
Eloquence Installation and Configuration

B.06.32

Edition E1202

© Copyright 2002 Marxmeier Software AG.

Legal Notices

The information contained in this document is subject to change without notice.

MARXMEIER SOFTWARE AG MAKES NO WARRANTY OF ANY KIND WITH REGARD TO THIS MATERIAL, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Marxmeier Software AG shall not be liable for errors contained herein or for incidental or consequential damages in connection with the furnishing, performance or use of this material.

This document contains proprietary information which is protected by copyright. All rights reserved. Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws

Restricted Rights Legend

Use, duplication, or disclosure by the U.S. Government is subject to restrictions as set forth in subparagraph (c) (1) (ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013. Rights for non-DOD U.S. Government Departments and Agencies are as set forth in FAR 52.227-19 (c) (1,2).

Acknowledgments

© Copyright Marxmeier Software AG 2002. All Rights Reserved.

Marxmeier Software AG
Besenbruchstrasse 9
42285 Wuppertal
Germany

Eloquence is a trademark of Marxmeier Software AG in the US and other countries.

© Copyright Hewlett-Packard Company 1990-2002. All Rights Reserved.

This software and documentation are based in part on HP software and documentation under license from Hewlett-Packard Company. HP is a trademark of Hewlett-Packard Company.

Printing History

The manual printing date indicates its current edition. The printing date will change when a new edition is printed. Minor changes may be made at reprint without changing the printing date. New editions are complete revisions of the manual. The dates on the title page change only when a new edition or a new update is published.

Manual updates may be issued between editions to correct errors or document product changes. Manuals that are published on the Eloquence website (www.hp-eloquence.com/doc) may be updated more often, please visit this website periodically for the most recent versions. To ensure that you receive the updated or new editions, you should also subscribe to the appropriate product support service.

The software code printed alongside the date indicates the version level of the software product at the time the manual or update was issued. Many product updates and fixes do not require manual changes and, conversely, manual corrections may be done without accompanying product changes. Therefore, do not expect a one to one correspondence between product updates and manual updates.

First Edition	Apr 1990	A.01.00
Second Edition	July 1991	A.03.00
Third Edition	1995	A.05.00
Fourth Edition	July 1997	A.06.00
Fifth Edition	October 1997	A.06.00
Sixth Edition (E1202)	December 2002	B.06.32

Printed in the Federal Republic of Germany.

Printing History

Table of Contents

1 Installing Eloquence	9
Introduction	10
Eloquence A.06.00 Introduction	11
Eloquence Media	14
Eloquence documentation	15
The Eloquence web site	17
Eloquence license scheme	18
2 Installing Eloquence on the HP-UX platform	21
Installation Overview	22
HP-UX version 9.X	24
HP-UX version 10.X	26
Configuring the HP-UX system	28
Configuring the User Environment	34
Configuring the eloqsd server	35
Configuring the eloqdb6 server	46
Configuring the eloqdb5 server	53
Customizing the Eloquence Configuration Files	59

Contents

Configuring the GUI Server	64
3 Installing Eloquence on the Windows 32 bit platform	73
Installation on Windows NT and Windows 95	74
The Setup Program	76
Configuring Windows NT and Windows 95	82
Configuring the eloqsd service	84
Configuring the eloqdb6 service	97
Customizing the Eloquence Configuration Files ...	106
Configuration of the GUI Server	110
4 Installing Eloquence on the Windows 16 bit platform	121
Installation on Windows 3.1x	122
The Setup Program	123
Configuring Windows 3.1x	127
Configuration of the GUI Server	129
5 Installing Eloquence on the Linux platform	139
Installation on a Linux system	140
Installation	142
Configuring your System	144

Contents

Configuring the User Environment	145
Configuring the eloqsd server	146
Configuring the eloqdb6 server	157
Customizing the Eloquence Configuration Files ...	164
Configuring the GUI Server	169

Contents

Installing Eloquence

This chapter provides an overview on the installation and configuration of the Eloquence software.

Introduction

This chapter provides an overview on installing and configuring the Eloquence A.06.00 software on your system.

- Eloquence A.06.00 Introduction
- Eloquence media
- Eloquence documentation
- The Eloquence web site
- The Eloquence license scheme

Since installation and system configuration is platform dependend, separate instructions for each supported platform are provided in subsequent chapters.

The information in this manual is directed to the system administrator for the Eloquence software. Some basic knowledge about operating the system is assumed.

What is Eloquence

Eloquence is a highly integrated applications development and runtime environment which significantly improves productivity. Developers can design and implement prototypes or customize existing programs easily. Since Eloquence was released in 1990, thousands of installations have confirmed this.

Recognized by software houses internationally, it is considered a powerful, reliable and flexible base for cost effective development and maintenance of commercial applications. A host of features, not found in such a combination in other programs, makes Eloquence unique and well suited to most customers needs.

Eloquence A.06.00 Introduction

Eloquence A.06.00 provides important enhancements over previous versions while keeping its strength:

- Eloquence A.06.00 includes a graphical development environment on the Windows platform.
- Eloquence A.06.00 is now available for the Windows NT and Linux platform in addition to HP-UX.
- Eloquence includes a new database system and is still able to access Eloquence databases from former releases.
- Additional protected program format.
- New user based licensing
- Eloquence now includes all development components. There is no runtime-only version anymore.
- Eloquence A.06.00 is compatible to previous releases.
- Complete online documentation is included

Eloquence A.06.00 is intended to coexist with a previous release on the same system (which may be required for a transition period). It is installed under `/opt/eloquence6` instead of the usual `/opt/eloquence` directory. Any previous Eloquence installation is not affected.

The eloqsd server

Beginning with this release, the former eloqd server has been renamed to eloqsd. This has been done to improve the interoperability of Eloquence A.06.00 with previous releases on the same system.

When a system runs both the A.06.00 and a former Eloquence release (which may be required during a transition time), there would be several eloqd processes. While this is harmless by itself, a lot of shell scripts including the Eloquence startup and shutdown scripts and the Eloquence installation scripts were simply checking for an eloqd and killing it on purpose.

The eloqsd server is an important part of Eloquence. It is responsible for the following task:

- Eloqsd coordinates the TASKID values (UNIX systems only).
- Eloqsd provides file sharing capabilities for the new graphical Eloquence development environment.

Installing Eloquence

Eloquence A.06.00 Introduction

- Eloqsd is used to start eloqcore processes in the background.
- Eloqsd is used to count active users and does validate it against available user licenses.
- Eloqsd optionally provides a HTTP interface so server status information can be queried with a web browser.

Eloquence A.06.00 implements file sharing capabilities for the new graphical development environment through the eloqsd server. This makes it independent of the availability of specific network file systems (NFS/ SMB) and overcomes inappropriate limitations.

- File names are case sensitive
- No limitations on file names, except they may not include a slash (used as directory separator) and a NUL character.
- There is a consistent authorization in a heterogeneous environment
- National characters are translated according to local conventions. So a client using the ISO 8859-1 character set encoding and a local user using a different character set encoding would see a consistent file name.
- Usable on a WAN connection

Running an eloqsd server on your system is not mandatory unless you are using eloq (providing virtual terminal capabilities on UNIX systems). However, when no eloqsd process is active, TASKID values are no longer unique and are set to 1 by default.

In order to run the eloqsd server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqsd TCP service
- Configuring the eloqsd server
- Configuring the eloqsd server startup

The eloqdb6 server

The eloqdb6 server is the new Eloquence A.06.00 data base server. In previous Eloquence releases the database was implemented as a shared process where each database client contained a common part of the database engine.

The Eloquence A.06.00 database uses a client/ server approach. This provides better performance since less synchronization between processes is required and the database server process can use dedicated system resources allocated for it.

The main objectives for the new implementation were:

- Compatibility: The new database is transparent to existing Eloquence programs.
- Improved database security. This includes both, access control and protection against corruption due to program or system failures.
- Better performance for large databases.

- Transaction logging and recovery
- A portable and extensible architecture

In order to run the eloqdb6 server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqdb TCP service
- Configuring the eloqdb6 server
- Configuring the eloqdb6 server startup

The eloqdb5 server

The eloqdb5 server is only available on the HP-UX platform and provides access for Eloquence A.06.00 to Eloquence A.05.xx databases. It is only available for the HP-UX platform.

In order to run the eloqdb5 server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqdb5 TCP service
- Configuring the eloqdb5 server
- Configuring the eloqdb5 server startup

Eloquence Media

Eloquence is usually delivered on CD-ROM media which includes the on-line documentation and the executables for all platforms. In addition, a DDS tape is available for the HP-UX platform which provides a subset of the Eloquence product for the HP-UX platform. The DDS media is intended for customers which neither have a CD-ROM drive connected to their system nor have a system connected to the local network which provides a CD-ROM drive.

CD-ROM media contents

The Eloquence CD-ROM media provides the following components:

- The Eloquence A.06.00 product for the HP-UX, Windows and Linux platform.
- The Eloquence A.05.12 product for the HP-UX platform. Since customers will continue to use Eloquence A.05.xx for a transition period it is at your option which Eloquence version you install.
- The Eloquence on-line documentation in PDF, HTML and Postscript format.
- Adobe Acrobat Reader for the HP-UX, Windows and Linux platform.
- Contributed software. Please note, that this is not part of the Eloquence product and is not supported by the HP Support Organization.
 - Samba for the HP-UX platform enables you share disk space and printers connected to your HP-UX system with Windows based PCs. Samba is free software and the source code is available on the Internet at various places. In addition it can be obtained from Marxmeier Software GmbH for the copying costs.
 - The SQL/R product from Marxmeier Software GmbH. SQL/R provides SQL access to your Eloquence database

DDS media contents

Eloquence is available on DDS media for the HP-UX platform. The DDS media provides the same contents as the CD-ROM and is recorded in tar format. To obtain files from the DDS media, you need to extract them into a temporary place. Most directories include a file README which describe the directory contents.

Eloquence documentation

Eloquence no longer includes printed documentation by default (it is available as a separate option). Instead all documentation is available on-line in different formats.

- Adobe PDF** You can view or print the documentation using the Acrobat Reader software which is included on the CD-ROM media or available free for almost all platforms on the Adobe web site (<http://www.adobe.com/prodindex/acrobat/readstep.html>). The Acrobat Reader does also include a plugin for the Netscape Navigator and Microsoft Internet Explorer web browsers so you can use a web browser to view the PDF documentation.
- HTML** You can use your web browser to read the documentation. You need a web browser which is capable to handle frames such as Netscape Navigator 2.0 or Microsoft Internet Explorer 3.0 or above.
- Postscript** The documentation is included in Postscript format so it can be easily printed on a Postscript printer. To print on a non Poscript printer you can use the Acrobat Reader on Windows to print the PDF documentation. Otherwise you can use the free ghostscript to convert the Postscript files into a printer specific format.

The Adobe PDF documentation provides the manuals in the same format as the printed documentation (its generated from the print files). The HTML documentation provides the same content but has been converted to on-line format. We recommend to install the Eloquence documentation on your web server, so it is available to all users instead of installing it locally on each computer.

NOTE:

The Eloquence online documentation requires a frame capable Web browser, such as Netscape Navigator 2.0 or the Microsoft Internet Explorer 3.0 and later releases. The integrated online help does currently only work with Netscape Navigator 3.0 and above. It uses OLE calls and can not be used with another browser.

Installing the Acrobat Reader Software

The Eloquence CD-ROM media includes the Acrobat Reader for the Windows, HP-UX and Linux platform in the `/acroread/reader` directory. Please refer to the documentation in the corresponding directory for information on installation.

The Acrobat Reader Software includes a plugin for the Netscape Navigator or the Microsoft Internet Explorer, so you can use view the PDF documentation in your web browser.

Installing Eloquence
Eloquence documentation

The Acrobat Reader software for additional platforms is available on the Adobe web site. The Acrobat Reader software is copyrighted by Adobe and is not a part of the Eloquence product.

In addition, Adobe Postscript drivers for Windows 3.1 and Windows 95 are included in the directory /acroread/drivers. Please refer to the documentation in the corresponding directory for information on installation.

The Eloquence web site

Eloquence is present on the Internet and has its own web site. If you are connected to the Internet, please point your browser at the URL

`http://www.hp-eloquence.com`

The Eloquence web site provides complete information on Eloquence ranging from marketing and sales information, upcoming events to patches and support notes.

The Eloquence mailing List

The Eloquence mailing list was formed to support Eloquence programmers and users in their daily work. It is intended as an *enhancement* to the Eloquence support channel. Eloquence support is responsible for helping you in case of trouble and to solve your immediate problem. This mailing is intended to share knowledge and ideas with other Eloquence users.

So if you have a question like "*How could i ...*" or "*Why doesn't this work ...*" this list is the place to ask. Other welcome topics include the discussion about Eloquence features and how you would like Eloquence to evolve in the future.

Please refer to the URL

`http://www.hp-eloquence.com/eloquence-list.html`

for more information.

Eloquence license scheme

In order to use the Eloquence software, you need to provide a license key on each system where you intend to run Eloquence server software on. With Eloquence A.06.00 it is *not* required to install a license key on each system running Eloquence unless you intend to run Eloquence server software.

When you install Eloquence on a system for the first time, a temporary license key is generated which will expire after 30 days.

If Eloquence A.05.02 or above is already installed on your system, no temporary license key is generated, because you installed Eloquence before. However, you can simply re-use your license key from your current installation. Simply copy the license file from `/opt/eloquence/licence` to `/opt/eloquence6/license` (please note the different spelling of licence vs. license).

In order to request your permanent license key, please fill out the "Permanent License Request" form included with the software and send it to the address below:

Fax +49 202 2431420

Mail Marxmeier Software AG
Attn. Eloquence Support
Besenbruchstrasse 9
D-42285 Wuppertal
Germany

After you received your permanent license key, you must add it to your license file in order to activate it. The location of the Eloquence license file depends on operating system revision:

HP-UX 10.x `/etc/opt/eloquence6/license`

HP-UX 9.x `/opt/eloquence6/etc/license`

Windows NT The file `license` is located in the `etc` subdirectory of the Eloquence installation path.

Linux `/etc/opt/eloquence6/license`

The license file is a plain text file which contains all licences which apply to the Eloquence product. The utility `/opt/eloquence6/etc/chklic` may be used to check the licence file.

Example license file contents

```
B1368B A.05.10 none 0-0-0 0-0-0 0 51036b7bf2f1f21b7d40c37ea230165e
```

Please refer to `/opt/eloquence6/newconfig/config/license` for a detailed description of the license file format.

Installing Eloquence
Eloquence license scheme

Installing Eloquence on the HP-UX platform

This chapter covers the installation of Eloquence on the HP-UX platform

- Software installation
- Configuring the HP-UX operating system
- Configuring Eloquence

Installation Overview

This chapter describes the installation of the Eloquence product on the HP-UX platform, the configuration of the HP-UX operating system and the configuration of the Eloquence software on HP-UX.

With the release of HP-UX 10.x, Hewlett-Packard has introduced a new filesystem layout paradigm, modelled after SVR4 and OSF. The model provides many benefits, such as separating the operating system from applications and aligning HP-UX with an industry-accepted file system layout. Eloquence follows the HP-UX 10.x file system conventions and provides the same file structure with HP-UX 9.x and HP-UX 10.x.

Eloquence A.06.00 on the HP-UX platform requires HP-UX release 9.0 or later. Eloquence A.06.00 is installed in the `/opt/eloquence6` directory and has no impact on a previously existing Eloquence installation.

Eloquence is installed and updated by the usual operating system tools. The installation tool depend on the operating system version:

HP-UX 9.x	<code>/etc/update</code>
HP-UX 10.x	<code>/usr/sbin/swinstall</code>

Please read the Eloquence release notes *before* installing or upgrading Eloquence as the release notes may include additional or more recent information.

Updating from HP-UX 9.x to HP-UX 10.x

If you install Eloquence on HP-UX 9.x and update to HP-UX 10.x subsequently, you should reinstall the Eloquence software using `swinstall`. Eloquence expects its configuration files in the directory `/etc/opt/eloquence` when running on HP-UX 10.x instead of `/opt/eloquence/etc` when running on HP-UX 9.x. It also requires the existence of the directory `/var/opt/eloquence`. Reinstalling Eloquence with `swinstall` does ensure the appropriate configuration. Your configuration files are copied automatically by the installation program to the new location. You should delete them afterwards manually from `/opt/eloquence/etc`.

NOTE:

To get Eloquence properly running under HP-UX 10.x, it is recommended to install the transition links on the HP-UX operating system.

Updating from previous Eloquence revision

If you are updating from a previous Eloquence revision, there are some special considerations which must be taken into account.

Updating from Eloquence revision before A.05.02

- Eloquence is installed under /opt/eloquence6 instead of /usr/eloquence. The old Eloquence installation must be deleted manually if it is no longer used (please make a backup).
- Eloquence uses a new licence scheme. Instead of "branding" the executable files with a system id, a licence file is now present in the /etc/opt/eloquence/ (HP-UX 10.x) or /opt/eloquence/etc/ (HP-UX 9.x) directory. During installation, a temporary license key is installed (which will expire after 30 days). You need to request your permanent license after the installation has finished.

As a benefit of this approach, the usual operating system tools for software management can be used and the product media are no longer machine specific.

- The Eloquence configuration files have changed. We recommend to start with the recent configuration files and merge your old configuration manually.
- Please note, that the HP-UX kernel configuration requirements have changed from previous Eloquence revisions.

Updating from Eloquence revision A.05.02 or above

- Eloquence is installed under /opt/eloquence6 instead of /opt/eloquence. The installation directory has been changed, so that Eloquence A.06.00 and a previous Eloquence revision can exist on the same system (which may be required during a transition periode).
- When Eloquence A.06.00 is installed, usually no temporary license key is generated, because you installed Eloquence before. However, you can simply re-use your license key from your current installation. Simply copy the license file from /opt/eloquence/license to /opt/eloquence6/license (please note the different spelling of licence vs. license).
- The Eloquence configuration files have changed. While the user specific configuration file (.eloqrc) is still compatible, the global eloq.config is different. We recommend to start with the recent configuration files and merge your old configuration manually.
- Please note, that the HP-UX kernel configuration requirements have changed from previous Eloquence revisions.

HP-UX version 9.X

Installing from CD-ROM media

As “superuser” follow the steps below to install the Eloquence software.

- ❑ Mount the CD-ROM media.

```
mount /dev/dsk/c3d0s2 /cdrom
```

where */dev/dsk/c3d0s2* is the device file associated with the CD-ROM drive and */cdrom* is the directory where the CD-ROM should be mounted. The Eloquence software for the HP-UX platform is in the **A0600/hpux** subdirectory.

- ❑ Start “update(1m)” by typing:

```
/etc/update
```

To install the Eloquence software, follow the directions below:

- Select “Change Source or Destination ->”.
- Select “From Tape Device to Local System ...”.
- Tab to the “Source” field and enter the following:

```
/cdrom/A0600/hpux/B1368B.UPDT;1
```

where */cdrom* is the directory where the cdrom is mounted. Because HP-UX does not support the Rock-Ridge CD-ROM extensions, file names are upper case with a trailing ;1.

- Press “Done”.
- Select “Select/View Partitions and Filesets ...”
- Activate the **B1368B** partition to install the Eloquence product.
- Select “Start Loading”.
- Type “y” to “Start loading filesets now ?”.
- Check */tmp/update.log* to make sure installation completed with no error.

Installing from DDS media

As “superuser” follow the steps below to install the Eloquence software.

- ❑ Insert the Eloquence DDS tape into your tape drive and extract the software from tape to a temporary location.

```
cd /tmp
```



```
tar xf /dev/rmt/0m A0600/hpux/B1368B.updt
```

where */dev/rmt/0m* is your DDS tape device file.

- Start “update(1m)” by typing:

```
/etc/update
```

To install the Eloquence software, follow the directions below:

- Select “Change Source or Destination ->”.
- Select “From Tape Device to Local System ...”.
- Tab to the “Source” field and enter the following:

```
/tmp/A0600/hpux/B1368B.updt
```
- Press “Done”.
- Select “Select/View Partitions and Filesets ...”
- Activate the **B1368B** partition to install the Eloquence product.
- Select “Start Loading”.
- Type “y” to “Start loading filesets now ?”.
- Check */tmp/update.log* to make sure installation completed with no error.

- After installation has completed you should remove the temporary file.

```
rm -r /tmp/A0600
```

HP-UX version 10.X

As “superuser” follow the steps below to install the Eloquence software.

Installing from CD-ROM media

As “superuser” follow the steps below to install the Eloquence software.

- ❑ Mount the CD-ROM media.

```
mount /dev/dsk/c1t2d0 /cdrom
```

where */dev/dsk/c1t2d0* is the device file associated with the CD-ROM drive and */cdrom* is the directory where the CD-ROM should be mounted. The Eloquence software for the HP-UX platform is in the **A0600/hpux** subdirectory.

- ❑ Start “swinstall(1m)” by typing:

```
/usr/sbin/swinstall -s /cdrom/A0600/hpux/B1368B.SD\;1
```

where */cdrom* is the directory where the cdrom is mounted. Because HP-UX does not support the Rock-Ridge CD-ROM extensions, file names are upper case with a trailing ;1. Please note, that the ';' has a special meaning to the shell and must be escaped with a backslash.

