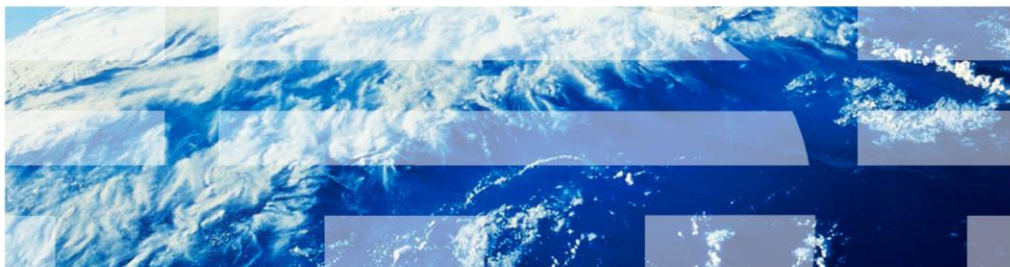


IBM Tivoli Directory Server Version 6.2

Native installation on AIX



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Welcome to this IBM Education Assistant module on IBM Tivoli® Directory Server version 6.2. Following this presentation, you should know how to perform a native installation for version 6.2, which includes DB2®, GSKit, Tivoli Directory Server client, server, and the Web administration tool.

Tivoli Directory Server V6.2 part numbers

CR7RTML: IBM Tivoli Directory Server 6.2 for AIX (.tar and .iso files)	
File name / Internal file name	File description
C1N5VML.tar (tds62-aix-ppc64-base.tar)	IBM Tivoli Directory Server tar file for AIX. Includes full server, proxy server, client.
C1N5XML.tar (tds62-aix-ppc64-db2.tar)	IBM Tivoli Directory Server tar file for AIX. Includes DB2 v 9.5 FixPack 1.
C1N5YML.tar (tds62-aix-ppc64-eWas.tar)	IBM Tivoli Directory Server tar file for AIX. Includes Embedded WebSphere Application Server 6.1.0.13.
C1N5ZML.tar (tds62-aix-ppc64-gskit.tar)	IBM Tivoli Directory Server tar file for AIX. Includes Global Security Kit (GSKit) 7.0.4.14.
C1N6ZML.iso (tds62-aix-ppc64.iso)	IBM Tivoli Directory Server iso file for AIX. Includes full server, proxy server, client, DB2 v 9.5 FixPack 1, Embedded WebSphere Application Server 6.1.0.13, GSKit 7.0.4.14, IBM Tivoli Directory Integrator 6.1.1, White Pages.

If you are downloading the ISMP or native installation of IBM Tivoli Directory Server version 6.2 from Passport Advantage <http://www-142.ibm.com/software/sw-lotus/services/cwepassport.nsf/wdocs/passporthome> verify that you have downloaded the appropriate packages:
<http://www-01.ibm.com/support/docview.wss?rs=767&uid=swq24020376>

.tar files

.iso image

2 Native installation on AIX © 2010 IBM Corporation

This presentation focuses on AIX 6.1 and the part numbers for AIX.

The native installation files are located in the left column of the table. You can use these tar files for either the ISMP installation or the native installation.

On the right is the ISO image.

Begin the installation by grabbing either the individual tar files or the ISO image.


Installation and configuration using ISMP and GUI tools

Download the packages and extract them in the same directory using the tar -xf command

```
root@l2aix /home/anntest/installImages/62/AIX
==> ls
C1N5VML.tar C1N5XML.tar C1N5YML.tar C1N5ZML.tar C1N60ML.tar C1N61ML.tar
root@l2aix /home/anntest/installImages/62/AIX
==> tar -xf C1N5VML.tar
root@l2aix /home/anntest/installImages/62/AIX
==> tar -xf C1N5XML.tar
```

After you extract the files, notice that the tdsV6.2 directory is now created

```
root@l2aix /home/anntest/installImages/62/AIX
==> ls
C1N5VML.tar C1N5YML.tar C1N60ML.tar tdsV6.2
C1N5XML.tar C1N5ZML.tar C1N61ML.tar
```

 *tdsV6.2 directory*

After you download the tar packages, extract them into the same directory using the tar-xf command. A directory is created, called tdsV6.2.

Remember to extract all of the tar files in the same directory if you are using the download option. Extracting them in different directories can cause problems in the future.

