ASF 3.3 with CICS
Document Connect for ASF

Installation on AIX Server
Using WebSphere Application Server V5.1

Server-to-Host Connection using
CICS Transaction Gateway

Edition: 1.1

31 March 2005

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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
   /usr/WebSphere/AppServer51

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
   /usr/IBMHttpServer

3. The CICS Transaction Gateway (Version 5.1 or later) has been installed either on z/OS or on AIX and the connections to the host (CICS) are available. If it is installed on z/OS the gateway classes has to be installed on AIX.

   Note: The CICS Transaction Gateway installation path is assumed to be
   /local/CTG510/ on z/OS or
   /usr/lpp/ctg on AIX

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

   /usr/fsn/v3r3m0w5/dc4asf

   where /usr/fsn/v3r3m0w5/ is fix and dc4asf can be specified after installation with SMIT/SMITTY with the docinstusr.sh script file.

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2 Name Space Bindings

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

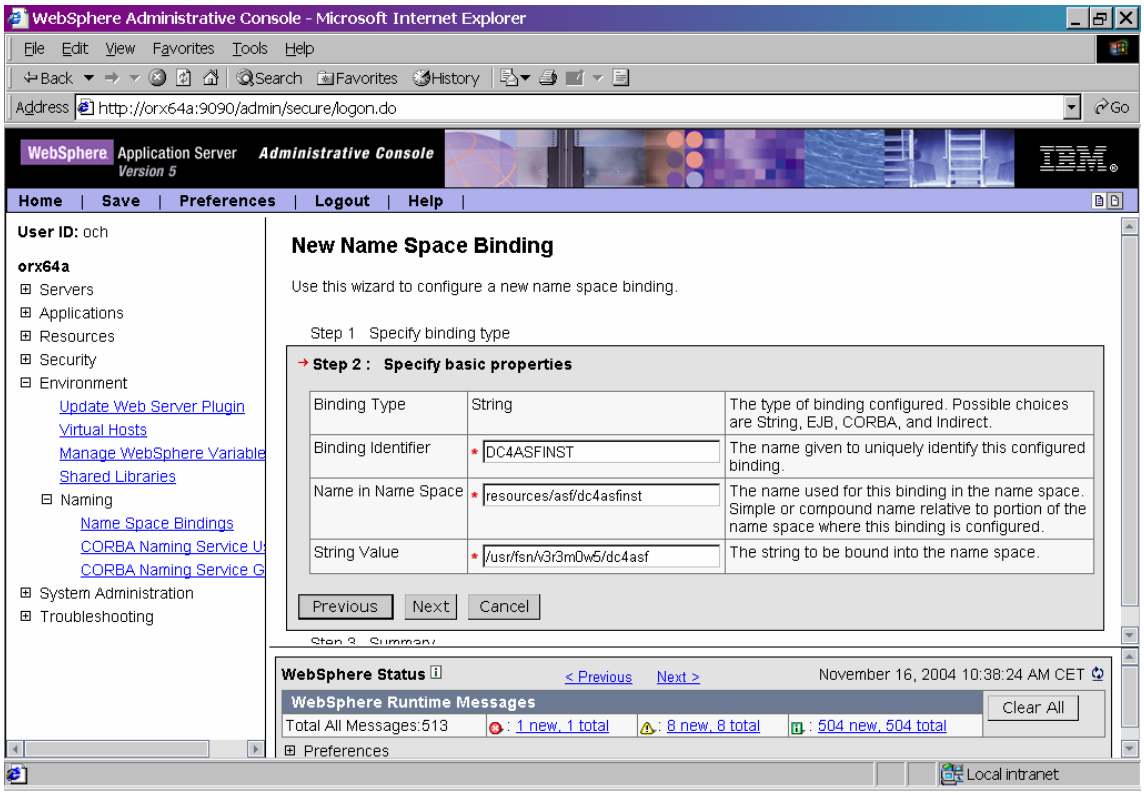
Open Environment > Naming >Name Space Bindings

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
(/usr//fsn/v3r3m0w5/dc4asf)

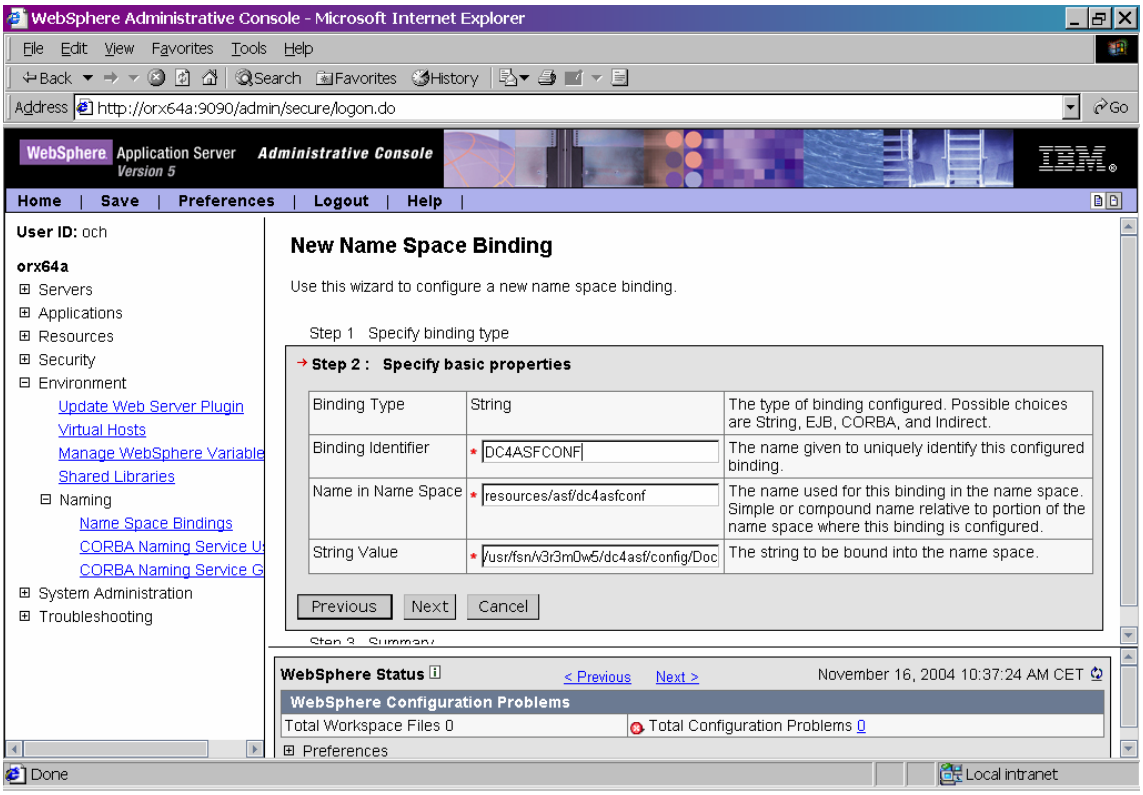
d) Press button Next to go to the Summary Panel
e) On the Summary Panel press button Finish to complete the Name Space Binding.



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
  (/usr/fsn/v3r3m0w5/dc4asf/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.



