



UniVerse

Installation Guide

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Introduction

This manual describes how to install UniVerse 10.2. These instructions consist of the following chapters:

- Chapter 1, “[Introduction](#),” describes preinstallation tasks, provides an overview of the installation process, lists operating system and disk space requirements for various platforms, and describes the *uv.load* script.
- Chapter 2, “[Quick Installation Procedure](#),” provides step-by-step instructions for a quick installation.
- Chapter 3, “[Installing UniVerse as root](#),” provides step-by-step instructions for initially installing or upgrading UniVerse as the *root* user.
- Chapter 4, “[Installing UniVerse as uvadm](#),” provides step-by-step instructions for initially installing or upgrading UniVerse as the *uvadm* user.
- Chapter 5, “[System-Specific Information](#),” provides information specific to various platforms.
- Chapter 6, “[Installing UniVerse on Windows Platforms](#),” provides step-by-step instructions for installing UniVerse on Windows platforms.
- Chapter 7, “[UniVerse Accounts](#),” discusses UniVerse accounts, including creating a new account, creating and viewing account details, deleting an account, customizing an account, and essential UniVerse files.
- Chapter 8, “[Installing UniVerse Clients](#),” describes the installation procedure for UniAdmin, UniVerse ODBC Client, UniDK, UniOLEDB, Dynamic Connect, and UniDebugger.

Determining the Installation Type

The Quick Installation Procedure should only be used by users experienced with the procedure for configuring UNIX and installing UniVerse.

The Complete Installation Procedure describes how to install UniVerse for the first time, and how to complete an upgrade installation.

Preinstallation Tasks on UniVerse for UNIX

Before beginning a UniVerse installation, make sure you know the following information:

- How to log on as *root* or *uvadmin*
- The type of installation you are performing
- How to mount the distribution media
- The location of the UniVerse directories
- The type of shell with which you are working
- The operating system requirements for your platform

Login ID

To install UniVerse, you must log on to your system as either *root* or *uvadm*.

If you log on as *root*, all UniVerse home account files and directories are owned and administered by *root*.

If you log on as *uvadm*, all UniVerse home account files and directories are owned and administered by *uvadm*. If you log on as *uvadm* to install UniVerse, you must have write permissions on the root directory (/) and the directories where you install the UniVerse home directory and the UniVerse/UniData shared directory.

Installation Type

The following types of installation procedures are available with UniVerse 10.2:

- Initial Installation – You are installing UniVerse for the first time on your system.
- Upgrade Installation – You are installing UniVerse 10.2 over an earlier version of UniVerse. An upgrade installation preserves site-specific files in the UV account, such as the &DEVICE& file, and recatalogs only the cataloged routines delivered with UniVerse. User-cataloged routines are left intact in the system catalog.

Operating System Requirements

IBM ports UniVerse for UNIX products to many versions of UNIX. Verify that the product you have received matches your UNIX operating system, and verify that the installation media is appropriate for your system.

The following table describes the operating system requirements for various operating systems.

Operating System	Requirements
Compaq AlphaServer	Tru64 UNIX V4.0D and V5.1A
HP Series 9000	HP-UX 11.0 PA2 32-bit
IBM RISC/System 6000	AIX Release 4.3.3, 5.1, 5.2
RedHat LINUX	RedHat LINUX 9.0
Sun Sparc (Solaris 2)	Solaris 2.7, Solaris 2.8, or Solaris 2.9

Operating System Requirements

Note: For operating system information not listed in the preceding table, please see the U2 Product Availability Matrix at <https://www-927.ibm.com/software/data/u2/support/u2techconnect/matrix.asp>, or contact U2askus@us.ibm.com.

UniVerse requires that certain kernel parameters have adequate settings in order for UniVerse to accommodate the full number of licensed users. The following table list some recommended kernel parameters

Kernel Parameter	Required Minimum on HP-UX	Required Minimum on Solaris	Required Minimum on Dynix/ptx
SHMMAX	N/A	2097152	N/A
SHMSEG	15	15	N/A
SEMMSL	N/A	N/A	175

Minimum Kernel Parameters





***Note:** If requirements for your operating system are not listed in the above table, the default values after installation should be sufficient.*

Product Configuration

A UniVerse Product Configuration sheet was shipped with your UniVerse product. This sheet lists customer information, hardware information, and the products and number of users you are authorized to install. Verify that the information on the Product Configuration sheet is correct. You will need this information when authorizing UniVerse.

Disk Space

The following table lists the minimum amount of disk space required to run UniVerse 10.2.

Platform	Required Disk Space
Compaq AlphaServer	215 MB
Dynix/ptx	210 MB
HP Series 9000	180 MB
IBM RISC System/6000	340 MB
Silicon Graphics IRIS	200 MB
Sun Space (Solaris 2)	210 MB
Disk Space Required	



***Note:** If your operating system is not listed in the above table, 200 MB of free disk space should be sufficient to install UniVerse.*



Overview Of UniVerse Installation on UNIX

UniVerse is installed on an existing UNIX system in directories you specify during the installation process. These directories are:

- `uv` – The UniVerse home directory
- `unishared` – The UniVerse/UniData shared directory

The examples in this manual use the default directories of `/usr/ibm/uv` and `/usr/ibm/unishared`. During the installation process, you can substitute the paths you choose for these directories.

Warning: Do not use symbolic links when specifying your `uvhome` and `unishared` directories. If you use symbolic links, the UniVerse license authorization routines fail.

The *uv.load* Script

Execute the UniVerse installation while you are logged on as `root` or `uvadm`. Use the `cpio` or `tar` command to load a short installation script called `uv.load`. Then execute the `uv.load` script to load the files from the installation media.

To ensure a valid installation, the `uv.load` script performs the following actions:

- Stops any active UniVerse spooler
- Removes the shared memory segments used by UniVerse

The spooler must be stopped before you install UniVerse because the restoration cannot overwrite an active file. `uv.load` then loads the files from the installation media into the directories you specify. Depending on the type of installation you are performing, the script then performs the following actions:

- If you log on as `root` and are installing UniVerse for the first time, `uv.load` automatically executes the `uv.install` script.
- If you log on as `uvadm` and are upgrading an existing UniVerse system, `uv.load` automatically executes the `uv.install` script.
- If you log on as `uvadm` and are installing UniVerse for the first time, you exit the `uv.load` script, then manually execute the `uv.install` script.



UniVerse checks the files loaded from the installation media to make sure they have a checksum that matches the checksum on the installation media. If the checksums do not match, UniVerse indicates that the files were not loaded correctly from the installation media, and instructs you to reload the groups that were in error.

Note: *If you have not been able to reload the groups that are in error, contact your maintenance vendor for assistance.*

The uv.load script performs the following actions:

- Creates the UniVerse directory structure and grants proper permissions. The following table describes the default UniVerse directory structure.

Path	Description
<i>/usr/ibm/uv</i>	The UniVerse home directory.
<i>/usr/ibm/uv/bin</i>	Contains the executables that make up the UniVerse product.
<i>/usr/ibm/uv/sample</i>	Contains various prototype files.
<i>/usr/ibm/uv/NEWACC</i>	Contains the templates for the supported flavors of the VOC file.
<i>/usr/ibm/uv/terminfo</i>	Contains the UniVerse terminal characteristics database.
<i>/usr/ibm/uv/catdir</i>	The system catalog.
<i>/usr/ibm/unishared</i>	Contains subdirectories and files shared by UniVerse and UniData systems.

UniVerse Directory Structure

In addition, the installation procedure loads several UniVerse type 1 files or multiple data files, which are implemented as UNIX directories in the UniVerse home directory (for example, BP, B.P.O, APP.PROGS, and APP.PROGS.O.)

- Initializes the shared memory tables used by UniVerse, and modifies the UNIX initialization script to execute the uv.rc file, which performs UniVerse initialization.
- Installs the UniVerse spooler and executes the spooler daemon. See *Administering UniVerse* for a more information about the UniVerse spooler.



- Compiles the UniVerse terminal definitions. You should always install the new definitions unless you have modified the supplied definitions and want to preserve your changes.

Installing the UniVerse terminal definitions updates only the UniVerse-specific characteristics kept in `/usr/ibm/uv/terminfo`. If you want to update the non-UniVerse-specific characteristics in `/usr/lib/terminfo`, you must manually invoke the `uvtic` command with the `-a` option.

Warning: *If this is an initial installation, the UniVerse terminal definitions are always installed. You should make sure the UNIX terminal definitions exist. If the UNIX version does not exist, use the `-a` option with the `uvtic` command to create it.*

- Creates the SQL catalog if it does not already exist.
- Initializes the UniVerse catalog space (for initial installation only) and catalogs a number of subroutines. For more information about catalog space, see *Administering UniVerse*.
- Copies the sample shell initialization file, `.profile`, from the UniVerse sample directory to the UniVerse home directory. The `.profile` file contains paths for system commands, default protection for created files, and characteristics of the login terminal.

You must activate the UniVerse license or upgrade by entering the authorization code supplied by your vendor. To activate the license, you must log on as `root` or `uvadm`, enter the UV account, then enter the authorization information in the License Activation screen.

After you authorize UniVerse, you can then add other accounts to be used in a UniVerse or UNIX environment, or perform administration of peripherals, such as spooler devices. To perform these tasks, use the UniVerse Admin client application or the **System Administration** menus. For detailed information, refer to *Administering UniVerse*.



Note: *When you log on to the UV account, you are in the System Administration menu system. If you exit the menus, you can reenter them by using the `LOGIN` command. To exit the **System Administration** menus, press `ESC`.*

Quick Installation Procedure

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Quick Installation Procedure

The Quick Installation Procedure should be used only by users experienced with the procedure for configuring UNIX and installing UniVerse.

*Note: Before you begin the installation, make sure you rebuild your kernel with adequate values for your environment. See [Preinstallation Tasks on UniVerse for UNIX](#) in Chapter 1, “[Introduction](#),” and *Administering UniVerse* for information about kernel parameter settings.*

Preinstallation Tasks

Before you begin the installation process, prepare the UniVerse home directory with adequate disk space. For information about the disk space required for your platform, see [Disk Space](#) in Chapter 1, “[Introduction](#).”

The preferred home directory is `/usr/ibm/uv`. You cannot specify the home directory for UniVerse with a symbolic link. If you do, the license authorization routines fail.

Note: Some of the files on the release tape media are in a compressed format and have a .Z suffix. If you are installing over an existing release of UniVerse, more space (approximately 50%) than mentioned above is required to install the files before uncompressing them. If this causes disk space problems, remove the UniVerse files in the UniVerse home directory that will be replaced by the new release.

Step-by-Step Instructions

Complete the following steps to install UniVerse:

1. Log on as `root` or `uvadm`. Create the UNIX user name `uvadm` first, if it does not already exist.
2. If you log on as `root`, change directories to the root directory (`/`). If you log in as `uvadm`, change to a directory to which you have write permission, such as `/tmp`.
3. Create the UNIX user name `uvsql` if it does not already exist.
4. If this is an upgrade installation, make sure an option products (UV/Net, GCI, and so forth) already installed on your system are deinstalled before proceeding with the following steps.
5. Insert the release media in the appropriate device.



6. Load the uv.load script from the release tape by entering the appropriate command from the following table:

Platform	Command
Compaq AlphaServer	cpio -ivcBdum uv.load < /dev/rmt01
Dynix/ptx	cpio -ivcBdum uv.load < /dev/rmt/tm0n
HP Series 9000	cpio -ivcBdum uv.load < /dev/rmt/0m
IBM RISC System/6000	cpio -ivcBdum uv.load < /dev/rmt0.4
Silicon Graphics IRIS	cpio -ivcBdum uv.load < /dev/rmt/tps0d6
Sun Sparc (Solaris 2)	tar xvf /dev/rmt/0 ./uv.load

uv.load commands

***Note:** For platforms that support multiple types of tape media, verify the previously mentioned device name corresponds to the tape device from which you are installing the UniVerse release tape. If it is different, substitute the correct device name in the cpio command. You must also make this substitution when prompted by the uv.load command that is executed in the next step.*

7. Or load the uv.load script from CD-ROM by entering the appropriate command from the following table:

Platform	Command
Compaq AlphaServer	cpio -ivcBdum uv.load < /mnt/STARTUP\;1
HP Series 9000	cpio -ivcBdum uv.load < /mnt/STARTUP
IBM RISC System/6000	cpio -ivcBdum uv.load < /mnt/startup.
RedHat LINUX	cpio -ivcBdum uv.load < /mnt/startup
Sun Sparc (Solaris 2)	cpio -ivcBdum uv.load < /mnt/startup.

uv.load commands

***Note:** This command assumes that the CD-ROM device has been mounted at /mnt on your system. If your system differs, replace /mnt with the appropriate mount point on your system.*



8. Load UniVerse by executing the *uv.load* command, as shown in the following example. Make sure no one is using UniVerse during the installation procedure.

```
# ./uv.load
```

uv.load displays the current installation settings, as shown in the following example:

The current settings of the available options are:

```
UniVerse installer      : root
UniVerse administrator : root uid=0 gid=0
```

- ```
1) UniVerse home directory: /usr/ibm/uv
 (currently: Not Installed.)
2) UniVerse-UniData shared directory: /usr/ibm/unishared
 (currently: Not Installed.)
3) Compile terminfo definitions: true
4) Rewind tape name /dev/rmt/0m
5) No-rewind tape name /dev/rmt/0mn
6) Long File Names OFF
```

Enter a field number to change, q to abort installation, or  
press <Return> to begin installation of UniVerse:

If the values are set correctly, press ENTER to start installing UniVerse.

The *uv.load* command loads the UniVerse release files and runs *uv.install*, which installs UniVerse. The installation procedure requires input several times. Normally, you respond to the prompts by pressing ENTER to select the default action.

9. If you are installing UniVerse over an earlier UniVerse release, you may see the following message:

```
Unable to get disk shared memory segment: Invalid argument
```

If this happens, shut down and restart UniVerse, then proceed to the next step.

10. After all groups are installed, the Upgrade UniVerse License screen appears. Proceed to the next step.

If you are installing UniVerse for the first time as *uvadm*, the following message appears:

This initial installation of UniVerse must now be completed by logging in as 'root' and executing the script '/usr/ibm/uv/uv.install'.

UniVerse will remain in an inoperable state until this script has been executed.

