

ASF 3.3 with IMS Document Connect for ASF

Installation on Windows Server
Using WebSphere Application Server V5.1

Server-to-Host Connection using
IMS Connect

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1 PREREQUISITES	3
2 NAME SPACE BINDINGS	4
3 INSTALLATION OF THE APPLICATION	6
Preparing for the application installation	6
Install new application (Step 1)	8
Install new application (Step 2)	9
Install new application (Step 3)	10
Install new application (Step 4)	11
Install new application (Step 5)	12
Start the application	12
4 SPELLCHECK INSTALLATION	13
5 ENABLE IMS CONNECT	15
6 HTTP SERVER CHANGES	16
Configure the WebSphere PLUGIN	16
Configure the IBM HTTP Server	17
7 CONFIGURE THE CONNECTIONS	18
8 INSTALLING A SECOND APPLICATION	19
9 APPLYING MAINTENANCE	21

1 Prerequisites

1. WebSphere Application Server (WAS) V5.1 has been installed, is operational, and has been started

Note: The installation path is assumed to be
D:\Program Files\WebSpheres

2. IBM HTTP Server (Version 1.3.26, or later) has been installed, is operational, and has been started

Note: The installation path is assumed to be
D:\Program Files\IBM HTTP Server

3. IMS Connect has been installed and the connections to the host (IMS) are available. IMS Connector for Java (runtime portion for Windows) has been installed.

Note: The IMS Connector for Java installation path is assumed to be
D:\IBM\IMS Connector

4. Document Connect for ASF (DC4ASF) has been installed in the following directory:

D:\Program Files\IBM\IBM Document Connect for ASF

2 Name Space Bindings

Two name space bindings must be created. To do this, open the WebSphere Administrative Console:

Open [Environment > Naming >Name Space Bindings](#)

Note: Ensure you are in the Server scope.

2.1 Define Name Space Binding for DC4ASFINST

- a) Press button [New](#) to create a new Binding
- b) Choose type **String** for the binding and press button [Next](#)
- c) Enter
 - the Binding Identifier
(for example DC4ASFINST)
 - Name in Name Space
(for example resources/asf/dc4asfinst)
 - and the path to your ASF installation directory
(D:\Program Files\IBM\IBM Document Connect for ASF)
- d) Press button [Next](#) to go to the Summary Panel
- e) On the Summary Panel press button [Finish](#) to complete the Name Space Binding.

The screenshot shows the WebSphere Administrative Console interface. The title bar reads "WebSphere Administrative Console - Microsoft Internet Explorer". The left sidebar menu under "B55M852L" includes "Servers", "Applications", "Resources", "Security", "Environment" (with sub-links for "Update Web Server Plugin", "Virtual Hosts", "Manage WebSphere Variables", "Shared Libraries", "Name Space Bindings", "CORBA Naming Service U...", and "CORBA Naming Service G..."), "Naming", "System Administration", and "Troubleshooting". The main content area is titled "Name Space Bindings > DC4ASFINST". It contains a "Configuration" section with a "General Properties" table:

General Properties	
Scope	* cells/B55M852L/nodes/B55M852L/servers/server1
Binding Type	* String
Binding Identifier	* DC4ASFINST
Name in Name Space	* resources/asf/dc4asfinst
String Value	* D:\Program Files\IBM\IBM Document Connect for ASF

Below the table, there is explanatory text: "Use this page to configure a name binding of a constant string value." and a detailed description for each row. At the bottom of the page are "Done" and "Local intranet" buttons.

2.2 Define Name Space Binding for DC4ASFCONF

- a) Press button **New** to create a new Binding
- b) Choose type **String** for the binding and press button **Next**
- c) Enter
 - the Binding Identifier
(for example DC4ASFCONF),
 - Name in Name Space
(for example resources/asf/dc4asfconf)
 - and the path to your ASF configuration file
(D:\Program Files\IBM\IBM Document Connect for ASF\config\DocConfiguration.xml)
- d) Press button **Next** to go to the Summary Panel
- e) On the Summary Panel press button **Finish** to complete the Name Space Binding.

The screenshot shows the WebSphere Administrative Console interface. The left sidebar menu is expanded, showing 'B55M852L' with 'Name Space Bindings' selected under the 'Naming' section. The main content area is titled 'DC4ASFCONF' and contains a 'General Properties' table with the following data:

General Properties	
Scope	* cells/B55M852L/nodes/B55M852L/servers/server1
Binding Type	* String
Binding Identifier	* DC4ASFCONF
Name in Name Space	* resources/asf/dc4asfconf
String Value	* D:\Program Files\IBM\IBM Documen

Save the two name space bindings created in the master configuration.