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

3 Installation of the application

Preparing for the application installation

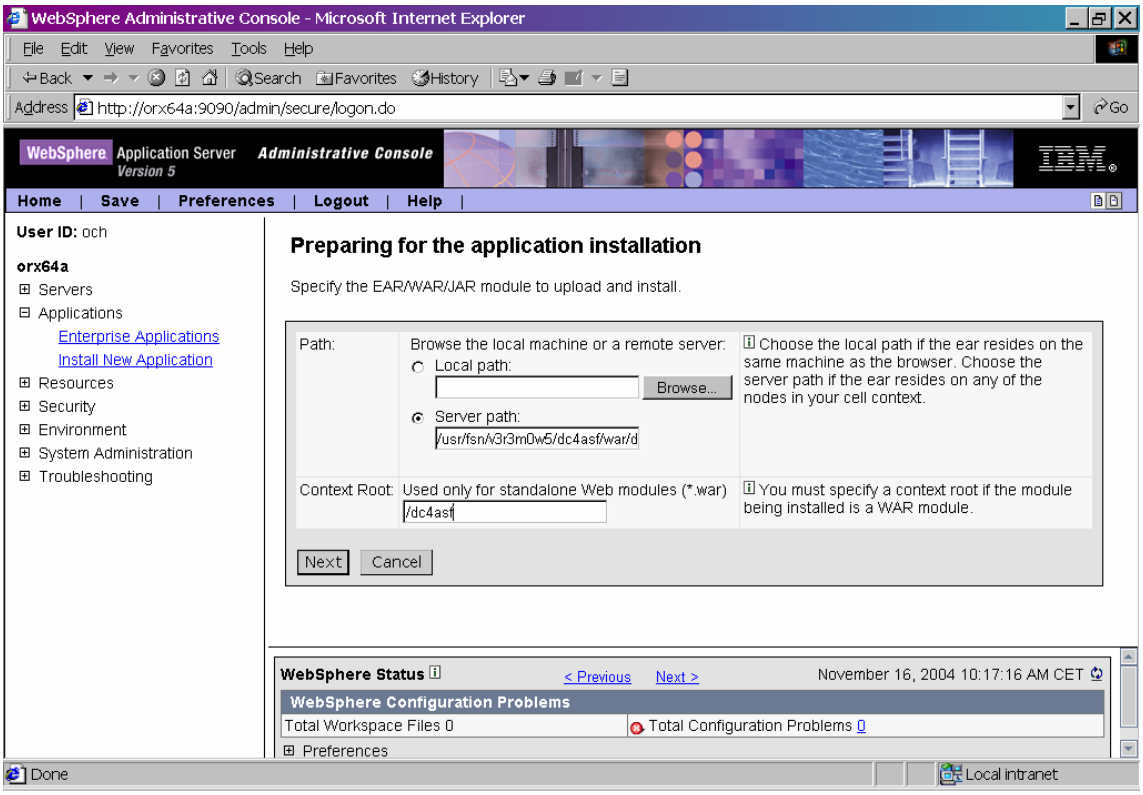
Open Application > Install New Application

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

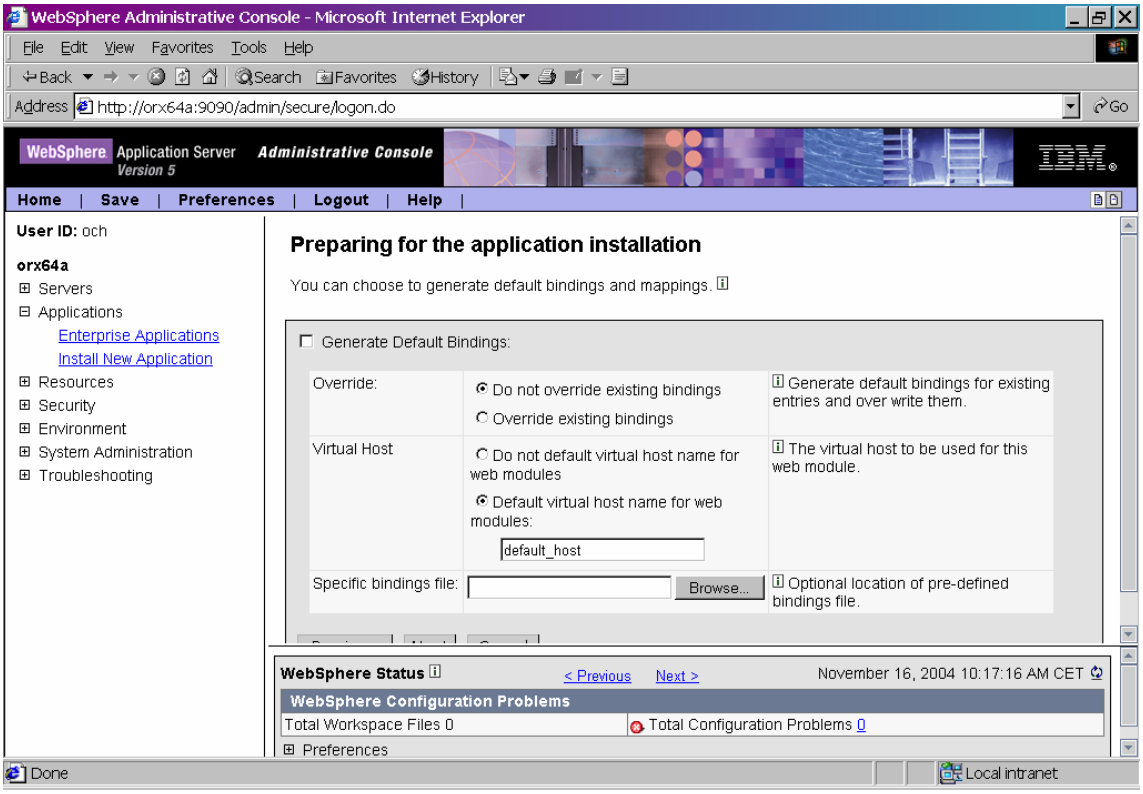
/usr/fsn/v3r3m0w5/dc4asf/war/dc4asf.war

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:

APP_INSTALL_ROOT/xxxxx/dc4asf.ear

where

- APP_INSTALL_ROOT is a path map variable which by default is set to

  /usr/WebSphere/AppServer51/installedApps/

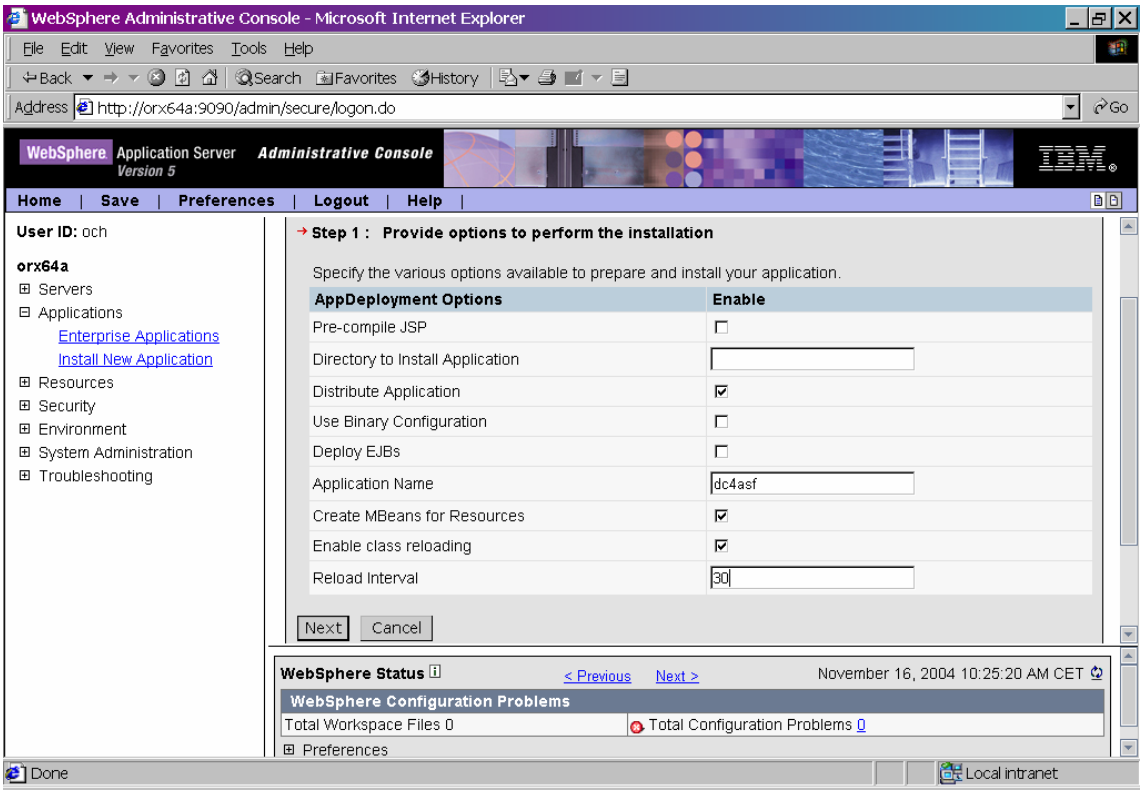
- 'xxxxx' is the cell name and
- 'dc4asf' is the application name.

Application Name:

Specify a unique name, for example 'dc4asf'.

Class Reloading:

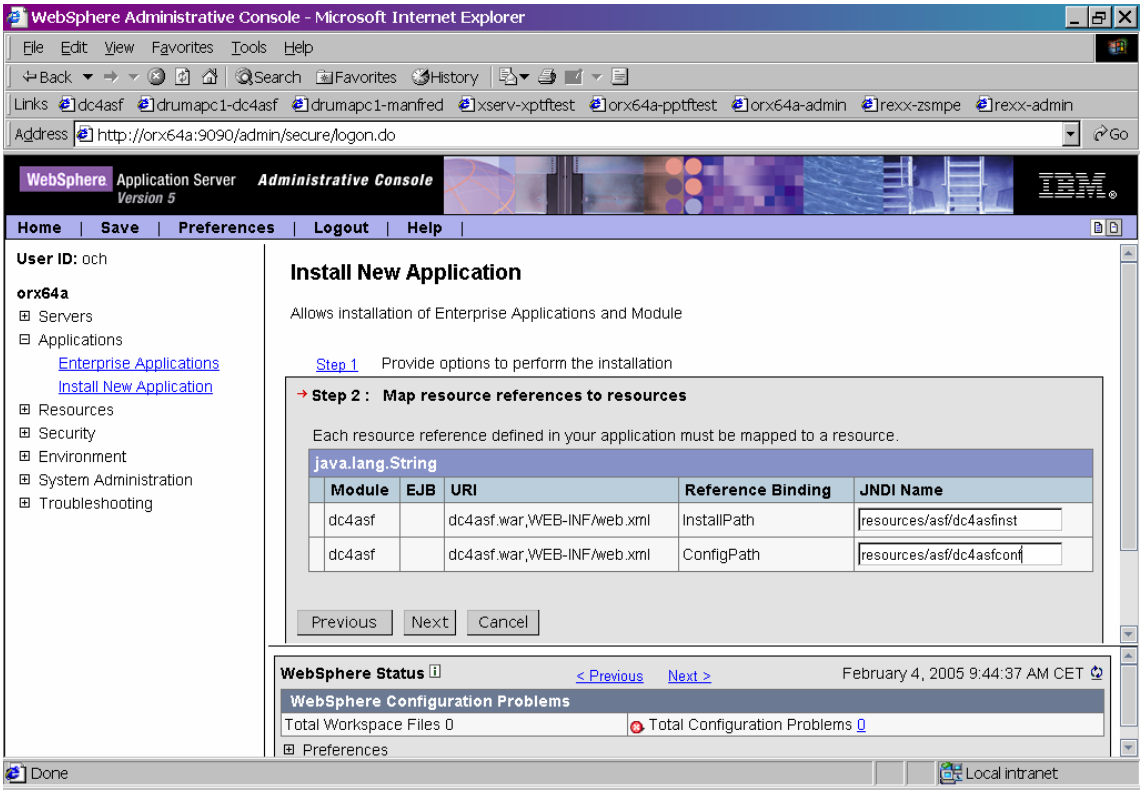
Specify a value in seconds, for example '30'.



Press button Next to finish Step 1 and go to Step 2.

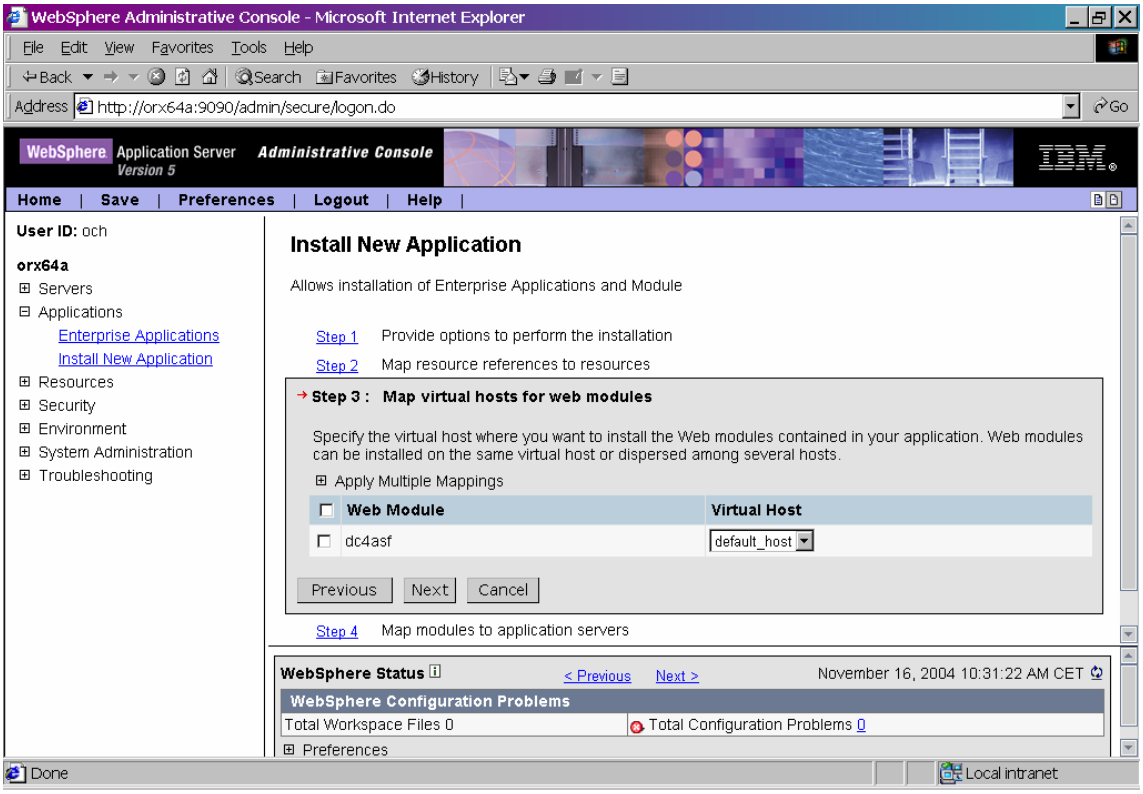
Install new application (Step 2)

