# From Zero to Web2.0 Hero: Deploying Lotus Connections 2.5 (ADM13)

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# Your Host

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# Agenda

* About Lotus Connections 2.5

* WAS Basics

* Installing WAS

* Federated Repositories

* Connections Databases

* Installing TDI/Populating Profiles

* Installing Connections

* Post Installation Steps

# First, some questions...

# First, some questions...

* Customer?

# First, some questions...

* Customer?

* Partner?

# First, some questions...

* Customer?

* Partner?

* Twitter?

# First, some questions...

* Customer?

* Partner?

* Twitter?

* Facebook?

# First, some questions...

* Customer?

* Partner?

* Twitter?

* Facebook?

* LinkedIn?

# First, some questions...

* Customer?

* Partner?

* Twitter?

* Facebook?

* LinkedIn?

* Greenhouse?

# First, some questions...

* Customer?

* Partner?

* Twitter?

* Facebook?

* LinkedIn?

* Greenhouse?

* Used Lotus Connections?

# First, some questions...

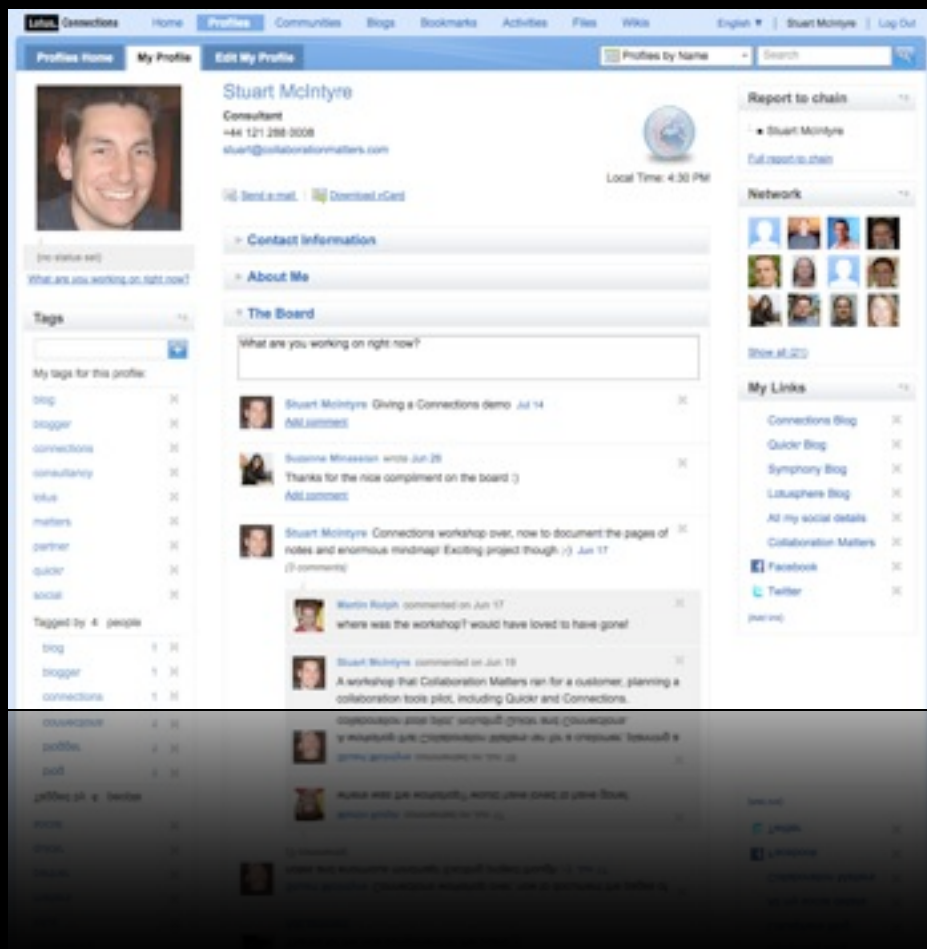* Customer?

* Partner?

* Twitter?

* Facebook?

* LinkedIn?

* Greenhouse?

* Used Lotus Connections?

* Installed Lotus Connections (any version)?

# First, some questions...

* Customer?

* Partner?

* Twitter?

* Facebook?

* LinkedIn?

* Greenhouse?

* Used Lotus Connections?

* Installed Lotus Connections (any version)?

* Installed Lotus Connections 2.5?

# Interactivity is good!

Profiles

Wikis

Bookmarks

Blogs

Communities

Activities

Homepage

Files

# Lotus Connections 2.5

## Profiles

Quickly find the people you need by searching across your organisation and connecting to others.

## Lotus Connections

All your social software needs ready for business

## Communities

Create, find, join, and work with communities of people who share a common interest, responsibility, or area of expertise

## Bookmarks

Save, organize and share bookmarks; discover bookmarks that have been qualified by others with similar interests & expertise

## Blogs

Use a weblog to present your idea and get feedback from others; learn from the expertise and experience of others who blog

## Activities

Organize your work, plan next steps, and easily tap your expanding professional network to help execute your everyday deliverables, faster

## Homepage

Manage your attention by viewing relevant social data aggregated across your subscriptions, notifications, and network of colleagues.

## Files

Upload and share any type of file with colleagues and communities. Store versions and view downloads, comments and ratings.

## Wikis

Create wiki spaces for individuals, groups, and communities to coauthor pages. View changes across pages, ratings, and comments.

# Lotus Connections 2.5

- Connections 2.0.1 had 6 core services
  - Profiles
  - Communities
  - Blogs
  - Dogear (renamed Bookmarks in 2.5)
  - Activities
  - Home Page
- Connections 2.5 adds
  - Files
  - Wikis
  - Mobile
  - Plus two backend services, News & Search

# What comes in the box?

✤ (Oh, alright then, in the eAssembly!)

**IBM. Lotus. software**

Lotus Connections 2.5 Installer
Lotus Connections 2.5 Wizards

**IBM. Tivoli. software**

Tivoli Directory Integrator 6.1.1
Tivoli Directory Server 6.0 (Optional)

**IBM. WebSphere. software**

WebSphere Application Server
Network Deployment 6.1
WebSphere Application Server
Network Deployment Supplements 6.1
WebSphere Application Edge
Components 6.1 (Optional)

**IBM. Information Management software**

DB2 9.5
(Optional)

# What do you REALLY need?

✤ Preparation is everything!

**IBM. WebSphere. software**

WAS ND 6.1 **PA/PW**
WAS ND Supplements 6.1 **PA/PW**
WebSphere UpdateInstaller 7.0.0.5 **TN**
WAS 6.1.0.23 **FC**

**IBM. Lotus. software**

LC 2.5 Installer **PA/PW**
LC 2.5 Wizards **PA/PW**
LC 2.5 UpdateInstaller **FC**
All current LC2.5 Fixes **FC**

**IBM. Tivoli. software**

TDI 6.1.1 **PA/PW**
TDI 6.1.1 FP6 **FC**

**ORACLE**

Oracle 10g
Enterprise
10.2.0.4

**IBM. Information Management software**

DB2 9.5 FP3 or
DB2 9.1 FP6 **FC**

**Microsoft SQL Server**

MS SQL Server
2005 Enterprise SP2

**IBM. Tivoli. software**

Tivoli Directory
Server 6.0 FP3 **FC**

**IBM. Lotus. software**

Domino 7.0.2
Domino 8.0.2
Domino 8.5.x

**Windows Server Active Directory**
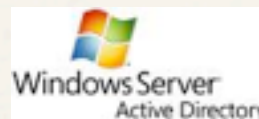
MS Active
Directory 2003
SP2+

**Novell.**

Novell eDirectory
8.8

**Sun microsystems**

Sun Java Directory
Server 5.2, 6.0

**FC = FixCentral** http://ibm.com/support/fixcentral

**PA/PW = Passport Advantage (Customers) or PartnerWorld (Partners)**

**TN = UpdateInstaller TechNote** http://www-01.ibm.com/support/docview.wss?rs=180&uid=swg24020212

# Supported Server Platforms

✤ Check OS requirements carefully - WAS/DB2 etc. are supported on more platforms than Lotus Connections

Windows 2008 Server (64 Bit only)
Windows 2003 Server SP2 (32 Bit only)

AIX5L 5.3 TL4

RHEL AS/ES 4.7 (32-bit only)

SUSE Linux Enterprise Server 10
(32-bit only)

# LC2.5 architecture



**Lotus Connections services running on WebSphere Application Server**

**Corporate LDAP Directory**

**Browsers
Mobile Devices
Rich Clients
Feed Readers
Custom Applications**

**IBM HTTP Server**

**RDBMS**

**Tivoli Directory Integrator**
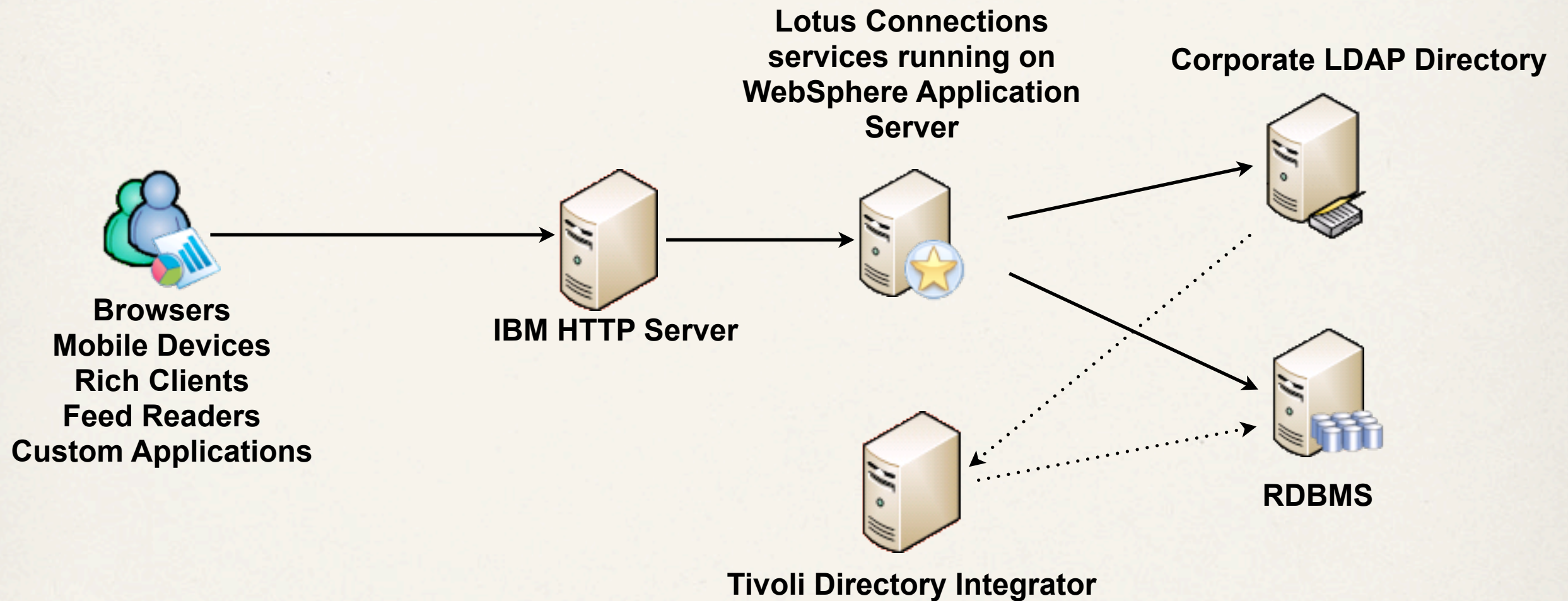
# First up, how many boxes?

* IBM's schematics can get pretty terrifying - large scale enterprise deployments with five nines uptime could get to 20 boxes/VMs

* but....

* IBM's own TAP deployment runs on 4 boxes, HTTP, 2 x WAS (only for availability reasons) and DB, so no need to worry!

* I only ever use 3 types of install...

# Single box

- Do NOT use LC2.5 Pilot install!

- Single box = HTTP, WAS, DB2

- Typically Windows, 4GB, 2 x CPUs, 100GB disk

- Would scale to ~500 users, depending on load

**Lotus Connections services running on WebSphere Application Server**

**LDAP (for Test/Demo)**

**Organisational LDAP**

**IBM HTTP Server**

**DB2 RDBMS**

**Tivoli Directory Integrator**

WAS ND installed
1 x Profile, 1 x Server
All features installed
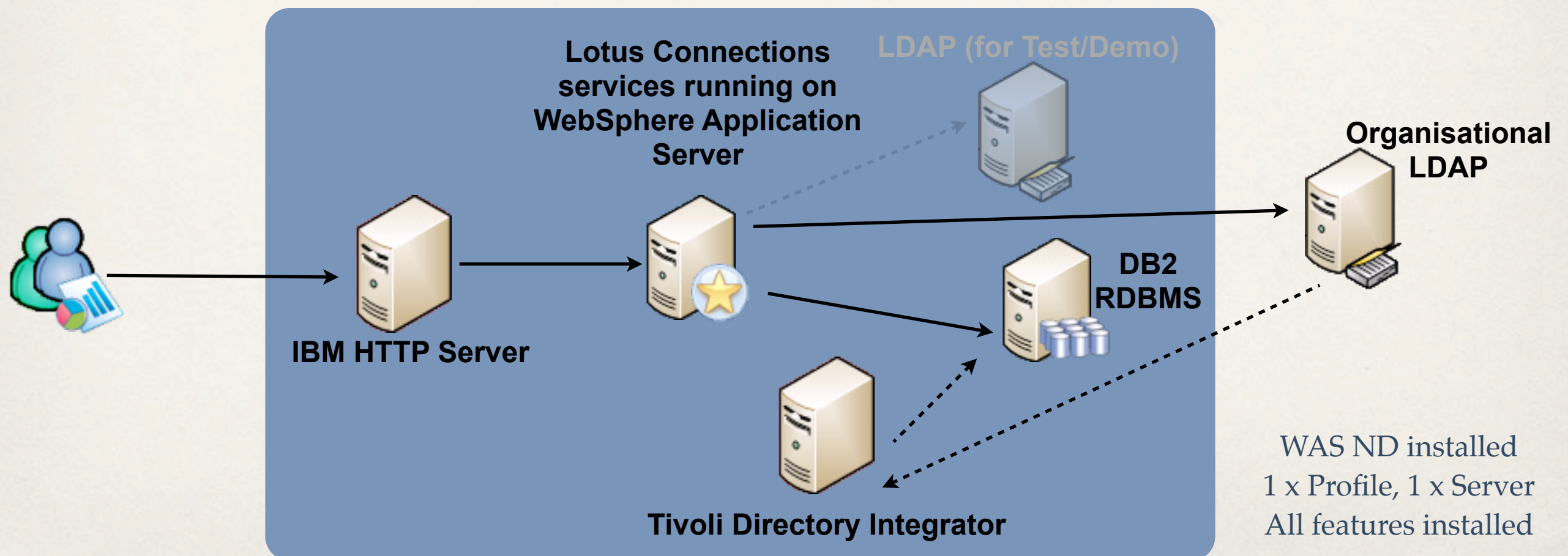
# Two boxes

