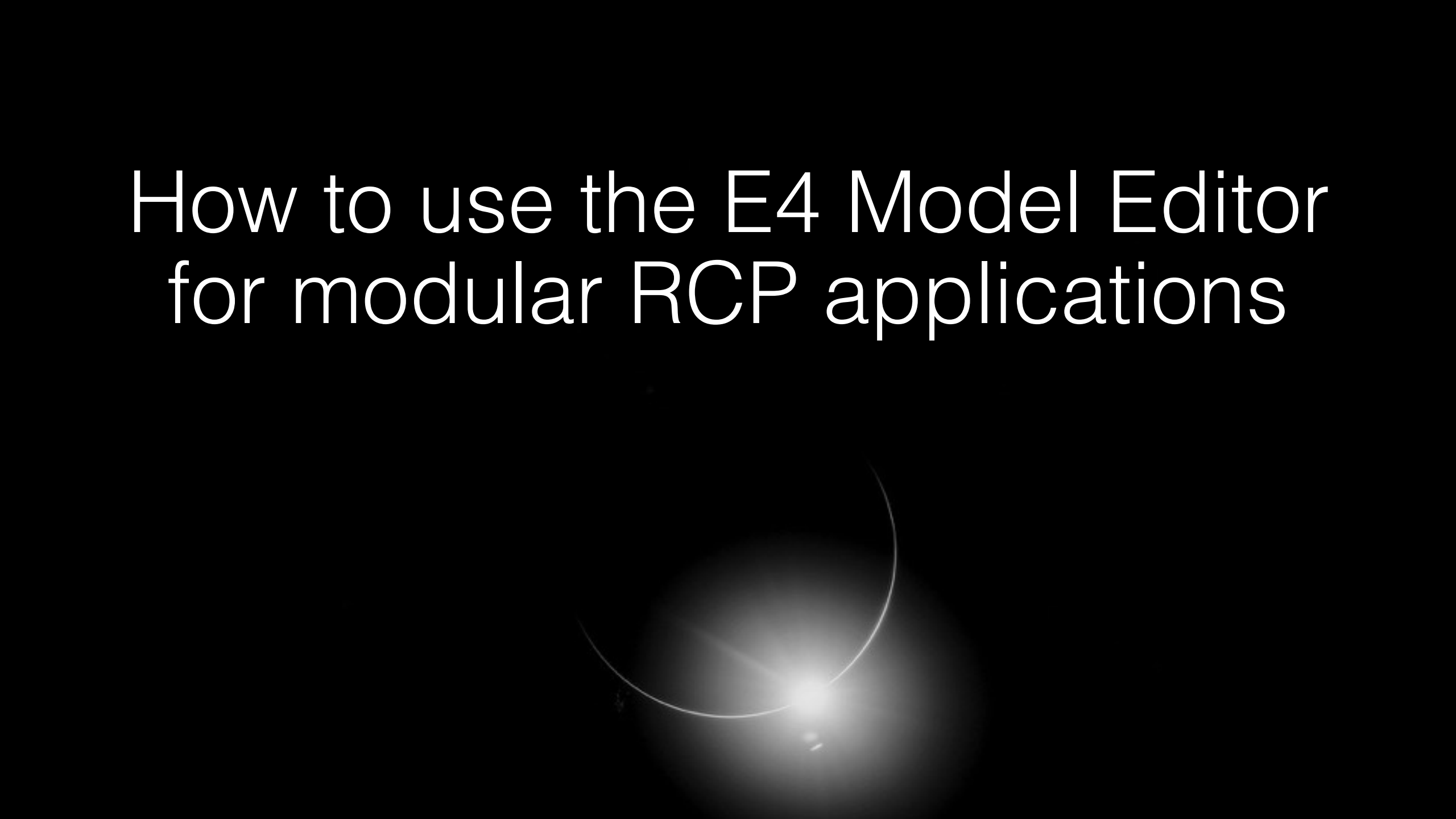
How to use the E4 Model Editor for modular RCP applications



Who are We?

Olivier Prouvost

- OPCoach (www.opcoach.com), Eclipse trainer and consultant
- Committer on e4 tools and Eclipse Platform UI

Patrik Suzzi

- Asegno (www.asegno.com), Eclipse Consultant
- Committer on Eclipse Platform UI

Content of this talk

- How to create modular E4 Fragments
- How to use the Model Editor for this purpose

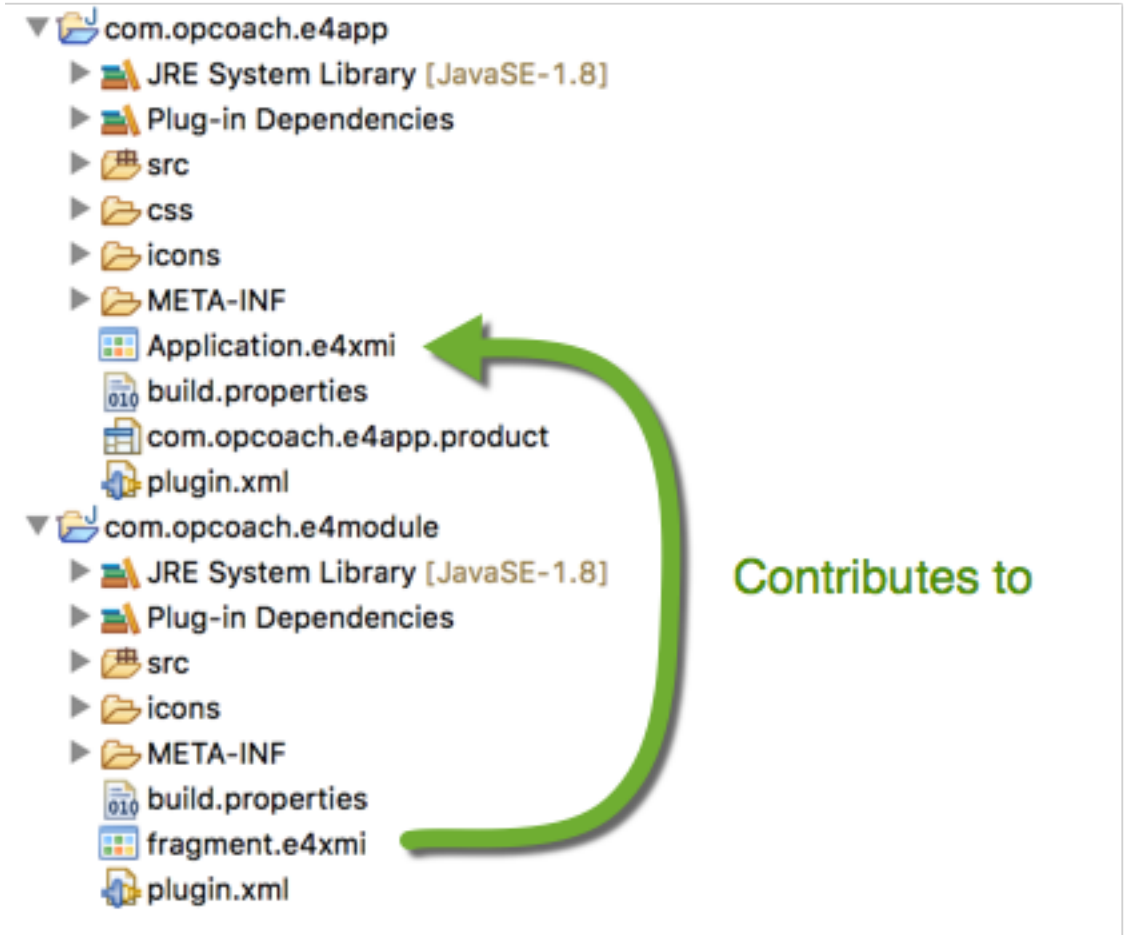
What do you need?