3 Installation of the application

Preparing for the application installation

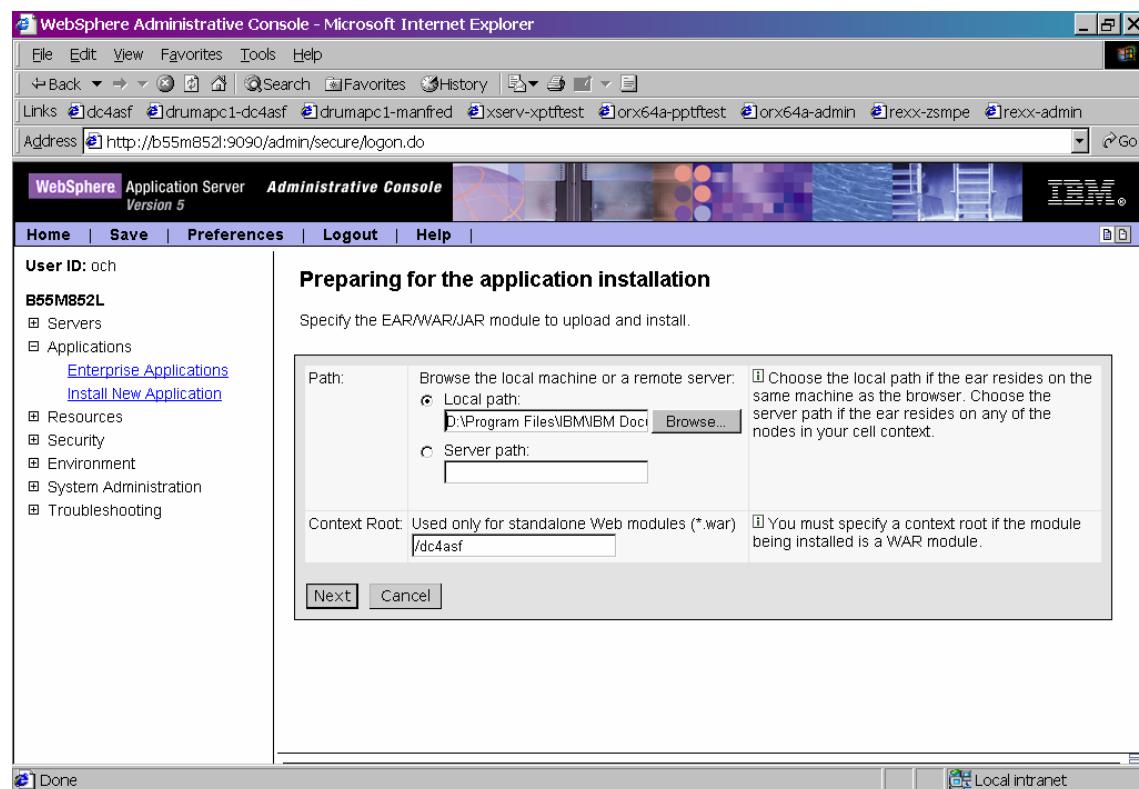
Open [Application](#) > [Install New Application](#)

Enter the path (local path or server path) where the DC4ASF war file is located:

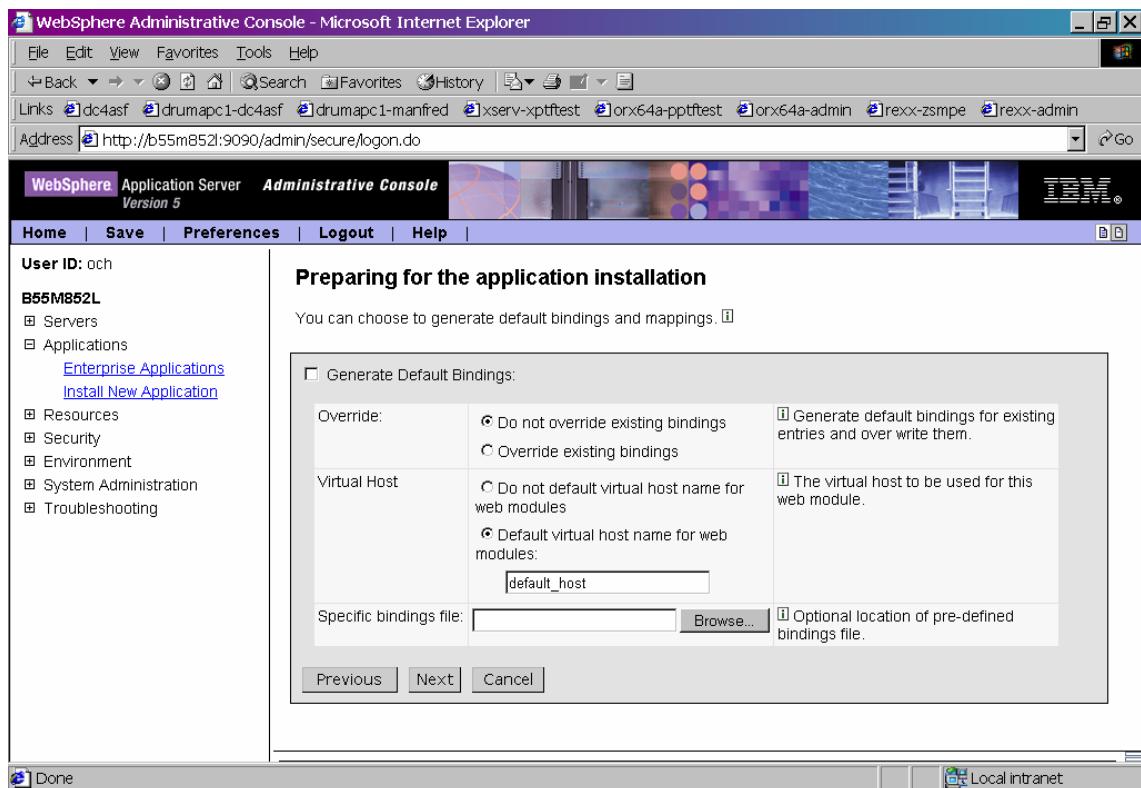
D:\Program Files\IBM\IBM Document Connect for ASF\war\dc4ASF.war

Enter the context root, for example /dc4ASF

Press button [Next](#). The file dc4ASF.war is now loaded on the server.



Press button [Next](#).



Press button [Next](#).

Install new application (Step 1)

Fill in the required fields (installation directory, application name, class reloading).