Installation and configuration using native methods

- Make sure prerequisites are met

<http://publib.boulder.ibm.com/infocenter/tivihelp/v2r1/topic/com.ibm.IBMDS.doc/sysreq.htm>

- Review the Installation and Configuration Guide for operating system-specific considerations:

<http://publib.boulder.ibm.com/infocenter/tivihelp/v2r1/topic/com.ibm.IBMDS.doc/install09.htm#consider>

- Install features in the following order:
 - DB2
 - GSKIT
 - Tivoli Directory Server Client
 - Tivoli Directory Server
 - Tivoli Directory Server Web administration tool
 - ***Note: There is no native installation method for installing TDI*

**NOTE**

The client is a prerequisite for the server installation. You must install the client before attempting to install the server.

For installation and configuration using native methods, check any operating system-specific prerequisites and review any configuration considerations before performing the installation.

For the native process, the installation order is DB2, GSKit, and then the Tivoli Directory Server packages. Each package has its own requisites. If you manually install using installp, there are additional considerations.

Note that the client is a prerequisite for the server installation. You must install the client before attempting to install the server.

Native installation: DB2 (1 of 3)

Change to the db2 directory (../tdsV6.2/db2) where you extracted the tar files and launch the db2 installer

```
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2
==> ls
appsrv      gskit      quickstart  tdsLangpack  whitepages
db2         installp   tdi         tdsfiles
entitlement  license    tds         tools
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2
==> cd db2
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2/db2
==> ls
db2          db2prereqcheck  installFixPack  readmefirst.htm
db2_deinstall  db2setup        nlpack          readmefirst.txt
db2_install    doc             readmefirst
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2/db2
==> ./db2_install
```


./db2_install

From the tdsV6.2/db2 directory, launch the DB2 installer by issuing a `./db2_install` command.

Native installation: DB2 (2 of 3)

Enter the directory for the installation and select the ESE keyword

```
==> ./db2_install

Default directory for installation of products - /opt/IBM/db2/V9.5
*****
Do you want to choose a different directory to install [yes/no] ?
no

Specify one of the following keywords to install DB2 products.
  ESE
  CLIENT
  RTCL

Enter "help" to redisplay product names.
Enter "quit" to exit.
*****
ESE
```

You are prompted to answer some questions. To select the default installation path, which is /opt/IBM/db2/V9.5, answer "no" to the first question. Otherwise, answer "yes" and provide a path for the db2 installation.

Select the DB2 product to install, specify ESE for the DB2 Enterprise Server Edition and press Enter.

Native installation: DB2 (3 of 3)

```
*****
ESE
DB2 installation is being initialized.

Total number of tasks to be performed: 43
Total estimated time for all tasks to be performed: 2091

Task #1 start
Description: Checking license agreement acceptance
Estimated time 1 second(s)
Task #1 end

Task #2 start
Description: Base Client Support for installation with root privileges
Estimated time 3 second(s)
Task #2 end

Task #3 start
Description: Product Messages - English
Estimated time 11 second(s)
Task #3 end

Task #4 start
Description: Base client support
Estimated time 189 second(s)
```

NOTE

With AIX 5.3 and AIX 6.1, an RSCT package at the end of the installation might display a failure message. This error can be safely ignored.

As the DB2 installation progresses, you see the estimated number of tasks to be performed and a time estimate.

With AIX 5.3 and AIX 6.1, an RSCT package at the end of the installation might give you a failure message. This error can be safely ignored.

If you want to resolve the issue, you can add the RSCT packages to your installation from the AIX install CDs.

Native installation: DB2 installation complete

```
Task #43 start
Description: Setting default global profile registry variables
Estimated time 1 second(s)
Task #43 end

Task #44 start
Description: Initializing instance list
Estimated time 5 second(s)
Task #44 end

Task #45 start
Description: Updating global profile registry
Estimated time 3 second(s)
Task #45 end

The execution completed successfully.

For more information see the DB2 installation log at
"/tmp/db2_install.log.303320".
```

This slide shows a successful execution with no error messages. If any errors are encountered, review the installation log for more information.

Native installation: DB2 installation confirmation

```
==> /usr/local/bin/db2ls
```

Install Path	Level	Fix Pack	Special	Install Number	Install Date	Installer	UID

/opt/IBM/db2/V9.5	9.5.0.1	1			Tue Apr 14 10:34:38 2009 CDT		

To confirm that DB2 has been installed, use the new command added in DB2 9.1, `db2ls`, which resides in the `usr local bin` directory on AIX. Issuing that command reveals the installation path, level, fix pack version, and other information.