- Eclipse for RCP and RAP developers (Neon or Oxygen)
  - E4 Spies (marketplace)

Eclipse 4 Modularity

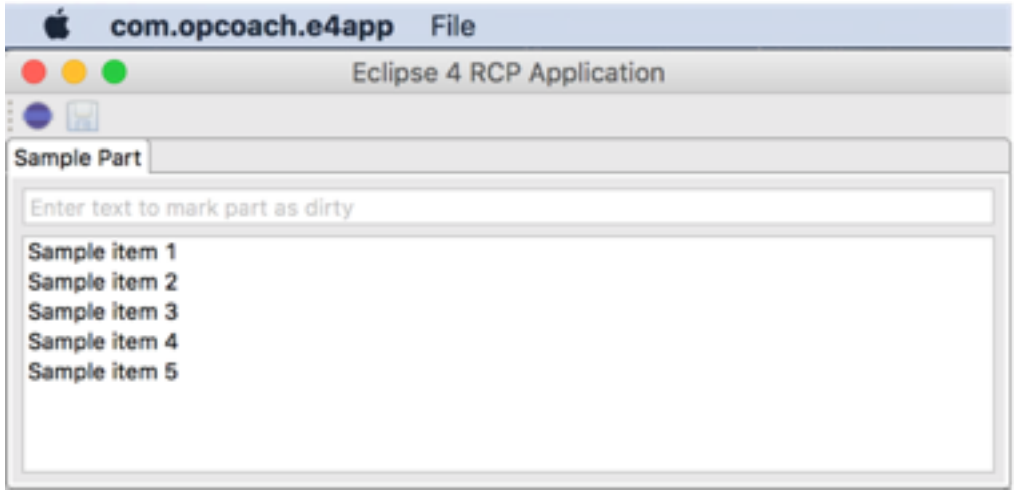
Eclipse 4 Model Modularity

- E4 Application
  - application.e4xmi
    (base application model)
- E4 Module
  - fragment.e4xmi
    (extends existing application)