Installation directory:

If you do not enter an installation directory, WAS will install the application under the default directory:

D:\Program Files\WebSphere\AppServer\installedApps\B55M852L\dc4ASF.ear

where

- 'B55M852L' is the cell name and
- 'dc4ASF' is the application name.

Application Name:

Specify a unique name, for example 'dc4ASF'.

Class Reloading:

Specify a value in seconds, for example '30'.

The screenshot shows the WebSphere Administrative Console interface in Microsoft Internet Explorer. The title bar reads "WebSphere Administrative Console - Microsoft Internet Explorer". The left sidebar shows a navigation tree with "User ID: och" and a selected node "B55M852L" which has "Applications" expanded, showing "Enterprise Applications" and "Install New Application". The main content area is titled "Install New Application" and describes the step as "Allows installation of Enterprise Applications and Module". A sub-section titled "Step 1 : Provide options to perform the installation" contains a table with "AppDeployment Options" and "Enable" checkboxes. The options listed are: Pre-compile JSP (unchecked), Directory to Install Application (empty input field), Distribute Application (checked), Use Binary Configuration (unchecked), Deploy EJBs (unchecked), Application Name (input field containing "dc4ASF"), Create MBeans for Resources (checked), Enable class reloading (checked), and Reload Interval (input field containing "30"). At the bottom of the page are "Done" and "Local intranet" buttons.

Press button [Next](#) to finish Step 1 and go to Step 2.

Install new application (Step 2)

Enter **resources/asf/dc4asfinst** for the InstallPath Reference Binding (JNDI Name) and **resources/asf/dc4asfconf** for the ConfigPath Reference Binding (see "Name Space Bindings").

The screenshot shows the WebSphere Administrative Console interface. On the left, the navigation menu includes 'User ID: och' and 'B55M852L' under 'Applications'. Under 'Applications', 'Enterprise Applications' is selected, and 'Install New Application' is highlighted. Other options like 'Resources', 'Security', 'Environment', 'System Administration', and 'Troubleshooting' are also listed. The main panel displays the 'Install New Application' wizard, specifically Step 2: 'Map resource references to resources'. The sub-step 'java.lang.String' is shown. A table lists two entries:

Module	EJB	URI	Reference Binding	JNDI Name
dc4ASF		dc4ASF.war,WEB-INF/web.xml	InstallPath	resources/asf/dc4asfinst
dc4ASF		dc4ASF.war,WEB-INF/web.xml	ConfigPath	resources/asf/dc4asfconf

Below the table, there are buttons for 'Previous', 'Next', and 'Cancel'. Further down, there are links for 'Step 3', 'Step 4', and 'Step 5'.

Press button [Next](#) to finish Step 2 and go to Step 3.

Install new application (Step 3)

The screenshot shows the WebSphere Administrative Console interface in Microsoft Internet Explorer. The title bar reads "WebSphere Administrative Console - Microsoft Internet Explorer". The left sidebar menu under "User ID: och" shows "B55M852L" selected, with options like Servers, Applications (Enterprise Applications, Install New Application), Resources, Security, Environment, System Administration, and Troubleshooting. The main content area is titled "Install New Application" and describes the process of allowing installation of Enterprise Applications and Modules. It shows "Step 1" (Provide options to perform the installation) and "Step 2" (Map resource references to resources). A highlighted section "Step 3 : Map virtual hosts for web modules" instructs the user to specify the virtual host where web modules will be installed. A table lists a single entry: "dc4ASF" under "Web Module" and "default_host" under "Virtual Host". Navigation buttons "Previous", "Next", and "Cancel" are at the bottom of this section. Below the table, "Step 4" (Map modules to application servers) and "Step 5" (Summary) are listed. The bottom right corner shows "Local intranet".

No updates are required for Step 3. Press button [Next](#) to go to Step 4.

Install new application (Step 4)

The screenshot shows the WebSphere Administrative Console interface in Microsoft Internet Explorer. The title bar reads "WebSphere Administrative Console - Microsoft Internet Explorer". The left sidebar menu under "B55M852L" includes "Servers", "Applications" (with "Enterprise Applications" and "Install New Application" selected), "Resources", "Security", "Environment", "System Administration", and "Troubleshooting". The main content area is titled "Install New Application" and describes the process: "Allows installation of Enterprise Applications and Module". It lists three steps: "Step 1 Provide options to perform the installation", "Step 2 Map resource references to resources", and "Step 3 Map virtual hosts for web modules". A callout box highlights "Step 4 : Map modules to application servers". Below this, a table lists a module ("dc4ASF.war") and its corresponding server ("WebSphere:cell=B55M852L,node=B55M852L,server=server1"). The table has columns "Module", "URI", and "Server". Buttons at the bottom include "Previous", "Next", and "Cancel". The status bar at the bottom right shows "Local intranet".

No updates are required for Step 4. Press button [Next](#) to go to Step 5.

Install new application (Step 5)

The screenshot shows the WebSphere Administrative Console interface in Microsoft Internet Explorer. The title bar reads "WebSphere Administrative Console - Microsoft Internet Explorer". The left sidebar shows a navigation tree with "User ID: och" and "B55M852L" selected. Under "B55M852L", the "Applications" node is expanded, showing "Enterprise Applications" and "Install New Application" as sub-options. Other collapsed nodes include "Servers", "Resources", "Security", "Environment", "System Administration", and "Troubleshooting". The main content area has a header "Install New Application" and a sub-header "Allows installation of Enterprise Applications and Module". It lists four steps: Step 1 (Provide options to perform the installation), Step 2 (Map resource references to resources), Step 3 (Map virtual hosts for web modules), and Step 4 (Map modules to application servers). A section titled "Step 5 : Summary" contains a table titled "Summary of Install Options" with the following data:

Options	Values
Distribute Application	Yes
Use Binary Configuration	No
Cell/Node/Server	Click here
Create MBeans for Resources	Yes
Enable class reloading	Yes
Deploy EJBs	..