Log on as root, change directories to the UniVerse home directory, and execute the uv.install script:

```
./uv.install
```

After the *uv.install* script completes successfully, the **Upgrade UniVerse License** screen appears.

11. Enter the license activation information as requested by the prompts. You must enter the following information:

- Serial number
- Maximum number of local users
- Expiration date, or press ENTER for the default
- Package list
- Number of Device Licenses for which you are authorized

Press ENTER. The licensing process displays a configuration code.

12. Remember the Configuration Code the licensing process displays. The configuration code is of the following format:

CCTM5-ZZ3UZ-QFZ7Z-ZZZW6-Z3ZZ4-XBKLC-UZTI9

The licensing process prompts for **Local Authorization Code**.

13. To obtain your authorization code, go to:

<http://www-306.ibm.com/software/data/u2/universe/>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code.

14. Once you have your authorization code, go back to the **Upgrade UniVerse License** window and enter the authorization code in the **Local Authorization Code** field.

15. When the authorization completes successfully, the following message appears:

UniVerse licensing is complete. Please shut down and restart UniVerse. Use the UniVerse system administration menu to create additional UniVerse accounts.

Complete the following steps to shut down and restart UniVerse:

- Change to the UniVerse home directory:

```
cd /usr/ibm/uv
```

- Enter the following command to shut down UniVerse:

```
bin/uv -admin -stop
```

- Enter the following command to restart UniVerse:

```
bin/uv -admin -start
```

16. If you are using any UniVerse optional products, install them now using the Install package menu in the **UniVerse System Administration** menu system.
17. Use the menus to configure the spooler and to do any account administration.

---

# Installing UniVerse as *root*

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## Installing UniVerse as *root*

You can execute the UniVerse installation by logging on as *root* or as *uvadm*. This chapter describes the steps you must complete to install UniVerse as *root*, either as an initial installation or an upgrade installation.



## Initial Installation of UniVerse

Complete the following steps to install UniVerse for the first time on your system.

**Note:** Some of the files on the release tape media are in a compressed format and have a .Z suffix. If you are installing over an existing release of UniVerse, approximately 50% more space is required to install the files before uncompressing them. If this causes disk space problems, remove UniVerse files in the UniVerse home directory that will be replaced by the new release.

## Installing UniVerse

1. Log on as root, and change directories to the root directory:  
# **cd /**
2. Make sure there are no users logged on to the system before you begin the installation.

Insert the release media into the appropriate device. If you are unfamiliar with the loading procedure, refer to your hardware instruction manual.

- If you are installing from tape, enter the appropriate command from the following table to load the *uv.load* script:

| Platform              | Command                                               |
|-----------------------|-------------------------------------------------------|
| Compaq AlphaServer    | <code>cpio -ivcBdum uv.load &lt; /dev/rmt01</code>    |
| Dynix/ptx             | <code>cpio -ivcBdum uv.load &lt; /dev/rmt/tm0n</code> |
| HP System 9000        | <code>cpio -ivcBdum uv.load &lt; /dev/rmt/0m</code>   |
| IBM RISC System/6000  | <code>cpio -ivcBdum uv.load &lt; /dev/rmt0.4</code>   |
| Silicon Graphics IRIS | <code>cpio -ivcBdum uv.load /dev/rmt/tps0d6</code>    |
| Sun Sparc (Solaris 2) | <code>tar xvf /dev/rmt/0 ./uv.load</code>             |

### uv.load Commands

**Note:** For platforms that support multiple types of tape media, verify that the device name corresponds to the tape device from which you are installing the UniVerse release tape.



3. If you are installing from CD-ROM, execute the appropriate command from the following table:

| Platform              | Command                                                 |
|-----------------------|---------------------------------------------------------|
| Compaq AlphaServer    | <code>cpio -ivcBdum uv.load &lt; /mnt/STARTUP.;1</code> |
| Dynix/ptx             | <code>cpio -ivcBdum uv.load &lt; /mnt/startup</code>    |
| HP Series 9000        | <code>cpio -ivcBdum uv.load &lt; /mnt/STARTUP</code>    |
| IBM RISC System/6000  | <code>cpio -ivcBdum uv.load &lt; /mnt/startup.</code>   |
| Silicon Graphics IRIS | <code>cpio -ivcBdum uv.load &lt; /mnt/startup</code>    |
| Sun Sparc (Solaris 2) | <code>cpio -ivcBdum uv.load &lt; /mnt/startup.</code>   |

**uv.load commands**

***Note:** This command assumes that the CD-ROM device has been mounted at /mnt on your system. If your system differs, replace /mnt with the appropriate mount point on your system.*

4. Execute the uv.load script while the installation media is still in the device, as shown in the following example:

**# /uv.load**

The following screen appears:

```
UniVerse Installation Procedure
=====
The current installation is being done as 'root'. All
uniVerse home account files and directories will be owned
and administered by 'root'. UniVerse may also be
installed, owned and administered by the non-root user
'uvadm'. Choose one of the following below:

1) Make 'root' the default owner and administrator of uniVerse.
 The current installation continues uninterrupted.

2) Make 'uvadm' the default owner and administrator of uniVerse.
 The current installation will be terminated, and the user
 'uvadm' must be created. You must then login as 'uvadm'
 and restart this installation.

3) Stop the installation.

Your choice (Default action is 1):
```



5. Select 1 to install UniVerse and make *root* the owner and administrator of UniVerse. The *uv.load* script displays the current installation settings, as shown in the following example:

The current settings of the available options are:

```
UniVerse installer : root
UniVerse administrator : root uid=0 gid=0
```

- ```
1) UniVerse home directory:      /usr/ibm/uv
                                   (currently: Not Installed.)
2) UniVerse-UniData shared directory: /usr/ibm/unishared
                                   (currently: Not Installed.)
3) Compile terminfo definitions:  true
4) Rewind tape name              /dev/rmt/0m
5) No-rewind tape name          /dev/rmt/0mn
6) Long File Names              OFF
```

Enter a field number to change, q to abort installation, or
press <Return> to begin installation of UniVerse:

6. Enter the number of value you want to change.
- 1 – The UniVerse home directory path.
 - 2 – The shared directory path.
 - 3 – Whether or not to compile terminfo definitions. You cannot change this value.
 - 4 – The rewind tape device path.
 - 5 – The no-rewind tape device path.
 - 6 – The default file creation characteristics. You can toggle between LONG-NAMES OFF, LONGNAMES ON, and LONGNAMES ON NEWACC. The default is LONGNAMES OFF. For detailed information about LONG-NAMES, see *Administering UniVerse*.

When the display values are correct, press ENTER to begin in the installation process. Press **q** to exit the installation process.

7. If an SQL catalog does not exist and the *uvsql* user name does not exist in the */etc/passwd* file, the following message will appear:

The user 'uvsql' does not exist. This user is the default owner of the SQL catalog. Would you like to:

- 1). Continue with the installation, making 'root' the default owner of the SQL catalog.
- 2). Suspend the installation so that you can create the 'uvsql' user.
- 3). Stop the installation.

Your choice (Default action is 1):

Select one of the following options:

- 1 – Make root the owner of the SQL catalog.
- 2 – Shell out of the installation process to create the *uvsql* user in the */etc/passwd* file. When you finish creating the user, you return to the installation process.
- 3 – Exit the installation process.

8. If you are installing UniVerse from media other than CD-ROM, the following screen appears:

The following UniVerse groups are available for installation:

MAIN OBJ DEVELOP DOC FILESIZE PORTING UCI IC UOJ UVODBC

Which groups do you wish to install (press <Return> for all groups)?

The following table describes the groups available for installation on your system:

Group	Description
MAIN	This group is the standard UniVerse environment. It contains the files and programs necessary for running UniVerse. The MAIN group must be installed on your system for UniVerse to run.
OBJ	The OBJ group contains object files and archive files that are used to install and link the UniVerse GCI product.
DEVELOP	The DEVELOP group contains tools for application development, including the BASIC compiler, catalog manipulation commands, and debugging tools. It is not necessary for this group to be loaded to run BASIC programs or cataloged programs.
DOC	This group contains the online help facility for UniVerse and BASIC. Also included is the demonstration account. This group is not necessary for UniVerse to run.
FILESIZE	This group contains tools for verifying and adjusting the type, modulo, and separation of UniVerse files. This group is not necessary for UniVerse to run.
PORTING	This group contains tools for porting applications from Pick, Reality, and Prime INFORMATION systems to your UniVerse system. This group is not necessary for UniVerse to run.
UCI	This group contains the files and programs needed to run UCI. This group is not necessary for UniVerse to run.
IC	This group contains the files and programs needed to run InterCall. This group is not necessary for UniVerse to run.
UOJ	This group contains the files and programs needed to run UniObjects for Java. This group is not necessary for UniVerse to run.
UVODBC	This group contains the files and programs needed to run UniVerse ODBC. This group is not necessary for UniVerse to run.

UniVerse Groups



If you want to install all the groups, press ENTER. If you do not want to install all the groups, enter the names of the groups you want to install, separated by spaces. You must enter the groups exactly as they appear at the prompt, and in the same order. When you have entered all the groups, press ENTER to begin the installation of the groups.

***Note:** If a group fails to load correctly, UniVerse displays a message indicating that the checksums did not verify for the listed groups. You should repeat the installation procedure for those groups that do not verify. When you repeat the installation procedure, you should verify that the UniVerse home directory is correct. You can repeat the installation procedure later to add groups that you do not install now.*

9. After all groups are installed, the **Upgrade UniVerse License** screen appears. Enter the license activation information as requested by the prompts. The information you must enter is:

- Serial number
- Maximum number of local users
- Expiration date, or press ENTER for the default
- Package list
- Number of Device Licenses for which you are authorized

Press ENTER. The licensing process displays a configuration code.

10. Remember the Configuration Code the licensing process displays. The configuration code is of the following format:

CCTM5-ZZ3UZ-QFZ7Z-ZZZW6-Z3ZZ4-XBKLC-UZTI9

The licensing process prompts for **Local Authorization Code**.

11. To obtain your authorization code, go to:

<http://www-306.ibm.com/software/data/u2/universe/>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code.

12. Once you have your authorization code, go back to the **Upgrade UniVerse License** window and enter the authorization code in the **Local Authorization Code** field.

13. When the authorization completes successfully, the following message appears:

UniVerse licensing is complete. Please shut down and restart uniVerse.
Use the uniVerse system administration menu
to create additional uniVerse accounts.

Shut down and restart UniVerse:

- Change to the UniVerse home directory:

```
# cd /usr/ibm/uv
```

- Enter the following command to shut down UniVerse:

```
# bin/uv -admin -stop
```

- Enter the following command to restart UniVerse:

```
# bin/uv -admin -start
```

14. Log on to the UV account. The **System Administration** menu appears. This menu system allows you to perform tasks such as adding users or setting up your spooler. See *Administering UniVerse* for complete instructions. To exit the menus, press **ESC** until you get to the UniVerse prompt:

```
>
```

To reenter the System Administration menu system, use the following command:

```
>LOGIN
```

15. To exit the UniVerse environment, enter **Q** at the UniVerse prompt. A standard shell prompt appears, as shown in the following example.

```
>Q  
#
```

***Note:** The UniVerse LOGTO command does not check the release level of the VOC file when used to enter a UniVerse account. The check is done only when directly invoking UniVerse in a user account. If your application uses LOGTO, you must verify that all user accounts are updated to the current release level before running the application.*

16. If you installed UniVerse from CD-ROM, remove the CD-ROM from the drive by entering the following command:

```
#umount /mnt
```

Upgrading an Existing UniVerse System as *root*

Complete the following steps to upgrade an existing UniVerse system from the system console.

Pre-Installation Tasks

If you are currently running a release of UniVerse, you must complete the following tasks before beginning the upgrade installation.

- Make sure no users are using UniVerse.
- Save any of the following files in the UV account directory that you may have modified:
 - *.profile*
 - *sample/uv.rc*
 - *sample/.profile*
 - *sample/terminfo.src*
 - Any changes to programs in BP or APP.PROGS



Note: An installation upgrade preserves the existing *uvconfig* file. On Windows platforms, the original *uvconfig* file is copied to *uvconfig.bak* and a new *uvconfig* file overwrites the existing one. UniVerse copies the existing *VOC* file to *VOC.OLD*.

- Deinstall any optional UniVerse products (for example, UV/Net, GCI, and so forth) that are installed on an earlier release of UniVerse.

Installing UniVerse

Make the entries shown in bold type, and press **ENTER** after each entry.



Note: Before you start the installation, make sure your kernel parameters are adequate to meet your UniVerse environment requirements.

1. Log in as root, and change directories to the root directory:
cd /



2. Make sure there are no users logged in to the system before you begin the installation.

Insert the release media into the appropriate device. If you are unfamiliar with the loading procedure, refer to your hardware instruction manual.

- If you are installing from tape, enter the appropriate command from the following table to load the *uv.load* script:

Platform	Command
Compaq AlphaServer	<code>cpio -ivcBdum uv.load < /dev/rmt01</code>
Dynix/ptx	<code>cpio -ivcBdum uv.load < /dev/rmt/tm0n</code>
HP Series 9000	<code>cpio -ivcBdum uv.load < /dev/rmt0m</code>
IBM RISC System/6000	<code>cpio -ivcBdum uv.load < /dev/rmt0.4</code>
Silicon Graphics IRIS	<code>cpio -ivcBdum uv.load /dev/rmt/tps0d6</code>
Sun Sparc (Solaris 2)	<code>tar xvf /dev/rmt/0 ./uv.load</code>

uv.load Commands

Note: For platforms that support multiple types of tape media, verify that the device name corresponds to the tape device from which you are installing the UniVerse release tape. If it is different, you must substitute the correct device name in the *cpio* command, and also make this substitution when prompted by the *uv.load* command.

