Lotus Expeditor 6.1 Education

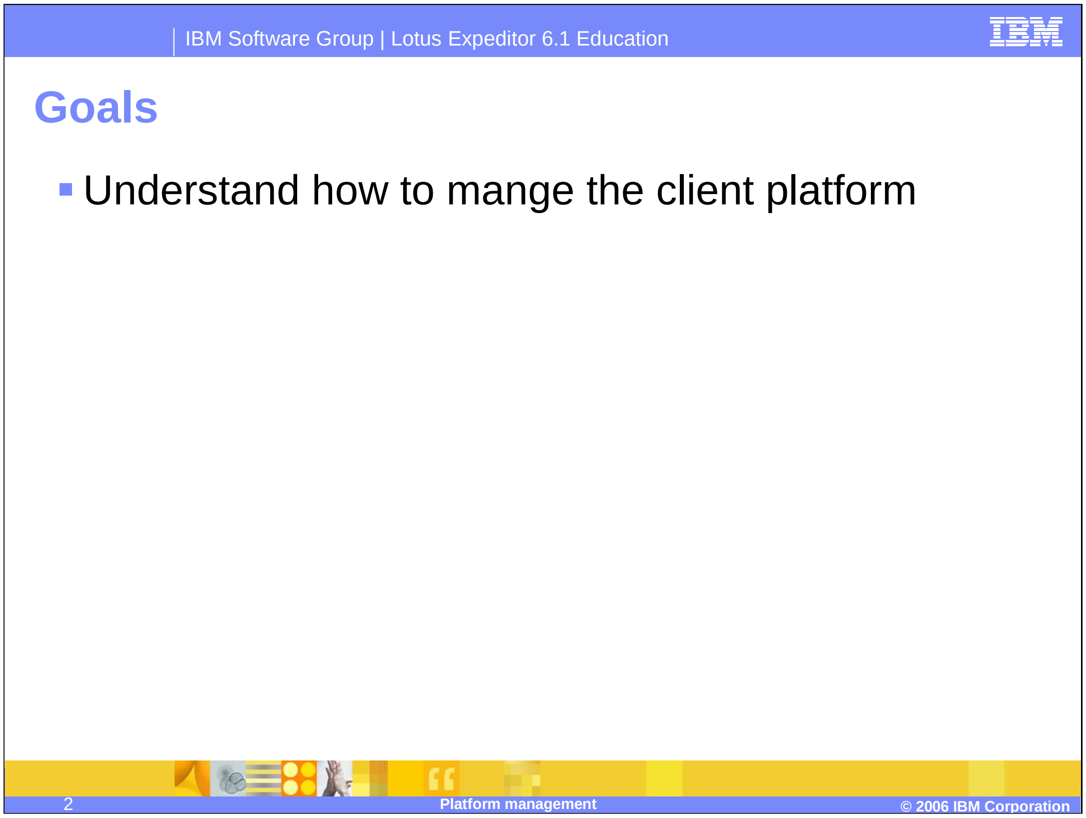
IBM® Lotus® Expeditor 6.1 Client for Desktop

Platform management

Lotus software

business on demand software

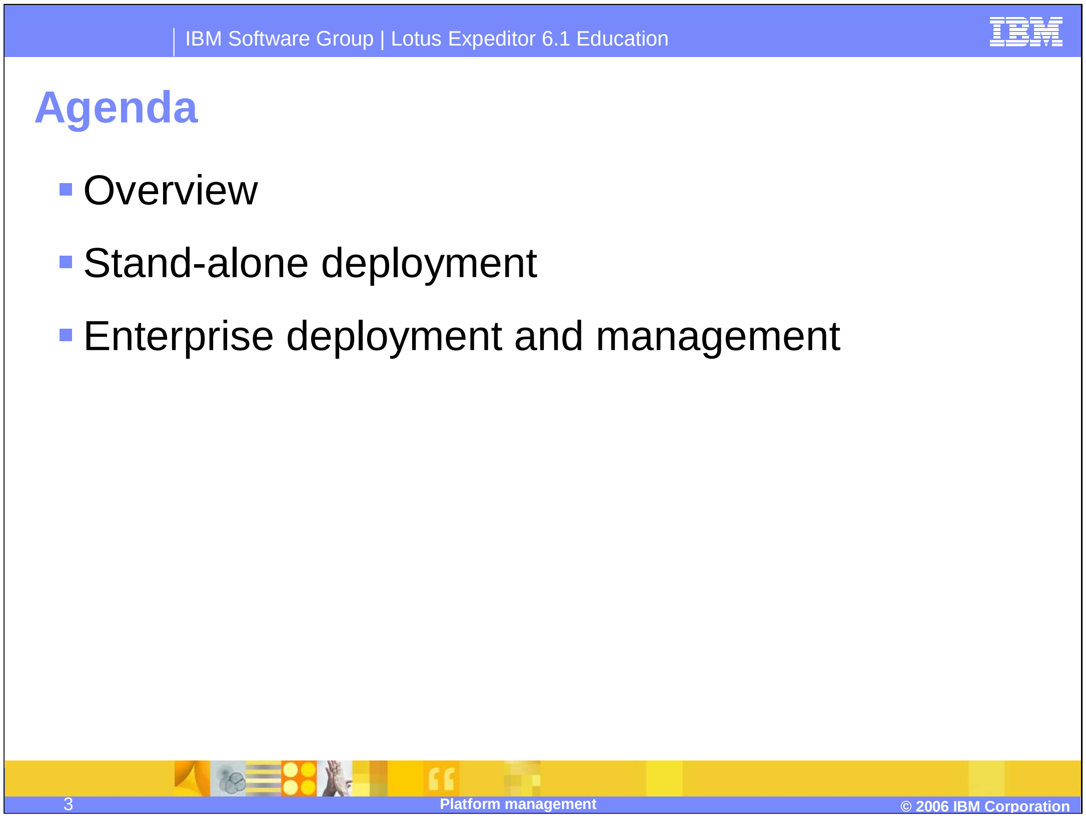
This presentation introduces the platform management capabilities of IBM Lotus Expeditor 6.1 Client for Desktop.



Goals

- Understand how to mange the client platform

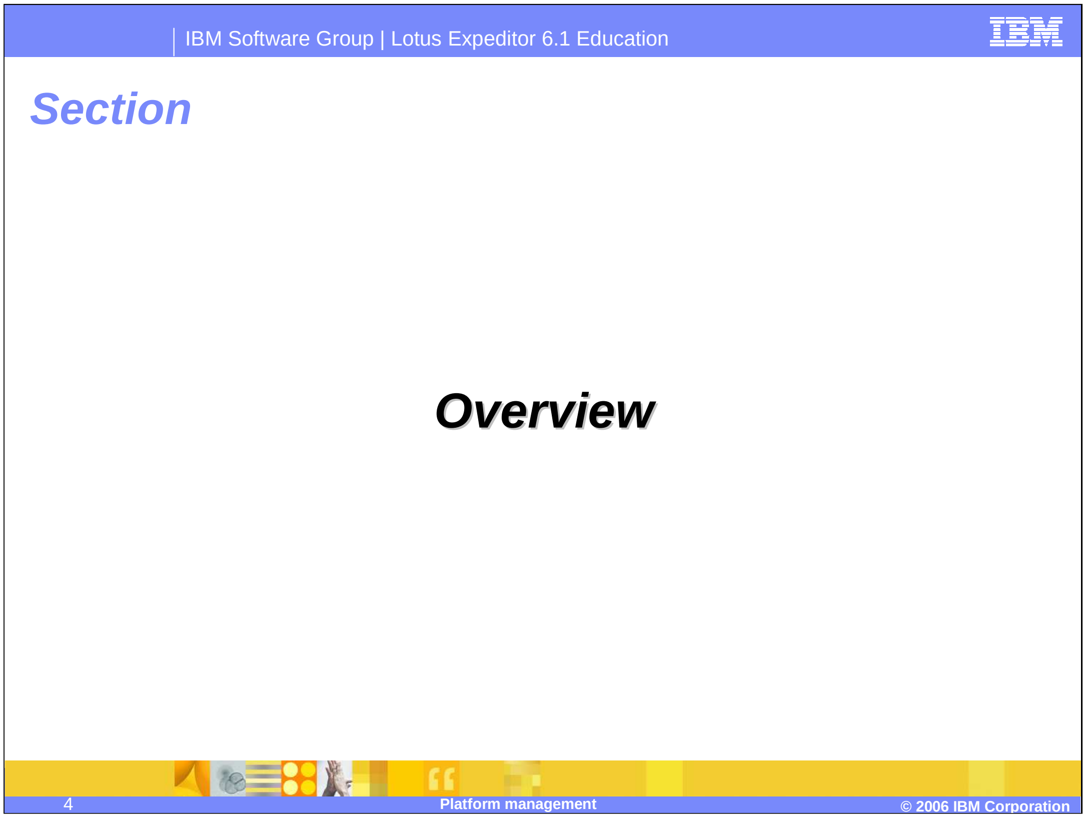
The goal of this presentation is to understand how to manage the IBM Lotus Expeditor 6.1 Client for Desktop platform.