Check the settings on this page and press button [Finish](#) to start the installation of your application. When the installation of the application has been completed it must be [saved](#) in the master configuration.

Start the application

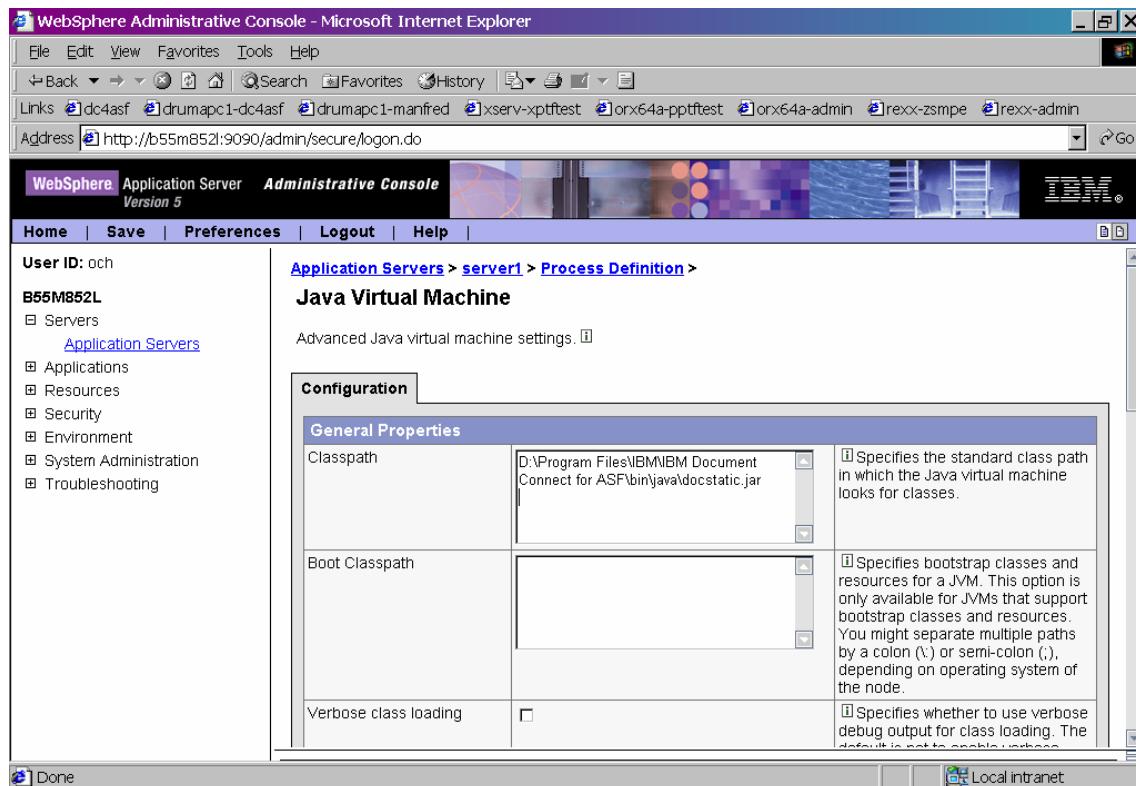
Open [Applications](#) > [Enterprise Application](#), select your dc4ASF application, and select [Start](#) to start the application.

4 Spellcheck Installation

To activate spell check you must set the Classpath variable and define a LIBPATH variable to the WAS environment.

Open [Servers > Application Servers > server name > Process Definition > Java Virtual Machine](#)

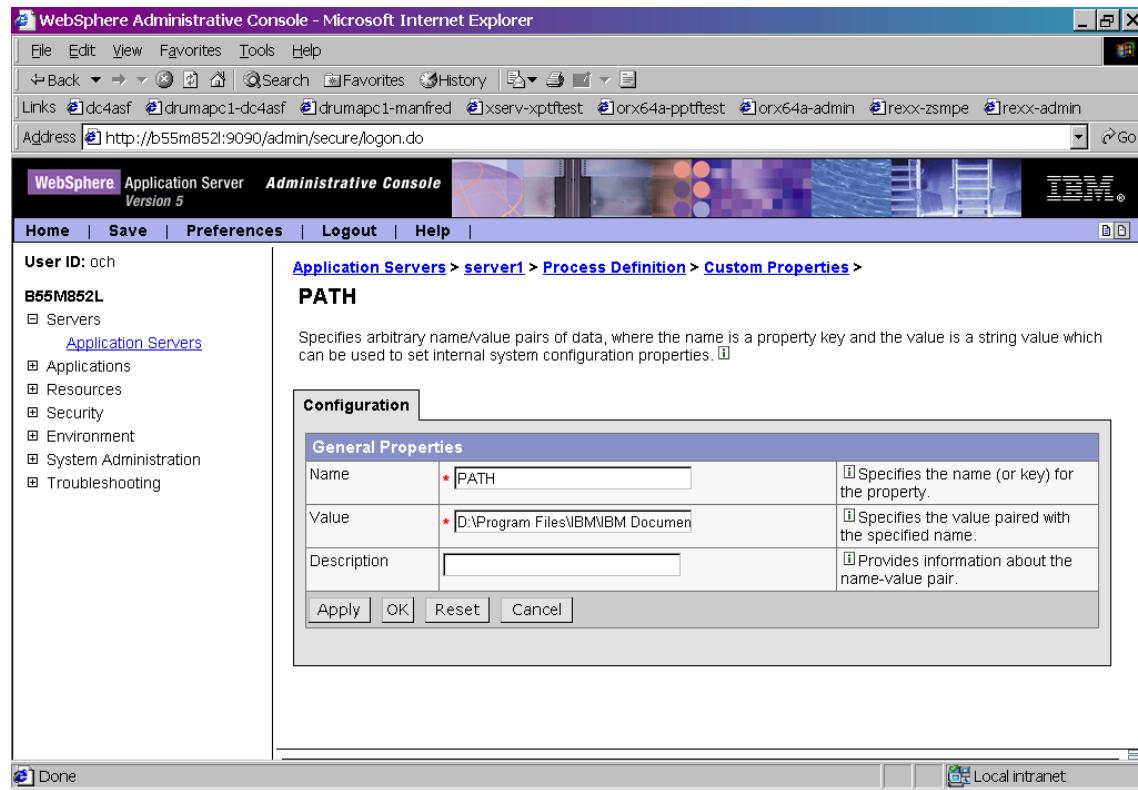
Add the file [*docstatic.jar*](#) delivered with DC4ASF to the Classpath
(D:\Program Files\IBM\IBM Document Connect for ASF\bin\java\docstatic.jar).