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



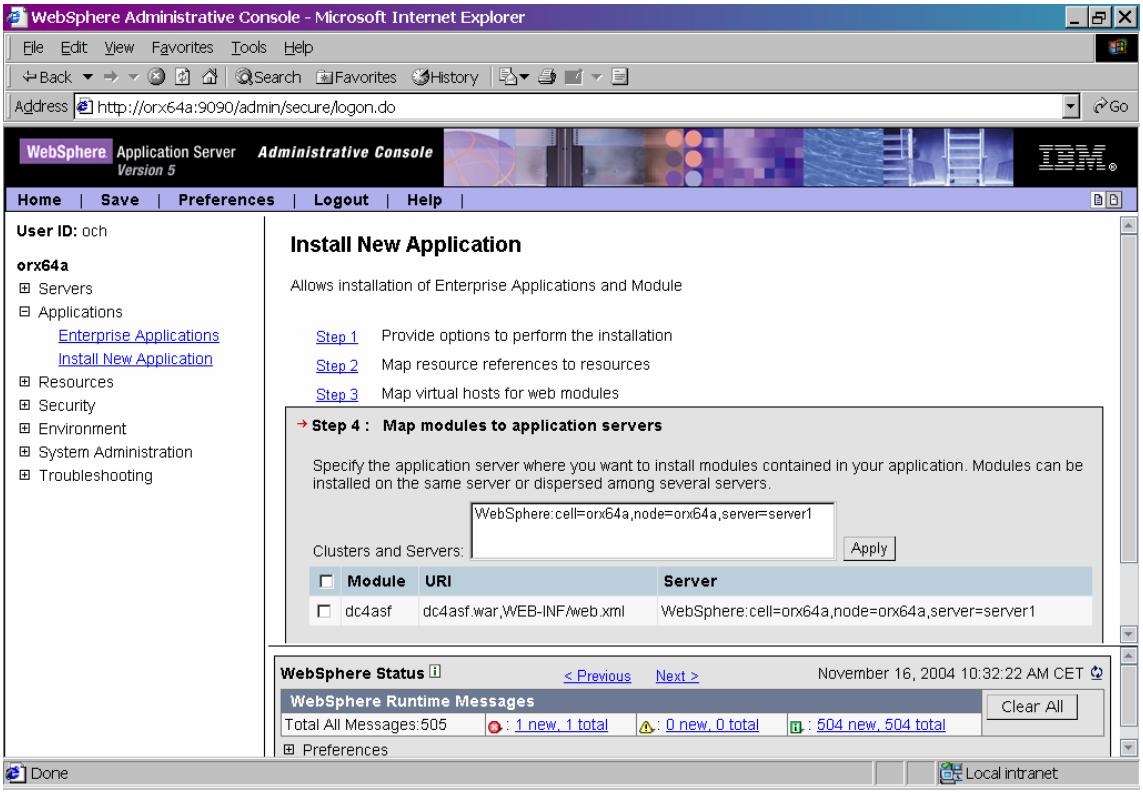
Press button Next to finish Step 2 and go to Step 3.

Install new application (Step 3)



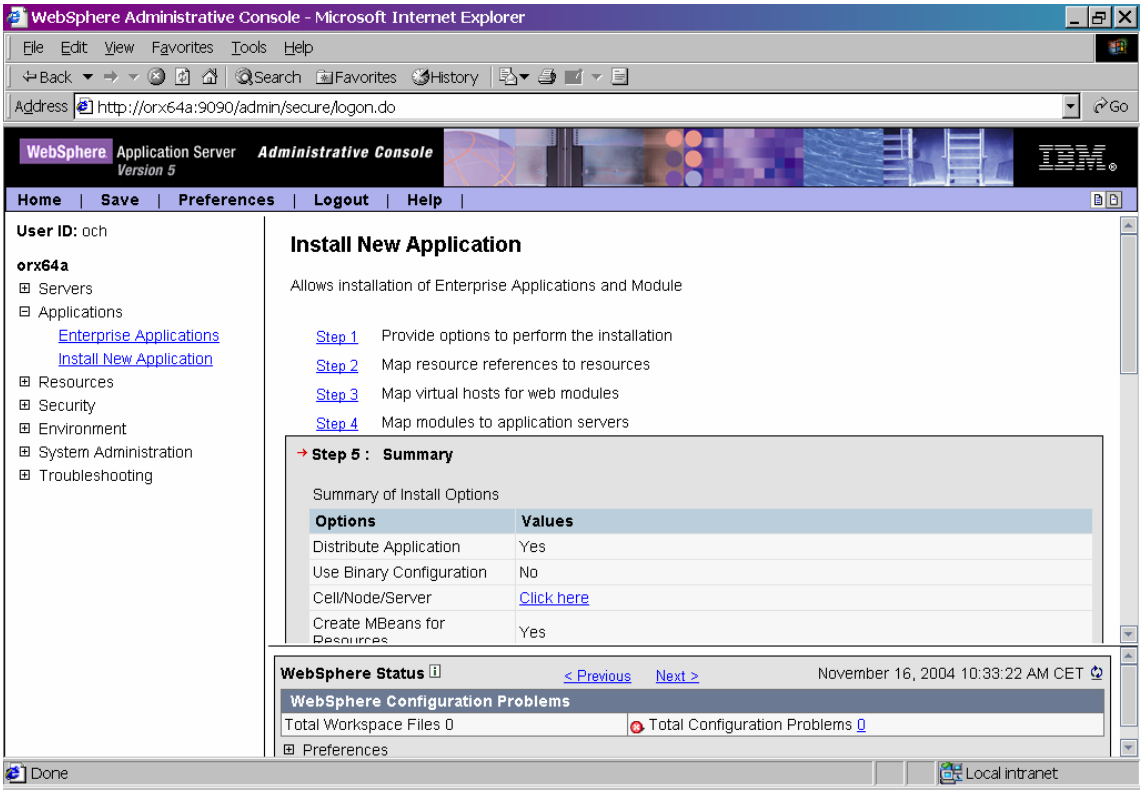
No updates are required for Step 3. Press button Next to go to Step 4.

Install new application (Step 4)



No updates are required for Step 4. Press button Next to go to Step 5.

