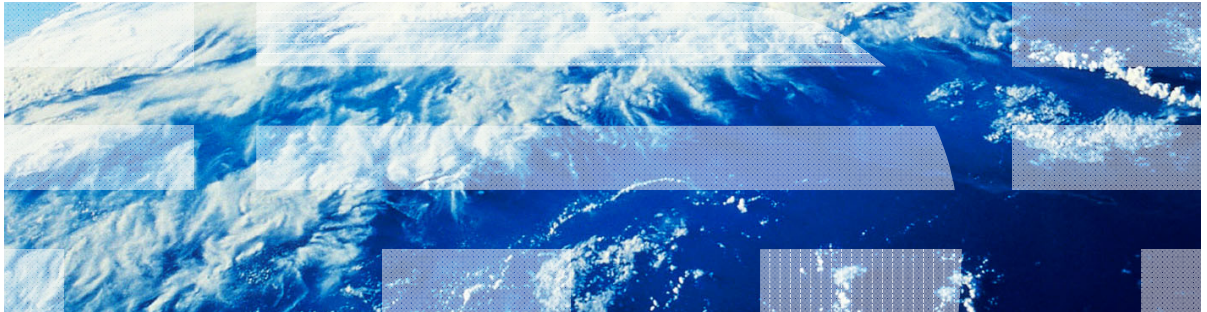


IBM Worklight V5.0.5 Getting Started

Module 2 – Setting Up Your Development Environment



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Agenda

- Requirements
- Installing Eclipse
- Installing the Worklight® Studio
 - Overview
 - Installation
- Appendix: Eclipse Overview

Development Environment: Choice of Operating System

- Worklight Studio is supported on following operating systems:
 - Windows
 - Mac OS
 - Linux
- You can develop for Worklight Applications with iOS environments on any of these operating systems. However, due to restrictions set by Apple, you can compile an iOS project only on a Mac OS.
- When used on a Mac OS, the Worklight Studio integrates with Xcode (the iOS development environment).
- For more information, see the IBM Worklight V5.0.5 Information Center.

Agenda

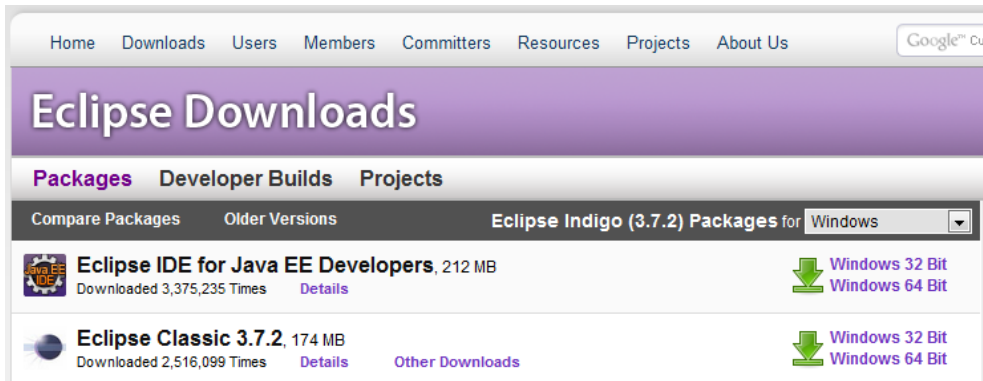
- Requirements
- Installing Eclipse
- Installing the Worklight Studio
 - Overview
 - Installation
- Appendix: Eclipse Overview

Eclipse: Introduction

- Multi-purpose Integrated Development Environment
- Open source
- Development Efficiency
 - Editor
 - Debugger
 - Source Control
- The Worklight Studio is a robust plug-in for Eclipse that supports the efficient development of rich, multi-channel applications.