Agenda

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

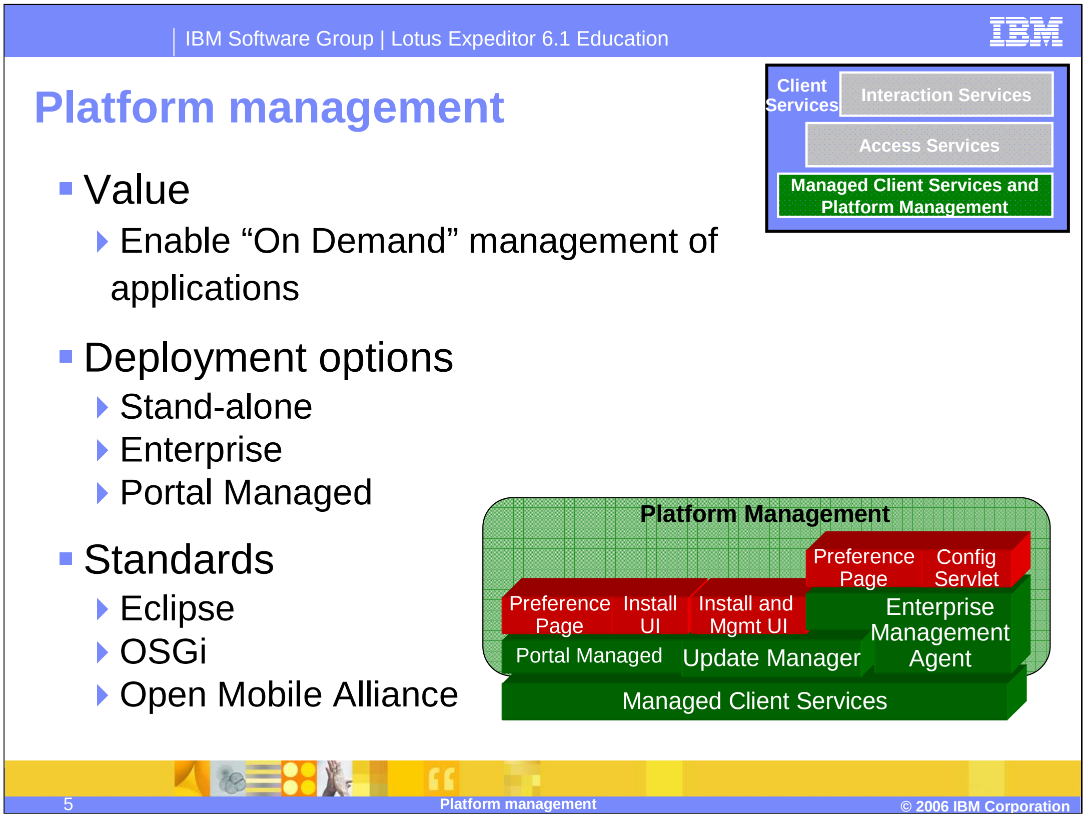
The agenda of this presentation is to provide an overview of platform management, explain the stand-alone deployment of software, and describe the enterprise deployment of software and management for the client platform.



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

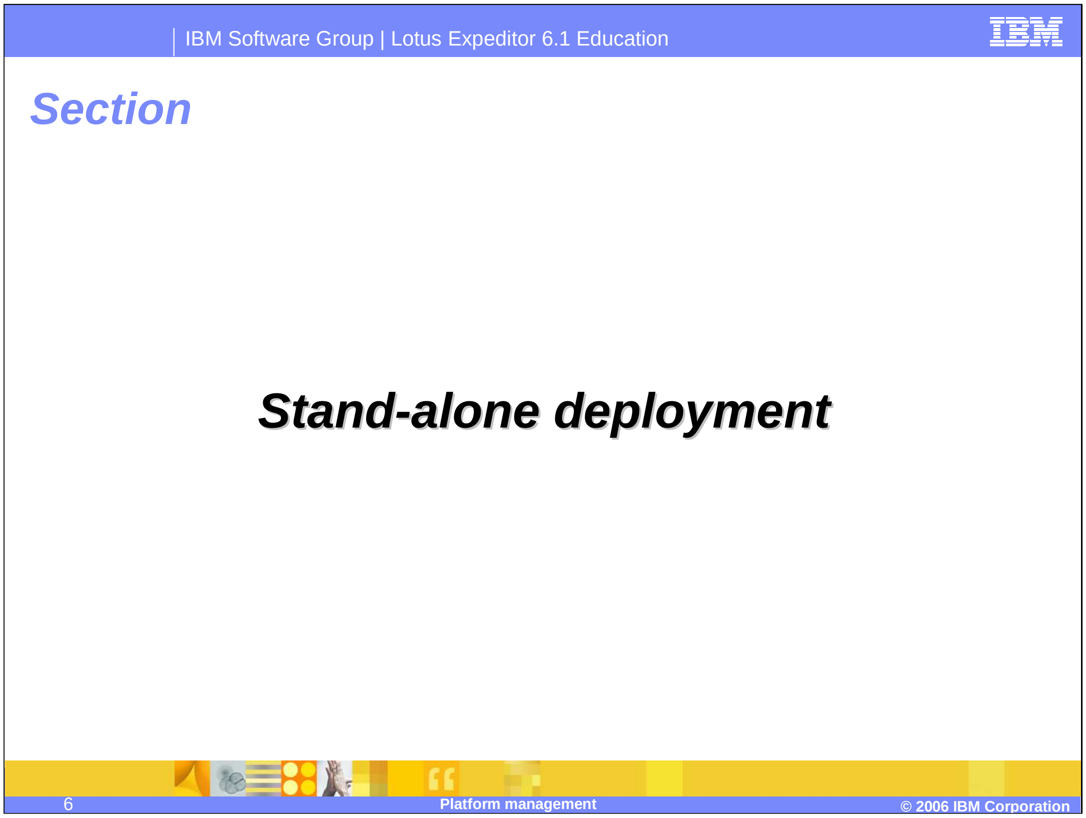
Client Services
Interaction Services
Access Services
Managed Client Services and Platform Management

Platform Management
Preference Page
Config Servlet
Preference Page
Install UI
Install and Mgmt UI
Enterprise Management Agent
Portal Managed
Update Manager
Managed Client Services

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.

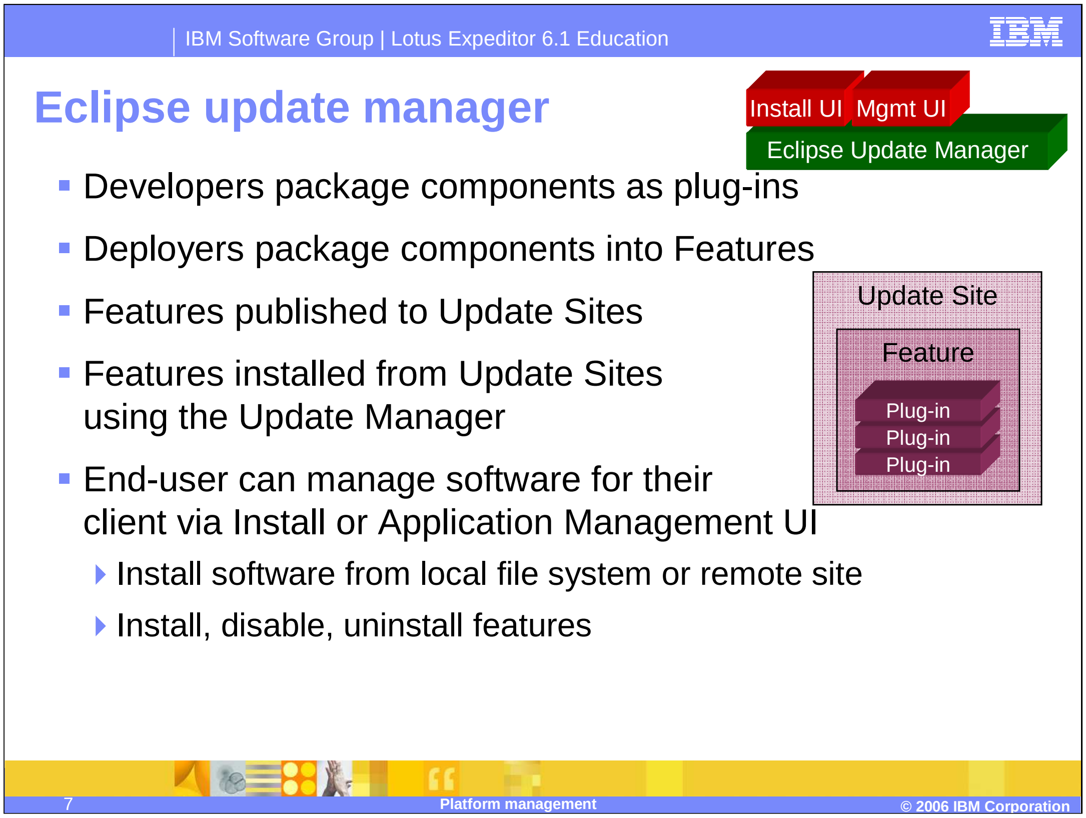
IBM Lotus Expeditor supports three options to deploy software to the client. Stand-alone deployment allows an end-user to install software onto their device through the Eclipse Update Manager. Enterprise deployment enables a System Administrator to install software onto multiple devices by using the 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.



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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 via Install or Application Management UI
  - Install software from local file system or remote site
  - Install, disable, uninstall features

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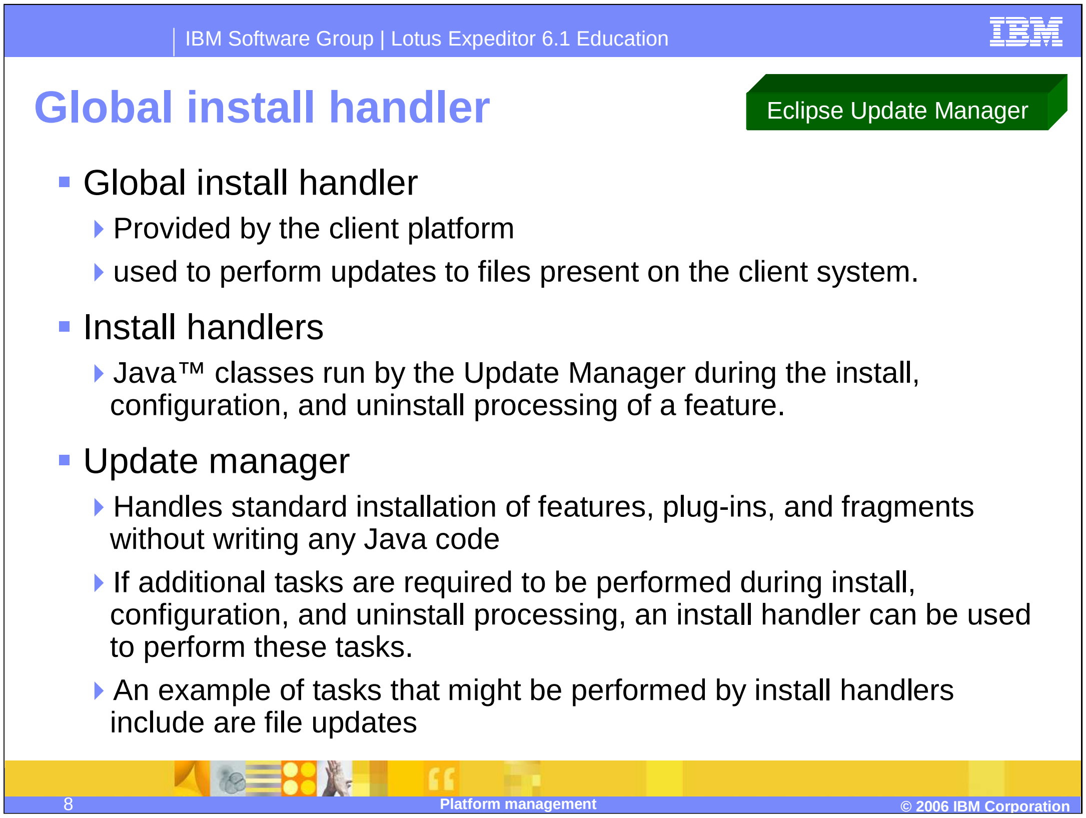
In IBM Lotus Expeditor 6.1, developers package software components as Eclipse plug-ins. Solution Deployers then package these plug-ins into installable Eclipse Features consisting of one or more plug-ins, and, optionally, other Features. They then publish these Features to an Eclipse Update Site. End-users 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.