Press button [Apply](#) first and then press button [OK](#).

Open [Servers](#) > [Application Servers](#) > *server name* > [Process Definition](#) > [Environment Entries](#)

Create the variable **LIBPATH**. Set its value to the Document Connect for ASF shared library path (D:\Program Files\IBM\IBM Document Connect for ASF\bin).



Press button [Apply](#) first and then press button [OK](#).

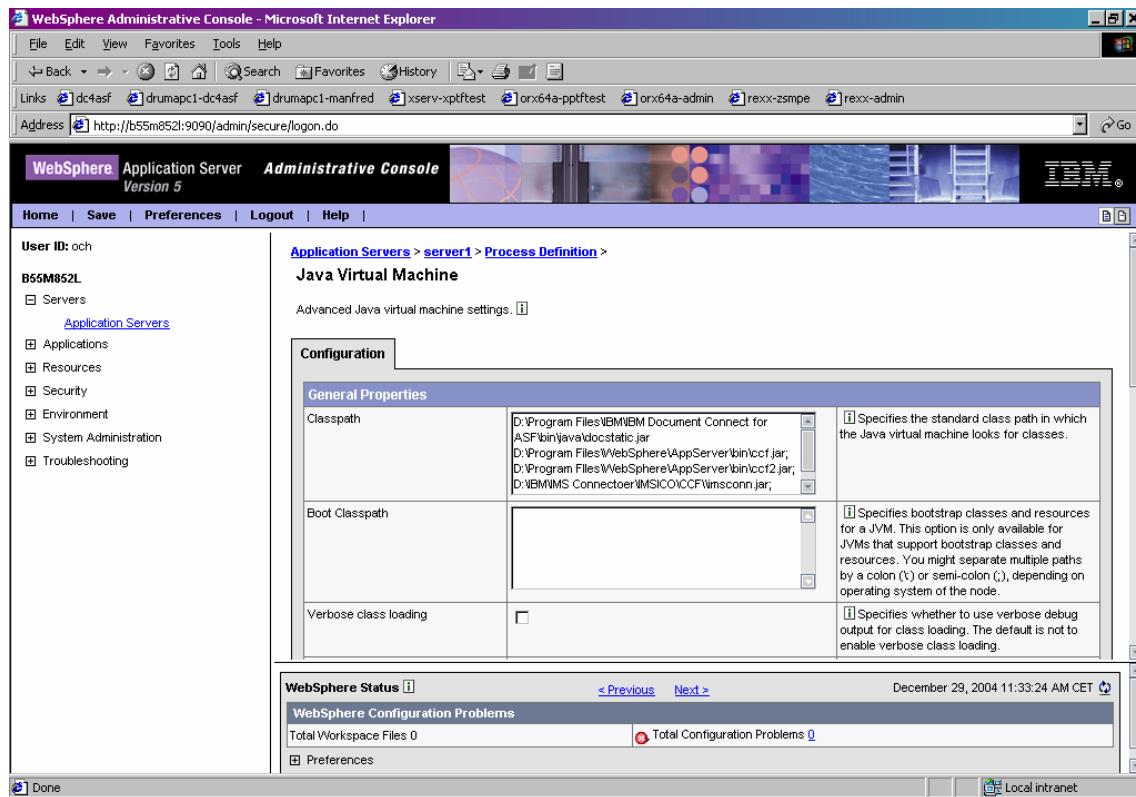
[Save](#) the changes to the master configuration.

5 Enable IMS Connect

To enable the IMS Connect connection between server and host you must change the Classpath variable in the WAS environment.

Open [Servers > Application Servers > *server name* > Process Definition > Java Virtual Machine](#)

Add the file *imsconn.jar* delivered with the IMS Connector for Java and the files *ccf.jar*, *ccf2.jar*, *recjava.jar* and *eablib.jar* delivered with WAS to the classpath (e.g. D:\IBM\IMS Connector\IMSIICO\CCF\imsconn.jar;D:\Program Files\WebSphere\AppServer\lib\ccf.jar)



Press button [Apply](#) first and then press button [OK](#).

After modifying the variable Classpath, you must stop and restart WebSphere Application Server.

6 HTTP Server Changes

Configure the WebSphere PLUGIN

Using Dynamic Link Library (DLL) "mod_ibm_app_server_http.dll".

