



IBM Software Group | Lotus Expeditor 6.1.1 Education

IBM® Lotus® Expeditor Client for Desktop Platform management

Lotus software



@ business on demand software

© 2007 IBM Corporation

This presentation introduces the platform management capabilities of IBM Lotus Expeditor Client for Desktop.

Goals

- Understand how to manage the client platform

The goal of this presentation is to understand how to manage the IBM Lotus Expeditor 6.1 Client for Desktop platform.

Agenda

- Overview
- Stand-alone deployment
- Enterprise deployment and management

The agenda of this presentation is to provide an overview of platform management, explain the stand-alone deployment of software, and describe the enterprise deployment of software and management for the client platform.

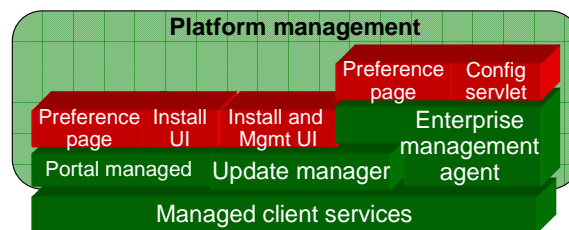
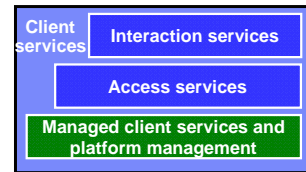
Section

Overview

Let's start with an overview of platform management.

Platform management

- Value
 - ▶ Enable “On Demand” management of applications
- Deployment options
 - ▶ Stand-alone
 - ▶ Enterprise
 - ▶ Portal managed
- Standards
 - ▶ Eclipse
 - ▶ OSGi
 - ▶ Open Mobile Alliance



Platform Management installs, maintains, and configures applications and services on the client. There are two platform management services. The Update Manager enables end-users to directly install applications and components from standard Eclipse update sites onto the Workbench.

The Enterprise Management Agent enables an administrator to manage the client platform remotely by using a Device Manager server, which is provided by the server platform.

IBM Lotus Expeditor supports three options to deploy software to the client. Stand-alone deployment allows an end-user to install software onto their device through the Eclipse Update Manager. Enterprise deployment enables a System Administrator to install software onto multiple devices by using the Enterprise Management Agent and a Device Manager server. And Portal Managed client also supports download of applications and configuring preferences.

Section

Stand-alone deployment

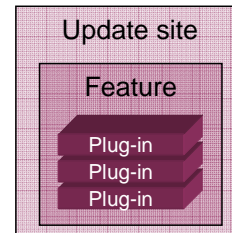
Next, let's cover stand-alone deployment of software to the client platform.

Eclipse update manager

Install UI Mgmt UI

Eclipse update manager

- Developers package components as plug-ins
- Deployers package components into features
- Features published to update sites
- Features installed from update sites using the update manager
- End-user can manage software for their client using installation or application management UI
 - ▶ Install software from local file system or remote site
 - ▶ Install, disable, uninstall features



In IBM Lotus Expeditor 6.1, developers package software components as Eclipse plug-ins. Solution Deployers then package these plug-ins into installable Eclipse Features consisting of one or more plug-ins, and, optionally, other Features. They then publish these Features to an Eclipse Update Site. End-users can use the installation user interface with the Update Manager to install these Features from an Update Site onto their client. Furthermore, end-users can use the management user interface to disable and uninstall Features that are installed on their client.

Global install handler

Eclipse update manager

- **Global install handler**
 - ▶ Provided by the client platform
 - ▶ used to perform updates to files present on the client system.
- **Install handlers**
 - ▶ Java™ classes run by the update manager during the installation, configuration, and uninstall processing of a feature.
- **Update manager**
 - ▶ Handles standard installation of features, plug-ins, and fragments without writing any Java code
 - ▶ If additional tasks are required to be performed during install, configuration, and uninstall processing, an install handler can be used to perform these tasks.
 - ▶ An example of tasks that might be performed by install handlers include are file updates

The client platform provides an install handler that can be used to perform updates to files present on the client system.

Install handlers are Java™ classes that are run by the Update Manager during the install, configuration, and uninstall processing of a feature.

Update manager can handle standard installation of features, plug-ins, and fragments without writing any Java code. However, if additional tasks are required to be performed during install, configuration, and uninstall processing, an install handler can be used to perform these tasks. An example of tasks that might be performed by install handlers is performing file updates.

Global install handler

Eclipse update manager

- The client platform provides an install handler that can be used to perform updates to files present on the client system. The install handler provides additional capabilities beyond that offered by the default install handler provided by Eclipse. Capabilities provided by the install handler include the following:
 - Ability to modify rcinstall.properties settings for single or multi-user for:
 - ▶ bootclasspath
 - ▶ PATH / LD_LIBRARY_PATH
 - ▶ class path
 - ▶ VM system properties
 - ▶ VM
 - ▶ Other properties
 - Ability to set locations of JVM, RCP base location, RCP launcher location, provisioning manifest location and version
 - Ability to launch a native script or executable file

The client platform provides an install handler that can be used to perform updates to files present on the client system. The install handler provides additional capabilities beyond that offered by the default install handler provided by Eclipse. Capabilities provided by the install handler include the following:

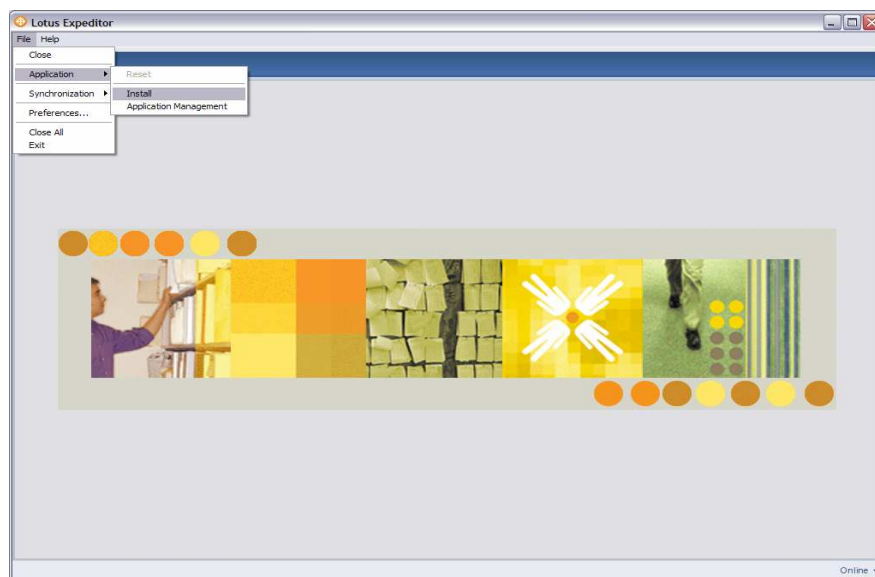
Ability to modify rcinstall.properties settings for single or multi-user for:

- bootclasspath
- PATH / LD_LIBRARY_PATH
- class path
- VM System properties
- VM
- Other properties

Ability to set locations of JVM, RCP base location, RCP launcher location, provisioning manifest location and version

Ability to launch a native script or executable

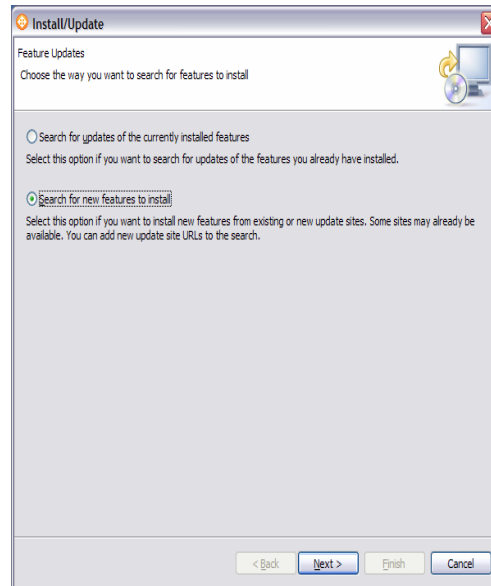
Application installation user interface

Install UI

This slide shows the application install user interface. Launch the client workbench, click **Application**, and then click **Install**.

Application installation user interface

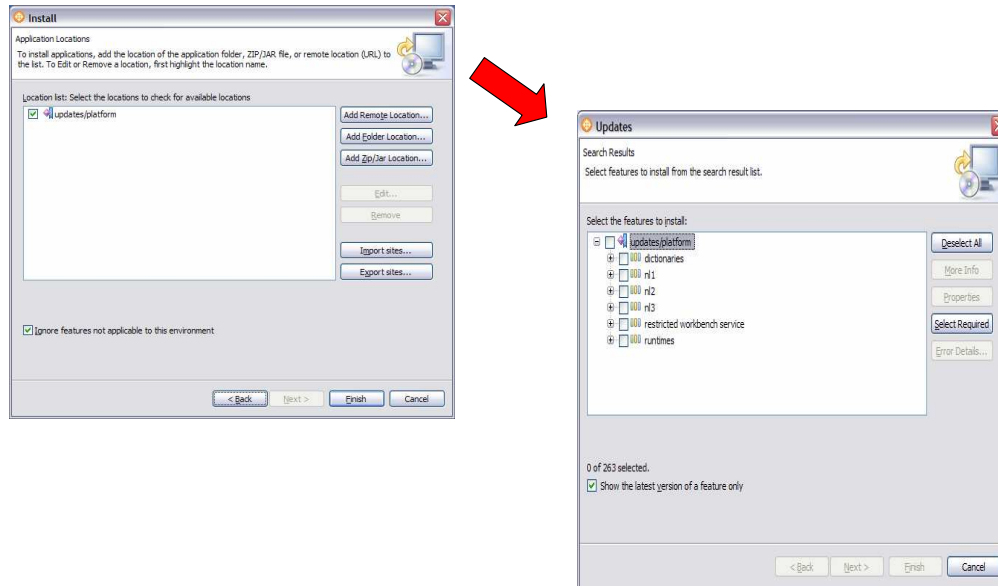
Install UI



This slide shows the application install user interface. Click the radio button **Search for new features to install** and click **Next**.

