



Rocket UniVerse

Installation Guide

Version 11.3.1

October 2016
UNV-1131-INST-1

Notices

Edition

Publication date: October 2016

Book number: UNV-1131-INST-1

Product version: Version 11.3.1

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Chapter 1: Introduction

This manual describes how to install Rocket UniVerse 11.3.1.

You can install UniVerse following the directions in the quick installation procedure as described in [Installing using the quick procedure, on page 12](#). 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. See the following sections for more information:

UNIX installations:

- [Installing UniVerse as root, on page 15](#)
- [Installing UniVerse as uvadm, on page 22](#)

Windows installations:

- [Installing UniVerse on Windows platforms, on page 32](#)

Beginning at UniVerse 10.3, you do not need to authorize UniVerse during the installation process. You have 10 days after installation to authorize UniVerse.

The UniVerse environment

UniVerse is a database management, development, and execution environment that is well suited for business applications. In a client/server environment, UniVerse functions as a relational database management system (RDBMS) server. It is simple enough to be used by people who are not programmers, yet powerful enough for experienced programmers to develop complex applications. As a tool for moving existing applications into open systems or for creating new applications, UniVerse has proven to be a productive development environment and an efficient execution environment. UniVerse provides easy-to-use access to complex open system technologies such as distributed processing, modern user interfaces, and the latest advances in hardware and operating systems.

Programmers can use the UniVerse BASIC programming language and the powerful facilities for stored command sequences and menu generation to develop business applications such as payroll, accounts receivable, inventory, sales tracking, and general ledger.

Users can use UniVerse SQL to define, query, and control the data in the database without changing existing UniVerse applications.

Installation type

The following types of installation procedures are available with UniVerse:

- Initial Installation – You are installing UniVerse for the first time on your system.
- Upgrade Installation – You are installing UniVerse 11.3.1 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

U2 ports UniVerse for UNIX products to many operating systems, such as AIX, HP, Solaris, Linux, and Windows platforms.

For operating system information, please see the U2 Product Availability Matrix at:

<https://rbc.rocketsoftware.com/buildmatrix.asp>

or contact U2askus@rs.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 parameters	Recommended minimum
SHMMAX	1073741824
SHMSEG	1024
SEMMSL	8
SEMMNI	256

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 order confirmation is emailed to you when you order UniVerse. This email lists customer information, hardware information, and the products and number of users you are authorized to install. Verify that the information on the email is correct. You will need this information when authorizing UniVerse.

Applicable platforms

UniVerse must be installed on a local, physical file system, including those within Virtual Machines. Installing UniVerse on a remote or network mounted file system will cause unpredictable problems during the execution of `uv.load` (the UniVerse installation and upgrade script).

You can install UniVerse on the following UNIX and Windows platforms.

UNIX platforms

- AIX IBM RISC System/6000
- HP-UX Itanium/Integrity Server

Note: Starting at UniVerse 11.3.0, for HP Itanium only, the HP library called MallocNextGen is required. If this library is not found specifically in the path `/usr/lib/hpux64/libmallocng.so`, then the UniVerse install or upgrade will abort prior to making any modifications to the system. This library incorporates a better memory manager.

- Sun SOLARIS Ultra-Sparc
- Sun SOLARIS x86
- Redhat Linux
- SuSE Linux

Windows platforms

- Windows 7*, 8.1, 10
- Windows Server 2008*, 2011 SBS, 2012

Note: At 11.3.1, Windows 7 and Windows Server 2008 are not supported, and all releases are 64-bit only.

The XDEMO account

Starting at UniVerse 11.3.1, you can use the XDEMO account to test and use UniVerse commands. The XDEMO account is a group of test files that are installed automatically with UniVerse on Windows. For UNIX platforms, the XDEMO account is optional.

For more information about how to use XDEMO, see the *User Reference Guide*.

The minimum generally available database releases required for U2 Python support are:

- UniVerse: 11.3.1

Note: If moving to a UniVerse version prior to 11.3.1, the U2 Python examples will be included but cannot be used.

For UniVerse UNIX/Linux, the XDEMO account is included with the XD `cpio` file.

On Windows, the account is included by default. If you are moving XDEMO to another system, it is recommended to run `UPDATE .ACCOUNT` on the new system.

Chapter 2: Installing UniVerse 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/uv` and `/usr/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.

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`, or as a `uvadm` group user, 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.

Preinstallation tasks for UniVerse on UNIX

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

- How to log on as `root` or `uvadm`.
- The type of installation you are performing and the prerequisites for that type:
 - For an initial installation, see [Preinstallation tasks for an initial installation, on page 10](#).
 - For an upgrade installation, see [Preinstallation tasks for an upgrade installation, on page 10](#).
- How to download the installation media.
- The location of the UniVerse directories.
- The type of shell with which you are working.
- The operating system requirements for your platform. See [Operating system requirements, on page 6](#).

If you are installing UniVerse on a Linux platform and are using UniVerse 10.x or earlier, you must create a symbolic link for the `uncompress` using the following command:

```
ln -s gunzip uncompress
```

It is recommended that the `umask` value be set to a minimum value of `0022`. To check the current value, type `umask` at your UNIX/Linux OS prompt.

Note: UniVerse telnet services will not work if SELINUX is enabled. We recommend disabling SELINUX if you are planning to use the UniVerse telnet services. Responses are blocked in non-secure and secure modes if SELINUX is enabled. Use `echo 0 >/selinux/enforce` to disable SELINUX temporarily to verify that UniVerse telnet services work correctly. To re-enable SELINUX use `echo 1 >/selinux/enforce`.

Beginning at UniVerse 10.3, you do not need to authorize UniVerse during the installation process. You have 10 days after installation to authorize UniVerse.

Preinstallation tasks for an initial installation

Before you begin the installation process for the first time, prepare the UniVerse home directory with adequate disk space.

The preferred home directory is `/usr/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 installation media are in a compressed format and have a `.Z` or `.gz` 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.

Preinstallation tasks for an upgrade installation

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
- Uninstall any optional UniVerse products (for example, NLS, as described in [Uninstalling NLS, on page 47](#)) that are installed on an earlier release of UniVerse.

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`.