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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 install, 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

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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.

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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 rcpinstall.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

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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 rcpinstall.properties settings for single or multi-user for:

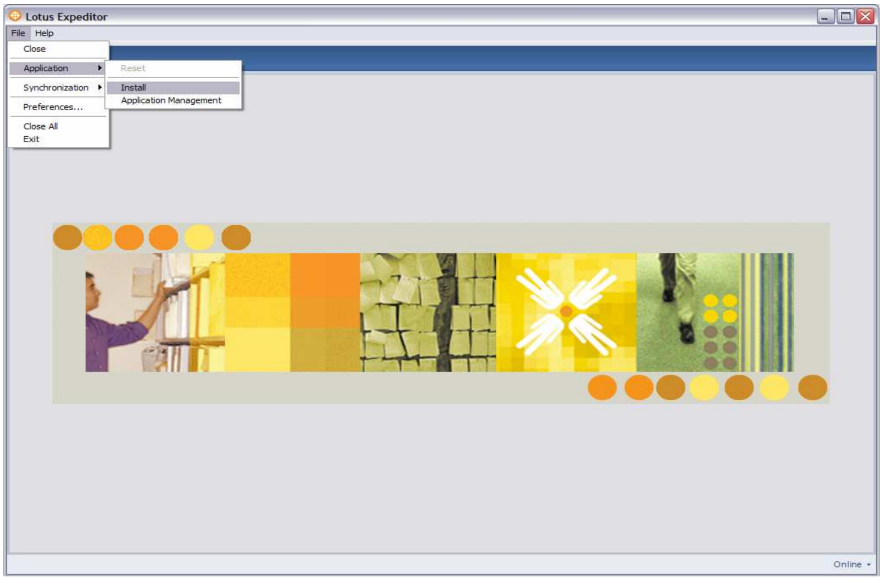
•bootclasspath
•PATH / LD_LIBRARY_PATH
•class path
•VM System properties
•VM
•Other properties

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 install user interface

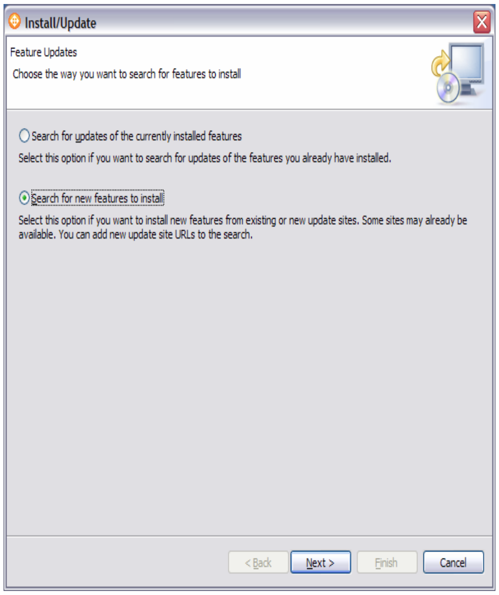
Install UI



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

Application install user interface

Install UI



Install/Update

Feature Updates

Choose the way you want to search for features to install

○ Search for updates of the currently installed features

Select this option if you want to search for updates of the features you already have installed.

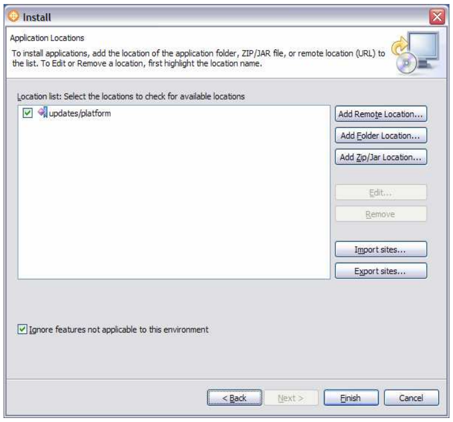
● Search for new features to install

Select this option if you want to install new features from existing or new update sites. Some sites may already be available. You can add new update site URLs to the search.

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



Install

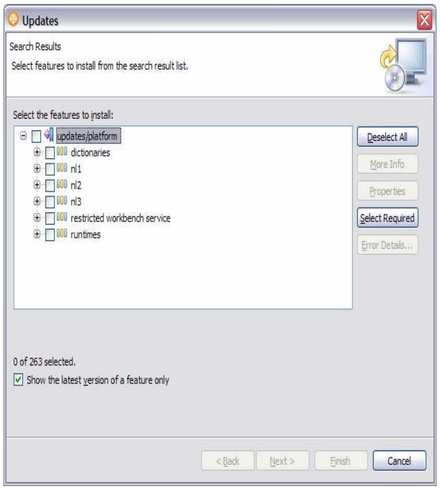
Application Locations

To install applications, add the location of the application folder, ZIP/JAR file, or remote location (URL) to the list. To Edit or Remove a location, first highlight the location name.

Location list: Select the locations to check for available locations

☑ updates/platform

☑ Ignore features not applicable to this environment



Updates

Search Results

Select features to install from the search result list.

Select the features to install:

- □ updates/platform
  - □ dictionaries
  - □ nl1
  - □ nl2
  - □ nl3
  - □ restricted workbench service
  - □ runtimes

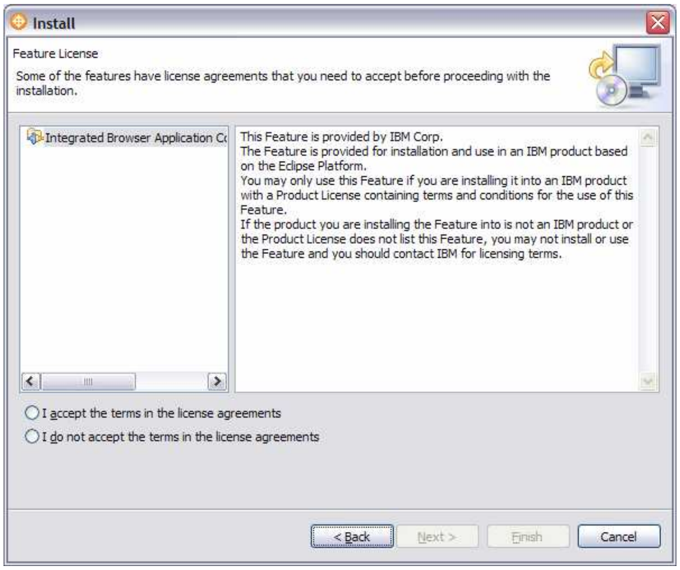
0 of 263 selected.

☑ Show the latest version of a feature only

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



Feature License

Some of the features have license agreements that you need to accept before proceeding with the installation.

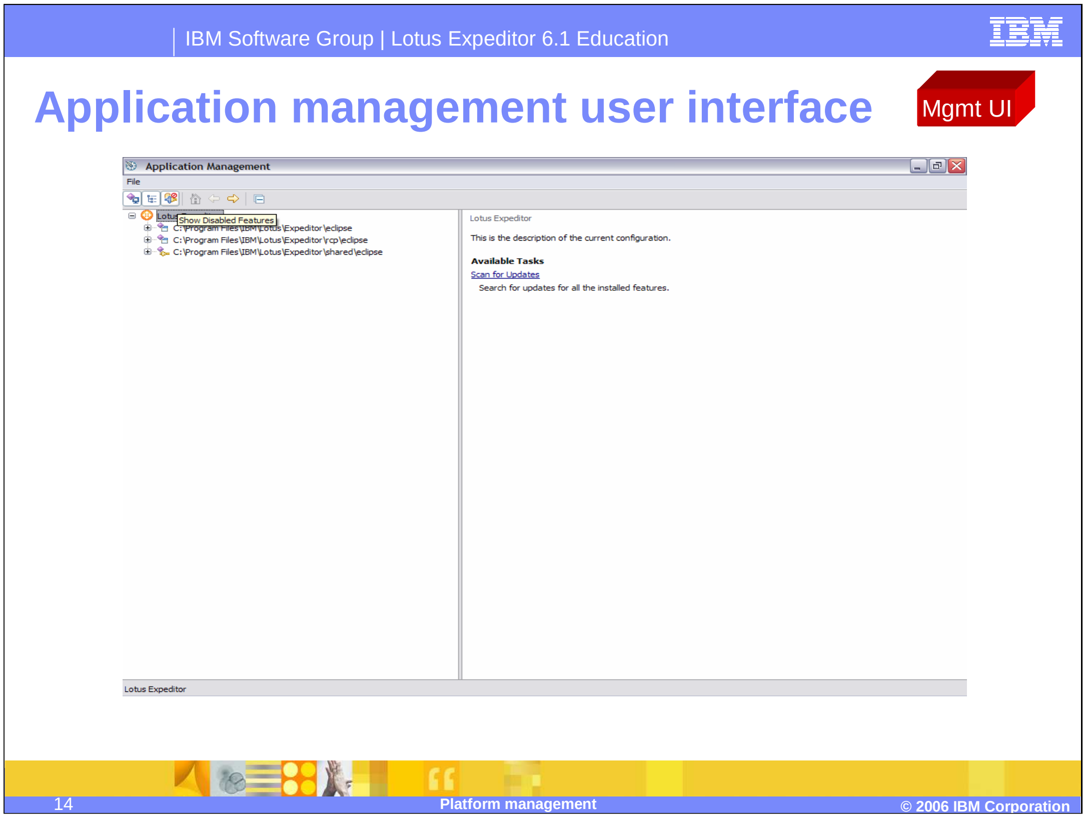
Integrated Browser Application C

This Feature is provided by IBM Corp.
The Feature is provided for installation and use in an IBM product based on the Eclipse Platform.
You may only use this Feature if you are installing it into an IBM product with a Product License containing terms and conditions for the use of this Feature.
If the product you are installing the Feature into is not an IBM product or the Product License does not list this Feature, you may not install or use the Feature and you should contact IBM for licensing terms.