To install the Eloquence software, follow the directions below:

- In the Software Selection Window, highlight to select the **B1368B** product to install the Eloquence development product.
- Then choose the “Mark for Install” item from the Actions Menu. The “Marked?” column will be set to “Yes”.
- Select the “Install (analysis...)” item from the Actions Menu. When the analysis is finished with no error, i.e. Status:Ready, click OK.
- Click Yes in the Confirmation window to begin the actual installation.
- When the installation is completed, a dialog is displayed to notify you that the install task is completed. You may exit then.

Installing from DDS media

- ❑ Insert the Eloquence DDS tape into your tape drive and extract the software from tape to a temporary location.

```
cd /tmp  
tar xf /dev/rmt/0m A0600/hpux/B1368B.sd
```

where */dev/rmt/0m* is your DDS tape device file.

- Start “swinstall(1m)” by typing:

```
/usr/sbin/swinstall -s /tmp/A0600/hpux/B1368B.sd
```

To install the Eloquence software, follow the directions below:

- In the Software Selection Window, highlight to select the **B1368B** product to install the Eloquence development product.
 - Then choose the “Mark for Install” item from the Actions Menu. The “Marked?” column will be set to “Yes”.
 - Select the “Install (analysis...)” item from the Actions Menu. When the analysis is finished with no error, i.e. Status:Ready, click OK.
 - Click Yes in the Confirmation window to begin the actual installation.
 - When the installation is completed, a dialog is displayed to notify you that the install task is completed. You may exit then.
- After installation has completed you should remove the temporary file.

```
rm -r /tmp/A0600
```

Configuring the HP-UX system

After installing the Eloquence software, configuration of your HP-UX system is required:

- Configure Kernel limits
- Configure TCP service names
- Configure Eloquence server startup/shutdown

Configure Kernel limits

Eloquence requires kernel resources such as files, locks, semaphores and shared memory segments. The HP-UX kernel can be configured to the requirements of the applications. This is done by tuning kernel parameters and building a new kernel with SAM.

Eloquence resource requirements depend on configuration and usage:

- `eloqsd` needs a shared memory segment and a semaphore set with two semaphores.
- `eloqdb5` requires a shared memory segment and a semaphore set with two semaphores per active session if IPC transport is enabled in the configuration. Since the A.05.xx data base is used, the A.05.xx requirements taken into account in addition.
- `eloqdb6` requires a shared memory segment and a semaphore set with two semaphores per active session if IPC transport is enabled in the configuration.
- Each A.06.00 `eloqcore` process uses up to 60 open files and 20 locks. When using Eloquence DLLs, a separate shared memory segment is used for each active DLL.
- When `eloq` is used, a `pty` is required per task. When you login over the network (for example using Telnet), an additional `pty` is required.

In order to estimate the required kernel resources, you should estimate the number of active users, the number of running `eloqcore` processes and the number of active data base sessions (probably the same as the number of `eloqcore` processes) and use the data provided above to calculate the total requirements for Eloquence.

- Number of concurrent processes
- Number of concurrent processes per user
- Number of `ptys`
- Number of files
- Number of locks
- Number of shared memory segments
- Number of semaphore sets
- Number of semaphores

The next step is to use those values to tune the kernel parameters. Please keep in mind that other processes use kernel resources as well, so be generous. Please refer to the HP-UX administration documentation for a complete reference and more information on kernel parameters.

Citing the SAM online documentation on kernel parameters:

Certain kernel operating parameters can be configured to fit specific system needs, resulting in better performance or more effective allocation of resources. The ideal value for each parameter is often determined by the system's particular hardware configuration, the specific mix of applications the system runs, and the trustworthiness of system users; factors that vary widely from system to system.

HP attempts to provide reasonable default parameter settings, but you may find it necessary or beneficial to modify these settings to better suit the needs of your particular system's users. Use the list below to obtain detailed information about each configurable kernel parameter.

WARNING: Changing kernel parameters to improper or inappropriate values or combinations of values can cause data loss, system panics, or other operating anomalies, depending on which parameters are set to what values. Before altering the value of any configurable kernel parameter, be sure you know the implications of making the change. Never set any system parameter to a value outside the allowable range for that parameter (SAM refuses to store values outside of the allowable range). Many parameters interact, and their values must be selected in a balanced way.

Note that individual parameters usually pertain to a specific subsystem; some are independent, but others are interrelated or interact with each other. The following subsections are grouped according to subsystem.

Configuring the number of processes

The *nproc* kernel parameter specifies the maximum total number of processes that can exist simultaneously in the system. When the total number of processes in the system is larger than *nproc*, the system issues these messages:

At the system console:

```
proc: table is full
```

Also, if a user tries to start a new process from a shell, the following message prints on their terminal:

```
no more processes
```

Configuring the number of user processes

The *maxuprc* kernel parameter specifies the maximum number of simultaneous processes available to each user on the system. The HP-UX 10.x default is 50 which should usually be sufficient. A user is identified by the user ID number, not by the login instances.

If a user attempts to start a new process that would cause the total number of processes for that user to exceed *maxuprc*, the system issues an error message to the user:

```
no more processes
```

The *maxuprc* should be much smaller than the *nproc* parameter, otherwise a single user could use up all system resources (for example due to a program failure).

Configuring the number of ptys (pseudo ttys)

The *npty* kernel parameter specifies the maximum number of pseudo-ttys available on the system. The default value for HP-UX 10.x is 60.

After raising this value you also need to create the new pty slave and master side device files in the */dev/pty* and */dev/ptym* directories. This can be done with *insf(1m)*. Please note, that for *npty* values above 60 you have to specify the *-n* argument to *insf*.

HP-UX 9.x

```
cd /dev
/etc/insf -n 60 -d pty0
/etc/insf -n 60 -d pty1
```

HP-UX 10.x

```
/sbin/insf -n 60 -d pty
```

Configuring the number of files

The *nfile* parameter specifies the maximum number of files that can be open simultaneously on the system at any given time. Be generous with this number because the required memory is minimal, and not having enough restricts system processing capacity.

The *ninode* parameter specifies the maximum number of open inodes that can be in memory. Each unique open file has an open inode associated with it. Therefore, the larger the number of unique open files, the larger *ninode* should be.

Configuring the number of locks

The *nflocks* parameter specifies the number of file locks that are available system-wide. The HP-UX 10.x default value is 200.

Each DATA file opened within eloqcore needs a lock for each process. So this value should be adapted to the anticipated usage. Each eloqcore process can currently open up to 20 DATA files concurrently.

Configuring the number of shared memory segments

The *shmmni* parameter specifies the maximum number of shared memory segments allowed to exist simultaneously, system-wide. The HP-UX 10.x default is 200 which should be sufficient unless you have a big number of active users.

Setting *shmmni* to an arbitrarily large number wastes memory and can degrade system performance. Setting the value too high on systems with small memory configuration may consume enough memory space that the system cannot boot. Select a value that is close to actual system requirements for optimum memory usage. A value not exceeding 1024 is recommended unless system requirements dictate otherwise.

The *shmseg* parameter specifies maximum number of shared memory segments that can be simultaneously attached to a single process. The HP-UX 10.x default is 12.

If using IPC transport for the eloqdb5 and eloqdb6 servers, this value should be adapted to the max. number of concurrent local processes accessing a single server.

Configuring the number of semaphore sets

The *semmni* parameter defines the maximum number of semaphore sets that can exist simultaneously on the system. The HP-UX 10.x default is 64.

If using IPC transport for the eloqdb5 and eloqdb6 servers, it may be necessary to adapt this value according to the anticipated max. number of concurrent local eloqcore processes which access the eloqdb5 or eloqdb6 server.

The *semmap* parameter specifies the size of the free-space resource map used for allocating new System V IPC semaphores. The HP-UX 10.x default is *semmni*+2.

If semaphore usage is heavy and a request for a semaphore set cannot be accommodated, the following message appears:

```
danger: mfree map overflow
```

You should then configure a new kernel with a larger value for *semmap*.

The *semmns* parameter specifies the system-wide maximum number of individual semaphores that can be allocated. The HP-UX 10.x default is 128 which should usually be sufficient.

Installing Eloquence on the HP-UX platform

Configuring the HP-UX system

The *semnu* parameter defines the maximum number of processes that can have undo operations pending on semaphores. The HP-UX 10.x default is 30.

If using IPC transport for the eloqdb5 and eloqdb6 servers, it may be necessary to adapt this value according to the anticipated max. number of concurrent local eloqcore processes which access the eloqdb5 or eloqdb6 server. A semaphore undo entry is required for each process accessing the eloqdb5 or eloqdb6 servers with using the IPC transport.

The *semume* parameter defines the maximum number of semaphores that a given process can have undo operations pending on. The HP-UX 10.x default is 10.

An undo is a special, optional, flag in a semaphore operation which causes that operation to be undone if the process which invoked it terminates. *semume* specifies the maximum number of semaphores that any given process can have undos pending on.

If using IPC transport for the eloqdb5 and eloqdb6 servers, it may be necessary to adapt this value according to the anticipated max. number of concurrent local eloqcore processes which access the eloqdb5 or eloqdb6 server. A semaphore undo entry is required for each process accessing the eloqdb5 or eloqdb6 servers with using the IPC transport.

Configure service names

You may want to define the Eloquence specific service names in your */etc/services* file (if you are using NIS it is probably required to do this on the NIS master server). This is optional, as you can specify the port number directly instead of a service name.

Please add lines like below to your */etc/services* file:

```
eloqsd      8100/tcp      # Eloquence A.06.00 eloqsd server
eloqdb      8102/tcp      # Eloquence A.06.00 eloqdb6 server
eloqdb5     8104/tcp      # Eloquence A.06.00 eloqdb5 server
runsrvt     8010/tcp      # Eloquence RunSRV (Windows)
```

where the first column specifies the service name (eg. *eloqsd*) and the second column the associated port number and protocol (eg. *8100/tcp*). The selected port numbers may not already be in use by another programs.

Configure Eloquence server startup/shutdown

This is different between the HP-UX 9.x and 10.x operating system:

- On HP-UX 9.x you can start the *eloqsd* server from your */etc/rc* startup configuration file. This is executed whenever the operating system is entering the run level 2.

Add a line like below to your `/etc/rc` configuration script:

```
# Start Eloquence eloqsd server
/opt/eloquence6/bin/eloqsd

# Start Eloquence eloqdb6 server
/opt/eloquence6/bin/eloqdb6

# In case you want to start Eloquence eloqdb5 server
# uncomment the line below
#/opt/eloquence6/bin/eloqdb5
```

- The Eloquence servers can be configured to start automatically by default if runlevel 2 is entered (after a reboot or single user mode) and shut down automatically on reboot.

The automatic server startup is configured in the Eloquence A.06.00 startup configuration file `/etc/rc.config.d/eloquence6`. For each server which should be handled automatically, the corresponding variable should be set to 1. For example, to handle the `eloqdb6` server automatically, change the `START_ELOQDB6` variable like below:

```
START_ELOQDB6=1
```

To start Eloquence servers manually enter the following command:

```
/sbin/init.d/eloq start
```

To stop Eloquence servers manually enter the following command:

```
/sbin/init.d/eloq stop
```

Configuring the User Environment

There are two files where the user environment can be configured:

- The environment defined in `/etc/profile` affects all users.
- The file `.profile` located in a user's home directory configures the user-specific environment.

Perform the following steps:

- 1 Make the Eloquence executables accessible:
 - If you are using HP-UX 10.x, this step is already done during software installation. The installation script automatically adds `/opt/eloquence6/bin` to the global path configuration file `/etc/PATH`.
 - If you are using HP-UX 9.x, please edit the file `/etc/profile`. This file contains the command `PATH=`, where you should append `:/opt/eloquence6/bin`.
- 2 If you plan to frequently use the Eloquence migration tools, you might additionally make the `/opt/eloquence6/tools` directory accessible.
 - If you want to make the migration tools accessible for all users and you are using HP-UX 10.x, edit the file `/etc/PATH` and append `:/opt/eloquence6/tools` to the global path list.
 - If you want to make the migration tools accessible for all users and you are using HP-UX 9.x, edit the file `/etc/profile` and append `:/opt/eloquence6/tools` to the `PATH=` command.
 - If you want to make the migration tools accessible only to specific users, edit the files `.profile` in the appropriate home directories and append `:/opt/eloquence6/tools` to the `PATH=` command.
- 3 Make sure that the terminal type is configured properly for all users. Normally, `/etc/profile` provides a mechanism that automatically detects the terminal type and sets the `TERM=` environment variable appropriately.
- 4 Make your configuration changes active. This is done by logging off and back on again.

Configuring the eloqsd server

Eloquence A.06.00 no longer has an eloqd server. Beginning with this release, the former eloqd has been renamed to eloqsd. This has been done to improve the interoperability of Eloquence A.06.00 with previous releases on the same system.

The eloqsd server is an important part of Eloquence. It is responsible for the following task:

- Eloqsd coordinates the TASKID values.
- Eloqsd provides file sharing capabilities for the new graphical Eloquence development environment.
- Eloqsd is used to start eloqcore processes in the background.
- Eloqsd is used to count active users and does validate it against available user licenses.
- Eloqsd optionally provides a HTTP interface so server status information can be queried with a web browser.

Eloquence A.06.00 implements file sharing capabilities for the new graphical development environment through the eloqsd server. This makes it independent of the availability of specific network file systems (NFS/ SMB) and overcomes inappropriate limitations.

Running an eloqsd server on your system is not mandatory unless you are using eloq (providing virtual terminal capabilities). However, when no eloqsd process is active, TASKID values are no longer unique and are set to 1 by default.

In order to run the eloqsd server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqsd TCP service
- Configuring the default eloqsd account and group
- Configuring the eloqsd server startup
- Configuring the eloqsd server

Configuring the eloqsd TCP service

You may want to define the eloqsd service names in your `/etc/services` file. This is optional, as you can specify the port number directly in the `eloqsd.cfg` configuration file.

Please add lines like below to your `/etc/services` file:

```
eloqsd      8100/tcp      # Eloquence A.06.00 eloqsd server
```

Installing Eloquence on the HP-UX platform

Configuring the eloqsd server

the first column specifies the service name (eg. eloqsd) and the second column the associated port number and protocol (eg. 8100/tcp). The selected port numbers may not already be in use by another programs.

NOTE:

All systems must use the same port numbers in order to communicate.

Configuring the default eloqsd account and group

The **eloqsd** server requires you to specify an account and group name in the configuration file. Whenever **eloqsd** is started with root capabilities it will switch to the specified account/group instead. This is required, because for one it is generally not a good idea to run programs with root capabilities unless necessary, on the other hand this is used as the default account and group for users accessing files through the eloqsd or starting a background process.

While you can specify any user or group account in the configuration file, we recommend to create a specific user account and group for Eloquence which is used by the eloqsd server.

We recommend to create the user account *eloqsd* and the group *eloqsd* which should have the account *eloqsd* as a member. You can configure this with SAM. The account should be marked "disabled" in SAM (which will result in an asterisk in the password) to prevent logins using the eloqsd account.

Configuring the eloqsd server startup

This is different between the HP-UX 9.x and 10.x operating system:

- On HP-UX 9.x you can start the eloqsd server from your **/etc/rc** startup configuration file. This is executed whenever the operating system is entering the run level 2.

Add a line like below to your **/etc/rc** configuration script:

```
# Start Eloquence eloqsd server
/opt/eloquence6/bin/eloqsd
```

- With HP-UX 10.x, all you need is to set the **START_ELOQSD** variable to one in the Eloquence A.06.00 startup/shutdown configuration file.

Change the line defining the **START_ELOQSD** variable in the file **/etc/rc.config.d/eloquence6** like below:

```
START_ELOQSD=1
```

Configuring the eloqsd server

The eloqsd server is configured by editing the `eloqsd.cfg`, `eloqsd.user` and `eloqsd.share` configuration files. They are located in the Eloquence configuration directory. All configuration files provide complete inline documentation and are included at the end of this section for your reference.

The Eloquence configuration directory depends on your operating system:

HP-UX 10.x `/opt/eloquence6/etc`
HP-UX 9.x `/etc/opt/eloquence6`

Each configuration file is responsible for a specific part of the eloqsd configuration:

- eloqsd.cfg** This is used for the general configuration of the server.
- eloqsd.user** Eloqsd provides its own user configuration. This makes it possible to define eloqsd users without the need to have a system account for each individual user. Instead eloqsd users are associated with system accounts and groups.
- As passwords are defined in this file we consider it good practice to make this file unreadable for regular users. You should chown it to root and chmod it to 400.
- eloqsd.share** This configuration file is used to define resources which can be accessed through the eloqsd server.

The eloqsd command line options

The eloqsd server supports the following command line options which can be used to temporarily override configured settings in the `eloqsd.cfg` configuration file.

```
usage: eloqsd [options]
options:
  -help           = show usage (this list)
  -c name         = configuration file
  -d flags        = debug mode
  -l name         = log file name (or console/syslog/default)
  -f             = run in foreground
  -s name         = service name (tcp/ip transport)
  -F facility     = syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
  -I ident        = syslog identifier
```

Installing Eloquence on the HP-UX platform
Configuring the eloqsd server

Option	Description	Equiv.*
-c name	Specifies the configuration file name	
-d flags	Specifies the server log flags.	LogFlags
-l name	Specifies the server log file.	LogFile
-f	Run in foreground. This is used for debugging the eloqsd server.	
-s name	The service name (as defined in /etc/services) or the port number where the server should listen for requests. The default value is eloqdb6.	Service
-F facility	When logging to the syslog daemon, you can define a syslog facility (USER/DAEMON LOCAL0..LOCAL7)	SysFacility
-I ident	When logging to the syslog daemon, you can define a syslog identifier. The default is eloqsd	SysIdent

*Equivalent configuration file directive.

The eloqsd HTTP status display

When the ServiceHttp is defined in the eloqsd.cfg configuration file, you can use a WEB browser such as Netscape to view the configuration and state of the eloqsd process in your network.

To access the eloqsd server, you need to provide a URL like below:

```
http://server:port/
```

where server is the host name or IP number of the system running the eloqsd server and port is the port number used for serviceHttp in the eloqsd.cfg file.

Default eloqsd.cfg file

```
# eloqsd.cfg
#
# @(#)Revision: 1.5 1997/07/15 00:00 $
# The purpose of this file is to define the eloqsd properties.
# The location depends on the operating system:
#
#   HP-UX 9.x:  /opt/eloquence6/etc/eloqsd.cfg
#   HP-UX 10.x: /etc/opt/eloquence6/eloqsd.cfg
#   Linux:     /etc/opt/eloquence6/eloqsd.cfg
#
# This file is read once at eloqsd startup.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
# Default values are provided commented out.

### Server configuration

[Config]

# Service          The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for requests. The default value is eloqsd.
#
# ServiceHttp      The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for HTTP requests. If this is not specified, the
#                  HTTP status is disabled.
#
# UseKeepAlive     Numeric flag if the KEEP ALIVE socket option
#                  should be used. Valid values are 1/0.
#                  The default value is 1.
#                  If this option is active, the server will check
#                  after a system defined period of inactivity, if the
#                  client is still alive.
#
#Service = eloqsd
#ServiceHttp =
#UseKeepAlive = 1

# panic           This option defines what should happen if a fatal
#                  error is encountered.
#
#                  The following options are valid:
#                  exit      Terminate the process. This is the default.
#                  dump     Terminate the process and create a core dump.
#
#                  This is a problem tracking option. Unless you know what
#                  you need the core dump for you probably want to stay with
#                  the default
```