✤ Box 1 = HTTP, WAS - 4GB+, 2 x CPUs, 60GB disk

✤ Box 2 = DB2 (or could be Oracle, SQL Server) - 4GB, 2 x CPUs, 100GB

✤ Windows or Linux

✤ Would scale to ~2000 users, depending on load

**Organisational LDAP**

**Lotus Connections services running on WebSphere Application Server**

**Tivoli Directory Integrator**

**IBM HTTP Server**

**RDBMS**
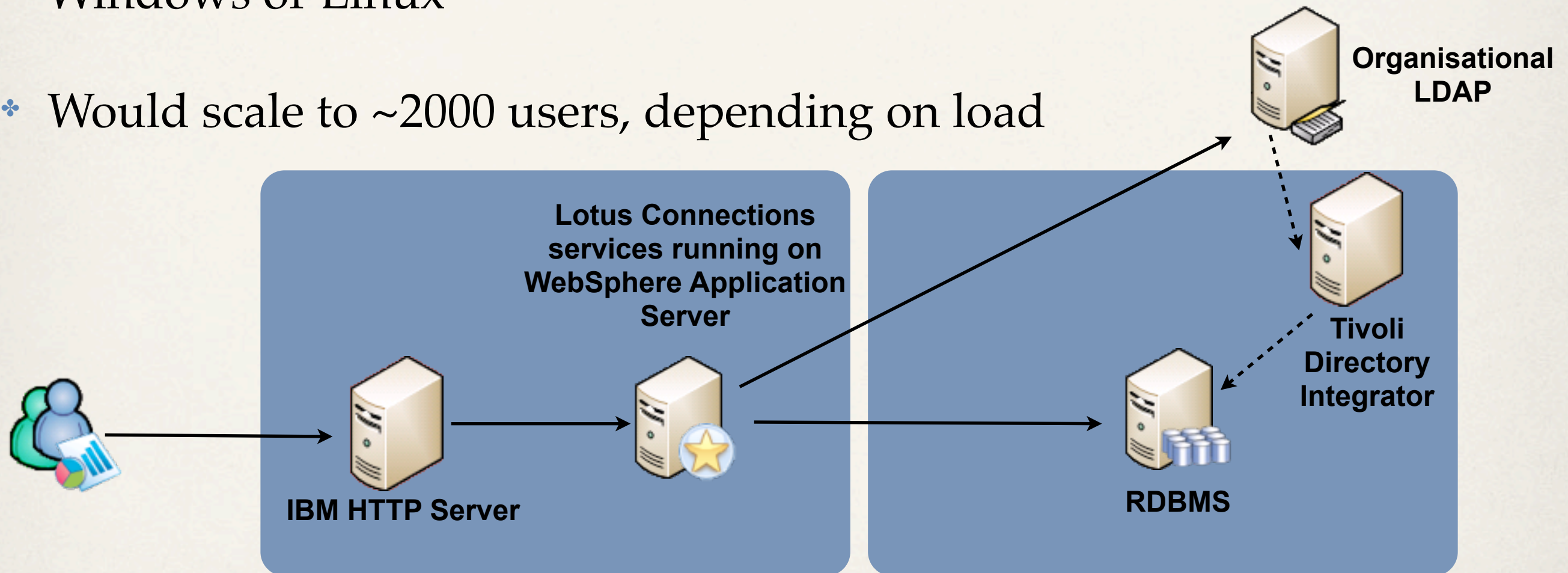
WAS ND installed
1 x Deployment Manager
1 x Profile, 4 x Servers
All features installed

# Clustered

* Two HTTP Servers, with 'IP Sprayer'

* Two WAS Servers, one Deployment Manager

* Linux or AIX

* Would scale to ~20,000 users, depending on load

* but...

* Don't worry about all that now!

# The Install Process

Install WAS

Install HTTP Server

Install WAS UpdateInstaller

Patch WAS to 6.1.0.23

Configure WAS LDAP

Configure HTTP Server

Install DB2

Configure DB2

Install TDI

Patch TDI to 6.1.1FP6

Run DB Wizard

Run Population Wizard

Install Lotus Connections

Configure Lotus Connections

Test

Post-Install Configuration
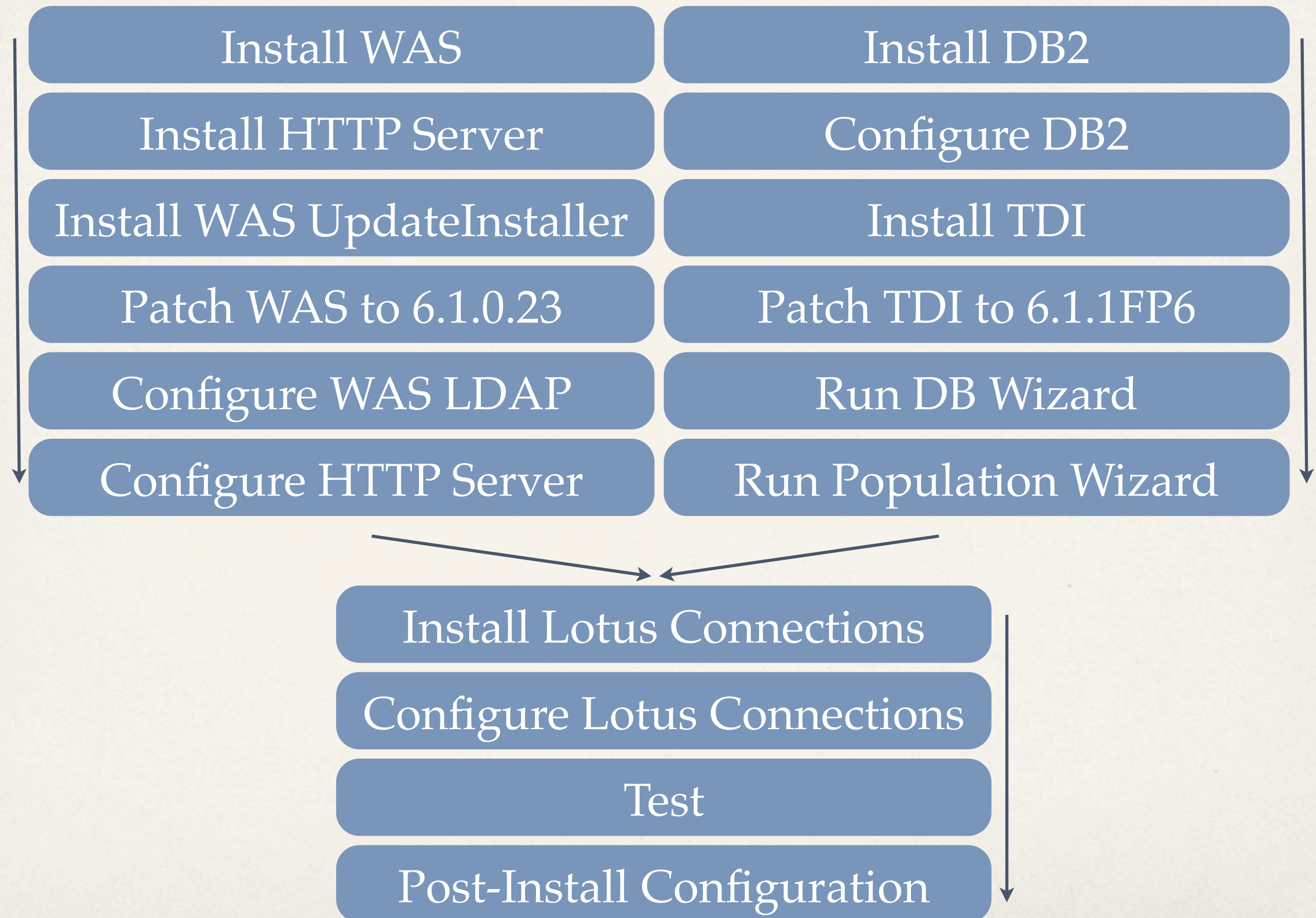
# Installing WAS

✤ Install WAS ND

✤ Install WAS Update Installer

✤ Install WAS Fix Pack 23

✤ Configure Federated Repositories

# WAS Basics

* Profile – an environment inside a WebSphere Application Server (WAS) to host applications

    * NOTE: WebSphere Application Server uses the term profile, Lotus Connections has a feature named Profiles.  These are two distinct terms with completely different meanings.

    * A WAS Server can have multiple profiles (much like a partitioned Domino Server).  The executable are installed in one directory, the profiles are the "data" directories.

    * A Profile can have multiple server processes (default is 'server1' )

* Cell – a group of Nodes

* Node – an individual WAS server

# Integrated Solutions Console

- WAS Administration performed primarily through the Integrated Solutions Console