○ I accept the terms in the license agreements

○ I do not accept the terms in the license agreements

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



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Application management user interface

Application Management

Lotus Expeditor
Show Disabled Features
C:\Program Files\IBM\Lotus\Expeditor\eclipse
C:\Program Files\IBM\Lotus\Expeditor\rcp\eclipse
C:\Program Files\IBM\Lotus\Expeditor\shared\eclipse

Lotus Expeditor

This is the description of the current configuration.

Available Tasks

Scan for Updates

Search for updates for all the installed features.

Lotus Expeditor

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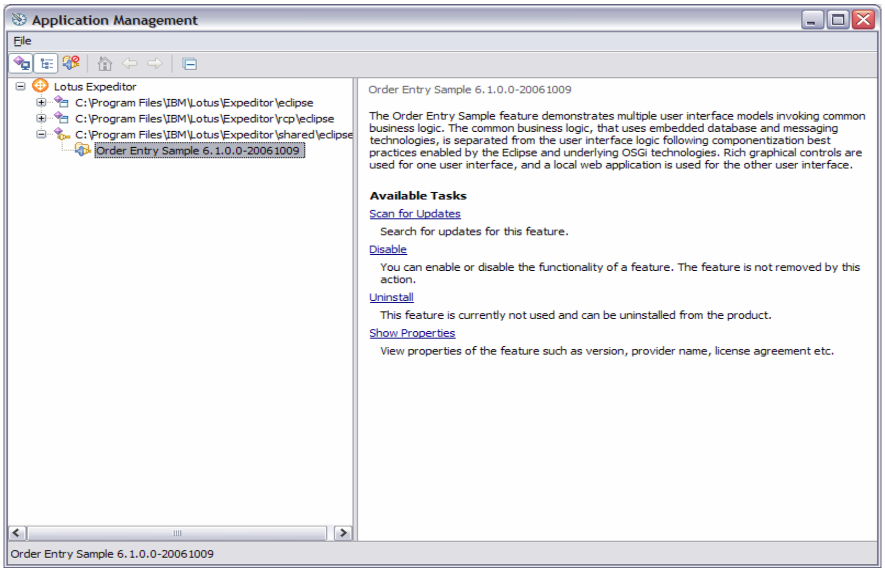
This slide shows the application management user interface. Launch the client workbench, click **Application**, and then click **Application Management**. The installed features are broken down into three groups: Eclipse features, RCP features, and Shared features.

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



Lotus Expeditor
C:\Program Files\IBM\Lotus\Expeditor\eclipse
C:\Program Files\IBM\Lotus\Expeditor\rcp\eclipse
C:\Program Files\IBM\Lotus\Expeditor\shared\eclipse
Order Entry Sample 6.1.0.0-20061009

Order Entry Sample 6.1.0.0-20061009

The Order Entry Sample feature demonstrates multiple user interface models invoking common business logic. The common business logic, that uses embedded database and messaging technologies, is separated from the user interface logic following componentization best practices enabled by the Eclipse and underlying OSGi technologies. Rich graphical controls are used for one user interface, and a local web application is used for the other user interface.

Available Tasks

Scan for Updates
Search for updates for this feature.

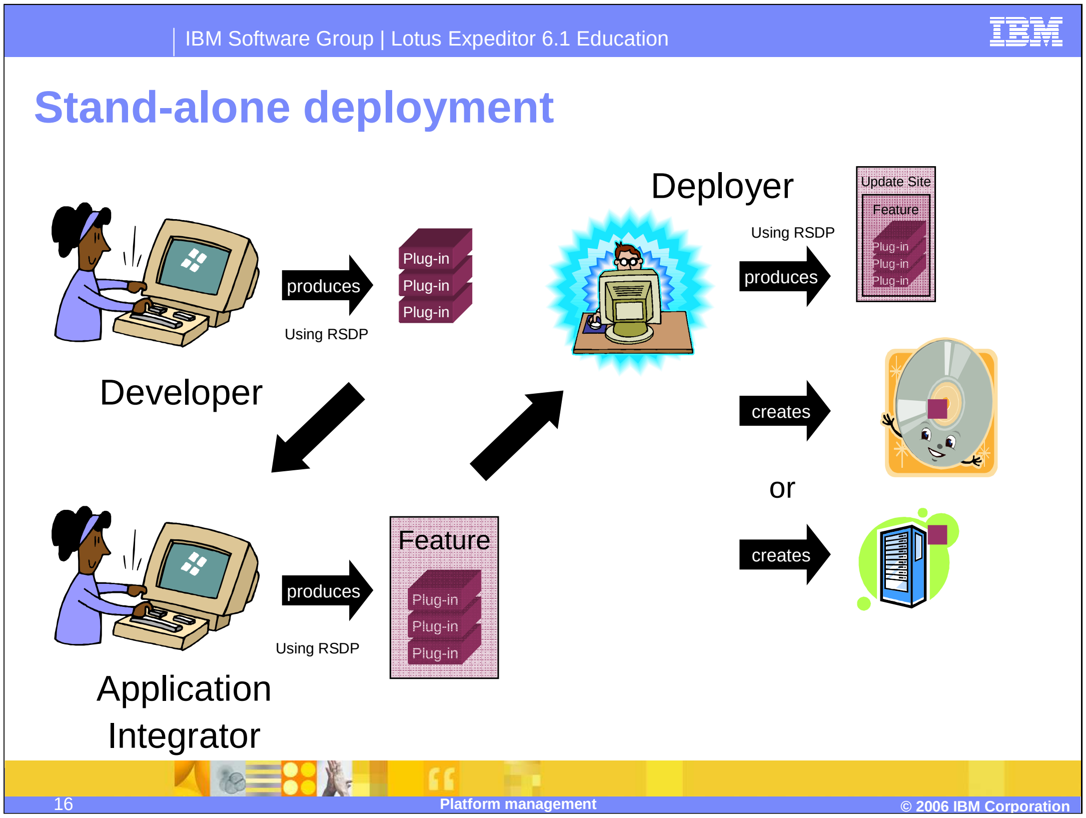
Disable
You can enable or disable the functionality of a feature. The feature is not removed by this action.

Uninstall
This feature is currently not used and can be uninstalled from the product.

Show Properties
View properties of the feature such as version, provider name, license agreement etc.

Order Entry Sample 6.1.0.0-20061009

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**.



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Stand-alone deployment

Developer

produces

Using RSDP

Plug-in
Plug-in
Plug-in

Application Integrator

produces

Using RSDP

Feature

Plug-in
Plug-in
Plug-in

Deployer

Using RSDP

produces

Update Site

Feature

Plug-in
Plug-in
Plug-in

creates

or

creates

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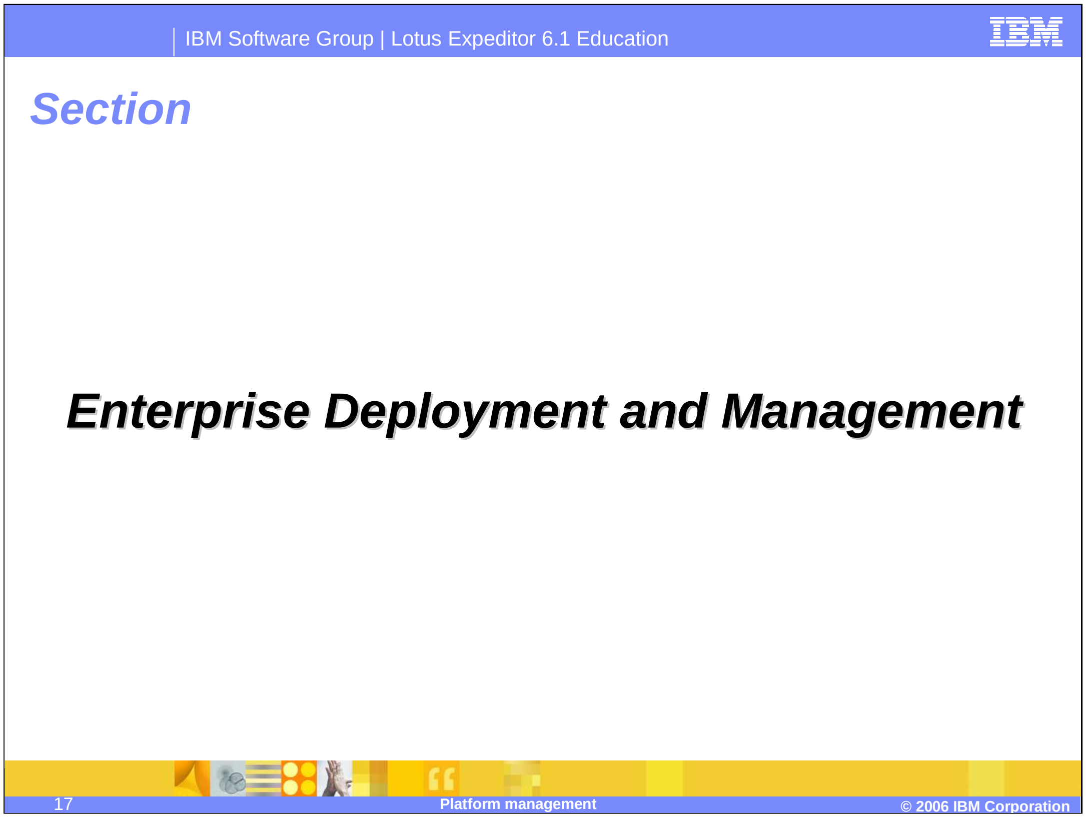
Let’s now walk through the process of stand-alone deployment. The Developer uses the Rational Software Development Platform (or RSDP) to create one or more plug-ins for their software components. They may either use the Plug-in Project wizard in the Plug-in Development Environment (PDE) or the Client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