Install new application (Step 5)



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

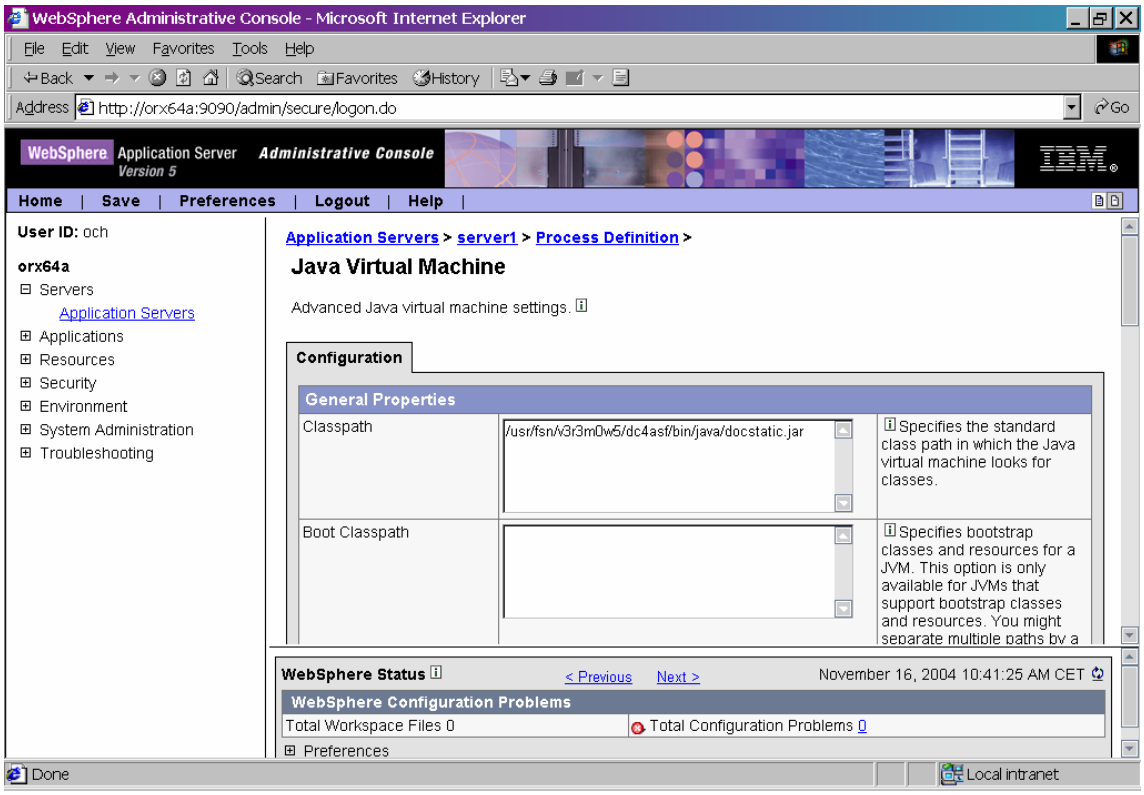
Open Applications > Enterprise Application, select your dc4asf application, and select Start to start the application.

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

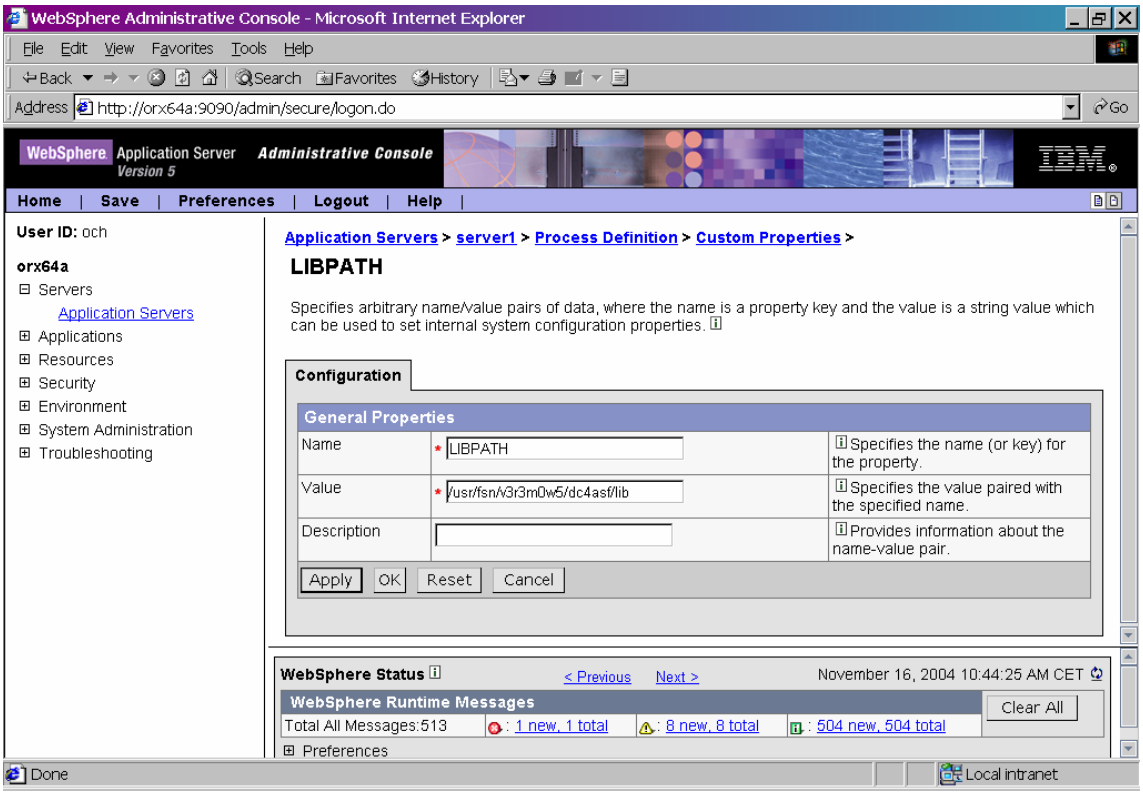
Add the file *docstatic.jar* delivered with DC4ASF to the Classpath (/usr/fsn/v3r3m0w5/bin/java/docstatic.jar).



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 (/usr/fsn/v3r3m0w5/dc4asf/bin).



Press button Apply first and then press button OK.

