Installing WebSphere Application Server on Iseries

The document describes in detail the steps required to install WebSphere Application Server Version 6.1 on Iseries (i5/OS V5R4).

Prerequisites

To install WebSphere Application Server on i5/OS, verify that your hardware and software meets the minimum requirements. Check the following Web site for the latest information available about prerequisites:

http://www-1.ibm.com/support/docview.wss?rs=180&uid=swg27007677

WebSphere Application Server V6.1 is supported on i5/OS Version 5 Release 3 (V5R3) or Version 5 Release 4 (V5R4). The server must be in an unrestricted state, and your user profile must have *ALLOBJ and *SECADM special authorities.

Preparing for Installation

After you have downloaded WebSphere Application Server for i5/OS Version 6.1, copy that Zip file in some local directory on the iseries host. If it is extracted setup (not a zip file) you need to copy in some folder on iseries also and skip the following section (Zip and Unzip to i5/OS PASE and QShell Environments) and move to next section (Performing WebSphere Application Server Installation)

Zip and Unzip to i5/OS PASE and QShell Environments

If you have copied the zip form of the WebSphere Application Server for i5/OS Version 6.1, you will be required to provide Zip and Unzip functionality on your iseries host. It is also possible to use the Zip functions in Portable Application Solutions Environment (i5/OS PASE), with a little help from AIX.

First you have to install PASE. PASE is an environment that lets you to run AIX software on the iSeries. PASE comes with OS/400 in V5R2 or later, free of charge. Older versions of OS/400 require you to pay.

We are running V5R4, so it is already installed; you can check it by typing GO LICPGM on i5/OS Main Menu screen and see option 11, Scroll down till you see "5722SS1 33 OS/400 - Portable App Solutions Environment"

Here are the steps to add the Unzip and Zip functions to your System i server:

1. Go to the following site and download the archives:

http://www.ctan.org/tex-archive/tools/zip/info-zip/UNIX/AIX/

In our case, we download these files:

zip23x-aix43.zip To compress (zip) files
unz550x-aix5L.tar.gz To uncompress (unzip) files

- 2. Place these files somewhere on your System i server. In this example, we use /home/zip.
- 3. You will also need the gunzip tool to uncompress the unz550x-aix5L.tar.gz file. Download the tool (gzip.1.2.4a.tar.Z) from the following Web site:

http://ftp.cc.uoc.gr/AIX/freeware/5.1.0/

Place the file in the same directory as the other two files. Review the license agreement for the downloaded tools. 4. Sign on to your System i server and start an i5/OS PASE terminal with the command:

CALL QP2TERM

5. Change to the /home/zip directory:

cd /home/zip

6. The unzip file is a compressed file. Uncompress this file:

uncompress gzip.1.2.4a.tar.Z

7. Untar the gzip tar file:

tar -xvf gzip.1.2.4a.tar

It installs the executable files under the /home/zip/usr/local/bin directory.

8. Update the PATH variable with the */home/zip/usr/loca/bin* directory by running this command:

export PATH=\$PATH:/home/zip/usr/local/bin

9. Uncompress the unz550x-aix5L.tar.gz file using this command:

gunzip unz550x-aix5L.tar.gz

10. Untar the uncompressed file:

tar -xvf unz550x-aix5L.tar

It creates the directory *unzip-5.50*. 11. Change to this directory:

cd unzip-5.50

12. Enter the following command:

unzip

It shows you the command usage text.

13. To run the command from any directory and any terminal window, you have to copy the unzip file into the /QOpenSys/usr/bin directory:

cp unzip /QOpenSys/usr/bin

14. Switch back to the directory to which you have downloaded the files: (home/zip)

cd ..

15. Now check whether unzip is really working. The Zip program on our system is packed in the zip file - *zip23x-aix43.zip*, so we can try on that one. Verify that you are in the directory in which the zip23x-aix43.zip file is located. Enter the following command:

unzip -d ./zip zip23x-aix43.zip

16. This creates a directory named *zip* and places all files into that directory. Change to this directory:

cd zip

17. Issue the following command to see if the program is working:

zip

This will show the usage notes.