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Section

Enterprise Deployment and Management

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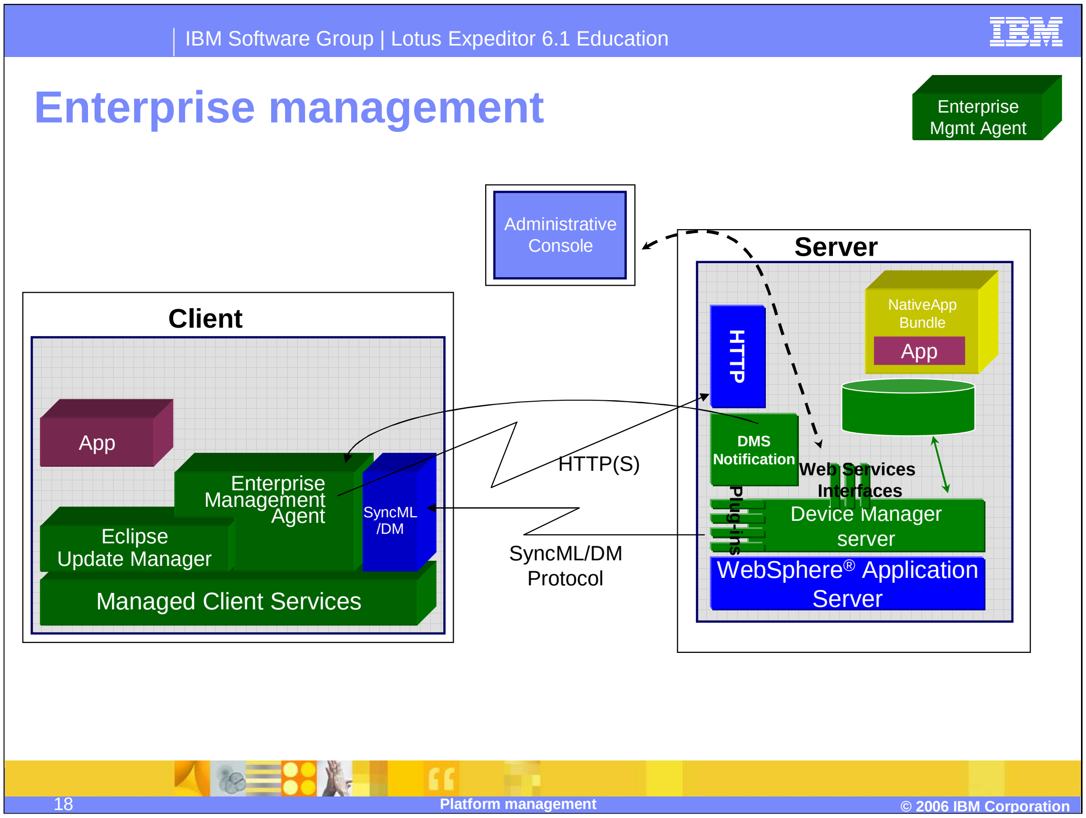
Finally, let’s explore enterprise deployment of software and management for the client platform.



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Enterprise management

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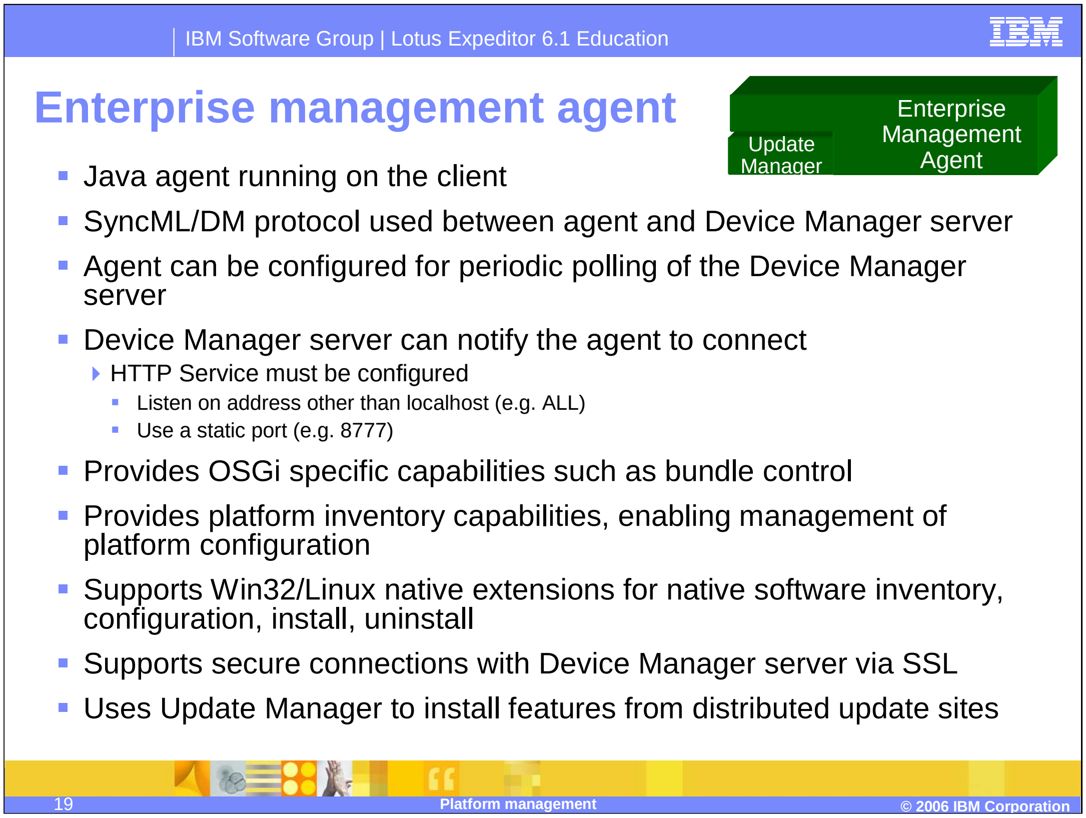
The Enterprise Management Agent works co-operatively with the Device Manager server provided by the IBM Lotus Expeditor 6.1 Server to perform management operations. The agent and server use the SyncML/DM protocol defined by the Open Mobile Alliance to communicate management requests. A System Administrator 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.



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Enterprise management agent

Update Manager
Enterprise 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 (e.g. ALL)
    - Use a static port (e.g. 8777)
- Provides OSGi specific capabilities such as bundle control
- Provides platform inventory capabilities, enabling management of platform configuration
- Supports Win32/Linux native extensions for native software inventory, configuration, install, uninstall
- Supports secure connections with Device Manager server via SSL
- Uses Update Manager to install features from distributed update sites

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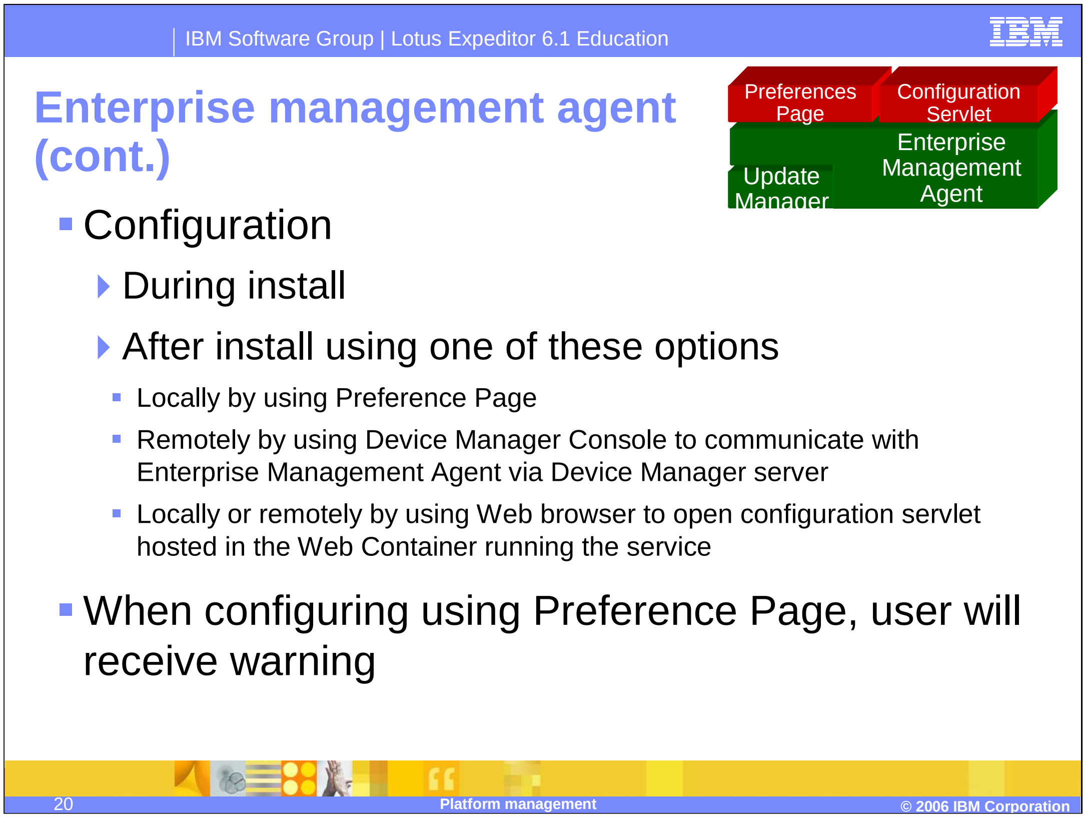
The Enterprise Management Agent is written in Java and runs on the Managed Client Services provided by the client platform. The agent uses the SyncML/DM protocol to communicate with the Device Manager server to perform management jobs. The agent can be configured to periodically poll the Device Manager 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 only deploys bundles – not Update Sites. Therefore, an Update Site must be packaged and deployed in a NativeAppBundle (we will explain this topic in more detail later in this presentation). When the agent receives a NativeAppBundle, the agent extracts the Update Site from the bundle and uses Update Manager to install the Features in the Update Site onto the client platform.