    - This is the WAS version of Domino Administrator Client

- Get familiar with this name

- You will use the ISC to configure

    - Federated Repositories

    - SSO

    - Grant administrative access to Connections features

    - Troubleshoot and fix database connectivity

    - many more tasks

# Installing WAS
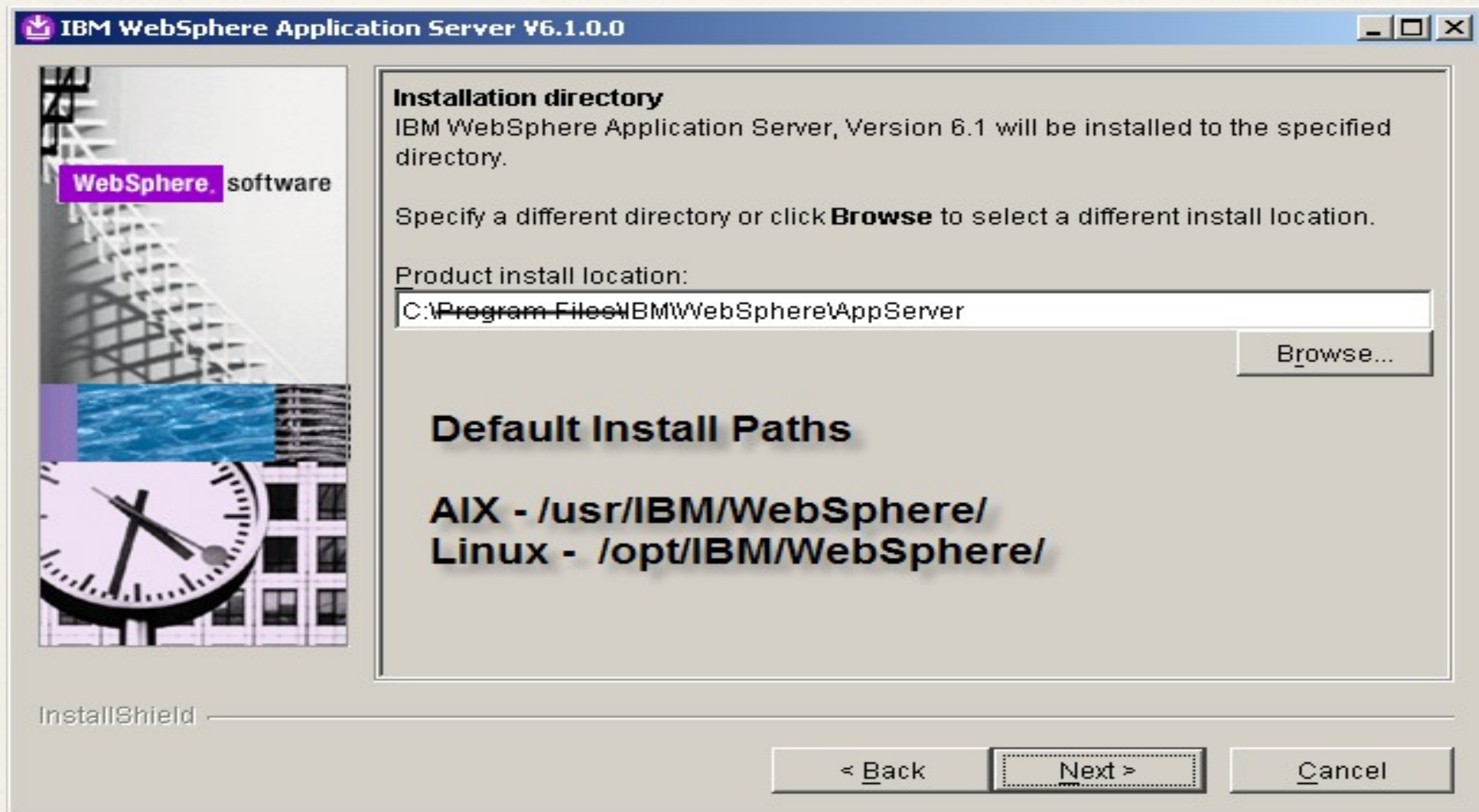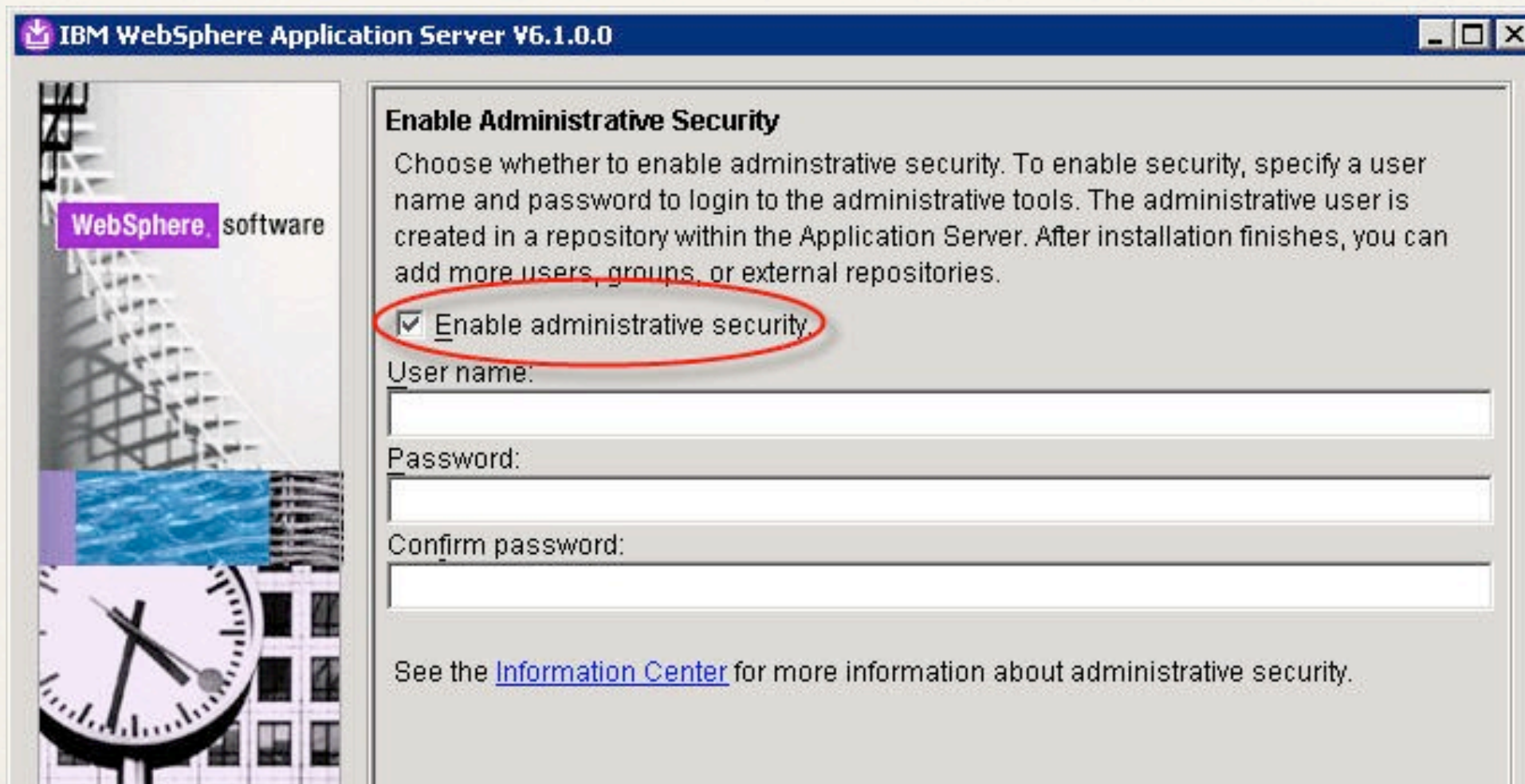
# Installing WAS

✤ Select the Profile type (or None)
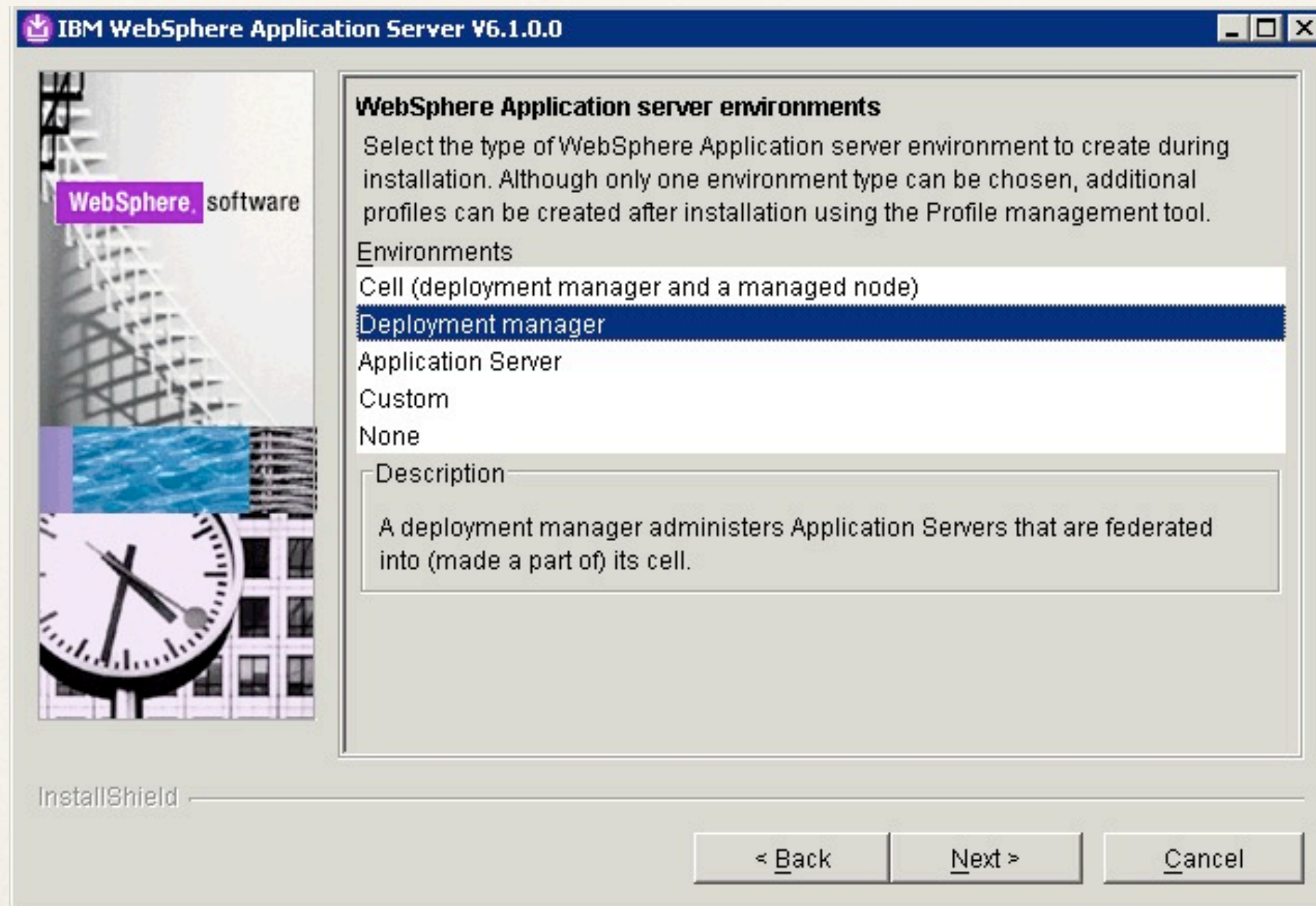
# Installing WAS

✤ **Enable Admin Security**

  ✤ Use a Username that DOES NOT exist in your LDAP

# Installing WAS

* Uncheck the "Launch First Steps" box
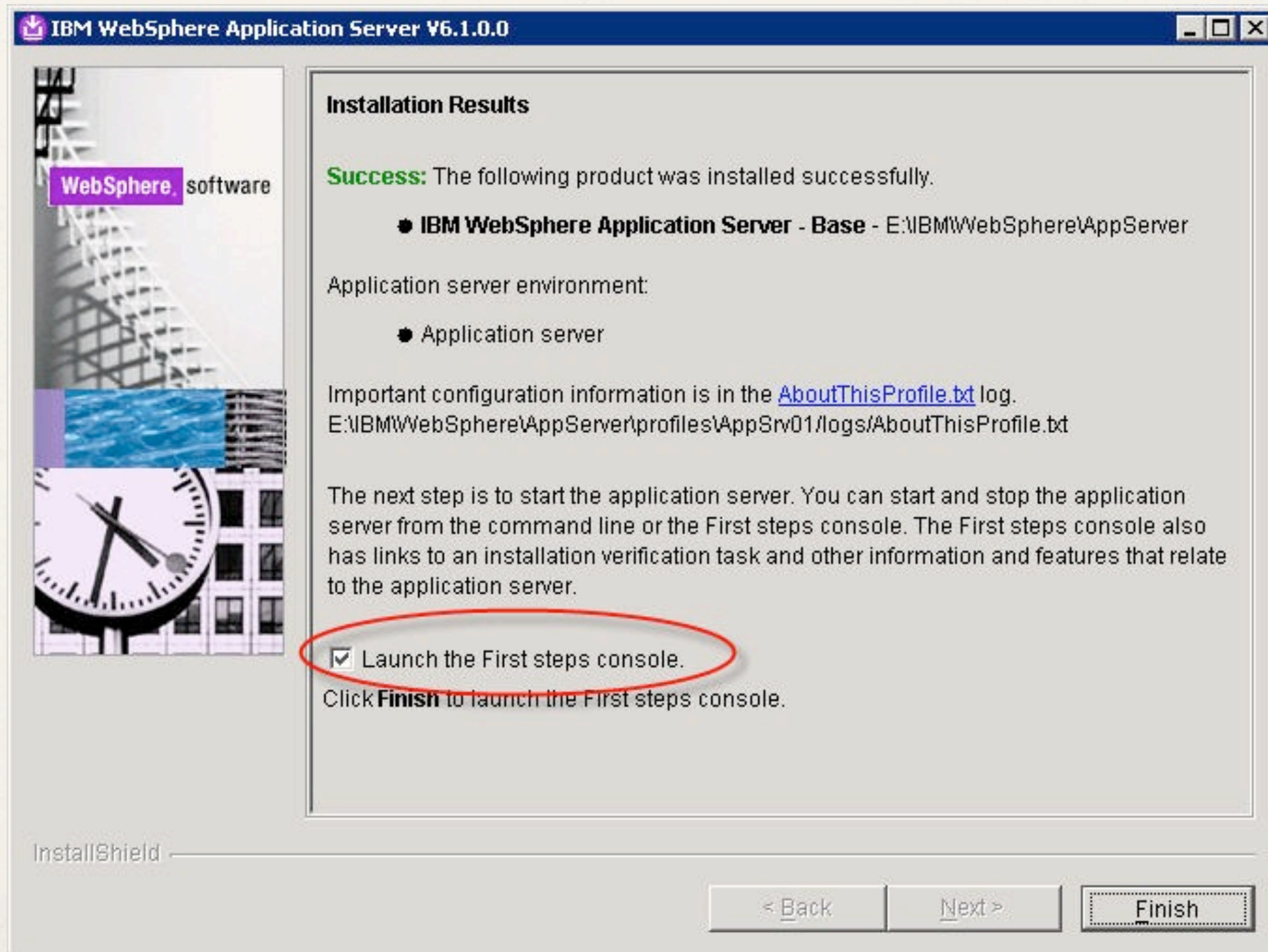
# Installing WAS Update Installer

* For WAS 6.1.0.21 and later you can use the WAS V7 Update Installer

    * WAS 7 Update Installer

        * http://tinyurl.com/wasv7ui

    * Since we are installing Fix Pack 23 we will use the V7 Update Installer

    * Fix Pack 23

        * http://tinyurl.com/was6fp23

# Installing the WAS Update
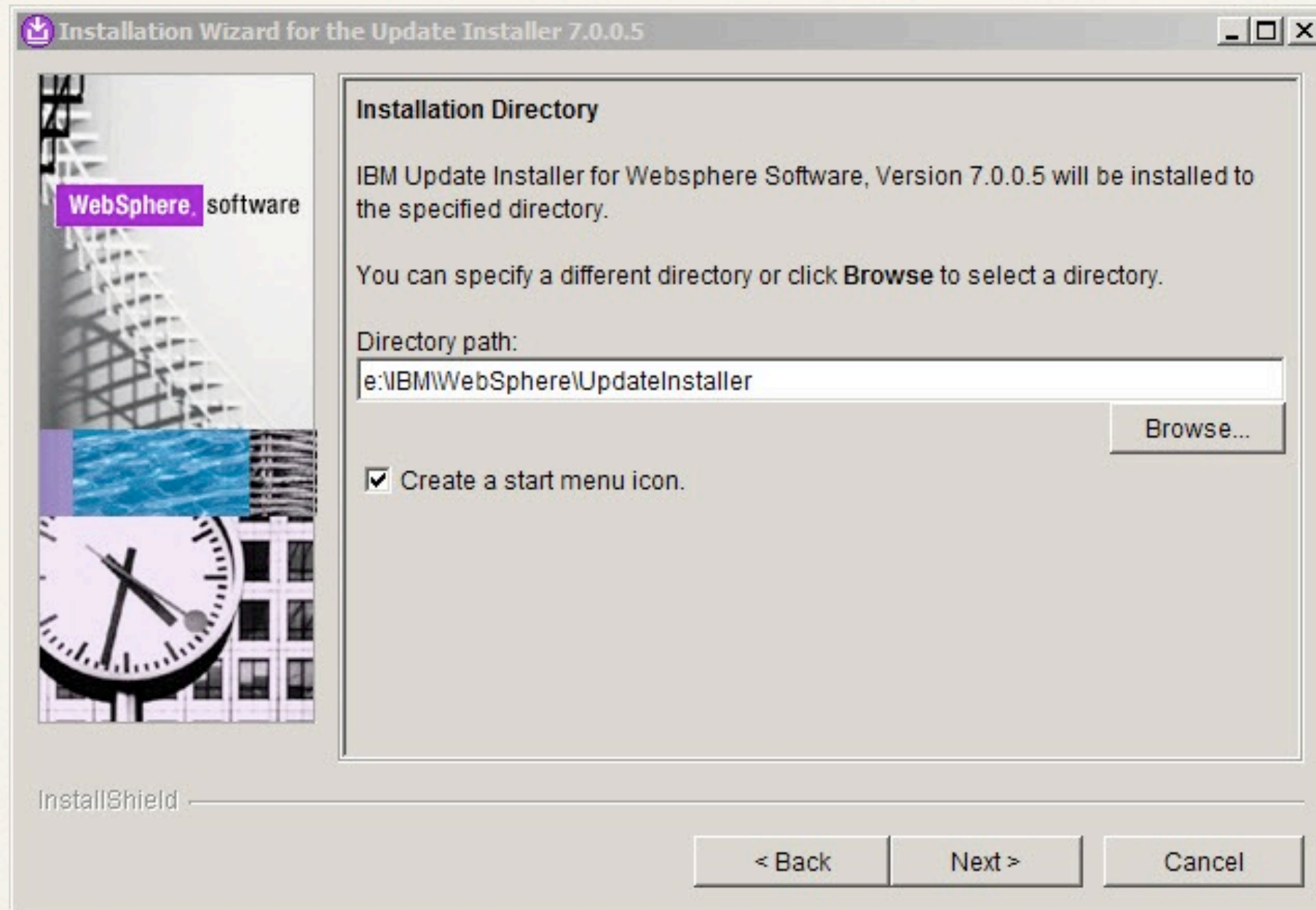
# Installing the WAS Update

* When the install is complete you can immediately launch the update installer
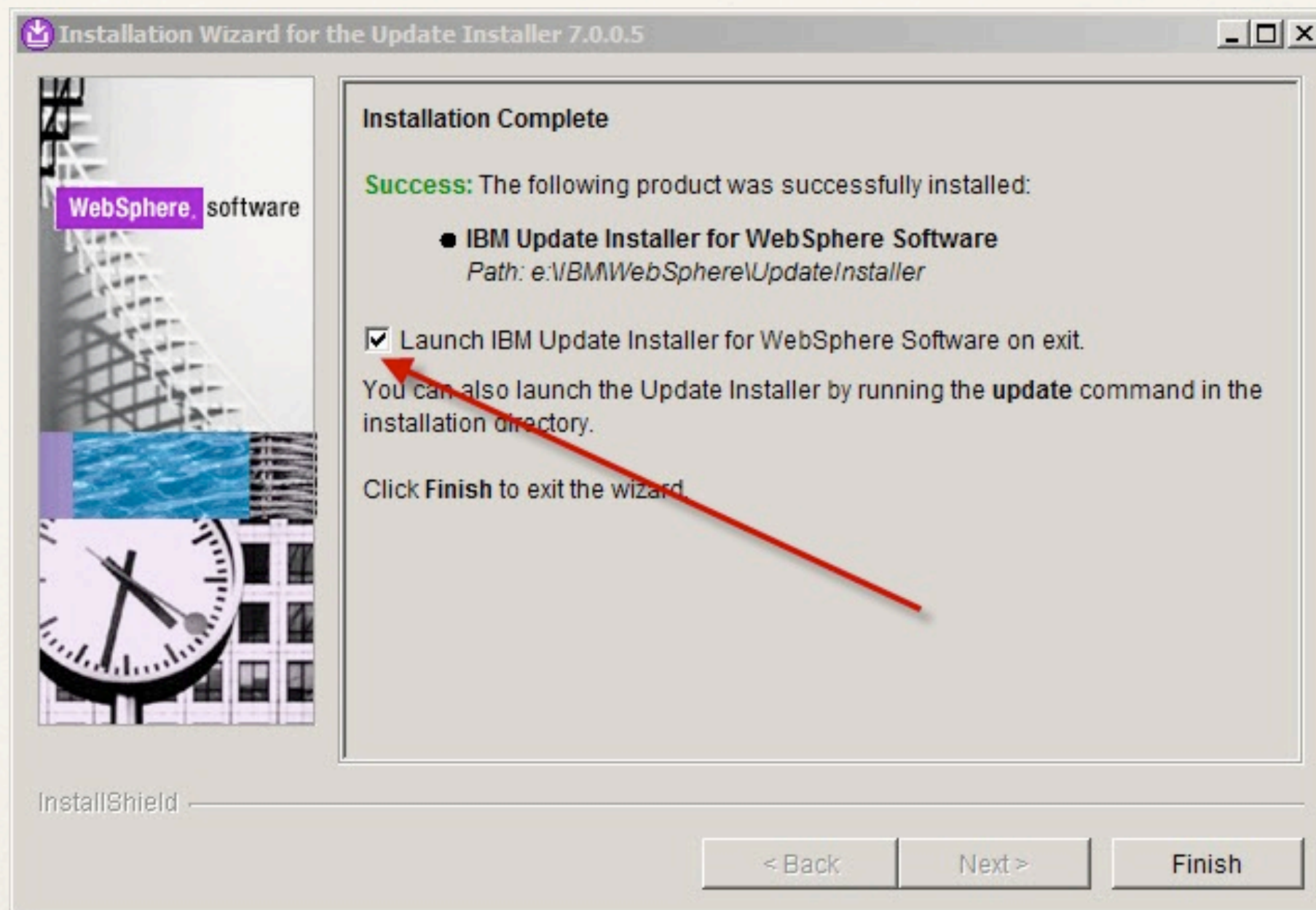
# Installing WAS Updates