Installing Eloquence on the HP-UX platform

Configuring the eloqsd server

```
#panic = exit

# HttpFrame      Numeric flag if the links should be omitted in
#                HTTP status. The default value is 0.

# HttpFrame = 0

# Lang           This configuration option defines the locale, the
#                server should use. The default value is "C".
#                The only locale currently supported is "C".
#
# Messages       This configuration option defines the language
#                for server messages. This value defaults to Lang.
#                The only locale currently supported is "C".
#
# Charset        This defines the character set encoding, the server
#                should use internally.
#
#                Valid settings are:
#                HPROMAN8 - HP Roman8
#                ISO8859/1 - ISO 8859/1
#                The default value for HP-UX is HPROMAN8, all other
#                platforms default to ISO8859/1.
#
#                This setting is used by the server to translate
#                client strings like user or file names.

#Lang = C
#Messages = C
#Charset = HPROMAN8

# AuthPolicy     This entry specifies, how user names and passwords
#                are validated. The following entries are valid:
#
#                server - The server will validate passwords
#                and user names using eloqsd.user
#
#                The default value is "server".
#
# userFile       The path/name of the eloqsd.user file.
#                The default value depends on your operating system:
#                HP-UX 9.x: /opt/eloquence6/etc/eloqsd.user
#                HP-UX 10.x: /etc/opt/eloquence6/eloqsd.user
#                Linux: /etc/opt/eloquence6/eloqsd.user
#
# shareFile      The path/name of the eloqsd.share file.
#                The default value depends on your operating system:
#                HP-UX 9.x: /opt/eloquence6/etc/eloqsd.share
#                HP-UX 10.x: /etc/opt/eloquence6/eloqsd.share
#                Linux: /etc/opt/eloquence6/eloqsd.share

#AuthPolicy = server
#userFile = /etc/opt/eloquence6/eloqsd.user
#shareFile = /etc/opt/eloquence6/eloqsd.share

# DefaultUID     The default name (or numeric id) of the system account
#                to run client processes as, unless a different setting
#                is provided for the user.
#
# DefaultGID     The default name (or numeric id) of the system group
#                to run client processes as, unless a different setting
```



```
#           is provided for the user.

DefaultUID = eloqsd
DefaultGID = eloqsd

# LogFile      This defines where log messages are written to.
#             This configuration value either specifies a path/file
#             or one of the keywords below:
#
#             console - log messages are written to the console
#             syslog  - log messages will be sent to the
#                   syslog daemon
#
#             The default value is "syslog".

LogFile = syslog

# SysIdent     When logging to the syslog daemon, you can define
#             a syslog identifier. Default is eloqsd.
#             See syslogd(1M) for more information
#
# SysFacility  When logging to the syslog daemon, you can define
#             a syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
#             The default setting is "USER".
#             See syslogd(1M) for more information

#SysIdent = eloqsd
#SysFacility = USER

# LogFlags     Each log message has an associated origin and
#             severity. The log flags define, which messages will
#             be logged. The "*" origin matches all message origins,
#             so it can be used to setup a default which can be
#             overridden for a specific message origin (eg. "*1N0"):
#             Default LogFlags are "*0"
#
#             The following origin are in use:
#             * = All origins
#             C = Configuration subsystem
#             N = Network transport
#             P = Protocol handling
#
#             The following severities are in use:
#             L_ERROR  = 0   - error messages
#             L_INFO   = 1   - information
#             L_DEBUG  = 2   - debug
#             L_VDEBUG = 3   - verbose debug
#
#             When using syslog, the following priorities
#             are mapped:
#             L_ERROR  = LOG_ERR
#             L_INFO   = LOG_NOTICE
#             L_DEBUG  = LOG_DEBUG
#             L_VDEBUG = LOG_DEBUG
#
#             Enabling log messages with L_DEBUG or L_VDEBUG severity
#             may result in a huge number of log messages.
#             To enable only fatal messages, you would want to set the
#             LogFlags to "*0", to enable regular log messages you
#             would want to set the LogFlags to "*1"
```

Installing Eloquence on the HP-UX platform

Configuring the eloqsd server

```
LogFlags = *0

# Configuration items below are the more traditional eloqsd
# settings.
#
# MaxUsers      Maximum number of eloqcore processes on the local
#               system. The default value is 40.
#
# MaxTasks      Maximum number of TASKIDs to reserve for "secondary"
#               eloqcore processes. If you don't know what this is good
#               for, you probably don't need it :-))
#               The default value is 20
#

MaxUsers = 40
MaxTasks = 20
```

Default eloqsd.user file

```
# eloqsd.user
#
# @(#) $Revision: 1.5 1997/07/15 00:00 $
# The purpose of this file is to define all users which are known to
# Eloquence. The location depends on the operating system:
#
#   HP-UX 9.x:  /opt/eloquence6/etc/eloqsd.user
#   HP-UX 10.x: /etc/opt/eloquence6/eloqsd.user
#   Linux:     /etc/opt/eloquence6/eloqsd.user
#
# This file is read at the startup time of the eloqsd process.
# Changes are automatically detected and honored.
#
# This makes it possible to define Eloquence users without the
# need to have a system account for each individual user.
# As passwords are defined in this file we consider it good practice
# to make this file unreadable for regular users. You should chown
# it to the administrator (probably root) and chmod id to 400.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
#
# Each user definition is a different section.
#
# The following configuration items are recognized for each section:
#
# [user_id]
# Name      The full user name (currently unused)
# Email     Email address of the user (currently unused)
# Password  The user password. This is currently clear text.
# uid       System account to execute client processes
# gid       System group to execute client processes
# Profile   Template user entry. User defaults will be taken from
#           this section.
# Home      Home path. Defaults to the home directory associated to
#           the UID by the system.
#
# There are two predefined sections:
#
# [public] is used, if a client does not provide a user id. This
# can only happen, if an eloqcore has been started locally and
# requests a remote operation. (currently unused)
#
# [default] is used as the default user profile.

[public]
Name = Anonymous

[default]
Name = Default user profile

[demo]
```

Installing Eloquence on the HP-UX platform
Configuring the eloqsd server

```
Name = Joe Average  
Password = secret
```

Default eloqsd.share file

```
# eloqsd.share
#
# @(#) $Revision: 1.5 1997/07/15 00:00 $
# The purpose of this file is to define all disk resources which are
# known to Eloquence. The location depends on the operating
# system:
#
#   HP-UX 9.x:   /opt/eloquence6/etc/eloqsd.share
#   HP-UX 10.x:  /etc/opt/eloquence6/eloqsd.share
#   Linux:      /etc/opt/eloquence6/eloqsd.share
#
# This file is read at the startup time of the eloqsd process.
# Changes are automatically detected and honored.
#
# Eloquence A.06.00 provides its own file sharing capabilities.
# This will make you independent of the availability of specific
# network file systems (NFS/SMB) and overcomes possible file system
# limitations.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
#
# Each share definition is a different section.
#
# The following configuration items are recognized for each section:
#
# [share_id]
# Path      Absolute path
# Comment   Share description. This is displayed by the client.
# Users     Comma separated list of individual users or user profiles
#           (currently unused)

[example]
Path = /opt/eloquence6/share
Comment = A.06.00 shared files
```

Configuring the eloqdb6 server

The eloqdb6 server is the new Eloquence A.06.00 data base server. Eloquence A.06.00 uses a new data base using the client/server approach. Eloquence A.05.xx data bases can be accessed from Eloquence A.06.00 using the eloqdb5 server.

In order to run the eloqdb6 server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqdb TCP service
- Configuring the default eloq account and group
- Configuring the eloqdb6 server startup
- Configuring the eloqdb6 server

Configuring the eloqdb TCP service

It is recommended, that you define the eloqdb service names in your `/etc/services` file. This is optional, as you can specify the port number directly in the `eloqsd.cfg` configuration file.

Please add lines like below to your `/etc/services` file:

```
eloqdb      8102/tcp      # Eloquence A.06.00 eloqdb6 server
```

the first column specifies the service name (eg. `eloqdb6`) and the second column the associated port number and protocol (eg. `8102/tcp`). The selected port numbers may not already be in use by another programs.

NOTE:

All systems must use the same port numbers for the same service in order to communicate.

You can have more than one instance of the eloqdb6 server running on a single system, however they must use different services/port numbers.

Configuring the default eloq account and group

The eloqdb6 server requires you to specify an account and group name in the configuration file. Whenever it is started with root capabilities it will switch to the specified account/group instead. This is required, because for one it is generally not a good idea to run programs with root capabilities unless necessary. In addition, all data base volumes are owned by this user and are thus protected from illegal access from other users.

While you can specify any user or group account in the configuration file, we recommend to create a specific user account and group for Eloquence which is used by the eloqdb6 server.

We recommend to create the user account `eloq` and the group `eloq` which should have the account `eloq` as a member. You can configure this with SAM. The account should be marked "disabled" in SAM (which will result in an asterisk in the password) to prevent logins using the `eloq` account.

Configuring the eloqdb6 server startup

This is different between the HP-UX 9.x and 10.x operating system:

- On HP-UX 9.x you can start the `eloqsd` server from your `/etc/rc` startup configuration file. This is executed whenever the operating system is entering the run level 2.

Add a line like below to your `/etc/rc` configuration script:

```
# Start Eloquence eloqsd6 server
/opt/eloquence6/bin/eloqdb6
```

- With HP-UX 10.x, all you need is to set the `START_ELOQDB6` variable to one in the Eloquence A.06.00 startup/shutdown configuration file.

Change the line defining the `START_ELOQDB6` variable in the file `/etc/rc.config.d/eloquence6` like below:

```
START_ELOQDB6=1
```

Configuring the eloqdb6 server

The `eloqsd` server is configured by editing the `eloqdb6.cfg` configuration file. It is located in the Eloquence configuration directory. The `eloqdb6.cfg` configuration file provides complete inline documentation. The default configuration file is included at the end of this section for your reference.

The Eloquence configuration directory depends on your operating system:

HP-UX 10.x	<code>/opt/eloquence6/etc</code>
HP-UX 9.x	<code>/etc/opt/eloquence6</code>

The eloqdb6 command line options

The `eloqdb6` server supports the following command line options which can be used to temporarily override configured settings in the configuration file.

```
usage: eloqdb6 [options]
options:
  -help          = show usage (this list)
```

Installing Eloquence on the HP-UX platform

Configuring the eloqdb6 server

```

-c name      = configuration file
-d flags     = debug mode
-l name      = log file name (or console/syslog/default)
-f          = run in foreground
-s name      = service name (tcp/ip transport)
-F facility  = syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
-I ident     = syslog identifier

```

Option	Description	Equiv.*
-c name	Specifies the configuration file name	
-d flags	Specifies the server log flags.	LogFlags
-l name	Specifies the server log file.	LogFile
-f	Run in foreground. This is used for debugging the eloqdb6 server.	
-s name	The service name (as defined in /etc/services) or the port number where the server should listen for requests. The default value is eloqdb6.	Service
-F facility	When logging to the syslog daemon, you can define a syslog facility (USER/DAEMON LOCAL0..LOCAL7)	SysFacility
-I ident	When logging to the syslog daemon, you can define a syslog syslog identifier. The default is eloqdb6	SysIdent

*Equivalent configuration file directive.

The eloqdb6 HTTP status display

When the ServiceHttp is defined in the eloqdb6.cfg configuration file, you can use a WEB browser such as Netscape to view the configuration and state of the eloqdb6 server in your network.

To access the eloqdb6 server, you need to provide a URL like below:

```
http://server:port/
```

where server is the host name or IP number of their system running the eloqsd server and port is the port number used for serviceHttp in the eloqdb6.cfg file.

Default eloqdb6.cfg file

```
# eloqdb6.cfg
#
# @(#)Revision: 1.8 1997/07/21 00:00 $
# This file defines the eloqdb6 configuration and the database
# environment. The default location depends on the operating system:
#
#   HP-UX 9.x:  /opt/eloquence6/etc/eloqdb6.cfg
#   HP-UX 10.x: /etc/opt/eloquence6/eloqdb6.cfg
#   Linux:     /etc/opt/eloquence6/eloqdb6.cfg
#
# This file is read once at eloqdb6 startup.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.

### Server configuration

[Server]

# Service          The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for requests. The default value is eloqdb.
#
# ServiceHttp      The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for HTTP requests. If this is not specified, the
#                  HTTP status is disabled.
#
# UseKeepAlive     Numeric flag if the KEEP ALIVE socket option
#                  should be used. Valid values are 1/0.
#                  The default value is 1.
#                  If this option is active, the server will check
#                  after a system defined period of inactivity, if the
#                  client is still alive.

#Service = eloqdb
#ServiceHttp =
#UseKeepAlive = 1

# panic            This option defines what should happen if a fatal
#                  error is encountered.
#
#                  The following options are valid:
#                  restart Restart the server process. This is the default.
#                  exit   Terminate the process.
#                  dump   Terminate the process and create a core dump.
#
#                  panic = dump is a problem tracking option. Unless you
#                  know what you need the coredump for you probably want
#                  to stay with panic = restart or panic = exit

#panic = restart
```

Installing Eloquence on the HP-UX platform

Configuring the eloqdb6 server

```
# UID          The name (or numeric id) of the system account to run
#              client processes as when started as root.
# GID          The name (or numeric id) of the system group to run
#              client processes as when started as root.
#
#              Please note, that the server will refuse to start
#              as root unless UID and GID are valid.

UID = eloq
GID = eloq

# EnableIPC    When set, shared memory can be used to transmit data
#              between the database server and a client running on
#              the same system. This provides better performance
#              than using sockets because data are not passed through
#              the kernel. The default value is 1 (enabled).

#EnableIPC = 1

# LogFile      This defines where log messages are written to.
#              This configuration value either specifies a path/file
#              or one of the keywords below:
#
#              console - log messages are written to the console
#              syslog  - log messages will be sent to the
#                       syslog daemon
#
#              The default value is "syslog".

#LogFile = syslog

# SysIdent     When logging to the syslog daemon, you can define
#              a syslog identifier. Default is eloqdb6.
#              See syslogd(1M) for more information
#
# SysFacility  When logging to the syslog daemon, you can define
#              a syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
#              The default setting is "USER".
#              See syslogd(1M) for more information

#SysIdent = eloqdb
#SysFacility = USER

# LogFlags     Each log message has an associated origin and
#              severity.
#              The log flags define, which messages will be logged.
#              The "*" origin matches all message origins, so it can
#              be used to setup a default which can be overridden
#              for a specific message origin (eg. "*1N0"):
#              Default LogFlags are "*0"
#
#              The following origin are in use:
#              * = All origins
#              A = Configuration subsystem
#              X = Network transport
#              P = Protocol handling
#              T = Thread kernel
#              I = IMAGE subsystem
#              B = BTREE subsystem
#              F = FIXREC subsystem
#              V = Volume handling
```

```
#           L = Transaction logging
#           C = Page cache
#           N = Node handling
#           D = The server framework
#           O = System catalog
#
#           The following severities are in use:
#           L_ERROR = 0 - error messages
#           L_INFO  = 1 - information
#           L_DEBUG = 2 - debug
#           L_VDEBUG = 3 - verbose debug
#
#           When using syslog, the following priorities
#           are mapped:
#           L_ERROR = LOG_ERR
#           L_INFO  = LOG_NOTICE
#           L_DEBUG = LOG_DEBUG
#           L_VDEBUG = LOG_DEBUG
#
#           Enabling log messages with L_DEBUG or L_VDEBUG severity
#           may result in a huge number of log messages.
#           To suppress anything but fatal messages, you can set
#           LogFlags to "*0". To enable informational log messages
#           you can set the LogFlags to "*1".

#LogFlags = *0

### Data base config

[Config]

# HttpFrame      Numeric flag if the links should be omitted in HTTP
#                status.The default value is 0

#HttpFrame = 0

# Threads        Number of threads in the data base server. A separate
#                thread is required for each client.
#                Default number of threads is 40.

#Threads = 40

# BufferCache     Size of page cache in megabytes. The page cache is
#                used to reduce the number of disc accesses. Large cache
#                size will speed up random database access, while a too
#                small cache size may cause bad server performance.
#                Default cache size is 5 MB.

#BufferCache = 5

# VnodeCache     Number of vnode cache elements. The VnodeCache is
#                used to cache Node open/close operations in the data
#                base kernel.
#                A Node is the data base equivalent to a file.
#                Default number of VNodesCache elements is 200.

#VnodeCache = 200

# VbufElements   Number of Vbuffer elements. Vbuffers are used as
#                scratch buffers by the database kernel.
```

Installing Eloquence on the HP-UX platform

Configuring the eloqdb6 server

```
#          About 3-5 are used per concurrent active thread
#          Default number of VBufElements is 20

#VbufElements = 20

# The server performs a checkpoint operation at fixed intervals. This
# flushes all modified buffers (including metadata) to the disk and
# resets log of committed transactions. A checkpoint is a point where
# the server knows all data are in a consistent state. Any data
# modification since the last checkpoint is recorded in the log
# volume.
#
# CheckPtFreq   Checkpoint frequency in seconds.
#               Default checkpoint frequency is 60 seconds.
#
# CheckPtSize   Checkpoint frequency based on accumulated log space
#               which would be freed by a checkpoint (in megabytes).
#               A zero CheckPtSize value disables size based
#               checkpoints.
#               Default checkpoint size is 5 megabytes.
#
# The database server performs a checkpoint operation at a fixed
# interval and optionally in addition when the accumulated log space
# which could be freed by a checkpoint operation reaches a given
# threshold.
# The frequency of the checkpoint operations has a great influence
# on the size of the log volume since the log volume must hold all
# committed transactions since between checkpoints

#CheckPtFreq = 60
#CheckPtSize = 5

# The syncer thread flushes modified buffer pages to the disk when
# they are likely to become reused in the near future.
#
# SyncerFreq    Syncer thread invocation frequency (in seconds)
#               Default interval is 10 seconds.
#
# SyncerMinFree Minimum number of pages which should be available in
#               a syncer state so they can be reused easily.
#               Default value is 16 pages.
#
# SyncerNFlush  Maximum number of pages to flush in a single syncer
#               run. Default value is 4 pages

#SyncerFreq = 10
#SyncerMinFree = 16
#SyncerNFlush = 4

[Volumes]

# List of data base volumes. Initially empty.
# This is usually filled in by dbvolcreate and dbvoextend utilities
```

Configuring the eloqdb5 server

The eloqdb5 server provides access to former A.05.xx data bases for Eloquence A.06.00. The Eloquence A.05.xx eloqnd server is no longer used with Eloquence A.06.xx. The eloqdb5 server is only available on HP-UX.

In order to run the eloqdb5 server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqdb5 TCP service
- Configuring the default eloq account and group
- Configuring the eloqdb5 server startup
- Configuring the eloqdb5 server

NOTE:

The **eloqdb5** server requires that the Eloquence revision A.05.xx is installed and the eloqd is running. Otherwise it will start but refuse to accept a client connection. **eloqdb5** is different from the eloqnd included with Eloquence A.05.xx.

Configuring the eloqdb5 TCP service

It is recommended, that you define the eloqdb5 service name in your `/etc/services` file as this will enable database clients to use a symbolic name instead of a port number when specifying a database. However is optional, as you can specify the port number directly in the `eloqsd.cfg` configuration file.

Please add a line like below to your `/etc/services` file:

```
eloqdb5      8104/tcp      # Eloquence A.06.00 eloqdb5 server
```

the first column specifies the service name (eg. `eloqdb5`) and the second column the associated port number and protocol (eg. `8104/tcp`). The selected port numbers may not already be in use by another programs.

NOTE:

All systems must use the same port numbers for the same service in order to communicate.

You can have more than one instance of the eloqdb5 server running on a single system, however they must use different services/port numbers.

Configuring the default eloq account and group

The eloqdb5 server requires you to specify an account and group name in the configuration file. Whenever it is started with root capabilities it will switch to the specified account/group instead. This is required, because for one it is generally

Installing Eloquence on the HP-UX platform

Configuring the eloqdb5 server

not a good idea to run programs with root capabilities unless necessary and on the other hand to overcome the special handling for the root user in the A.05.xx data base.

While you can specify any user or group account in the configuration file, we recommend to create a specific user account and group for Eloquence which is used by the eloqdb5 server.

We recommend to create the user account `eloq` and the group `eloq` which should have the account `eloq` as a member. You can configure this with SAM. The account should be marked "disabled" in SAM (which will result in an asterisk in the password) to prevent logins using the `eloq` account.

Configuring the eloqdb5 server startup

This is different between the HP-UX 9.x and 10.x operating system:

- On HP-UX 9.x you can start the eloqdb5 server from your `/etc/rc` startup configuration file. This is executed whenever the operating system is entering the run level 2.

Add a line like below to your `/etc/rc` configuration script:

```
# Start Eloquence eloqdb5 server
/opt/eloquence6/bin/eloqdb5
```

- With HP-UX 10.x, all you need is to set the `START_ELOQDB5` variable to one in the Eloquence A.06.00 startup/shutdown configuration file.

Change the line defining the `START_ELOQDB5` variable in the file `/etc/rc.config.d/eloquence6` like below:

```
START_ELOQDB5=1
```

Configuring the eloqdb5 server

The eloqdb5 server is configured by editing the `eloqdb5.cfg` configuration file. It is located in the Eloquence configuration directory. The `eloqdb5.cfg` configuration file provides complete inline documentation. The default configuration file is included at the end of this section for your reference.

The Eloquence configuration directory depends on your operating system:

HP-UX 10.x	<code>/opt/eloquence6/etc</code>
HP-UX 9.x	<code>/etc/opt/eloquence6</code>

The eloqdb5 command line options

The eloqdb5 server supports the following command line options which can be used to temporarily override configured settings in the configuration file.

```
usage: eloqdb5 [options]
options:
  -help          = show usage (this list)
  -c name        = configuration file
  -d flags       = debug mode
  -l name        = log file name (or console/syslog/default)
  -f            = run in foreground
  -s name        = service name (tcp/ip transport)
  -F facility    = syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
  -I ident       = syslog identifier
```

Option	Description	Equiv.*
-c name	Specifies the configuration file name	
-d flags	Specifies the server log flags.	LogFlags
-l name	Specifies the server log file.	LogFile
-f	Run in foreground. This is used for debugging the eloqdb6 server.	
-s name	The service name (as defined in /etc/services) or the port number where the server should listen for requests. The default value is eloqdb6.	Service
-F facility	When logging to the syslog daemon, you can define a syslog facility (USER/DAEMON LOCAL0..LOCAL7)	SysFacility
-I ident	When logging to the syslog daemon, you can define a syslog syslog identifier. The default is eloqdb5	SysIdent

*Equivalent configuration file directive.