3. If you are installing from CD-ROM, execute the appropriate command from the following table:

Platform	Command
Compaq AlphaServer	<code>cpio -ivcBdum uv.load < /mnt/STARTUP.;</code> 1
Dynix/ptx	<code>cpio -ivcBdum uv.load < /mnt/startup</code>
HP Series 9000	<code>cpio -ivcBdum uv.load < /mnt/STARTUP</code>
IBM RISC System/6000	<code>cpio -ivcBdum uv.load < /mnt/startup.</code>
Silicon Graphics IRIS	<code>cpio -ivcBdum uv.load < /mnt/startup</code>
Sun Sparc (Solaris 2)	<code>cpio -ivcBdum uv.load < /mnt/startup.</code>

uv.load commands

***Note:** This command assumes that the CD-ROM device has been mounted at /mnt on your system. If your system differs, replace /mnt with the appropriate mount point on your system.*

4. Execute the *uv.load* script with the release media still in the device:

/uv.load

A screen similar to the following appears:

```
UniVerse Upgrade Procedure
=====
The current upgrade is being done as 'root'. The
existing installed uniVerse (at /usr/ibm/uv)
is being administered by the user 'root'.
Choose one of the following below:

1) Keep 'root' as the owner and administrator of uniVerse.
   The current installation continues uninterrupted.

2) Make 'uvadm' the new owner and administrator of uniVerse.
   The current installation continues uninterrupted.

3) Stop the installation.

Your choice (Default action is 1):
```


5. Choose 1 to install UniVerse and keep the *root* user as the owner and administrator of UniVerse. Proceed to step 6.

Choose 2 to install UniVerse and make the *uvadm* user the new owner and administrator of UniVerse. If the *uvadm* user does not yet exist, the following message appears:

The user 'uvadm' does not exist. Would you like to:

- 1). Suspend the installation so that you can create the 'uvadm' user.
- 2). Stop the installation.

Your choice (Default action is 1):

Choose 1 to shell out of the upgrade procedure and create a new user *uvadm* in the */etc/passwd* file. When you exit from doing this, you return to the upgrade procedure.

6. *uv.load* displays the current installation settings:

The current settings of the available options are:

```
UniVerse installer      : root
UniVerse administrator : root  uid=0 gid=0
```

- ```
1) UniVerse home directory: /usr/ibm/uv
2) UniVerse-UniData shared directory: /usr/ibm/unishared
3) Compile terminfo definitions: true
4) Rewind tape name /dev/rmt/0m
5) No-rewind tape name /dev/rmt/0mn
6) Long File Names OFF
```

Enter a field number to change, q to abort installation, or  
press <Return> to begin installation of UniVerse:

Enter the number of the value you want to change. If you choose 1, you are prompted for the UniVerse home directory. If you choose 2, you are prompted for the shared directory name. If you choose 4 or 5, you are prompted for a new device pathname. You cannot change 6.

**Note:** You can manually change the *LONGNAMES* setting later by issuing the command *LONGNAMES ON NEWACC* in the *UV* account.

You can also enter **q** at this point to quit the installation procedure.

If the values displayed are acceptable, press **ENTER** to start installing UniVerse.

If you choose 3, a list similar to the following is displayed:

Compiling the uniVerse terminfo definitions will overlay the descriptions  
for terminals listed below:

|       |         |          |             |
|-------|---------|----------|-------------|
| 4410  | at386   | pt200    | viewpoint   |
| AT386 | att3b1  | qt102    | viewpoint60 |
| M=    | att4410 | regent20 | vp          |



|               |           |          |               |
|---------------|-----------|----------|---------------|
| Mu            | av        | regent25 | vp60          |
| a210          | dialup    | regent40 | vp60:regent40 |
| a210:adm5     | dumb      | regent60 | vt100         |
| a210:hzi410   | fenix     | s4       | vt100-am      |
| a210:hzi500   | gt        | sun      | vwpt          |
| a210:qt102    | hft       | sun-cmd  | vwpt60        |
| a210:regent25 | hzi410    | sun-w    | wy200         |
| a210:tvi910   | hzi500    | tvi910   | wy200-w       |
| a210:tvi910+  | ibm5151   | tvi910+  | wy50          |
| a210:tvi920   | icl6404   | tvi920   | wy50:hzi500   |
| a210:tvi925   | network   | tvi925   | wy50:tvi910   |
| a210:vp       | pc7300    | tvi955   | wy50:tvi920   |
| adm5          | performer | unixpc   | wy50:tvi925   |
| at            | pt        | unknown  | wy50:vp       |

Enter YES to compile and install `terminfo.src`:

Enter **Y** to compile and install *terminfo.src*. Enter **N** to change option 3 from true to false.

**7. If you do not already have an SQL catalog and there is no user name *uvsql* in the */etc/passwd* file, you see the following message:**

The user 'uvsql' does not exist. This user is the default owner of the SQL catalog. Would you like to:

- 1). Continue with the installation, making 'root' the default owner of the SQL catalog.
- 2). Suspend the installation so that you can create the 'uvsql' user.
- 3). Stop the installation.

Your choice (Default action is 1):

Choose 1 to make root the owner of the SQL catalog. Choose 2 to shell out of the installation procedure and create the *uvsql* user in the */etc/passwd* file. When you exit from doing this, you return to the installation procedure.

8. If you are installing UniVerse from any media other than CD-ROM, the following prompt appears:

The following uniVerse groups are available for installation:

MAIN OBJ DEVELOP DOC FILESIZE PORTING UCI IC UOJ UVODBC

Which groups do you wish to install (press <Return> for all groups) ?

Choose which groups you want to install on your system. The following groups are available for installation on your system:

| Group    | Description                                                                                                                                                                                                                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAIN     | This group is the standard UniVerse environment. It contains the files and programs necessary for running UniVerse. The MAIN group must be installed on your system for UniVerse to run.                                             |
| OBJ      | This group contains object files and archive files that are used to install and link the UniVerse optional product GCI.                                                                                                              |
| DEVELOP  | This group contains tools for application development including the BASIC compiler, catalog manipulation commands, and debugging tools. It is not necessary for this group to be loaded to run BASIC programs or cataloged programs. |
| DOC      | This group contains the online help facility for UniVerse and BASIC. Also included is the demonstration account. This group is not necessary for UniVerse to run.                                                                    |
| FILESIZE | This group contains tools for verifying and adjusting the type, modulo, and separation of UniVerse files. This group is not necessary for UniVerse to run.                                                                           |
| PORTING  | This group contains tools for porting applications from Pick, Reality, and Prime INFORMATION systems to your UniVerse system. This group is not necessary for UniVerse to run.                                                       |
| UCI      | This group contains the files and programs needed to run UCI. This group is not necessary for UniVerse to run.                                                                                                                       |

#### UniVerse Groups

| Group  | Description                                                                                                                    |
|--------|--------------------------------------------------------------------------------------------------------------------------------|
| IC     | This group contains the files and programs needed to run InterCall. This group is not necessary for UniVerse to run.           |
| UOJ    | This group contains the files and programs needed to run UniObjects for Java. This group is not necessary for UniVerse to run. |
| UVODBC | This group contains the files and programs needed to run UniVerse ODBC. This group is not necessary for UniVerse to run.       |

#### UniVerse Groups (Continued)

If you want to install all the groups, press **ENTER** at the prompt, otherwise enter the names of the groups you want to install, separated by spaces. You must enter the groups exactly as they appear at the prompt, and in the same order. When you have entered all the groups, press **ENTER** to begin the installation of the groups.

***Note:** If a group fails to load correctly, a message is displayed indicating that the checksums do not verify for the listed groups. You should repeat the installation procedure for those groups that do not verify. When you repeat the installation procedure, you should verify that the UniVerse home directory is correct when you are prompted for it. You can repeat the installation procedure later to add groups that you do not install now.*

9. You may see the following message:

Unable to get disk shared memory segment: Invalid argument

If this happens, shut down and restart UniVerse (see step 10). Then proceed to step 9.

10. After the installation process installs all groups, the **Upgrade UniVerse License** screen appears. Enter the license activation information as requested by the prompts. The information you must enter is:

- Serial number
- Maximum number of local users
- Expiration date, or press **ENTER** for the default
- Package list
- Number of Device Licenses for which you are authorized

Press **ENTER**. The licensing process displays a configuration code.

11. Remember the Configuration Code the licensing process displays. The configuration code is of the following format:  
CCTM5-ZZ3UZ-QFZ7Z-ZZZW6-Z3ZZ4-XBKLC-UZTI9  
The licensing process prompts for **Local Authorization Code**.
12. To obtain your authorization code, go to:  
<http://www-306.ibm.com/software/data/u2/universe/>  
Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code.
13. Once you have your authorization code, go back to the **Upgrade UniVerse License** window and enter the authorization code in the **Local Authorization Code** field.
14. When the authorization completes successfully, the following message appears:

```
UniVerse licensing is complete. Please shut down and restart uniVerse.
```

```
Use the uniVerse system administration menu
to create additional uniVerse accounts.
```

Shut down and restart UniVerse using the following steps:

Change to the UniVerse home directory, as shown in the following example:

```
cd /usr/ibm/uv
```

Enter the following command to shut down UniVerse:

```
bin/uv -admin -stop
```

Enter the following command to restart UniVerse:

```
bin/uv -admin -start
```

15. Log in to the UV account. The **UniVerse System Administration** menu appears. This menu system lets you perform tasks such as adding users or setting up your spooler. See *Administering UniVerse* for complete instructions. To exit the menus, press ESC until you get to the UniVerse prompt:

```
>
To reenter the System Administration menu system, use the command:
```

```
>LOGIN
```

16. To exit the UniVerse environment, enter Q at the UniVerse prompt. A standard shell prompt appears, as shown in the following example.

```
>Q
#
```



17. Each user account VOC file must be updated to the current UniVerse release level. Do this by invoking UniVerse in each user account. When you do this, the following prompt appears:

Your VOC is out of date. Update to current release (Y/N)?  
Entering Y at the prompt updates the VOC to the current release level.

**Note:** *The UniVerse LOGTO command does not check the release level of the VOC file when used to enter a UniVerse account. The check is done only when directly invoking UniVerse in a user account. If your application uses LOGTO, you must verify that all user accounts are updated to the current release level before running the application.*

18. If you installed UniVerse from CD-ROM, remove the CD-ROM from the drive by entering the following command:

```
umount /mnt
```

---

# Installing UniVerse as *uvadm*

|                                                          |      |
|----------------------------------------------------------|------|
| Initial Installation of UniVerse . . . . .               | 4-3  |
| Upgrading an Existing UniVerse System as uvadm . . . . . | 4-10 |
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## Installing UniVerse as *uvadm*

You can execute the UniVerse installation by logging in as *root* or as *uvadm*. This chapter describes the steps you must complete to install UniVerse as *uvadm*, either as an initial installation or an upgrade installation.





## Initial Installation of UniVerse

Complete the following steps to install UniVerse for the first time on your system.

**Note:** Before you start the installation, make sure your kernel parameters are adequate to meet your UniVerse environment requirements. Also make sure you have write permissions on the root directory (/) and on the directories where you plan to install the UniVerse home directory and the UniVerse/UniData shared directory.

1. Log in as *uvadm*, and change directories to any directory to which you have write permissions, as shown in the following example:

```
cd /tmp
```

2. Make sure there are no users logged in to the system before you begin the installation.

Insert the release media into the appropriate device. If you are unfamiliar with the loading procedure, refer to your hardware instruction manual.

- If you are installing from tape, enter appropriate command from the following table to load the *uv.load* script:

| Platform              | Command                                               |
|-----------------------|-------------------------------------------------------|
| Compaq AlphaServer    | <code>cpio -ivcBdum uv.load &lt; /dev/rmt01</code>    |
| Dynix/ptx             | <code>cpio -ivcBdum uv.load &lt; /dev/rmt/tm0n</code> |
| HP Series 9000        | <code>cpio -ivcBdum uv.load &lt; /dev/rmt/0m</code>   |
| IBM RISC System/6000  | <code>cpio -ivcBdum uv.load &lt;dev rmt0.4</code>     |
| Silicon Graphics IRIS | <code>cpio -ivcBdum uv.load /dev/rmt/tps0d6</code>    |
| Sun Sparc (Solaris 2) | <code>tar xvf /dev/rmt/0 ./uv.load</code>             |

### uv.load Commands

**Note:** For platforms that support multiple types of tape media, verify that the device name corresponds to the tape device from which you are installing the UniVerse release tape.





3. If you are installing from CD-ROM, execute the appropriate command from the following table:

| Platform              | Command                                                 |
|-----------------------|---------------------------------------------------------|
| Compaq AlphaServer    | <code>cpio -ivcBdum uv.load &lt; /mnt/STARTUP.;1</code> |
| Dynix/ptx             | <code>cpio -ivcBdum uv.load &lt; /mnt/startup</code>    |
| HP Series 9000        | <code>cpio -ivcBdum uv.load &lt; /mnt/STARTUP</code>    |
| IBM RISC System/6000  | <code>cpio -ivcBdum uv.load &lt; /mnt/startup.</code>   |
| Silicon Graphics IRIS | <code>cpio -ivcBdum uv.load &lt; /mnt/startup</code>    |
| Sun Sparc (Solaris 2) | <code>cpio -ivcBdum uv.load &lt; /mnt/startup.</code>   |

#### **uv.load commands**

***Note:** This command assumes that the CD-ROM device has been mounted at /mnt on your system. If your system differs, replace /mnt with the appropriate mount point on your system.*

4. Execute the uv.load script while the installation media is still in the device, as shown in the following example:

**# /uv.load**

*uv.load* displays the current installation settings, as shown in the following example:

The current settings of the available options are:

```
UniVerse installer : uvadm
UniVerse administrator : uvadm uid=214 gid=200

1) UniVerse home directory: /usr/ibm/uv
 (currently: Not Installed.)
2) UniVerse-UniData shared directory: /usr/ibm/unishared
 (currently: Not Installed.)
3) Compile terminfo definitions: true
4) Rewind tape name /dev/rmt/0m
5) No-rewind tape name /dev/rmt/0mn
6) Long File Names OFF
```

Enter a field number to change, q to abort installation, or press <Return> to begin installation of UniVerse:

5. Enter the number of the value you want to change. If you choose 1, you are prompted for the UniVerse home directory. If you choose 2, you are prompted for the shared directory name. You cannot change option 3. If you choose 4 or 5, you are prompted for a new device pathname. If you choose 6, its value is toggled.

Option 6 sets the default file creation characteristics (see *LONGNAMES* in *Administering UniVerse*). You can toggle option 6 between *LONGNAMES OFF*, *LONGNAMES ON*, and *LONGNAMES ON NEWACC*. The default is *LONGNAMES OFF*, meaning *LONGNAMES* is not active.

You can also enter q at this point to quit the installation procedure.

If the values displayed are acceptable, press ENTER to start installing UniVerse.