Eclipse Downloading

- Eclipse can be downloaded at <http://www.eclipse.org/>
- The following editions of Eclipse are supported:
 - Eclipse Classic
 - Eclipse for Java™ Enterprise Edition (Java EE) Developers



The screenshot shows the Eclipse Downloads page. At the top, there is a navigation bar with links: Home, Downloads, Users, Members, Committers, Resources, Projects, About Us, and a Google search box. Below the navigation bar is a purple header with the text "Eclipse Downloads". Underneath the header are three tabs: Packages, Developer Builds, and Projects. The "Packages" tab is selected. Below the tabs is a dark grey bar with "Compare Packages", "Older Versions", and "Eclipse Indigo (3.7.2) Packages for" followed by a dropdown menu set to "Windows". The main content area displays two download options:

Package Name	Size	Download Count	Details	Other Downloads	OS Support
Eclipse IDE for Java EE Developers	212 MB	Downloaded 3,375,235 Times	Details		Windows 32 Bit Windows 64 Bit
Eclipse Classic 3.7.2	174 MB	Downloaded 2,516,099 Times	Details	Other Downloads	Windows 32 Bit Windows 64 Bit

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Worklight Studio: Introduction

- Worklight Studio is an Eclipse plug-in that contains an embedded version of Worklight Server which simplifies and facilitates the development process.
- Worklight Studio provides a quick and easy way to:
 - Create and modify applications
 - Deploy applications to the embedded Worklight Server
 - Preview and manage applications by using Worklight Console
 - Create custom server-side Java code that can be used by Worklight adapters
 - Create and modify Worklight adapters
 - Deploy Worklight adapters to the embedded Worklight Server
 - Test Worklight adapter procedures

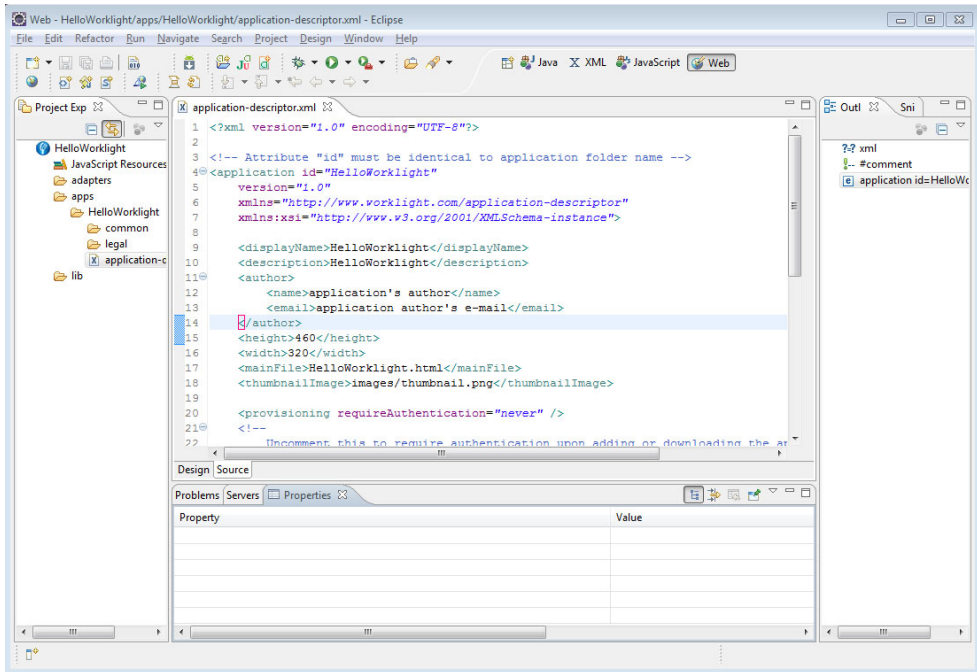
Downloading Worklight Studio

- You can download Worklight Studio locally as a compressed file, and then install it as an Eclipse archive.
- Alternatively, from Eclipse, you can add the **Worklight Studio** Eclipse update site, and install Worklight Studio directly from the web.
- See <http://www.ibm.com/developerworks/mobile/worklight.html> for download and installation information.

