



IBM Software Group

## Installation and Configuration

**WebSphere Portal Server v5.1**

**Lotus software**



**ON DEMAND BUSINESS™**

## IBM Proof of Technology

IBM Product Introduction + Exploration

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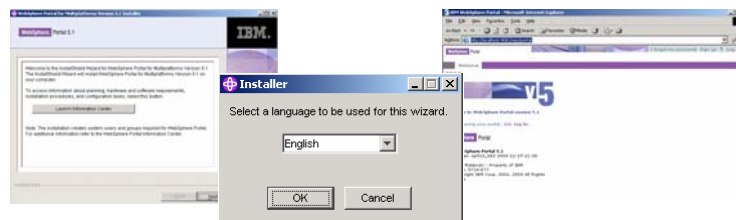
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## Session Objectives

- After completing this session, you should be able to:
  - ▶ Understand the Portal Installation Process
  - ▶ Determine which installation option best suits your needs
  - ▶ Locate Installation logs and perform basic problem determination
  - ▶ Understand the Portal Configuration process
  - ▶ Perform configuration through scripts or the configuration wizard.



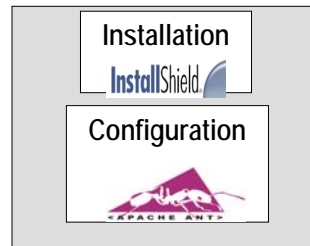
PI+E

Installation & Configuration

2

## New Features for Installation and Configuration

- Archive Install
  - ▶ Fastest install, “one click”!
- Installation Scenario Additions
  - ▶ Installation to a Federated Node
  - ▶ Local Development Environment
  - ▶ Remote Server Attach Development Environment
- Speed of Installation
  - ▶ More efficient database transfers
  - ▶ InstallShield Improvements
- GUI Configuration Tool



## Installation

- InstallShield Multiplatform Product (ISMP)
  - ▶ Prerequisite Checking
  - ▶ GUI install
  - ▶ Silent/console install
  - ▶ Multiplatform support
  - ▶ Product registration
- Basic Configuration by calling configuration tasks



## Installation Options

- Installing with the GUI
    - Requires JRE for install
    - Ability to maneuver mouse or TAB key
    - Sets values in wpconfig.properties
  - Installing with the Console
    - Interactive from a command prompt
    - Enter number corresponding to selection and "Enter"
  - Silent Installs (Response Files)
    - Information pulled from file
    - Multiple machines/same setup
- install.bat**
- install.bat -console**
- install.bat -options "C:\Portal files\installresponse.txt"**



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Select a language to be used for this wizard.

1 - Czech  
 2 - English  
 3 - French  
 4 - German  
 5 - Greek  
 6 - Hungarian  
 7 - Italian  
 8 - Japanese  
 9 - Korean  
 10 - Polish  
 11 - Portuguese  
 12 - Portuguese (Brazil)  
 13 - Russian  
 14 - Simplified Chinese  
 15 - Spanish  
 16 - Traditional Chinese  
 17 - Turkish

To select an item enter its number, or 0 when you are finished: [0]

## Types of Install

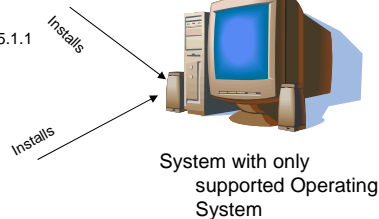
### ■ Full Install



WebSphere Application Server v5.1.1  
WBISF



WebSphere Portal v5.1  
Core Components



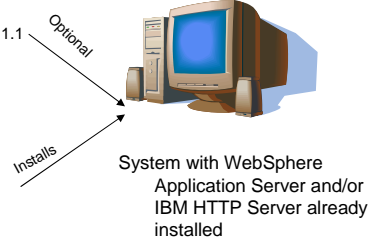
### ■ Custom Install



WebSphere Application Server v5.1.1  
WBISF

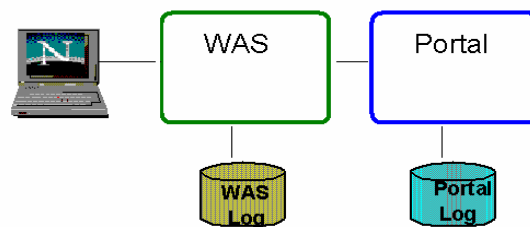


WebSphere Portal v5.1  
Core Components



## Problem Determination

- Check all installation logs for WAS and Portal.
- Be sure servers can be started and stopped without errors
- Run IVT programs at each level. Run snoop servlet on WAS
- Make sure you can log on as Portal Administrator
- Application Server names are case-sensitive
- No Port Conflicts