✤ Currently the following WAS fixes are required

   ✤ WAS Fix Pack 23

   ✤ PK78743 (Network Deployments only)

   ✤ PK77465 (Required for SPNEGO)

✤ Technote 27016547 has detailed requirements check for updates

   ✤ http://tinyurl.com/con25req

# Installing WAS Updates

* Select the instance of WAS to update

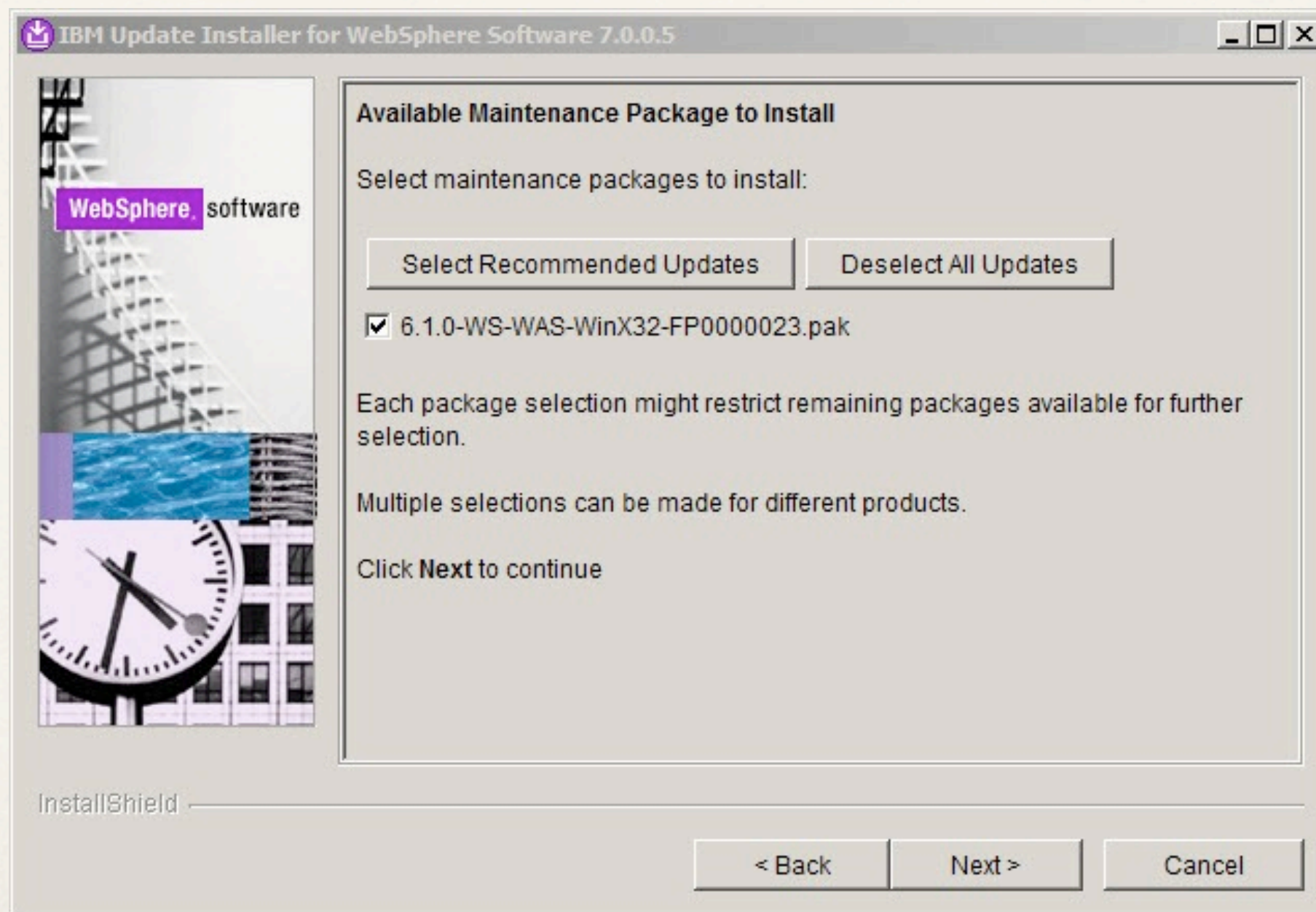  * If only one is installed it is the default
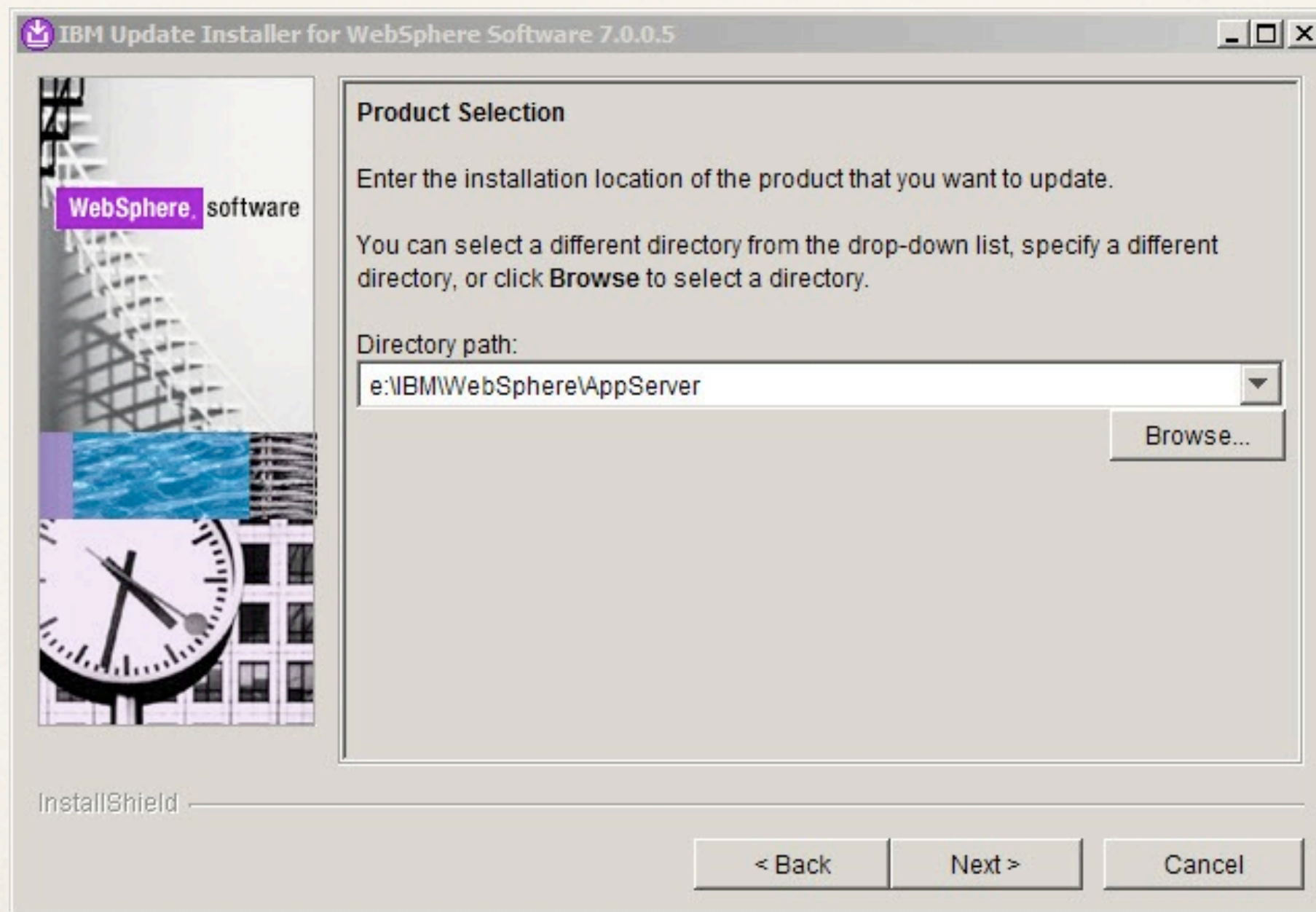
# Installing WAS Updates
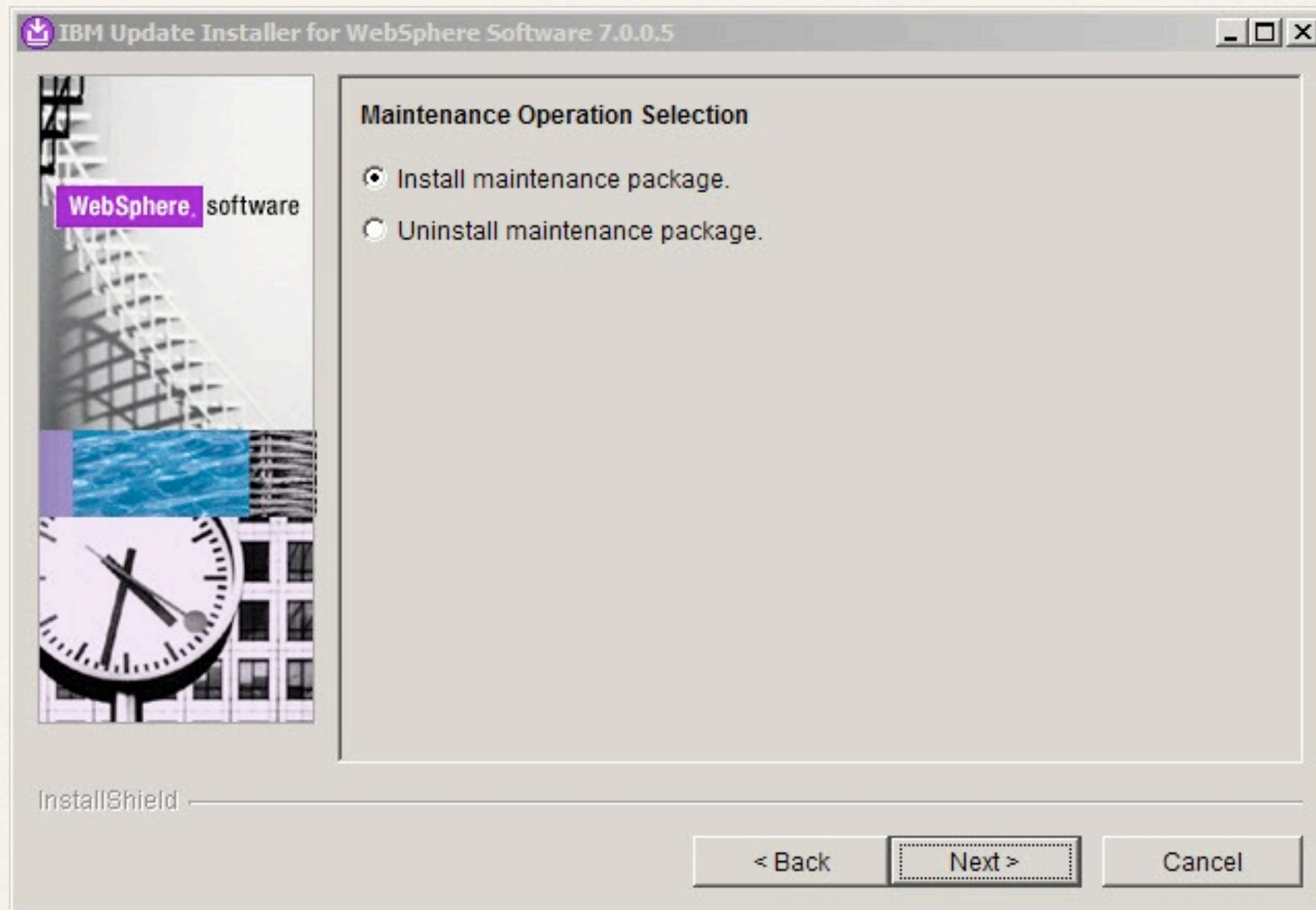
# Installing WAS Updates