This command also reveals whether multiple versions of DB2 9.5 are present on your system. If there are multiple versions and you choose to install a patch for DB2, you must install the patch separately for each copy of DB2.

Native installation: GSKit (1 of 4)

The DB2 installation bundles the gskjt.rte and gskta.rte packages. The Tivoli Directory Server installation provides a newer version of the gskta.rte (contained in the gsk7bas32 subdirectory), gskjs.rte, and gksa.rte.

Begin the native installation of GSKit by installing the gskjs.rte and gksa.rte first, and then proceed to update the gskta.rte package.

Change to the gskit subdirectory where you extracted the installation media.

```
==> cd tdsV6.2/gskit
```

```
root@12aix /home/anntest/installImages/62/AIX/tdsV6.2/gskit
==> ls
.toc      gsk7bas32  gskjs.rte  gksa.rte
```

Next is the GSKit installation. Because DB2 was installed first, the gskjt.rte and gskta.rte packages are already in place. Tivoli Directory Server provides a newer version of gskta, gskjs, and the gksa.rte packages.

Perform a native installation of the gskjs and gksa.rte packages. Use the same directory the tar files were extracted to, tdsV6.2, and go into the GSKit subdirectory.

Install the gskjs.rte and gksa.rte packages first and then CD to the gsk7bas32 subdirectory and install the gskta.rte package.

Native installation: GSKit (2 of 4)

You can use either SMIT or installp utilities. In this example the installp command is used to install the gskit packages as follows:

```
==> installp -acgXd . gskjs.rte
```

```
==> installp -acgXd . gsksa.rte
```

where

- a stands for apply
- c stands for commit
- g automatically installs or commits any requisite software product
- X expands the file system if necessary
- d stands for device and specifies where the installation media can be found

You can use either the SMIT or installp utilities to install these packages. For this demonstration, use installp.

Specify `installp -acgXd .` to indicate the package is in the local directory, and the file names.

Native installation: GSKit (3 of 4)

When the installp command completes, you see a successful result in the installation summary

```
-----+
                          Summaries:
                          -----+
Installation Summary
-----+
Name           Level      Part      Event      Result
-----+-----+-----+-----+-----+
gskjs.rte     7.0.4.14  USR       APPLY      SUCCESS
```



```
-----+
                          Summaries:
                          -----+
Installation Summary
-----+
Name           Level      Part      Event      Result
-----+-----+-----+-----+-----+
gksa.rte     7.0.4.14  USR       APPLY      SUCCESS
```

When installp completes, a successful result appears in the installation summary. The package name and its current level are also displayed.

Native installation: GSKit (4 of 4)

Next, change to the gsk7bas32 subdirectory (../tdsV6.2/gskit/gsk7bas32)

```
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2/gskit/gsk7bas32
==> ls
.toc      gskta.rte
```

Issue the installp command to install the gskta.rte package.

```
==> installp -acgXd . gskta.rte
```

```
+-----+
|                               Summaries:                               |
+-----+
Installation Summary
+-----+
Name           Level      Part      Event      Result
+-----+
gskta.rte      7.0.4.14  USR       APPLY      SUCCESS
```

Next, CD to the subdirectory, gsk7bas32, to update the gskta.rte package previously installed by DB2. In this example, the installp command is being used again with the same flags and the specification to update the gskta.rte.

Native installation: GSKit installation confirmation

==> lspp -l | grep gsk

```
gskjs.rte      7.0.4.14 COMMITTED AIX Certificate and SSL Java
gskjt.rte      7.0.3.18 COMMITTED AIX Certificate and SSL Java
gksa.rte       7.0.4.14 COMMITTED AIX Certificate and SSL Base
gskta.rte      7.0.4.14 COMMITTED AIX Certificate and SSL Base
```

Entering an `lspp -l | grep gsk` allows you to view all four packages and the one you updated.

Native installation: Tivoli Directory Server (1 of 7)

The file for the native installation is located in the tdsfiles directory (../tdsV6.2/tdsfiles).