Preferences Page
Configuration Servlet
Enterprise Management Agent
Update Manager

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Enterprise management agent (cont.)

- Configuration
  - During install
  - 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

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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.

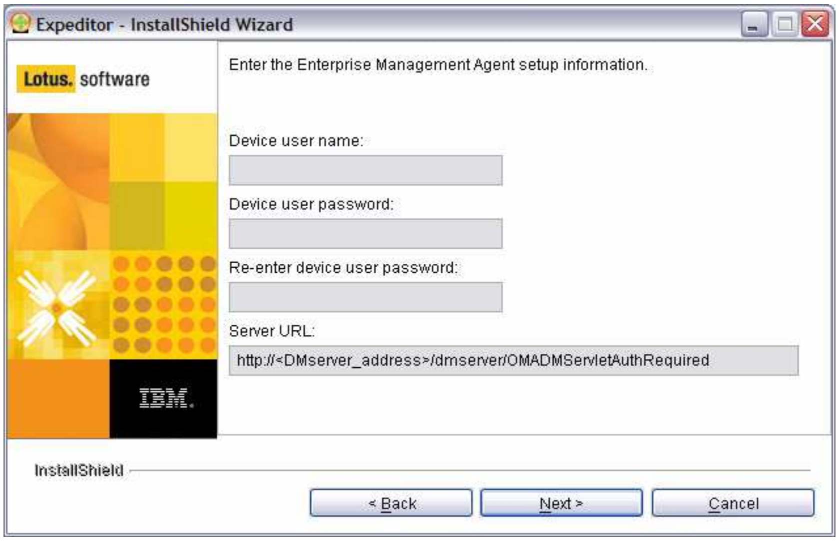
A System Administrator can remotely configure the agent by using the Device Manager Console to configure the agent via the Device Manager server.

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



Enter the Enterprise Management Agent setup information.

Device user name:

Device user password:

Re-enter device user password:

Server URL:

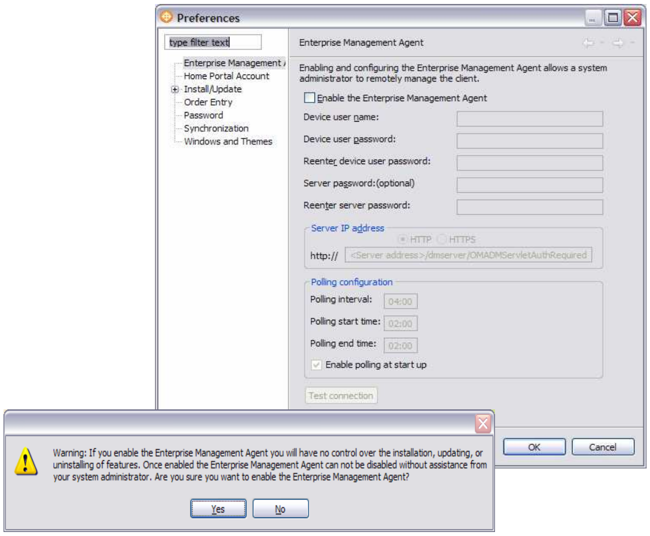
http://<DMserver_address>/dmserver/OMADMServletAuthRequired

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



Enterprise Management Agent

Enabling and configuring the Enterprise Management Agent allows a system administrator to remotely manage the client.

□ Enable the Enterprise Management Agent

Device user name:

Device user password:

Reenter device user password:

Server password:(optional)

Reenter server password:

Server IP address

● HTTP ○ HTTPS

http:// <Server address>/dmserver/OMADMServletAuthRequired

Polling configuration

Polling interval: 04:00

Polling start time: 02:00

Polling end time: 02:00

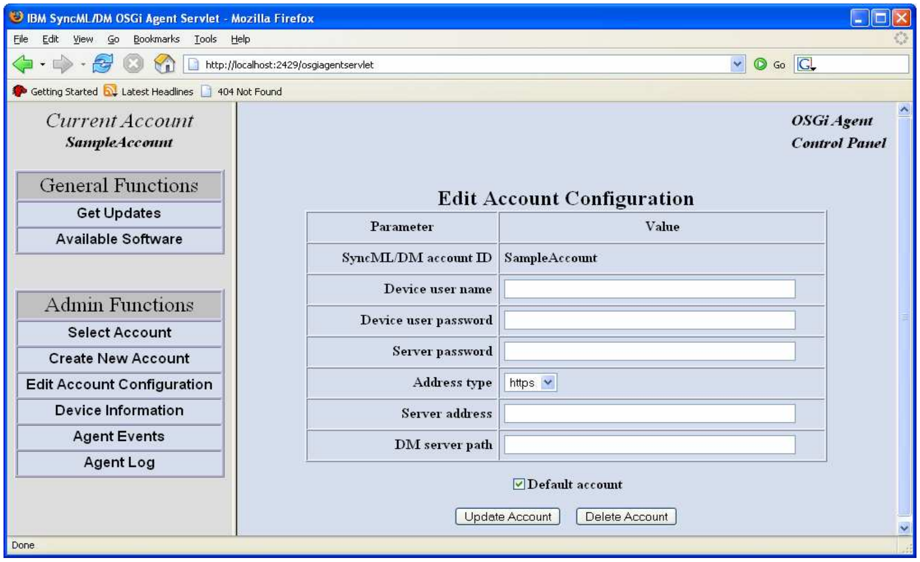
☑ Enable polling at start up

Warning: If you enable the Enterprise Management Agent you will have no control over the installation, updating, or uninstalling of features. Once enabled the Enterprise Management Agent can not be disabled without assistance from your system administrator. Are you sure you want to enable the Enterprise Management Agent?

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.

Configuration Servlet

Enterprise management agent configuration servlet

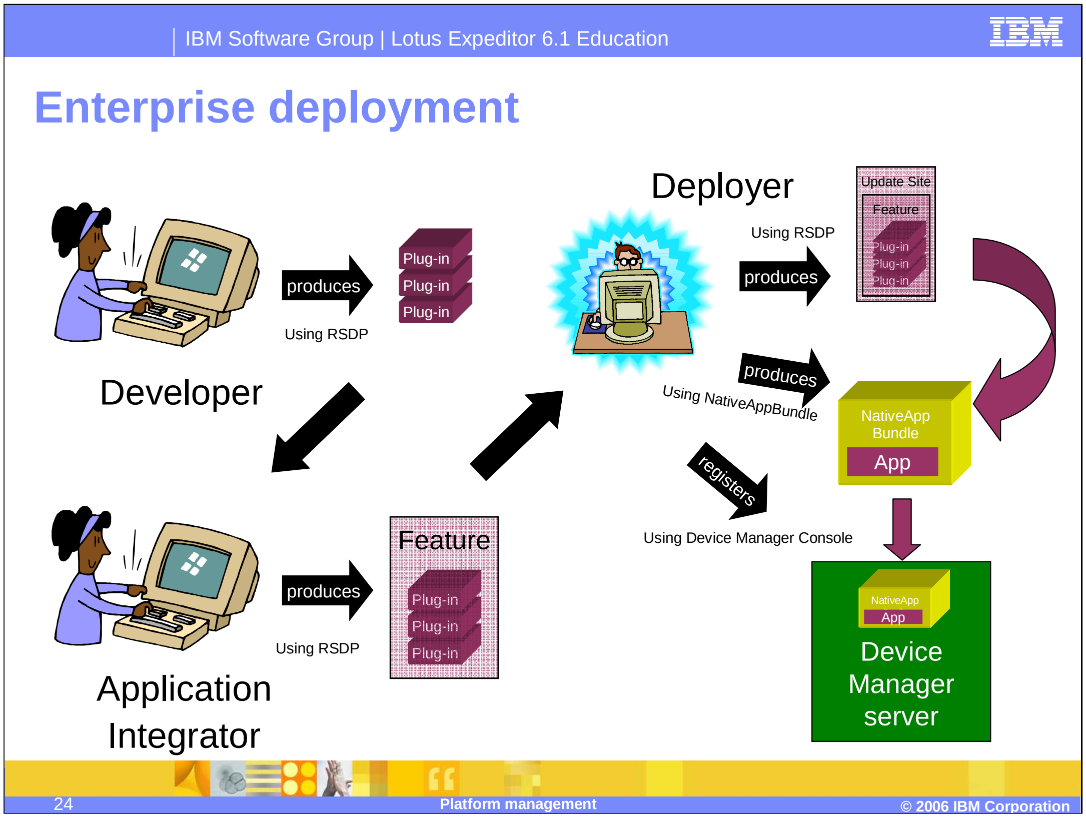


Edit Account Configuration

Parameter	Value
SyncML/DM account ID	SampleAccount
Device user name	
Device user password	
Server password	
Address type	https
Server address	
DM server path	