Agenda

- Requirements
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 - Overview
 - Installation
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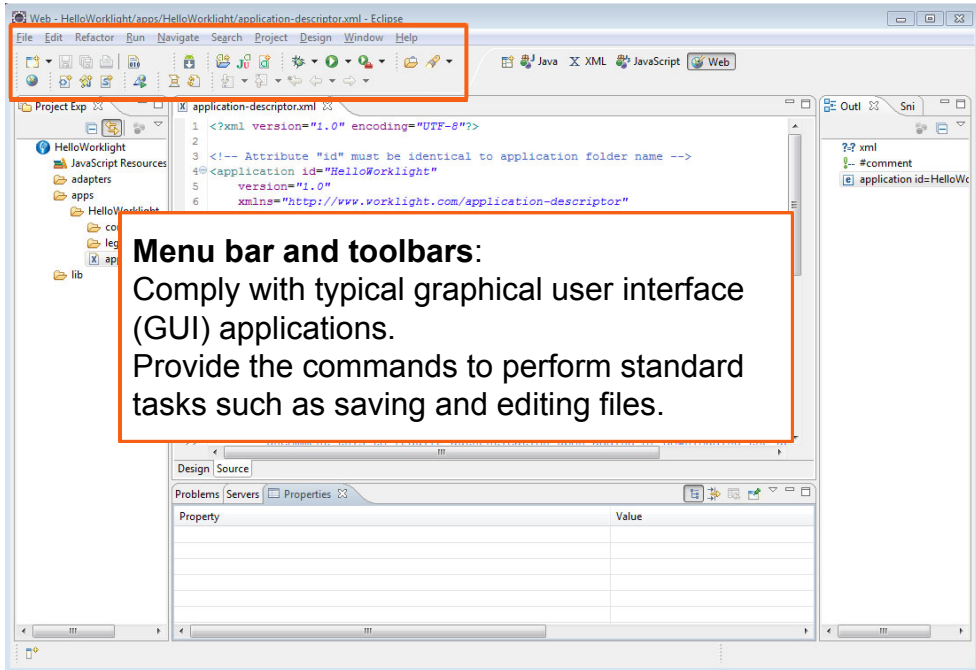
Eclipse Terminology: Workbenches



Eclipse Terminology: Workbenches

The Eclipse workbench:
The term *workbench* is used to describe the environment where all of your work is done. The workbench contains the menu bar, toolbars, and one or more perspectives.

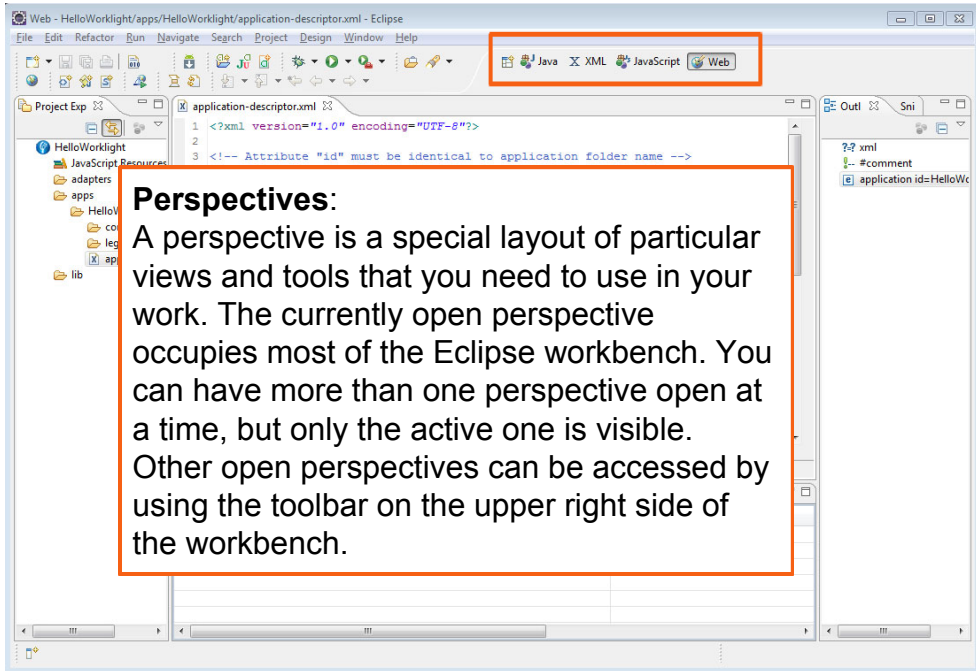
Eclipse Terminology: Menu bar and Toolbar