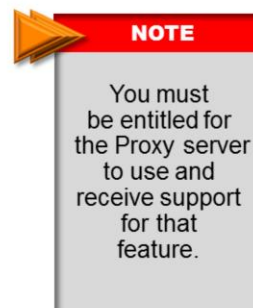
```
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2/tdsfiles
==> ls
.toc  idldap.msg62.en_US
idldap.clt32bit62idldap.srv64bit62
idldap.clt64bit62idldap.srv_max_cryptobase64bit62
idldap.clt_max_crypto32bit62      idldap.srvbase64bit62
idldap.clt_max_crypto64bit62     idldap.srvproxy64bit62
idldap.cltbase62idldap.webadmin62
idldap.cltjava62 idldap.webadmin_max_crypto62
```

Next, perform a native installation of Tivoli Directory Server. A command line installation provides the greatest amount of control. If you are just installing the client, install the client packages. For this demonstration, all the packages are selected.

Native installation: Tivoli Directory Server (2 of 7)

The native installation provides these items:

- Installs the file sets for the client, server, Web Admin, and proxy (You must be entitled for Proxy Support)
- Creates the idsldap group and user for internal product use, if it does not already exist



The native installation installs the Tivoli Directory Server packages for the client, server, Web Administration tool, and the proxy server. You must be entitled for the proxy server to use and receive support for that feature.

Native installation: Tivoli Directory Server (3 of 7)

In this example, SMIT is used to install the Tivoli Directory Server packages:

==> smit install_all

Enter a period "." as the input device to specify the current directory and press Enter

```
Install and Update from ALL Available Software

Type or select a value for the entry field.
Press Enter AFTER making all desired changes.

[Entry Fields]
INPUT device / directory for software  |.
```

Using SMIT to install, issue the command line **smit install_all** from inside the directory where the packages reside. Specify a period as the input device to install from the current directory.

Native installation: Tivoli Directory Server (4 of 7)

Use F4 to list the packages and use F7 to select each package.

After you select the packages, press Enter

```

Install and Update from ALL Available Software

Type or sel+-----+
Press Enter|                SOFTWARE to install                |
| Move cursor to desired item and press F7. Use arrow keys to scroll. |
* INPUT dev| ONE OR MORE items can be selected. |
* SOFTWARE | Press Enter AFTER making all selections. |
PREVIEW o| |
COMMIT so| [MORE...20] |
SAVE repl| > idsldap.msg | ALL |
AUTOMATIC| + 6.2.0.0 Directory Server - Messages - U.S. English (en) |
EXTEND fi| |
OVERWRITE| > idsldap.srv64bit62 | ALL |
VERIFY in| + 6.2.0.0 Directory Server - 64 bit Server |
DETAILED | |
Process m| > idsldap.srv_max_cryptobase64bit62 | ALL |
ACCEPT ne| + 6.2.0.0 Directory Server - base Server (SSL) |
Preview n| |
WEAR Mana| > idsldap.srvbase64bit62 | ALL |
| + 6.2.0.0 Directory Server - Base Server |

```

Next, select the correct software. Use F4 to generate a software list. Then use F7 to select all the packages.

Native installation: Tivoli Directory Server (5 of 7)

Confirm the selection and press Enter to proceed with the installation.

```
Install and Update from ALL Available Software

Type or select values in entry fields.
Press Enter AFTER making all desired changes.

[Entry Fields]
INPUT device / directory for software
SOFTWARE to install
PREVIEW only? (install operation will NOT occur)
COMMIT software updates?
SAVE replaced files?
AUTOMATICALLY install requisite software?
EXTEND file systems if space needed?
OVERWRITE same or newer versions?
VERIFY install and check file sizes?
DETAILED output?
Process multiple volumes?
ACCEPT new license agreements?
Preview new LICENSE agreements?

WPAR Management
  Perform Operation in Global Environment
  Perform Operation on Detached WPARs
    Detached WPAR Names
  Remount Installation Device in WPARs
  Alternate WPAR Installation Device
```

PREVIEW only?
set to "no"

Be sure "preview only" is set to "no" and press Enter.

Native installation: Tivoli Directory Server (6 of 7)


You are prompted to confirm that you want to proceed.
Press Enter to continue.

```
|                                     ARE YOU SURE?                                     |
|   Continuing may delete information you may want                               |
|   to keep. This is your last chance to stop                                   |
|   before continuing.                                                         |
|   Press Enter to continue.                                                   |
|   Press Cancel to return to the application.                                  |
|   █                                                                            |
| F1=Help           F2=Refresh          F3=Cancel                             |
| F8=Image          F10=Exit            Enter=Do                              |
|                                                                                   |
```

Press Enter again to confirm.