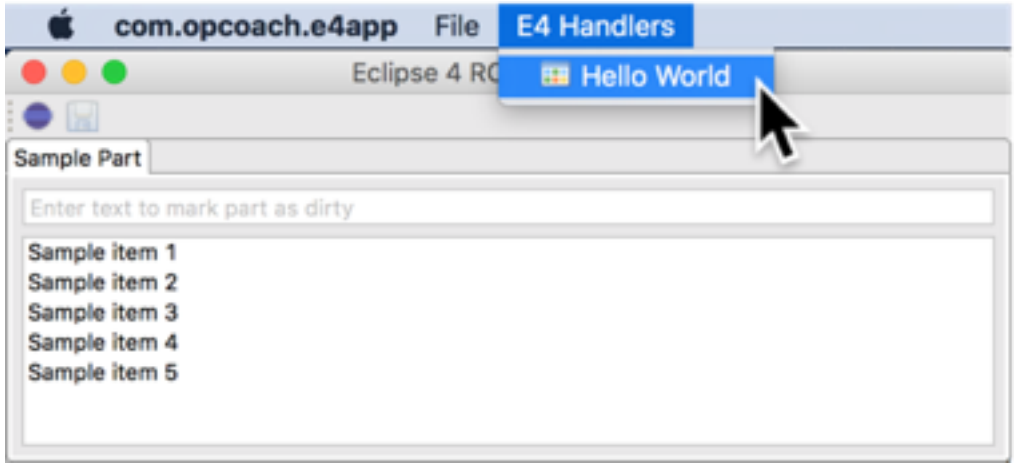


Simple example of Contribution

- E4 RCP App
  - Sample content
  - Run

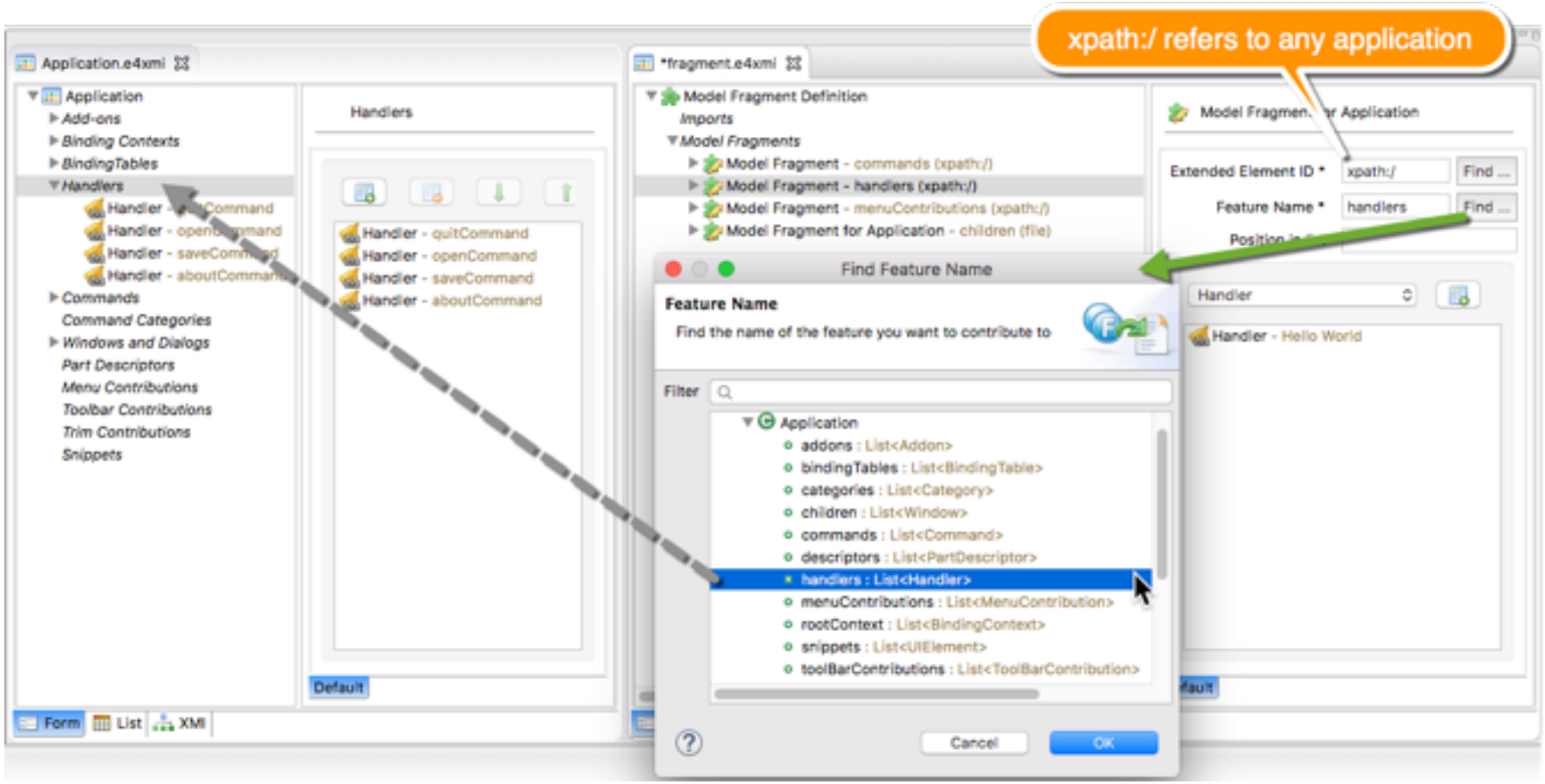


- E4 Plugin
  - Menu contribution using E4 Api
  - Add plugin to E4 app
  - Run



Extend your E4 Application Elements

- Contribute a Handler to the E4 Application



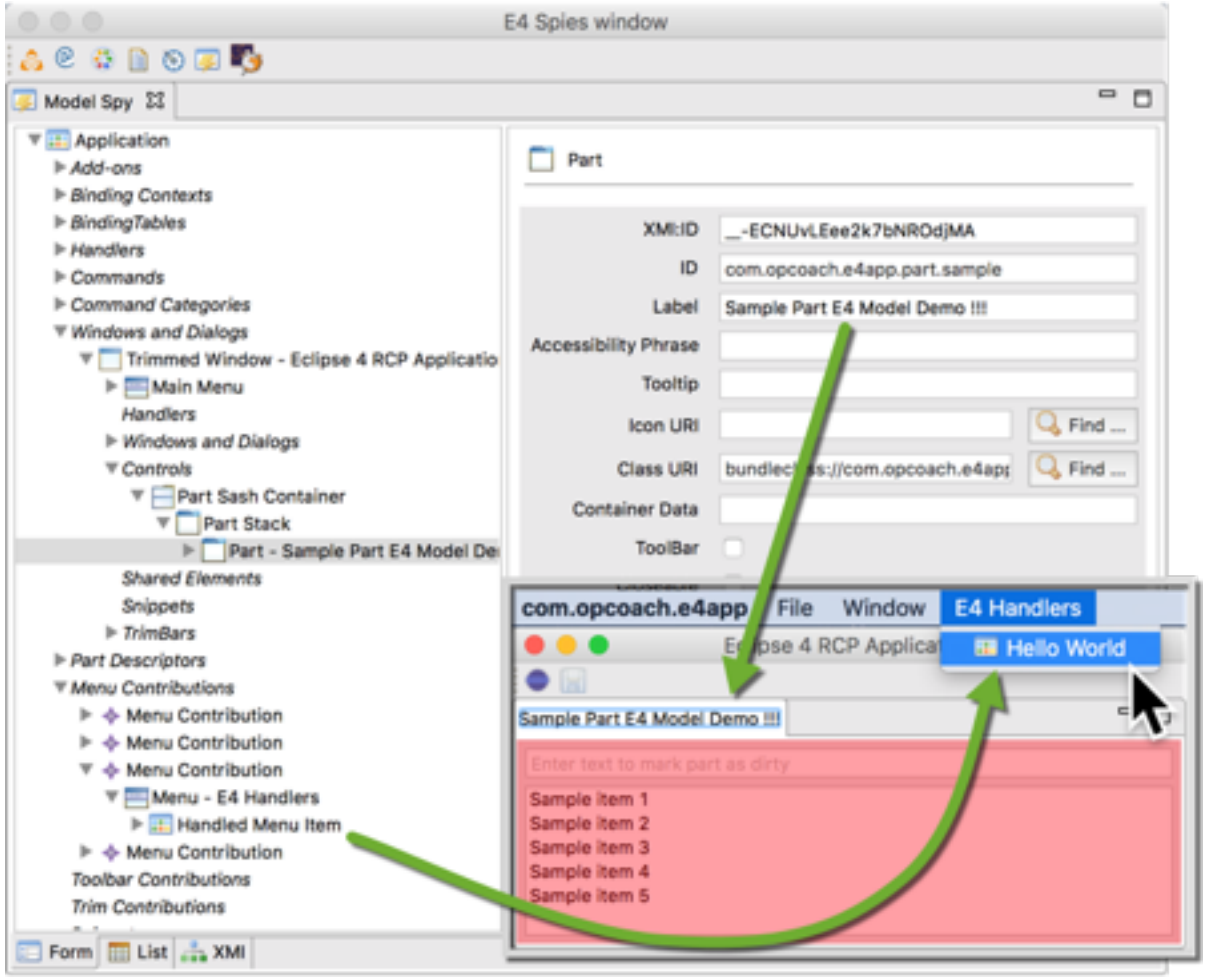
Demo

- Run a sample E4 RCP App
- Extend the App with a E4 Module
- use xpath:/ to refer to the App root element
- you can extend a specific element using
  - advanced xpath notation
  - extended element id
- delete the App launch configuration
- add the module in the E4App product
- run the new product

