EclipseCon March 2013

e(fx)clipse – JavaFX Tooling and Runtime

Tom Schindl – BestSolution Systemhaus GmbH

EclipseCon March 2013
About Tom

- CTO BestSolution Systemhaus GmbH
- Eclipse Committer
  - e4
  - Platform UI
  - EMF
- Main developer of e(fx)clipse
- Twitter: @tomsontom
About e(fx)clipse
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* Opensource project lead by BestSolution.at
About e(fx)clipse

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- All sources provided under EPL
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- Community Support: www.efxclipse.org
- Commercial Support: www.bestsolution.at
About e(fx)clipse
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- Proposed as Eclipse.org project - e(fx)clipse
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* Current status - Initial IP Review
About e(fx)clipse

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- Current status - Initial IP Review
- expect to check in code in the next month
Take away from talk
Take away from talk

- JavaFX 2 is a great new technology for UI applications
Take away from talk

- JavaFX 2 is a great new technology for UI applications
- Most Eclipse technologies are not bound to SWT at all
2 faces of e(fx)clipse
2 faces of e(fx)clipse

Tooling
2 faces of e(fx)clipse

Tooling       Runtime

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e(fx)clipse - Tooling

Basic-Tooling
e(fx)clipse - Tooling

Basic-Tooling

- Java
- Classpath-Container for JDT
- Bootstrap Wizards
e(fx)clipse - Tooling

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- Classpath-Container for JDT
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- CSS
  - Custom written CSS-Editor
e(fx)clipse - Tooling

Basic-Tooling

- Java
  - Classpath-Container for JDT
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- CSS
  - Custom written CSS-Editor
- FXML
  - Customized WST-XML-Editor
e(fx)clipse - Tooling

Basic-Tooling

- Java
  - Classpath-Container for JDT
  - Bootstrap Wizards
- CSS
  - Custom written CSS-Editor
- FXML
  - Customized WST-XML-Editor
- Export
  - Support for fx-ant tasks
e(fx)clipse - Tooling

Basic Tooling Demo

✦ Create application
✦ Create and edit FXML
✦ Connect to controller
✦ Edit CSS-Stylesheet
✦ Export application
About e(fx)clipse

Advanced-Tooling
About e(fx)clipse

Advanced-Tooling

- FXGraph
- JSON like Language that „compiles“ to FXML

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Donnerstag, 28. März 13
About e(fx)clipse

Advanced-Tooling

- FXGraph
  - JSON like Language that „compiles“ to FXML
- OSGi-Tooling
  - Wizards

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About e(fx)clipse

Advanced-Tooling

- FXGraph
  - JSON like Language that „compiles“ to FXML
- OSGi-Tooling
  - Wizards
- SVG
  - Converter for SVG to FXML

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e(fx)clipse - Tooling

Advanced Tooling Demo

- Create an FXGraph-File
- Connect to a controller
- Convert a SVG-File
e(fx)clipse - Runtime

Basic-Runtime

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e(fx)clipse - Runtime

Basic-Runtime

- Java
  - Additional Layout-Panels (known from SWT)
  - Dialogs similar those of SWT/JFace
  - FXML/Guice-Injector

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e(fx)clipse - Runtime

Basic-Runtime

- Java
  - Additional Layout-Panels (known from SWT)
  - Dialogs similar those of SWT/JFace
  - FXML/Guice-Injector
- OSGi
  - Equinox-Extension

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e(fx)clipse - Runtime

Basic Runtime Demo

• Create OSGi-App
• JavaIDE: Launch JDT+WebView

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e(fx)clipse - Runtime

Advanced-Runtime
e(fx)clipse - Runtime

Advanced-Runtime

- Eclipse 3.x/4.x
- Specialized ViewPart
e(fx)clipse - Runtime

Advanced-Runtime

- Eclipse 3.x/4.x
- Specialized ViewPart
- OSGi + FXML
- DI support for loading

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e(fx)clipse - Runtime

Advanced/Runtime

- Eclipse 3.x/4.x
  - Specialized ViewPart
- OSGi + FXML
  - DI support for loading
- e4
  - renderers for e4
  - jemmy test support

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e(fx)clipse - OSGI & FXML

System.bundle - Object.class, String.class
e(fx)clipse - OSGI & FXML

System.bundle - Object.class, String.class

MyApp-Bundle (requires FX-Bundle)
MyController.class
MyControl.class
MyApp.class
myscreen.fxml

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e(fx)clipse - OSGI & FXML

System.bundle - Object.class, String.class

FX-Bundle

FXMLLoader.class
Node.class
...

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e(fx)clipse - OSGI & FXML

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can see

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e(fx)clipse - EAP
e(fx)clipse - EAP

Eclipse 4 Application Platform

OSGi (Equinox)

JRE

EMF

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e(fx)clipse - EAP

- Eclipse 4 Application Platform
- OSGi (Equinox)
- JRE
- Services
- DI-Container
- Workbench Model
- EMF

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e(fx)clipse - EAP

App
- SWT-UI
- Core-Business-Logic

Framework
- EAP-SWT
- Eclipse 4 Application Platform
- OSGi (Equinox)
- JRE

Services
- DI-Container
- Workbench Model

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e(fx)clipse - EAP

App
- JFX-UI
- Core-Business-Logic

Framework
- Eclipse 4 Application Platform
- OSGi (Equinox)
- JRE
- EMF
- DI-Container
- Workbench Model
- Services

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e(fx)clipse - Runtime

DI Runtime Demo

✦ Show Contacts Demo
✦ Show Media Demo
Create e4 app
Create Jemmy Test case
e(fx)clipse - Runtime

bitbucket sample

- Launch application
- Edit files
e(fx)clipse - FX43

- Browser-App
- Media-App
- ...

- FX43-Desktop
- OSGi (Equinox)
- JVM

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e(fx)clipse - FX43

Browser-App | Media-App | ...

FX43-Desktop (fullscreen)

OSGi (Equinox)

JVM

Linux-Desktop-Manager

Linux (x86/arm)

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e(fx)clipse - Runtime

fx43 sample

- Launch application
- Dynamically Install new app
e(fx)clipse - Sources

- **fx-43**: [https://github.com/tomsontom/fx43](https://github.com/tomsontom/fx43)

- **fx-ide**: [https://github.com/tomsontom/fx-ide](https://github.com/tomsontom/fx-ide)

- **fx-bitbucket**: [https://bitbucket.org/tschindl/bitbucketmgr](https://bitbucket.org/tschindl/bitbucketmgr)

- **e(fx)clipse**: [https://github.com/tomsontom/e-fx-clipse](https://github.com/tomsontom/e-fx-clipse)
e(fx)clipse – Runtime

• Credits:
  • Oxygene Icons from KDE (LGPL)

• Resources
  • www.efxclipse.org
  • www.bestsolution.at
  • Twitter: @tomsontom