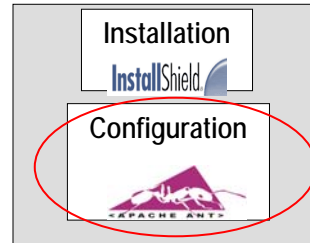


## Installation Verification

- Administrator must be able to do the following task for the installation to be considered successful.
  - ▶ Sign on as the Portal Administrator
  - ▶ View the "Administration" Link
  - ▶ Install a Portal application
  - ▶ Create a page and add the portlet

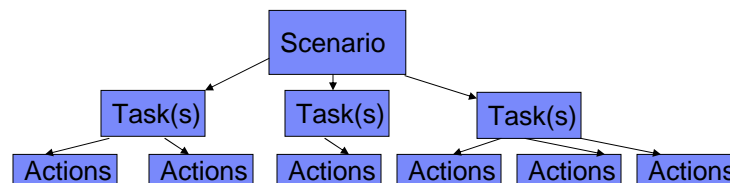
## Configuration

- Configuration Separated from Install
- Uses ANT
- Configuration through
  - Portal Install
  - Portal Scripting Interface
  - Portal Configuration GUI
- Change a configuration without a reinstall
  - Change Security Settings
  - Select to use a new component – Web Conferencing
  - Change run-time parameters



## Configuring WebSphere Portal Server

- All configuration done via configuration scripts
  - Interface provided by the WebSphere Application Server
  - Tasks share common properties file
  - Validation of properties done prior to execution of task
  - Post-task validation done as well
  - Consists of Actions, Tasks, and Scenarios



## Configuration Tasks, Actions & Scenarios

- Scenario – Tasks and Actions grouped together to form a last know configuration
  - basic-config (for installation)
- Tasks – group of Actions which contain a complete configuration step
  - wpsconfig.bat/sh (primary script file)
  - wpsconfig.bat *task\_name* [-Dproperty=value]

### wpsconfig.bat secure-portal-ldap

```
<target name="secure-portal-ldap" depends="init">
  <antcall target="action-secure-portal-ldap" />
  <antcall target="action-create-deployment-credentials"/>
</target>
```

- Action – Single Configuration step

```
<target name="action-create-deployment-credentials" depends="start-portal-server">
  <xmlassess
    user="${PortalAdminIdShort}"
    password="${PortalAdminPwd}"
    url="http://${HostName}:${HostPort}/${ContextRoot}/config"
    srcfile="${InstallLoc}/.../createDeploymentCredentials.xml" /
  </target>
```

## Properties File – wpconfig.properties

- Portal Configuration Properties File
  - File containing configuration information of WebSphere Portal version 5.1 (wps-root\config\wpconfig.properties)
  - Some machine-specific properties populated at install time
    - Path to WebSphere Portal install location
    - Path to WebSphere Application Server install location
    - WebSphere Portal Host Name
  - Execute WPSConfig bat/sh with specified properties file
    - Example: WPSconfig.bat config-was-internal-http (for windows)
      - Configure WebSphere Portal for Internal HTTP server using values from wpconfig.properties file