☑ Default account

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



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Enterprise deployment

Developer

produces

Using RSDP

Plug-in
Plug-in
Plug-in

Application Integrator

produces

Using RSDP

Feature

Plug-in
Plug-in
Plug-in

Deployer

Using RSDP

produces

Update Site

Feature

Plug-in
Plug-in
Plug-in

produces

Using NativeAppBundle

NativeApp Bundle

App

registers

Using Device Manager Console

NativeApp

App

Device Manager server

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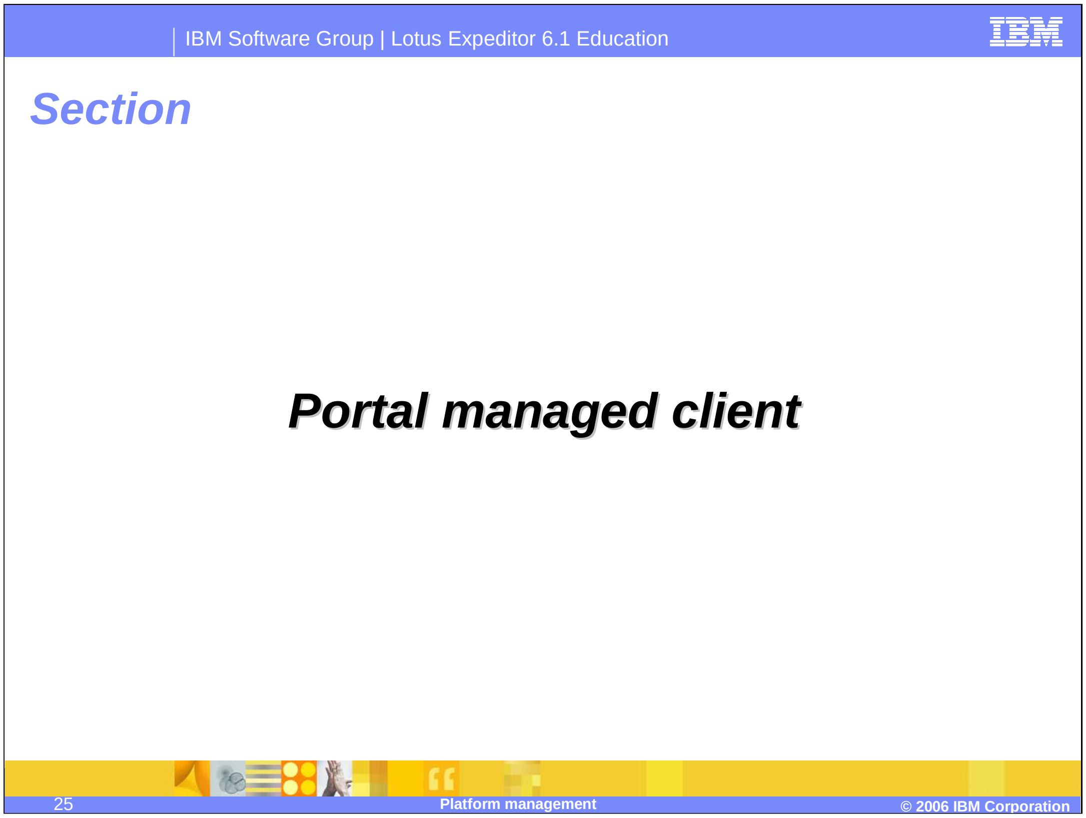
Let’s now walk through the process of Enterprise deployment. The Developer and Application Integrator perform the same steps as in Stand-alone Deployment. The Deployer then produces an Update Site that contains one or more Features. However, now the Deployer uses the NativeAppBundle tool to produce a NativeAppBundle that contains an Update Site. Next, the Deployer uses the Device Manager Console to register the NativeAppBundle with the Device Manager server. The System Administrator can subsequently use the console to schedule deployment of this NativeAppBundle to one or more clients. The Enterprise Management Agent on a receiving client extracts the Update Site from the NativeAppBundle and invokes the local Update Manager to install the Update Site, and its Features and plug-ins, onto the client platform.



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Section

Portal managed client

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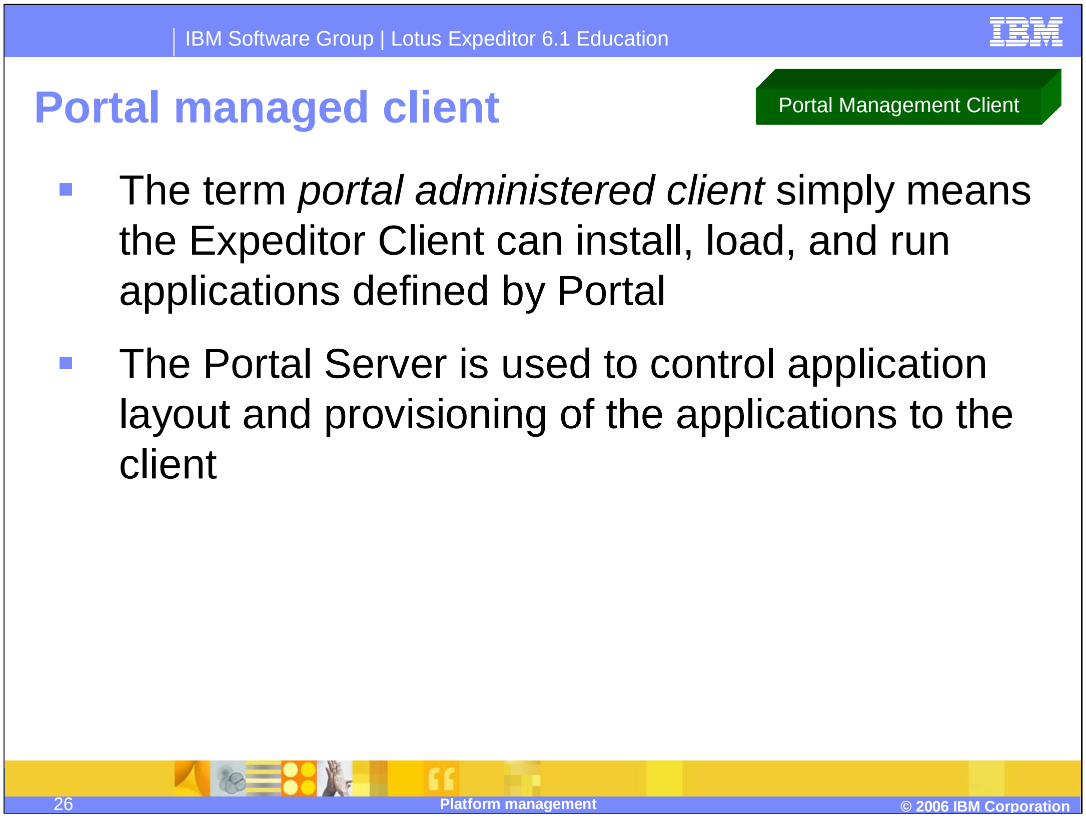
Finally, let’s explore Portal deployment of software and configuration.

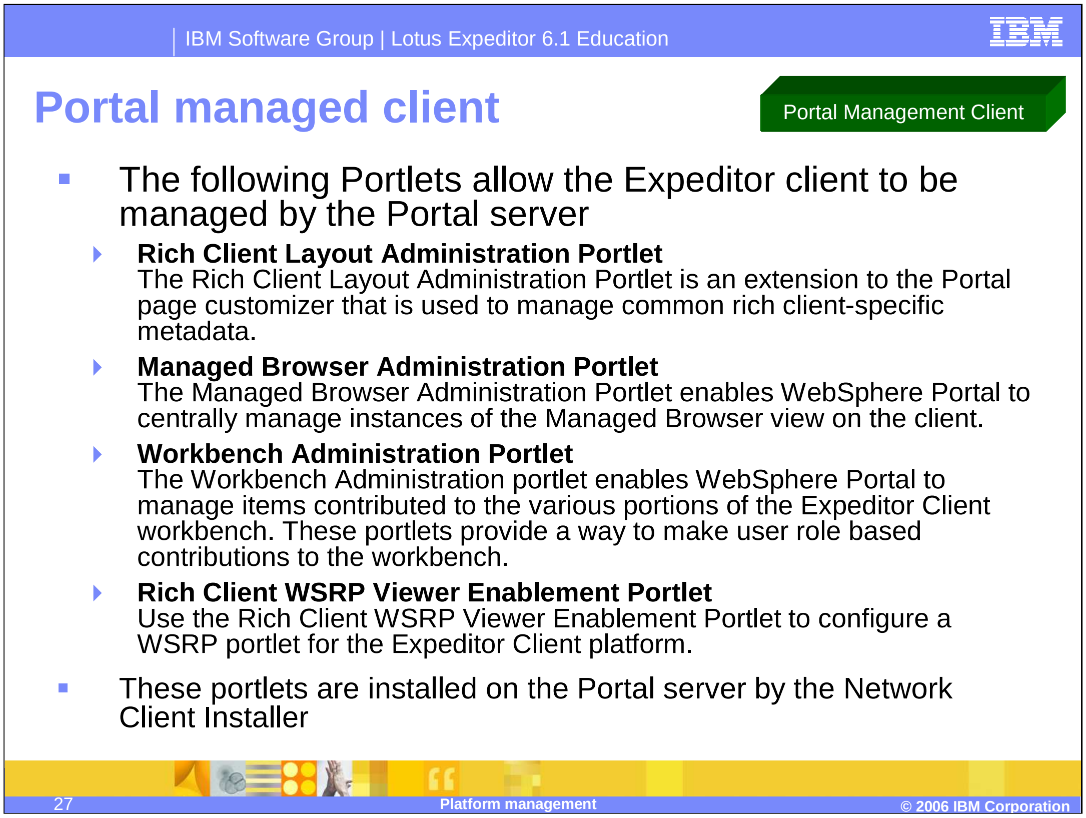


Portal managed client

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.