Make sure you have installed the Dynamic Link Library (DLL) mod_ibm_app_server_http.dll. This DLL is usually installed with WAS by selecting the HTTP server installation. It resides in the bin directory of the WAS installation.

Modify the configuration file "plugin-cfg.xml"

Generate the plugin configuration file "plugin-cfg.xml" using the WebSphere Administrative Console:

Open [Environment > Update Web Server Plugin](#)

Press button **OK** to generate the file [plugin-cfg.xml](#).

Note: Usually the xml file is placed in the
D:\Program Files\WebSphere\AppServer\config\cells
directory of the IBM WebSphere Application Server installation.

Copy the file "plugin-cfg.xml" into the "conf" directory of the IBM HTTP Server.
Open the copy with an editor and modify it as follows:

a) Locate the following string (which may be customized with your installation values):

```
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/*"/>
```

Note:

dc4ASF is the context root as described in "Preparing for the application installation".

b) Insert the text string "servlet/" before the asterisk:

```
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/servlet/*"/>
```

c) Add the following lines after the line specified in b) above:

```
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/html/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/xsl/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/javascript/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/java/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/css/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/preview/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFServerConfigServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFNetworkConfigServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFNetworkConfigProcessServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFFileServlet/*"/>
```

Note:

You will find these lines in the file plugin-cfg.xml.add delivered with DC4ASF in the /install directory.

d) Save the file

Configure the IBM HTTP Server

You need to configure your IBM HTTP Server to run properly with DC4ASF. Proceed as follows:

a) Open the HTTP server configuration file "httpd.conf". Usually it is located in the conf directory of the HTTP server installation.

b) Add the following lines:

```
Alias /dc4ASF/          "D:/Program Files/IBM/IBM Document Connect for ASF/www/"
Alias /dc4ASF/transfer/ "D:/Program Files/IBM/IBM Document Connect for ASF/www/transfer/"
Alias /dc4ASF/help/     "D:/Program Files/IBM/IBM Document Connect for ASF/www/help/"
Alias /dc4ASF/helpconfig/ "D:/Program Files/IBM/IBM Document Connect for ASF/www/helpconfig/"
Alias /dc4ASF/images/   "D:/Program Files/IBM/IBM Document Connect for ASF/www/images/"
Alias /dc4ASF/custom/   "D:/Program Files/IBM/IBM Document Connect for ASF/www/custom/"
Alias /dc4ASF/samples/  "D:/Program Files/IBM/IBM Document Connect for ASF/www/samples/"
```

Note:

You will find these lines in the file http.conf.add delivered with DC4ASF in the /install directory.

c) Restart the HTTP server to activate the changes.

7 Configure the Connections

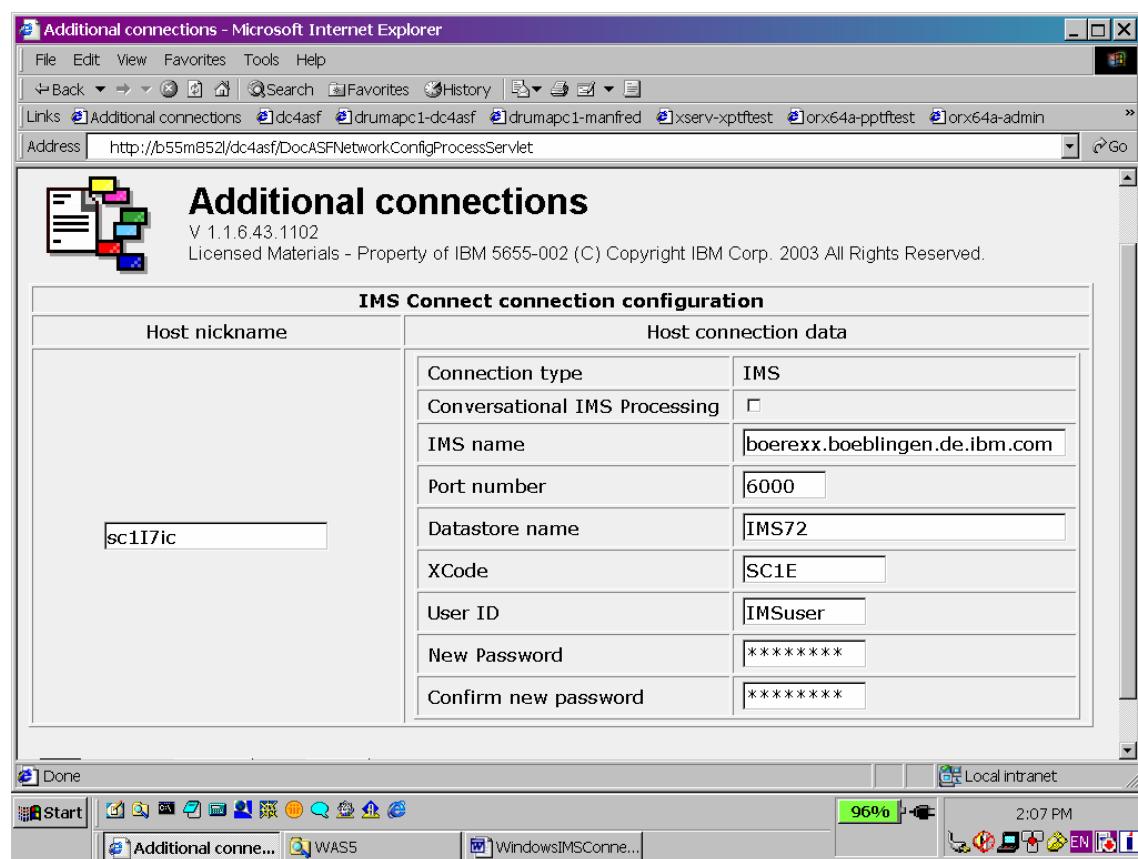
To define the server-host connections in DocNetworkConfiguration.xml invoke the servlet application "DocASFNetworkConfigServlet" using the Microsoft Internet Explorer.