The `uv.load` script

Execute the UniVerse installation while you are logged on as root, `uvadm`, or a `uvadm` group user. Use the `cpio` or `tar` command to load a short installation script called `uv.load`, and 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 installing UniVerse for the first time, you exit the `uv.load` script, then manually execute the `uv.install` script.
- If you log on as `uvadm`, or as a `uvadm` group user, and are upgrading an existing UniVerse system, you must use `uv_upgrade` to run `uv.load`, which then automatically executes 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
<code>/usr/uv</code>	The UniVerse home directory.
<code>/usr/uv/bin</code>	Contains the executables that make up the UniVerse product.
<code>/usr/uv/sample</code>	Contains various prototype files.
<code>/usr/uv/NEWACC</code>	Contains the templates for the supported flavors of the VOC file.
<code>/usr/uv/terminfo</code>	Contains the UniVerse terminal characteristics database.
<code>/usr/uv/catdir</code>	The system catalog.
<code>/usr/unishared</code>	Contains subdirectories and files shared by UniVerse and UniData systems.

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`, `BP.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/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, uvadm, or a uvadm group user, 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 Extensible Administration Tool 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.

The `uv_upgrade` command

Execute the `uv_upgrade` command while you are logged in as uvadm, or as a member of the uvadm group, to upgrade UniVerse installations. The `uv_upgrade` command is used to ensure that uvadm users have the appropriate administrative privileges necessary to upgrade existing UniVerse installations.

The `./uv_upgrade ./uv.load` command invokes the `uv.load` script, which loads the files from the installation image. Users who are logged on as uvadm or as a member of the uvadm group must use the `uv_upgrade` command to upgrade existing UniVerse installations.

Note: If UniVerse 11.1 or later is installed, root, uvadm, or uvadm group users can run `uv_upgrade`. If UniVerse 10.3 or earlier is installed, only the root or uvadm user can run `uv_upgrade`.

Installing using the quick procedure

The quick installation procedure should only be used by users experienced with the procedure for configuring UNIX and installing UniVerse.

Prerequisites

Before you begin the installation, make sure you rebuild your kernel with adequate values for your environment. See [Preinstallation tasks for UniVerse on UNIX, on page 9](#) and *Administering UniVerse* for information about kernel parameter settings.

Make sure no one is using UniVerse during the installation procedure. If this is an upgrade installation, make sure any optional products (such as NLS) are already installed on your system are uninstalled before proceeding with the following steps.

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

About this task

The installation procedure requires input several times. Normally, you respond to the prompts by pressing Enter to select the default action.

Procedure

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

```
#cd /tmp
```

2. Download the installation image.
3. If using FTP, create a directory on the UNIX machine (example used in the following step is /data/ftp_directory) and ftp the files from the PC to the UNIX directory in binary format.
4. Use the following `uv.load` command to install from the installation image:

```
cpio -ivcBdum uv.load < /data/ftp_directory/STARTUP
```

5. Load UniVerse by executing the `uv.load` command, as shown in the following example.

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

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

```
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):
```

6. Decide how you want UniVerse owned and administered as:

- 1: Install UniVerse and keep the root user as the owner and administrator of UniVerse.
- 2: 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):
```

Press Enter to shell out of the installation procedure and create a new user uvadm in the /etc/passwd file. When you exit from doing this, you return to the installation procedure.

The `uv.load` command loads the UniVerse release files and runs `uv.install`, which installs UniVerse.

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.

7. 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/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.

8. 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.

9. Remember the configuration code that 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**.

10. To obtain your authorization code, go to:

US: <https://rbc.rocketsoftware.com/authprod.asp>

International: <https://rbcint.rocketsoftware.com/authprod.asp?js=y>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code. The serial number on the website should include a -UV extension.

11. 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.

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.
```

12. Shut down and restart UniVerse:

- a. Change to the UniVerse home directory:

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

- b. Enter the following command to shut down UniVerse:

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

- c. Enter the following command to restart UniVerse:

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

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

Installing UniVerse as root

You can execute the UniVerse installation by logging on as root, as uvadm, or as a uvadm group user. The following sections describe the steps you must complete to install UniVerse as root, either as an initial installation or an upgrade installation.

For steps about initial installation, see [Installing UniVerse as an initial installation for root, on page 15](#).

For steps about an upgrade installation, see [Installing UniVerse as an upgrade installation for root, on page 18](#).

Installing UniVerse as an initial installation for root

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

Prerequisites

Review the prerequisites as described in [Preinstallation tasks for an initial installation, on page 10](#).

Before you begin the installation, make sure you rebuild your kernel with adequate values for your environment. See [Preinstallation tasks for UniVerse on UNIX, on page 9](#) and *Administering UniVerse* for information about kernel parameter settings.

Make sure no one is using UniVerse during the installation procedure. If this is an upgrade installation, make sure any optional products (such as NLS) are already installed on your system are uninstalled before proceeding with the following steps.

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

Procedure

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

```
#cd /tmp
```

2. Download the installation image.
3. If using FTP, create a directory on the UNIX machine (example used in the following step is /data/ftp_directory) and ftp the files from the PC to the UNIX directory in binary format.
4. Use the following `uv.load` command to install from the installation image:

```
cpio -ivcBdum uv.load < /data/ftp_directory/STARTUP
```

5. Load UniVerse by executing the `uv.load` command, as shown in the following example.

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

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

```
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):

6. Decide how you want UniVerse owned and administered as:

- 1: Install UniVerse and keep the root user as the owner and administrator of UniVerse.
- 2: 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):
```

Press Enter to shell out of the installation procedure and create a new user uvadm in the /etc/passwd file. When you exit from doing this, you return to the installation procedure.

The `uv.load` script displays the current installation settings, as displayed 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/uv
                                (currently: Not Installed.)
2) UniVerse-UniData shared directory: /usr/unishared
                                (currently: Not Installed.)
3) Compile termInfo definitions:  true
4) Install Media Path:           /cdrom
5) Long File Names:             OFF
6) Install XDEMO:                YES
Enter a field number to change, q to abort installation, or press <Return>
to begin installation of UniVerse:
```

7. Enter the number of the value that 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 installation media path. Beginning at UniVerse 11.2.3, the Install Media Path defaults to the directory where the `uv.load` script is extracted if it contains the UniVerse media files. Otherwise, it defaults to `/cdrom`. Prior to 11.2.3, the default location was `/cdrom`.

5: The default file creation characteristics. You can toggle between OFF, and ON NEWACC. The default is LONGNAMES OFF. The ON NEWACC setting enables LONGNAMES in all data accounts after the account has been updated to the current version. For detailed information about LONGNAMES, see *Administering UniVerse*.

6. Whether or not to install the XDEMO account for examples. You cannot change this value.

8. When the display values are correct, press Enter to begin the installation process.

If an SQL catalog does not exist and the uvsql user name does not exist in the `/etc/passwd` file, the following message appears:

```
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.

