

Eclipse Equinox OSGi Training COURSE OUTLINE



Description

Equinox is the core of the Eclipse platform and a major contributor to the success of Eclipse on the client-side (RCP). Bundles (plug-ins) and Extension Points based on the OSGi runtime are solid architectural building blocks. However, Equinox is not limited to the client-side. It can be applied in a general way to build any kind of application, especially servers.

Equinox-based servers use the OSGi runtime which provides a service abstraction. OSGi is a dynamic environment where bundles can be installed, started, stopped and uninstalled at runtime. The Equinox vision is to model a community and a repertoire of bundles specifically built for servers, similar to the Eclipse SDK where bundles cover a vast array of functions and purposes for the client. Imagine extending your server with additional functionality by installing some extra bundles, for example a log analyzer for your HTTP service.

This intensive course covers fundamentals of OSGi as well as intermediate topics and specific features of Eclipse Equinox. You will apply the theoretical knowledge in several labs which will give you the practical experience necessary for your projects.

Audience

Software developers and architects

Prerequisites

Good knowledge of Java development, experience using Eclipse as a Java IDE and working knowledge of XML

Duration

Two-day instructor-led class with hands-on labs

<p>1. OSGi-Style Modularization</p> <ul style="list-style-type: none">• Introduction to OSGi concepts of bundles and modularity• Bundle lifecycle – developing, running and debugging bundles
<p>2. Runtime Dynamics</p> <ul style="list-style-type: none">• Dynamic awareness• Trackers, listeners and activators
<p>3. Service Model</p> <ul style="list-style-type: none">• Inter-bundle collaboration• Defining and discovering services
<p>4. Declarative Services</p> <ul style="list-style-type: none">• Concepts for designing declarative services• POJO techniques• Best practices for naming, markup• PDE tooling