Native installation: Tivoli Directory Server (7 of 7)

When SMIT finishes, the command displays OK. Enter F10 to EXIT SMIT



```
COMMAND STATUS
Command: OK          stdout: yes          stderr: no
Before command completion, additional instructions may appear below.
[TOP]
geninstall -I "a -cgNqWx -J" -Z -d . -f File 2>&1
File:
I:idsldap.clt32bit62.rte          6.2.0.0
I:idsldap.clt64bit62.rte         6.2.0.0
I:idsldap.clt_max_crypto32bit62.rte 6.2.0.0
I:idsldap.clt_max_crypto64bit62.rte 6.2.0.0
T:idsldap.cltbase62.adr          6.2.0.0
```

After the SMIT finishes, the command status displays OK. If there is an error message, check the installation logs to identify the problem. Here, everything has installed successfully, and all packages and package levels have been listed. To ensure a successful installation, you can review the SMIT log.

Native installation: Confirm installed file sets

```
==> lspp -l | grep idsldap
idsldap.clt32bit62.rte 6.2.0.0 COMMITTED Directory Server - 32 bit
idsldap.clt64bit62.rte 6.2.0.0 COMMITTED Directory Server - 64 bit
idsldap.clt_max_crypto32bit62.rte
idsldap.clt_max_crypto64bit62.rte
idsldap.cltbase62.adt 6.2.0.0 COMMITTED Directory Server - Base Client
idsldap.cltbase62.rte 6.2.0.0 COMMITTED Directory Server - Base Client
idsldap.cltjava62.rte 6.2.0.0 COMMITTED Directory Server - Java Client
idsldap.msg62.en_US 6.2.0.0 COMMITTED Directory Server - Messages -
idsldap.srv64bit62.rte 6.2.0.0 COMMITTED Directory Server - 64 bit
idsldap.srv_max_cryptobase64bit62.rte
idsldap.srvbase64bit62.rte
idsldap.srvproxy64bit62.rte
idsldap.webadmin62.rte 6.2.0.0 COMMITTED Directory Server - Web
idsldap.webadmin_max_crypto62.rte
idsldap.clt32bit62.rte 6.2.0.0 COMMITTED Directory Server - 32 bit
idsldap.clt64bit62.rte 6.2.0.0 COMMITTED Directory Server - 64 bit
idsldap.cltbase62.rte 6.2.0.0 COMMITTED Directory Server - Base Client
idsldap.srvbase64bit62.rte
idsldap.srvproxy64bit62.rte
```

A simple `lspp -l | grep idsldap` confirms that all the packages are currently installed for Tivoli Directory Server. Again, if you have multiple versions installed, you see it here.

Native installation: Entitlement package

```
root@l2aix /home/anntest/installimages/62/AIX/tdsV6.2
==> ls
appsrv  gskit  quickstart  tdsLangpack  whitepages
db2     installp  tdi      tdsfiles
entitlement  license  tds      tools
==> cd entitlement
==> ls
.toc      entitlement.txt  idldap.ent62
==> installp -acgXd . idldap.ent62
```

```
+-----+
| Summaries: |
+-----+
```

Installation Summary

Name	Level	Part	Event	Result
idldap.ent62.rte	6.2.0.0	USR	APPLY	SUCCESS

To install the entitlement package, go into the same tdsV6.2 directory where the tar files were extracted, and go into the entitlement subdirectory. The entitlement package, idldap.ent62 is installed using the same installp command with the same flags as used previously. Again, upon completion, a results summary is displayed.