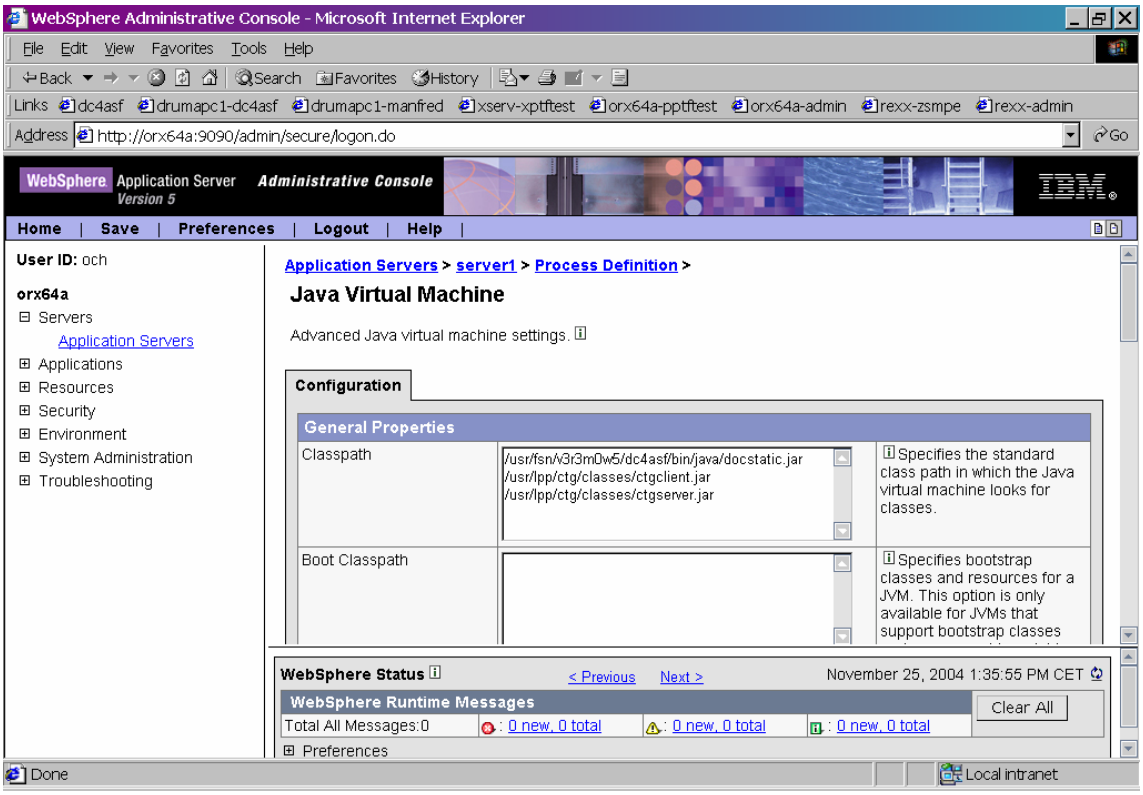
Save the changes to the master configuration.

5 Enable CICS Transaction Gateway Connection

To enable the CICS Transaction Gateway connection between server and host you must change the Classpath and the LIBPATH variable in the WAS environment.

Open Servers > Application Servers > *server name* > Process Definition > Java Virtual Machine

Add the files *ctgclient.jar* and *ctgserver.jar* delivered with the CICS Transaction Gateway to the Classpath (e.g. /usr/lpp/ctg/classes/ctgclient.jar)

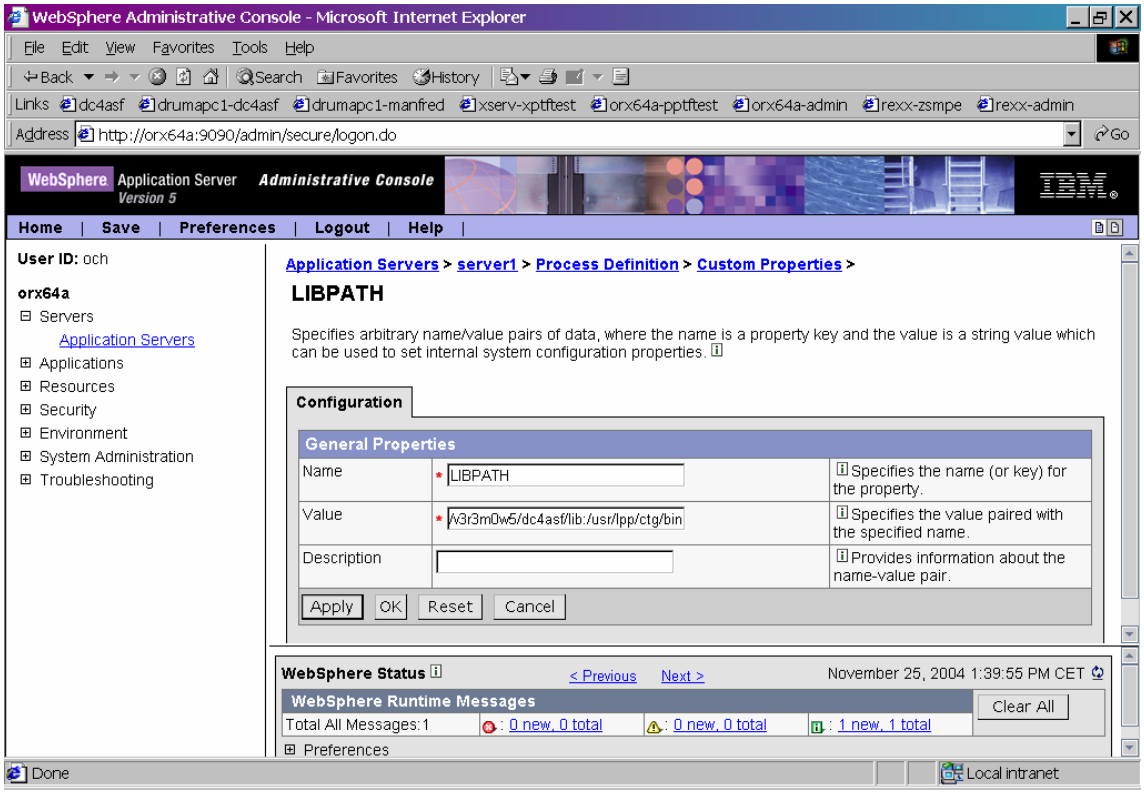


Press button Apply first and then press button OK.

Open Servers > Application Servers > *server name* > Process Definition > Environment Entries

Add the CICS Transaction Gateway shared library path (/usr/lpp/ctg/bin) to the value for the variable **LIBPATH**.

Note: Separate the path values with a colon.



Press button Apply first and then press button OK.

Save the changes to the master configuration.

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

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6 HTTP Server Changes

Configure the WebSphere PLUGIN

Using Shared Object library "mod_ibm_app_server_http.so"

Make sure you have installed the Shared Object (SO) library mod_ibm_app_server_http.so. This SO 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 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

To configure your IBM HTTP Server to run properly with DC4ASF, follow these steps:

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/              "/usr/fsn/v3r3m0w5/dc4asf/www/"
Alias /dc4asf/transfer/     "/usr/fsn/v3r3m0w5/dc4asf/www/transfer/"
Alias /dc4asf/help/         "/usr/fsn/v3r3m0w5/dc4asf/www/help/"
Alias /dc4asf/helpconfig/   "/usr/fsn/v3r3m0w5/dc4asf/www/helpconfig/"
Alias /dc4asf/images/       "/usr/fsn/v3r3m0w5/dc4asf/www/images/"
Alias /dc4asf/custom/       "/usr/fsn/v3r3m0w5/dc4asf/www/custom/"
Alias /dc4asf/samples/      "/usr/fsn/v3r3m0w5/dc4asf/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.