The screenshot shows the Eclipse IDE interface. The menu bar at the top includes File, Edit, Refactor, Run, Navigate, Search, Project, Design, Window, and Help. Below the menu bar is a toolbar with various icons for file operations and development tasks. The main editor area displays XML code for an application descriptor. A text box is overlaid on the editor area, containing the following text:

Menu bar and toolbars:
Comply with typical graphical user interface (GUI) applications.
Provide the commands to perform standard tasks such as saving and editing files.

Eclipse Terminology: Perspectives



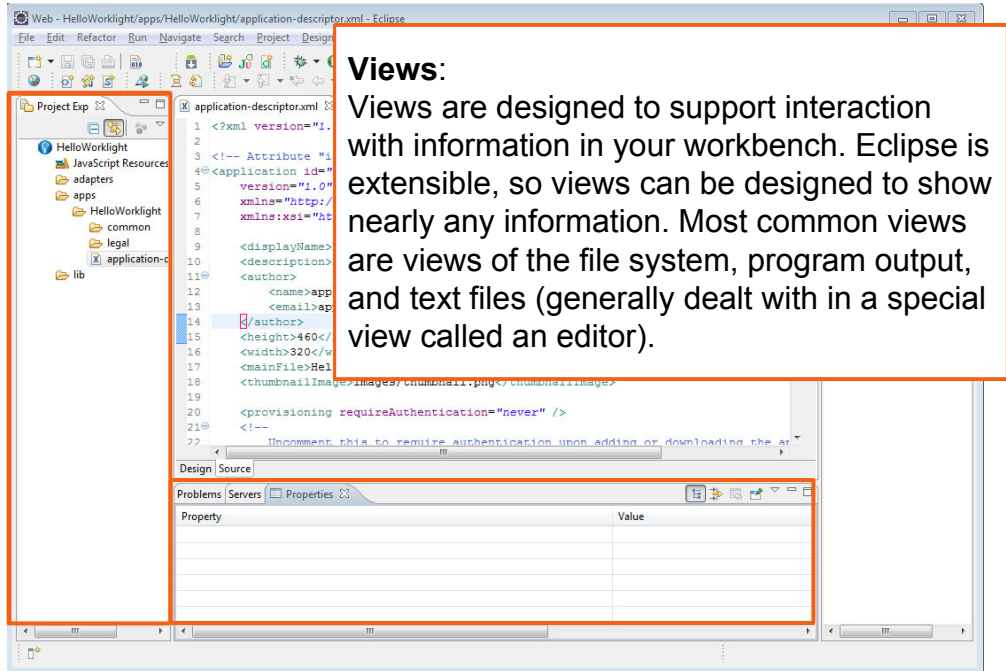
The screenshot shows the Eclipse IDE interface. The title bar reads 'Web - HelloWorldlight/apps/HelloWorldlight/application-descriptor.xml - Eclipse'. The menu bar includes 'File', 'Edit', 'Refactor', 'Run', 'Navigate', 'Search', 'Project', 'Design', 'Window', and 'Help'. The toolbar contains various icons, with a red box highlighting the 'Web' perspective icon. The 'Project Explorer' on the left shows a tree view with 'HelloWorldlight' as the root, containing subfolders like 'adapters', 'apps', 'HelloWorld', 'co', 'leg', 'ap', and 'lib'. The main editor area displays an XML file named 'application-descriptor.xml' with the following content:

```
1 <?xml version="1.0" encoding="UTF-8"?>
2
3 <!-- Attribute "id" must be identical to application folder name -->
```

The 'Outline' view on the right shows the XML structure with a selected element: 'application id=HelloWorld'.