E4 Model Spy

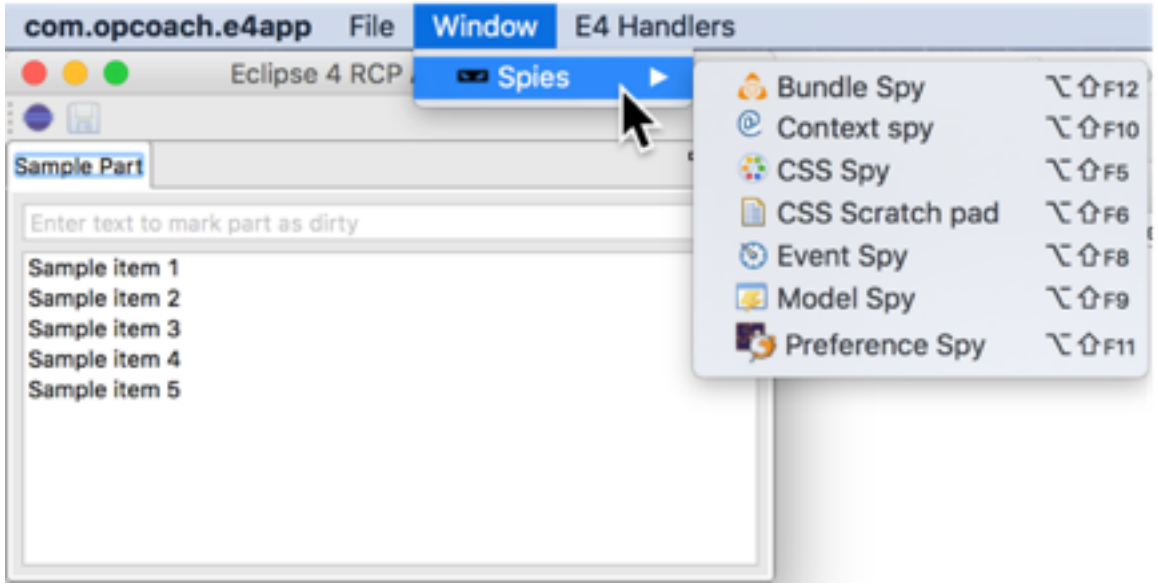
E4 Model Spy module

- E4 Spies
  - Display information on the E4 runtime model, injection context, css, etc..
  - It can be extended for your specific purposes (developer point of view)
  - Add “e4*spy” to your run configuration



Demo

- Add E4 Spies to the E4 App
- Observe the additional menus
  - “E4 Handlers” <— module
  - “Window” <— Spies
- Explore the E4 App model
- Edit the E4 App model



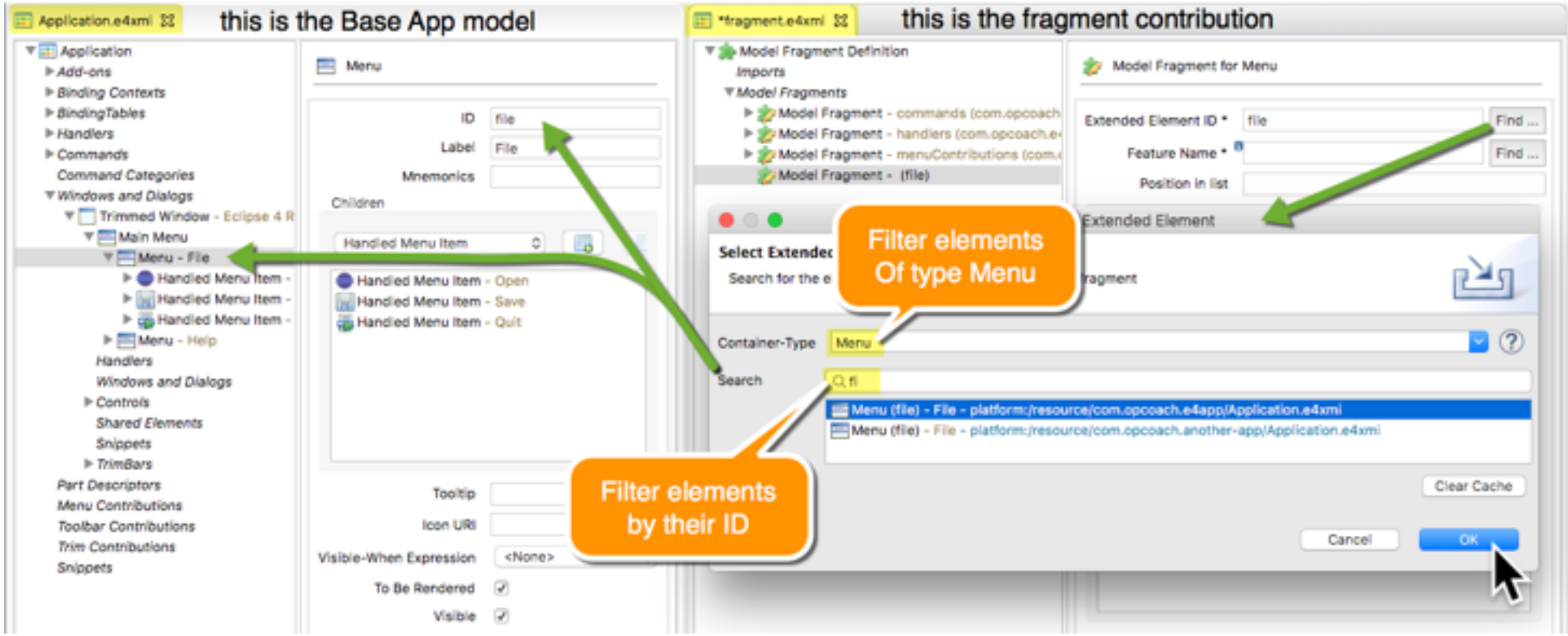
Extend your E4 Application

What can we extend?