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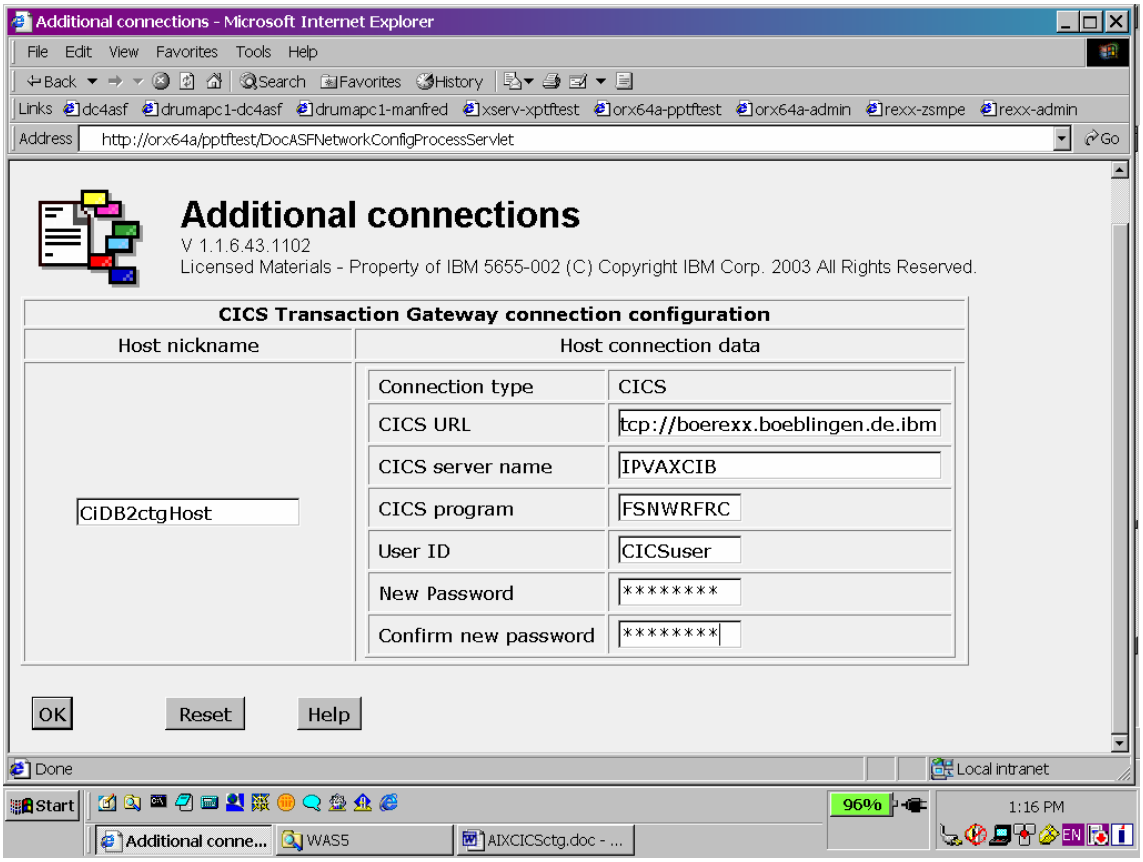
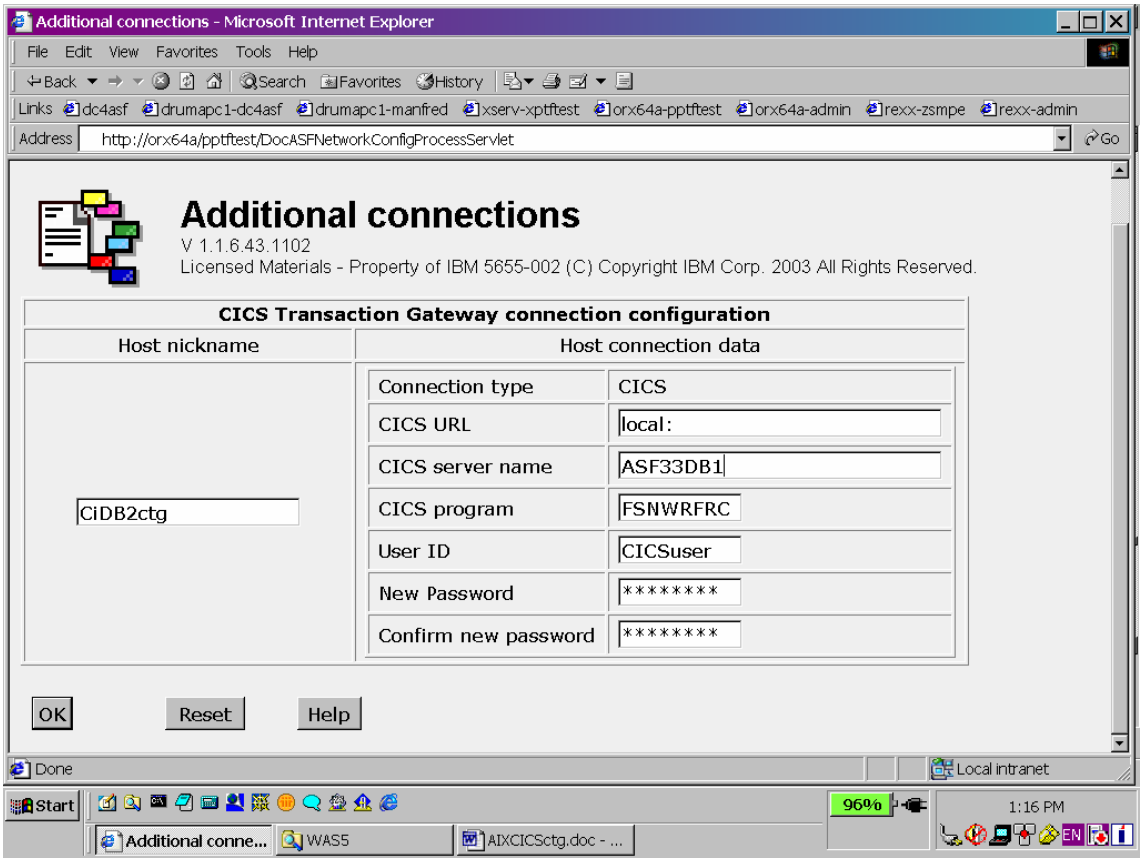
7 Configure the Connections

To define the server-host connections in DocNetworkConfiguration.xml invoke the servlet application "DocASFNetworkConfigServlet" in Internet Explorer.
Specify the URL where the CICS Transaction Gateway resides (local: if it is running on AIX otherwise the TCP/IP address and the port where the CICS Transaction Gateway resides, for example tcp://boerexx.boeblingen.de.ibm.com:2006), the CICS server name as defined in the CICS Transaction Gateway, the CICS program name (must be FSNWRFRC), the defined User ID used for CICS 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 script file "docinstusr.sh" available in directory /usr/lpp/fsn_v3r3m0w5/IBM

When being prompted specify an alternate installation path, for example

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	/usr/fsn/v3r3m0w5/dc4asftest

Binding Identifier	DC4ASFCONFTEST
Name in Name Space	resources/asf/dc4asfconftest
Path	/usr/fsn/v3r3m0w5/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:

   /usr/fsn/v3r3m0w5/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

Then 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/                 "/usr/fsn/v3r3m0w5/dc4asf/www/"
Alias /dc4asf/transfer/        "/usr/fsn/v3r3m0w5/dc4asf/www/transfer/"
Alias /dc4asf/help/            "/usr/fsn/v3r3m0w5/dc4asf/www/help/"
Alias /dc4asf/helpconfig/      "/usr/fsn/v3r3m0w5/dc4asf/www/helpconfig/"
Alias /dc4asf/images/          "/usr/fsn/v3r3m0w5/dc4asf/www/images/"
Alias /dc4asf/custom/          "/usr/fsn/v3r3m0w5/dc4asf/www/custom/"
Alias /dc4asf/samples/         "/usr/fsn/v3r3m0w5/dc4asf/www/samples/"