Specify your IMS name (TCP/IP address), port number and datastore name (as defined within IMS Connect), the IMS transaction code, the defined User ID used for IMS logon, and the corresponding password.

Press button [OK](#) to save your changes.

Note:

The password specified will be encrypted and stored in file "hnp.txt" in the /config subdirectory.



[Stop](#) and [Start](#) your application using the WebSphere Administrative Console.

8 Installing a second Application

The steps above describe how to install the application dc4asftest in WebSphere Application Server.

IBM recommends to generate a second application instance of Document Connect for ASF for use by administrators, for example “dc4asftest”.

To create a second instance, execute the batch file “docinstusr.bat” available in directory D:/Program Files/IBM/IBM Document Connect for ASF/install.

When being prompted specify an alternate installation path, for example

“D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest”

After successful completion perform the following steps using the WebSphere Administrative Console:

1. Add two name space bindings as described in “Name Space Bindings” with different values, for example:

Binding Identifier	DC4ASFINSTTEST
Name in Name Space	resources/asf/dc4asfinsttest
Path	“D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest”
Binding Identifier	DC4ASFCONFTEST
Name in Name Space	resources/asf/dc4ASFCONFTEST
Path	“D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/config/DocConfiguration.xml”

2. Perform the steps described in “Installation of the application” with the following changes:

In paragraph “Preparing for the application installation”, specify the following path for the location of the war file:

“D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/war/dcf4asf.war”

and specify the following path for context root:

/dc4asftest

In paragraph “Install new application (Step 1)”, use “dc4asftest” as the application name

In paragraph “Install new application (Step 2)”, use the following new name space bindings:

resources/asf/dc4asfinsttest

resources/asf/dc4ASFCONFTEST

Now perform the steps described in “HTTP Server Changes” using the context root [/dc4asftest](#).

The file plugin-cfg.xml will then contain the following lines:

```
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/html/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/xsl/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/javascript/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/java/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/css/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/preview/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFServerConfigServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFNetworkConfigServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFNetworkConfigProcessServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4ASF/DocASFFileServlet/*"/>

<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/servlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/html/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/xsl/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/javascript/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/java/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/css/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/preview/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/DocASFServerConfigServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/DocASFNetworkConfigServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/DocASFNetworkConfigProcessServlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/DocASFFileServlet/*"/>
```

The file http.conf will then contain the following lines:

Alias /dc4ASF/	"D:/Program Files/IBM/IBM Document Connect for ASF/www/"
Alias /dc4ASF/transfer/	"D:/Program Files/IBM/IBM Document Connect for ASF/www/transfer/"
Alias /dc4ASF/help/	"D:/Program Files/IBM/IBM Document Connect for ASF/www/help/"
Alias /dc4ASF/helpconfig/	"D:/Program Files/IBM/IBM Document Connect for ASF/www/helpconfig/"
Alias /dc4ASF/images/	"D:/Program Files/IBM/IBM Document Connect for ASF/www/images/"
Alias /dc4ASF/custom/	"D:/Program Files/IBM/IBM Document Connect for ASF/www/custom/"
Alias /dc4ASF/samples/	"D:/Program Files/IBM/IBM Document Connect for ASF/www/samples/"
Alias /dc4asftest/	"D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/www/"
Alias /dc4asftest/transfer/	"D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/www/transfer/"
Alias /dc4asftest/help/	"D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/www/help/"
Alias /dc4asftest/helpconfig/	"D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/www/helpconfig/"
Alias /dc4asftest/images/	"D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/www/images/"
Alias /dc4asftest/custom/	"D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/www/custom/"
Alias /dc4asftest/samples/	"D:/Program Files/IBM/IBM Document Connect for ASF/dc4asftest/www/samples/"

9 Applying Maintenance

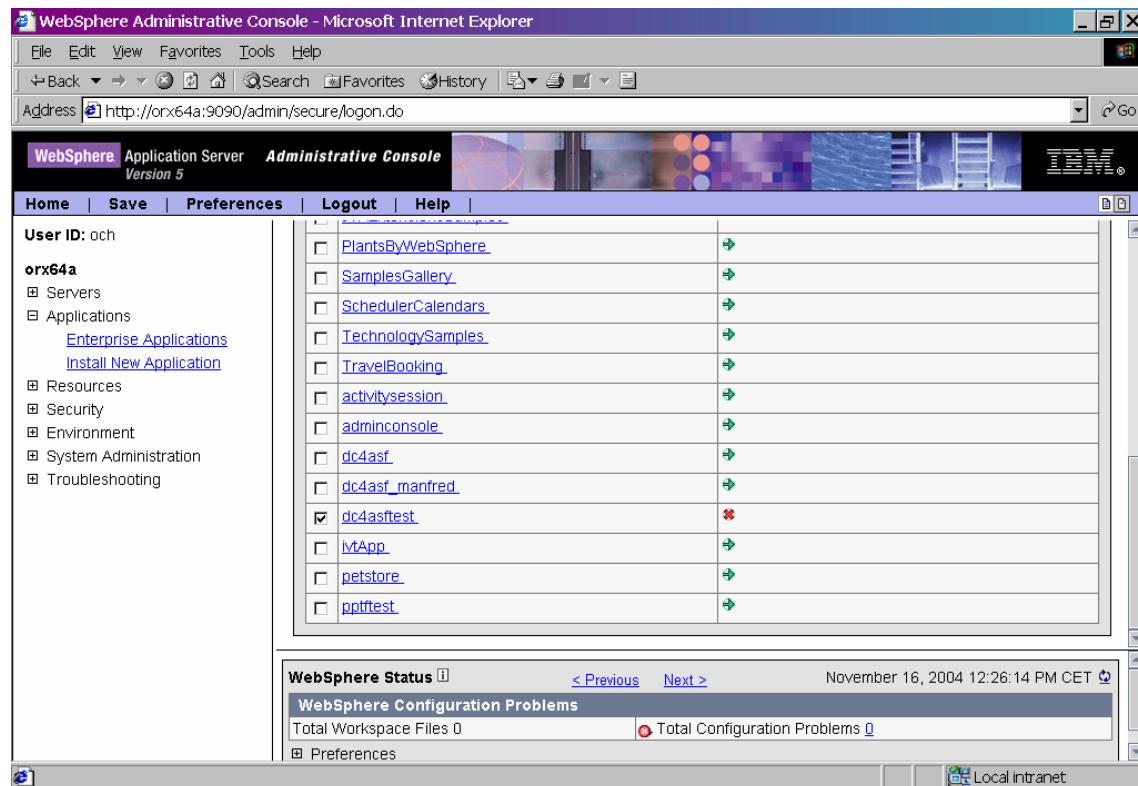
Launch the delivered Windows executable program to install a maintenance update. Follow the installation wizard and select “repair” to update DC4ASF.