After all groups are installed, the Upgrade UniVerse License screen appears.

9. Enter the license activation information as requested by the prompts:
 - Serial number – include the numeric portion only
 - Maximum number of local users
 - Expiration date, or press Enter for the default
 - Package list – use the following formats:
 - PACKAGE_NAME:USER_COUNT,PACKAGE_NAME:USER_COUNT
 - Connection Pooling – CONNPL:###
 - UVNET – UVNET:9999 (always use 9999)
 - EDA – EDA:1 (To enable EDA)
 - AUDIT:1 (To enable AUDIT)
 - SUBKEY:1 (To enable SUBKEY)
 - CURE:1 (To enable SystemCure)
 - Number of device licenses for which you are authorized – set to 10 in Workgroup and Enterprise editions. Set to 0 on Server edition, unless the add-on is used.

Press Enter. The licensing process displays a configuration code.

10. Remember the configuration code that 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:

US: <https://rbc.rocketsoftware.com/authprod.asp>

International: <https://rbcint.rocketsoftware.com/authprod.asp?js=y>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code. The serial number on the website should include a -UV extension.

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.

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.
```

13. Shut down and restart UniVerse:

- a. Change to the UniVerse home directory:

```
# cd /usr/uv
```
- b. Enter the following command to shut down UniVerse:

```
# bin/uv -admin -stop
```
- c. 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, enter 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. When you install UniVerse on your system for the first time, you must add the UniRPC daemon's port to the /etc/services file.

Note: This step is automatically done for you starting at UniVerse 11.2.0.

Add the following line to the /etc/services file:

```
uvrpc 31438/tcp # uvrpc port
```

Note: You can check to see if the entry already exists in the /etc/services file by executing the following command:

```
cat /etc/services |grep 31438
```

Once the port information is added to the /etc/services file, you can start the RPC Service from the UniVerse System Administration Menu in the UniVerse account.

To do this, perform the following steps:

- a. Select **Package** → **RPC Administration** → **Start the rpc daemon**.
A dialog box opens and asks for file name information.
- b. Either add a new file name or accept the default. Add the correct file name information and then press Enter.
A window opens and asks if you want to start the daemon. Click **Yes**. The UniRPC daemon will now start automatically when UniVerse restarts.

Installing UniVerse as an upgrade installation for root

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

Prerequisites

Review the prerequisites as described in [Preinstallation tasks for an upgrade installation, on page 10](#).

Before you begin the installation, make sure you rebuild your kernel with adequate values for your environment. See [Preinstallation tasks for UniVerse on UNIX, on page 9](#) and *Administering UniVerse* for information about kernel parameter settings.

Make sure no one is using UniVerse during the installation procedure. If this is an upgrade installation, make sure any optional products (such as NLS) are already installed on your system are uninstalled before proceeding with the following steps.

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

Procedure

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

```
#cd /tmp
```

2. Download the installation image.
3. If using FTP, create a directory on the UNIX machine (example used in the following step is /data/ftp_directory) and ftp the files from the PC to the UNIX directory in binary format.
4. Use the following `uv.load` command to install from the installation image:

```
cpio -ivcBdum uv.load < /data/ftp_directory/STARTUP
```

5. Load UniVerse by executing the `uv.load` command, as shown in the following example.

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

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

```
UniVerse Upgrade Procedure
```

```
=====
```

```
The current upgrade is being done as 'root'. The
existing installed uniVerse (at /usr/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):
```

6. Decide how you want UniVerse owned and administered as:

- 1: Install UniVerse and keep the root user as the owner and administrator of UniVerse.
- 2: 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):
```

Press Enter to shell out of the installation procedure and create a new user uvadm in the /etc/passwd file. When you exit from doing this, you return to the installation procedure.

The `uv.load` script displays the current installation settings, as displayed 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/uv
                               (currently: Not Installed.)
2) UniVerse-UniData shared directory: /usr/unishared
                               (currently: Not Installed.)
3) Compile termInfo definitions:  true
4) Install Media Path:           /cdrom
5) Long File Names:             OFF
6) Install XDEMO:               YES
Enter a field number to change, q to abort installation, or press <Return>
to begin installation of UniVerse:
```

7. Enter the number of the value that 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.

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         att3bl    qt102      viewpoint60
M=           att4410    regent20   vp
Mu           av        regent25   vp60
a210         dialup    regent40   vp60:regent40
a210:adm5    dumb      regent60   vt100
a210:hz1410  fenix      s4         vt100-am
a210:hz1500  gt         sun        vwpt
a210:qt102   hft         sun-cmd    vwpt60
a210:regent25 hz1410    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 `Y` to compile and install `terminfo.src`. Enter `N` to change option 3 from true to false.

4: The installation media path. Beginning at UniVerse 11.2.3, the Install Media Path defaults to the directory where the `uv.load` script is extracted if it contains the UniVerse media files. Otherwise, it defaults to `/cdrom`. Prior to 11.2.3, the default location was `/cdrom`.

5: If UniVerse is running at the start of the upgrade and `LONGNAMES` was previously enabled, the value for prompt 5 shows the present value. Otherwise, it is set to `OFF`. You cannot change this value.

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

6. Whether or not to install the XDEMO account for examples. You cannot change this value.

8. When the display values are correct, press `Enter` to begin the installation process.

If an SQL catalog does not exist and the uvsql user name does not exist in the `/etc/passwd` file, the following message appears:

```
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.

9. If you see the following message, shut down and restart UniVerse, then proceed to step 15.

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

10. A prompt opens and asks if you want to update the `uvdr.config` and `uvodbc.config` files. If you use U2 Data Replication or BCI (Basic Call Interface), select **No**; otherwise, answer **Yes** to overwrite these files.

After all groups are installed, the Upgrade UniVerse License screen appears.

11. Enter the license activation information as requested by the prompts:

- Serial number – include the numeric portion only
- Maximum number of local users
- Expiration date, or press Enter for the default
- Package list – use the following formats:
 - PACKAGE_NAME:USER_COUNT,PACKAGE_NAME:USER_COUNT
 - Connection Pooling – CONNPL:###
 - UVNET – UVNET:9999 (always use 9999)
 - EDA – EDA:1 (To enable EDA)
 - AUDIT:1 (To enable AUDIT)
 - SUBKEY:1 (To enable SUBKEY)
 - CURE:1 (To enable SystemCure)
- Number of device licenses for which you are authorized – set to 10 in Workgroup and Enterprise editions. Set to 0 on Server edition, unless the add-on is used.