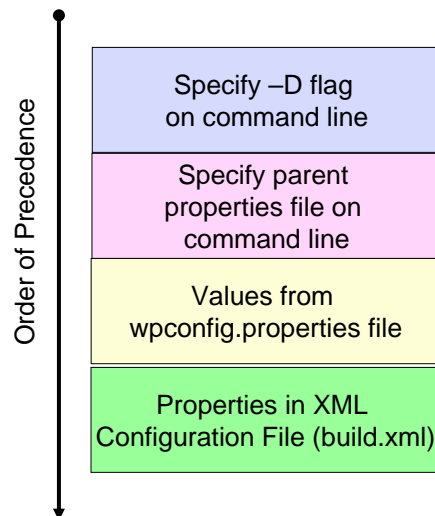
## Configuration Templates

- Condensed, special-purpose files
  - ▶ Easier to manage as superfluous properties are not a part of this file
- Parent Properties
  - ▶ Property from "parent file" supersedes value in wpconfig.properties
  - ▶ Different machine has same properties for some, different for others (DB2 driver location same, user/pwd different)

WPSconfig.bat -DparentProperties=*path\_to\_file/parent.properties* -  
DSaveParentProperties=true *task\_name* [*task\_name* ...]
- Configuration Templates
  - ▶ Parent property templates provided with the Portal Product
  - ▶ DB2, Tivoli, Oracle, Domino, etc.

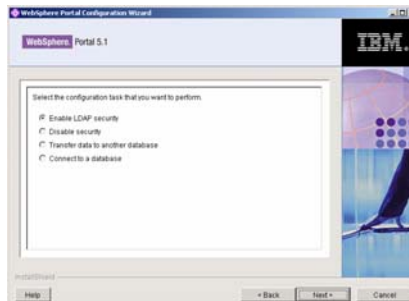
WPSconfig.bat -DparentProperties=config/helpers/transfer\_db2.properties -  
DSaveParentProperties=true
- Creating New Templates

## Configuration File: Precedence



## Configuration Wizard

- Post Installation “ease-of-use” tool to complete some typical configurations
  - ▶ Transferring Data between Databases
  - ▶ Connecting to Databases
  - ▶ Configuring LDAP Security
- `<wps_root>/wizard/configwizard.bat`
  - ▶ List of configurations one can perform
  - ▶ Will not install prerequisites (i.e. DB2, LDAP, etc)
  - ▶ Provides log file `<wps_root>/config/wizard/configwizardlog.txt`



## Example: Database Transfer (scripted)

- PREREQ: Database is installed! (DB2)
- Update `wpconfig.properties` with DB2 information
- Create the local databases (or create remote and catalog)
 

```
wpsconfig.bat create-local-database-db2
```
- Validate connections to database(s)
 

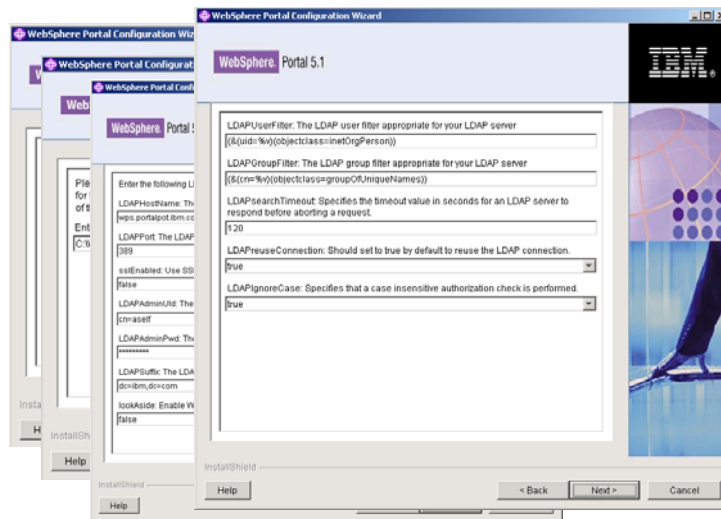
```
wpsconfig.bat validate-database-connection-wps
```
- Transfer database configuration from Cloudscape to DB2 (used to be two “tasks” in v5.0x now just one!)
 

```
wpsconfig.bat database-transfer
```

 (Takes about 30 mins)
- Start Portal and guarantee functionality
- Log into WebSphere Administrative Console and check datasources to guarantee are now pointed to DB2