- Select the location of the WAS Fixes

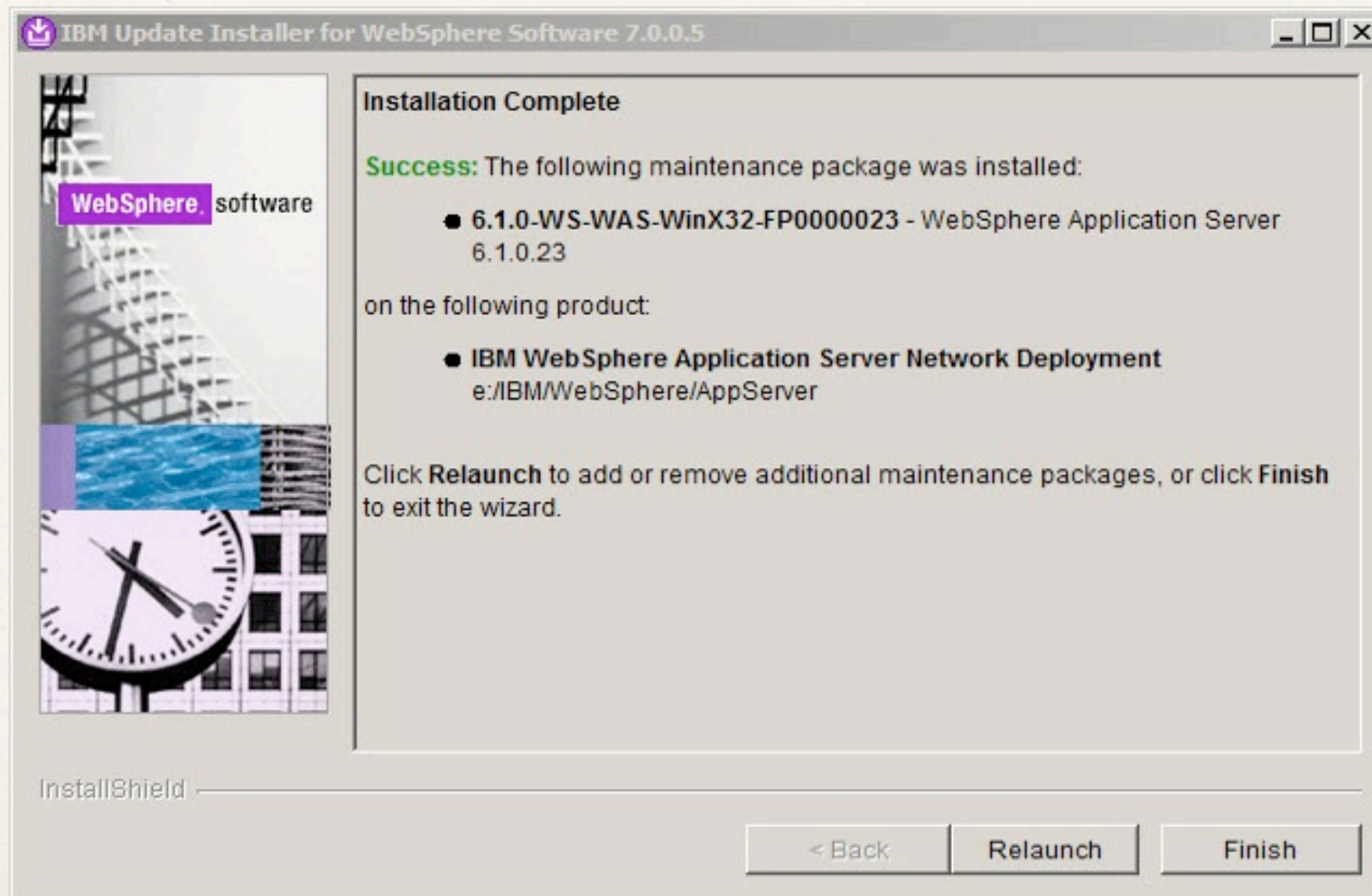  - Default is 'maintenance' directory under the updater install
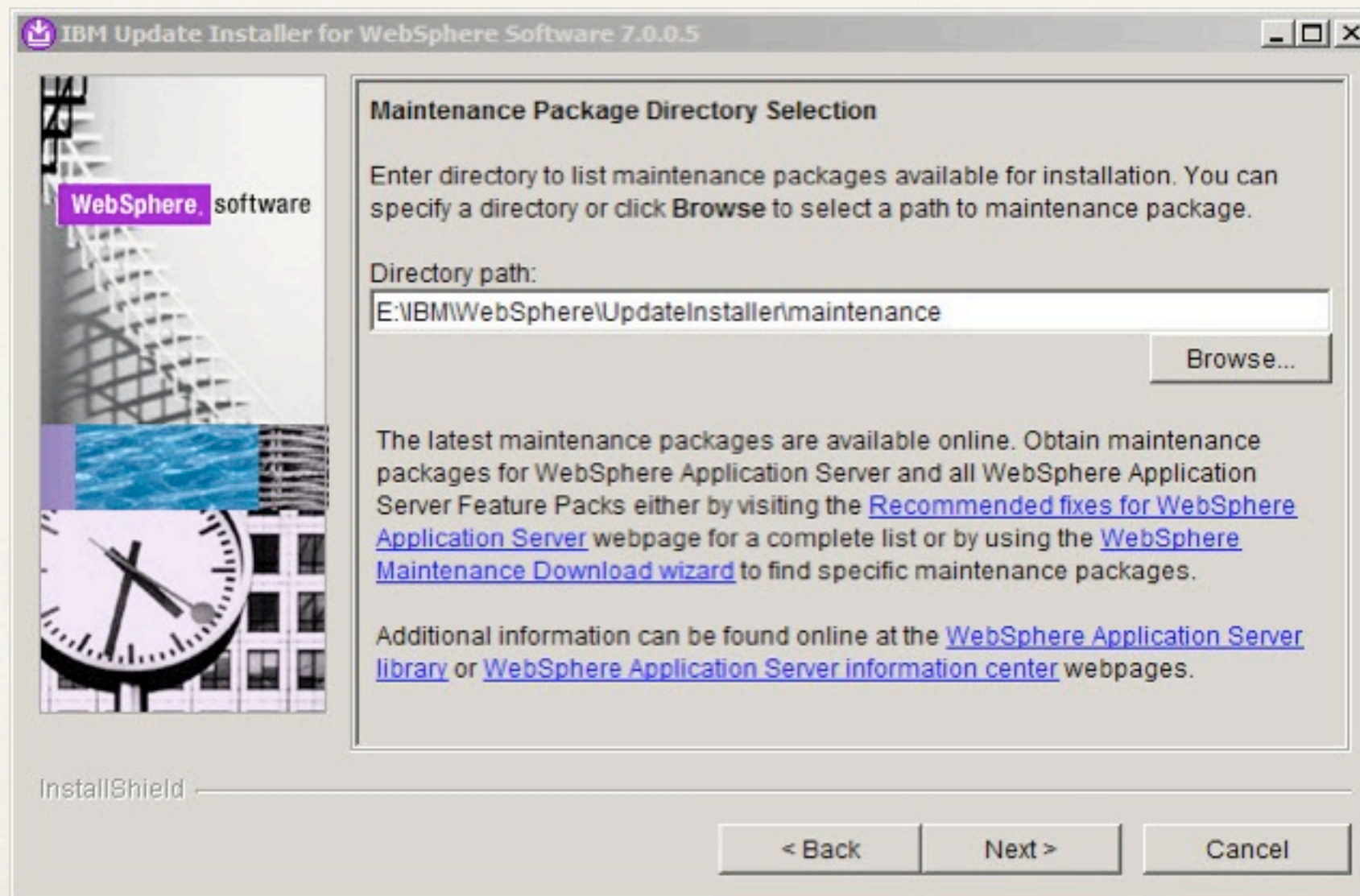
# Installing WAS Updates

* Select the Fixes to install

    * Fixes that do not apply will be greyed out

# Installing WAS Updates

✤ Verify the updates installed successfully

# Federated Repositories

* Federated Repositories is how you connect WAS to your LDAP

    * If using a Deployment Manager configure Federated Repositories on the DMgr only

    * If you are not using a Deployment Manager configure Federated Repositories for the WAS profile(s) to be used for Connections

# Configuring Federated Repositories

* The ISC Can be accessed via

    * http://servername.domain:9060/ibm/console

        * Or substitute the correct port number

    * Your ID can be anything at this stage

# Configuring Federated Repositories

- The ISC Can be accessed via

  - http://servername.domain:9060/ibm/console

    - Or substitute the correct port number

  - Your ID can be anything at this stage

**Integrated Solutions Console**

**Welcome, enter your information.**

User ID:

[                    ]

Log in

Note: After some time of inactivity, the system will log you out automatically and ask you to log in again.

# Configuring Federated Repositories

* Launch the Integrated Solutions Console

    * Security / Secure administration, applications, and infrastructure

    * Enable Administrative Security (skip if you did this during installation)

        * Create ID and Password

        * Note: this ID and Password should not be in LDAP

    * Set Available Realm Definitions to Federated Repositories, Set as a current, and Configure

# Configuring Federated Repositories

**View:** All tasks

- Welcome
- ⊞ Guided Activities
- ⊞ Servers
- ⊞ Applications
- ⊞ Resources
- ⊟ Security
  - ▪ Secure administration, applications, and infrastructure
  - ▪ SSL certificate and key management
  - ▪ Bus Security
- ⊞ Environment
- ⊞ System administration
- ⊞ Users and Groups
- ⊞ Monitoring and Tuning
- ⊞ Troubleshooting
- ⊞ Service integration
- ⊞ UDDI

## Secure administration, applications, and infrastructure

### Secure administration, applications, and infrastructure

The application serving environment is completely secured when administration is supports the administration and applications also are secured.

**Configuration**

| Security Configuration Wizard | Security Configuration Report |

**Administrative security**

☐ Enable administrative security
- Administrative User Roles
- Administrative Group Roles

**Application security**

☑ Enable application security

**Java 2 security**

☐ Use Java 2 security to restrict application access to local resources

    ☑ Warn if applications are granted custom permissions

    ☐ Restrict access to resource authentication data

**User account repository**

Current realm definition

Local operating system
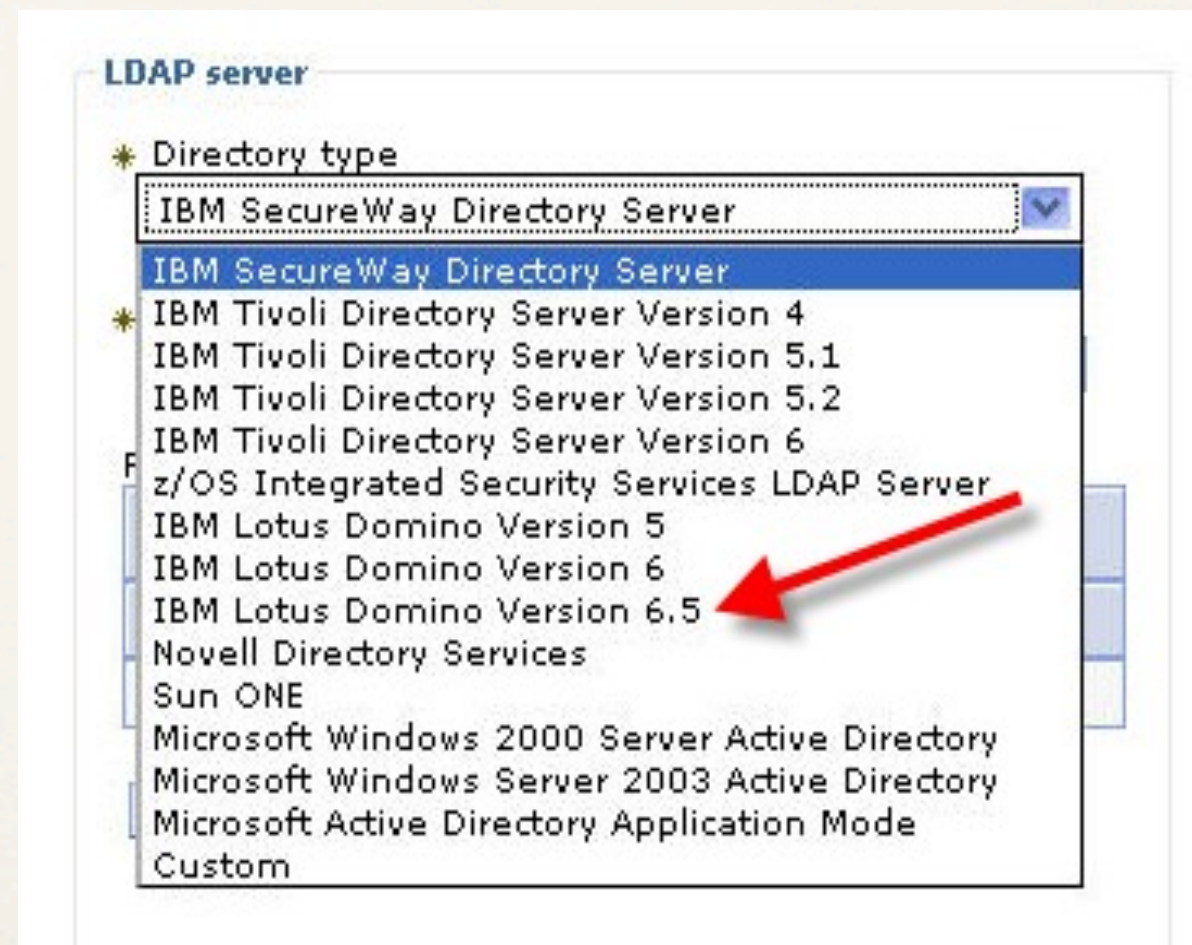
Available realm definitions

| Federated repositories ▾ | Configure | Set as current |

- Federated repositories
- Local operating system
- Standalone LDAP registry
- Standalone custom registry

# Configuring Federated Repositories

* Add a Base Entry to the Realm and configure your LDAP Server

* Wait I am using Domino 7 or 8 as my LDAP!

**LDAP server**

* Directory type

IBM SecureWay Directory Server

| IBM SecureWay Directory Server |
| IBM Tivoli Directory Server Version 4 |
| IBM Tivoli Directory Server Version 5.1 |
| IBM Tivoli Directory Server Version 5.2 |
| IBM Tivoli Directory Server Version 6 |
| z/OS Integrated Security Services LDAP Server |
| IBM Lotus Domino Version 5 |
| IBM Lotus Domino Version 6 |
| IBM Lotus Domino Version 6.5 |
| Novell Directory Services |
| Sun ONE |
| Microsoft Windows 2000 Server Active Directory |
| Microsoft Windows Server 2003 Active Directory |
| Microsoft Active Directory Application Mode |
| Custom |

# Configuring Federated Repositories

* If using Domino LDAP you need to manually set 'LDAP entity types'

# Configuring Federated Repositories

✤ Make sure Administrative Security and Application Security is Enabled

✤ Java 2 Security should be disabled for Connections 2.5

✤ Asked for Admin ID - choose 'wasadmin' or similar, say to create this

✤ Enter password - make sure you remember this!

# Configuring Federated Repositories

* Save your changes and restart WAS

* Note: Once Federated repositories is configured you will not be able to login if WAS can not contact your LDAP Server

    * Make sure you have configured

        * Firewalls

        * Credentials

* You will need the administrative ID to stop WAS

# Single Sign on

* Domino and Websphere both use LPTA and can integrate for SSO

    * The LPTA key must be generated in WAS and imported to Domino

        * Beware of automatic key roll over in WAS

            * http://tinyurl.com/keyrollover

* Other methods of SSO are supported

    * Windows Authentications (SPNEGO)

    * Tivoli Access Manager

    * SiteMinder

# Installing TDI

* TDI can be installed on the system with the Database or independently

    * AIX (newly supported in LC2.5)

    * Linux

    * Windows (not 2008)

* Make sure your TDI system has good network connectivity to your LDAP and Database

# Installing TDI

✤ Make sure to select

✤ Do not specify, Use current working directory at startup time
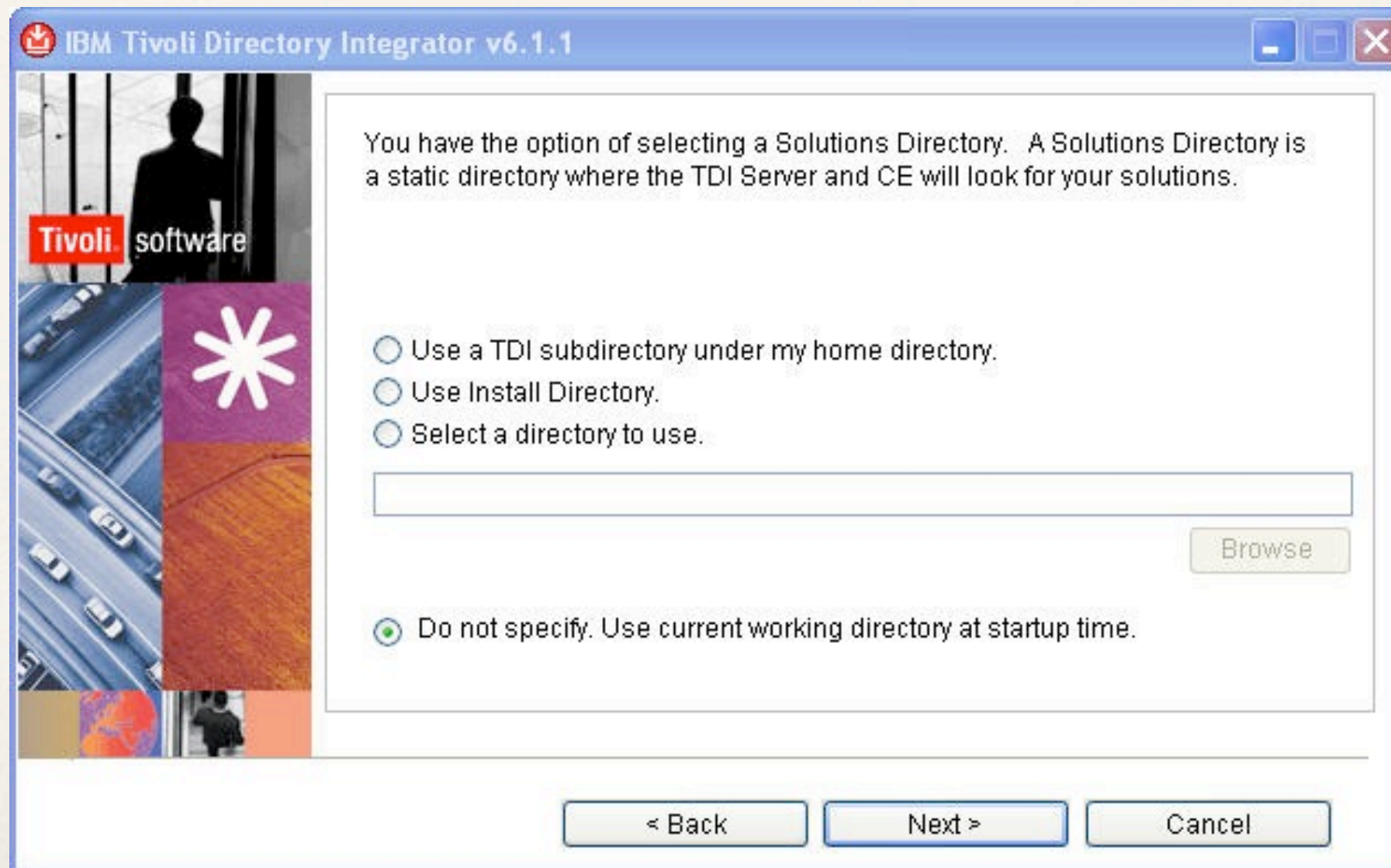
# Installing TDI Fixpacks

* Installing FP6

    * Regardless of where you install TDI the common files will be in

        * C:\Program Files\IBM\Common\ci\gmi\bin

        * /[opt,usr]/ibm/common/ci/gmi/bin

    * Launch gmi.cmd to install the Fix Pack

    * When prompted add the path to where the Fix Pack is located

# Creating Connections Databases

* Interactive wizard to create the features databases

    * Database wizard (dbWizard.bat/dbWizard.sh) must be run locally on the server where DB2 is installed

    * You can create the DB via command line scripts if you want to...