Native installation: Package listing

```
==> lslpp -l | grep idsldap
idsldap.clt32bit62.rte      6.2.0.3  COMMITTED  Directory Server - 32 bit
idsldap.clt64bit62.rte    6.2.0.3  COMMITTED  Directory Server - 64 bit
idsldap.clt_max_crypto32bit62.rte
idsldap.clt_max_crypto64bit62.rte
idsldap.cltbase62.adt     6.2.0.3  COMMITTED  Directory Server - Base Client
idsldap.cltbase62.rte    6.2.0.3  COMMITTED  Directory Server - Base Client
idsldap.cltjava62.rte    6.2.0.3  COMMITTED  Directory Server - Java Client
idsldap.ent62.rte        6.2.0.0  COMMITTED  Directory Server - Entitlement
idsldap.msg62.en_US      6.2.0.3  COMMITTED  Directory Server - Messages -
idsldap.srv64bit62.rte   6.2.0.3  COMMITTED  Directory Server - 64 bit
idsldap.srv_max_cryptobase64bit62.rte
idsldap.srvbase64bit62.rte
idsldap.srvproxy64bit62.rte
idsldap.webadmin62.rte   6.2.0.3  COMMITTED  Directory Server - Web
idsldap.webadmin_max_crypto62.rte
idsldap.clt32bit62.rte   6.2.0.3  COMMITTED  Directory Server - 32 bit
idsldap.clt64bit62.rte   6.2.0.3  COMMITTED  Directory Server - 64 bit
idsldap.cltbase62.rte    6.2.0.3  COMMITTED  Directory Server - Base Client
idsldap.srvbase64bit62.rte
idsldap.srvproxy64bit62.rte
```

 Entitlement

Issue the same lslpp command again to see the listing showing that the entitlement package now installed.

Native installation: Install embedded WebSphere Application Server (1 of 2)

Change to the appsrv directory where you extracted the tar files.

Then, issue this command:

```
install.sh -installRoot EWAS_installpath
```

where *EWAS_installPath* is the directory where you are installing Embedded WebSphere Application Server

```
==> ./install.sh. -installRoot /opt/IBM/ldap/V6.2/appsrv
```

```
==> cd appsrv
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2/appsrv
==> ls
COPYRIGHT.TXT  derby          installableApps  optionalLibraries  systemApps
Scheduler      etc            java              plugins             universalDriv
bin            features       lib               profileTemplates   util
configuration  install.sh     logs              properties
root@l2aix /home/anntest/installImages/62/AIX/tdsV6.2/appsrv
==> ./install.sh -installRoot /opt/IBM/ldap/V6.2/appsrv
```

To proceed with the native installation for the embedded WebSphere provided with the installation, CD to the appsrv directory where the tar files were extracted: tdsV6.2/appsrv. Issue the command line install.sh. then specify – installRoot and specify the path where the embedded WebSphere is to be installed. Typically, the installation path is /opt/IBM/ldap/V6.2/appsrv.

Native installation: Install embedded WebSphere Application Server (2 of 2)

After the installation is complete, the Installation complete message is displayed

```
==> ./install.sh -installRoot /opt/IBM/ldap/V6.2/appsrv

+-----+
+   WEAS Version 6.1 Install   +
+-----+

Validating target directory ...
Copying files ...
Setting permissions ...
Installation complete.
```

 *Installation complete*

After the installation is complete, check for a success message. Any errors are shown in the installation log.

Next, deploy the WAR file into the embedded WebSphere Application Server (eWAS) so that the Web administrative tool can be used.

Native installation: Deploying the Web administration tool into the embedded WebSphere Application Server (1 of 3)

Deploy the Web administration tool into the embedded WebSphere Application Server

1. Go to the idstools subdirectory of the installation path. (the installation path is the directory where Tivoli Directory Server is installed).
On AIX : /opt/IBM/ldap/V6.2/idstools
2. Be sure that the deploy_IDSWebApp file is present in the idstools directory.
3. Type the following command on AIX:
./deploy_IDSWebApp

Go to the idstools subdirectory of the installation path, /opt/IBM/ldap/V6.2/idstools directory. Make sure that the deploy_IDSWebApp file is present in the idstools directory. Then issue the ./deploy_IDSWebApp command.

If a custom path was used for the installation of eWAS, you must specify the custom installation path when deploying the WAR file. Information about the correct parameters to use can be obtained by issuing a -? command, which displays additional usage information.

Native installation: Deploying the Web administration tool into the embedded WebSphere Application Server (2 of 3)

```
==> cd idstools
root@l12aix /opt/IBM/ldap/V6.2/idstools
==> ls
DSML.zip                bin                    idssupport             snmp
IDSWebApp.war           deploy_IDSWebApp      idswmigr               ncssl
IDSWEBPortDef.props    idsdefinst            nossl                  setLogging.jacl
adsynch                 idslogmgmt
root@l12aix /opt/IBM/ldap/V6.2/idstools
==> ./deploy_IDSWebApp
```

This slide details the location and how to invoke the `deploy_IDSWebApp` command.