Press Enter. The licensing process displays a configuration code.

12. Remember the configuration code that 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:

US: <https://rbc.rocketsoftware.com/authprod.asp>

International: <https://rbcint.rocketsoftware.com/authprod.asp?js=y>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code. The serial number on the website should include a -UV extension.

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.

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.
```

15. Shut down and restart UniVerse:

- a. Change to the UniVerse home directory:

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

- b. Enter the following command to shut down UniVerse:

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

- c. Enter the following command to restart UniVerse:

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

16. 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, enter 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.

Installation is now complete. You can confirm your licensing is properly installed by typing the command CONFIG at TCL.

Installing UniVerse as uvadm

You can execute the UniVerse installation by logging in as root, uvadm or as a uvadm group user. The following sections describe the steps you must complete to install UniVerse as uvadm, either as an initial installation or an upgrade installation.

For steps about initial installation, see [Installing UniVerse as an initial installation for uvadm, on page 23](#).

For steps about an upgrade installation, see [Installing UniVerse as an upgrade installation for uvadm, on page 26](#).

Installing UniVerse as an initial installation for uvadm

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

Prerequisites

Review the prerequisites as described in [Preinstallation tasks for an initial installation, on page 10](#).

You must 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.

Before you begin the installation, make sure you rebuild your kernel with adequate values for your environment. See [Preinstallation tasks for UniVerse on UNIX, on page 9](#) and *Administering UniVerse* for information about kernel parameter settings.

Make sure no one is using UniVerse during the installation procedure. If this is an upgrade installation, make sure any optional products (such as NLS) are already installed on your system are uninstalled before proceeding with the following steps.

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

Procedure

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. Download the installation image.
3. If using FTP, create a directory on the UNIX machine (example used in the following step is /data/ftp_directory) and ftp the files from the PC to the UNIX directory in binary format.
4. Use the following `uv.load` command to install from the installation image:

```
cpio -ivcBdum uv.load < /data/ftp_directory/STARTUP
```

5. Load UniVerse by executing the `uv.load` command, 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/uv
                               (currently: Not Installed.)
2) UniVerse-UniData shared directory: /usr/unishared
                               (currently: Not Installed.)
3) Compile termInfo definitions:  true
4) Install Media Path:           /cdrom
5) Long File Names:             OFF
6) Install XDEMO:                YES
Enter a field number to change, q to abort installation, or press <Return>
to begin installation of UniVerse:
```

6. Enter the number of the value that 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 installation media path. Beginning at UniVerse 11.2.3, the Install Media Path defaults to the directory where the `uv.load` script is extracted if it contains the UniVerse media files. Otherwise, it defaults to `/cdrom`. Prior to 11.2.3, the default location was `/cdrom`.
- 5: The default file creation characteristics. You can toggle between OFF, and ON NEWACC. The default is LONGNAMES OFF. The ON NEWACC setting enables LONGNAMES in all data accounts after the account has been updated to the current version. For detailed information about LONGNAMES, see *Administering UniVerse*.
6. Whether or not to install the XDEMO account for examples. You cannot change this value.
7. When the display values are correct, press Enter to begin the installation process.

If an SQL catalog does not exist and the `uvsql` user name does not exist in the `/etc/passwd` file, the following message appears:

```
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 'uvadm' 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 `uvadm` 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.

After the installation process installs 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/uv/uv.install'.
```

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

8. Log in as root and execute the script:
 - a. Log in as root.

```
$ su
$ password:
```
 - b. Change directory to the UniVerse home directory.

```
# cd /usr/uv
```
 - c. Execute the `uv.install` script:

```
# ./uv.install
```

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

9. Enter the license activation information as requested by the prompts:
 - Serial number – include the numeric portion only
 - Maximum number of local users
 - Expiration date, or press Enter for the default
 - Package list – use the following formats:
 - `PACKAGE_NAME:USER_COUNT,PACKAGE_NAME:USER_COUNT`
 - Connection Pooling – `CONNPL:###`

- UVNET – UVNET:9999 (always use 9999)
- EDA – EDA:1 (To enable EDA)
- AUDIT:1 (To enable AUDIT)
- SUBKEY:1 (To enable SUBKEY)
- CURE:1 (To enable SystemCure)
- Number of device licenses for which you are authorized – set to 10 in Workgroup and Enterprise editions. Set to 0 on Server edition, unless the add-on is used.

Press Enter. The licensing process displays a configuration code.

10. Remember the configuration code that 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:

US: <https://rbc.rocketsoftware.com/authprod.asp>

International: <https://rbcint.rocketsoftware.com/authprod.asp?js=y>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code. The serial number on the website should include a -UV extension.

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.

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.
```

13. Shut down and restart UniVerse:

- a. Enter the following command to shut down UniVerse:

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

- b. 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, enter 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. When you install UniVerse on your system for the first time, you must add the UniRPC daemon's port to the `/etc/services` file.

Note: This step is automatically done for you starting at UniVerse 11.2.0.

Add the following line to the `/etc/services` file:

```
uvrpc 31438/tcp # uvrpc port
```

Note: You can check to see if the entry already exists in the `/etc/services` file by executing the following command:

```
cat /etc/services |grep 31438
```

Once the port information is added to the `/etc/services` file, you can start the RPC Service from the UniVerse System Administration Menu in the UniVerse account.

To do this, perform the following steps:

- a. Select **Package** → **RPC Administration** → **Start the rpc daemon**.
A dialog box opens and asks for file name information.
- b. Either add a new file name or accept the default. Add the correct file name information and then press Enter.
A window opens and asks if you want to start the daemon. Click **Yes**. The UniRPC daemon will now start automatically when UniVerse restarts.

Installing UniVerse as an upgrade installation for uvadm

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

Prerequisites

Review the prerequisites as described in [Preinstallation tasks for an initial installation, on page 10](#).

You must 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.

Before you begin the installation, make sure you rebuild your kernel with adequate values for your environment. See [Preinstallation tasks for UniVerse on UNIX, on page 9](#) and *Administering UniVerse* for information about kernel parameter settings.

Make sure no one is using UniVerse during the installation procedure. If this is an upgrade installation, make sure any optional products (such as NLS) are already installed on your system are uninstalled before proceeding with the following steps.

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

Procedure

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