- Menus
- Parts (Descriptors, shared elements)
- Perspectives (snippet)
- Windows
- Toolbars, TrimBars, Status bar
- Handlers or Commands
- Addons

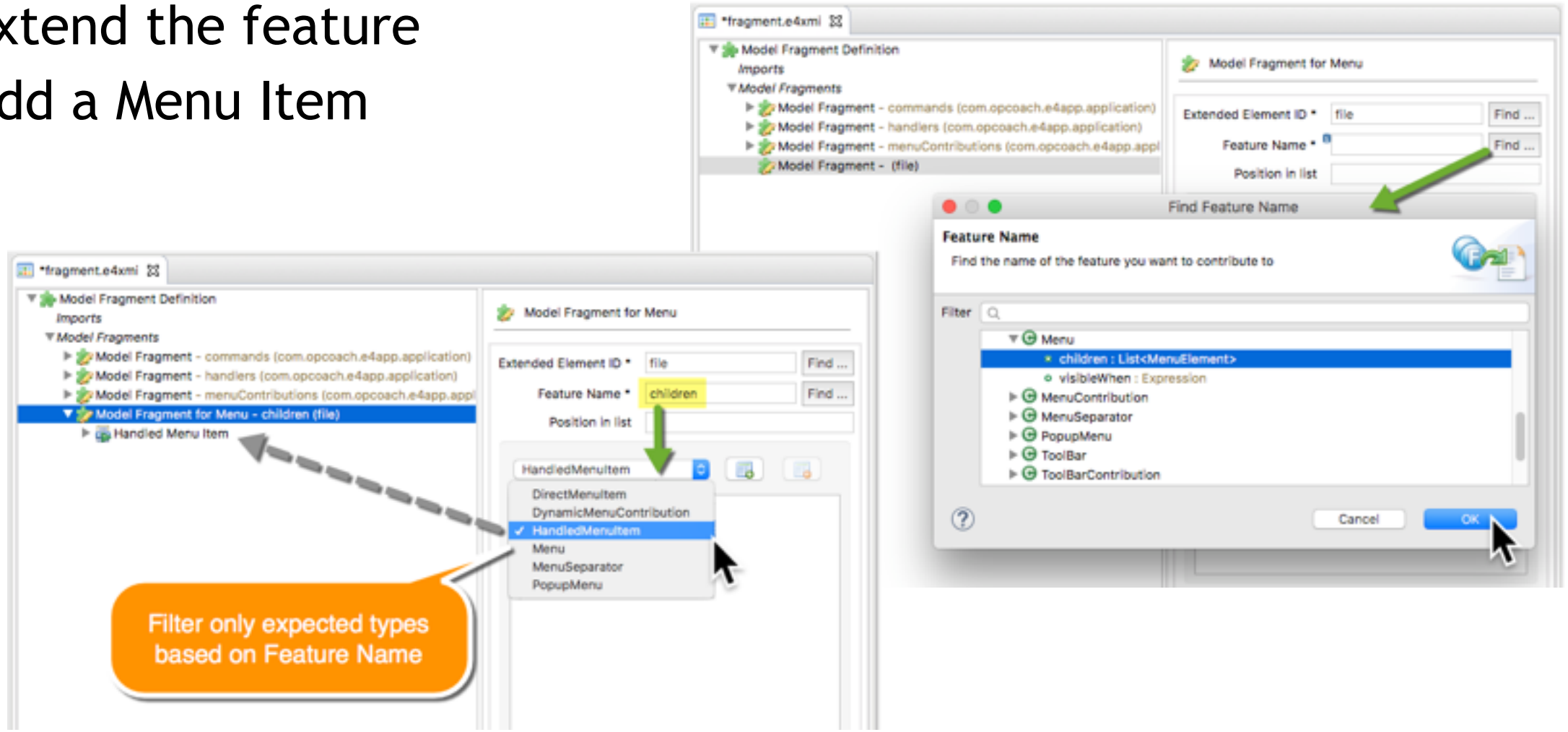
Extend your E4 Application menu

- Add a new contribution to the E4 App file Menu



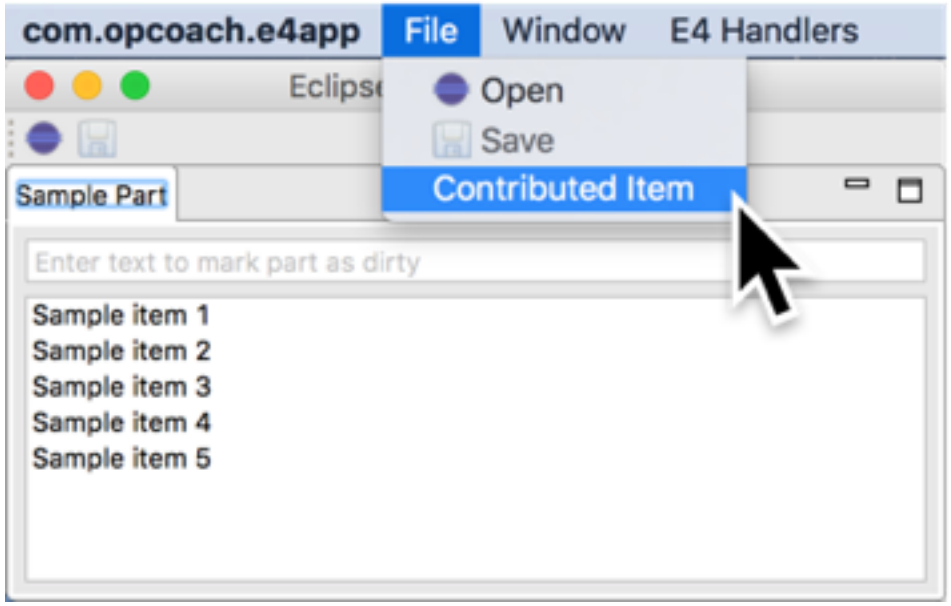