Application install user interface

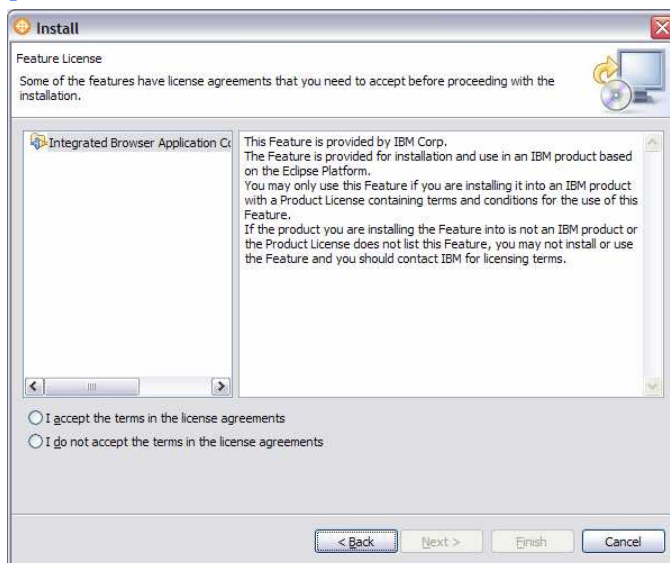
Install UI



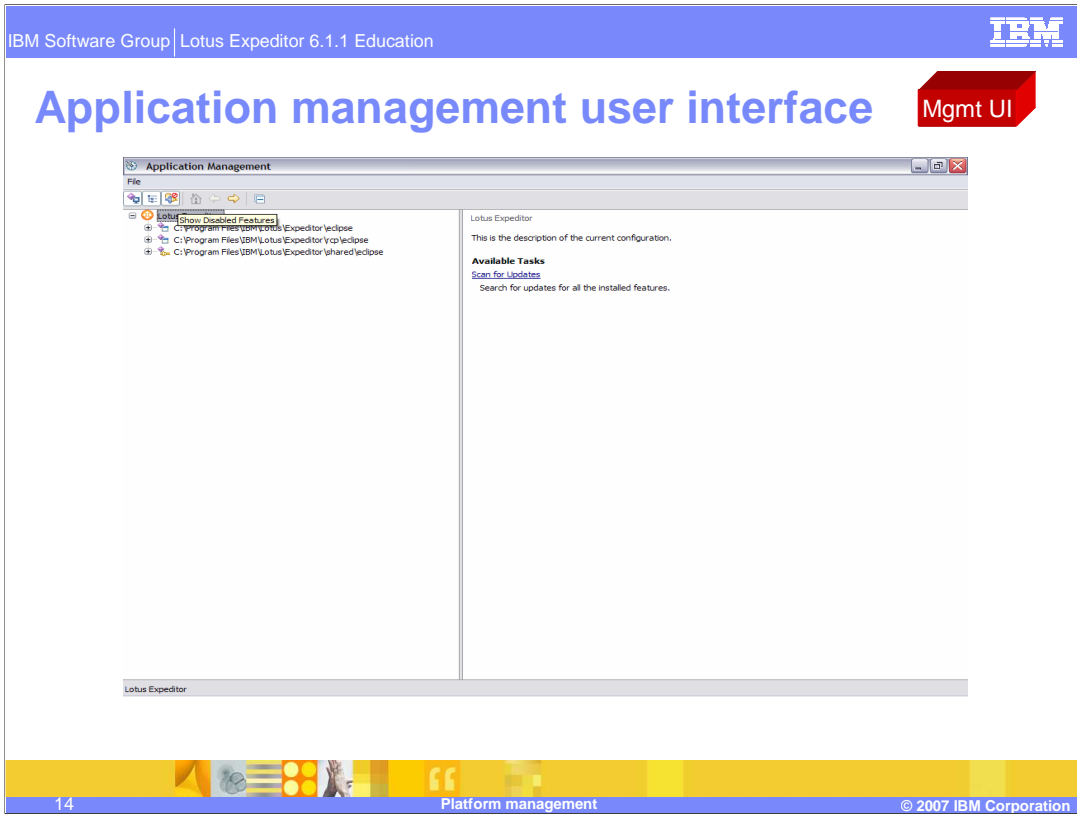
This slide shows the application install user interface. To install applications, add the location of the application folder, ZIP/JAR file, or remote location (or URL) to the list. Select the site you wish to install from and click **Finish**. The next screen will display all features that can be selected to be installed.

Install UI

Install UI



This slide shows the application install user interface. Accept the license and click **Finish** to install the feature.

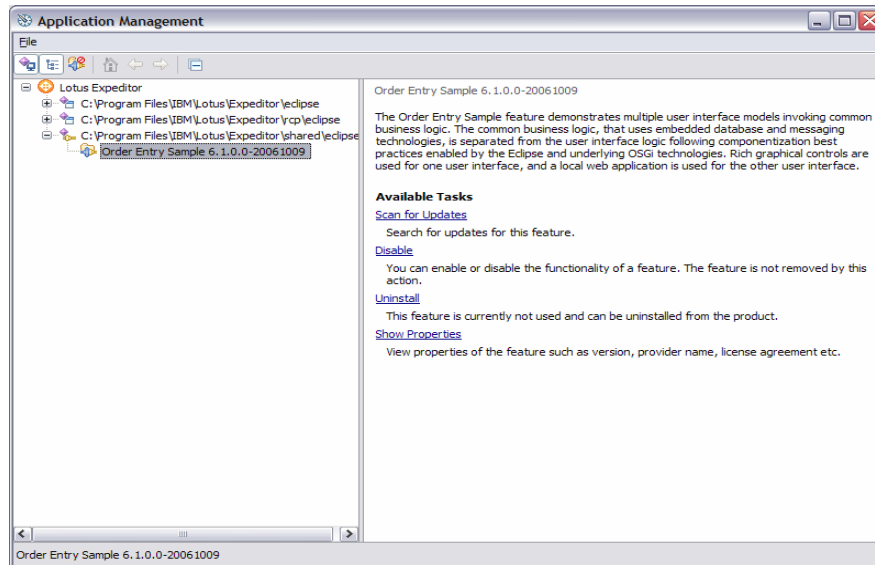


This slide shows the application management user interface. Launch the client workbench, click **Application**, and then click **Application Management**. The installed features are broken down into three groups: Eclipse features, RCP features, and Shared features.

One option on the toolbar is “Show Disable Features” – if a feature has been disabled but not uninstalled, it will displayed when this icon is selected.