```
$ login: uvadm
uvadmuvadm's password:
```
2. Change directories to any directory to which you have write permissions, as shown in the following example:


```
$ cd /tmp
```
3. Download the installation image.
4. If using FTP, create a directory on the UNIX machine (example used in the following step is `/data/ftp_directory`) and ftp the files from the PC to the UNIX directory in binary format.
5. Use the following `uv.load` command to install from the installation image:


```
cpio -ivcBdum uv.load uv.upgrade < /data/ftp_directory/STARTUP
```

6. Execute the `./uv_upgrade` command to invoke the `uv.load` script, with the release media still in the device:

```
$ ./uv_upgrade
```

or

```
./uv_upgrade ./uvload
```

A screen similar to the following appears:

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

- 1) Keep 'uvadm' as the owner and administrator of uniVerse.
The current installation continues uninterrupted.
- 2) Make 'root' the new owner and administrator of uniVerse.
The current installation continues uninterrupted.
- 3) Stop the installation.

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

7. Choose 1 to install UniVerse and make uvadm the owner and administrator of UniVerse.

`uv.load` displays the current installation settings:

```
The current settings of the available options are:
UniVerse installer : root
UniVerse administrator : uvadm uid=1000 gid=100
```

- 1) UniVerse home directory: /usr/uv2)
- 2) UniVerse-UniData shared directory: /usr/unishared
- 3) Compile terminfo definitions: true
- 4) Install Media Path /cdrom
- 5) Long File Names OFF
- 6) Install XDEMO: YES

```
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.

8. Enter the number of the value that 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.

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:hz1410 fenix         s4           vt100-am
a210:hz1500 gt            sun          vwpt
```

```

a210:qt102      hft          sun-cmd      vwpt60
a210:regent25  hz1410      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 **Y** to compile and install `terminfo.src`. Enter **N** to change option 3 from true to false.

4: The installation media path. Beginning at UniVerse 11.2.3, the Install Media Path defaults to the directory where the `uv.load` script is extracted if it contains the UniVerse media files. Otherwise, it defaults to `/cdrom`. Prior to 11.2.3, the default location was `/cdrom`.

5: If UniVerse is running at the start of the upgrade and `LONGNAMES` was previously enabled, the value for prompt 5 shows the present value. Otherwise, it is set to `OFF`. You cannot change this value.

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

6. Whether or not to install the `XDEMO` account for examples. You cannot change this value.

9. When the display values are correct, press **Enter** to begin the installation process.

If an SQL catalog does not exist and the `uvsql` user name does not exist in the `/etc/passwd` file, the following message appears:

```

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 'uvadm' 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 `uvadm` 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.

10. If you see the following message, shut down and restart UniVerse, then proceed to step 15.

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

11. A prompt opens and asks if you want to update the `uvdr.config` and `uvodbc.config` files. If you use U2 Data Replication or BCI (Basic Call Interface), select **No**; otherwise, answer **Yes** to overwrite these files.

After all groups are installed, the Upgrade UniVerse License screen appears.

12. Enter the license activation information as requested by the prompts:

- Serial number – include the numeric portion only
- Maximum number of local users
- Expiration date, or press **Enter** for the default
- Package list – use the following formats:
 - `PACKAGE_NAME:USER_COUNT,PACKAGE_NAME:USER_COUNT`
 - Connection Pooling – `CONNPL:###`

- UVNET – UVNET:9999 (always use 9999)
- EDA – EDA:1 (To enable EDA)
- AUDIT:1 (To enable AUDIT)
- SUBKEY:1 (To enable SUBKEY)
- CURE:1 (To enable SystemCure)
- Number of device licenses for which you are authorized – set to 10 in Workgroup and Enterprise editions. Set to 0 on Server edition, unless the add-on is used.

Press Enter. The licensing process displays a configuration code.

13. Remember the configuration code that 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**.

14. To obtain your authorization code, go to:

US: <https://rbc.rocketsoftware.com/authprod.asp>

International: <https://rbcint.rocketsoftware.com/authprod.asp?js=y>

Click **Authorize Products**. Follow the instructions on the website to obtain your authorization code. The serial number on the website should include a -UV extension.

15. 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.

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.
```

16. Shut down and restart UniVerse:

- a. Change to the UniVerse home directory:

```
$ cd /usr/uv
```

- b. Enter the following command to shut down UniVerse:

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

- c. Enter the following command to restart UniVerse:

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

17. 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, enter LOGIN.

18. To exit the UniVerse environment, enter Q at the UniVerse prompt.

A standard shell prompt appears, as shown in the following example.

```
>Q
$
```

19. 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.

Installation is now complete. You can confirm your licensing is properly installed by typing the command `CONFIG` at `TCL`.

Additional installation information

The `uv.load` command

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

```
uv.load {-buildno} {-defaults} {-longnames} {-nochecksum} {-nocpio} {-version} {-g group_name | -g group_number} {-nls | -fnls} {uvhome}
```

The following table describes each parameter of the syntax:

Option	Description
-buildno	Returns the build number of the <code>uv.load</code> script. This option is available at UniVerse 11.2.3 or later.
-defaults	Specifies that all defaults are to be used—no prompting by the script. This allows for automatic installation.
-longnames	Forces <code>LONGNAMES</code> to <code>ON NEWACC</code> .
-nochecksum	Specifies to skip the checksum step. This should be done only after consulting with U2 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.
-version	Returns the version of the <code>uv.load</code> script. This option is available at UniVerse 11.2.3 or later.
-g <i>group_name</i> <i>group_number</i>	Specifies the group name or group number on installation files. Any group permissions set specifically during the <code>uv.install</code> script will remain with the administrator's default group value. The value entered for the <i>group_name</i> or <i>group_number</i> is not validated. If not used, the default group is 1.
-nls -fnls	The <code>-nls</code> option installs the NLS package during installation and changes the <code>NLSMODE</code> parameter in the <code>uvconfig</code> file to 1. On an upgrade, this option aborts the upgrade, as NLS is normally uninstalled first. The <code>-fnls</code> option forces the installation of NLS even on an upgrade. When using this option on upgrades, <code>NLSMODE</code> is not changed. These options are available at UniVerse 11.3.1 or later.