Default eloqdb5.cfg file

```
# eloqdb5.cfg
#
# @(#)Revision: 1.6 1997/07/15 00:00 $
# The purpose of this file is to define the eloqdb5 properties.
# The location depends on the operating system:
#
#   HP-UX 9.x: /opt/eloquence6/etc/eloqdb5.cfg
#   HP-UX 10.x: /etc/opt/eloquence6/eloqdb5.cfg
#
# This file is read once at eloqdb5 startup.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
# Default values are provided commented out.

### Server configuration

[Server]

# Service          The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for requests. The default value is eloqdb5.
#
# UseKeepAlive     Numeric flag if the KEEP ALIVE socket option
#                  should be used. Valid values are 1/0.
#                  The default value is 1.
#                  If this option is active, the server will check
#                  after a system defined period of inactivity, if the
#                  client is still alive.

#Service = eloqdb5
#UseKeepAlive = 1

# panic           This option defines what should happen if a fatal
#                  error is encountered.
#
#                  The following options are valid:
#                  exit      Terminate the process. This is the default.
#                  dump     Terminate the process and create a core dump.
#
#                  This is a problem tracking option. Unless you know what
#                  you need the coredump for you probably want to stay with
#                  the default.

#panic = exit

# UID             The name (or numeric id) of the system account to run
#                  client processes as when started as root.
#
# GID             The name (or numeric id) of the system group to run
#                  client processes as when started as root.
```



```
UID = eloq
GID = eloq

# LogFile          This defines where log messages are written to.
#                  This configuration value either specifies a path/file
#                  or one of the keywords below:
#
#                  console - log messages are written to the console
#                  syslog  - log messages will be sent to the
#                          syslog daemon
#
#                  The default value is "syslog".

#LogFile = syslog

# SysIdent         When logging to the syslog daemon, you can define
#                  a syslog identifier. Default is eloqdb5.
#                  See syslogd(1M) for more information
#
# SysFacility      When logging to the syslog daemon, you can define
#                  a syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
#                  The default setting is "USER".
#                  See syslogd(1M) for more information

#SysIdent = eloqd
#SysFacility = USER

# LogFlags         Each log message has an associated origin and
#                  severity.
#                  The log flags define, which messages will be logged.
#                  The "*" origin matches all message origins, so it can
#                  be used to setup a default which can be overridden
#                  for a specific message origin (eg. "*1N0"):
#                  Default LogFlags are "*0"
#
#                  The following origin are in use:
#                  * = All origins
#                  C = Configuration subsystem
#                  N = Network transport
#                  P = Protocol handling
#
#                  The following severities are in use:
#                  L_ERROR  = 0 - error messages
#                  L_INFO   = 1 - information
#                  L_DEBUG  = 2 - debug
#                  L_VDEBUG = 3 - verbose debug
#
#                  When using syslog, the following priorities
#                  are mapped:
#                  L_ERROR  = LOG_ERR
#                  L_INFO   = LOG_NOTICE
#                  L_DEBUG  = LOG_DEBUG
#                  L_VDEBUG = LOG_DEBUG
#
#                  Enabling log messages with L_DEBUG or L_VDEBUG severity
#                  may result in a huge number of log messages.
#                  To enable only fatal messages, you would want to set the
#                  LogFlags to "*0", to enable regular log messages you
#                  would want to set the LogFlags to "*1"

LogFlags = *0
```

Installing Eloquence on the HP-UX platform

Configuring the eloqdb5 server

```
### Data base config
[Config]
# MaxDB          Maximum number of data bases a single session server
#               can handle. The default value is 20
#MaxDB = 20
```

Customizing the Eloquence Configuration Files

This discussion assumes that the Eloquence software has already been installed on your system. The information in this section is directed to the system administrator for the Eloquence software.

Before Eloquence can be used, its resources must be configured. Eloquence programs usually don't use system resources directly, instead they rely on a mapping of paths, printers and device files in Eloquence configuration files.

There are three different levels of configuration:

System global	This is achieved with the eloq.config configuration file which is located in the Eloquence configuration directory.
Group specific	This is achieved with the group.<GroupName> configuration file which is located in the Eloquence directory.
User specific	This is achieved with the .eloqrc configuration file which is located in the home directory of the user.

The Eloquence configuration files are read by the `eloqcore` process, when it is started. The configuration files are processed in an order such that more specific definitions override the more general ones. So a system global assignment can be overridden from a group specific configuration file, a user specific definition will override group and system global definitions.

The system global configuration file, **eloq.config** is usually copied during the installation process to Eloquence configuration directory and should be adapted to local requirements. Template configuration files are provided in the directory `/opt/eloquence6/newconfig/config`. The template configuration files provide complete inline documentation and are included at the end of this section for your reference.

Eloquence resource configuration

Eloquence resources go back to the "dark ages" when a predecessor of Eloquence was implemented in hardware (called HP250/HP260 at that time) and the resources definition actually were real OS resources. Since programs depended on a program independent resource configuration and it a convenient mechanism anyway, the concept was kept. Instead of real devices Eloquence resources can be mapped to whatever is appropriate. Eloquence is of course able to access native operating resources directly.

Installing Eloquence on the HP-UX platform

Customizing the Eloquence Configuration Files

Since the following names are not commonly used, let's define them first:

- VOLUME** A **VOLUME** is the Eloquence concept of a directory. Instead of using the path directly, it is possible to assign an identifier for a path and refer to it in a symbolic manner.
- MSI** This is a short form of **MASS STORAGE IS** and species the default **VOLUME** on which pathes should be related unless an absolute path or another **VOLUME** is given.
- PRINTER** A **PRINTER** is the Eloquence concept of an output depvice. A **PRINTER** is identified by a number and could be mapped to a device file or to a sequence of commands.

The device numbers 8 to 10 have a special predefined meaning:

- 8: Display terminal.
- 9: Bit bucket (Eloquence equivalent of /dev/null)
- 10: Local terminal printer

- PORT** A **PORT** is the Eloquence equivalent of a (tty) device file. Eloquence provides prowefull machanisms to handle them in a efficient manner.

The eloq.config configuration file

The eloq.config file provides system global definitions and is usually copied during the installation process into the Eloquence configuration directory from the template file `d.eloq.config`.

The group specific configuration file

To provide group specific definitions, you could install a group specific configuration file in the Eloquence configuration directory. Consider we would like to have a specific configuration for the *sales* group you would perform the following steps:

- 1 Change to the Eloquence confuration directory as follows:

```
HP-UX 9.x: cd /opt/eloquence6/etc
HP-UX 10.x: cd /etc/opt/eloquence6
```

- 2 Create a group specifc configuration file from the template group configuration file. The group specific file should be named *group.sales*.

```
cp /opt/eloquence6/newconfig/config/d.group group.sales
```

- 3 Use a text editor, such as vi to edit the file

```
vi group.sales
```

The user specific configuration file

To provide user specific definitions, you could install a user specific configuration file in the home directory of the user. Consider we would like to have a specific configuration for the user *mike*, you would perform the following steps:

- 1** Change to the home directory of the user:

```
cd ~mike
```

- 2** Create a user specific configuration file from the template user configuration file. The user specific file should be named `.eloqrc`:

```
cp /opt/eloquence6/newconfig/config/d.eloqrc .eloqrc
```

- 3** Use a text editor, such as `vi` to edit the file

```
vi .eloqrc
```

Template eloq.config file

```
# d.eloq.config
# Eloquence configuration file
# (C) Copyright Marxmeier Software AG, 2002
# @(#) $Revision: 20.4 $
#
# This file contains global available configuration
# It must be named eloq.config and located at:
#   HP-UX 9.x      /opt/eloquence6/etc
#   HP-UX 10.x     /etc/opt/eloquence6
#   linux         /etc/opt/eloquence6
#
# PLEASE NOTE:
# You MUST define at least one volume (typically SYSTEM, see below),
# or eloqcore will fail on startup.
#
# Globally defined volumes
#
# Format: VOLUME label [device] path
#
#   label   - Volume label (up to 8 characters)
#             must be unique per file
#   device  - Device specifier eg. ":F2,6,0"
#             ignored when present, no longer used
#   path    - HP-UX path to map volume on
#
# Globally defined printers
#
# Format: PRINTER no [model] type spec
#
#   no      - printer select code (-2 .. 7, 11 .. 99)
#   model   - PCL or OTHER
#             ignored when present, not used
#   type    - printer type PIPE, FILE or SYSTEM
#   spec    - path/command to process on printer selection
#
# Globally defined ports
#
# Format: PORT no spec
#
#   no      - port select code (11 .. 20)
#             may not conflict with PRINTER
#   spec    - path of tty devicefile
#
#
# Default date/time format
#
# Format: DATE spec
#        TIME spec
#
#   spec    - date/time specification. please refer to date(1) or
#             strftime(3) for more information.
#             For backward compatibility, the former specifications
#             "DD.MM.YY" and "MM/DD/YY" are silently converted.
#
#             Default: DATE "%m/%d/%y"
```

Installing Eloquence on the HP-UX platform Customizing the Eloquence Configuration Files

```
#                               TIME "%H:%M:%S"
#
# Global MSI value
#
# Format: MSI label
#
#     label - Volume label. Default is the first defined volume.
#

# --- sample volumes

VOLUME SYSTEM /opt/eloquence6/share/prog
#VOLUMEEXAMPLE /opt/eloquence6/share/example

# --- sample printers

PRINTER 0 PIPE "lp -s 2>/dev/null"
#PRINTER 1 PIPE "lp -s -oc 2>/dev/null"
#PRINTER 2 FILE /dev/lp

# --- sample PORT

#PORT 11 /dev/tty0p5
```

Configuring the GUI Server

There are two kind of dialog drivers: The motif driver which is running locally on HP-UX and the Windows **DLGSRV** which operates over the network.

When accessing the **DLGSRV** over the network, Eloquence running on the application server establishes a connection using the **RUNSRV** utility. The information how to contact the **RUNSRV** is provided in the **eloq.ini** configuration file on the application server. The service name or port number used by the **RUNSRV** utility must be the same on the client and the server.

The configuraion of the motif dialog driver is provided in the **eloqcl.ini** configuration file.

Customization of the **eloq.ini** and **eloqcl.ini** file

The location of the Eloquence configuration files depends on your operating system:

HP-UX 10.x **/opt/eloquence6/etc**
HP-UX 9.x **/etc/opt/eloquence6**

Eloquence uses the **eloq.ini** configurationfile to configure how to contact the **RUNSRV** on the client system. The configuration file **eloqcl.ini** is used to configure the the motif dialog driver.

A default **eloq.ini** and **eloqcl.ini** file are located in the directory **/opt/eloquence6/newconfig/config**.

The 'ini' File format

The file **eloq.ini** and **eloqcl.ini** contain several sections, each containing a group of related configuration items. The sections and configuration items have the following format:

```
[Section]  
Item=Value
```

Section is the name of a section. The enclosing brackets ([]) are required and they must start at the first column.

Item=Value defines a value of a configuration item. *Item* is the name of a configuration item. It consists of any sequence of characters (case insensitive) and digits followed by a equal sign (=). Depending on item type, the value may either be an integer or a string (optionally enclosed in double quotes).

Comment lines must either start with a semicolon (;) or a hash character (#) in the first column.

The eloq.ini file

Section [runsrv]

This section is used by Eloquence to contact the **RUNSRV** utility program on a remote host.

The section [runsrv] may hold the following configuration items:

Service	Service=	<Servicename>
	Default:	runsrv
	Function:	Defines the service name (or port number) used to connect to RUNSRV on a remote host. The service name is used to lookup the port number in your /etc/services file.

NOTE:

You should provide the appropriate entry in your **/etc/services** file.

If the first character of the value is a digit, the value will be considered as a port number. It is recommended to use a service name.

The resulting port number *must* be the same on the client and server side.

Debug	Debug=	<level>
	Default:	0
	Function:	DebugLevel specifies the RUNSRV debug level. A zero value is recommended.

The eloql.ini file

Section [dlgsrv]

This section is used by the motif dialog driver program.

The section [dlgsrv] and any *user-defined sections* may hold the following configuration items:

Memsz	MemSz=	<MemorySize>
	Default:	4096
	Function:	MemorySize specifies the size of a memory area used for communication. The arguments exchanged by server and client is limited by the communication memory. A value of 4096 is recommended.
DefaultsFile	DefaultsFile=	<Filename>
	Default:	/opt/eloquence6/share/dlg/defaults.eq
	Function:	Defines the name (and path) of the defaults file used by motif dialog driver to provide defaults to dynamically created objects. If you are using modular dialog files, change the default value to the defaults.eq file in the module subdirectory. /opt/eloquence6/share/dlg/module/defaults.eq
IdmLib	IdmLib=	<Search Path>
	Default:	none, the environment variable IDMLIB is used instead.
	Function:	On execution of the DLG LOAD statement the specified dialog file is searched in each directory specified by the <i>IdmLib</i> item regardless of any directory specification named in the DLG LOAD statement. The directories are separated by ':'. If <i>IdmLib</i> is specified in the [dlgsrv] section it overrides the value of the IDMLIB environment variable unless the token \$IDMLIB is included into the directory list.

Installing Eloquence on the HP-UX platform

Configuring the GUI Server

If *IdmLib* is specified in an *user-defined section* it overrides the value of the *IdmLib* item specified in the [dlgsrv] section unless the token **\$IDMLIB** is included into the directory list.

Example: `IdmLib=/path1:path2:$IDMLIB`

This causes every dialog file loaded by **DLG LOAD** to be searched in the directories `/path1` and `/path2`. If the dialog file cannot be found in these locations, searching is continued using the value of the previous *IdmLib* item, such as the value of the **IDMLIB** environment variable.

DlgPath	DlgPath=	<Path>
	Default:	none
	Function:	Defines the path where DLGSRV expects dialog files.

NOTE: If *IdmLib* and/or the environment variable **IDMLIB** is present, *DlgPath* will be ignored. *DlgPath* serves for backward compatibility and may not be supported in future releases. *IdmLib* is much more flexible and should be used instead.

Dlg	Dlg=	<Prefix>
	Default:	DLG
	Function:	This specifies the file extension, by which Eloquence recognizes a Eloquence dialog file. Whenever Eloquence tries to load a Dlg file (for example sample.dlg), it will try to locate and load an Idc (e.g. sample.idc) or Idm (e.g. sample.idm) file first.

NOTE: Although it's possible to use Eloquence dialog files (they are converted internally at runtime) it's strongly recommended to convert them to Dialog Manager format due to performance considerations.

Idm	Idm=	<Prefix>
	Default:	IDM
	Function:	This specifies the file extension, by which Eloquence recognizes a Dialog Manager dialog file.

This file is usually created by the `cvdlg` utility program or the Dialog Manager graphical editor.

Idc	Idc= <Prefix> Default: IDC Function: This specifies the file extension, by which Eloquence recognizes a compiled Dialog Manager dialog file.
Debug	Debug= <Level> Default: 0 Function: DebugLevel specifies the debug of the motid dialog driver level. A zero value is recommended.
LogFile	Logfile= <Filename> Default: none Function: Defines the name and path of a log file the motif dialog driver uses to write debug messages to. This value is only used if DebugLevel is nonzero.
Netscape	<p>The Netscape web browser can be used with Eloquence as an on-line help viewer. The following configuration item is necessary to establish this function. The motif dialog driver uses the <code>-remote</code> commandline argument to communicate with an already running Netscape Navigator.</p> <p>HelpBaseURL= <Path to Netscape> Default: none Function: The Netscape item is used by the motif dialog driver as the location of the Netscape executable. This is vital in order to communicate with or startup Netscape.</p> <p>If the Netscape item is nopt present, the NETSCAPE environment variable is is used instead. If this variable is not present, the following path will be assumed:</p> <p><code>/usr/X11/bin/netscape</code></p>

Installing Eloquence on the HP-UX platform

Configuring the GUI Server

NOTE: This function requires Netscape Navigator 1.1 or above which is not included with Eloquence.

HelpBaseURL **HelpBaseURL=** <URL>
Default: none
Function: This defines the base URL of the on-line help files.
 Example: **HelpBaseURL=http://www/help/**

NOTE: Since this functionality uses the Microsoft Windows DDE protocol, you should provide a *Netscape* item in the section [modules]. If this item is missing, **DLGSRV** will not be able to automatically start-up Netscape. Please refer to the description of *Section [modules]* below and to the *Eloquence Graphical User Interface* documentation for details.

FileBaseURL **FileBaseURL=** <URL>
Default: none
Function: This defines the base URL for the function **EqHelpViewFile**.
 Example: **FileBaseURL=http://www/files/**

ManBaseURL **ManBaseURL=** <URL>
Default: none
Function: This defines the base URL for the function **EqHelpManPage**.
 Example: **ManBaseURL=http://www/cgi-bin/man2html**

User-defined sections

User-defined sections are used by the **DLGSRV** utility program.

The **DLGSRV** utility program is launched by the **DLG SET ".driver"** statement, the syntax of this statement is:

```
DLG SET ".driver", "driver_spec [ini_section [arguments]]"
```

driver_spec: motif

ini_section: Optional name of an *user-defined section* in the eloqcl.ini file where the defaults specified in the section [dlgsrv] can be overridden.

arguments: Additional arguments can optionally be specified here and will be passed-through to the Dialog Manager.

On startup of the motif dialog driver, the following tasks are performed:

- 1 the motif dialog driver sets up the *Dialog Manager argument list* from the **arguments** specified in the **DLG SET ".driver"** statement, if any. **DLGSRV** then reads the configuration items in the section *[dlgsrv]* (please refer to the description of *Section [dlgsrv]* below).
- 2 If **ini_section** is specified in the **DLG SET ".driver"** statement, the motif dialog driver reads additional configuration items from this *user-defined section*. If these items have been previously specified in the section *[dlgsrv]*, the previous values are overridden.

Example:

```
[debug]
DefaultsFile = /path/to/mydefaults.eq
```

This *user-defined section* named *[debug]* defines one item *DefaultsFile*. In order to activate this item, the name of this section must be specified in the **DLG SET ".driver"** statement, e.g.:

```
DLG SET ".driver" ,"motif debug"
```

Any previous *DefaultsFile* definition in section *[dlgsrv]* is overridden with the new value from section *[debug]*.

- 3 If **ini_section** is specified in the **DLG SET ".driver"** statement, the motif dialog driver searches this *user-defined section* for an item named *Arguments*. If this item exists, its value is appended to the *Dialog Manager argument list*.

Example:

```
[debug]
Arguments = -IDMtracefile /tmp/tracefile
```

This enables an additional Dialog Manager argument which creates a trace file for debugging purposes.

- 4 Finally, the composed *Dialog Manager argument list* is passed to the Dialog Manager runtime system start-up function.

Any configuration item valid for section *[dlgsrv]* may also be defined in *user-defined sections* (please refer to the description of *Section [dlgsrv]* below).

Additionally, *user-defined sections* may hold the following configuration item:

Arguments

Arguments= <Additional Dialog Manager Arguments>

Default: none

Installing Eloquence on the HP-UX platform
Configuring the GUI Server

Function: Additional arguments specific to the current *user-defined section* can optionally be specified here and will be passed-through to the Dialog Manager.

NOTE: If **arguments** are immediately specified in the **DLG SET ".driver"** statement, an *user-defined section* must be specified, too. However, if you specify a section name not present in the eloq.ini file, the *user-defined section* will be ignored.

NOTE: For a list of valid commandline arguments, please refer to the *ISA Dialog Manager* documentation.

Installing Eloquence on the Windows 32 bit platform

This chapter covers the installation of the Eloquence software on Windows NT and Windows 95.

- Software installation
- Configuring the operating system
- Configuring Eloquence

Installation on Windows NT and Windows 95

This document provides installation instructions for Eloquence on the 32 bit Windows platform. This applies to Windows NT and Windows 95.

Installation Prerequisites

The following prerequisites must be met before installing the Eloquence software on a system. Failing to do so will either cause the installation process to fail or will prohibit the successful use of Eloquence.

- Eloquence makes use of the TCP/IP protocol to interchange data between different processes even when used on the local computer only. No network card or dialup connection is required, but the TCP/IP protocol stack must be installed and configured before installing Eloquence.
- As usual, all applications should be closed before installing or upgrading Eloquence. The setup program may need to update shared components on your system and may require a reboot in order to do so.
- The Eloquence server software can only be installed on the Windows NT platform. On the Windows 95 platform, the installation program will disable all software packages which are not compatible.
- If you are upgrading the Eloquence software on your system, you should stop all running Eloquence software before installation. This includes any Eloquence related services (eloqsd and eloqdb6 service). Failing to do so will require a reboot of your system and may result in a failure during the installation process.
- When installing Eloquence server software on Windows NT, administrative capabilities are required. The server software is disabled by the installation program unless administrative capabilities are available. The installation of the Eloquence software is continued even if administrative capabilities are not available (a warning box provides a warning notice) but may fail subsequently depending on security policy (registry write access is required to HKEY_LOCAL_MACHINE and HKEY_CLASSES_ROOT).
- You should not install the Eloquence HTML documentation (reference manuals) on a FAT filesystem. Since this includes more than 1000 rather small files this may take considerable space on a FAT filesystem depending on cluster size. We recommend to install the Eloquence HTML documentation on a Web server in your local network.

Installing a Standalone system

A full functional standalone system can only be installed on a Windows NT system, since the Eloquence server programs are not available on Windows 95. However the Eloquence IDE and the Eloquence runtime can also be installed standalone on a Windows 95 system.

In order to configure the TCP/IP protocol, a network adapter is required on Windows. However, if your system does not have a network card installed you can use the following configuration:

Windows NT On the Windows NT platform you can install the *MS Loopback Adapter*. You are required to configure an IP address for the Loopback Adapter. We recommend to use an IP address reserved for internal usage (such as 192.168.1.1 with the Subnet mask 255.255.255.0) as defined by RFC 1597.