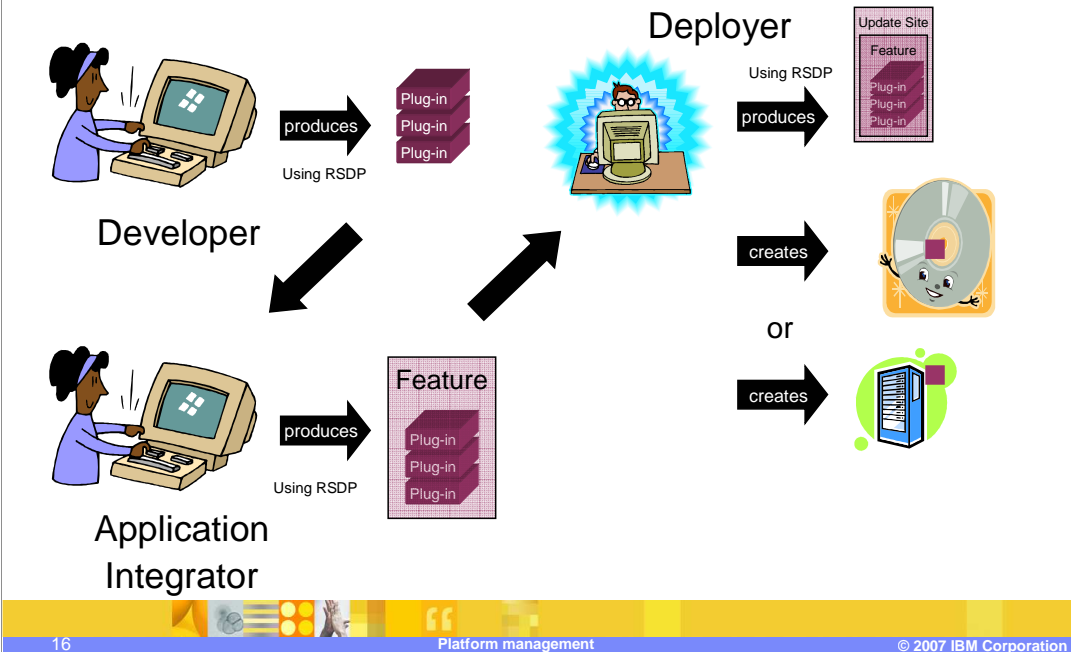
Application management user interface

Mgmt UI



This slide shows the application management user interface. When you highlight an application or feature that is installed, all possible actions are displayed in the right hand view. These include: **Scan for updates**, **Disable**, **Uninstall** and **Show Properties**.

Stand-alone deployment



Let's now walk through the process of stand-alone deployment. The Developer uses the Rational Software Development Platform (or RSDP) to create one or more plug-ins for their software components. They may either use the Plug-in Project wizard in the Plug-in Development Environment (PDE) or the Client Services Project wizard in the Bundle Tools to create the plug-ins.

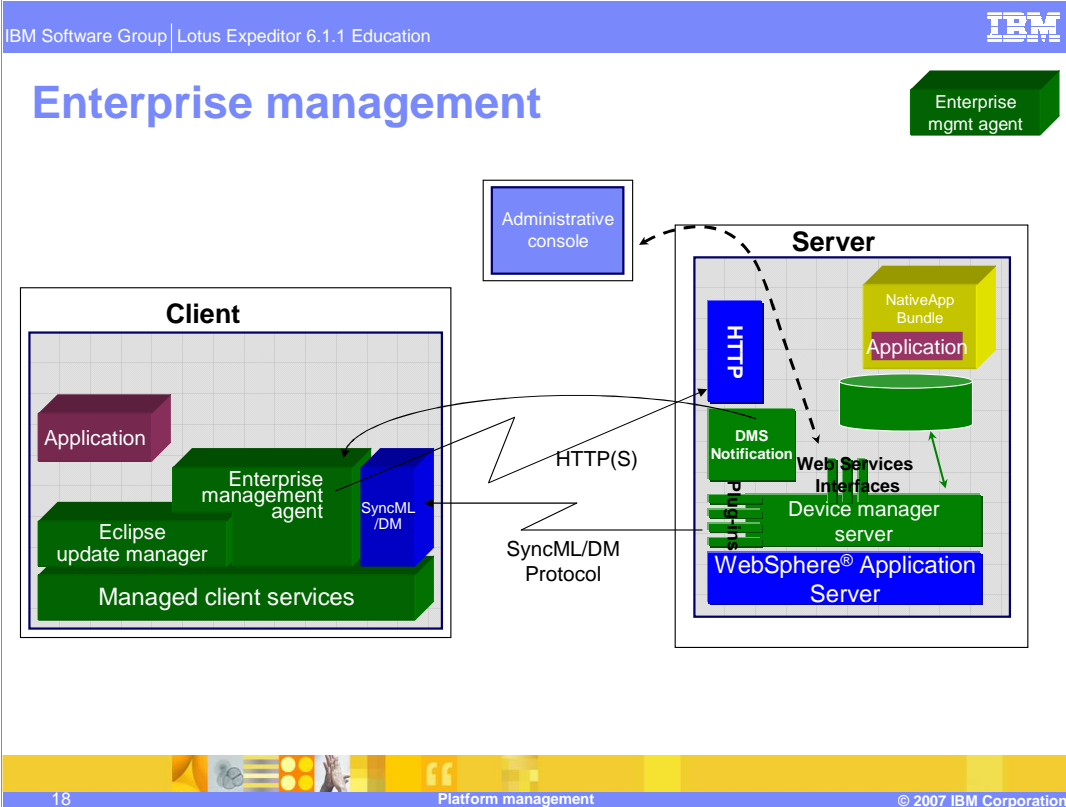
Next, the Application Integrator uses the Feature Project wizard in the PDE to integrate plug-ins into a Feature.

The Deployer then produces an Update Site that contains one or more Features. They can then create Update Sites on CD's or on the Web. End-users can then subsequently access these Update Sites from their client workbench to install Features onto their client platform.

Section

Enterprise deployment and management

Finally, let's explore enterprise deployment of software and management for the client platform.