Option	Description
<i>uvhome</i>	Specifies the UniVerse home directory if it is different from either the installed UniVerse or <code>/usr/uv</code> .

UniVerse system administration menus (UNIX only)

On UNIX systems, you can use the UniVerse System Administration menus in addition to XAdmin to administer UniVerse. While these menus are now deprecated and no longer updated, they are still functional and let you perform normal UniVerse maintenance and some UNIX system administration without having to use XAdmin (the preferred option in most cases), UNIX shell commands, or file formats.

The UniVerse System Administration menus are available only to UniVerse Administrators working in the UV account. To have access to all files used for system administration, you must log in as a UniVerse Administrator.

Once you are logged on, activate the System Administration menus from the UNIX shell by changing to the UV account directory (usually `/usr/uv`):

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

Then use the command `bin/uv`:

```
# bin/uv
```

From an account in the UniVerse environment, you can use the `LOGTO` command to log to the UV account.

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 *Administering UniVerse*.

Chapter 3: Installing UniVerse on Windows platforms

The UniVerse Release 11.3.1 for Windows platforms installation image contains a program that manages the installation. Start this installation program as an administrator, then choose the software you want to install from the UniVerse setup wizard.

This section describes how to install UniVerse release 11.3.1 on an NTFS partition on a server running Windows. The installation procedure varies according to whether you are installing, reinstalling, or upgrading.

Preinstallation tasks for UniVerse on Windows

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

- The type of installation you are performing and the prerequisites for that type:
 - For an initial installation, see [Installing UniVerse as an initial installation, on page 33](#).
 - For an upgrade installation or reinstallation, see [Installing UniVerse as an upgrade or reinstallation, on page 32](#).
 - For a silent installation, see [Installing UniVerse as a silent installation, on page 34](#).
- How to download the installation media.
- The operating system requirements for your platform. See [Operating system requirements, on page 6](#).

Beginning at UniVerse 10.3, you do not need to authorize UniVerse during the installation process. You have 10 days after installation to authorize UniVerse.

Installing UniVerse as an upgrade or reinstallation

Use the install wizard to install UniVerse 11.3.1 as an upgrade or reinstallation.

Prerequisites

Review the prerequisites as described in [Preinstallation tasks for UniVerse on Windows, on page 32](#).

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

Make sure no one is using UniVerse during the installation procedure. If this is an upgrade installation, make sure any optional products (such as NLS) are already installed on your system are uninstalled before proceeding with the following steps.

1. Log on to Windows as Administrator.
2. Make sure that no users are connected to the UniVerse server by using the LISTU command to list all users who are connected.
3. Stop all UniVerse services as follows:
 - a. Select **Start** → **All Programs** → **Rocket U2** → **UniVerse** → **UniVerse Control**.
 - b. If UniVerse is not started, click **Stop All Services**.
4. Proceed with the installation as described [Installing UniVerse as an initial installation, on page 33](#).

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.

Installing UniVerse as an initial installation

Use the install wizard to install UniVerse 11.3.1 for the first time.

Prerequisites

Review the prerequisites as described in [Preinstallation tasks for UniVerse on Windows, on page 32](#).

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

Procedure

1. Download the installation image and start the **AutoRun.exe** program.
2. Click **Install Rocket UniVerse**, and follow the steps in the wizard to complete the installation.
3. Start all UniVerse services as follows:
 - a. Select **Start → All Programs → Rocket U2 → UniVerse → UniVerse Control**.
 - b. 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:
 - Select **Start → All Programs → Rocket U2 → UniVerse → UniVerse Shell**.
 - Start a telnet session from a client (see [Starting a UniVerse session over telnet, on page 36](#)).
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.
 - a. Select **Start → Devices and Printers → Add Printer**.
 - b. 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.

Installing UniVerse as a silent installation

A silent installation runs without prompting you for input. To run a silent installation, you must set up a response file to answer the prompts automatically, then run through a normal installation to save the responses in a `Setup.iss` file in the `C:\Windows` directory. The `Setup.iss` response file stores information about the data entered and options selected by the user at runtime so that the next time you run the installation, you can run it silently and avoid the prompts.

Prerequisites

Review the prerequisites as described in [Preinstallation tasks for UniVerse on Windows, on page 32](#).

Review [Applicable platforms, on page 7](#) and verify that your platform meets the UniVerse installation requirements.

Procedure

1. Download the installation image. As an administrator, open a command prompt and `cd` to the installation image's `UNIVERSE/I386` directory.
2. Run `setup.exe /r`. The `/r` (or `-r`) switch records the responses. Proceed through the dialogs and complete the installation. This process created a `Setup.iss` file in the `C:\Windows` directory, as well as a `setup.log` file. You can change these default file names and location using the following steps:

- a. If you want to use a different name than the default `Setup.iss` name, use the `/f1` or `-f1` switch. For example:

```
setup.exe /r /f1"c:\temp\UVSetup.iss"
```

This option creates a `UVSetup.iss` file in the `c:\temp` directory. Note that there is no space between the `/f1` switch and the file name.

- b. If you want to specify a log file name other than the default `setup.log` file, use the `/f2` switch. For example:

```
setup.exe /r /f2"c:\temp\uvsetup.log"
```

This option creates a `uvsetup.log` file in the `c:\temp` directory. Again, there is no space between the `/f2` switch and the file name.

Note: The installer will start a separate process and exit before the installer is complete. To prevent this, use the `/sms` switch to pause the installer until it is complete. This option is useful for scripting purposes.

3. When the installation is complete, navigate to the `C:\Windows` directory. Copy the `Setup.iss` file and paste it into the installation's directory.