Use the batch program “docinstusr.bat” available in directory “D:/Program Files/IBM/IBM Document Connect for ASF/install” to apply the update to the appropriate application, for example [dc4asftest](#).

Open the WebSphere Administrative Console:

[Open Application > Enterprise Application](#)

Select application “dc4asftest” and select [Update](#).



Enter the path (local path or server path) where the new DC4ASF war file is located:

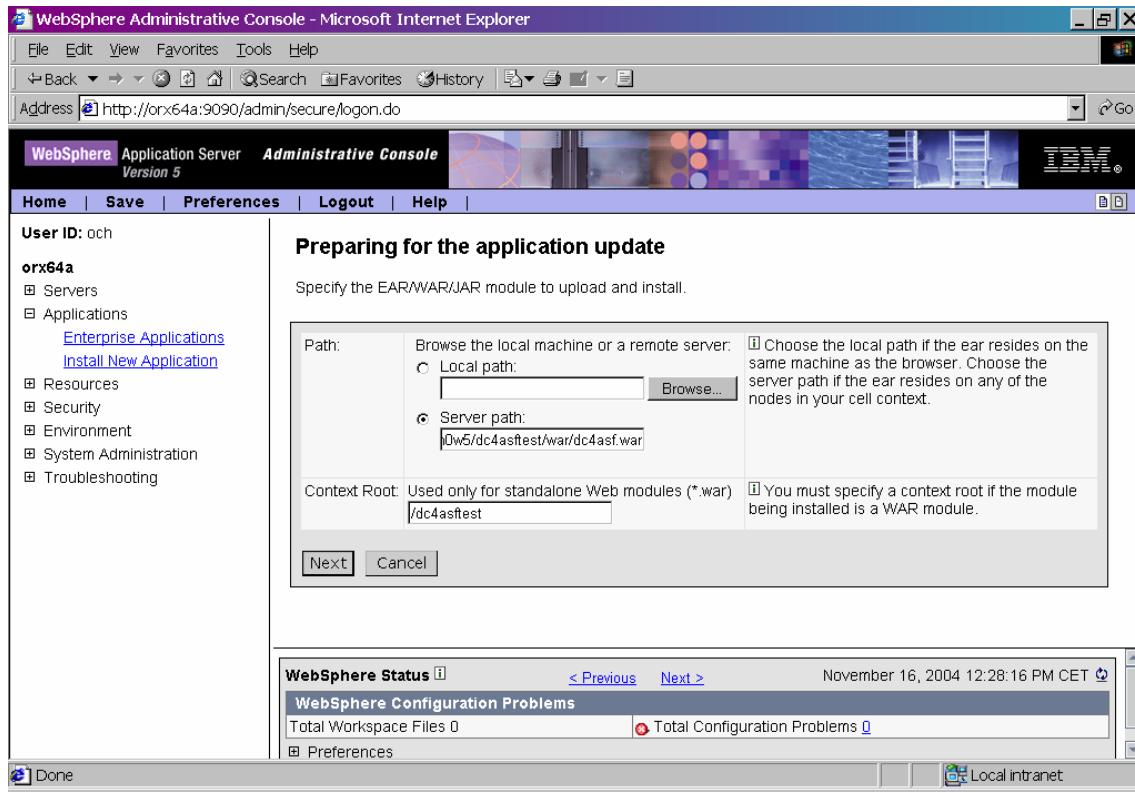
D:/Program Files/IBM/IBM Document Connect for ASF/[dc4asftest/war/dc4asf.war](#)

Enter the context root: /dc4asftest

Note:

The context root must be the same as the context root specified during installation (see “Preparing for the application installation”). If you do not remember the context root of your installation, check the file plugin-cfg.xml:

```
...
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/servlet/*"/>
<Uri AffinityCookie="JSESSIONID" Name="/dc4asftest/html/*"/>
...
```



On each of the next panels press button [Next](#) and finally press button [Finish](#). After the update of the application has been completed save the master configuration.

Open [Applications > Enterprise Application](#) and select your application dc4asftest. Select [Stop](#) and then select [Start](#) to restart the application.