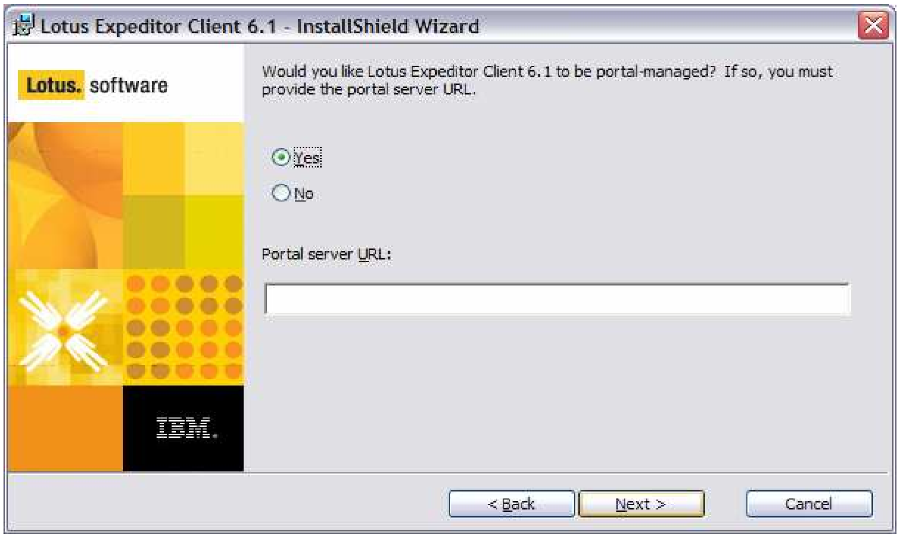
•The Managed Browser Administration Portlet enables WebSphere Portal to centrally manage instances of the Managed Browser view on the client.

•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.

Installation – Portal managed client

Installation



Lotus Expeditor Client 6.1 - InstallShield Wizard

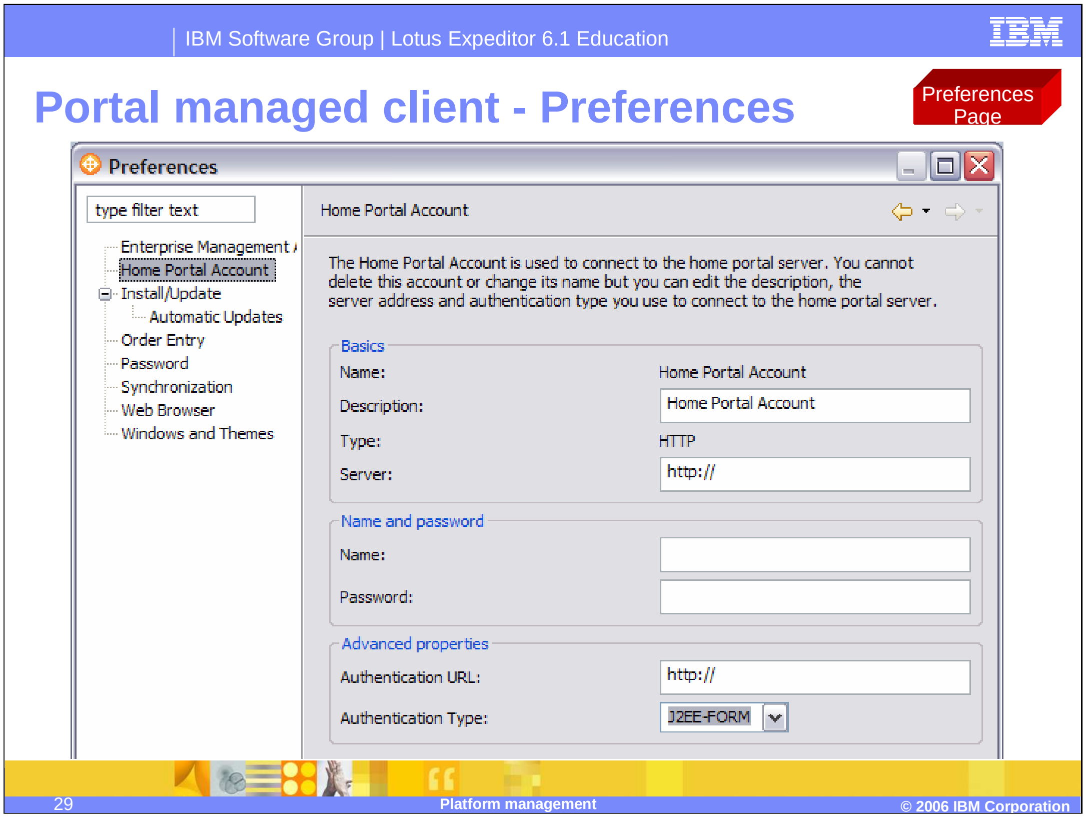
Would you like Lotus Expeditor Client 6.1 to be portal-managed? If so, you must provide the portal server URL.

● Yes

○ No

Portal server URL:

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



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Portal managed client - Preferences

The Home Portal Account is used to connect to the home portal server. You cannot delete this account or change its name but you can edit the description, the server address and authentication type you use to connect to the home portal server.

Basics

Name: Home Portal Account

Description: Home Portal Account

Type: HTTP

Server: http://

Name and password

Name:

Password:

Advanced properties

Authentication URL: http://

Authentication Type: J2EE-FORM

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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.

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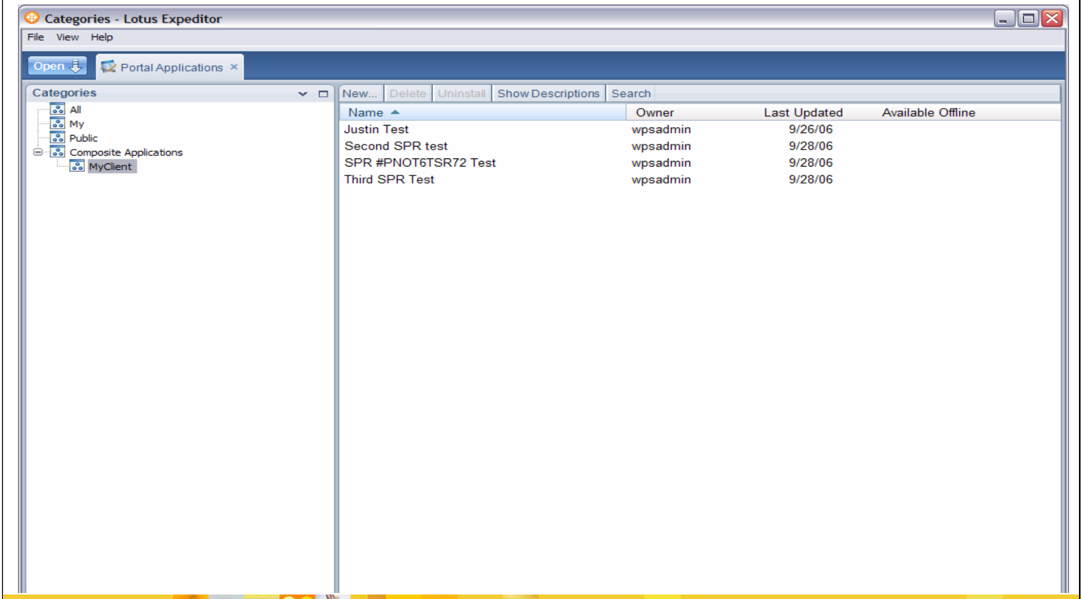
Portal managed client - Applications

Portal Management Client



Name	Owner	Last Updated	Available Offline
Justin Test	wpsadmin	9/26/06	
Second SPR test	wpsadmin	9/28/06	
SPR #PNOT6TSR72 Test	wpsadmin	9/28/06	
Third SPR Test	wpsadmin	9/28/06	

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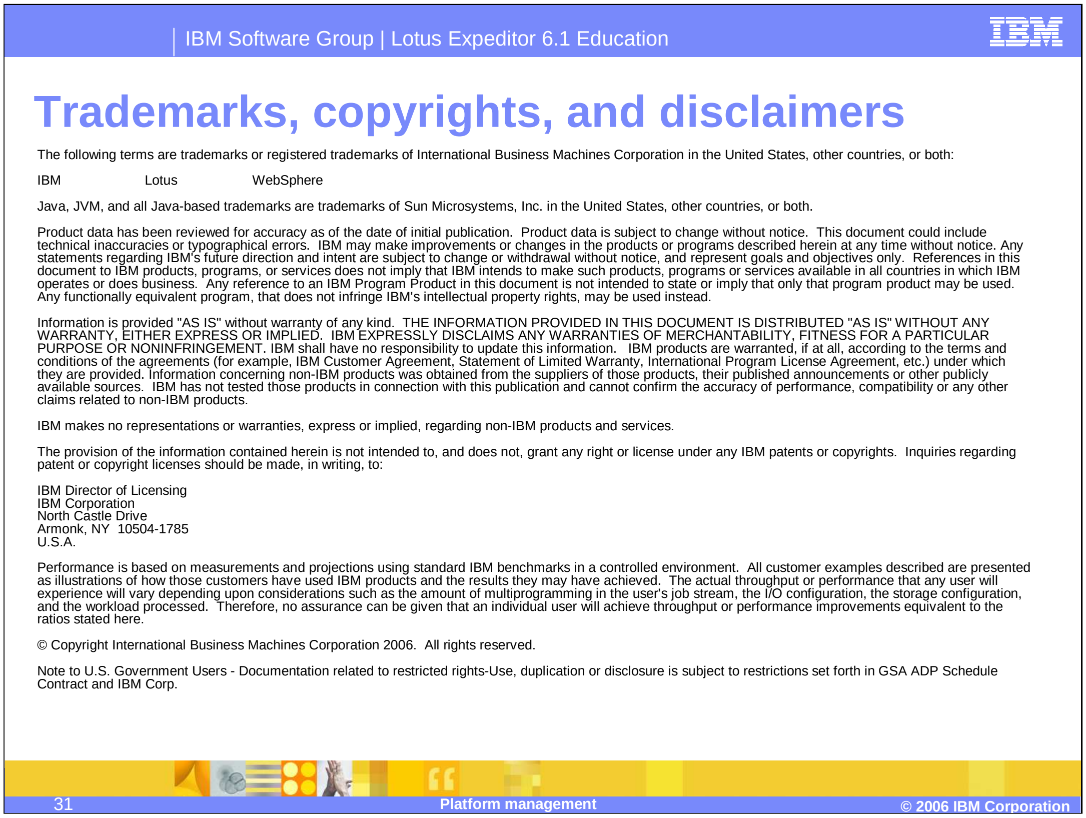
This slide shows the Expeditor workbench after applications have been provisioned from the Portal server.

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.



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This concludes the presentation.