        * Not recommended!

* One Database per feature, some features do not have DBs

    * 8 databases for LC 2.5

# Creating Connections Databases

- If your database is DB2 remember to

    - Register the DB2 license key

    - Create the 'lcuser' account in the Operating System (avoids the need to specify DB2admin user for each DB created)

# Populating the Profiles Database

* TDI needs to be installed on the system used to run the wizard

* If you did not install TDI in default directory you will need to set the location manually

# Populating the Profiles Database

# Populating the Profiles Database

* Supply the correct JDBC Driver

    * Oracle \JDBC\lib

    * DB2 SQLLIB\java

    * MS SQL – MS SQL 2005 JDBC Driver 1.2

* You need these files for both TDI and WAS

# Populating the Profiles Database

* GUID is the KEY field

    * Domino – dominoUNID*

    * Novell – GUID

    * Active Directory – objectGUID/objectSID*

    * Tivoli Directory Server – ibmentryUUID

    * Sun Java – nsuniqueod

    * * Make sure to use the JavaScript Function to populate these fields

# Populating the Profiles Database
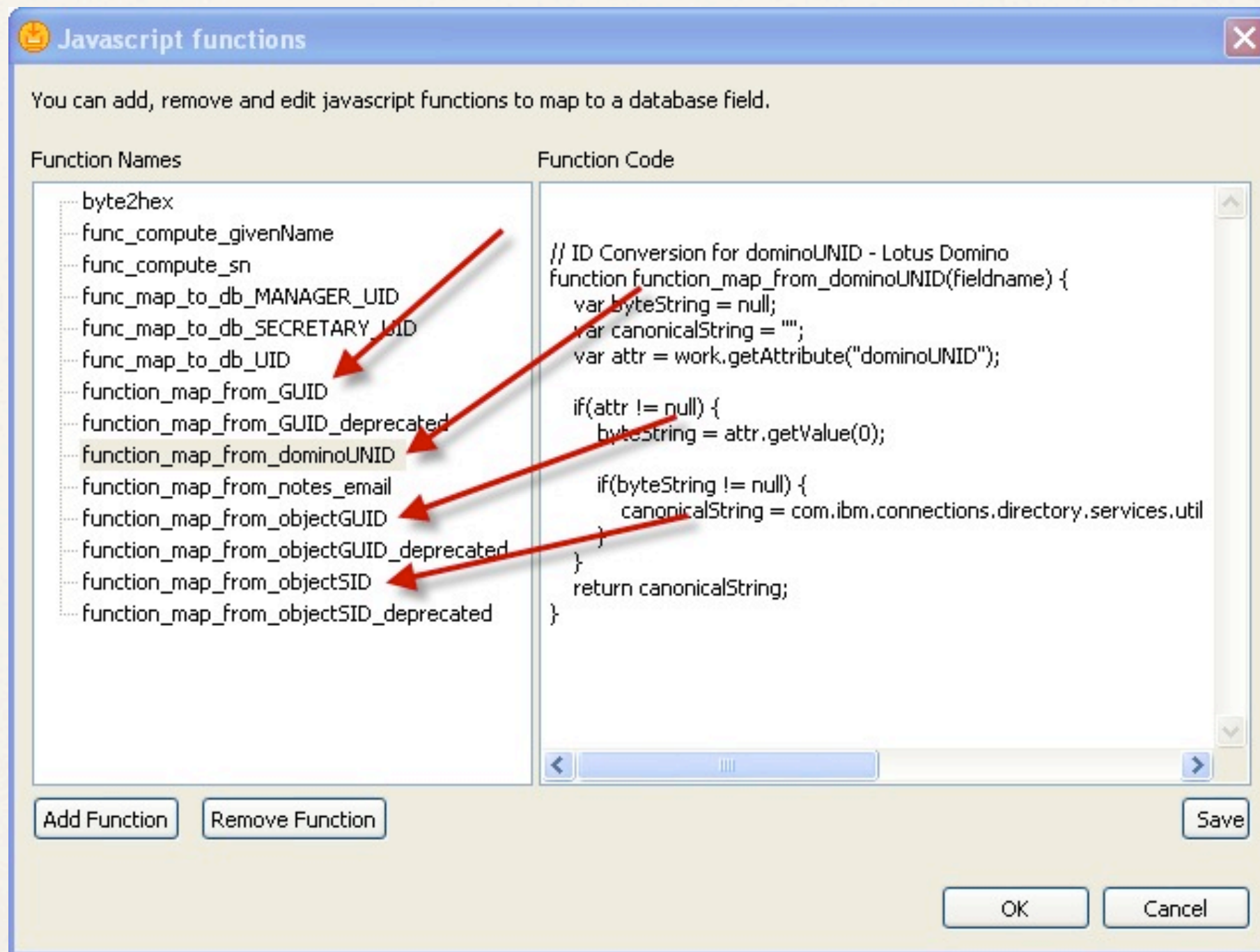
# Populating the Profiles Database

**Profiles population wizard for Lotus Connections 2.5**

**Profiles database mapping**

Lotus. Connections

Select an LDAP attribute or a JavaScript function for each field in the Profiles database.
You can sort the columns by selecting the column header, or select each row to add, remove, or edit the LDAP attribute or Javascript function.

| Database Fields | LDAP Attributes or JS Functions | Description | |
|---|---|---|---|
| alternateLastname | | Alternate last name | |
| bldgId | | Building | |
| blogUrl | | Blog link | |
| calendarUrl | | Calendar link | |
| countryCode | c | Country code | |
| courtesyTitle | | Courtesy title | |
| deptNumber | | Department number | |
| description | description | About me | |
| displayName | cn | Name | |
| distinguishedName | $dn | LDAP distinguished name | |
| email | mail | Office email | |
| employeeNumber | employeenumber | Employee number | |
| employeeTypeCode | employeetype | Employee type | |
| experience | | Background | |
| faxNumber | facsimiletelephonenumber | Fax number | |
| floor | | Floor | |
| freeBusyUrl | | Free/Busy time link | |
| givenName | givenName | default given name | |
| givenNames | givenName | Supported multiple given names | |
| groupwareEmail | displayName | Alternate email | |
| guid | {function_map_from_dominoUNID} | LDAP object GUID | |
| ipTelephoneNumber | | IP telephony number | |
| isManage | | Whether user is manager | |
| jobResp | | Job title | |

IBM.

Back     Next     Cancel

# Populating the Profiles Database

* Map the rest of the fields as appropriate for your LDAP environment

* You can create your own JavaScript functions if you need to parse data from your LDAP

    * http://tinyurl.com/customjs

# Populating the Profiles Database

* Optional Steps

  * Populate Country Codes

    * isocc.csv supplied or you can use your own

  * Populate

    * Departments

    * Organizations

    * Employee Types

    * Work Locations

# Installing Lotus Connections

* Before you begin

    * Copy JDBC Drivers on to WAS server

    * Need hostname, User ID and Passwords for Database connectivity

    * SMTP Server (if configuring mail routing)

* I suggest you create a response file for your install it can be useful later on

# Installing Lotus Connections

* For Network Deployments make sure the Deployment Manager is running

    * Increase the Java Heap size on the deployment manager before starting the install

        * http://tinyurl.com/dmgrheap

# Installing Lotus Connections

* Choose your install type

    * Stand-alone deployment

    * Network deployment

    * Advanced Stand-alone deployment

        * Think twice before choosing Advanced you are probably better off with a Network Deployment

* Pilot install is a different installer

# Installing Lotus Connections
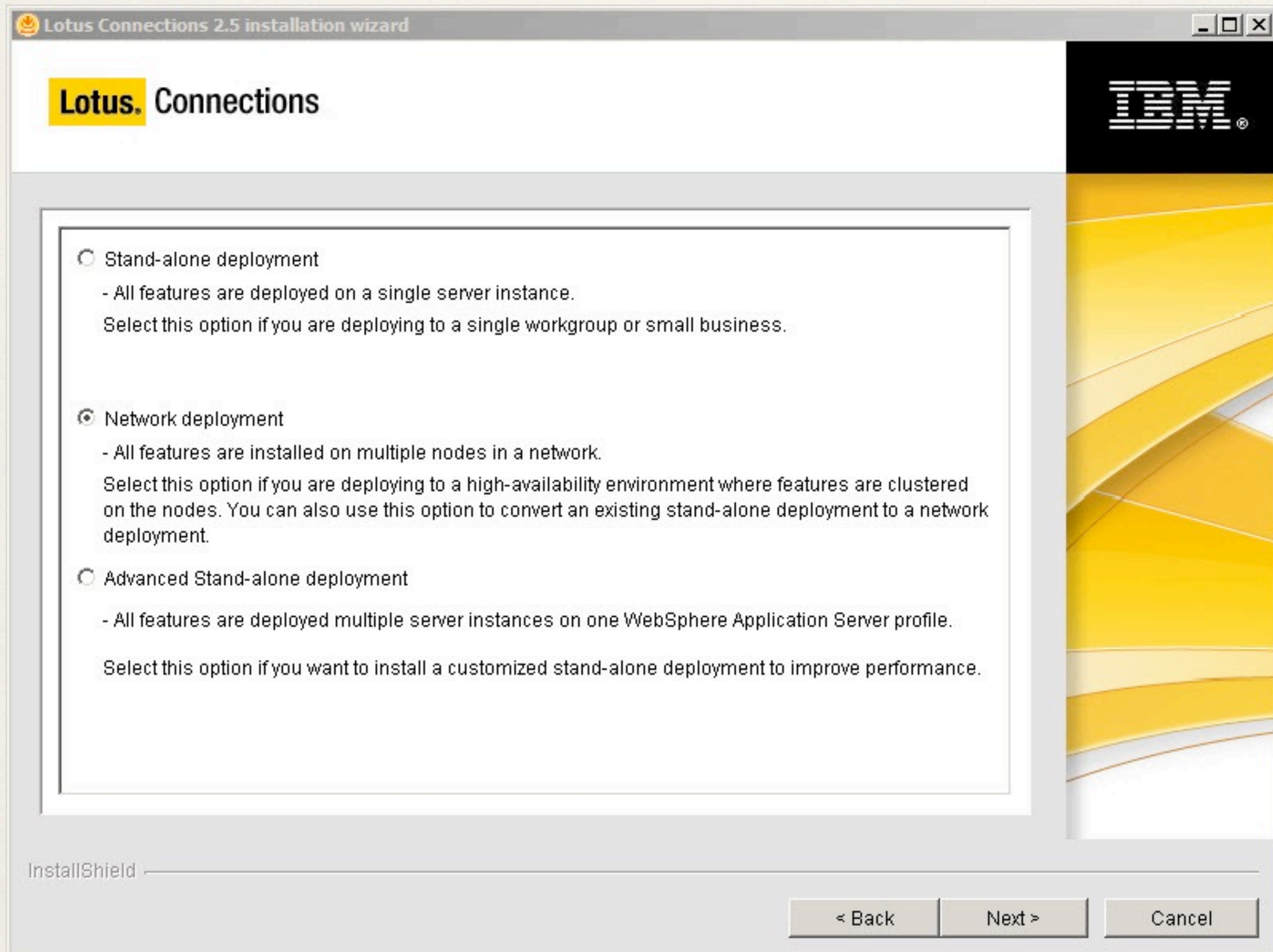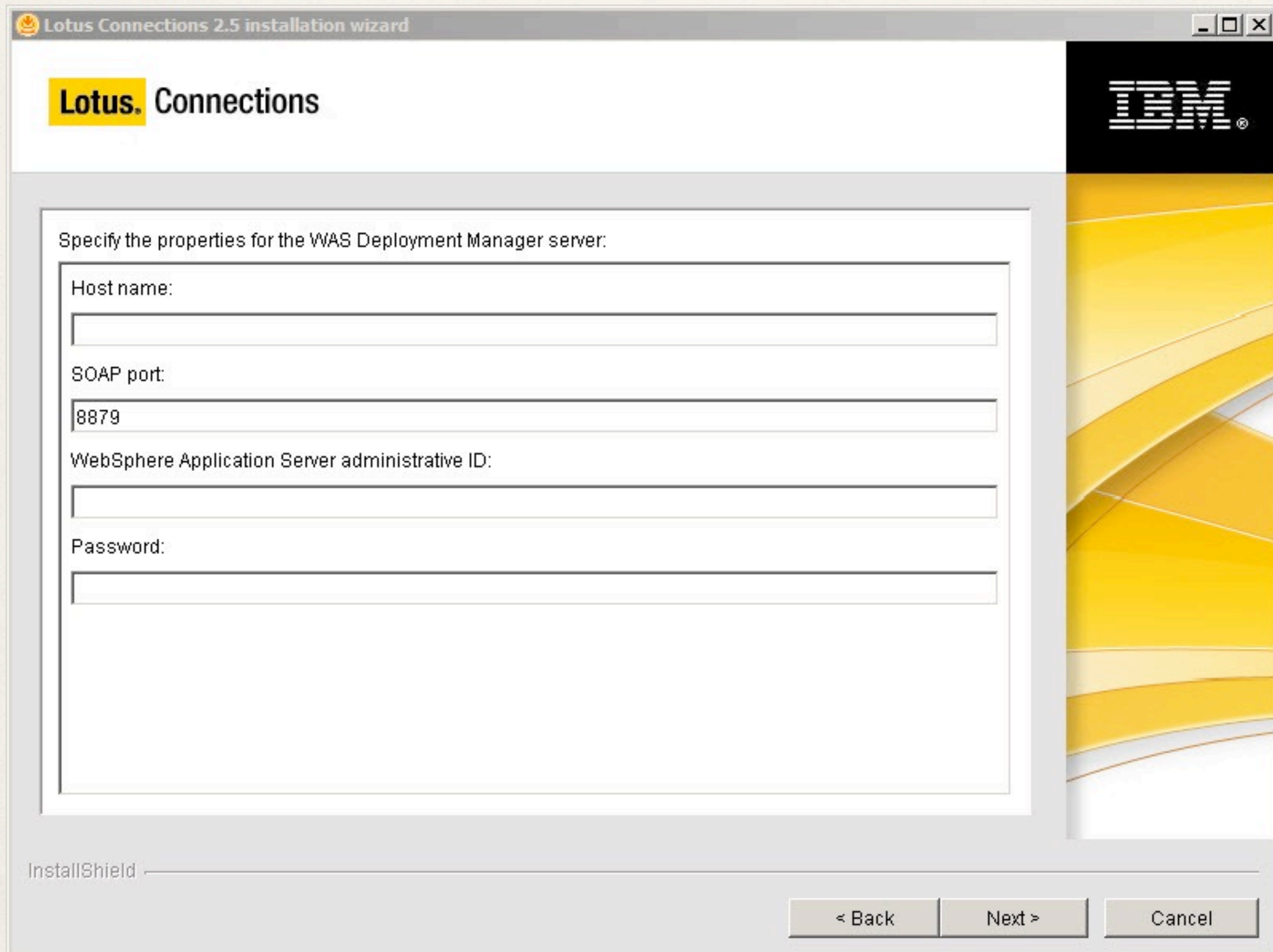
# Installing Lotus Connections