Alias /dc4asftest/             "/usr/fsn/v3r3m0w5/dc4asftest/www/"
Alias /dc4asftest/transfer/    "/usr/fsn/v3r3m0w5/dc4asftest/www/transfer/"
Alias /dc4asftest/help/        "/usr/fsn/v3r3m0w5/dc4asftest/www/help/"
Alias /dc4asftest/helpconfig/  "/usr/fsn/v3r3m0w5/dc4asftest/www/helpconfig/"
Alias /dc4asftest/images/      "/usr/fsn/v3r3m0w5/dc4asftest/www/images/"
Alias /dc4asf/custom/          "/usr/fsn/v3r3m0w5/dc4asftest/www/custom/"
Alias /dc4asf/samples/         "/usr/fsn/v3r3m0w5/dc4asftest/www/samples/"
```

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9 Applying Maintenance

Use SMIT or SMITTY to apply the PTF containing new tar file(s). SMIT/SMITTY will copy the tar file(s) into directory

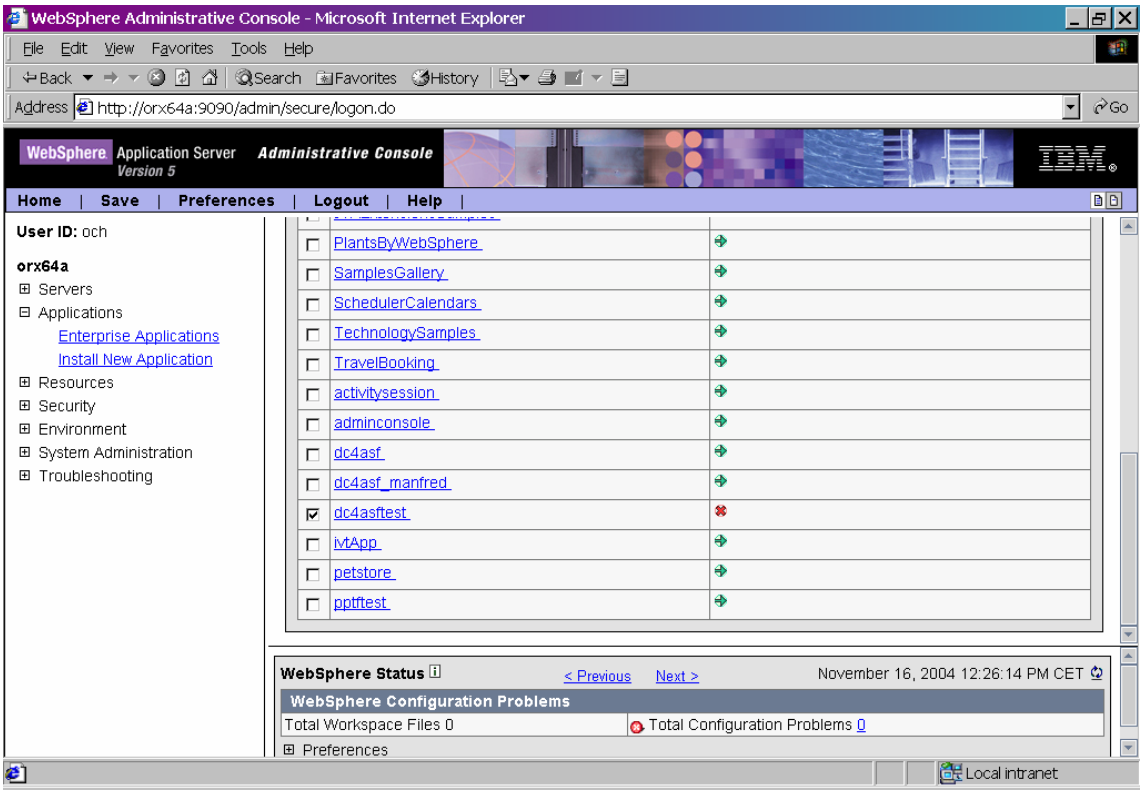
/usr/lpp/fsn_v3r3m0w5/IBM

Use the script file “docinstusr.sh” available in directory /usr/lpp/fsn_v3r3m0w5/IBM to apply the tar file(s) to the appropriate application, for example dc4asftest

Open the WebSphere Administrative Console:

Open Application > Enterprise Application

Select application “dc4asftest” and select Update.



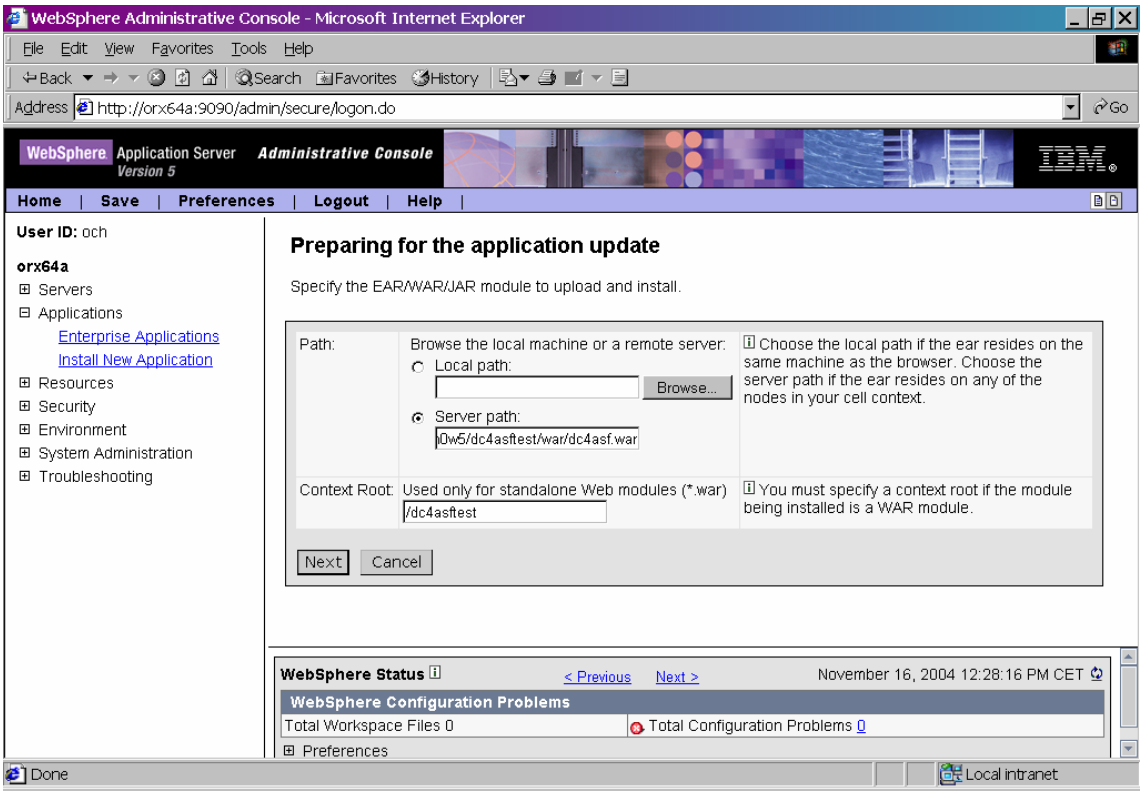
Enter the path (local path or server path) where the new DC4ASF war file is located:

/usr/fsn/v3r3m0w5/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.

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