Extend your E4 Application

- Extend the feature
- Add a Menu Item



Demo

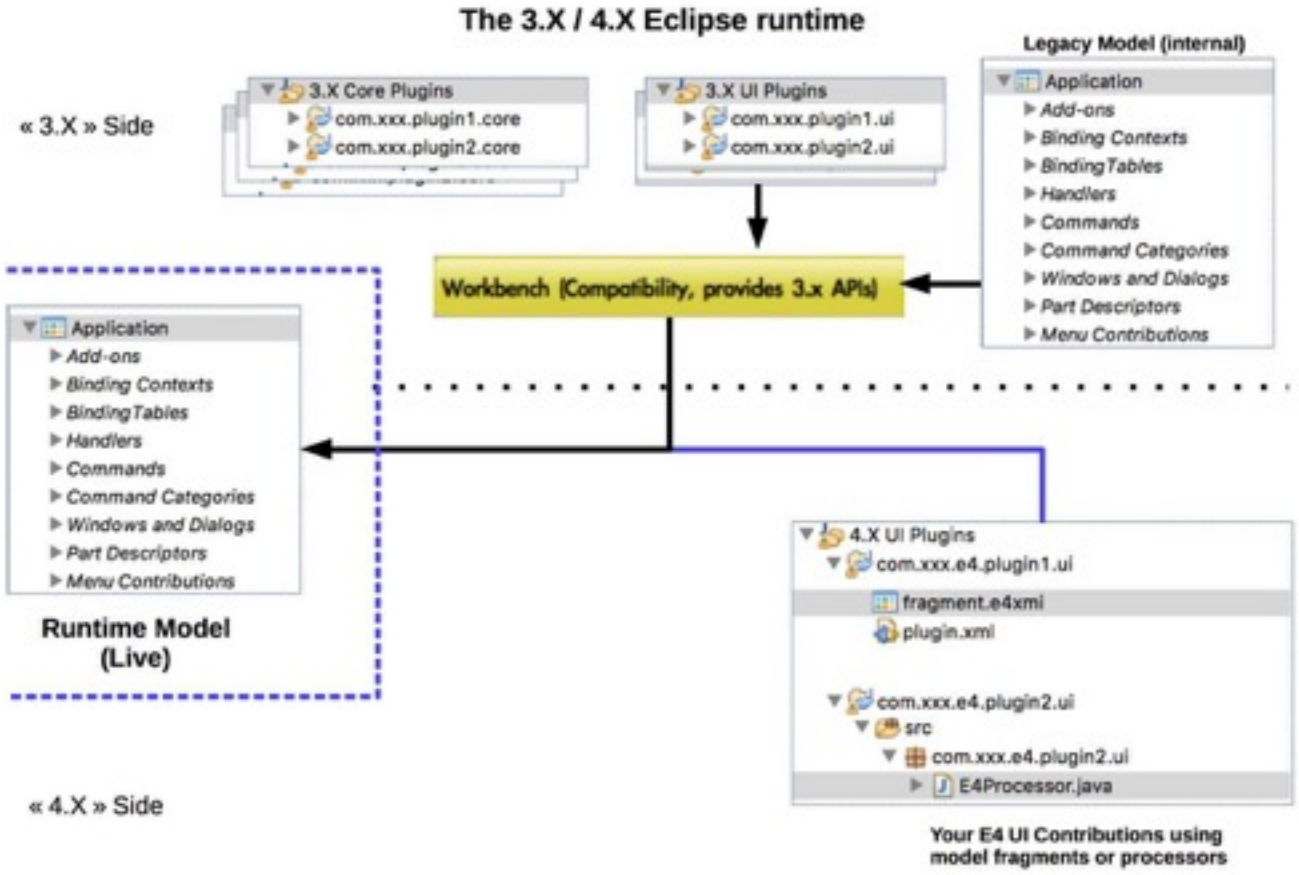
- Add a fragment into the module
- Find the feature for the E4 App menu
- Add a Handled Menu Item to the parent E4 App



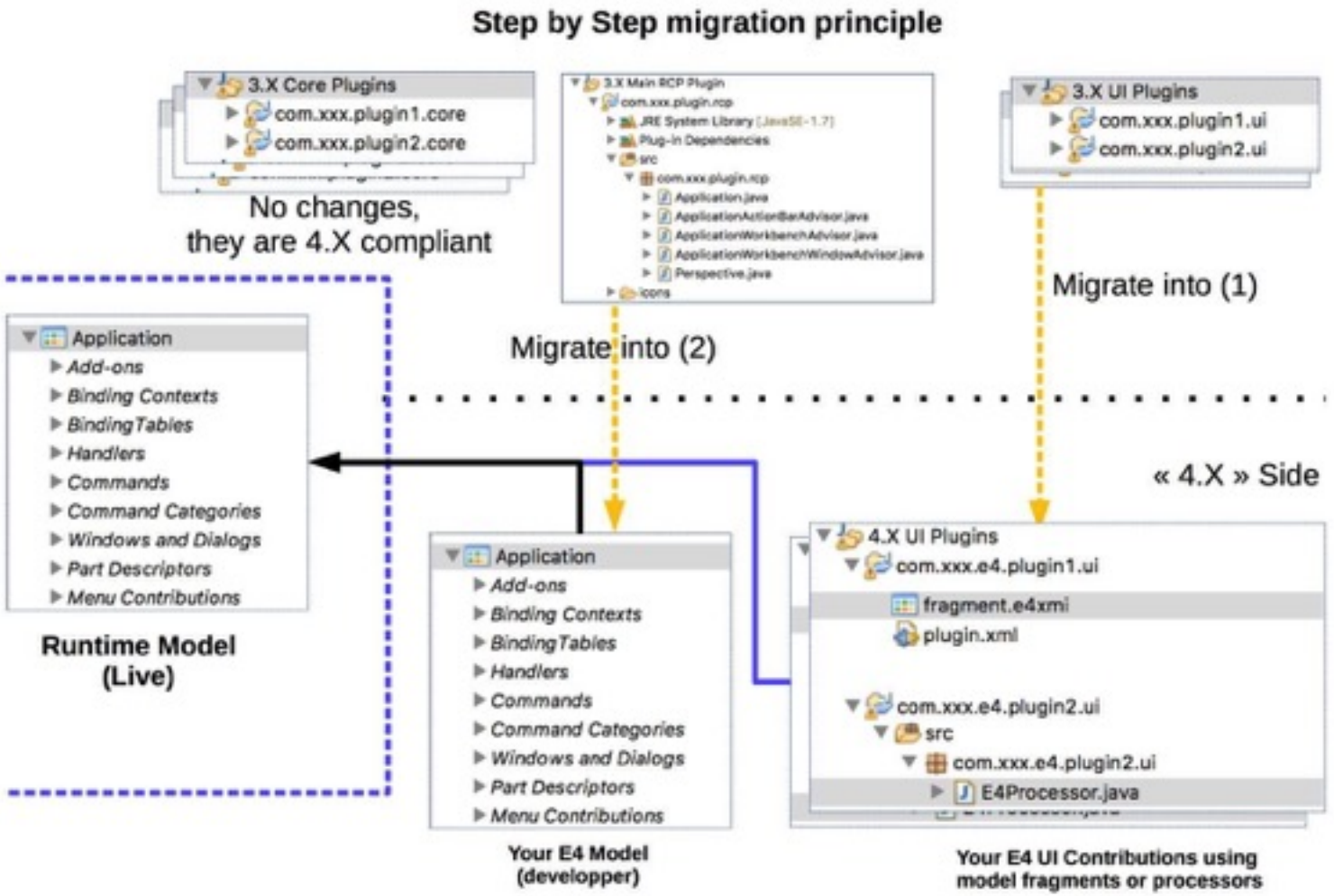
Can you do this with 3.x legacy Applications?