Perspectives:
A perspective is a special layout of particular views and tools that you need to use in your work. The currently open perspective occupies most of the Eclipse workbench. You can have more than one perspective open at a time, but only the active one is visible. Other open perspectives can be accessed by using the toolbar on the upper right side of the workbench.

Eclipse Terminology: Views



The screenshot shows the Eclipse IDE interface. The Project Explorer on the left displays a project structure with folders like 'adapters', 'apps', 'HelloWorklight', 'common', 'legal', and 'lib'. The main editor area shows an XML file named 'application-descriptor.xml' with the following content:

```
1 <?xml version="1.0" encoding="UTF-8" standalone="no" ?>
2
3 <!-- Attribute "id" is required -->
4 <application id="com.ibm.worklight.application.descriptor"
5     version="1.0"
6     xmlns="http://www.ibm.com/xmlns/res/1.0/worklight"
7     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
8     xsi:schemaLocation="http://www.ibm.com/xmlns/res/1.0/worklight
9     http://www.ibm.com/xmlns/res/1.0/worklight/application-descriptor.xsd"
10     >
11     <description>
12         <name>app
13         <email>app@ibm.com
14         </author>
15         <height>460</height>
16         <width>320</width>
17         <mainFile>HelloWorklightApp.js
18         <thumbnailImage>images/thumbnail.png</thumbnailImage>
19     </description>
20     <provisioning requireAuthentication="never" />
21     <!-- Uncomment this to require authentication upon adding or downloading the app -->
22 </application>
```

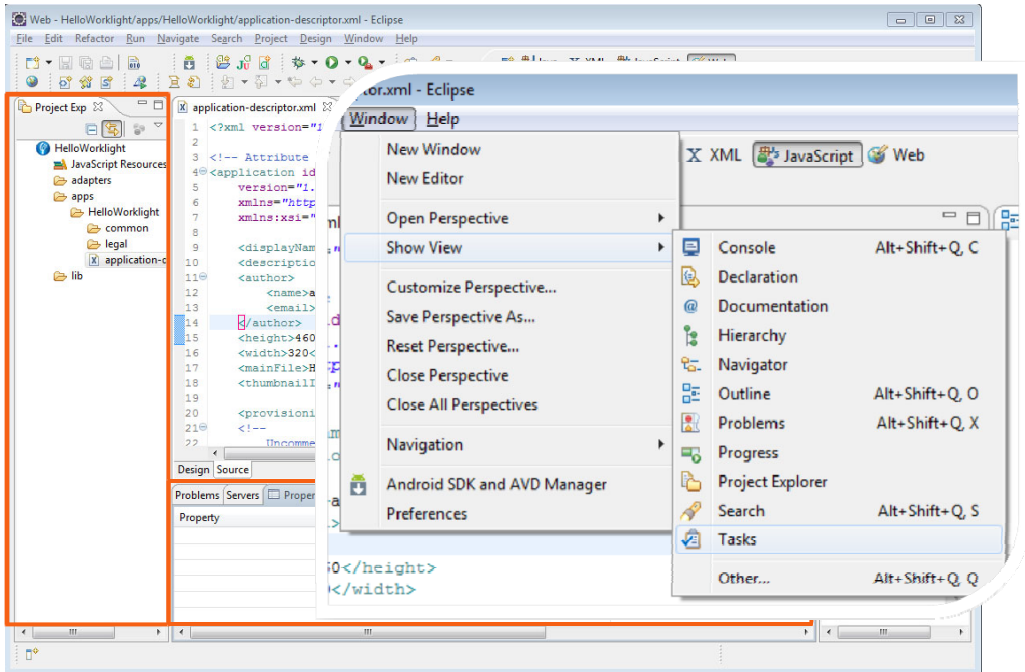
The Properties view at the bottom shows a table with columns for 'Property' and 'Value'.