The Enterprise Management Agent works co-operatively with the Device Manager server provided by the IBM Lotus Expeditor 6.1 Server to perform management operations. The agent and server use the SyncML/DM protocol defined by the Open Mobile Alliance to communicate management requests. A System Administrator uses the Device Manager (Admin) Console to schedule management jobs for devices that include software installation, update, and configuration. When installing and updating software components, the management system determines which components are already on the device and then installs only the missing components based on information about the dependencies among all the requested components (for example, bundles). The Device Manager server can also notify the Agent about management jobs. When the Agent receives a management job to install components, the Agent uses HTTP/HTTP(S) to pull the necessary components from the Device Manager server. Next, let's discuss Enterprise Management in more detail.

Enterprise management agent

Update
managerEnterprise
Management
Agent

- Java agent running on the client
- SyncML/DM protocol used between agent and device manager server
- Agent can be configured for periodic polling of the device manager server
- Device manager server can notify the agent to connect
 - ▶ HTTP Service must be configured
 - Listen on address other than localhost (for example, ALL)
 - Use a static port (for example, 8777)
- Provides OSGi specific capabilities such as bundle control
- Provides platform inventory capabilities, enabling management of platform configuration
- Supports Win32® and Linux native extensions for native software inventory, configuration, installation, uninstallation
- Supports secure connections with device manager server over SSL
- Uses update manager to install features from distributed update sites

The Enterprise Management Agent is written in Java and runs on the Managed Client Services provided by the client platform. The agent uses the SyncML/DM protocol to communicate with the Device Manager server to perform management jobs. The agent can be configured to periodically poll the Device Manager server for jobs. However, the Device Manager server can also notify the agent to connect and then perform a management job (for example, install software). The agent provides OSGi-specific capabilities supported by the Managed Client Services (such as bundle control), and provides inventory capabilities so a System Administrator can manage the configuration of the client platform.

The agent supports native extensions to manage native software on Windows and Linux clients. These extensions support Install, Uninstall, Status, Start, Stop, and gathering information from STDOUT/STDERR.

SSL is also enabled to secure the connection between the Enterprise Management Agent and the Device Manager server.

The Device Manager server now also deploys Features. The features and update sites can be directly registered to the Device Manager Server. In the previous versions, the site was wrapped in a bundle using NativeAppBundle tool and then deployed to the client. The new version eliminates the tedious step of using the NativeAppBundle tool to wrap the site.

IBM Software Group | Lotus Expeditor 6.1.1 Education IBM

Enterprise management agent (continued)

Preferences page	Configuration servlet
Update manager	Enterprise management agent

- Configuration
 - ▶ During installation
 - ▶ After install using one of these options
 - Locally by using Preference Page
 - Remotely by using Device Manager Console to communicate with Enterprise Management Agent via Device Manager server
 - Locally or remotely by using Web browser to open configuration servlet hosted in the Web Container running the service
- When configuring using preference page, user will receive warning

20 Platform management © 2007 IBM Corporation

You can configure the Enterprise Management Agent either during or after installation of the client. You are prompted to configure the agent while installing the client platform, and, if you choose to do so, you can use a Preferences Page to provide the information necessary to connect the agent to a Device Manager server. You may also configure the agent after installing the client by using one of the following options.

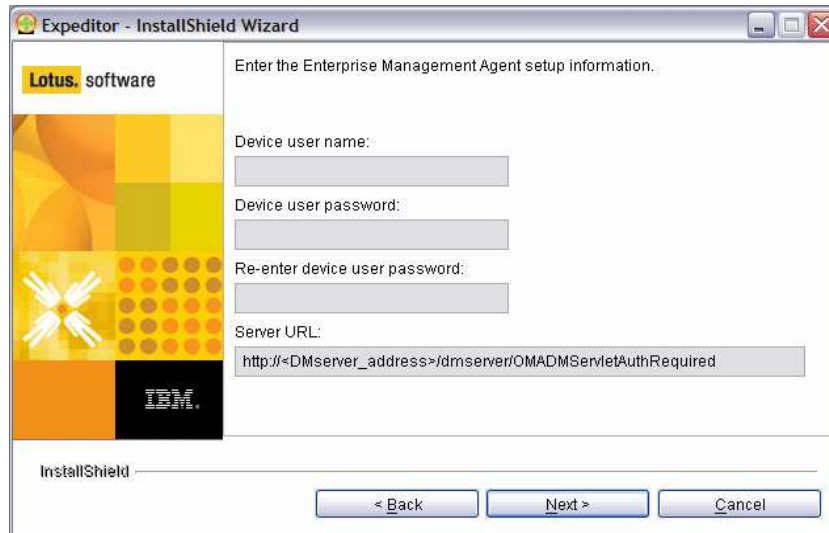
An end-user can configure the agent locally from the client workbench by clicking **File -> Preferences -> Enterprise Management Agent** and then use the Preferences Page to configure the agent.

A System Administrator can remotely configure the agent by using the Device Manager Console to configure the agent via the Device Manager server.

A System Administrator can locally or remotely configure the agent by using a Web browser to open a configuration servlet that is hosted by the Web container running the client service. When the IBM Lotus Expeditor client is installed as a system management service, the Enterprise Management Agent Servlet is the only way to configure and control the Enterprise Management Agent.

If you choose to enable the Enterprise Management Agent, the end-user will no longer have control over installing, updating, or uninstalling features so check with your Systems Administrator before you enable the agent.

Installation - Server managed client

Install

Expeditior - InstallShield Wizard

Lotus. software

Enter the Enterprise Management Agent setup information.