6. If an SQL catalog does not exist and the *uvsql* user name does not exist in the */etc/passwd* file, the following message will appear:

The user 'uvsql' does not exist. This user is the default owner of the SQL catalog. Would you like to:

- 1). Continue with the installation, making 'root' the default owner of the SQL catalog.
- 2). Suspend the installation so that you can create the 'uvsql' user.
- 3). Stop the installation.

Your choice (Default action is 1):

Choose 1 to make root the owner of the SQL catalog. Choose 2 to shell out of the installation procedure and create the *uvsql* user in the */etc/passwd* file. When you exit from doing this, you return to the installation procedure.

7. If you are installing UniVerse from media other than CD-ROM, the following screen appears:

The following UniVerse groups are available for installation:

MAIN OBJ DEVELOP DOC FILESIZE PORTING UCI IC UOJ UVODBC

Which groups do you wish to install (press <Return> for all groups)?

The following table describes the groups available for installation on your system:

| Group    | Description                                                                                                                                                                                                                                  |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAIN     | This group is the standard UniVerse environment. It contains the files and programs necessary for running UniVerse. The MAIN group must be installed on your system for UniVerse to run.                                                     |
| OBJ      | The OBJ group contains object files and archive files that are used to install and link the UniVerse GCI product.                                                                                                                            |
| DEVELOP  | The DEVELOP group contains tools for application development, including the BASIC compiler, catalog manipulation commands, and debugging tools. It is not necessary for this group to be loaded to run BASIC programs or cataloged programs. |
| DOC      | This group contains the online help facility for UniVerse and BASIC. Also included is the demonstration account. This group is not necessary for UniVerse to run.                                                                            |
| FILESIZE | This group contains tools for verifying and adjusting the type, modulo, and separation of UniVerse files. This group is not necessary for UniVerse to run.                                                                                   |
| PORTING  | This group contains tools for porting applications from Pick, Reality, and Prime INFORMATION systems to your UniVerse system. This group is not necessary for UniVerse to run.                                                               |
| UCI      | This group contains the files and programs needed to run UCI. This group is not necessary for UniVerse to run.                                                                                                                               |
| IC       | This group contains the files and programs needed to run InterCall. This group is not necessary for UniVerse to run.                                                                                                                         |
| UOJ      | This group contains the files and programs needed to run UniObjects for Java. This group is not necessary for UniVerse to run.                                                                                                               |
| UVODBC   | This group contains the files and programs needed to run UniVerse ODBC. This group is not necessary for UniVerse to run.                                                                                                                     |

**UniVerse Groups**

If you want to install all the groups, press ENTER. If you do not want to install all the groups, enter the names of the groups you want to install, separated by spaces. You must enter the groups exactly as they appear at the prompt, and in the same order. When you have entered all the groups, press ENTER to begin the installation of the groups.

***Note:** If a group fails to load correctly, UniVerse displays a message indicating that the checksums do not verify for the listed groups. You should repeat the installation procedure for those groups that do not verify. When you repeat the installation procedure, you should verify that the UniVerse home directory is correct. You can repeat the installation procedure later to add groups that you do not install now.*

8. After the installation process installs all the selected groups, the following message appears:

This initial installation of UniVerse must now be completed by logging in as 'root' and executing the script '/usr/ibm/uv/uv.install'.

UniVerse will remain in an inoperable state until this script has been executed.

Perform the following steps:

- Log in as root:

```
$ su
$ password:
```

- Change directory to the UniVerse home directory:

```
cd /usr/ibm/uv
```

- Execute the *uv.install* script:

```
./uv.install
```

9. After the *uv.install* completes successfully, the **Upgrade UniVerse License** screen appears. Enter the license activation information as requested by the prompts. The information you must enter is:

- Serial number
- Maximum number of local users
- Expiration date, or press ENTER for the default
- Package list
- Number of Device Licenses for which you are authorized

Press ENTER. The licensing process displays a configuration code.

10. Remember the Configuration Code the licensing process displays. The configuration code is of the following format:  
CCTM5-ZZ3UZ-QFZ7Z-ZZZW6-Z3ZZ4-XBKLC-UZTI9  
The licensing process prompts for **Local Authorization Code**.
11. To obtain your authorization code, go to:  
<http://www-306.ibm.com/software/data/u2/universe/>  
Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code.
12. Once you have your authorization code, go back to the **Upgrade UniVerse License** window and enter the authorization code in the **Local Authorization Code** field.
13. When the authorization completes successfully, the following message appears:

```
UniVerse licensing is complete. Please shut down and
restart uniVerse.
Use the uniVerse system administration menu
to create additional uniVerse accounts.
```

Shut down and restart UniVerse:

- Enter the following command to shut down UniVerse:

```
bin/uv -admin -stop
```

- Enter the following command to restart UniVerse:

```
bin/uv -admin -start
```

14. Log in to the UV account. The **System Administration** menu appears. This menu system allows you to perform tasks such as adding users or setting up your spooler. See *Administering UniVerse* for complete instructions. To exit the menus, press **ESC** until you get to the UniVerse prompt:

```
>
```

To reenter the **System Administration** menu system, use the command:

```
>LOGIN
```

15. To exit the UniVerse environment, enter **Q** at the UniVerse prompt. A standard shell prompt appears, as shown in the following example.

```
>Q
#
```

16. If you installed UniVerse from CD-ROM, remove the CD-ROM from the device by entering the following command:

```
umount /mnt
```



---

## Upgrading an Existing UniVerse System as *uvadm*

Complete the following steps to upgrade an existing UniVerse system from the system console. Make the entries shown in bold type, and press **ENTER** after each entry.

***Note:** Before you start the installation, make sure your kernel parameters are adequate to meet your UniVerse environment requirements. Also make sure you have write permissions on the root directory (/) and on the directories where you plan to install the UniVerse home directory and the UniVerse/UniData shared directory.*

1. If the existing UniVerse system is owned by *root*, enter the following command at the login prompt:

```
login: root
root's password:
```

If the existing UniVerse system is owned by *uvadm*, enter the following command at the login prompt:

```
login: uvadm
uvadm's password:
```

2. Change directories to any directory to which you have write permissions, as shown in the following example:

```
$ cd /tmp
```



3. Make sure there are no users logged in to the system before you begin the installation.

Insert the release media into the appropriate device. If you are unfamiliar with the loading procedure, refer to your hardware instruction manual.

- If you are installing from tape, enter the appropriate command from the following table to load the *uv.load* script:

| Platform              | Command                               |
|-----------------------|---------------------------------------|
| Sun Sparc (Solaris 2) | tar xvf /dev/rmt/0 ./uv.load          |
| Dynix/ptx             | cpio -ivcBdum uv.load < /dev/rmt/tm0n |
| Silicon Graphics IRIS | cpio -ivcBdum uv.load /dev/rmt/tps0d6 |
| IBM RISC System/6000  | cpio -ivcBdum uv.load < /dev/rmt0.4   |
| HP Series 9000        | cpio -ivcBdum uv.load < /dev/rmt/0m   |
| Compaq AlphaServer    | cpio -ivcBdum uv.load < /dev/rmt01    |

#### **uv.load Commands**

**Note:** For platforms that support multiple types of tape media, verify that the device name corresponds to the tape device from which you are installing the UniVerse release tape. If it is different, you must substitute the correct device name in the *cpio* command, and also make this substitution when prompted by the *uv.load* command.



4. If you are installing from CD-ROM, execute the appropriate command from the following table:

| Platform              | Command                                                   |
|-----------------------|-----------------------------------------------------------|
| Sun Sparc (Solaris 2) | <code>cpio -ivcBdum uv.load &lt; /mnt/startup.</code>     |
| Dynix/ptx             | <code>cpio -ivcBdum uv.load &lt; /mnt/startup</code>      |
| Silicon Graphics IRIS | <code>cpio -ivcBdum uv.load &lt; /mnt/startup</code>      |
| IBM RISC System/6000  | <code>cpio -ivcBdum uv.load &lt; /mnt/startup.</code>     |
| HP Series 9000        | <code>cpio -ivcBdum uv.load &lt; /mnt/STARTUP</code>      |
| Compaq AlphaServer    | <code>cpio -ivcBdum uv.load &lt; /mnt/STARTUP.\\;1</code> |

**uv.load commands**

***Note:** This command assumes that the CD-ROM device has been mounted at /mnt on your system. If your system differs, replace /mnt with the appropriate mount point on your system.*

5. Execute the *uv.load* script with the release media still in the device:

**# /uv.load**

6. If the existing UniVerse system is owned by *uvadm*, proceed to step 6. If the existing UniVerse system is owned by *root*, the following screen appears:

A screen similar to the following appears:

```
UniVerse Upgrade Procedure
=====
The current upgrade is being done as 'root'. The
existing installed uniVerse (at /usr/ibm/uv)
is being administered by the user 'root'.
Choose one of the following below:

1) Keep 'root' as the owner and administrator of uniVerse.
 The current installation continues uninterrupted.

2) Make 'uvadm' the new owner and administrator of uniVerse.
 The current installation continues uninterrupted.

3) Stop the installation.

Your choice (Default action is 1):

Choose 2 to install UniVerse and make uvadm the owner and administrator
of UniVerse.
```

## 7. *uv.load* displays the current installation settings:

The current settings of the available options are:

```
UniVerse installer : uvadm
UniVerse administrator : uvadm uid=214 gid=200
```

- 1) UniVerse home directory: /usr/ibm/uv
- 2) UniVerse-UniData shared directory: /usr/ibm/unishared
- 3) Compile terminfo definitions: true
- 4) Rewind tape name /dev/rmt/0m
- 5) No-rewind tape name /dev/rmt/0mn
- 6) Long File Names OFF

Enter a field number to change, q to abort installation, or  
press <Return> to begin installation of UniVerse:

The UniVerse installer will appear either as root or uvadm, depending on how you logged in at step 1.

Enter the number of the value you want to change. If you choose 1, you are prompted for the UniVerse home directory. If you choose 2, you are prompted for the shared directory name. If you choose 4 or 5, you are prompted for a new device path. You cannot change 6.

You can also enter **q** at this point to quit the installation procedure.

If the values displayed are acceptable, press **ENTER** to start installing UniVerse.

If you choose 3, a list similar to the following is displayed:

Compiling the uniVerse terminfo definitions will overlay the descriptions  
for terminals listed below:

|               |           |          |               |
|---------------|-----------|----------|---------------|
| 4410          | at386     | pt200    | viewpoint     |
| AT386         | att3b1    | qt102    | viewpoint60   |
| M=            | att4410   | regent20 | vp            |
| Mu            | av        | regent25 | vp60          |
| a210          | dialup    | regent40 | vp60:regent40 |
| a210:adm5     | dumb      | regent60 | vt100         |
| a210:hzl410   | fenix     | s4       | vt100-am      |
| a210:hzl500   | gt        | sun      | vwpt          |
| a210:qt102    | hft       | sun-cmd  | vwpt60        |
| a210:regent25 | hzl410    | sun-w    | wy200         |
| a210:tvi910   | hz1500    | tvi910   | wy200-w       |
| a210:tvi910+  | ibm5151   | tvi910+  | wy50          |
| a210:tvi920   | icl6404   | tvi920   | wy50:hz1500   |
| a210:tvi925   | network   | tvi925   | wy50:tvi910   |
| a210:vp       | pc7300    | tvi955   | wy50:tvi920   |
| adm5          | performer | unixpc   | wy50:tvi925   |
| at            | pt        | unknown  | wy50:vp       |

Enter YES to compile and install terminfo.src:

Enter **Y** to compile and install *terminfo.src*. Enter **N** to change option 3 from true to false.

**8.** If you do not already have an SQL catalog and there is no user name *uvsql* in the */etc/passwd* file, you see the following message:

The user 'uvsql' does not exist. This user is the default owner of the SQL catalog. Would you like to:

- 1). Continue with the installation, making 'root' the default owner of the SQL catalog.
- 2). Suspend the installation so that you can create the 'uvsql' user.
- 3). Stop the installation.

Your choice (Default action is 1):

Choose 1 to make root the owner of the SQL catalog. Choose 2 to shell out of the installation procedure and create the *uvsql* user in the */etc/passwd* file. When you exit from doing this, you return to the installation procedure.

9. If you are installing UniVerse from any media other than CD-ROM, the following prompt appears:

The following uniVerse groups are available for installation:

MAIN OBJ DEVELOP DOC FILESIZE PORTING UCI IC UOJ UVODBC

Which groups do you wish to install (press <Return> for all groups) ?

Choose which groups you want to install on your system. The following groups are available for installation on your system:

| Group    | Description                                                                                                                                                                                                                          |
|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MAIN     | This group is the standard UniVerse environment. It contains the files and programs necessary for running UniVerse. The MAIN group must be installed on your system for UniVerse to run.                                             |
| OBJ      | This group contains object files and archive files that are used to install and link the UniVerse optional product GCI.                                                                                                              |
| DEVELOP  | This group contains tools for application development including the BASIC compiler, catalog manipulation commands, and debugging tools. It is not necessary for this group to be loaded to run BASIC programs or cataloged programs. |
| DOC      | This group contains the online help facility for UniVerse and BASIC. Also included is the demonstration account. This group is not necessary for UniVerse to run.                                                                    |
| FILESIZE | This group contains tools for verifying and adjusting the type, modulo, and separation of UniVerse files. This group is not necessary for UniVerse to run.                                                                           |
| PORTING  | This group contains tools for porting applications from Pick, Reality, and Prime INFORMATION systems to your UniVerse system. This group is not necessary for UniVerse to run.                                                       |
| UCI      | This group contains the files and programs needed to run UCI. This group is not necessary for UniVerse to run.                                                                                                                       |

#### UniVerse Groups

| Group  | Description                                                                                                                    |
|--------|--------------------------------------------------------------------------------------------------------------------------------|
| IC     | This group contains the files and programs needed to run InterCall. This group is not necessary for UniVerse to run.           |
| UOJ    | This group contains the files and programs needed to run UniObjects for Java. This group is not necessary for UniVerse to run. |
| UVODBC | This group contains the files and programs needed to run UniVerse ODBC. This group is not necessary for UniVerse to run.       |

#### UniVerse Groups (Continued)

If you want to install all the groups, press ENTER at the prompt, otherwise enter the names of the groups you want to install, separated by spaces. You must enter the groups exactly as they appear at the prompt and in the same order. When you have entered all the groups, press Return to begin the installation of the groups.