Property	Value

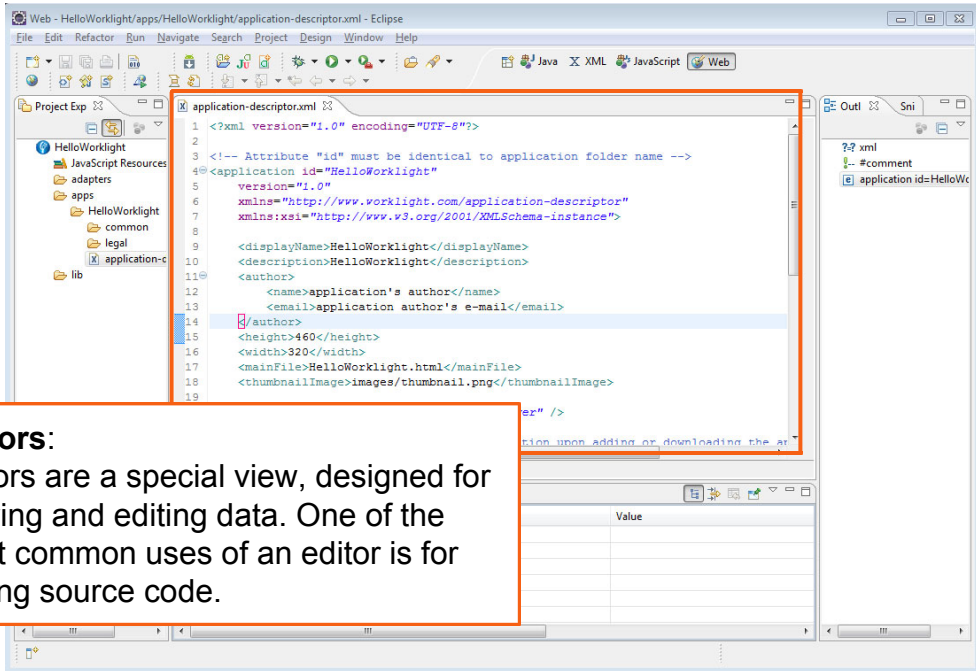
Views:

Views are designed to support interaction with information in your workbench. Eclipse is extensible, so views can be designed to show nearly any information. Most common views are views of the file system, program output, and text files (generally dealt with in a special view called an editor).

Eclipse Terminology: Views (continued)



Eclipse Terminology: Editors



The screenshot shows the Eclipse IDE interface. The main editor window, titled "application-descriptor.xml", contains the following XML code:

```
1 <?xml version="1.0" encoding="UTF-8"?>
2
3 <!-- Attribute "id" must be identical to application folder name -->
4 <application id="HelloWorklight"
5     version="1.0"
6     xmlns="http://www.vorklight.com/application-descriptor"
7     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
8
9     <displayName>HelloWorklight</displayName>
10    <description>HelloWorklight</description>
11    <author>
12        <name>application's author</name>
13        <email>application author's e-mail</email>
14    </author>
15    <height>460</height>
16    <width>320</width>
17    <mainFile>HelloWorklight.html</mainFile>
18    <thumbnailImage>images/thumbnail.png</thumbnailImage>
19
```

The text box on the left contains the following text:

Editors:
Editors are a special view, designed for viewing and editing data. One of the most common uses of an editor is for editing source code.

Useful Keyboard Shortcuts

- **CTRL+F**: find
- **CTRL+K**: find next
- **CTRL+J**: incremental find next
- **CTRL+L**: go to line
- **CTRL+SHIFT+R**: open resource
- **CTRL+Q**: last edit location
- **ALT+ ←** (left): back
- **ALT+ →** (right): forward

- Note: CTRL key is for Linux and Windows. Use CMD key on Mac instead.

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