Extend 3.x Applications

- Run them on the compat layer



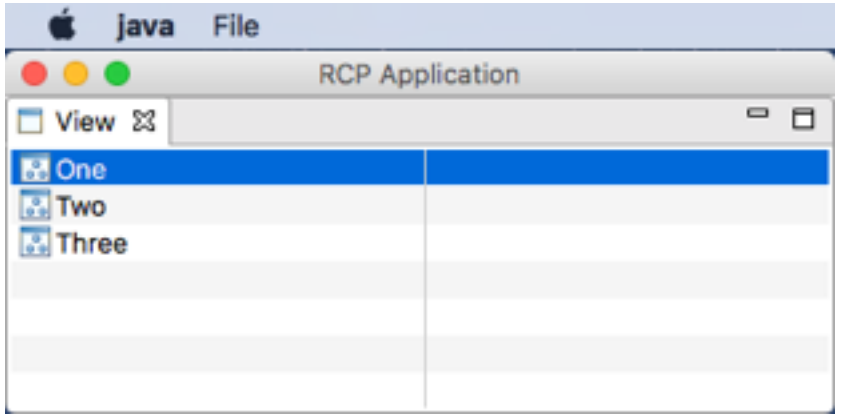
Extend E4 Applications

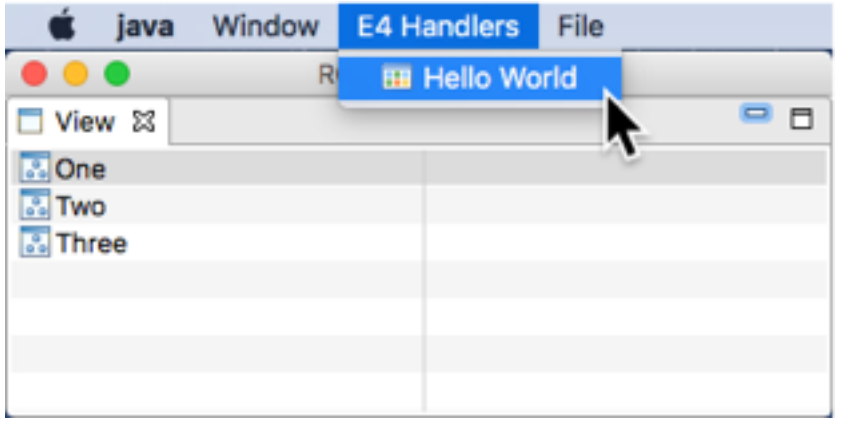


Demo

- Create a 3.x application with a view
  - Run it

- Add the E4 Module and the spies to the launch config (do not change the 3.x application dependencies)
  - Observe the menu contributed by the module
  - Observe the “Window” menu contributed by E4 Spies