Device user name:

Device user password:

Re-enter device user password:

Server URL:

InstallShield

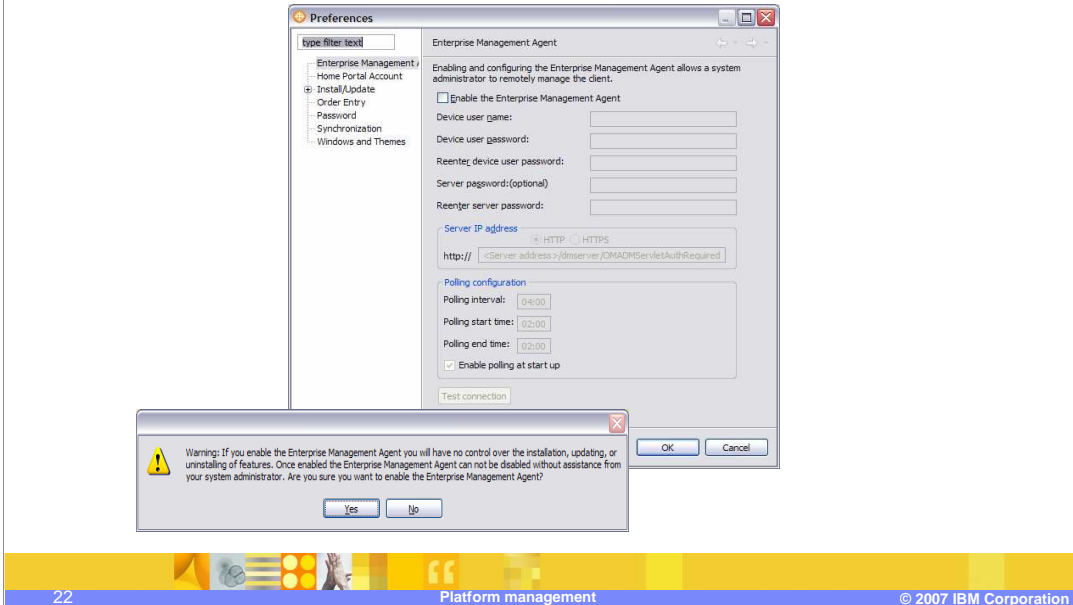
< Back Next > Cancel

To complete this Wizard window, users enter their device user name and password and provide a device name and password which is provided by administrator.

Users type the device management server address in the Server URL field.

Enterprise management agent runtime preference page

Preferences page



This slide shows the enterprise management agent configuration page, which is displayed in the client workbench after you have installed the client. To display this page, launch the client workbench and click **File -> Preferences -> Enterprise Management Agent**. If you choose to enable the Enterprise Management Agent, you will be prompted with the warning shown on this slide. Again, if you enable the enterprise management agent, the end-user will no longer have control over installing, updating, or uninstalling features, so check with your systems administrator before you enable the agent.

Enterprise management agent configuration servlet

Configuration
servlet

The screenshot shows a web browser window titled "IBM SyncML/DM OSGi Agent Servlet - Mozilla Firefox" with the address bar showing "http://localhost:2429/osgiagentservlet". The page content is divided into a sidebar and a main area.

Current Account
Sample Account

General Functions

- Get Updates
- Available Software

Admin Functions

- Select Account
- Create New Account
- Edit Account Configuration
- Device Information
- Agent Events
- Agent Log

OSGi Agent Control Panel

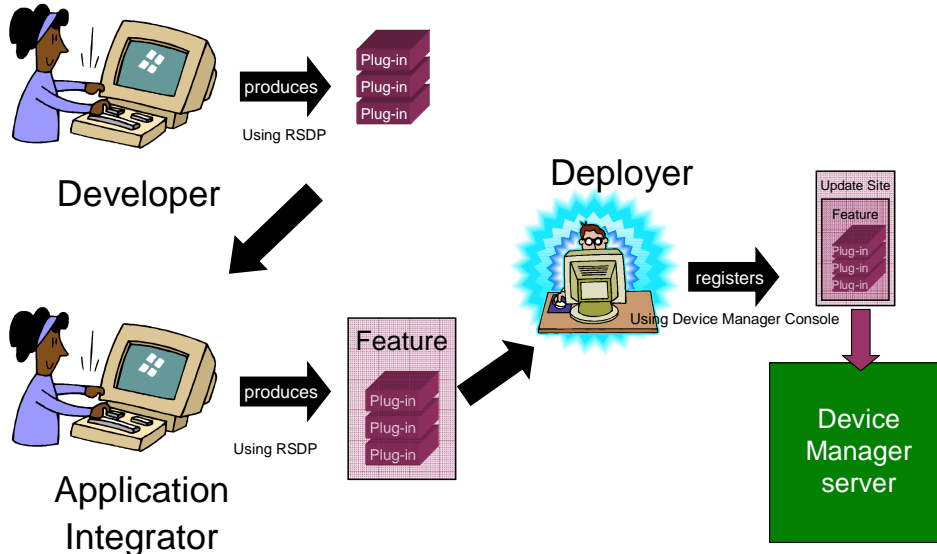
Edit Account Configuration

Parameter	Value
SyncML/DM account ID	Sample.Account
Device user name	<input type="text"/>
Device user password	<input type="password"/>
Server password	<input type="password"/>
Address type	https
Server address	<input type="text"/>
DM server path	<input type="text"/>

Default account

This slide shows the initial web page provided by the configuration servlet.

Enterprise deployment



Let's now walk through the process of Enterprise deployment. The Developer and Application Integrator perform the same steps as in Stand-alone Deployment. The Deployer then produces an Update Site that contains one or more Features. Next, the Deployer uses the Device Manager Console to register the individual Feature or the whole update site (through DMS CLI) with the Device Manager server. The System Administrator can subsequently use the console to schedule deployment of feature(s) to one or more clients. The Enterprise Management Agent on a receiving client downloads the feature(s) and create a temporary site and invokes the local Update Manager to install the Update Site, and its Features and plug-ins, onto the client platform.