Native installation: Deploying the Web administration tool into the embedded WebSphere Application Server (3 of 3)

Messages are displayed as the script runs.

When the script is complete, you see these results:

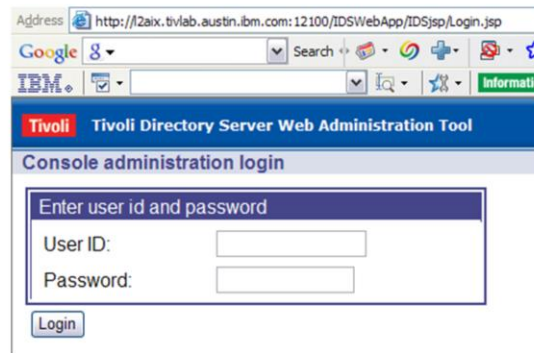
```
/opt/IBM/ldap/V6.2/appsrv/profiles/TDSWebAdminProfile/bin/startServer.sh server1
ADMU0116I: Tool information is being logged in file
/opt/IBM/ldap/V6.2/appsrv/profiles/TDSWebAdminProfile/logs/server1/startServer.log
ADMU0128I: Starting tool with the TDSWebAdminProfile profile
ADMU3100I: Reading configuration for server: server1
ADMU3200I: Server launched. Waiting for initialization status.
ADMU3000I: Server server1 open for e-business; process id is 417966
```

As the script runs, expect heavy message output. When it finishes, ensure everything has started successfully and that you have a process ID. The Web administrative profile is running and has been successfully deployed.

Native installation: Web administration tool

The application server is installed, and the Web administration tool is deployed into the embedded WebSphere Application Server.

Now you can bring up the Web administrative console and add a managed console server if one is already configured.



The screenshot shows a web browser window displaying the login page for the Tivoli Directory Server Web Administration Tool. The address bar shows the URL: `http://12aix.tivlab.austin.ibm.com:12100/IDSWebApp/IDSjsp/Login.jsp`. The page title is "Tivoli Directory Server Web Administration Tool". Below the title, there is a section for "Console administration login". A form titled "Enter user id and password" contains two input fields: "User ID:" and "Password:". A "Login" button is located below the form.

Input the URL into your browser to bring up the console administration server. The default login is `superadmin` with the password `secret`. After you log into the console administration server and the server instance is created and configured, you can add the Tivoli Directory Server instance as a managed console server.

Set product links: idslink utility

Set the links to the V6.2 client and server utilities

```
# cd /opt/IBM/ldap/V6.2/bin
# ls
64          idslldapdiff      idsrmlink         ldapexop
ibmdirctl  idslldapexop     idsversion        ldapmodify
idmdirctl  idslldapmodify   ldapadd           ldapmodrdn
idslldapadd idslldapmodrdn   ldapchangepwd     ldapsearch
idslldapchangepwd idslldapsearch  ldapcompare       ldaptrace
idslldapcompare idslldaptrace   ldapdelete        tbindmsg
idslldapdelete idslink          ldapdiff
# ./idslink -g -i -s fullsrv -f
```

Now use the idslink utility to set the links to the client and server utilities. Issue the command: `idslink -g -i -s fullsrv -f` to set all the links for all the utilities for both the client and server.

A note about command line utilities

**NOTE**

Every command line utility has a question mark flag for additional usage information. The command reference guide has helpful examples.

- Each command line utility
 - has a “-?” option for usage information
 - provides an optional debug flag to generate additional messages to help identify why an error is occurring.
- For additional information about the utilities and to see some examples, refer to the Command Reference Guide:

<http://publib.boulder.ibm.com/infocenter/tivihelp/v2r1/topic/com.ibm.IBMDS.doc/commandref.htm>

Every command line utility has a question mark flag for additional usage information. If you need more information, find the command reference guide for some helpful examples.

Also, if you encounter any problems issuing any of the command line utilities, there is a debug flag option that generates additional messages to help identify why a problem is occurring. This is typically -d for the command line utilities. If there is a server start problem, the debug flag is -h. You can then specify a debug mask.

Refer to the Problem Determination Guide and Command Reference Guide for additional information.

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