18. To make the command available in every i5/OS PASE terminal session, copy the program into the /QOpenSys/usr/bin directory.

cp zip /QOpenSys/usr/bin

- 19. To use both commands (*zip* and *unzip*) in QShell, make another copy of the programs into the */usr/bin* directory by running 2 commands: Go to root directory first by typing cd / and pressing Enter
 - cp /Q0penSys/usr/bin/zip /usr/bin
 cp /Q0penSys/usr/bin/unzip /usr/bin

Now zip and unzip are available for the next QShell terminal.

Now we will unzip the WebSphere Application Server zip package which is **C132JML.zip** Open Qshell and change the directory where the zip file is located, in our case */home/ftp*

cd /home/ftp

Perform the following command to extract the zip file, it will create a new directory WAS61 and extract all the data in that directory

unzip -d ./WAS61 C132JML.zip

It will be showing the messages of files being extracted wait until it shows **\$** (dollar sign) which is the end of the command which was being executed.

Performing WebSphere Application Server Installation

In this section, we will install WebSphere Application Server V6.1 on i5/OS by local silent install from i5/OS QShell command line. To start the local silent installation:

1. Sign on to your server.

2. Start Hosts servers. On an i5/OS command line type STRHOSTSVR SERVER(*ALL), and press Enter.

3. Verify that your user profile has the *ALLOBJ and *SECADM special authorities.

4. Use the Copy (CPY) command to create a copy of the responsefile.<edition>.txt file from the path where we extracted WAS:

CPY OBJ('/home/ftp/WAS61/WAS/responsefile.base.txt') TODIR('/tmp')

5. Edit the /tmp/responsefile.base.txt file using the EDTF command, for example:

EDTF STMF('/tmp/responsefile.base.txt')

6. Change the response file as required for your installation. We describe only the needed parameters in this step: (Note: Modify only those parameters that you need)

Change the following parameter to **true** in order to accept the license:

-OPT silentInstallLicenseAcceptance="false"

If you do not accept the license, the installation will fail.

Change the following parameter to **false** if you do not want to enable administrative security. You do not need to set the PROF_adminUserName or PROF_adminPassword in this case.

-OPT PROF_enableAdminSecurity="true"

You do not need to set the PROF_adminUserName or PROF_adminPassword in this case. If you select above parameter as true then you will have to also define (PROF_adminUserName and PROF_adminPassword) otherwise installation will fail. In our case we don't need admin security so we have made it false

7. Save the file by pressing F3 twice.

8. Open a Qshell session. On an i5/OS command line, type STRQSH

9. Change the directory to the WAS subdirectory on i5/OS command line:

cd /home/ftp/WAS61/WAS

11. Invoke the install script, and point to your response file:

install -options /tmp/responsefile.base.txt

12. After you invoke the installation script, messages are displayed that indicate the progress of the installation. When the setup program completes, check the last window. The last two

messages should indicate the status of the installation: success, partial success, or failure, for example:

Process, com.ibm.ws.install.ni.ismp.actions.SetExitCodeAction, msg1, CWUPI0000I: EXIT-CODE=0

Process, com.ibm.ws.install.ni.ismp.actions.ISMPLogSuccessMessageAction, msg1, **INSTCONFSUCCESS**

🔛 tn	5250 172.29.139.74									
File	Edit View Help									
	QSH Command Entry									
	<pre>te: 87% (May 7, 2008 6:18:35 PM), Process, com.ibm.ws.install.ni.ismp.actions.Install NIFPackage, msg1, Running configuration command: migrationSlashFix, percent c omplete: 100% (May 7, 2008 6:18:47 PM), Process, com.ibm.ws.install.ni.ismp.actions.SettleN IFRegistryAction, msg1, Current install/uninstall process is successful. Proc ess type is: install (May 7, 2008 6:18:48 PM), Process, com.ibm.ws.install.ni.ismp.actions.SetExit CodeAction, msg1, CWUPI0000I: EXITCODE=0 (May 7, 2008 6:18:48 PM), Process, com.ibm.ws.install.ni.ismp.actions.ISMPLog SuccessMessageAction, msg1, INSTCONFSUCCESS Wizard.getExitCode(): called after WizardServices is shutdown. # actions.setExit # actions.setExitCode(): called after WizardServices is shutdown. # actionsetExitCode(): called after WizardSe</pre>									
-										
-										
F3: F1:	=Exit F6=Print F9=Retrieve F12=Disconnect 3=Clear F17=Top F18=Bottom F21=CL command entry									
525	0 MW 007/018									

An exit code of 0 means successful installation.