Windows 95 On the Windows 95 platform you can configure the *Dial-Up Adapter* as some kind of generic device. This is sufficient to bind the TCP/IP protocol. No further configuration is required.

This makes it possible to install the TCP/IP protocol. You can use the host name "localhost" or the IP number 127.0.0.1 to reference your local system since this is used by TCP/IP to address the local system.

The Setup Program

- ❑ To install Eloquence from the CD-ROM media, please change to the `\A0600\win32` directory on the CD and start the `setup.exe` program.
- ❑ To install Eloquence from a directory (for example if you downloaded the files from the Internet), please change to the directory and start the `setup.exe` program. Please make sure that all packages that you wish to install (for example `run.z` and `dev.z` etc.) are located in this folder.

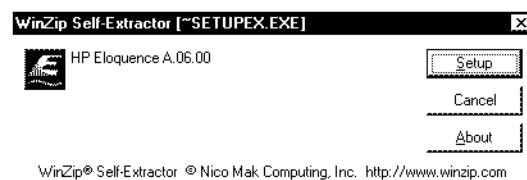
NOTE:

The setup program requires all packages in the same directory it was started from. On startup it examines all packages in the start directory and adjusts its selection appropriately. This is not required for patch files.

The Eloquence installation program is compliant with the Windows Setup/Uninstall procedures. You can use the control panel to uninstall Eloquence.

The Eloquence installation program normally takes care of upgrading an installed Eloquence release. However, manual adjustments may be required when upgrading to a new Eloquence revision. Please read the Eloquence release notes before installing or upgrading Eloquence.

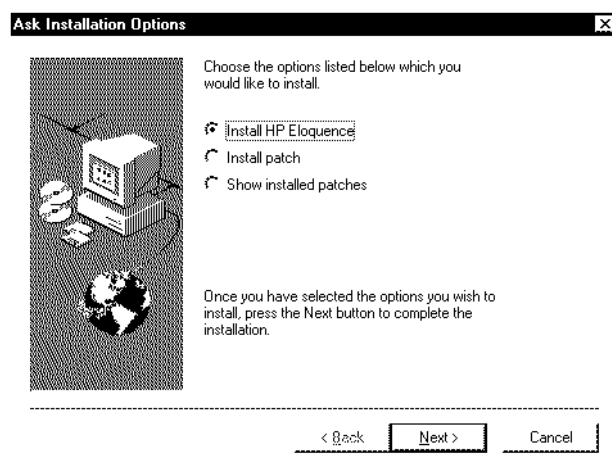
The setup program has been compressed into a self extracting exe file. After it has been started the following dialog appears:



Please choose *Setup* to continue the installation process. This will unpack the setup program and additional components contained in the `setup.exe` to a temporary location on your disk and execute it.

After a short delay the Welcome dialog and the License Agreement will appear on the screen. You must accept the Eloquence license agreement in order to continue the installation.

The "Installation Options" dialog will appear next. It can be used to select the operation of the setup program.



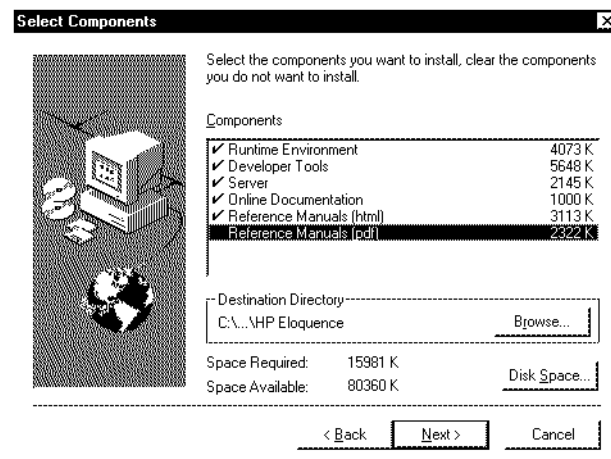
The following options are available:

- | | |
|--------------------------------|---|
| Install Eloquence | This option is used to install Eloquence software. |
| Install patch | This option is used to install Eloquence patch files. Please refer to the section Eloquence patch installation below for more information. |
| Show installed versions | This option is used to obtain version information about the installed Eloquence packages. Please refer to the section Obtaining version information below for more information. |

To continue the installation process, please select the option "Installing Eloquence".

The "Select Components" dialog comes next. It can be used to select the Eloquence components which you want to install.

Installing Eloquence on the Windows 32 bit platform The Setup Program



The Components list provides the list of available Eloquence components. Only components which are available (the package file is present) and can be installed (due to platform or security restrictions) are displayed.

Each component marked with a check mark will be installed subsequently. You can set or remove this mark with your mouse. By default, the Runtime Environment and all already installed components are marked for installation.

The Destination directory shows the path, where Eloquence will be installed. You can use the Browse push button to select a different directory. The default installation path is `/Program Files/Hewlett-Packard/HP-Eloquence`.

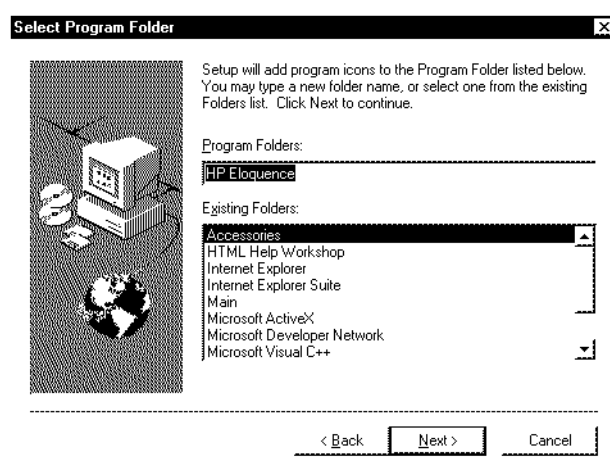
The following packages are available:

- | | |
|---------------------------------|--|
| Runtime Environment | This package includes the Eloquence runtime environment. |
| Developer Tools | This package includes the Integrated Development Environment (IDE) and additional program development related tools. |
| Server | This package provides the Eloquence server software. This cannot be installed on Windows 95 and requires administrative capabilities. |
| Online Documentation | This package includes the online documentation of the Eloquence IDE and other components and the Eloquence release notes. |
| Reference Manuals (html) | This package includes the Eloquence Reference Manuals in HTML format. Since it consists of more than 1000 files, installing on a FAT filesystem can take up considerable |

disk space.

Reference Manuals (pdf) This package includes Eloquence Reference Manuals in PDF format. This can be read using the free Adobe Acrobat Reader software which is included on the CD-ROM media or can be downloaded from the Internet

The "Select Program Folder" dialog asks you where the Eloquence software should be installed in the Start menu.



The default program folder name is "Eloquence".

The next dialog will display a short summary of your installation options. If you continue, the installation program will start copying Eloquence to your hard disk.

NOTE:

Existing configuration files are not replaced by the installation. Instead, a new template file is installed in the etc subdirectory with the extension .sam (sample).

Install Eloquence Patches

Please read the README.txt file included with the patch before installing a Eloquence patch. It provides a description of the patch and the replaced files and may provide additional information about required manual installation or configuration steps.

Installing Eloquence on the Windows 32 bit platform

The Setup Program

NOTE:

Please note: Don't install a regular Eloquence install package as a patch file. No configuration is performed on patch files. You should only install patches for already installed Eloquence packages.

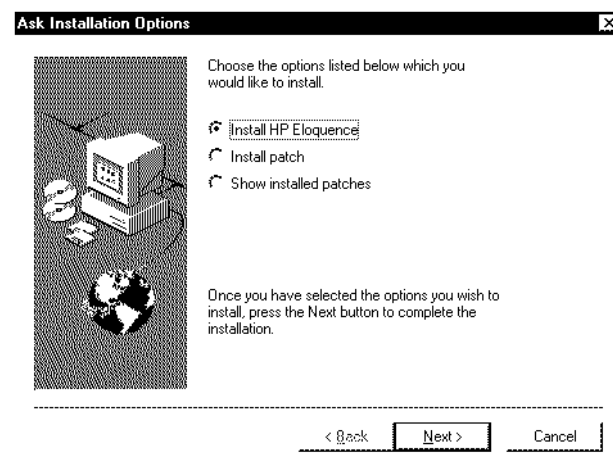
Please start the **setup.exe** program as described previously in this chapter. In the options dialog, please select the Install Patches option.

A file selection box appears to select the Eloquence patch file. Eloquence patch files are named **patch?? .z**. After the patch file has been selected, the files included in the patch file are used to replace the original files on your disk.

Obtaining version information

Please start the **setup.exe** program as described previously in this chapter. In the options dialog, please select the Show installed versions option.

The setup program will then obtain version information about installed Eloquence packages and patches from the registry.



Uninstallation

The Eloquence installation program is compliant with the Windows Setup/Uninstall procedures. You can use the control panel to uninstall Eloquence.

In order to uninstall Eloquence services an additional manual step is required to unregister the Eloquence services from the Windows NT operating system.

- 1 Log on as Administrator

- 2 Stop the eloqsd and eloqdb6 services using the service manager in the control panel
- 3 Open a command line window and change to the \WINNT\SYSTEM32 directory
- 4 Unregister the Eloquence services by executing

```
eloqsd -remove  
eloqdb6 -remove
```

After that, you can remove the Eloquence software using the usual uninstall function in the control panel.

List of Packages

Package	Description
run.z	Eloquence runtime environment
dev.z	Eloquence development environment
server.z	Eloquence server software
doc.z	Online documentation (HTML)
man.z	Reference manuals (HTML)
pdf.z	Reference manuals (PDF)

Configuring Windows NT and Windows 95

After the initial installation of the Eloquence software configuration of the Windows NT or Windows 95 system is required:

- Configure host names
- Configure service names

Additional configuration of the Dialog subsystem is required. This involves editing the configuration files eloqcl.ini and eqexec.ini. Please refer to the Eloquence Dialog Manual for more information.

If you installed the Eloquence server software (Windows NT only) additional configuration is required:

- Configuring the eloqsd service
- Configuring the eloqdb6 service

Configure host names

You may want to define the host name of your server in your HOSTS file. Unless you use DNS to resolve host names, this is required as the dialog subsystem relies on the server name.

The location of your HOSTS file depend on your Windows version:

Windows NT \WINNT\SYSTEM32\DRIVERS\ETC

Windows 95 \WINDOWS

Please add a line like below to your HOSTS file:

```
192.168.1.1  server
```

where *192.168.1.1* is the IP address and *server* is the host name of your server system.

Configure service names

You may want to define the Eloquence specific service names in your SERVICES file. This is optional, as you can specify the port number directly instead of a service name.

The location of your SERVICES file depends on your Windows version:

Windows NT \WINNT\SYSTEM32\DRIVERS\ETC

Windows 95 \WINDOWS

Please add a line like below to your SERVICES file:

```
runsrv 8010/tcp      # Eloquence RunSRV
eloqsd 8100/tcp      # Eloquence server
eloqdb 8102/tcp      # Eloquence data base server
eloqdb5 8104/tcp     # Eloquence A.05.x data base server
```

where the first column specifies the service name (eg. runsrv) and the second column the associated port number and protocol (eg. 8010/tcp). The selected port numbers may not already be in use by another programs.

NOTE:

All systems must use the same port numbers in order to communicate.

Configure the eloqsd service

If you intend to run the eloqsd service on your system additional configuration is required. This is described in detail in the next section.

Overview:

- Allow **Log on as a batch job** for all users who should use the eloqsd service.
- Edit the eloqsd configuration files.
- Select a startup mode for the eloqsd service.
- Start the eloqsd service

Configure the eloqdb6 service

If you intend to run the Eloquence database server on your system additional configuration is required. This is described in detail in the next section.

Overview:

- Edit the eloqdb6.cfg configuration file.
- Create a data base environment (please refer to the document *A practical approach to the new Eloquence A.06.00 database* for more information).
- Select a startup mode for the eloqdb6 service.
- Start the eloqdb6 service

Configuring the eloqsd service

The eloqsd service is an important part of Eloquence. It is responsible for the following tasks

- Eloqsd provides file sharing capabilities for the new graphical Eloquence development environment.
- Eloqsd is used to start eloqcore processes in the background.
- Eloqsd is used to count active users and does validate it against available user licenses.

Eloquence A.06.00 implements its own file sharing capabilities through the eloqsd server. This makes it independent of the availability of specific network file systems (NFS/SMB) and overcomes inappropriate limitations.

- File names are case sensitive
- No limitations on files names, except they may not include a slash (used as directory separator) and a NUL character.
- There is a consistent authorization in a heterogeneous environment
- National characters are translated according to local conventions. So a client using the ISO 8859-1 character set encoding and a local user using a different character set encoding would see a consistent file name.
- Usable on a WAN connection

In order to run the eloqsd service it is required to adapt your system configuration. This involves the following steps:

- Registering the eloqsd server with the Windows NT operating system
- Configuring your system
- Configuring the eloqsd server
- Configuring the eloqsd server startup

Registering the eloqsd server with the Windows NT operating system

The Eloquence server software is installed as Windows NT services. During the installation process the eloqsd.exe executable is installed in the Windows NT system directory (usually \WINNT\SYSTEM32). In addition, it is automatically registered with the Windows NT Service Control Manager.

NOTE:

Manual registration of the eloqsd service with the Windows NT Service Control Manager is usually not required since the Setup program performs a default registration. Unless you need any of the special installation variants noted below you can skip this section.

In order to manually register the eloqsd server with the Windows NT Service Control Manager you must execute eloqsd.exe with the -install argument:

- 1 Log on as Administrator.
- 2 Open a Command Prompt window and change to the Windows NT system directory where the eloqsd.exe executable is located. This is usually `\WINNT\SYSTEM32`.
- 3 Execute the following command: `eloqsd -install`. This makes the eloqsd server available to the Windows NT Service Control Manager. The NT service name is "EloqSD".

As a special installation variant, it is possible to install multiple instances of the eloqsd server on a single machine. In such a scenario, a single eloqsd.exe is made available to the Windows NT Service Control Manager more than once, with each instance using a different NT service name.

Let us assume, for example, that you intend to setup a second eloqsd server in order to make private files accessible which need special privileges. The first thing you should consider is that every eloqsd instance must have a unique NT service name. Since the first eloqsd has been installed with the Setup program, its NT service name is "EloqSD". The second eloqsd needs a different name, so let us choose "Private EloqSD".

To make this second eloqsd available to the Windows NT Service Control Manager, follow the steps shown above. In the last step, you provide the NT service name after the `-install` argument: `eloqsd -install "Private EloqSD"`

The Windows NT Service Control Manager now knows about two instances of the eloqsd server, each with its own NT service name and treats them as two different services although both refer to the same eloqsd.exe file. You could now provide them with two different startup options and different command line arguments (please refer to the following section "Service configuration").

If you want to uninstall the eloqsd server, it is important that you first remove it from the Windows NT Service Control Manager before you actually delete the eloqsd.exe file:

- 1 Log on as Administrator.
- 2 Make sure that the eloqsd server is not running:
 - From the Start menu, choose Settings - Control Panel. This opens the Control Panel window.
 - Double-click the Services icon. This opens the Services dialog.
 - Locate the EloqSD entry in the service list and verify that its Status column is empty. If not, select it with the mouse, press the Stop button, confirm with "Yes" and wait until the service has been stopped.

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqsd service

NOTE:

If you have installed multiple instances of the eloqsd server, you must repeat this for each instance (where each instance has a different NT service name) since each of these instances refers to the same eloqsd.exe file.

- 3 Open a Command Prompt window and change to the Windows NT system directory where the eloqsd.exe is located. This is usually `\WINNT\SYSTEM32`.
- 4 Execute the following command: `eloqsd -remove`. This removes the eloqsd server from the Windows NT Service Control Manager.

NOTE:

If you have registered multiple instances of the eloqsd server, you should repeat this for each instance, providing the NT service name after the `-remove` argument.

For example:

```
eloqsd -remove "Private EloqSD"
```

After you have stopped and unregistered every instance of the eloqsd server you can safely delete the eloqsd.exe file.

Configuring your System

This involves the following steps:

- Configuring the TCP eloqsd service
- Configuring the default eloqsd account
- Grant the background login right to users

Configuring the TCP eloqsd service

You may want to define the eloqsd service names in your `SERVICES` file. This is optional, as you can specify the port number directly in the `eloqsd.cfg` configuration file.

Your `SERVICES` file is located in the directory `\WINNT\SYSTEM32\DRIVERS\ETC`. Please add a line like below:

```
eloqsd      8100/tcp      # Eloquence A.06.00 eloqsd server
```

where the first column specifies the service name (eg. `eloqsd`) and the second column the associated port number and protocol (eg. `8100/tcp`). The selected port numbers may not already be in use by another programs.

Configuring the default eloqsd account

The eloqsd server requires you to specify an account name in the configuration file. This account is used

to define the access rights which are used unless a specific account is defined for the user.

You may specify any existing account in the configuration file (for example the guest account) or you may create a new user account "eloqsd" which is used by the eloqsd server.

Grant the background login right to users

Each system account associated with an eloqsd user must have the right to log on as a batch job. This must be setup manually using the Windows NT User Manager or the Windows NT User Manager for Domains, respectively:

- 1 Log on as Administrator.
- 2 Start the User Manager or the User Manager for Domains, respectively. It is located in the Start menu (Programs - Administrative Tools).
- 3 From the Policies menu, select User Rights. This opens the User Rights Policy dialog.
- 4 Check the Show Advanced User Rights option.
- 5 From the Right list, select Log on as a batch job.
- 6 Use the Add... button to add the users or groups who should have access to the eloqsd server. To grant this right to all accounts you could simply select "everyone".

Configuring the eloqsd server

The eloqsd server is configured by editing the eloqsd.cfg, eloqsd.user and eloqsd.share configuration files. They are located in the Eloquence configuration directory. All configuration files provide complete inline documentation and are included at the end of this document for your reference.

The location of the Eloquence configuration directory depends on where the Eloquence has been installed. All Eloquence configuration files are installed in the etc subdirectory of the Eloquence installation directory. This is usually C:\Program Files\Eloquence.

Each configuration file is responsible for a specific part of the eloqsd configuration:

eloqsd.cfg	Is used for the general configuration of the server.
eloqsd.user	Eloqsd provides its own user configuration. This makes it possible to define eloqsd users without the need to have a system account for each individual user. Instead eloqsd users are associated with system accounts.

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqsd service

eloqsd.share This configuration file is used to define resources which can be accessed through the eloqsd server.

Configuring the eloqsd server startup

After the eloqsd server has been registered with the Windows NT Service Control Manager it can be accessed using the Control Panel:

- 1 From the Start menu, choose Settings - Control Panel. This opens the Control Panel window.
- 2 Double-click the Services icon. This opens the Services dialog.
- 3 Locate the EloqSD entry in the service list (or the service name you have specified during the service installation) and select it with the mouse.

Now you should specify the Startup Options by selecting the Startup... button:

- If you want the eloqsd server to be automatically started each time Windows NT is restarted, you should select the Automatic Startup Type. This is the recommended setting.
- If you select the Manual Startup Type, you have to manually start the eloqsd server each time Windows NT is restarted.
- By default, the Log On As option is set to System Account. This is the recommended setting since eloqsd has its own authorization facility which switches the system account whenever a new connection is established. This is controlled by means of the eloqsd.cfg and eloqsd.user configuration files.

Alternatively, you can specify a different account using the This Account option, but concerning to the eloqsd server this will not make a big difference.

When you have setup the Startup Options, you can define additional arguments for the eloqsd server as an option. This is usually not required (if a single instance of the eloqsd server is used) since all settings are normally provided in the eloqsd.cfg configuration file. However this can be used for tracking down problems (starting the eloqsd server temporarily with different log options) and is mandatory if you have multiple eloqsd instances.

Possible arguments are:

```
-c name      = configuration file
-d flags     = log flags
-l name      = log file name
-s name      = service name (tcp/ip transport)
```

Option	Description	Equiv.*
-c name	Specifies the configuration file name	

Option	Description	Equiv.*
-d flags	Specifies the server log flags.	LogFlags
-l name	Specifies the server log file.	LogFile
-s name	The service name (as defined in /etc/services) or the port number where the server should listen for requests. The default value is eloqsd.	Service

*Equivalent configuration file directive.

For example, if you wish to specify a different TCP/IP service name (the default is "eloqsd"), you could enter the following into the Startup Parameters field:

```
-save -s 8567
```

This will make the eloqsd server listen to the TCP/IP port number 8567. The leading -save argument makes this command line persistent, so that the same arguments are used each time this eloqsd server instance is started. If you do not specify the -save argument this options will be used only once.

Any persistent command line is associated with the NT service name, so you can (actually must) provide separate arguments to each instance of the eloqsd server.

If you want to make sure that the command line is empty and that any persistent command line is deleted, just specify -save without any additional arguments.

At this point, everything is configured and the eloqsd server can be started. Select the Start button and wait until the startup has completed.

If you did not specify a log file, the eloqsd server will write log messages to the Windows NT Event Log. You should periodically check this in order to get aware of possible configuration problems:

- 1 Start the Event Viewer. It is located in the Start menu (Programs - Administrative Tools).
- 2 From the Log menu, select Application. This shows the contents of the Application Log Queue.