✤ You can convert a Stand-alone deployment to a Network deployment
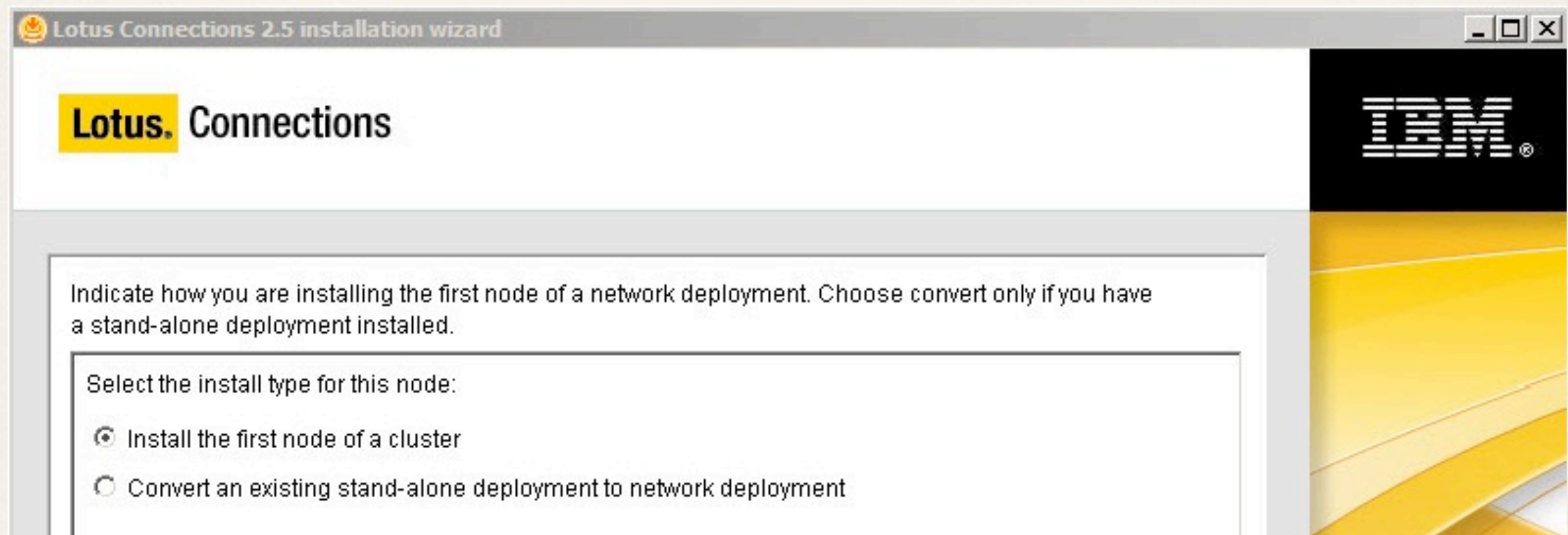
# Installing Lotus Connections
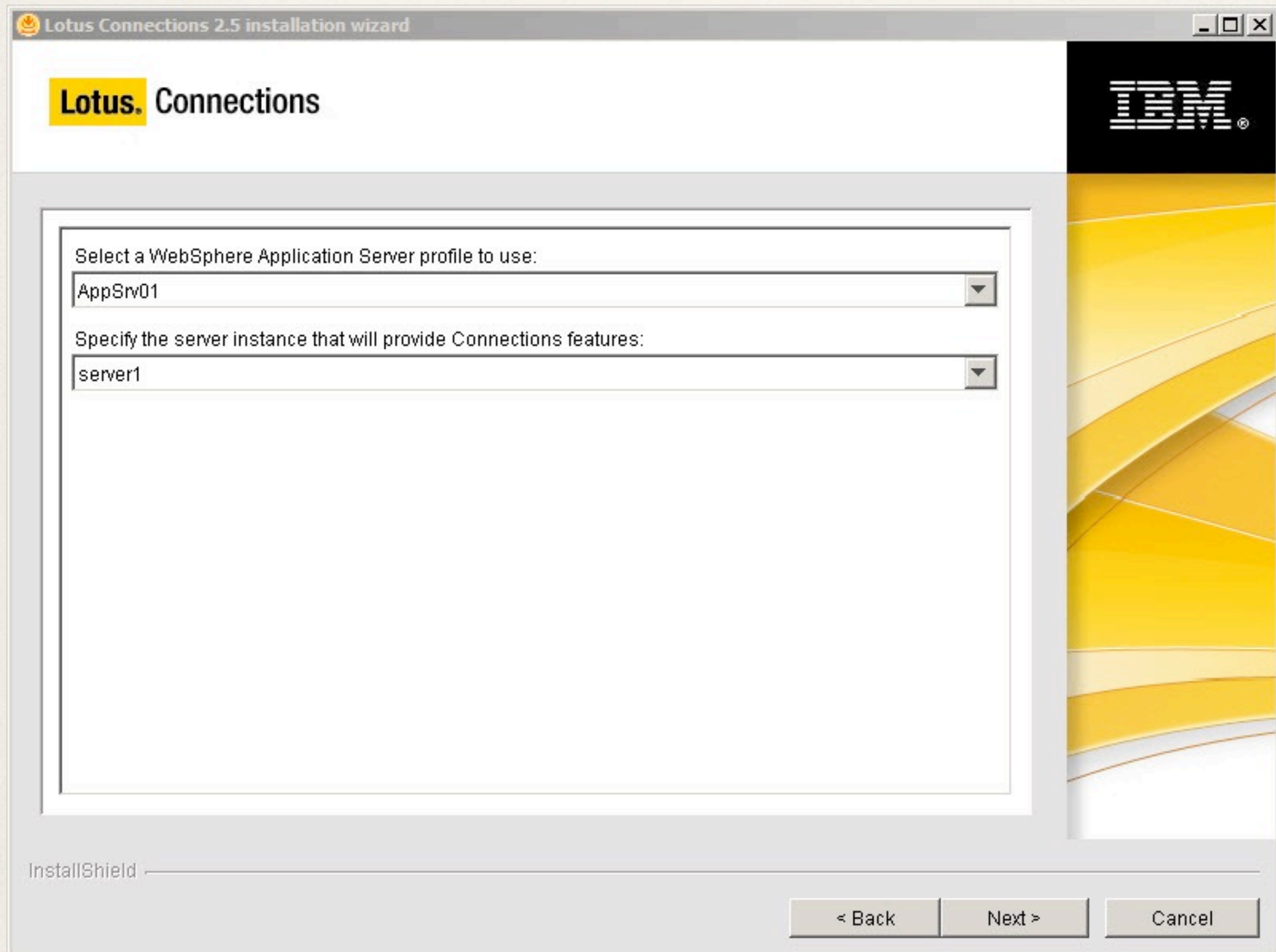
# Installing Lotus Connections

* Select the features to install

  * In a Stand-alone install select the WAS Profile and Server process to install to

  * In a Network Deployment or Advanced network deployment you will have already specified Profile and Server process earlier

# Installing Lotus Connections

# Installing Lotus Connections

# Installing Lotus Connections

* Define the Database Connections

# Installing Lotus Connections

✤ Provide the credentials for each feature database

    ✤ Do Not change the Database name

    ✤ You need to do this for each feature you are installing (even if they are on the same database server and use the same username/password)

# Installing Lotus Connections

# Installing Lotus Connections

* A word of caution if you see this

**Error**

❌ The database authentication fail. The database application user id or password do not match.
You may choose Back to change the database configuration, or you can choose to re-config the database connection after installation. Refer Lotus Connections Information Cent

OK
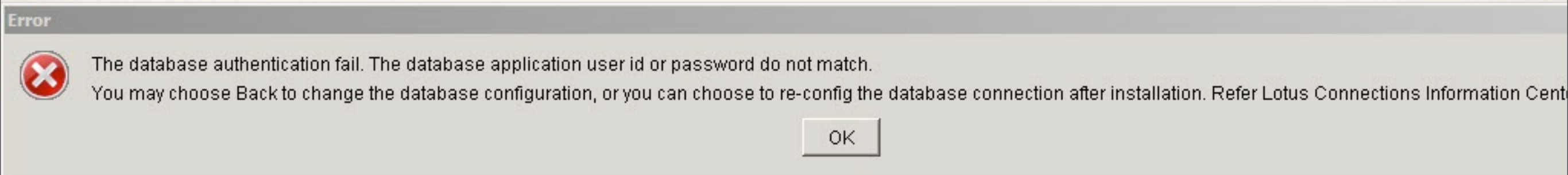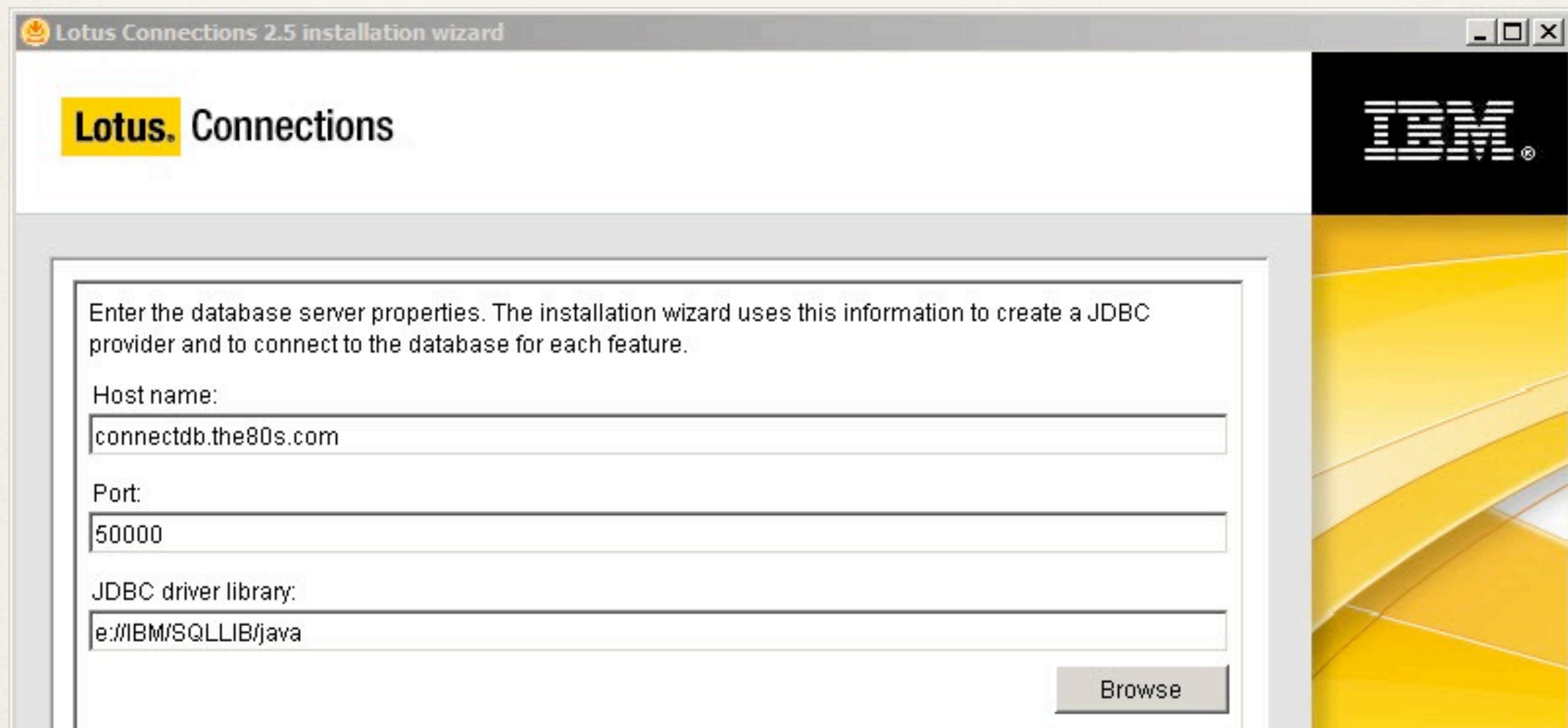
* When you click "OK" it moves on to the next feature

    * Use the Back button to return and fix

    * If you don't fix now you can fix in the ISC later

# Installing Lotus Connections

* Select data directories

    * This is for data that is not stored in the database

        * Indexes

        * Images

        * Attachments

        * Favicons (bookmarks)

    * For a network deployment the data directory must be available to all participating nodes

# Installing Lotus Connections

* Select your configuration for SMTP Mail Routing

# Installing Lotus Connections

* Select a method for Profiles Searches

    * I would always recommend Profiles DB
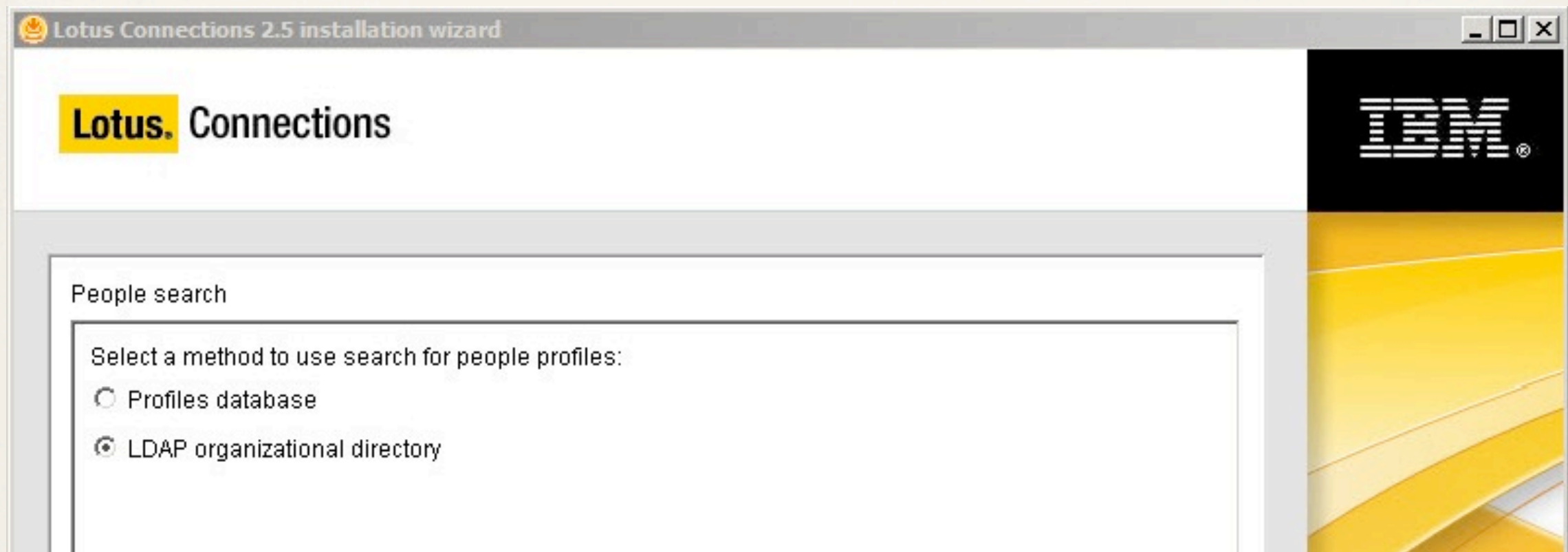
# Installing Lotus Connections

