Extending Eclipse Che to build custom cloud IDEs

EclipseCon NA 2016 - March 10

Stevan Le Meur (@stevanLM)
Florent Benoit (@florentbenoit)

#eclipseche
The developer workspace
The browser IDE
The dashboard

Select Stack

- **READY-TO-GO STACKS**
  - **NODE**
    - Ubuntu, Git, Node.js, NPM, Gulp, Bower, Grunt, Yeoman, Angular, Karma
  - **JAVA**
    - Java, JDK, Maven, Tomcat, Subversion, Ubuntu, Git
  - **ASP.NET**
    - Debian, ASP, Git, mono, libc6, dnx, libuv
  - **BLANK**
    - Blank, Ubuntu, Git, Subversion

- **STACK LIBRARY**
  - Ubuntu, Git, PHP, mysql, sqlite, Apaide, Composer

- **CUSTOM STACK**
Extensions, Plug-Ins and Assemblies

- Extension
  - Java + Javascript + CSS

- Extension
  - Java + Javascript + CSS

- Extension
  - Java + Javascript + CSS

- Che Core

- Plug-Ins

- Assembly
  - Server
  - Desktop App
  - App Server + Plug-Ins + Installer

Eclipse Che
Growing the base of plug-ins...

Languages
Syntax highlighting, stacks, templates, and code assistants.
- Java
- C++
- JavaScript
- Python
- PHP
- Ruby
- SQL

Frameworks
Project types, scaffold tool integration, and syntax analysis.
- OpenShift
- Angular JS
- Docker
- Yeoman

Builders
Builders to manage unit tests, compilation, linking, and dependencies.
- Ant
- Bower
- Grunt
- Gulp
- Maven
- Npm

Tools
Extensions that integrate the IDE with other parts of the developer tool chain.
- Git
- Orion
- SSH
- Subversion
Custom Eclipse Che

- Project Type
  - Enable plug-in
  - Create project wizard pages

- Add new stack
- Add template
Registering project type

@Singleton
class CustomProjectType extends ProjectTypeDef {

    @Inject
    public MavenProjectType() {
        super("custom", "My Custom project type");
    }
}

newSetBinder(binder(), ProjectTypeDef.class).addBinding().to(CustomProjectType.class);
Live Demo

- Custom workspace runtime and commands
- Plug-ins
- Custom dedicated stacks
- Dedicated assemblies
- Use another programming language
Demo recap

- Extensibility: Customize without creating plug-ins
- Extensibility: Develop plug-ins
- Creating new assemblies
Get started with Eclipse Che

Sources
github.com/eclipse/che

Dev List
che-dev@eclipse.org

IRC
#eclipseche

Gitter
gitter.im/eclipse/che
And of course...

eclipse.org/che

Getting started guides
Downloads
Documentations
Contribution guide
<table>
<thead>
<tr>
<th>Session</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code in the Cloud with Eclipse Che &amp; Docker</td>
<td>Tuesday, 4:15 PM</td>
</tr>
<tr>
<td>An Introduction to Eclipse Che</td>
<td>Wednesday, 1:30 PM</td>
</tr>
<tr>
<td>Extending Eclipse Che to Build Custom Cloud IDEs</td>
<td>Thursday, 1:45 PM</td>
</tr>
<tr>
<td>Pair Programming with Che, Eclipse, Flux, Orion and Docker</td>
<td>Thursday, 2:30 PM</td>
</tr>
</tbody>
</table>

Che experts will be at the Hackathon! @eclipse_che
Questions ?
Thank you