Section

Portal managed client

Finally, let's explore Portal deployment of software and configuration.

Portal managed client

Portal management client

- The term *portal administered client* simply means the Expeditor Client can install, load, and run applications defined by Portal
- The Portal server is used to control application layout and provisioning of the applications to the client

The term **Portal administered client** simply refers to a configuration of the Expeditor platform that can install, load and run applications defined by a central WebSphere Portal Server.

Portal managed client

Portal management client

- The following Portlets allow the Expeditor client to be managed by the Portal server
 - ▶ **Rich client layout administration portlet**
the rich client layout administration portlet is an extension to the portal page customizer that is used to manage common rich client-specific metadata.
 - ▶ **Managed browser administration portlet**
the managed browser administration portlet enables WebSphere Portal to centrally manage instances of the managed browser view on the client.
 - ▶ **Workbench administration portlet**
the workbench administration portlet enables WebSphere Portal to manage items contributed to the various portions of the Expeditor Client workbench. These portlets provide a way to make user role based contributions to the workbench.
 - ▶ **Rich client WSRP viewer enablement portlet**
use the rich client WSRP viewer enablement portlet to configure a WSRP portlet for the Expeditor Client platform.
- These portlets are installed on the Portal server by the network client installer

Provided for the Expeditor desktop client are four portlets which allow the Expeditor client to be managed by the Portal server. These portlets are installed by the Network Client Installer onto the Portal Server.

- The Rich Client Layout Administration Portlet is an extension to the Portal page customizer that is used to manage common rich client-specific metadata.
- The Managed Browser Administration Portlet enables WebSphere Portal to centrally manage instances of the Managed Browser view on the client.
- The Workbench Administration portlet enables WebSphere Portal to manage items contributed to the various portions of the Expeditor Client workbench. These portlets provide a way to make user-role-based contributions to the workbench.
- The Rich Client WSRP Viewer Enablement Portlet allows you to configure a WSRP portlet for the Expeditor Client platform.

IBM Software Group | Lotus Expeditor 6.1.1 Education IBM

Installation – Portal managed client

Installation

Lotus Expeditor Client 6.1 - InstallShield Wizard

Lotus. software

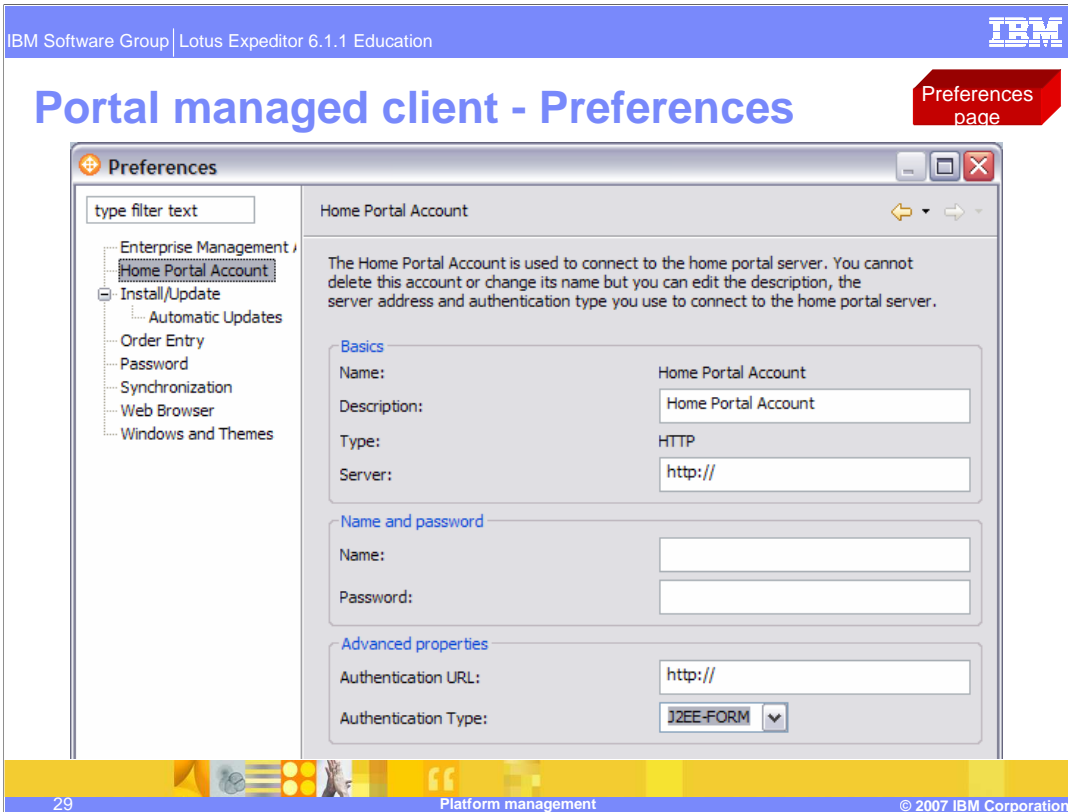
Would you like Lotus Expeditor Client 6.1 to be portal-managed? If so, you must provide the portal server URL.