* When the installation is complete review the information provided on the Install Results screen

    * Note the port numbers for each feature, and ISC

    * Note the location of the install log

        * Save your install log file

        * It could be useful troubleshooting any issues with your installation

# Installing Lotus Connections
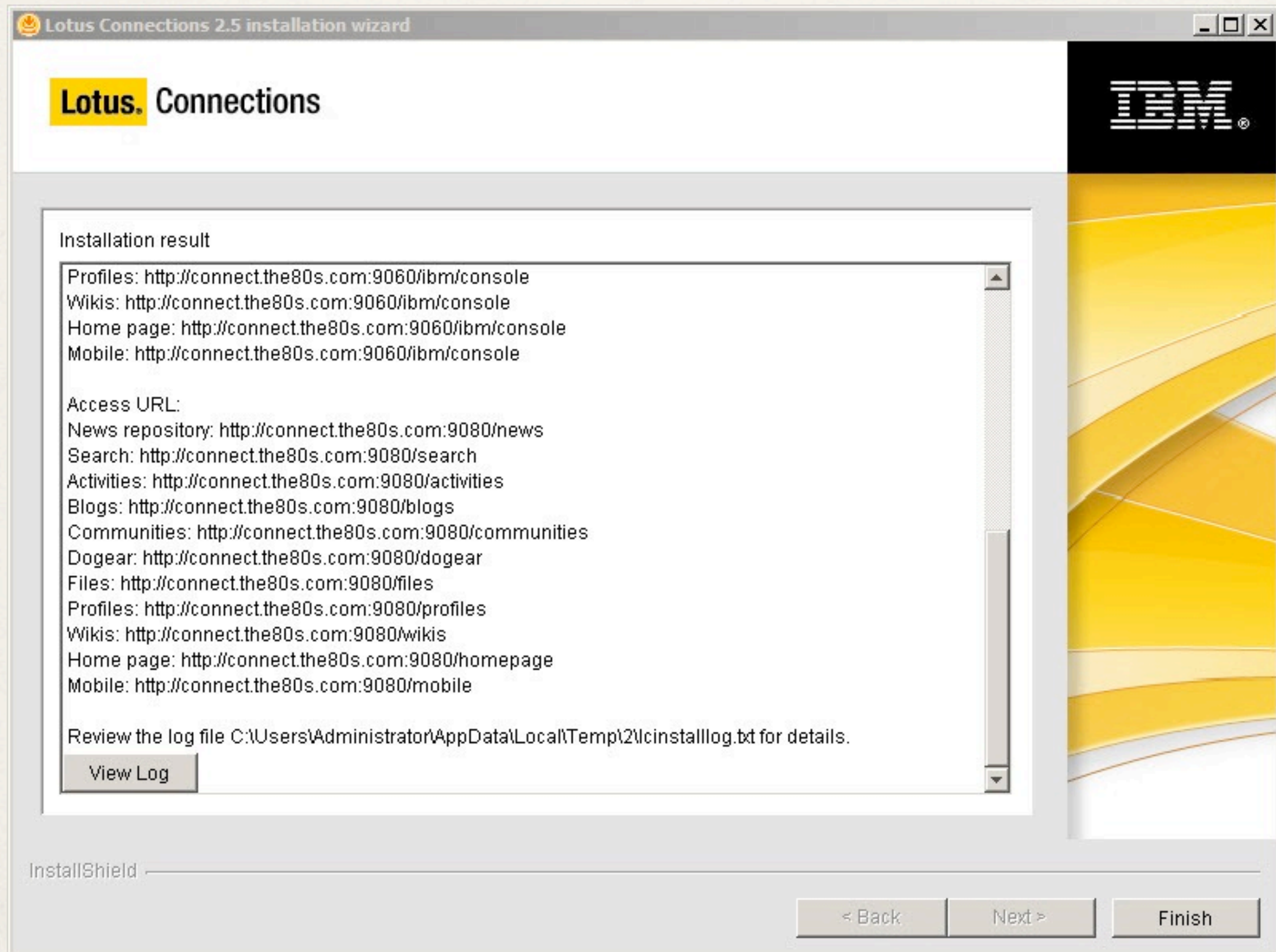
# Post Install Steps

* Grant Administrative access to

  * Blogs

  * Homepage

  * Communities

  * Mobile

  * Files

  * News

  * Profiles

# Post Install Steps

**Enterprise Applications** > **Blogs** > **Security role to user/group mapping**

Security role to user/group mapping

Each role that is defined in the application or module must map to a user or group from the domain user registry.

| Look up users | Look up groups |

* Y

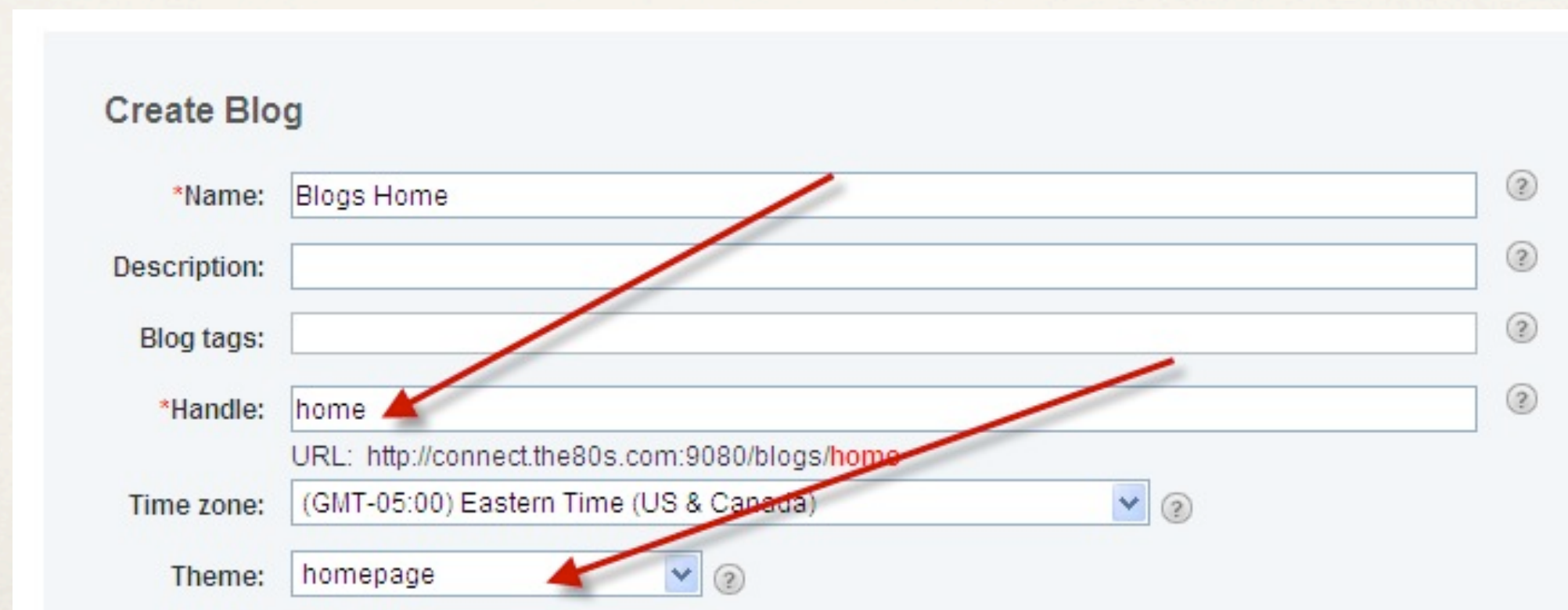| Select | Role | Everyone? | All authenticated? | Mapped users |
|--------|------|-----------|--------------------|--------------|
| ☐ | person | ☐ | ☑ | |
| ☐ | everyone | ☑ | ☐ | |
| ☐ | admin | ☐ | ☐ | Sitcom Administrator |
| ☐ | search-admin | ☐ | ☐ | wasadmin |
| ☐ | widget-admin | ☐ | ☐ | wasadmin |
| ☐ | reader | ☑ | ☐ | |

| OK | Cancel |

# Post Install Steps

✤ Configure Blogs

 ✤ Log in to Blogs with the ID granted administrator access in the previous step

 ✤ If you don't see the Administration tab you are not an administrator
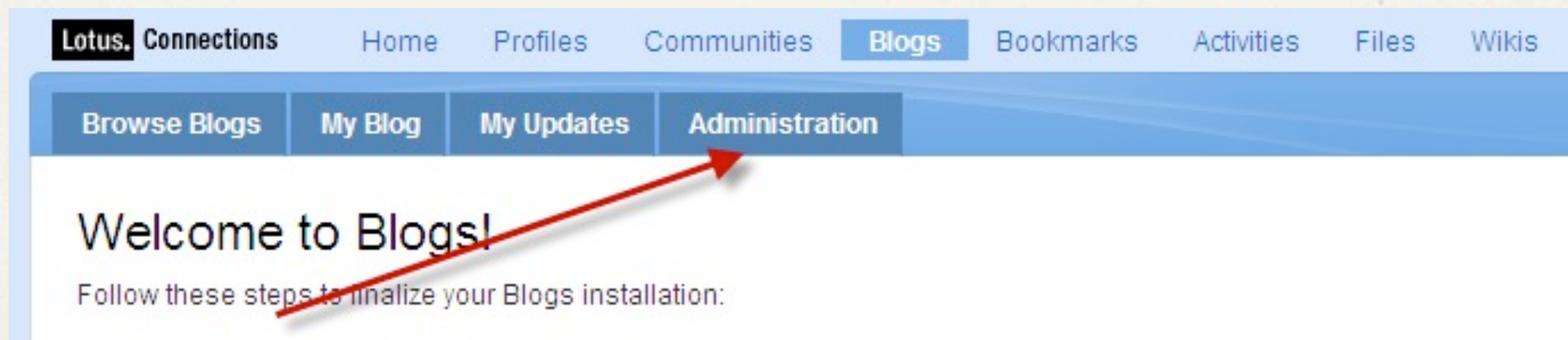
# Post Install Steps

✤ Create a blog using the Homepage template

  ✤ Only administrators see the homepage template

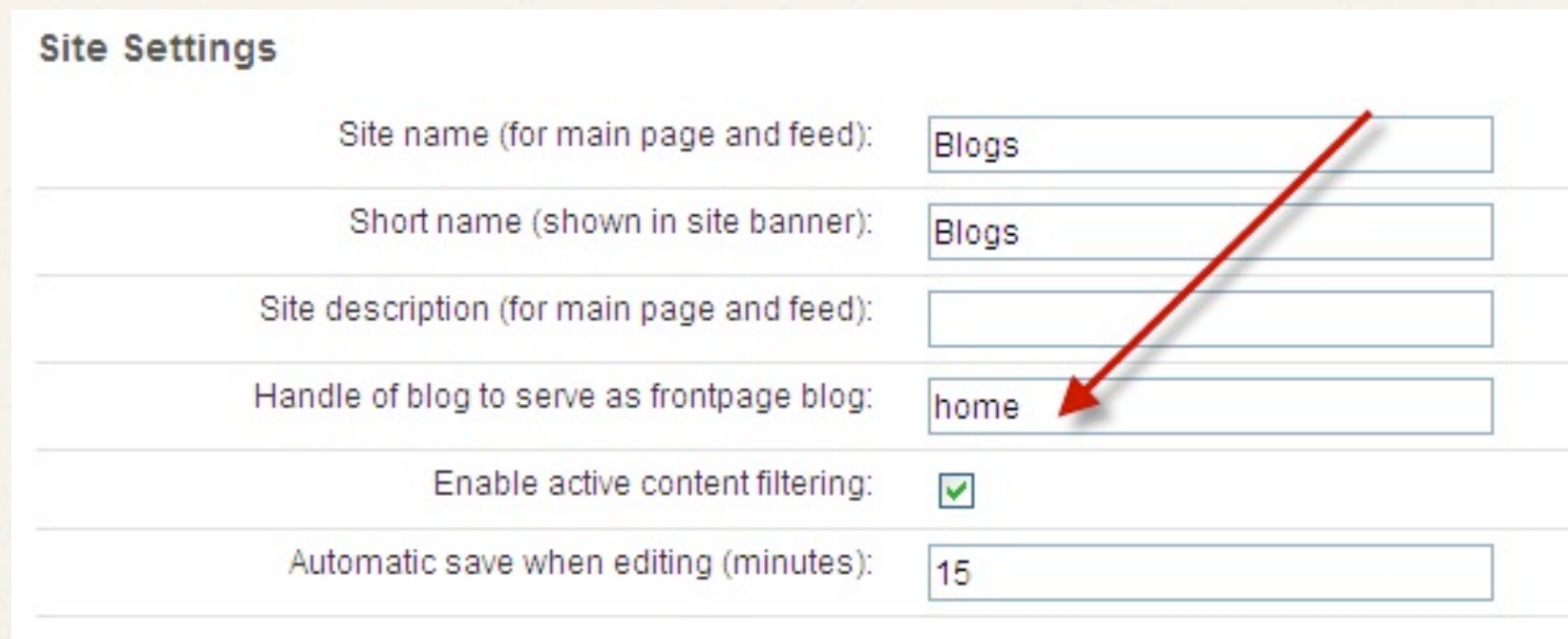  ✤ Choose your handle carefully (keep it simple - usually 'home')

# Post Install Steps

- On the Administration Tabs

  - Set the Handle for the Blogs Homepage

  - This is the handle you used to create the blog in the previous step



  - Set other blogs preferences

# Post Install Steps

- Map features to HTTP Server

    - Install IHS

        - Remember to include the IHS plugins for WAS

    - Configure SSL on IHS

    - Create Webserver definition in ISC

    - Map Features

    - Generate and Deploy plugin

    - Update links in Lotus-Connectionsconfig.xml

# Post Install Steps

* Remember to check Fix Central for any updates to Connections 2.5

* You must replace any previous versions of the Update Installer for Lotus Connections with the 2.5 version

* Wizard mode is supported for Fixes and Fix Packs

* Currently two fixes available for 2.5

# Lotus Connections Resources

| | |
|---|---|
| Infocenter | http://tinyurl.com/20infocenter |
| Wiki | http://tinyurl.com/connectwiki |
| Support Page | http://tinyurl.com/consupport |
| Support Forum | http://tinyurl.com/20forum |
| developerWorks articles | http://tinyurl.com/condevworks |
| Software Catalog | http://tinyurl.com/consoftcat |
| Product Page | http://tinyurl.com/conhome |

> " But in truth, social software isn't really about the tools. It's about what the tools let users do and the business problems the tools address. "

Jakob Nielsen, Usability Guru

My Takeaways

Don't use Pilot Install
The secret is the preparation
One- or Two-box installs are fine in most situations
A single-server WAS install is fine in 90% of cases
Follow these instructions and the InfoCenter, you'll be fine!
Ask us to help – we would be delighted!

Thank You!