***Note:** If a group fails to load correctly, a message is displayed indicating that the checksums do not verify for the listed groups. You should repeat the installation procedure for those groups that do not verify. When you repeat the installation procedure, you should verify that the UniVerse home directory is correct. You can repeat the installation procedure later to add groups that you do not install now.*

10. You may see the following message:
 

```
Unable to get disk shared memory segment: Invalid argument
```

 If this happens, shut down and restart UniVerse (see step 11). Then proceed to step 10.
11. After the installation process installs all of the groups, the **Upgrade UniVerse License** screen appears. Enter the license activation information as requested by the prompts. The information you must enter is:
  - Serial number
  - Maximum number of local users
  - Expiration date, or press ENTER for the default
  - Package list
  - Number of Device Licenses for which you are authorized
 Press ENTER. The licensing process displays a configuration code.

12. Remember the Configuration Code the licensing process displays. The configuration code is of the following format:  
CCTM5-ZZ3UZ-QFZ7Z-ZZZW6-Z3ZZ4-XBKLC-UZTI9  
The licensing process prompts for **Local Authorization Code**.
13. To obtain your authorization code, go to:  
<http://www-306.ibm.com/software/data/u2/universe/>  
Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code.
14. Once you have your authorization code, go back to the **Upgrade UniVerse License** window and enter the authorization code in the **Local Authorization Code** field.
15. When the authorization completes successfully, the following message appears:

```
UniVerse licensing is complete. Please shut down and
restart uniVerse.
```

```
Use the uniVerse system administration menu
to create additional uniVerse accounts.
```

Shut down and restart UniVerse using the following steps:

Change to the UniVerse home directory, as shown in the following example:

```
cd /usr/ibm/uv
```

Enter the following command to shut down UniVerse:

```
bin/uv -admin -stop
```

Enter the following command to restart UniVerse:

```
bin/uv -admin -start
```

16. Log in to the UV account. The **UniVerse System Administration** menu appears. This menu system lets you perform tasks such as adding users or setting up your spooler. See *Administering UniVerse* for complete instructions. To exit the menus, press ESC until you get to the UniVerse prompt:

```
>
```

To reenter the **System Administration** menu system, use the command:

```
>LOGIN
```

17. To exit the UniVerse environment, enter Q at the UniVerse prompt. A standard shell prompt appears, as shown in the following example.

```
>Q
#
```



18. Each user account VOC file must be updated to the current UniVerse release level. Do this by invoking UniVerse in each user account. When you do this, the following prompt appears:

Your VOC is out of date. Update to current release (Y/N)?

Entering Y at the prompt updates the VOC to the current release level.

***Note:** The UniVerse LOGTO command does not check the release level of the VOC file when used to enter a UniVerse account. The check is done only when directly invoking UniVerse in a user account. If your application uses LOGTO, you must verify that all user accounts are updated to the current release level before running the application.*

19. If you installed UniVerse from CD-ROM, remove the CD-ROM from the drive by entering the following command:

```
umount /mnt
```

---

## Examining the Load and Installation Scripts

You can examine the UniVerse load or installation script using the *vi* editor. These scripts are in the UniVerse home directory, by default */usr/ibm/uv*, under the names *uv.load* and *uv.install*. You must have root privileges to view these files.

### *uv.load* Options

You can use the options to the *uv.load* command to change the installation process. The syntax of the *uv.load* command is:

**uv.load** {**-defaults**} {**-longnames**} {**-nochecksum**} {**-nocpio**}  
{*uvhome*}

The following table describes each parameter of the syntax:

| Option        | Description                                                                                                                                                                                                          |
|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| -defaults     | Specifies that all defaults are to be used—no prompting by the script. This allows for automatic installation.                                                                                                       |
| -longnames    | Forces LONGNAMES to ON NEWACC.                                                                                                                                                                                       |
| -nochecksum   | Specifies to skip the checksum step. This should be done only after consulting with Informix support. If files are really damaged, the installed UniVerse will not execute correctly, with possible damage to files. |
| -nocpio       | Specifies to skip the physical read of the installation media. This option can be used to restart the installation after files have been loaded.                                                                     |
| <i>uvhome</i> | Specifies the UniVerse home directory if it is different from either the installed UniVerse or <i>/usr/ibm/uv</i> .                                                                                                  |

---

#### *uv.load* Options



---

## System Administration Menus

The System Administration menus and data entry screens look and work the same way as Motif menus. For a complete description of these menus, see Appendix A of *Administering UniVerse*.

---

# System-Specific Information

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## **System-Specific Information**

This chapter describes system-specific information for various platforms.

---

## MT0 Definition in the &DEVICE& File

The following is the definition of the MT0 entry in the &DEVICE& file for various platforms. This is the device used to load the release tape.

## MT0 Definition for Sun Sparc (Solaris 2)

| Field                       | Contents                                       |
|-----------------------------|------------------------------------------------|
| ID                          | MT0                                            |
| Description                 | Cartridge tape drive number 0<br>(Version 024) |
| Pathname                    | /dev/rmt/0n                                    |
| Default Blocksize           | 1024                                           |
| Type                        | DC                                             |
| Access Control File         |                                                |
| Rewind Device Pathname      | /dev/rmt/0                                     |
| No Rewind Device Pathname   | /dev/rmt/0n                                    |
| Backup Shell Command        | tar cvf \$tape \$file                          |
| Restore Shell Command       | tar xvf \$tape \$file                          |
| Skip Forward Command        | mt -f \$tape fsf                               |
| Rewind Command              | mt -f \$tape rewind                            |
| Offline Command             | mt -f \$tape offline                           |
| Read to Write Mode Position | L                                              |
| Close on Read Action        | Y                                              |
| Multiple Read at eof Status | Y                                              |
| Account Transfer Block Size | 512                                            |

### MT0 Definition for Sun Sparc (Solaris 2)

## MT0 Definition for Dynix/ptx

| Field                       | Contents                                       |
|-----------------------------|------------------------------------------------|
| ID                          | MT0                                            |
| Description                 | Cartridge tape drive number 0<br>(Version 183) |
| Pathname                    | /dev/rmt/tm0n                                  |
| Default Blocksize           | 512                                            |
| Type                        | DC                                             |
| Access Control File         |                                                |
| Rewind Device Pathname      | /dev/rmt/tm0                                   |
| No Rewind Device Pathname   | /dev/rmt/tm0n                                  |
| Backup Shell Command        | find \$file -print   cpio -ovcB > \$tape       |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape                  |
| Skip Forward Command        | mt -f \$tape fsf                               |
| Rewind Command              | mt -f \$tape rewind                            |
| Offline Command             | mt -f \$tape rewind                            |
| Read to Write Mode Position | L                                              |
| Close on Read Action        | Y                                              |
| Multiple Read at eof Status | Y                                              |
| Account Transfer Block Size | 512                                            |

### MT0 Definition for Dynix/ptx

## MT0 Definition for Silicon Graphics IRIS

| Field                       | Contents                                        |
|-----------------------------|-------------------------------------------------|
| ID                          | MT0                                             |
| Description                 | Magnetic tape drive number 6<br>(4mm Cartridge) |
| Pathname                    | /dev/rmt/tps0d6nr                               |
| Default Blocksize           | 8192                                            |
| Type                        | DC                                              |
| Access Control File         |                                                 |
| Rewind Device Pathname      | /dev/rmt/tps0d6                                 |
| No Rewind Device Pathname   | /dev/rmt/tps0d6nr                               |
| Backup Shell Command        | find \$file -print  cpio -ovcB > \$tape         |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape                   |
| Skip Forward Command        | mt -t \$tape fsf                                |
| Rewind Command              | mt -t \$tape rewind                             |
| Offline Command             | mt -t \$tape offline                            |
| Read to Write Mode Position | E                                               |
| Close on Read Action        | N                                               |
| Multiple Read at eof Status | N                                               |
| Account Transfer Block Size | 8192                                            |

### MT0 Definition for Silicon Graphics IRIS

## MT1 Definition for Silicon Graphics IRIS

| Field                       | Contents                                         |
|-----------------------------|--------------------------------------------------|
| ID                          | MT1                                              |
| Description                 | Magnetic tape drive number 7<br>(1/4" Cartridge) |
| Pathname                    | /dev/rmt/tps0d7nr                                |
| Default Blocksize           | 512                                              |
| Type                        | DC                                               |
| Access Control File         |                                                  |
| Rewind Device Pathname      | /dev/rmt/tps0d7                                  |
| No Rewind Device Pathname   | /dev/rmt/tps0d7nr                                |
| Backup Shell Command        | find \$file -print  cpio -ovcB > \$tape          |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape                    |
| Skip Forward Command        | mt -t \$tape fsf                                 |
| Rewind Command              | mt -t \$tape rewind                              |
| Offline Command             | mt -t \$tape offline                             |
| Read to Write Mode Position | E                                                |
| Close on Read Action        | N                                                |
| Multiple Read at eof Status | N                                                |
| Account Transfer Block Size | 8192                                             |

### MT1 Definition for Silicon Graphics IRIS



## MT0 Definition for IBM RISC/6000

| Field                       | Contents                                        |
|-----------------------------|-------------------------------------------------|
| ID                          | MT0                                             |
| Description                 | Tape drive number 0 (Version 029, 093, or 115)) |
| Pathname                    | /dev/rmt/0.5                                    |
| Default Blocksize           | 512                                             |
| Type                        | DC                                              |
| Access Control File         |                                                 |
| Rewind Device Pathname      | /dev/rmt/0.4                                    |
| No Rewind Device Pathname   | /dev/rmt/0.5                                    |
| Backup Shell Command        | find \$file -print   cpio -ovcB > \$tape        |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape                   |
| Skip Forward Command        | tctl -f \$tape fsf 1                            |
| Rewind Command              | tctl -f \$tape rewind                           |
| Offline Command             | tctl -f \$tape rewind                           |
| Read to Write Mode Position | L                                               |
| Close on Read Action        | Y                                               |
| Multiple Read at eof Status | Y                                               |
| Account Transfer Block Size | 512                                             |

### MT0 Definition for IBM RISC/6000

## MT0 Definition for HP Series 9000

| Field                       | Contents                                 |
|-----------------------------|------------------------------------------|
| ID                          | MT0                                      |
| Description                 | DAT Tape Drive (Version 069)             |
| Pathname                    | /dev/rmt/0mn                             |
| Default Blocksize           | 8192                                     |
| Type                        | DT                                       |
| Access Control File         |                                          |
| Rewind Device Pathname      | /dev/rmt/0m                              |
| No Rewind Device Pathname   | /dev/rmt/0mn                             |
| Backup Shell Command        | find \$file -print   cpio -ovcB > \$tape |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape            |
| Skip Forward Command        | mt -t \$tape fsf                         |
| Rewind Command              | mt -t \$tape rew                         |
| Offline Command             | mt -t \$tape offl                        |
| Read to Write Mode Position | E                                        |
| Close on Read Action        | Y                                        |
| Multiple Read at eof Status | Y                                        |
| Account Transfer Block Size | 8192                                     |

### MT0 Definition for HP Series 9000

## MT0 Definition for Compaq AlphaServer

| Field                       | Contents                                 |
|-----------------------------|------------------------------------------|
| ID                          | MT0                                      |
| Description                 | 4mm Cartridge Tape (Version UV-006)      |
| Pathname                    | /dev/nrmt01                              |
| Default Blocksize           | 512                                      |
| Type                        | DT                                       |
| Access Control File         |                                          |
| Rewind Device Pathname      | /dev/rmt01                               |
| No Rewind Device Pathname   | /dev/nrmt01                              |
| Backup Shell Command        | find \$file -print   cpio -ovcB > \$tape |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape            |
| Skip Forward Command        | mt -f \$tape fsf                         |
| Rewind Command              | mt -f \$tape rewind                      |
| Offline Command             | mt -f \$tape rewoffl                     |
| Read to Write Mode Position | A                                        |
| Close on Read Action        | N                                        |
| Multiple Read at eof Status | N                                        |
| Account Transfer Block Size | 16384                                    |

### MT0 Definition for Compaq AlphaServer

**Warning:** Please note that the tape format used on the UniVerse release tape was changed from *cpio* to *tar* format at Release 8.3.1. If you install Release 10.0 over an existing release of UniVerse earlier than Release 8.3.1, the *&DEVICE* file entry MT0 will not have been updated to reflect the definition above. To update the *&DEVICE* file entry, run the following command while logged in as root in the UV account directory.



*If you want to maintain the original MT0 entry, copy it to another record ID before executing the following command:*

**# bin/init.device**

*This command loads the new device entry into the &DEVICE& file. You must do this before you load any UniVerse optional products.*

---

## **CD-ROM Definition in the &DEVICE& File**

This section defines the CD-ROM definition in the &DEVICE& file for various platforms.