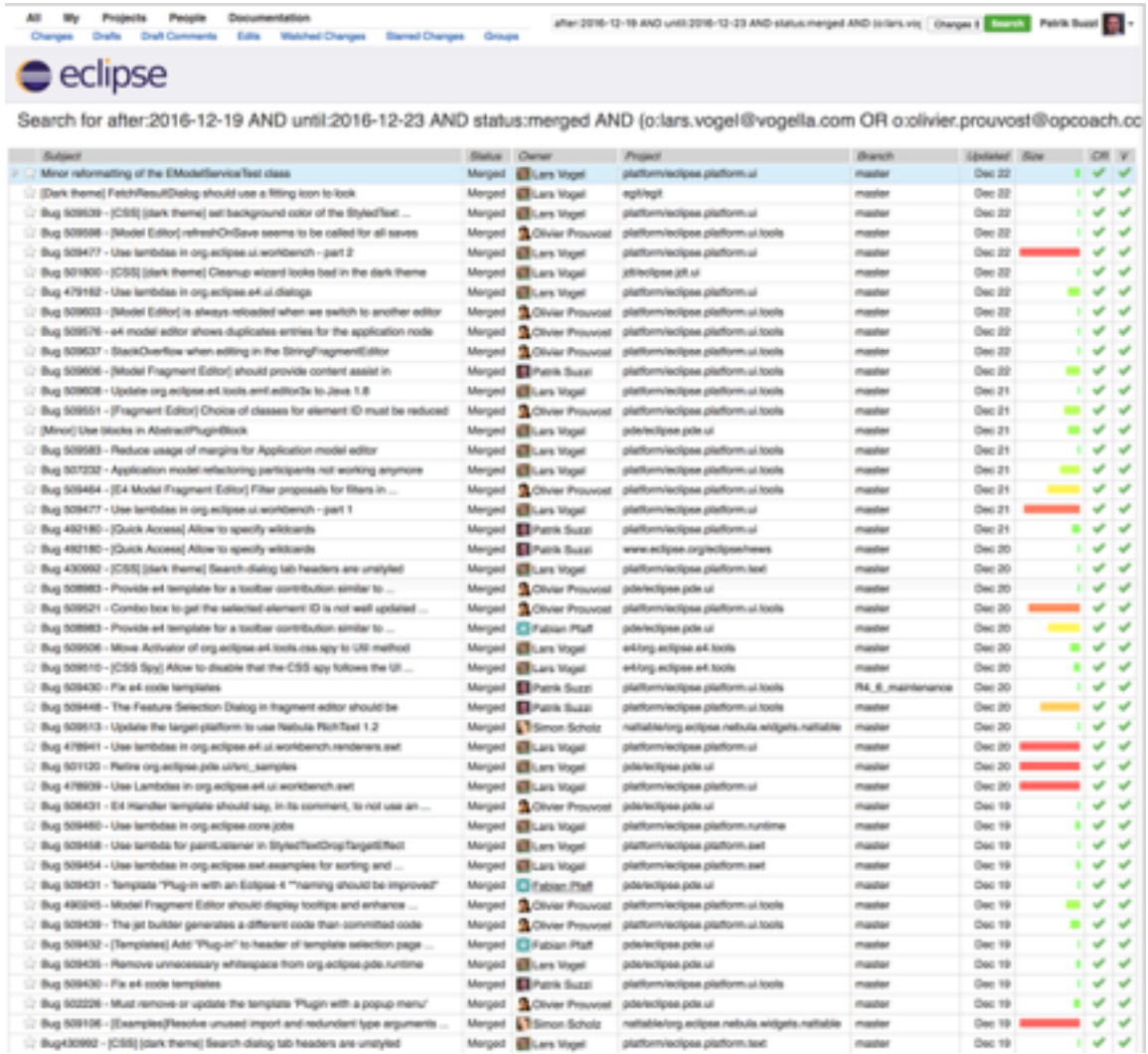
Hackhathon

Eclipse Hackathon

- Event for developers to meet, share, learn, and improve the Eclipse technology.
- It can be an organised meeting, in a conference, or a meeting between friends.
- Everybody can join!

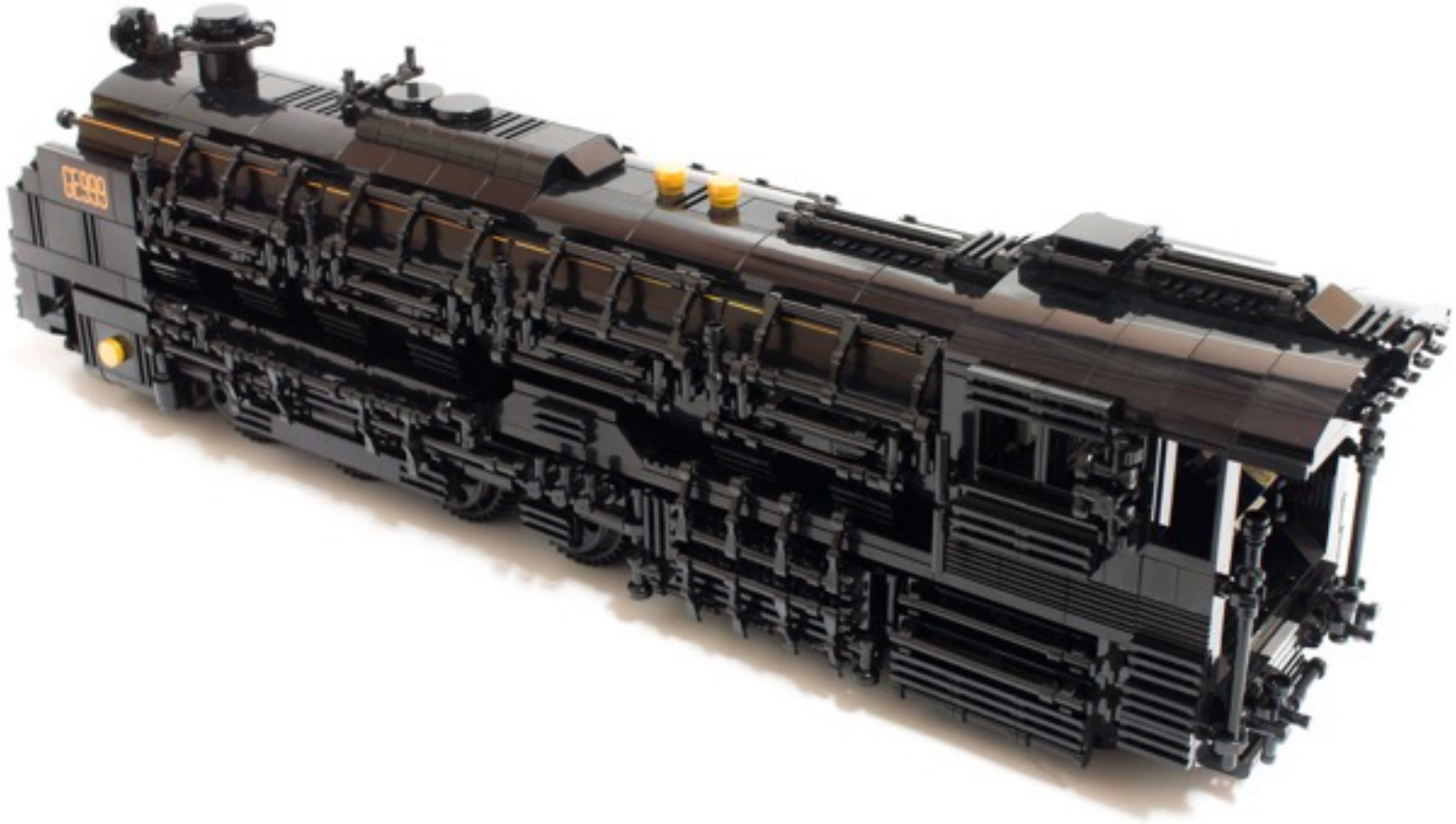
Eclipse Hackathon, Hamburg Dec 2016

- merged:



https://goo.gl/vXNpMj

Questions?



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