At this time, there should be three entries concerning the EloqSD noting that the server has been installed, started and activated.

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqsd service

The eloqsd HTTP status display

When the ServiceHttp is defined in the eloqsd.cfg configuration file, you can use a WEB browser such as Netscape to view the configuration and state of the eloqsd process in your network.

To access the eloqsd server, you need to provide a URL like below:

```
http://server:port/
```

where server is the host name or IP number of the system running the eloqsd server and port is the port number used for serviceHttp in the eloqsd.cfg file.

Default eloqsd.cfg file

```
# eloqsd.cfg
#
# @(#)Revision: 1.4 1997/07/15 00:00 $
# The purpose of this file is to define the eloqsd properties.
# The location depends on the operating system:
#
# Windows NT:
#   C:/Program Files/Eloquence/etc/eloqsd.cfg
#
# This file is read once at eloqsd startup.
#
# Format:
#
# The section names are not case sensitive.
# String values can be enclosed in double quotes
# to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.

### Server configuration

[Config]

# Service          The service name (as defined in your SERVICES file)
#                  or the port number where the server should listen
#                  for requests. The default value is eloqsd.
#
# ServiceHttp      The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for HTTP requests. If this is not specified, the
#                  HTTP status is disabled.
#
# UseKeepAlive     Numeric flag if the KEEP ALIVE socket option
#                  should be used. Valid values are 1/0.
#                  The default value is 1.
#                  If this option is active, the server will check
#                  after a system defined period of inactivity, if the
#                  client is still alive.

#Service = eloqsd
#ServiceHttp =
#UseKeepAlive = 1

# panic           This option defines what should happen if a fatal
#                  error is encountered.
#
#                  The following options are valid:
#                  exit    Terminate the process. This is the default.
#                  dump    Terminate the process and create a core dump.
#
#                  This is a problem tracking option. Unless you know what
#                  you need the core dump for you probably want to stay with
#                  the default.

#panic = exit
```

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqsd service

```
# HttpFrame      Numeric flag if the links should be omitted
#                in HTTP status.
#                The default value is 0.

# HttpFrame = 0

# Lang           This configuration option defines the locale, the
#                server should use. The default value is "C".
#                The only locale currently supported is "C".
#
# Messages      This configuration option defines the language
#                for server messages. This value defaults to Lang.
#                The only locale currently supported is "C".
#
# Charset        This defines the character set encoding, the server
#                should use internally.
#
#                Valid settings are:
#                HPROMAN8 - HP Roman8
#                ISO8859/1 - ISO 8859/1
#                The default value for HP-UX is HPROMAN8, all other
#                platforms default to ISO8859/1.
#
#                This setting is used by the server to translate
#                client strings like user or file names.

#Lang = C
#Messages = C
#Charset = ISO8859/1

# AuthPolicy     This entry specifies, how user names and passwords
#                are validated. The following entries are valid:
#
#                server - The server will validate passwords
#                and user names using eloqsd.user
#
#                The default value is "server".
#
# userFile       The path/name of the eloqsd.user file.
#                The default value depends on your operating system:
#                HP-UX 9.x: /opt/eloquence6/etc/eloqsd.user
#                HP-UX 10.x: /etc/opt/eloquence6/eloqsd.user
#                Linux: /etc/opt/eloquence6/eloqsd.user
#
# shareFile      The path/name of the eloqsd.share file.
#                The default value depends on your operating system:
#                HP-UX 9.x: /opt/eloquence6/etc/eloqsd.share
#                HP-UX 10.x: /etc/opt/eloquence6/eloqsd.share
#                Linux: /etc/opt/eloquence6/eloqsd.share

#AuthPolicy = server

#userFile = C:/Program Files/Eloquence/...
#                ...etc/eloqsd.user
#shareFile = C:/Program Files/Eloquence/...
#                ...etc/eloqsd.share

# DefaultUID     The default name of the system account to run
#                client processes as, unless a different setting is
#                provided for the user.
#                If this account is located on a domain server,
```

Installing Eloquence on the Windows 32 bit platform Configuring the eloqsd service

```
#           it must be prefixed with the domain name
#           followed by a backslash character (domain\user).

DefaultUID = Guest

# LogFile      This defines where log messages are written to.
#              This configuration value either specifies a path/file
#              or one of the keywords below:
#
#              syslog   - log messages are sent to the Windows NT
#                       event log
#
#              The default value is "syslog".

#LogFile = syslog

# LogFlags     Each log message has an associated origin and severity.
#              The log flags define which messages will be logged.
#              The "*" origin matches all message origins, so it can
#              be used to setup a default which can be overridden
#              for a specific message origin (eg. "*1N0"):
#              Default LogFlags are "*0"
#
#              The following origin are in use:
#              * = All origins
#              C = Configuration subsystem
#              N = Network transport
#              P = Protocol handling
#
#              The following severities are in use:
#              L_ERROR  = 0   - error messages
#              L_INFO   = 1   - information
#              L_DEBUG  = 2   - debug
#              L_VDEBUG = 3   - verbose debug
#
#              When using syslog, the following priorities
#              are mapped:
#              L_ERROR  = LOG_ERR
#              L_INFO   = LOG_NOTICE
#              L_DEBUG  = LOG_DEBUG
#              L_VDEBUG = LOG_DEBUG
#
#              Enabling log messages with L_DEBUG or L_VDEBUG severity
#              may result in a huge number of log messages.
#              To enable only fatal messages you would want to set the
#              LogFlags to "*0", to enable regular log messages you
#              would want to set the LogFlags to "*1"

LogFlags = *1
```

Default eloqsd.share file

```
# eloqsd.share
#
# @(#) $Revision: 1.3 1996/12/19 12:00 $
# The purpose of this file is to define all disk resources which are
# known to Eloquence.
# The location depends on the operating system:
#
# Windows NT:
#   C:/Program Files/Eloquence/etc/eloqsd.share
#
# This file is read at the startup time of the eloqsd process.
# Changes are automatically detected and honored.
#
# Eloquence A.06.00 provides its own file sharing capabilities.
# This will make you independent of the availability of specific
# network file systems (NFS/SMB) and overcomes possible file system
# limitations.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
#
# Each share definition is a different section.
#
# The following configuration items are recognized for each section:
#
# [share_id]
# Path      Absolute path
# Comment   Share description. This is displayed by the client.

[temp]
Path = C:/Temp
Comment = Tempory Location
```

Default eloqsd.user file

```
# eloqsd.user
#
# @(#) $Revision: 1.3 1996/12/19 12:00 $
# The purpose of this file is to define all users which are known to
# Eloquence. The location depends on the operating system:
#
# Windows NT:
#   C:/Programs/Eloquence/etc/eloqsd.user
#
# This file is read at the startup time of the eloqsd process.
# Changes are automatically detected and honored.
#
# This makes it possible to define Eloquence users
# without the need to have a system account for each individual user.
# During logon, a password is expected which must match
# the system account associated with the eloqsd user id.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
#
# Each user definition is a different section.
#
# The following configuration items are recognized for each section:
#
# [user_id]
# Name          The full user name (currently unused)
# Email         Email address of the user (currently unused)
# Password      (not supported on Windows NT)
# uid          System account to execute client processes.
#              If this account is located on a domain server, it must be
#              prefixed with the domain name followed by a backslash
#              character (domain\user).
# gid          (not supported on Windows NT)
# Allow        Comma separated list of hosts/IP addresses to allow
#              connection for this user. (currently unused)
# Deny        Comma separated list of hosts/IP addresses to deny
#              connection for this user. (currently unused)
# Options      Comma separated list of capabilities to enable
#              for this user (currently unused)
#              HTTP_Info, HTTP_Admin, FileSharing, Debug, Attach
#              RExec, EqExec, DLGSRV, ...
# Profile      Template user entry. User defaults will be taken
#              from this section.
# Home        Home path. Defaults to the home directory associated to
#              the UID by the system.
#
# There are two predefined sections.
# [public] is used, if a client does not provide a user id.
# This can only happen, if an eloqcore has been started locally
# and requests a remote operation. It is probably a good idea
# to define a very restrictive deny for this section.
# [default] is used as the default user profile.
```

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqsd service

```
[public]
Name = Anonymous
deny = *

[default]
Name = Default user profile
deny = *

[demo]
Name = Joe Average
UID = JoesAccount
```

Configuring the eloqdb6 service

The eloqdb6 server is the new Eloquence A.06.00 data base server. Eloquence A.06.00 uses a new data base using the client/server approach.

In order to run the eloqdb6 service it is required to adapt your system configuration. This involves the following steps:

- Registering the eloqdb6 server with the Windows NT operating system
- Configuring your system
- Configuring the eloqdb6 server
- Configuring the eloqdb6 server startup

Registering the eloqsd server with the Windows NT operating system

The Eloquence server software is installed as Windows NT services. During the installation process the eloqdb6.exe executable is installed in the Windows NT system directory (usually \WINNT\SYSTEM32). In addition, it is automatically registered with the Windows NT Service Control Manager.

NOTE:

Manual registration of the eloqdb6 service with the Windows NT Service Control Manager is usually not required since the Setup program performs a default registration. Unless you need any of the special installation variants noted below you can skip this section.

In order to manually register the eloqdb6 server with the Windows NT Service Control Manager you must execute eloqdb6.exe with the -install argument:

- 1 Log on as Administrator.
- 2 Open a Command Prompt window and change to the Windows NT system directory where the eloqdb6.exe executable is located. This is usually \WINNT\SYSTEM32.
- 3 Execute the following command: `eloqdb6 -install`. This makes the eloqdb6 server available to the Windows NT Service Control Manager. The NT service name is "EloqDB6".

As a special installation variant, it is possible to install multiple instances of the eloqdb6 server on a single machine. In such a scenario, a single eloqdb6.exe is made available to the Windows NT Service Control Manager more than once, with each instance using a different NT service name.

Let us assume, for example, that you intend to setup a second eloqdb6 server in order to have another data base environment for testing purposes. The first thing you should consider is that every eloqdb6 instance must have an unique NT ser-

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqdb6 service

vice name. Since the first eloqdb6 has been installed with the Setup program, its NT service name is "EloqDB6". The second eloqdb6 needs a different name, so let us choose "Private EloqDB6".

To make this second eloqdb6 available to the Windows NT Service Control Manager, follow the steps shown above. In the last step, you provide the NT service name after the -install argument: `eloqdb6 -install "Private EloqDB6"`

The Windows NT Service Control Manager now knows about two instances of the eloqdb6 server, each with its own NT service name and treats them as two different services although both refer to the same eloqdb6.exe file. You could now provide them with two different startup options and different command line arguments (please refer to the following section "Service configuration").

If you want to uninstall the eloqdb6 server, it is important that you first remove it from the Windows NT Service Control Manager before you actually delete the eloqdb6.exe file:

- 1 Log on as Administrator.
- 2 Make sure that the eloqdb6 server is not running:
 - From the Start menu, choose Settings - Control Panel. This opens the Control Panel window.
 - Double-click the Services icon. This opens the Services dialog.
 - Locate the eloqdb6 entry in the service list and verify that its Status column is empty. If not, select it with the mouse, press the Stop button, confirm with "Yes" and wait until the service has been stopped.

NOTE:

If you have installed multiple instances of the eloqdb6 server, you must repeat this for each instance (where each instance has a different NT service name) since each of these instances refers to the same eloqdb6.exe file.

- 3 Open a Command Prompt window and change to the Windows NT system directory where the eloqdb6.exe is located. This is usually `\WINNT\SYSTEM32`.
- 4 Execute the following command: `eloqdb6 -remove`. This removes the eloqdb6 server from the Windows NT Service Control Manager.

NOTE:

If you have registered multiple instances of the eloqdb6 server, you should repeat this for each instance, providing the NT service name after the -remove argument.

For example:

```
eloqdb6 -remove "Private EloqDB6"
```

After you have stopped and unregistered every instance of the eloqdb6 server you can safely delete the eloqdb6.exe file.

Configuring your System

This involves the following steps:

- Configuring the TCP eloqdb6 service

Configuring the TCP eloqdb6 service

You may want to define the eloqdb6 service names in your SERVICES file. This is optional, as you can specify the port number directly in the eloqdb6.cfg configuration file.

Your SERVICES file is located in the directory \WINNT\SYSTEM32\DRIVERS\ETC. Please add a line like below:

```
eloqdb      8102/tcp      # Eloquence A.06.00 eloqdb6 server
```

where the first column specifies the service name (eg. eloqdb6) and the second column the associated port number and protocol (eg. 8102/tcp). The selected port numbers may not already be in use by another programs.

Configuring the eloqdb6 server

The eloqdb6 server is configured by editing the eloqdb6.cfg configuration file. It is located in the Eloquence configuration directory. This file provides complete inline documentation and is included at the end of this document for your reference.

The location of the Eloquence configuration directory depends on where the Eloquence has been installed. All Eloquence configuration files are installed in the etc subdirectory of the Eloquence installation directory. This is usually C:\Program Files\Eloquence.

Configuring the eloqdb6 server startup

After the eloqdb6 server has been registered with the Windows NT Service Control Manager it can be accessed using the Control Panel:

- 1 From the Start menu, choose Settings - Control Panel. This opens the Control Panel window.
- 2 Double-click the Services icon. This opens the Services dialog.
- 3 Locate the EloqDB6 entry in the service list (or the service name you have specified during the service installation) and select it with the mouse.

Now you should specify the Startup Options by selecting the Startup... button:

- If you want the eloqdb6 server to be automatically started each time Windows NT is

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqdb6 service

restarted, you should select the Automatic Startup Type. This is the recommended setting.

- If you select the Manual Startup Type, you have to manually start the eloqdb6 server each time Windows NT is restarted.
- By default, the Log On As option is set to System Account. Alternatively, you can specify a different account using the This Account option.

When you have setup the Startup Options, you can define additional arguments for the eloqdb6 server as an option. This is usually not required (if a single instance of the eloqdb6 server is used) since all settings are normally provided in the eloqdb6.cfg configuration file. However this can be used for tracking down problems (starting the eloqdb6 server temporarily with different log options) and is mandatory if you have multiple eloqdb6 instances.

Possible arguments are:

```
-c name      = configuration file
-d flags     = log flags
-l name      = log file name
-s name      = service name (tcp/ip transport)
```

Option	Description	Equiv.*
-c name	Specifies the configuration file name	
-d flags	Specifies the server log flags.	LogFlags
-l name	Specifies the server log file.	LogFile
-s name	The service name (as defined in /etc/services) or the port number where the server should listen for requests. The default value is eloqdb6.	Service

*Equivalent configuration file directive.

For example, if you wish to specify a different TCP/IP service name (the default is "eloqdb6"), you could enter the following into the Startup Parameters field:

```
-save -s 8567
```

This will make the eloqdb6 server listen to the TCP/IP port number 8567. The leading -save argument makes this command line persistent, so that the same arguments are used each time this eloqdb6 server instance is started. If you do not specify the -save argument this options will be used only once.

Any persistent command line is associated with the NT service name, so you can (actually must) provide separate arguments to each instance of the eloqdb6 server.

If you want to make sure that the command line is empty and that any persistent command line is deleted, just specify -save without any additional arguments.

At this point, everything is configured and the eloqdb6 server can be started. Select the Start button and wait until the startup has completed.

If you did not specify a log file, the eloqdb6 server will write log messages to the Windows NT Event Log. You should periodically check this in order to get aware of possible configuration problems:

- 1 Start the Event Viewer. It is located in the Start menu (Programs - Administrative Tools).
- 2 From the Log menu, select Application. This shows the contents of the Application Log Queue.

At this time, there should be two entries concerning the EloqDB6 noting that the server has been installed and successfully started.

The eloqdb6 HTTP status display

When the ServiceHttp is defined in the eloqdb6.cfg configuration file, you can use a WEB browser such as Netscape to view the configuration and state of the eloqdb6 server in your network.

To access the eloqdb6 server, you need to provide a URL like below:

```
http://server:port/
```

where server is the host name or IP number of their system running the eloqsd server and port is the port number used for serviceHttp in the eloqdb6.cfg file.

Default eloqdb6.cfg file

```
# eloqdb6.cfg
#
# @(#)Revision: 1.8 1997/07/21 00:00 $
# This file defines the eloqdb6 configuration and the
# database environment.
# The default location depends on the operating system:
#
# Windows NT:
#   C:/Program Files/Eloquence/etc
#
# This file is read once at eloqdb6 startup.
#
# Format:
#
# The section names are not case sensitive.
# String values can be enclosed in double quotes to protect
# leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.

### Server configuration

[Server]

# Service          The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for requests. The default value is eloqdb.
#
# ServiceHttp      The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for HTTP requests. If this is not specified, the
#                  HTTP status is disabled.
#
# UseKeepAlive     Numeric flag if the KEEP ALIVE socket option
#                  should be used. Valid values are 1/0.
#                  The default value is 1.
#                  If this option is active, the server will check
#                  after a system defined period of inactivity if the
#                  client is still alive.

#Service = eloqdb
#ServiceHttp =
#UseKeepAlive = 1

# panic           This option defines what should happen if a fatal
#                  error is encountered.
#
#                  The following options are valid:
#                  exit    Terminate the process. This is the default.
#                  dump   Terminate the process and create a core dump.
#
#                  This is a problem tracking option. Unless you know what
#                  you need the coredump for you probably want to stay
#                  with the default.

#panic = exit
```

Installing Eloquence on the Windows 32 bit platform Configuring the eloqdb6 service

```
# LogFile          This defines where log messages are written to.
#                  This configuration value either specifies a path/file
#                  or one of the keywords below:
#
#                  console - log messages are written to the console
#                  syslog  - log messages will be sent to the Windows NT
#                           Event Log
#
#                  The default value is "syslog".

#LogFile = syslog

# LogFlags         Each log message has an associated origin
#                  and severity.
#                  The log flags define which messages will be logged.
#                  The "*" origin matches all message origins, so it can
#                  be used to setup a default which can be overridden
#                  for a specific message origin (eg. "*1N0"):
#                  Default LogFlags are "*0"
#
#                  The following origin are in use:
#                  * = All origins
#                  A = Configuration subsystem
#                  X = Network transport
#                  P = Protocol handling
#                  T = Thread kernel
#                  I = IMAGE subsystem
#                  B = BTREE subsystem
#                  F = FIXREC subsystem
#                  V = Volume handling
#                  L = Transaction logging
#                  C = Page cache
#                  N = Node handling
#                  D = The server framework
#                  O = System catalog
#
#                  The following severities are in use:
#                  L_ERROR  = 0 - error messages
#                  L_INFO   = 1 - information
#                  L_DEBUG  = 2 - debug
#                  L_VDEBUG = 3 - verbose debug
#
#                  When using syslog, the following priorities
#                  are mapped:
#                  L_ERROR  = LOG_ERR
#                  L_INFO   = LOG_NOTICE
#                  L_DEBUG  = LOG_DEBUG
#                  L_VDEBUG = LOG_DEBUG
#
#                  Enabling log messages with L_DEBUG or L_VDEBUG severity
#                  may result in a huge number of log messages.
#                  To suppress anything but fatal messages you can set
#                  LogFlags to "*0".
#                  To enable informational log messages you can set
#                  the LogFlags to "*1".

#LogFlags = *0

### Data base config
```

Installing Eloquence on the Windows 32 bit platform

Configuring the eloqdb6 service

```
[Config]

# HttpFrame      Numeric flag if the links should be omitted
#                in HTTP status.
#                The default value is 0.

#HttpFrame = 0

# Threads        Number of threads in the data base server. A separate
#                thread is required for each client.
#                Default number of threads is 40.

#Threads = 40

# BufferCache     Size of page cache in megabytes. The page cache is
#                used to reduce the number of disc accesses. Large cache
#                size will speed up random database access, while a too
#                small cache size may cause bad server performance.
#                Default cache size is 5 MB.

#BufferCache = 5

# VnodeCache     Number of vnode cache elements.
#                The VnodeCache is used to cache Node open/close
#                operations in the data base kernel.
#                A Node is the data base equivalent to a file.
#                Default number of VNodesCache elements is 200.

#VnodeCache = 200

# VbufElements   Number of Vbuffer elements. Vbuffers are used
#                as scratch buffers by the database kernel.
#                About 3-5 are used per concurrent active thread.
#                Default number of VBufElements is 20

#VbufElements = 20

# The server performs a checkpoint operation at fixed intervals. This
# flushes all modified buffers (including metadata) to the disk and
# resets log of committed transactions. A checkpoint is a point where
# the server knows all data are in a consistent state. Any data
# modification since the last checkpoint is recorded in the
# log volume.
#
# CheckPtFreq    Checkpoint frequency in seconds.
#                Default checkpoint frequency is 60 seconds.
#
# CheckPtSize    Checkpoint frequency based on accumulated log space
#                which would be freed by a checkpoint (in megabytes).
#                A zero CheckPtSize value disables size based
#                checkpoints.
#                Default checkpoint size is 5 megabytes.
#
# The database server performs a checkpoint operation at a fixed
# interval and optionally in addition when the accumulated log
# space which could be freed by a checkpoint operation reaches
# a given threshold.
# The frequency of the checkpoint operations has a great
# influence on the size of the log volume since the log volume
# must hold all committed transactions since between checkpoints.
```


Installing Eloquence on the Windows 32 bit platform Configuring the eloqdb6 service

```
#CheckPtFreq = 60
#CheckPtSize = 5

# The syncer thread flushes modified buffer pages to the disk
# when they are likely to become reused in the near future.
#
# SyncerFreq      Syncer thread invocation frequency (in seconds)
#                  Default interval is 10 seconds.
#
# SyncerMinFree  Minimum number of pages which should be available in
#                  a syncer state so they can be reused easily.
#                  Default value is 16 pages.
#
# SyncerNFlush   Maximum number of pages to flush in a single
#                  syncer run.
#                  Default value is 4 pages.

#SyncerFreq = 10
#SyncerMinFree = 16
#SyncerNFlush = 4

[Volumes]

# List of data base volumes. Initially empty.
# This is usually filled in by dbvolcreate and dbvoextend utilities
```

Customizing the Eloquence Configuration Files

This discussion assumes that the Eloquence software has already been installed on your system. The information in this section is directed to the system administrator for the Eloquence software.