## CD-ROM Definition for Sun Sparc (Solaris 2)

| Field                       | Contents                                            |
|-----------------------------|-----------------------------------------------------|
| ID                          | CDROM                                               |
| Description                 | CDROM-Drive (Version 304)                           |
| Pathname                    | /cdrom                                              |
| Default Block Size          | 8192                                                |
| Type                        | CD                                                  |
| Access Control File         |                                                     |
| Rewind Device Pathnam       | /cdrom                                              |
| No Rewind Device Pathname   | /cdrom                                              |
| Backup Shell Command        | find \$file -print   cpio -ovcB ><br>\$tape/\$uvcdi |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape/\$uvcdi               |
| Skip Forward Command        |                                                     |
| Rewind Command              |                                                     |
| Offline Command             |                                                     |
| Read to Write Mode Position | A                                                   |
| Close on Read Action        | Y                                                   |
| Multiple Read at eof Status | Y                                                   |
| Account Transfer Block Size | 8192                                                |

### CD-ROM Definition for Sun Sparc (Solaris 2)

## CD-ROM Definition for Dynix/ptx

| Field                       | Contents                                            |
|-----------------------------|-----------------------------------------------------|
| ID                          | CDROM                                               |
| Description                 | CDROM-Drive (Version 321)                           |
| Pathname                    | /cdrom                                              |
| Default Block Size          | 8192                                                |
| Type                        | CD                                                  |
| Access Control File         |                                                     |
| Rewind Device Pathnam       | /cdrom                                              |
| No Rewind Device Pathname   | /cdrom                                              |
| Backup Shell Command        | find \$file -print   cpio -ovcB ><br>\$tape/\$uvcdi |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape/\$uvcdi               |
| Skip Forward Command        |                                                     |
| Rewind Command              |                                                     |
| Offline Command             |                                                     |
| Read to Write Mode Position | A                                                   |
| Close on Read Action        | Y                                                   |
| Multiple Read at eof Status | Y                                                   |
| Account Transfer Block Size | 8192                                                |

### CD-ROM Definition for Dynix/ptx

## CD-ROM Definition for Silicon Graphics IRIS

| Field                       | Contents                                            |
|-----------------------------|-----------------------------------------------------|
| ID                          | CDROM                                               |
| Description                 | CDROM-Drive (Version 307)                           |
| Pathname                    | /cdrom                                              |
| Default Block Size          | 8192                                                |
| Type                        | CD                                                  |
| Access Control File         |                                                     |
| Rewind Device Pathnam       | /cdrom                                              |
| No Rewind Device Pathname   | /cdrom                                              |
| Backup Shell Command        | find \$file -print   cpio -ovcB ><br>\$tape/\$uvcdi |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape/\$uvcdi               |
| Skip Forward Command        |                                                     |
| Rewind Command              |                                                     |
| Offline Command             |                                                     |
| Read to Write Mode Position | A                                                   |
| Close on Read Action        | Y                                                   |
| Multiple Read at eof Status | Y                                                   |
| Account Transfer Block Size | 8192                                                |

### CD-ROM Definition for Silicon Graphics IRIS



## CD-ROM Definition for IBM RISC System/6000

| Field                       | Contents                                            |
|-----------------------------|-----------------------------------------------------|
| ID                          | CDROM                                               |
| Description                 | CDROM-Drive (Version 301)                           |
| Pathname                    | /cdrom                                              |
| Default Block Size          | 8192                                                |
| Type                        | CD                                                  |
| Access Control File         |                                                     |
| Rewind Device Pathnam       | /cdrom                                              |
| No Rewind Device Pathname   | /cdrom                                              |
| Backup Shell Command        | find \$file -print   cpio -ovcB ><br>\$tape/\$uvcdi |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape/\$uvcdi               |
| Skip Forward Command        |                                                     |
| Rewind Command              |                                                     |
| Offline Command             |                                                     |
| Read to Write Mode Position | A                                                   |
| Close on Read Action        | Y                                                   |
| Multiple Read at eof Status | Y                                                   |
| Account Transfer Block Size | 8192                                                |

### CD-ROM Definition for IBM RISC/6000 System/6000

## CD-ROM Definition for HP Series 9000

| Field                       | Contents                                            |
|-----------------------------|-----------------------------------------------------|
| ID                          | CDROM                                               |
| Description                 | CDROM-Drive (Version 302)                           |
| Pathname                    | /cdrom                                              |
| Default Block Size          | 8192                                                |
| Type                        | CD                                                  |
| Access Control File         |                                                     |
| Rewind Device Pathnam       | /cdrom                                              |
| No Rewind Device Pathname   | /cdrom                                              |
| Backup Shell Command        | find \$file -print   cpio -ovcB ><br>\$tape/\$uvcdi |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape/\$uvcdi               |
| Skip Forward Command        |                                                     |
| Rewind Command              |                                                     |
| Offline Command             |                                                     |
| Read to Write Mode Position | A                                                   |
| Close on Read Action        | Y                                                   |
| Multiple Read at eof Status | Y                                                   |
| Account Transfer Block Size | 8192                                                |

### CD-ROM Definition for HP Series 9000

## CD-ROM Definition for Compaq AlphaServer

| Field                       | Contents                                            |
|-----------------------------|-----------------------------------------------------|
| ID                          | CDROM                                               |
| Description                 | CDROM-Drive (Version 309)                           |
| Pathname                    | /cdrom                                              |
| Default Block Size          | 8192                                                |
| Type                        | CD                                                  |
| Access Control File         |                                                     |
| Rewind Device Pathnam       | /cdrom                                              |
| No Rewind Device Pathname   | /cdrom                                              |
| Backup Shell Command        | find \$file -print   cpio -ovcB ><br>\$tape/\$uvcdi |
| Restore Shell Command       | cpio -ivcBdum \$file < \$tape/\$uvcdi               |
| Skip Forward Command        |                                                     |
| Rewind Command              |                                                     |
| Offline Command             |                                                     |
| Read to Write Mode Position | A                                                   |
| Close on Read Action        | Y                                                   |
| Multiple Read at eof Status | Y                                                   |
| Account Transfer Block Size | 8192                                                |

### CD-ROM Definition for Compaq AlphaServer

---

# Installing UniVerse on Windows Platforms

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## Installing UniVerse on Windows Platforms

The *UniVerse Release 10.2 for Windows Platforms* CD-ROM contains a program that manages the installation. You start this installation program, then choose the software you want to install from the **UniVerse Master Setup** screen.

---

## Starting the UniVerse Master Setup

All programs are installed from the **UniVerse Master Setup** screen. To reach that screen, perform the following steps:

1. Log on as Administrator.
2. Insert the UniVerse CD-ROM in the drive. The **UniVerse Master Setup** screen should appear automatically. If Auto run is switched off and the screen does not appear, choose the CD-ROM driver from **Explorer**, then choose **Install.exe**.

---

## Installing UniVerse

This section describes how to install UniVerse Release 10.2 on an NTFS partition on a server running Windows. The installation procedure varies according to whether you are installing, reinstalling, or upgrading.

- If you are installing Release 10.2 for the first time, see “[Installing UniVerse for the First Time.](#)”
- If you are reinstalling Release 10.0 or upgrading from an earlier release, skip to “[Upgrading to or Reinstalling UniVerse Release 10.2.](#)”

### Installing UniVerse for the First Time

Beginning at UniVerse 10.2, you do not need to authorize UniVerse during the installation process. You have 60 days after installation to authorize UniVerse.

Complete the following steps to install UniVerse 10.2:

1. From the **UniVerse Master Setup** screen, choose **UniVerse RDBMS** to start the **UniVerse installation**. The **Welcome** screen appears.
2. Follow the instructions on the screen until the installation is complete.
3. Start all UniVerse services as follows:
  - Choose **Start**, then **Programs**, then **IBM U2**, then **UniVerse**, and then **UniVerse Control** to display the UniVerse Control Panel.
  - If UniVerse is not started, click **Start All Services**.

***Note:** The UniRPC service allows connections to servers from applications written using UniDK, or from UniVerse Admin. The UniVerse Telnet service allows users to make a telnet connection to UniVerse.*

4. Start a UniVerse session on the server. Execute one of the following tasks:
  - Choose **Start**, then programs, then **IBM U2**, then **UniVerse**, and then **UniVerse Shell**.
  - Start a telnet session from a client (see “[Starting a UniVerse Session Over Telnet](#)” on page 6).

***Note:** If your application uses UniVerse menus or screen formatting, run your application in a telnet window, because the UniVerse Shell window does not support terminal handling.*



5. Review your file security. The UniVerse installation directory inherits its security permissions from the parent directory and from the attributes of the installer. Adjust the permissions to meet your needs. UniVerse administrators need full access to the UV account directory. Other users require full access to the *catdir* directory and its contents, and read-only access to all other files in the UV account directory. All users must have full access to the UniVerse temporary directory.
6. Use Notepad to edit the uvconfig file in the UV account directory to specify a value for the UVTEMP configurable parameter. This value defines the directory where UniVerse writes temporary files. (Windows platforms do not have a fixed location for temporary files.)

If you do not specify a value for UVTEMP, UniVerse first checks for temporary files in the directory specified in the TEMP environment variable, and then it searches the local directory.

7. Define the default UniVerse printer as follows. Choose **Start**, then **Settings**, then **Printers**, and then **Add Printer**. Specify the printer name as UVDEFAULT and define a suitable printer as the UniVerse default. The printer must be available to all UniVerse users on the system. It need not be a physical printer; it can be a file or a print queue.

## Upgrading to or Reinstalling UniVerse Release 10.2

Complete the following steps to upgrade or reinstall UniVerse Release 10.2.

1. Log on to Windows as Administrator.
2. Make sure that no users are connected to the UniVerse server. Use the UniVerse command LISTU to list all users connected to the UniVerse server.
3. Stop all UniVerse services. Choose **Start**, then **Programs**, then **IBM U2**, then **UniVerse**, and then **UniVerse Control** to display the UniVerse Control Panel. Click **Stop All Services**.
4. Proceed with the installation as described in [“Installing UniVerse for the First Time”](#) on page 4.

**Note:** The installation process does not preserve any settings, including the *LONGNAMES* setting. If you run UniVerse with *LONGNAMES ON*, the new installation sets it back to the default *LONGNAMES OFF*.





## Starting a UniVerse Session Over Telnet

Complete the following steps to start a UniVerse session over telnet:

1. From the server, make sure the UniVerse Telnet services is running on the server.
2. From the client, run the telnet application, for example, UV/Term.
3. From the client, enter the appropriate telnet command, such as *open* or *connect*, and specify your UniVerse server's network name as it appears in the *hosts* or *lmhosts* file. The following example illustrates connecting to the server univ.

```
open univ
```

4. Once connected, enter a valid user ID and password for your server.
5. If you are prompted, enter the location of the UniVerse account that you want to access, as shown in the following example:

```
D: \ IBM\UV
```

## Installing the AREV Migration Toolkit

Complete the following steps to install the AREV Migration Toolkit:

1. Check to see if any applications are running. IBM recommends that no applications be running during installation.
2. Start the installation by choosing AMTK (AREV Migration Toolkit) from the UniVerse Master Setup screen.

When installation is complete, you return to the UniVerse Master Setup screen.

---

## Authorizing UniVerse

Complete the following steps to authorize UniVerse through UniAdmin:

Select one of the following methods to access the **UniVerse License** dialog box:

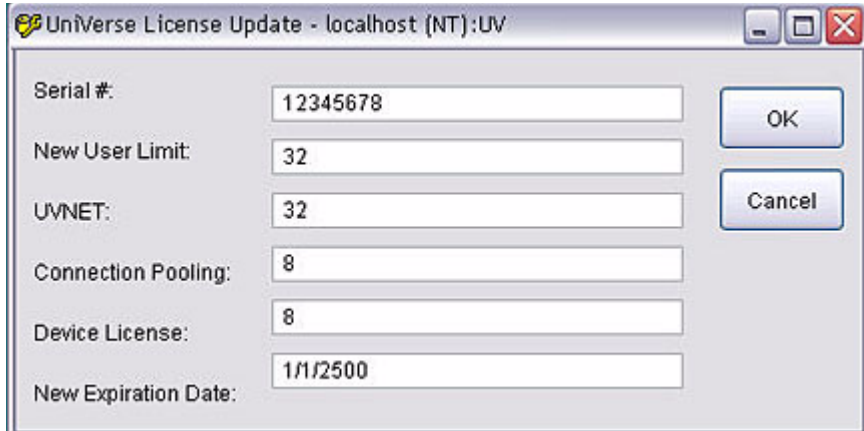
- From the **UniAdmin** window, double-click **License**.
- From the **UniAdmin** menu, click Admin, then click **License**.

The **UniVerse License** dialog box appears, as shown in the following example:



## Authorizing a New UniVerse License

Verify that the number of users and expiration date displayed in the **UniVerse Licensing** dialog box matches the configuration on the Product Configuration sheet shipped with UniVerse. If you need to update any information, click **Update**. The **UniVerse License Update** dialog box appears, as shown in the following example:



|                      |          |
|----------------------|----------|
| Serial #:            | 12345678 |
| New User Limit:      | 32       |
| UVNET:               | 32       |
| Connection Pooling:  | 8        |
| Device License:      | 8        |
| New Expiration Date: | 1/1/2500 |

1. Enter your UniVerse serial number in the **Serial #** box.
2. Enter the number of users for which you are licensed in the **New User Limit** box.
3. Enter the number of UVNet users for which you are licensed in the **UVNET** box. If you are not licensed for any UVNet users, enter 0.
4. Enter the number of Connection Pooling licenses in the **Connection Pooling** box. If you are not licensed for any connection pools, enter 0.
5. Enter the number of device licenses for which you are authorized in the **Device License** box.
6. If the expiration date of your license is incorrect, enter the correct date in the **New Expiration Date** box.

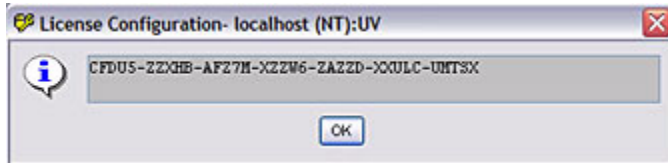
When the license information is correct, click **OK**.

**Note:** If you are using UV/NET, you must authorize both the UniVerse database and UV/NET.



## Obtain Configuration Code

Click **ConfigCode** to obtain the configuration code you will need to authorize UniVerse. A window similar to the following example appears with the configuration code:



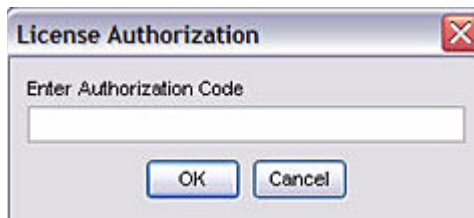
## Obtain Authorization Code

To obtain your authorization code, go to:

<http://www-306.ibm.com/software/data/u2/universe/>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code.

Once you have your authorization code, click **Authorize** from the **UniVerse License** dialog box. The **License Authorization** dialog box appears, as shown in the following example:



Enter your authorization code, then click **OK**.

---

# UniVerse Accounts

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## UniVerse Accounts

You always enter UniVerse through a UniVerse account. A UniVerse account includes a directory containing the files required to run UniVerse in that directory. An established UniVerse account can also contain database files and program files.

The VOC file in each UniVerse account defines the account environment, including all the files and commands that are available to users who are logged in to the account.

For example, a UniVerse account might be defined for a department rather than for an individual. Each user of the SALES account might be given his or her own login name at the operating system level, but be assigned the same home directory and share the same UniVerse account.