The following example shows a basic `Setup.iss` response file.

```
[InstallShield Silent]
Version=v7.00
File=Response File
[File Transfer]
OverwrittenReadOnly=NoToAll
[{E7EA0E92-3AFF-11D4-8961-00500462FF70}-DlgOrder]
Dlg0={E7EA0E92-3AFF-11D4-8961-00500462FF70}-AskYesNo-0
Count=13
Dlg1={E7EA0E92-3AFF-11D4-8961-00500462FF70}-SdWelcome-0
Dlg2={E7EA0E92-3AFF-11D4-8961-00500462FF70}-SdLicense2-0
Dlg3={E7EA0E92-3AFF-11D4-8961-00500462FF70}-LICENSE_DIALOG-0
Dlg4={E7EA0E92-3AFF-11D4-8961-00500462FF70}-ASK_DEST_PATH_DIALOG-0
```

```

Dlg5={E7EA0E92-3AFF-11D4-8961-00500462FF70}-GENERAL_CHECK_DIALOG-1
Dlg6={E7EA0E92-3AFF-11D4-8961-00500462FF70}-GENERAL_CHECK_DIALOG-2
Dlg7={E7EA0E92-3AFF-11D4-8961-00500462FF70}-GENERAL_CHECK_DIALOG-3
Dlg8={E7EA0E92-3AFF-11D4-8961-00500462FF70}-GENERAL_CHECK_DIALOG-4
Dlg9={E7EA0E92-3AFF-11D4-8961-00500462FF70}-SdSelectFolder-0
Dlg10={E7EA0E92-3AFF-11D4-8961-00500462FF70}-SdStartCopy-0
Dlg11={E7EA0E92-3AFF-11D4-8961-00500462FF70}-GENERAL_CHECK_DIALOG-5
Dlg12={E7EA0E92-3AFF-11D4-8961-00500462FF70}-SdFinish-0
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -AskYesNo-0]
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -SdWelcome-0]
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -SdLicense2-0]
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -LICENSE_DIALOG-0]
SerialNo=123456789
UserLimit=10
UVNETUserLimit=10
ConnectionPooling=10
DeviceLicense=10
ExpirationDate=01/01/2500
EDA=1
AUDIT=1
SUBKEY=1
PYTHON=1
MVCURE=1
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -ASK_DEST_PATH_DIALOG-0]
UniVerseDir=C:\U2\UV
UniSharedDir=C:\U2\unishared
PythonDir=C:\U2\UV\python
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -GENERAL_CHECK_DIALOG-1]
Check_Box_1=0
Check_Box_2=0
Check_Box_3=0
Check_Box_4=0
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -GENERAL_CHECK_DIALOG-2]
Check_Box_1=0
Check_Box_2=0
Check_Box_3=0
Check_Box_4=0
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -GENERAL_CHECK_DIALOG-3]
Check_Box_1=0
Check_Box_2=0
Check_Box_3=0
Check_Box_4=0
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -GENERAL_CHECK_DIALOG-4]
Check_Box_1=1
Check_Box_2=1
Check_Box_3=1
Check_Box_4=0
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -SdSelectFolder-0]
szFolder=Rocket U2\UniVerse
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -SdStartCopy-0]
Result=1
[Application]

```

```

Name=UniVerse
Version=11.3
Company=Rocket Software
Lang=0009
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -GENERAL_CHECK_DIALOG-5]
Check_Box_1=0
Check_Box_2=0
Check_Box_3=0
Check_Box_4=0
Result=1
[ {E7EA0E92-3AFF-11D4-8961-00500462FF70} -SdFinish-0]
Result=1
bOpt1=0
bOpt2=0

```

4. **Optional:** Verify that the silent installation works by uninstalling UniVerse, then running `setup.exe /s` from the command prompt. The `/s` (or `-s`) switch runs the installer with the silent option.
5. The next time you install UniVerse, run `setup.exe /s` to install it silently. If you changed the file name or location using the `/f1` switch, run `setup.exe /s /f1"path"`.

Results

When you use a silent installation, UniVerse creates a `silent-install.log` file. Open and check this file to monitor the progress of the silent installation. The message "UniVerse silent installation finished" is written to the log when the silent installation is finished. If any errors occur during the silent installation, the message "UniVerse silent installation aborted" is written to the log.