Before Eloquence can be used, its resources must be configured. Eloquence programs usually don't use system resources directly, instead they rely on a mapping of pathes, printers and device files in Eloquence configuration files.

There are two different levels of configuration:

System global This is achived with the **eloq.config** configuration file which is located in the Eloquence configuration directory.

User specific This is achived with the **.eloqrc** configuration file which is located in the home directory of the user.

The Eloquence configuration files are read by the eloqcore process, when it is started. The configuration files are processed in an order such that more specific definitions override the more general ones. So a system global assignment can be overridden from a group specific configuration file, a user specific definition will override group and system global definitions.

The system global configuration file, **eloq.config** is usually copied during the installation process to Eloquence configuration directory and should be adapted to local requirements. Template configuration files are provided in **etc** subdirectory of the Eloquence installation directory. The template configuration files provide complete inline documentation and are included at the end of this section for your reference.

Eloquence resource configuration

Eloquence resources go back to the "dark ages" when a predecessor of Eloquence was implemented in hardware (called HP250/HP260 at that time) and the resources definition actually were real OS resources. Since programs depended on a program independent resource configuration and it a convenient mechanism anyway, the concept was kept. Instead of real devices Eloquence resources can be mapped to whatever is appropriate. Eloquence is of course able to access native operating resources directly.

Since the following names are not commonly used, let's define them first:

VOLUME A **VOLUME** is the Eloquence concept of a directory. Instead

of using the path directly, it is possible to assign an identifier for a path and refer to it in a symbolic manner.

MSI This is a short form of **MASS STORAGE IS** and species the default **VOLUME** on which pathes should be related unless an absolute path or another **VOLUME** is given.

PRINTER A **PRINTER** is the Eloquence concept of an output depvice. A **PRINTER** is identified by a number and could be mapped to a device file or to a sequence of commands.

The device numbers 8 to 10 have a special predefined meaning:

- 8: Display terminal.
- 9: Bit bucket (Eloquence equivalent of /dev/null)
- 10: Local terminal printer

The eloq.config configuration file

The eloq.config file provides system global definitions and is usually copied during the installation process into the Eloquence configuration directory from the template file **d.e1oq.config**.

The user specific configuration file

To provide user specific definitions, you could install a user specific configuration file in the home directory of the user. Consider we would like to have a specific configuration for the user *mike*, you would perform the following steps:

- 1 Change to the home directory of the user (the directory where the HOME environment variable refers to):

```
cd c:\home\mike
```

- 2 Copy the default eloq.config.sam configuration file to the home directory of the user and rename it to eloq.rc.

- 3 Use a text editor, such as notepad to edit the file

```
notepad eloq.rc
```

Template eloq.config file

```
# Sample global Eloquence configuration file
#
# (C) Copyright Marxmeier Software AG, 2002
# @(#) $Revision: 20.4 $
#
# This file defines the global Eloquence configuration
# It must be named eloq.config and located in the Eloquence config
# directory. The location of the Eloquence configuration
# directory depends on your operating system and the Eloquence
# install directory.
#
# On the Windows platform, it is located by default in the
# C:/Program Files/Eloquence/etc
#
# PLEASE NOTE:
# You MUST define at least one volume (typically SYSTEM, see below),
# or eloqcore will fail on startup.
#
# Globally defined volumes
#
#       Format: VOLUME label [device] path
#
#       label   - Volume label (up to 8 characters)
#                 must be unique
#       device  - HP260 device specifier eg. :F2,6,0
#                 ** optional, ignored when present
#       path    - path to map volume
#
# Globally defined printers
#
#       Format: PRINTER no [model] type spec
#
#       no      - printer select code (-2 .. 7, 11 .. 99)
#       model   - PCL or OTHER
#                 ** optional, unused
#       type    - printer type PIPE, FILE or SYSTEM
#       spec    - path/command to process on printer selection
#
# Globally defined ports (not available on Windows)
#
#       Format: PORT no spec
#
#       no      - port select code (11 .. 20)
#                 may not conflict with PRINTER
#       spec    - path of tty devicefile
#
# Default date/time format
#
#       Format: DATE spec
#               TIME spec
#
#       spec    - date/time specification. please refer to date(1) or
#                 strftime(3) for more information.
#               For backward compatibility, the former specifications
```

Installing Eloquence on the Windows 32 bit platform Customizing the Eloquence Configuration Files

```
#           "DD.MM.YY" and "MM/DD/YY" are silently converted.
#
#           Default: DATE "%m/%d/%y"
#                   TIME "%H:%M:%S"
#
# Global MSI value
#
#           Format: MSI label
#
#           label - Volume label. Default is the first defined volume.
#
# date format
#
# DATE "%m/%d/%y"
# TIME "%H:%M:%S"
#
# volume configuration
#
# VOLUME LOCAL .
# VOLUME TMP "C:/Temp"
#
# sample global printers
#
# This is an example how to access a native Windows printer
# The printer name must be given exactly as defined in Windows.
#
# PRINTER 0 SYSTEM "HP LaserJet 4/4M Plus PS 600"
```

Configuration of the GUI Server

The Windows GUI server (**DLGSRV**) communicates with the Application Server via the network, so it can operate in a network environment and a standalone system as well. The Application Server establishes a connection to the GUI server using the **RUNSRV** utility. The information how to contact the **RUNSRV** is provided in the **eloq.ini** configuration file on the Application Server.

The configuration of the GUI server and the **RUNSRV** utility is provided in the **eloqcl.ini** configuration file on the client. The service name or port number used by the **RUNSRV** utility must be the same on the client and the server.

Customization of the **eloq.ini** and **eloqcl.ini** file

Eloquence configuration files are located in the **etc** subdirectory of your Eloquence installation directory. For example:

```
C:\Program Files\Eloquence\etc
```

Eloquence uses the **eloq.ini** configuration file to configure how to contact the **RUNSRV** on the client system. The configuration file **eloqcl.ini** is used to configure the **RUNSRV** utility and the GUI server (**DLGSRV**).

Template files named **eloq.ini.sam** and **eloqcl.ini.sam** are located in the same directory. You can use the Eloquence Configuration Utility or a text editor (such as Notepad) to modify the files.

The 'ini' File format

The file **eloq.ini** and **eloqcl.ini** contain several sections, each containing a group of related configuration items. The sections and configuration items have the following format:

```
[Section]  
Item=Value
```

Section is the name of a section. The enclosing brackets ([]) are required and they must start at the first column.

Item=Value defines a value of a configuration item. *Item* is the name of a configuration item. It consists of any sequence of characters (case insensitive) and digits followed by an equal sign (=). Depending on item type, the value may either be an integer or a string (optionally enclosed in double quotes).

Comment lines must start with a semicolon (;) in the first column.

The eloq.ini file

Section [runsrv]

This section is used by Eloquence to communicate with the **RUNSRV** utility program on a remote host.

The section [runsrv] may hold the following configuration items:

Service	Service=	<Servicename>
	Default:	runsrv
	Function:	Defines the service name (or port number) used to connect to RUNSRV on a remote host. The service name is used to lookup the port number in your /etc/services file.

NOTE:

You should provide the appropriate entry in your **/etc/services** file.

If the first character of the value is a digit, the value will be considered as a port number. It is recommended to use a service name.

The resulting port number *must* be the same on the client and server side.

Debug	Debug=	<level>
	Default:	0
	Function:	DebugLevel specifies the RUNSRV debug level. A zero value is recommended.

The eloql.ini file

Section [runsrv]

This section is used by the **RUNSRV** utility program. It may hold the following configuration items:

Service	Service=	<Servicename>
	Default:	runsrv
	Function:	Defines the service name (or port number) RUNSRV expects to become connected from a remote host (running Eloquence). The service name is used to lookup the port number in your SERVICES file. If the first character of the value is a digit, the value will be considered as a port number. It is recommended to use a service name.

NOTE: You should provide the appropriate entry in your **SERVICES** file. The location of your **SERVICES** file depends on your networking software.

Debug	Debug=	<level>
	Default:	0
	Function:	This activates debug output for the RUNSRV utility. A zero value is recommended.

DlgSrvX	DlgSrvX=	<Command to start DLGSRV >
	Default:	DLGSRV%s -connect %s -IDMfont 1 -IDMcolor 1
	Function:	This specifies an alternate command line that is executed by RUNSRV to launch DLGSRV . It must contain two entries of %s .

NOTE: The *DlgSrvX* is only used on Windows 16 bit platform. Please use *DlgSrv* instead.

NDlgSrv	NDlgSrv=	<Number of DLGSRV Instances>
	Default:	1

Function: This specifies the maximum number of **DLGSRV** instances to be run at the same time.

NOTE:

The *NDlgSRV* is only used on the Windows 16 bit platform.

DlgSrv

DlgSrv= <Command to start **DLGSRV**>

Default: **DLGSRV -connect %s -IDMfont 1 -IDMcolor 1**

Function: This specifies the commandline that is executed by **RUNSRV** to launch **DLGSRV**.

An entry of **%s** will be replaced by the connection argument provided by Eloquence (please refer to the **DLGSRV** documentation for details).

Section [dlgsrv]

This section is used by the **DLGSRV** utility program.

The section [dlgsrv] and any *user-defined sections* may hold the following configuration items:

Memsz

MemSz= <MemorySize>

Default: **4096**

Function: MemorySize specifies the **DLGSRV** communication memory size. The arguments exchanged by server and client is limited by the communication memory. A value of 4096 is recommended.

DefaultsFile

DefaultsFile= <Filename>

Default: The file **default.eq** in the **dlg** subdirectory of the Eloquence installation directory. For example:

C:\Programs\Eloquence\dlg\defaults.eq

Function: Defines the name (and path) of the defaults file used by the **DLGSRV** program.

The defaults file is used by the **DLGSRV** to provide defaults to dynamically created objects.

Installing Eloquence on the Windows 32 bit platform

Configuration of the GUI Server

If you are using modular dialog files, change the default value to the file **defaults.eq** in the **dlg\module** subdirectory.

C:\Programs\Eloquence\dlg\module\defaults.eq

IdmLib	IdmLib=	<Search Path>
	Default:	none, the environment variable IDMLIB is used instead.
	Function:	On execution of the DLG LOAD statement the specified dialog file is searched in each directory specified by the <i>IdmLib</i> item regardless of any directory specification named in the DLG LOAD statement. The directories are separated by ‘;’. If <i>IdmLib</i> is specified in the [dlgsrv] section it overrides the value of the IDMLIB environment variable unless the token %IDMLIB% is included into the directory list. If <i>IdmLib</i> is specified in an <i>user-defined section</i> it overrides the value of the <i>IdmLib</i> item specified in the [dlgsrv] section unless the token %IDMLIB% is included into the directory list.
	Example:	IdmLib=C:\DLG\APP1;C:\DLG\APP2;%IDMLIB% This causes every dialog file loaded by DLG LOAD to be searched in the directories C:\DLG\APP1 and C:\DLG\APP2 . If the dialog file cannot be found in these locations, searching is continued using the value of the previous <i>IdmLib</i> item, such as the value of the IDMLIB environment variable.

DlgPath	DlgPath=	<Path>
	Default:	none
	Function:	Defines the path where DLGSRV expects dialog files.

NOTE: If *IdmLib* and/or the environment variable **IDMLIB** is present, *DlgPath* will be ignored. *DlgPath* serves for backward compatibility and may not be supported in future releases. *IdmLib* is much more flexible and should be used instead.

Dlg	Dlg=	<Prefix>
	Default:	DLG
	Function:	This specifies the file extension, by which Eloquence recog-

nizes a Eloquence dialog file.

Whenever Eloquence tries to load a Dlg file (for example sample.dlg), it will try to locate and load an Idc (e.g. sample.idc) or Idm (e.g. sample.idm) file first.

NOTE:

Although it's possible to use Eloquence dialog files (they are converted internally at runtime) it's strongly recommended to convert them to Dialog Manager format due to performance considerations.

Idm	Idm=	<Prefix>
	Default:	IDM
	Function:	This specifies the file extension, by which Eloquence recognizes a Dialog Manager dialog file. This file is usually created by the cvdlg utility program or the Dialog Manager graphical editor.
Idc	Idc=	<Prefix>
	Default:	IDC
	Function:	This specifies the file extension, by which Eloquence recognizes a compiled Dialog Manager dialog file.
Debug	Debug=	<Level>
	Default:	0
	Function:	DebugLevel specifies the DLGSRV debug level. A zero value is recommended.
LogFile	Logfile=	<Filename>
	Default:	none
	Function:	Defines the name (and path) of a log file DLGSRV uses to write debug messages to. This value is only used if DebugLevel is nonzero.
HelpBaseURL	The Netscape web browser can be used with Eloquence as an on-line help viewer.	

The following configuration item is necessary to establish this function.

HelpBaseURL= <URL>

Default: none

Function: This defines the base URL of the on-line help files.

Example: **HelpBaseURL=http://www/help/**

NOTE:

Since this functionality uses the Microsoft Windows DDE protocol, you should provide a *Netscape* item in the section [modules]. If this item is missing, **DLGSRV** will not be able to automatically start-up Netscape. Please refer to the description of *Section [modules]* below and to the *Eloquence Graphical User Interface* documentation for details.

FileBaseURL

FileBaseURL= <URL>

Default: none

Function: This defines the base URL for the function **EqHelpViewFile**.

Example: **FileBaseURL=http://www/files/**

ManBaseURL

ManBaseURL= <URL>

Default: none

Function: This defines the base URL for the function **EqHelpManPage**.

Example: **ManBaseURL=http://www/cgi-bin/man2html**

Section [modules]

This section is used by the **RUNSRV** and **DLGSRV** utility programs in context with the Microsoft Windows DDE communication protocol.

Since DDE server programs are not automatically started by Microsoft Windows, this section associates the Microsoft Windows *module identifier* with the program execution path. This enables the **RUNSRV** and **DLGSRV** utility programs to start-up the required DDE server programs themselves if they are not currently running.

If you want to communicate with any Microsoft Windows program using DDE, knowledge about the Microsoft Windows *module identifier* and the communication topics specific to the program is required. Normally, these informations are contained in the program's documentation.

Example:

```
[modules]  
WinWord = C:\WINWORD\WINWORD.EXE
```

This associates the *module identifier* of *Microsoft Word for Windows* with the program execution path. This enables the **RUNSRV** and **DLGSRV** utility programs to establish DDE communications with *Microsoft Word for Windows*.

The **DLGSRV** utility program has built-in support for DDE communication with the Netscape WWW browser. This is used to establish access to the on-line help system. In order to use this, you do not need any information concerning the internal Netscape DDE implementation. All you need to do is to add an entry in the section [modules] so that Netscape can be automatically started.

Example:

```
[modules]  
Netscape = C:\Programs\Netscape\Navigator\NETSCAPE.EXE
```

NOTE:

The Microsoft Windows *Task List* displays the *module identifiers* of all programs currently running.

NOTE:

Please refer to the *Eloquence Graphical User Interface* documentation for details about *On-line Help* and *RUNSRV DDE Communication*.

User-defined sections

User-defined sections are used by the **DLGSRV** utility program.

The **DLGSRV** utility program is launched by the **DLG SET ".driver"** statement, the syntax of this statement is:

```
DLG SET ".driver","driver_spec [ini_section [arguments]]"
```

driver_spec: @hostname

hostname is the name of the system where the **DLGSRV** utility program shall be executed.

ini_section: Optional name of an *user-defined section* in the eloq.ini file where the defaults specified in the section [dlgsrv] can be overridden.

arguments: Additional arguments can optionally be specified here and will be passed-through to the Dialog Manager.

On **DLGSRV** start-up, the following tasks are performed:

- 1 **DLGSRV** sets up the *Dialog Manager argument list* from the **arguments** specified in the **DLG SET ".driver"** statement, if any. **DLGSRV** then reads the configuration

Installing Eloquence on the Windows 32 bit platform

Configuration of the GUI Server

items in the section *[dlgsrv]* (please refer to the description of *Section [dlgsrv]* below).

- 2 If **ini_section** is specified in the **DLG SET ".driver"** statement, **DLGSRV** reads additional configuration items from this *user-defined section*. If these items have been previously specified in the section *[dlgsrv]*, the previous values are overridden.

Example:

```
[debug]
DefaultsFile = C:\DLG\DEBUG\DEFAULTS.EQ
```

This *user-defined section* named *[debug]* defines one item *DefaultsFile*. In order to activate this item, the name of this section must be specified in the **DLG SET ".driver"** statement, e.g.:

```
DLG SET ".driver", "@my-pc debug"
```

Any previous *DefaultsFile* definition in section *[dlgsrv]* is overridden with the new value from section *[debug]*.

- 3 If **ini_section** is specified in the **DLG SET ".driver"** statement, **DLGSRV** searches this *user-defined section* for an item named *Arguments*. If this item exists, its value is appended to the *Dialog Manager argument list*.

Example:

```
[debug]
Arguments = -IDMtracefile C:\TMP\IDMTRACE.TXT
```

This enables an additional Dialog Manager argument which creates a trace file for debugging purposes.

- 4 Finally, the composed *Dialog Manager argument list* is passed to the Dialog Manager runtime system start-up function.

Any configuration item valid for section *[dlgsrv]* may also be defined in *user-defined sections* (please refer to the description of *Section [dlgsrv]* below).

Additionally, *user-defined sections* may hold the following configuration item:

Arguments

Arguments= <Additional Dialog Manager Arguments>

Default: none

Function: Additional arguments specific to the current *user-defined section* can optionally be specified here and will be passed-through to the Dialog Manager.

NOTE: If **arguments** are immediately specified in the **DLG SET ".driver"** statement, an *user-defined section* must be specified, too. However, if you specify a section name not present in the eloq.ini file, the *user-defined section* will be ignored.

NOTE: For a list of valid commandline arguments, please refer to the *ISA Dialog Manager* documentation.

Installing Eloquence on the Windows 32 bit platform
Configuration of the GUI Server

Installing Eloquence on the Windows 16 bit platform

This chapter covers the installation of the Eloquence software on Windows 3.1x and Windows for Workgroups.

- Software installation
- Configuring the operating system
- Configuring Eloquence

Installation on Windows 3.1x

This document provides installation instructions for Eloquence on the 16 bit Windows platform. This applies to Windows 3.11 and Windows for Workgroups.

Installation Prerequisites

The following prerequisites must be met before installing the Eloquence software on a system. Failing to do so will either cause the installation process to fail or will prohibit the successful use of Eloquence.

- Eloquence makes use of the TCP/IP protocol. A TCP/IP protocol stack compliant with the WINSOCK 1.1 API is required in order to use the Eloquence client/server functionality.
- As usual, all applications should be closed before installing or upgrading Eloquence. The setup program may need to update shared components on your system and may require a reboot in order to do so.
- If you are upgrading the Eloquence software on your system, you should stop all running Eloquence software before installation.

Hardware Requirements

The following minimum hardware prerequisites must be met:

Processor	A 486 type processor or above is recommended.
RAM	You should have installed at least 8 MB of memory. While it may work with less memory, it is probably slow.
Disk space	About 8 MB of available disk space

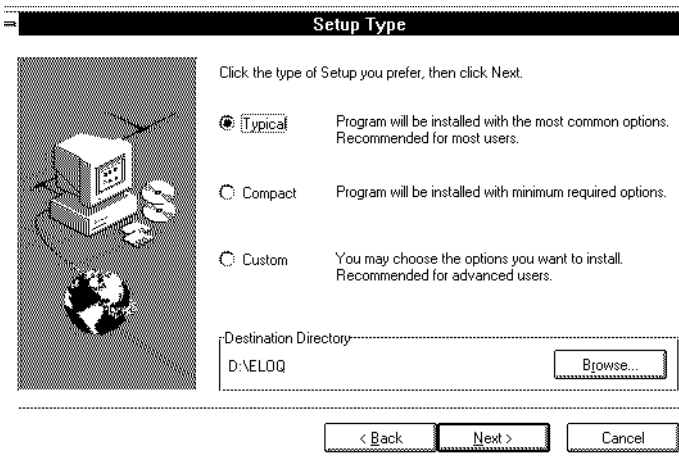
The Setup Program

- ❑ To install Eloquence from the CD-ROM media, please change to the `\A0600\win16\disk1` directory on the CD and start the `setup.exe` program.
- ❑ To install Eloquence from a directory (for example if you downloaded the files from the Internet), please change to the directory and start the `setupex.exe` program.