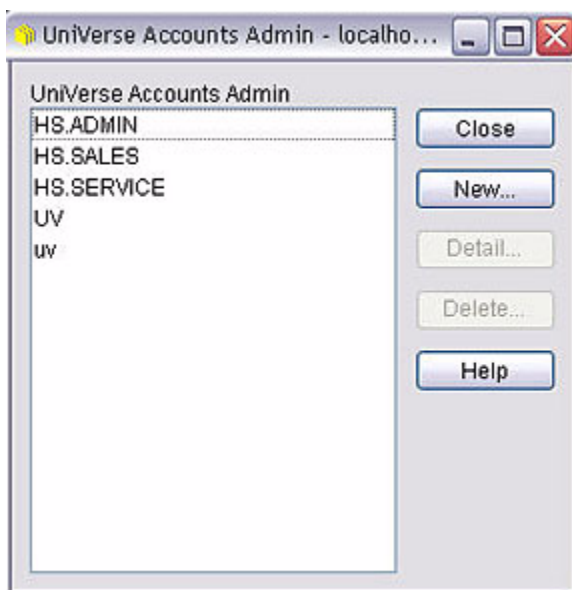
On UNIX systems, you can assign or change the user ownership and group ownership of files in an account, and you can set or change the file access permissions. These ownerships and permissions apply to all of the files and subdirectories contained in a UniVerse account directory.

UniVerse file permissions are managed by UNIX or Windows file permissions. For information about setting file permissions, refer to the documentation that comes with your operating system.

## Creating a New UniVerse Account

Choose the **Accounts** option from **UniAdmin** to create a new UniVerse account. The **Account Admin** window appears with a list of all UniVerse accounts currently defined in the UV.ACCOUNT file (see “[The UV.ACCOUNT File](#)” on page 12 for information about this file). The tasks you can perform from this window include:

- Creating a new account
- Viewing or modifying account details
- Deleting an account



How you create an account depends on whether you are administering a UNIX server or a Windows server.



**Note:** You can also create UniVerse accounts by entering **uv** at an operating system prompt. If an account is created this way, the UV.ACCOUNT file is not updated and the account cannot be administered using the **Accounts** option.

When you add a new account, UniVerse performs the following tasks:

- Assigns an account compatibility flavor

- Updates The UV.ACCOUNT File
- On UNIX systems, edits the *.profile* file in the account directory
- Edits the LOGIN entry in the UniVerse account

## Creating a New Account on a UNIX System

Complete the following steps to create a new UniVerse account:

1. From the **Account Admin** window, click **New**. The **Create Account** dialog box appears, as shown in the following example:

The screenshot shows a 'Create Account' dialog box with the following fields and options:

- Account Name:** (empty text field)
- Account Flavor:** IDEAL (dropdown menu)
- Owner:** root (dropdown menu)
- Group:** system (dropdown menu)
- Pathname:** alpha/uv102\_060901\_6098 (text field with a 'Browse...' button next to it)
- File Permissions:**
  - ☒ Use Defaults
  - ☐ Use Default Login
  - Permissions: rwxrwxrwx (text field)
- Buttons: OK, Cancel, Help

2. Enter the name of the account in the **Account Name** field.
3. Select one of the following flavors from the **Account Flavor** list:
  - **IDEAL**. Choose this flavor if you are new to UniVerse. It contains the best features of all the flavors.
  - **INFORMATION**. Choose this flavor for compatibility with Prime INFORMATION.
  - **PIOPEN**. Choose this flavor for compatibility with PI/open.
  - **PICK**. Choose this flavor for compatibility with Pick or Advanced Pick.
  - **REALITY**. Choose this flavor for compatibility with Microdata REALITY.
  - **IN2**. Choose this flavor for compatibility with IN2.





4. Enter a destination for the new account in the **Pathname** field. You can enter the full path of the directory, or use the **Browse** button to search the system for an appropriate directory. If you enter the name of a directory that does not exist, it is created when you click **OK**. For example:

**/usr/users/newuser**

The parent directory (*/usr/users*) must exist.

***Note:** You can choose a directory path of an existing UniVerse account. In this case, the new account is added to the UVACCOUNT file, but no changes are made to the existing account files.*

5. Select the owner of the account from the **Owner** list.
6. Select a group to assign the new account to from the **Group** list.
7. Clear the **Use Default LOGIN** check box if you do not want to use the default LOGIN entry for the new account.
8. Set the file permissions by doing one of the following:
  - Select the **Use Defaults** check box to accept the default permissions *rwx-rwxrwx*.
  - Enter suitable settings in the **Permissions** field. This field is only active when the **Use Defaults** check box is cleared.
9. Click **OK**. UniVerse creates the account in the chosen directory, and updates the UVACCOUNT file and the **Account Admin** window.

## Creating a New Account on a Windows System

Complete the following steps to create a new UniVerse account:

1. From the **Account Admin** window, click **New**. The **UniVerse Account Details** dialog box appears, as shown in the following example:



2. Enter the name of the account in the **Account Name** field.
3. Select one of the following flavors from the **Account Flavor** list:
  - **IDEAL**. Choose this flavor if you are a new user. It contains the best features of all the flavors.
  - **INFORMATION**. Choose this flavor for compatibility with Prime INFORMATION.
  - **PIOPEN**. Choose this flavor for compatibility with PI/open.
  - **PICK**. Choose this flavor for compatibility with Pick or Advanced Pick.
  - **REALITY**. Choose this flavor for compatibility with Microdata REALITY.
  - **IN2**. Choose this flavor for compatibility with IN2.
4. Enter a destination for the new account in the **Pathname** field. You can use the **Browse** button to search the system for the appropriate directory, or enter the full path of a directory. If you enter the name of a directory that does not exist, it is created when you click **OK**. For example:

**D:\uv\accounts\newuser**

The parent directory (*D:\uv\accounts*) must exist.
5. Clear the **Use Default LOGIN** check box if you do not want to use the default LOGIN entry for the new account.
6. Click **OK**. UniVerse creates the account in the chosen directory, with the ownership and security of the parent directory, and updates the UV.ACCOUNT file and the **Account Admin** window.

***Note:** You can choose a directory path of an existing UniVerse account. In this case, UniVerse adds the new account to the UV.ACCOUNT file, but no changes are made to the existing account files in the directory.*

---

## Viewing or Modifying Account Details

To view the details of an account, perform one of the following tasks:

- Double-click the account in the **UniVerse Accounts** list.
- Choose an account, then click **Detail**.

The **UniVerse Account Details** dialog box appear. You can modify the account settings, except for the **Account Flavor** setting and account path. Changes are saved when you click **OK**.

---

## Deleting an Account

Choose the **Accounts** option from **UniAdmin** to delete a UniVerse account. How you delete the account depends on whether you are connected to a UNIX or a Windows server.

### Deleting a UniVerse Account on UNIX

To delete a UniVerse account:

1. Select the account you want to delete from the UniVerse Accounts list in the **Account Admin** window.
2. Click **Delete**. The **Delete Account** dialog box appears with the name and location of the chosen account, as shown in the following example:





3. Choose how to delete the account by selecting one of the following options:

- **Retain Directory.** UniVerse removes the account from the UV.ACCOUNT file.
- **Delete Directory.** UniVerse removes the account from the UV.ACCOUNT file and deletes the directory, along with all of its contents. If other accounts in the UV.ACCOUNT file use the files in this directory, you will also be prompted whether you want to delete these accounts.
- **Transfer Ownership.** UniVerse removes the account from the UV.ACCOUNT file and transfers the account directory ownership to a user you specify. Select a user from the **Transfer to** list.

***Note:** Options available in the dialog box change dynamically according to your choice to retain or delete a directory.*

4. Click **OK**. A message box appears.
5. Click **Yes** to remove the account as specified. The **Account Admin** window is updated.

## Deleting a UniVerse Account on a Windows System

Complete the following steps to delete a UniVerse account:

1. Select the account you want to delete from the **UniVerse Accounts** list in the **Account Admin** window.
2. Click **Delete**. The **Delete Account** dialog box appears with the name and location of the chosen account, as shown in the following example:



3. Choose how you want to delete the account by selecting one of the following options:
  - **Retain Directory.** UniVerse removes the account from the UV.ACCOUNT file.
  - **Delete Directory.** UniVerse removes the account from the UV.ACCOUNT file and the directory, along with all of its contents. If other accounts in the UV.ACCOUNT file share this directory, you are asked whether you want to delete these accounts.
4. Click **OK**. A message box appears.
5. Click **Yes** to remove the account as specified. UniVerse updates the **Account Admin** window.

---

## Customizing UniVerse Accounts

You can customize UniVerse accounts. For example, you can prevent certain users from creating or modifying accounts from their own UniVerse accounts.

You can also set up alternative account flavors and their associated VOC files. To customize your system in this way, you must modify the NEWACC Files and [The UV.FLAVOR File](#).

Using **UniAdmin**, you can specify the account flavor to use, which in turn affects the VOC file and the user's access to UniVerse. There are six standard flavors: IDEAL, INFORMATION, PICK, REALITY, PIOPEN, and IN2. These are listed when you create accounts using the **Accounts** option from **UniAdmin**.

On Windows platforms, you can specify the account directory or UniVerse account to which each user initially logs in from a telnet session. Use the Network Services option from **UniAdmin** to do this. For more information about the Network Services option, see Maintaining the hosts File in *Administering UniVerse*.

## UniVerse Account Control Files

**UniAdmin** uses the account control files to check the validity of responses to some of the data entry screens. UniVerse only updates these files when you create or modify an account using **UniAdmin**, so it is important to create accounts using **UniAdmin**.

Although the account control files are used primarily by **UniAdmin**, you can use LIST and SORT to create reports. You can update them with ReVise or the UniVerse Editor.

*The UV.ACCOUNT File*

The UV.ACCOUNT file is in the UV account. It contains a list of UniVerse accounts and their paths. UniVerse automatically updates this file when you create or delete an account using **UniAdmin**. Each UniVerse account has a record in the UV.ACCOUNT file. The record ID is the account name. Each record also contains the following fields, but only the PATH field is updated by UniVerse.

| Field Name  | Description                                     |
|-------------|-------------------------------------------------|
| @ID         | Account name                                    |
| PASSWORD    | Account's password ( <i>/etc/passwd</i> )       |
| MAX         |                                                 |
| MIN         |                                                 |
| AGE         |                                                 |
| UID         | User ID number ( <i>/etc/passwd</i> )           |
| GID         | Group ID number ( <i>/etc/passwd</i> )          |
| NAME        | Account owner's name ( <i>/etc/passwd</i> )     |
| OFFICE      |                                                 |
| EXT         |                                                 |
| PHONE       |                                                 |
| PATH        | Account directory's path ( <i>/etc/passwd</i> ) |
| SHELL       | UNIX shell ( <i>/etc/passwd</i> )               |
| PERMISSIONS |                                                 |

**UV.ACCOUNT Record Fields**

*The UV.FLAVOR File*

The UV.FLAVOR file is in the UV account. The UV.FLAVOR file dictionary contains X-descriptors that define each flavor. The UV.FLAVOR data file contains records that specify restrictions on creating or updating accounts. This file lets you choose the account flavor for an individual or for a group of users.



Each record in UV.FLAVOR can have one of the following types of record IDs:

| Record ID          | Description                              | Example     |
|--------------------|------------------------------------------|-------------|
| USER. <i>name</i>  | <i>name</i> is the login name of a user. | USER.alice  |
| GROUP. <i>name</i> | <i>name</i> is the name of a user group. | GROUP.users |
| OTHER              | A specially defined account.             | OTHER       |

#### UV.FLAVOR Record IDs

Each record has two fields. The second field specifies one of the six different flavors: IDEAL (UniVerse), INFORMATION, PICK, REALITY, PIOPEN, or IN2. The first field specifies one of the following codes:

| Code | Description                                                                            |
|------|----------------------------------------------------------------------------------------|
| C    | UniVerse prompts you to choose an account flavor when creating or updating an account. |
| F    | UniVerse automatically assigns the account flavor designated in field 2.               |
| N    | The user cannot create or update an account.                                           |

#### UV.FLAVOR: Field One

The following example is of a sample UV.FLAVOR file:

|                |        |             |
|----------------|--------|-------------|
|                | Access |             |
| UV.FLAVOR..... | Code.. | Flavor..... |
| GROUP.users    | F      | PICK        |
| OTHER          | C      |             |
| GROUP.demo     | F      | NEWACC      |

To prevent users creating or modifying an account, create an entry for them in the UV.FLAVOR file and set the access code to N.

To use a custom flavor, create an entry in the UV.FLAVOR file for users who will use the flavor, and set the access code to F. Enter the custom flavor name in field 2 of the UV.FLAVOR file.



### ***The UV.LOGINS File on Windows Platform***

The UV.LOGINS file is in the UV account only on Windows Platforms. It contains a list of users and the UniVerse accounts they log on to when they first connect to UniVerse through a telnet session. Use the Network Services option of the **UniVerse Admin Control Panel** to maintain this file. For information about the Network Services file, see Maintaining the hosts File in Chapter 19 of *Administering UniVerse*.

**Note:** *There is no UV.LOGINS file on UNIX systems.*

## **Essential UniVerse Files**

For users to work in the UniVerse environment, their current working directories must contain a number of UniVerse files, including the VOC file and its associated file dictionary. In addition, each UniVerse account is set up in a specified flavor of compatibility, such as IDEAL (UniVerse), PICK, or INFORMATION.

The system administrator does not set up the VOC file and its associated file dictionary. They are created when the user logs on to the new UniVerse account for the first time.

If the directory has not been set up as a UniVerse account, the system notifies the user that the account has not yet been set up. The user must answer the system prompts to create or update the VOC file.

### ***The VOC File***

The VOC file is created according to the restrictions specified in the UV.FLAVOR file. The master files used as templates for creating VOC files are in the file NEWACC.

If your VOC is being updated rather than created, replaced records are moved to the file &TEMP& to prevent them from being destroyed. The names of any records that are moved to &TEMP& are listed on your screen.



**Note:** *The VOC file defines the UniVerse account. The contents of the VOC file limits access to commands and files in a UniVerse account. Users cannot access any files or commands not defined in the VOC file of the account in which they are working.*

## *The UV.LOGIN and LOGIN Entries*

If the UniVerse command processor is specified as the account's command interpreter, UniVerse executes the UV.LOGIN entry in the VOC file of the UV account when the user logs on to the system. The UV.LOGIN entry can be a paragraph, a proc, a BASIC program, or a menu. It is typically a paragraph containing commands that establish systemwide defaults. After executing UV.LOGIN, UniVerse executes the LOGIN entry in the VOC file of the user's account.