Starting a UniVerse session over telnet

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

Procedure

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:\U2\UV
```

Updating license information

Use the XAdmin License tool to authorize UniVerse. After you have opened the License pane, verify that the number of users and expiration date displayed in the License pane matches the configuration on the Product Configuration sheet shipped with U2.

Prerequisites

If you are using UVNet, you must authorize both the UniVerse database and UVNet.

Procedure

1. To access the License tool in XAdmin, open XAdmin and then double-click the server you want to use.
The server starts. The Admin Tasks pane opens and displays the database type that you are using.
2. From the **Admin Tasks** pane, double-click **License**.

The screenshot shows the 'UniVerse License' configuration window. The 'Update' tab is active, displaying the following fields and options:

- Serial Number:** 987654321
- UniVerse User Limit:** 32
- UVNET User Limit:** 0
- Connection Pooling:** 0
- Device License:** 0
- Options:** EDA, AUDIT, SUBKEY, PYTHON, SystemCure for UniVerse
- Expiration Date:** Month 4, Day 1, Year 4010

Buttons at the bottom right include 'Refresh', 'Save', and 'Close'.

3. Click the **Update** tab, and in the **Serial Number** field, enter the UniVerse serial number.
4. In the **UniVerse User Limit** field, enter the number of users for which you are licensed.
5. In the **UVNET User Limit** field, enter the number of UVNet users for which you are licensed. If you are not licensed for any UVNet users, enter 0.
6. In the **Connection Pooling** field, enter the number of connection pooling licenses. If you are not licensed for any connection pools, enter 0.
7. In the **Device License** field, enter the number of device licenses for which you are authorized.
8. Select the check boxes for any of the applicable features you are running:
 - EDA
 - AUDIT
 - SUBKEY
 - PYTHON
 - SystemCure for UniVerse
9. In the **Expiration Date** field, update the expiration date of the license if necessary.
10. If you have not yet authorized UniVerse, click the **Authorize** tab, and enter the code in the **Authorization Code**. See [Obtaining an authorization code, on page 38](#).

Note: In previous versions of UniVerse, if you move the installation to different hardware and start UniVerse, you might encounter an "invalid .uvconfig" error and UniVerse fails to start. At 11.2.5 and 11.3.x, the 10-day temporary license period prevents this message. When moved to different hardware, UniVerse will become unauthorized and enter the 10-day temporary license period. You need to reauthorize then restart UniVerse within 10 days to avoid the expiration of the temporary license. When starting UniVerse sessions, reminder messages display indicating the status of the temporary license.

Obtaining an authorization code

After updating all of the license information, you must obtain an authorization code. You must authorize UniVerse within 10 days of installation.

1. From the XAdmin menu, double-click **Licenses**, and then click **Authorize**.
2. Copy the configuration code shown in the **Configuration Code** field.
3. Go to the Rocket Authorization page, listed below, and follow the instructions on the website to obtain and copy the authorization code.
 - US: <https://rbc.rocketsoftware.com/authprod.asp?js=y>
 - International: <https://rbcint.rocketsoftware.com/authprod.asp?js=y>
4. Paste the authorization code into the **Authorization Code** field.

Chapter 4: 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

To create an account, use the Accounts tab from XAdmin, as described in the following steps.

About this task

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

Procedure

1. Open XAdmin and then select the server you want to use.
The Admin Tasks pane opens and displays the database type that you are using.
2. From the Admin Tasks pane, double-click **Accounts**.
The Accounts tab opens on the right.
3. From the Accounts tab, click **Add**.
4. In the Add a New U2 Account dialog box, enter the name of the account in the **Account Name** field.
5. Enter a destination for the new account in the **Account Path** field. You can enter the full path of the directory, or click **Browse** 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 `UV.ACCOUNT` file, but no changes are made to the existing account files.

6. Select one of the following flavors from the **Account Flavor** list:
 - **IDEAL:** Select this flavor if you are new to UniVerse. It contains the best features of all the flavors.
 - **INFORMATION:** Select this flavor for compatibility with Prime INFORMATION.
 - **PIOPEN:** Select this flavor for compatibility with PI/open.
 - **PICK:** Select this flavor for compatibility with Pick or Advanced Pick.
 - **REALITY:** Select this flavor for compatibility with Microdata REALITY.
 - **IN2:** Select this flavor for compatibility with IN2.
7. Click **Finish**.

UniVerse creates the account in the chosen 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 or modify the details of an account, use the Accounts tab from XAdmin, as described in the following steps.

Prerequisites

You must have an account created before you can view the details. For more information, see [Creating a new UniVerse account, on page 39](#).

Procedure

1. From the Accounts tab in XAdmin, select the account that you want to view or update, and click **Detail**.
2. Modify the account settings that you want, except for the account flavor setting and account path. Changes are saved when you click **OK**.

Deleting an account

To delete an account, use the Accounts tab from XAdmin, as described in the following steps.

Prerequisites

You must have an account created before you can delete one. For more information, see [Creating a new UniVerse account, on page 39](#).

Procedure

1. From the Accounts tab in XAdmin, select the account that you want to delete, and click **Delete**.
2. Click **Delete**.
3. In the Delete Account dialog box that appears, select whether to retain the directory or delete the directory.
 - **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.

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

4. Click **OK**. Click **Yes** at the confirmation message to remove the account.

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, on page 42](#).

Using XAdmin, 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 XAdmin, as described in [Creating a new UniVerse account, on page 39](#).

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 XAdmin to do this. For more information about the Network Services option, see *Administering UniVerse*.

UniVerse account control files

XAdmin 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 XAdmin, so it is important to create accounts using XAdmin.

Although the account control files are used primarily by XAdmin, 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 XAdmin. 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 (/etc/passwd)
MAX	
MIN	
AGE	
UID	User ID number (/etc/passwd)
GID	Group ID number (/etc/passwd)
NAME	Account owner's name (/etc/passwd)
OFFICE	
EXT	
PHONE	
PATH	Account directory's path (/etc/passwd)
SHELL	UNIX shell (/etc/passwd)
PERMISSIONS	

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

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.

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

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

To prevent users from 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 platforms

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 *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 UniVerse BASIC program, or a menu. It is typically a paragraph containing commands that establish system-wide defaults. After executing `UV . LOGIN`, UniVerse executes the `LOGIN` entry in the `VOC` file of the user's account.

```
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/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 / etc/passwd	Initialization files	You log in...	You log out...
<code>/usr/uv/bin/uv</code>	<code>LOGIN</code>	Directly to UniVerse.	To a UNIX login shell.
<code>/bin/sh</code>	<code>.profile</code>	To a UNIX Bourne shell.	To a UNIX login shell.
<code>/bin/sh</code>	<code>.profile</code> containing <code>exec uv</code>	To UniVerse. The UNIX login is transparent to the user.	To a UNIX login shell.
<code>/bin/csh</code>	<code>.cshrc</code> <code>.login</code>	To a UNIX C shell.	To a UNIX login shell.
<code>/bin/csh</code>	<code>.cshrc</code> <code>.login</code> containing <code>uv</code> command	To UniVerse. The UNIX login is transparent to the user.	To a UNIX C shell.

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 XAdmin to specify how users should connect to UniVerse. For more information about the Network Services option, see *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/uv/NEWACC/PICK
003 /usr/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/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/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"
```

Chapter 5: Installing NLS

Complete the following steps to install the NLS package.

This task applies to UNIX and Linux platforms only. On Windows platforms, install NLS from the UniVerse installation program at the same time you install UniVerse. When installation is complete, use the NLS Administration menus to configure NLS to suit your system.

Note: Starting at 11.3.1 for UNIX and Linux platforms, you can install NLS using the `uv.load` script with the `-nls` or `-fnls` options. For more information about these options, see [The `uv.load` command, on page 30](#).

1. As a UniVerse administrator, log on to the UniVerse account directory and invoke UniVerse.
2. From the **UniVerse System Administration** menu, select **Package**.
3. From the **Package** menu, enter `I` to select the **Install package** menu.
4. At the "Name of package to install?" prompt, enter `NLS`.
5. At the "Device to load package" prompt, select `CDROM`, to see of list of devices, enter `*`.
6. At the "Are you sure you want to install this package" prompt, press Enter to accept the default **Yes**.
7. At the "Installation of package NLS Complete" prompt, press Enter.
8. Press Esc to return to the UniVerse prompt.
9. Log out of UniVerse.
10. Go to the UniVerse home directory (`cat / .uvhome`) at the UNIX/Linux level.
11. Without users logged in, run `bin/uvregen`.
12. Shut down and restart UniVerse.

Uninstalling NLS

Complete the following steps to uninstall the NLS package.

This task applies to UNIX and Linux platforms only.

1. As a UniVerse administrator, log on to the UniVerse account directory and invoke UniVerse.
2. From the **UniVerse System Administration** menu, select **Package**.
3. From the **Package** menu, enter `D` to select the **De-install package** menu.
4. At the "Name of package to de-install?" prompt, enter `NLS`.
5. At the "Are you sure you want to de-install this package" prompt, press Enter to accept the default **Yes**.
6. Press Esc to return to the UniVerse prompt.
7. Log out of UniVerse.
8. Go to the UniVerse home directory (`cat / .uvhome`) at the UNIX/Linux level.
9. Without users logged in, run `bin/uvregen`.
10. Shut down and restart UniVerse.