## Example: Enable LDAP Security (ConfigWizard)



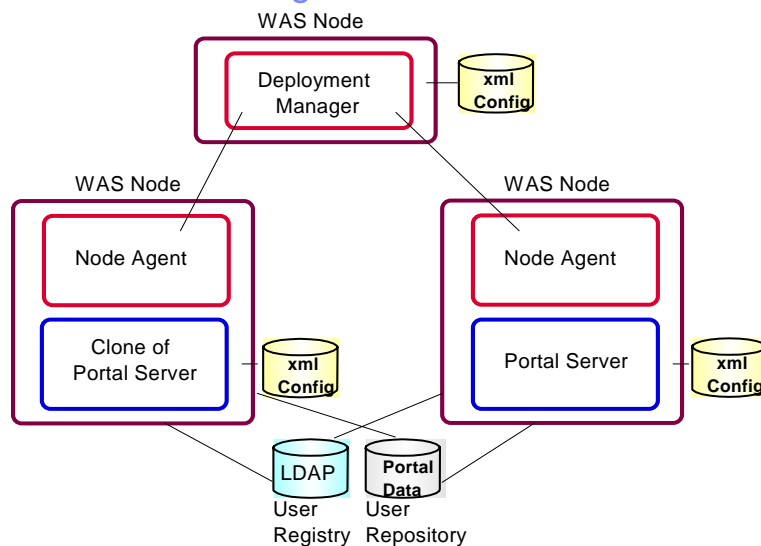
## Deleting Passwords

- Security-sensitive information is written into multiple files during the installation process
- Passwords in "clear text"
  - WPSconfig.bat cleanup-work-dir
  - WPSconfig.bat delete-passwords
- Additional configuration will require inserting the passwords or inserting passwords on the command line

## Clustering WebSphere Portal Server

- Federate the Node
  - This will involve creating a managed Cell with Deployment Manager
- You will now have only one full install of Portal
  - Additional installs will share Application Database
  - Cell will manage LDAP Security
- Create a Application Server Cluster
  - Add cluster members (WP1, WP2)
- Administration will now automatically update all members of the cluster

## Clustered Portal Configuration



## Session Summary

- Now that you have completed this session, you should be able to:
  - ▶ Understand both Portal Installation and Configuration
  - ▶ Be able to determine the appropriate installation option and scenario
  - ▶ Be familiar with the Configuration Wizard
  - ▶ Understand actions, tasks and scenarios
  - ▶ Be able to configure Security and a Database Transfer for your Portal environment

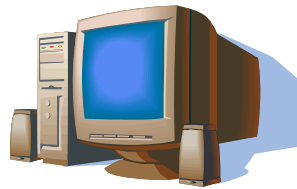
## AJRSToys

A large International Toy Retailer that has decided to do a complete overhaul of their company Intranet. It was becoming way too time-consuming and expensive for their IT team to continue to manage their “home grown” Portal and IBM offered them an excellent product at an excellent price!



## Non-Functional Requirements

- 1000 Internal Employees -> 500 Concurrent Users
- Employees are located in three time zones:
  - Hong Kong, London and New York City
  - Users log in at 9AM Local Time and log out at 6PM Local Time. (Shows peak usage)
- Each Portal User visits approximately 3 pages for each visit.
- After 30 minutes of inactivity, our user sessions will expire



## The Portal Team

- 1 Portal Project Manager
- 1 Infrastructure Architect
- 1 WebSphere Administrator with a backup
- 1 Portal Administrator with a backup
- 4 Portal application developers
- 1 Theme Developer
- A content management team.



Our plan is to have the Intranet moved into Production, running on WebSphere Portal Server in 6 months. This will include all development, administration, content migration, functional, performance and usability testing.

## Lab Exercise 1.1

- Lab 1.1 - Portal Configuration
  - ▶ Make a backup of your Portal configuration
  - ▶ Edit the configuration properties file to change the context root
  - ▶ Run script to change the context root and "regenerate" HTTP Plugin
  - ▶ Restart the HTTP Web Server
  - ▶ Restart the Portal Server
  - ▶ Change your browser bookmark
  - ▶ Visit the new Portal URL  
<http://wps.portalpot.ibm.com/ajrstoys/portal>