The standard VOC file on UNIX systems contains a LOGIN entry that is analogous to the UNIX *.profile* file. The default LOGIN entry in the *sample* directory of the UV account is a paragraph similar to the following example:

```
LOGIN
001 PA
002 PTERM ERASE ON KILL ON WERASE ON RPRNT ON FLUSH ON LNEXT ON SUSP ON_
003 INTR ON QUIT ON STOP ON START ON EOF ON BRK OFF_
004 ECHO ON ECHO CTRL ON TABS ON CRMODE ON TYPE FAST LFDELAY 0 FFDELAY 2
005 UMASK 077
```

This LOGIN entry uses PTERM to set terminal characteristics, and it uses the UniVerse UMASK command to set the default file permission mask. These commands have the same function as the UNIX commands *stty* and *umask*.

Many of the functions performed by the LOGIN entry are identical to those performed in the UNIX *.profile* file. For example, the *stty* command in *.profile* determines which keys perform erase, kill, interrupt and quit operation on your terminal:

```
stty erase '^H' kill '^U' intr '^?' quit '^_' -tabs ff0 cr0 nl0
```

On Windows platforms, the default LOGIN entry in the *sample* directory is a paragraph similar to the following example:

```
LOGIN
001 PA
002 PTERM ERASE ON KILL ON WERASE ON RPRNT ON INTR ON_
003 ECHO ON ECHO CTRL
004 CLR
```

## **Controlling Access to UniVerse on UNIX Systems**

You can make UniVerse your default working environment by entering */usr/ibm/uv/bin/uv* as your default shell in the */etc/passwd* file. When you log in and out, you log directly in to and out of UniVerse.

If, on the other hand, the */etc/passwd* file specifies a UNIX shell (for example, */bin/sh*), you log in to a UNIX shell. You can then invoke the UniVerse environment with the *uv* command. Even if the */etc/passwd* file specifies a UNIX shell, your *.profile* or *.login* file can log you directly in to the UniVerse environment. To do that, add the following line to your *.profile*:

```
exec uv
```

The *exec* command replaces the current shell with the shell you specify, in this case *uv*. On exiting UniVerse, you also exit the system.

| Login Shell Specified in <i>/etc/passwd</i> | Initialization Files                                        | You log in...                                           | You log out...         |
|---------------------------------------------|-------------------------------------------------------------|---------------------------------------------------------|------------------------|
| <i>/usr/bm/uv/bin/uv</i>                    | LOGIN                                                       | Directly to UniVerse.                                   | To a UNIX login shell. |
| <i>/bin/sh</i>                              | <i>.profile</i>                                             | To a UNIX Bourne shell.                                 | To a UNIX login shell. |
| <i>/bin/sh</i>                              | <i>.profile</i> containing <i>exec uv</i>                   | To UniVerse. The UNIX login is transparent to the user. | To a UNIX login shell. |
| <i>/bin/csh</i>                             | <i>.cshrc</i><br><i>.login</i>                              | To a UNIX C shell.                                      | To a UNIX login shell. |
| <i>/bin/csh</i>                             | <i>.cshrc</i><br><i>.login</i> containing <i>uv</i> command | To UniVerse. The UNIX login is transparent to the user. | To a UNIX C shell.     |

**Login Shell and Environment on Exiting UniVerse**

**Note:** If you interrupt execution of the *.profile* or *.login* file (for example, by pressing the **Break** key) before the *uv* command is executed, you are left in a UNIX shell.



## Controlling Access to UniVerse on Windows Platforms

The UV.LOGINS file is used on Windows platforms to define how users connect to UniVerse via telnet sessions. Use the Network Services option of **UniAdmin** to specify how users should connect to UniVerse. For more information about the Network Services option, see Maintaining the hosts File in Chapter 19 of *Administering UniVerse*.

## Customizing a UniVerse Account

A valid UniVerse account always includes a VOC file and its associated file dictionary. The VOC file defines all the commands and keywords that can be used, and all the files that can be accessed from that account. UniVerse uses master files in the UV account directory to create the VOC files in all new accounts.

### *Choosing a UniVerse Flavor*

Any UniVerse account can be one of several standard flavors: IDEAL (UniVerse), IN2, INFORMATION, PICK, PIOPEN, or REALITY.

- The PIOPEN flavor is used for compatibility with PI/open.
- The INFORMATION flavor is used to maintain an environment compatible with Prime INFORMATION products.
- The IN2, PICK, and REALITY flavors are used for compatibility with the different versions of the Pick system. These flavors can be chosen by users who are more comfortable with a Pick system and want UniVerse to behave in the same way.
- The IDEAL flavor contains the best of both the Pick and Prime worlds.

New users are encouraged to choose the IDEAL UniVerse flavor.

## ***NEWACC Files***

The NEWACC file in the UV account contains the different VOC file templates for each flavor of UniVerse. UniVerse stores these templates as multiple data files of the NEWACC file. Each data file is a fully configured VOC template whose name corresponds to the flavor. To list the contents of the data file containing the template for IDEAL flavor VOC files, enter either of the following commands from the UV account:

```
>LIST NEWACC
>LIST NEWACC,NEWACC
```

To list the contents of the NEWACC template for INFORMATION flavor VOC files, enter:

```
>LIST NEWACC,INFORMATION
```

The VOC file can reference a particular VOC template as a single data file by using its full path in field 2 of the File Definition record. See the File Definition record for NEWACC in the VOC file in any UniVerse account other than the UV account. For example, this VOC entry points to the NEWACC template for PICK flavor VOC files:

```
NEWACC
001 F File
002 /usr/ibm/uv/NEWACC/PICK
003 /usr/ibm/uv/D_NEWACC
```

## ***Customizing NEWACC Files***

You can modify the standard NEWACC files to ensure that the VOC files of new accounts contain only the records you want. For example, you can remove records for commands that you do not want users to access, or you can add records for files that are needed for an application.

You can also create up to 27 additional customized NEWACC files (see *UniVerse System Description* for information about adding data files to a UniVerse file). Each NEWACC file is a template for a new flavor of UniVerse. For each new flavor, you must add an X-descriptor to the dictionary of the UV.FLAVOR file. The record ID of the X-descriptor is the name of the new NEWACC file, and field 2 contains the description of the new flavor. This description appears in the list of UniVerse flavors when you create new accounts. The following steps describe the easiest way to create a customized flavor:

1. Change to the UV account directory and invoke UniVerse:

```
cd /usr/ibm/uv
bin/uv
```

2. Make a copy of one of the standard NEWACC files. Do this by creating a new data file in NEWACC and copying the contents of the standard NEWACC file to the new data file:

```
>CREATE.FILE DATA NEWACC,MY.FLAVOR 3 23 4
Creating file "/usr/ibm/uv/NEWACC/MY.FLAVOR" as Type 3,
Modulo 23, Separation 4.
>COPY FROM NEWACC,INFORMATION TO NEWACC,MY.FLAVOR ALL
355 records copied.
```

3. Use the UniVerse Editor or ReVise to add, delete, or change standard VOC entries in your new flavor.
4. Use the UniVerse Editor to add an X-descriptor to the DICT of UV.FLAVOR:

```
>ED DICT UV.FLAVOR
Record name = MY.FLAVOR
New record.

----: I
0001=X
0002=My own custom UniVerse flavor
0003=
Bottom at line 2
----: FI
"MY.FLAVOR" filed in File "DICT UV.FLAVOR"
```

---

# Installing UniVerse Clients

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## Installing UniVerse Clients

The *UniVerse Clients* CD-ROM contains the following client software for use with Windows servers.

- UniAdmin
- UniVerse ODBC Client
- UniDK (Uni Development Kit)
- UniOLEDB
- UniDebugger
- Dynamic Connect

The **UniVerse Clients Setup** screen should appear automatically. If Auto Run is switched off, and the screen does not appear, choose the CD-ROM drive from **Explorer**, then choose **Install.exe**.

---

## Installing UniAdmin

Complete the following steps to install UniAdmin:

1. Check to see if any applications are running. IBM recommends that no applications be running during installation.
2. Start the installation by selecting **UniAdmin** from the **UniVerse Master Setup** screen. The **Welcome** screen appears.
3. Follow the instructions on the screen until the installation is complete.

To use **UniAdmin**, you must ensure that the UniRPC daemon is running on a UNIX server, or that the UniRPC service is running on a Windows server.

## Executing a Silent Installation for UniAdmin

A UniAdmin silent installation allows automated electronic software distribution. When using the silent installation, there is no need to monitor the installation setup or provide input to the installation process.

A silent installation does not prompt you for input, but gets input from the setup.iss file. You can either execute the installation and record the input to create a custom setup.iss file, or use the default setup.iss file shipped with the UniVerse client.

### *Using the setup.iss file*

To create the setup.iss file, copy the contents of the UniAdmin directory from the client CD to a location of your choice on your hard drive.

### *Using the Default setup.iss File*

To execute a silent installation using the default setup.iss file, enter the following command from the UniAdmin directory:

```
C:\IBM\UniAdmin\setup.exe -s
```

### *Using a Custom setup.iss File*

To create a custom setup.iss file, execute the following command from the location where you copied the UniAdmin directory:

```
C:\>setup.exe -f1\Directory_pathname\setup.iss -r
```

where the *Directory\_pathname* is the location where you want to create the setup.iss file, as shown in the following example:

```
C:\Test\UniAdmin>setup.exe -f1c:\Test\UniAdmin\setup.iss -r
```

The UniAdmin Welcome screen appears. Follow the installation prompts until the installation is complete.

To install UniAdmin using the custom setup.iss file, execute the following command from your UniAdmin directory:

```
C:\Directory_pathname>setup.exe -s
```

---

## Installing the UniVerse ODBC Client

Complete the following steps to install the UniVerse ODBC Client:

1. Check to see if any applications are running. IBM recommends that no Windows applications be running during the installation.
2. Start the installation by selecting **UniVerse ODBC Client** from the **UniVerse Master Setup** screen. The Welcome screen appears. Follow the instructions on the screen until the installation is complete.

## Executing a Silent Installation for UniVerse ODBC

A UniVerse ODBC silent installation allows automated electronic software distribution. When using the silent installation, there is no need to monitor the installation setup or provide input to the installation process.

A silent installation does not prompt you for input, but gets input from the setup.iss file. You can either execute the installation and record the input to create a custom setup.iss file, or use the default setup.iss file shipped with the UniVerse client.

### *Using the setup.iss file*

To create the setup.iss file, copy the contents of the UniVerse ODBC directory from the client CD to a location of your choice on your hard drive.

### *Using the Default setup.iss File*

To execute a silent installation using the default setup.iss file, enter the following command from the UniVerse ODBC directory:

```
C:\IBM\UniVerseODBC\setup.exe -s
```

### *Using a Custom setup.iss File*

To create a custom setup.iss file, execute the following command from the location where you copied the UniVerse ODBC directory:

```
C:\setup.exe -f1\Directory_pathname\setup.iss -r
```

where the *Directory\_pathname* is the location where you want to create the setup.iss file, as shown in the following example:

```
C:\Test\UniDK>setup.exe -f1c:\Test\UniVerseODBC\setup.iss -r
```

The UniVerse ODBC Welcome screen appears. Follow the installation prompts until the installation is complete.

To install UniVerse ODBC using the custom setup.iss file, execute the following command from your UniVerse ODBC directory:

```
C:\Directory_pathname>setup.exe -s
```

---

## Installing UniDK (Uni Development Kit)

Complete the following steps to install UniDK:

1. Check to see if any applications are running. IBM recommends that no applications be running during installation.
2. Start the installation by selecting **UniDK** from the **UniVerse Master Setup** screen. The **Welcome** screen appears.
3. Follow the instructions on the screen until the installation is complete.

To run applications developed with UniDK, you must ensure that the UniRPC daemon is running on a UNIX server, or the UniRPC service is running on a Windows server.

## Executing a Silent Installation for UniDK

A UniDK silent installation allows automated electronic software distribution. When using the silent installation, there is no need to monitor the installation setup or provide input to the installation process.

A silent installation does not prompt you for input, but gets input from the setup.iss file. You can either execute the installation and record the input to create a custom setup.iss file, or use the default setup.iss file shipped with the UniVerse client.

### *Using the setup.iss file*

To create the setup.iss file, copy the contents of the UniDK directory from the client CD to a location of your choice on your hard drive.

### *Using the Default setup.iss File*

To execute a silent installation using the default setup.iss file, enter the following command from the UniDK directory:

```
C:\IBM\UniDK\setup.exe -s
```

### *Using a Custom setup.iss File*

To create a custom setup.iss file, execute the following command from the location where you copied the UniDK directory:

```
C:\>setup.exe -f1\Directory_pathname\setup.iss -r
```

where the *Directory\_pathname* is the location where you want to create the setup.iss file, as shown in the following example:

```
C:\Test\UniDK>setup.exe -f1c:\Test\UniDK\setup.iss -r
```

The UniDK Welcome screen appears. Follow the installation prompts until the installation is complete.

To install UniDK using the custom setup.iss file, execute the following command from your UniDK directory:

```
C:\Directory_pathname>setup.exe -s
```

---

## Installing Dynamic Connect

Complete the following steps to install Dynamic Connect:

1. Check to see if any applications are running. IBM recommends that no applications be running during installation.
2. Start the installation by selecting **Dynamic Connect** from the **UniVerse Master Setup** screen. The **Welcome** screen appears.
3. Follow the instructions on the screen until the installation is complete.



---

## Installing UniDebugger

Complete the following steps to install UniDebugger:

1. Check to see if any applications are running. IBM recommends that no applications be running during installation.
2. Start the installation by selecting **UniDebugger** from the **UniVerse Master Setup** screen. The **Welcome** screen appears.
3. Follow the instructions on the screen until the installation is complete.

---

## About Windows Help

Windows Help is available on the UniVerse for Windows Platforms CD-ROM. The files are installed automatically with the software. Windows Help is provided for the following applications and APIs:

- UniAdmin
- InterCall
- UCI (Uni Call Interface)
- UniVerse ODBC Client
- UniObjects

When you use Windows Help for any of these applications, you get the standard Windows Help features, such as the menu bar and buttons.

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