13. You should also check the log file at: <install_root>/logs/install/log.txt

You have successfully installed WebSphere Application Server for i5/OS Version 6.1

Starting Server and Accessing Admin Console

Now as you have installed WebSphere Application Server successfully, you need to start the server and access admin console to verify the installation.

To start the server:

1. Open Qshell from i5/OS command line by typing STRQSH and press Enter

2. On the Qshell change the directory to where application server is installed, in our case

cd /QIBM/ProdData/WebSphere/AppServer/V61/BASE/bin

3. Before starting the server, we will check the status of the server to see if it is started or stopped to be on the safe side, type the following command

serverStatus server1

4. Wait until it gets some information and see the last message, at the end if it says "Application server server1 can not be reached. It appears to be stopped" then perform the following command. (**Note:** If it says "Application server server1 is STARTED" then no need to perform following command and skip to step 5)

startServer server1

Wait for a while until it gives a message like "Application server server1 in profile default has started and is ready to accept connections on admin port 9060"

	tn525	50 -	- 172.29	.139.74								
File	Edit	t Vie	ew Help									
	QSH Command Entry											
>	AD At AD be \$ st CP li CW ea	MU(tac MU(MU(C12 bra NAT	1500I ching ol.ja 1509I tServ 221: ary Q [V00I to a	: Retri Java p r. The A stopp er serv Job 002 WASOL : Appli ccept c	eving server rogram to /Q pplication S ed. er1 233/QEJBSVR/ cation serve connections o	status for ser IBM/ProdData/We erver "server1" SERVER1 submitt r server1 in pr n admin port 90	ver1 bSphere/App cannot be ed to job q ofile defau 60.	Server/V61/E reached. It ueue QWASJOE It has start	Base/lib/mai appears to BQ in Ged and is r			
	\$											
	==>											
F	3=Е 13=	xi Cle	t F ear F	6=Print 17=Top	F9=Retrieve F18=Bottom	F12=Disconnect F21=CL command	l entry					
52	50				MW				007/018			

5. Next is to access the WAS admin console to verify that the server is started. We will access the admin console from our windows machine. Open internet explorer and type in the address bar:

```
http://<iseriesHostIP>:9060/ibm/console
```

And you will see the following login screen, type any user id like "**admin**" and click **Login**, and you are ready to install, uninstall applications and use many features of WebSphere Application Server.





© Copyright IBM Corporation 2010 IBM Global Services Route 100 Somers, NY 10589 U.S.A. Produced in the United States of America 08-10 All Rights Reserved

IBM, the IBM logo, ibm.com, Lotus®, Rational®, Tivoli®, DB2® and WebSphere® are trademarks or registered trademarks of International Business Machines Corporation in the United States, other countries, or both. If these and other IBM trademarked terms are marked on their first occurrence in this information with a trademark symbol (® or ™), these symbols indicate U.S. registered or common law trademarks owned by IBM at the time this information was published. Such trademarks may also be registered or common law trademarks in other countries. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at ibm.com/legal/copytrade.shtml Other company, product and service names may be trademarks or service marks of others. The information contained in this documentation is provided for informational purposes only. While efforts were made to verify the completeness and accuracy of the information contained in this documentation, it is provided "as is" without warranty of any kind, express or implied. In addition, this information is based on IBM's current product plans and strategy, which are subject to change by IBM without notice. IBM shall not be responsible for any damages arising out of the use of, or otherwise related to, this documentation or any other documentation. Nothing contained in this documentation is intended to, nor shall have the effect of, creating any warranties or representations from IBM (or its suppliers or licensors), or altering the terms and conditions of the applicable license agreement governing the use of IBM software. This document illustrates how one organization uses IBM products. Many factors have contributed to the results and benefits described; IBM does not guarantee comparable results elsewhere.