Yes
 No

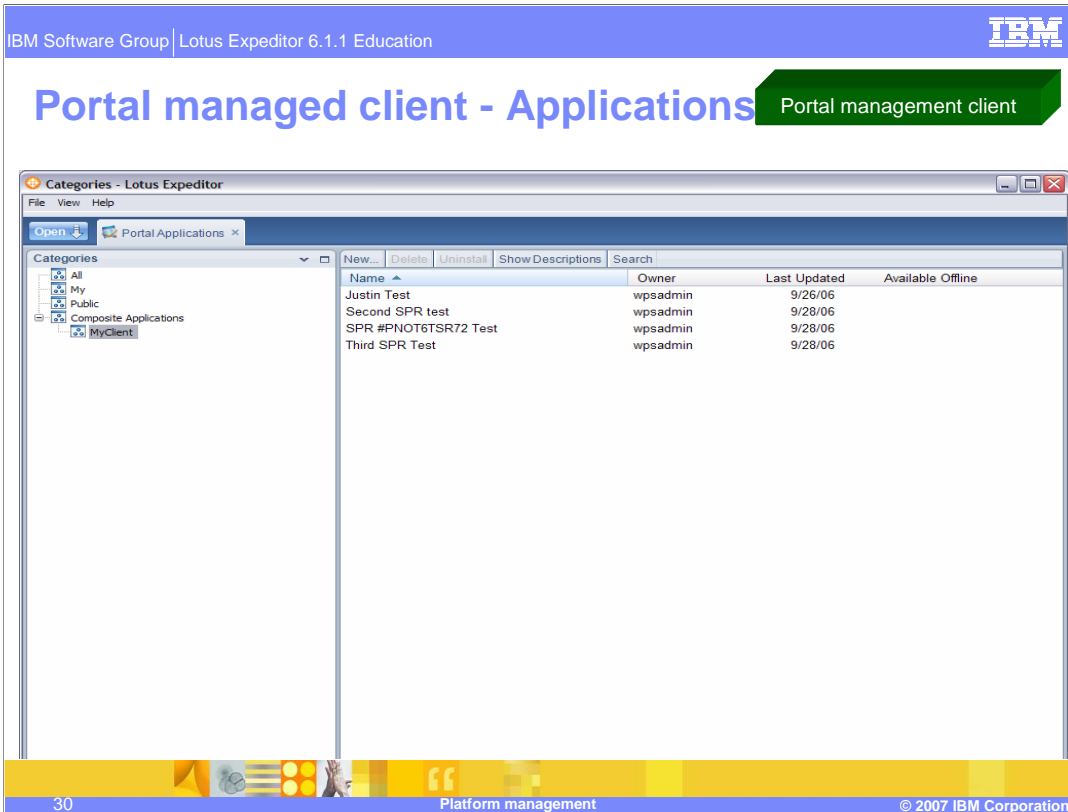
Portal server URL:

28 Platform management © 2007 IBM Corporation

This slide shows the configuration screen displayed during install for the Portal managed client. The configuration information required is the Portal server address.



This slide shows the home portal account preference page, which is displayed in the client workbench after you have installed the client. To display this page, launch the client workbench and click **File -> Preferences -> Home Portal Account**. Configuration includes Portal server address, user name and password, authentication type and authentication URL.



This slide shows the Expeditor workbench after applications have been provisioned from the Portal server.

The Portal Home Account has been defined, and the client platform has connected to the specified Portal Server. The applications have been downloaded onto the client.

Click **Open->Portal Applications** to see this view.

Feedback

Your feedback is valuable

You can help improve the quality of IBM Education Assistant content to better meet your needs by providing feedback.

- Did you find this module useful?
- Did it help you solve a problem or answer a question?
- Do you have suggestions for improvements?

Click to send e-mail feedback:

mailto:iea@us.ibm.com?subject= Feedback about xpdv6.1.1_platform_management.ppt

You can help improve the quality of IBM Education Assistant content by providing feedback.

Trademarks, copyrights, and disclaimers

The following terms are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both:

IBM Lotus WebSphere

Java, JVM, and all Java-based trademarks are trademarks of Sun Microsystems, Inc. in the United States, other countries, or both.

Product data has been reviewed for accuracy as of the date of initial publication. Product data is subject to change without notice. This document could include technical inaccuracies or typographical errors. IBM may make improvements or changes in the products or programs described herein at any time without notice. Any statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only. References in this document to IBM products, programs, or services does not imply that IBM intends to make such products, programs or services available in all countries in which IBM operates or does business. Any reference to an IBM Program Product in this document is not intended to state or imply that only that program product may be used. Any functionally equivalent program, that does not infringe IBM's intellectual property rights, may be used instead.

Information is provided "AS IS" without warranty of any kind. THE INFORMATION PROVIDED IN THIS DOCUMENT IS DISTRIBUTED "AS IS" WITHOUT ANY WARRANTY, EITHER EXPRESS OR IMPLIED. IBM EXPRESSLY DISCLAIMS ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. IBM shall have no responsibility to update this information. IBM products are warranted, if at all, according to the terms and conditions of the agreements (for example, IBM Customer Agreement, Statement of Limited Warranty, International Program License Agreement, etc.) under which they are provided. Information concerning non-IBM products was obtained from the suppliers of those products, their published announcements or other publicly available sources. IBM has not tested those products in connection with this publication and cannot confirm the accuracy of performance, compatibility or any other claims related to non-IBM products.

IBM makes no representations or warranties, express or implied, regarding non-IBM products and services.

The provision of the information contained herein is not intended to, and does not, grant any right or license under any IBM patents or copyrights. Inquiries regarding patent or copyright licenses should be made, in writing, to:

IBM Director of Licensing
IBM Corporation
North Castle Drive
Armonk, NY 10504-1785
U.S.A.

Performance is based on measurements and projections using standard IBM benchmarks in a controlled environment. All customer examples described are presented as illustrations of how those customers have used IBM products and the results they may have achieved. The actual throughput or performance that any user will experience will vary depending upon considerations such as the amount of multiprogramming in the user's job stream, the I/O configuration, the storage configuration, and the workload processed. Therefore, no assurance can be given that an individual user will achieve throughput or performance improvements equivalent to the ratios stated here.

© Copyright International Business Machines Corporation 2007. All rights reserved.

Note to U.S. Government Users - Documentation related to restricted rights-Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract and IBM Corp.