The Eloquence installation program normally takes care of upgrading an installed Eloquence release. However, manual adjustments may be required when upgrading to a new Eloquence revision. Please read the Eloquence release notes *before* installing or upgrading Eloquence.

After you started `setup.exe` the Welcome dialog and the License Agreement will appear on the screen. You must accept the Eloquence license agreement in order to continue the installation.

The "Setup Type" dialog will appear next. It can be used to select the operation of the setup program.



The following options are available:

- | | |
|----------------|---|
| Typical | This option is used to install Eloquence Runtime Environment. This includes the Eloquence dialog subsystem and the Eloquence data base DLL. |
| Compact | This option is the same as Typical. |
| Custom | The Customer Setup Type leads you to the advanced Option |

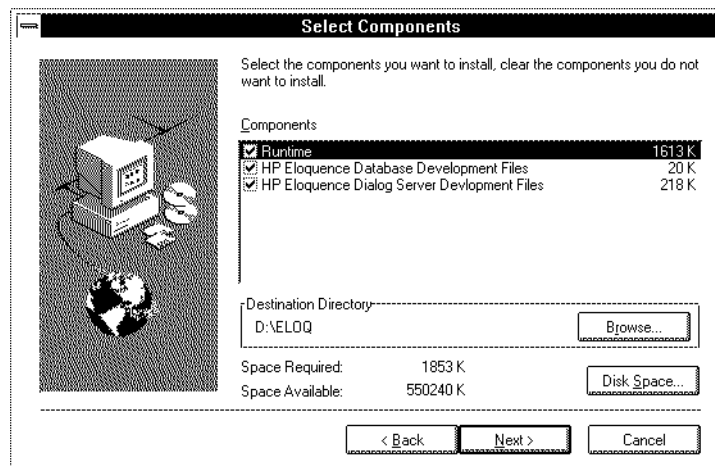
Installing Eloquence on the Windows 16 bit platform

The Setup Program

menu where you can select individual components which should be installed.

To continue the installation process, please choose the install type and select the next button.

If you have selected Custom Type the "Select Components" dialog comes up. It can be used to select the individual Eloquence components which should be installed.



The following components are available:

Runtime

This option installs the Eloquence Runtime Environment. This includes the Eloquence dialog subsystem and the Eloquence data base DLL.

Database Development Files This provides additional files which are required to integrate the Eloquence data base DLL into your 'C' program. This includes the eloqdb.h include file and eloqdb.lib which is required to link your application against the eloqdb.dll.

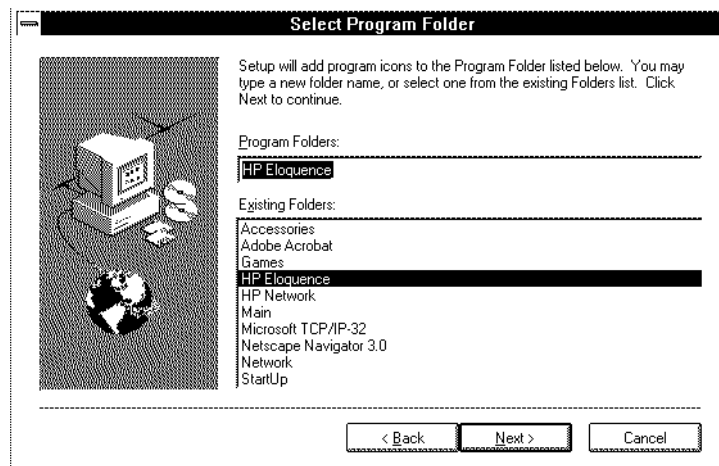
Dialog Server Development Files

This provides additional files which are required to build your own dlgsrv using the 'C' programming language. This can be used to integrate additional functionality into the Eloquence dlgsrv. Please note, that the ISA Dialog Manager product is required in addition to do so.

The Destination directory shows the path, where Eloquence will be installed. You can use the Browse

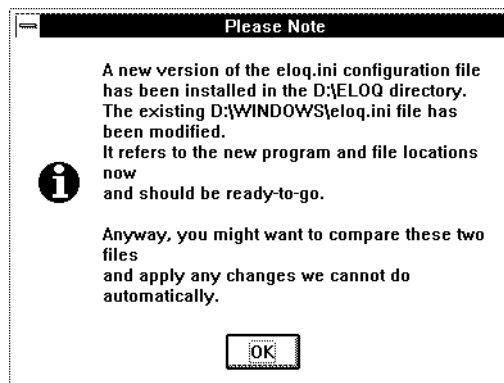
push button to select a different directory. The default installation path is **C:\ELOQ**.

The "Select Program Folder" dialog asks you where the Eloquence software should be installed in the Program Manager menu.



The default program folder name is "Eloquence". If you want to install the 16 bit Eloquence software in addition to the 32 bit version or the A.05.xx version, you should enter a different program folder name (eg. Eloquence 16 bit).

The next dialog will display a short summary of your installation options. If you continue, the installation program will start copying Eloquence to your hard disk. If a previous **eloq.ini** configuration file is detected, program pathes are adjusted accordingly and the following note appears:



Installing Eloquence on the Windows 16 bit platform

The Setup Program

NOTE:

Existing configuration files are not replaced by the installation. A new default **eloq.ini** configuration file is installed in the destination directory.

After the initial installation of Eloquence, you should configure your system as described in the next section.

Uninstallation

The Eloquence installation provides its own uninstall program. To uninstall the Eloquence software, please start the uninstall program which is installed along with the Eloquence software.

The uninstall program does *not* remove your **eloq.ini** and **eqexec.ini** configuration files from the **\WINDOWS** directory. They must be removed manually.

Configuring Windows 3.1x

After the initial installation of the Eloquence software configuration of the Windows 3.1x system is required:

- Configure host names
- Configure service names

Additional configuration of the Dialog subsystem is required. This involves editing the configuration files `eloq.ini` and `eqexec.ini`. Please refer to the Eloquence Dialog Manual for more information.

Configure host names

You may want to define the host name of your server in your HOSTS file. Unless you use DNS to resolve host names, this is required as the dialog subsystem relies on the server name. The location of the HOSTS file depends on your TCP/IP protocol stack. If you use the one available from Microsoft (TCP32), the HOSTS file is located in your Windows directory.

Please add a line like below to your HOSTS file:

```
192.168.1.1 server
```

where *192.168.1.1* is the IP address and *server* is the host name of your server system.

Configure service names

You may want to define the Eloquence specific service names in your SERVICES file. This is optional, as you can specify the port number directly instead of a service name. The location of the SERVICES file depends on your TCP/IP protocol stack. If you use the one available from Microsoft (TCP32), the SERVICES file is located in your Windows directory.

Eloquence uses the following services names on the Windows 16 bit platform:

runsrv	This service name is used by default by the RUNSRV utility
eloqdb	This is the default services name used by the database library.
eloqdb5	This service name is used by convention to connect to Eloquence A.05.xx databases (eloqdb5 server).

To add the runsrv service, please add a line like below to your SERVICES file:

```
runsrv 8010/tcp # Eloquence RunSRV
```

Installing Eloquence on the Windows 16 bit platform

Configuring Windows 3.1x

where the first column specifies the service name (eg. runsrv) and the second column the associated port number and protocol (eg. 8010/tcp). The selected port numbers may not already be in use by another programs.

If you intend to use the Eloquence database library (eloqdb.dll) you may want to define the following SERVICES mappings below as well:

```
eloqdb  8102/tcp      # Eloquence data base server
eloqdb5 8104/tcp      # Eloquence A.05.x data base server
```

NOTE:

All systems must use the same port numbers in order to communicate.

Configuration of the GUI Server

The MS Windows GUI Server communicates with the Application Server via network. The Application Server needs the information concerning the servicename and the port number of the network connection. This servicename and the port-number has to be configured on both systems. The GUI Server gets all necessary information from the **eloq.ini** file which has to be located on the system where the GUI Server is installed.

Customize the eloq.ini file

The MS Windows GUI Server uses the **eloq.ini** file to obtain its configuration. It must be located in your WINDOWS directory. A template eloq.ini file is saved at the installation directory in addition (C:\ELOQ by default).

You can use a text editor (such as MS DOS edit or Microsoft Windows Notepad) to modify the eloq.ini file.

The 'ini' File format

The file **eloq.ini** contains several sections, each containing a group of related configuration items. The sections and configuration items have the following format:

```
[Section]  
Item=Value
```

Section is the name of a section. The enclosing brackets ([]) are required and they must start at the first column.

Item=Value defines a value of a configuration item. *Item* is the name of a configuration item. It consists of any sequence of characters (case insensitive) and digits followed by a equal sign (=). Depending on item type, the value may either be an integer or a string (optionally enclosed in double quotes).

Comment lines must start with a semicolon (;) in the first column.

The eloq.ini file

Section [runsrv]

This section is used by the **RUNSRV** utility program. It may hold the following configuration items:

Service	Service=	<Servicename>
	Default:	runsrv
	Function:	Defines the service name (or port number) RUNSRV expects to become connected from a remote host (running Eloquence). The service name is used to lookup the port number in your SERVICES file. If the first character of the value is a digit, the value will be considered as a port number. It is recommended to use a service name.

NOTE:

You should provide the appropriate entry in your **SERVICES** file. The location of your **SERVICES** file depends on your networking software.

Debug	Debug=	<level>
	Default:	0
	Function:	This activates debug output for the RUNSRV utility. A zero value is recommended.
DlgSrvX	DlgSrvX=	<Command to start DLGSRV >
	Default:	DLGSRV%s -connect %s -IDMfont 1 -IDMcolor 1
	Function:	This specifies the command line that is executed by RUNSRV to launch DLGSRV . It must contain two entries of %s . If an instance of DLGSRV is already running, the first entry of %s will be replaced by the DLGSRV instance appendix. This is necessary since Microsoft Windows denies to run more than one instance of DLGSRV at the same time (please refer to the <i>Eloquence Graphical User Interface</i> documentation for details).

The second entry of **%s** will be replaced by the connection argument provided by Eloquence (please refer to the **DLGSRV** documentation for details).

NOTE: The *NDlgSrv* item must be setup properly if multiple instances of **DLGSRV** are to be run at the same time (see below).

NDlgSrv	NDlgSrv=	<Number of DLGSRV Instances>
	Default:	1
	Function:	This specifies the maximum number of DLGSRV instances to be run at the same time.
		After changing the <i>NDlgSrv</i> value, you should run the DLG-CLONE utility program which automatically creates the required number of DLGSRV clone-copies (please refer to the <i>Eloquence Graphical User Interface</i> documentation for details).

NOTE: The *DlgSrvX* item must be present if multiple instances of **DLGSRV** are to be run at the same time (see above).

DlgSrv	DlgSrv=	<Command to start DLGSRV >
	Default:	DLGSRV -connect %s -IDMfont 1 -IDMcolor 1
	Function:	This specifies the commandline that is executed by RUNSRV to launch DLGSRV .
		An entry of %s will be replaced by the connection argument provided by Eloquence (please refer to the DLGSRV documentation for details).

NOTE: On the Windows 16 bit platform, *DlgSrvX* should be used instead of *DlgSrv* to allow multiple instances.

Section [dlgsrv]

This section is used by the **DLGSRV** utility program.

The section [dlgsrv] and any *user-defined sections* may hold the following configuration items:

Memsz	MemSz=	<MemorySize>
	Default:	4096
	Function:	MemorySize specifies the DLGSRV communication memory size. The arguments exchanged by server and client is limited by the communication memory. A value of 4096 is recommended.
DefaultsFile	DefaultsFile=	<Filename>
	Default:	C:\DLG\DEFAULTS.EQ
		If you are using modular dialog files, change this default to: C:\DLG\MODULE\DEFAULTS.EQ
	Function:	Defines the name (and path) of the defaults file used by the DLGSRV program. If undefined, DLGSRV will look for a file defaults.eq in the current directory. The defaults file is used to provide defaults to dynamically created objects.
IdmLib	IdmLib=	<Search Path>
	Default:	none, the environment variable IDMLIB is used instead.
	Function:	On execution of the DLG LOAD statement the specified dialog file is searched in each directory specified by the <i>IdmLib</i> item regardless of any directory specification named in the DLG LOAD statement. The directories are separated by ' ; '. If <i>IdmLib</i> is specified in the [dlgsrv] section it overrides the value of the IDMLIB environment variable unless the token %IDMLIB% is included into the directory list. If <i>IdmLib</i> is specified in an <i>user-defined section</i> it overrides the value of the <i>IdmLib</i> item specified in the [dlgsrv] section unless the token %IDMLIB% is included into the directory list.
	Example:	IdmLib=C:\DLG\APP1;C:\DLG\APP2;%IDMLIB% This causes every dialog file loaded by DLG LOAD to be searched in the directories C:\DLG\APP1 and C:\DLG\APP2 . If the dialog file cannot be found in these locations, searching is continued using the value of the previous <i>IdmLib</i> item, such as

the value of the **IDMLIB** environment variable.

DlgPath	DlgPath=	<Path>
	Default:	none
	Function:	Defines the path where DLGSRV expects dialog files.

NOTE: If *IdmLib* and/or the environment variable **IDMLIB** is present, *DlgPath* will be ignored. *DlgPath* serves for backward compatibility and may not be supported in future releases anymore. *IdmLib* is much more flexible and should be used instead.

Dlg	Dlg=	<Prefix>
	Default:	DLG
	Function:	This specifies the file extension, by which Eloquence recognizes a Eloquence dialog file. Whenever Eloquence tries to load a Dlg file (for example sample.dlg), it will try to locate and load an Idc (e.g. sample.idc) or Idm (e.g. sample.idm) file first.

NOTE: Although it's possible to use Eloquence dialog files (they are converted internally at runtime) it's strongly recommended to convert them to Dialog Manager format due to performance considerations.

Idm	Idm=	<Prefix>
	Default:	IDM
	Function:	This specifies the file extension, by which Eloquence recognizes a Dialog Manager dialog file. This file is usually created by the cvdlg utility program or the Dialog Manager graphical editor.

Idc	Idc=	<Prefix>
	Default:	IDC
	Function:	This specifies the file extension, by which Eloquence recognizes a compiled Dialog Manager dialog file.

Installing Eloquence on the Windows 16 bit platform
Configuration of the GUI Server

Debug **Debug=** <Level>
Default: 0
Function: DebugLevel specifies the **DLGSRV** debug level. A zero value is recommended.

LogFile **Logfile=** <Filename>
Default: none
Function: Defines the name (and path) of a log file **DLGSRV** uses to write debug messages to. An empty value (default) causes **DLGSRV** to write to dbwin (using **OutputDebugString**). This value is only used if DebugLevel is nonzero.

HelpBaseURL The Netscape web browser can be used with Eloquence as an on-line help viewer. The following configuration item is necessary to establish this function.

HelpBaseURL= <URL>
Default: none
Function: This defines the base URL of the on-line help files.
Example: **HelpBaseURL=http://www/help/**

NOTE: Since this functionality uses the Microsoft Windows DDE protocol, you should provide a *Netscape* item in the section [modules]. If this item is missing, **DLGSRV** will not be able to automatically start-up Netscape. Please refer to the description of *Section [modules]* below and to the *Eloquence Graphical User Interface* documentation for details.

FileBaseURL **FileBaseURL=** <URL>
Default: none
Function: This defines the base URL for the function **EqHelpViewFile**.
Example: **FileBaseURL=http://www/files/**

ManBaseURL **ManBaseURL=** <URL>
Default: none
Function: This defines the base URL for the function **EqHelpManPage**.

Example: `ManBaseURL=http://www/cgi-bin/man2html`

Section [modules]

This section is used by the `RUNSRV` and `DLGSRV` utility programs in context with the Microsoft Windows DDE communication protocol.

Since DDE server programs are not automatically started by Microsoft Windows, this section associates the Microsoft Windows *module identifier* with the program execution path. This enables the `RUNSRV` and `DLGSRV` utility programs to start-up the required DDE server programs themselves if they are not currently running.

If you want to communicate with any Microsoft Windows program using DDE, knowledge about the Microsoft Windows *module identifier* and the communication topics specific to the program is required. Normally, these informations are contained in the program's documentation.

Example:

```
[modules]
WinWord = C:\WINWORD\WINWORD.EXE
```

This associates the *module identifier* of *Microsoft Word for Windows* with the program execution path. This enables the `RUNSRV` and `DLGSRV` utility programs to establish DDE communications with *Microsoft Word for Windows*.

The `DLGSRV` utility program has built-in support for DDE communication with the Netscape WWW browser. This is used to establish access to the on-line help system. In order to use this, you do not need any information concerning the internal Netscape DDE implementation. All you need to do is to add an entry in the section [modules] so that Netscape can be automatically started.

Example:

```
[modules]
Netscape = C:\NETSCAPE\NETSCAPE.EXE
```

NOTE:

The Microsoft Windows *Task List* displays the *module identifiers* of all programs currently running.

NOTE:

Please refer to the *Eloquence Graphical User Interface* documentation for details about *On-line Help* and *RUNSRV DDE Communication*.

User-defined sections

User-defined sections are used by the `DLGSRV` utility program.

Installing Eloquence on the Windows 16 bit platform

Configuration of the GUI Server

The **DLGSRV** utility program is launched by the **DLG SET ".driver"** statement, the syntax of this statement is:

```
DLG SET ".driver", "driver_spec [ini_section [arguments]]"
```

driver_spec: @hostname

hostname is the name of the system where the **DLGSRV** utility program shall be executed.

ini_section: Optional name of an *user-defined section* in the *eloq.ini* file where the defaults specified in the section [*dlgsrv*] can be overridden.

arguments: Additional arguments can optionally be specified here and will be passed-through to the Dialog Manager.

On **DLGSRV** start-up, the following tasks are performed:

- 1 **DLGSRV** sets up the *Dialog Manager argument list* from the **arguments** specified in the **DLG SET ".driver"** statement, if any. **DLGSRV** then reads the configuration items in the section [*dlgsrv*] (please refer to the description of *Section [dlgsrv]* below).
- 2 If **ini_section** is specified in the **DLG SET ".driver"** statement, **DLGSRV** reads additional configuration items from this *user-defined section*. If these items have been previously specified in the section [*dlgsrv*], the previous values are overridden.

Example:

```
[debug]
DefaultsFile = C:\DLG\DEBUG\DEFAULTS.EQ
```

This *user-defined section* named [debug] defines one item *DefaultsFile*. In order to activate this item, the name of this section must be specified in the **DLG SET ".driver"** statement, e.g.:

```
DLG SET ".driver", "@my-pc debug"
```

Any previous *DefaultsFile* definition in section [*dlgsrv*] is overridden with the new value from section [debug].

- 3 If **ini_section** is specified in the **DLG SET ".driver"** statement, **DLGSRV** searches this *user-defined section* for an item named *Arguments*. If this item exists, its value is appended to the *Dialog Manager argument list*.

Example:

```
[debug]
Arguments = -IDMtracefile C:\TMP\IDMTRACE.TXT
```

This enables an additional Dialog Manager argument which creates a trace file for debugging purposes.

- 4 Finally, the composed *Dialog Manager argument list* is passed to the Dialog Manager runtime system start-up function.

Any configuration item valid for section *[dlgsrv]* may also be defined in *user-defined sections* (please refer to the description of *Section [dlgsrv]* below).

Additionally, *user-defined sections* may hold the following configuration item:

Arguments

Arguments= <Additional Dialog Manager Arguments>

Default: none

Function: Additional arguments specific to the current *user-defined section* can optionally be specified here and will be passed-through to the Dialog Manager.

NOTE:

If **arguments** are immediately specified in the **DLG SET ".driver"** statement, an *user-defined section* must be specified, too. However, if you specify a section name not present in the eloq.ini file, the *user-defined section* will be ignored.

NOTE:

For a list of valid commandline arguments, please refer to the *ISA Dialog Manager* documentation.

Installing Eloquence on the Windows 16 bit platform
Configuration of the GUI Server

Installing Eloquence on the Linux platform

This chapter covers the installation of the Eloquence software on the Linux platform.

- Software installation
- Configuring the operating system
- Configuring Eloquence

Installation on a Linux system

This document provides installation instructions for Eloquence on the Linux Platform. You can obtain Linux support by contacting Marxmeier Software AG at eloq-support@msede.com.

Hardware requirements

In order to run Eloquence, your hardware should fulfil the following minimum requirements:

Processor	Intel Pentium processor or compatible.
RAM	You should have installed at least 16 MB of memory. When using X11, 32 MB are recommended. While it should work with less memory it may be slow.
Disk space	About 20 MB for the Eloquence software
Network card	Eloquence requires that a network card is installed as eth0.

System requirements

Eloquence on the Linux platform has been tested with the 2.0.29 kernel. As far as we can see, any 2.0.x kernel should work as Eloquence does not depend on specific kernel features.

Probably more important are the shared library revisions (as they are usually *not* backwards compatible). Eloquence has been linked against the following shared libraries:

```
libncurses.so.3.0 => /lib/libncurses.so.3.0
libg++.so.27 => /usr/lib/libg++.so.27.2.1
libstdc++.so.27 => /usr/lib/libstdc++.so.27.2.1
libm.so.5 => /lib/libm.so.5.0.9
libc.so.5 => /lib/libc.so.5.4.33
```

If you are encountering segment violations or core dumps when using Eloquence on Linux you should verify that you have installed compatible shared library versions on your system. Either obtain the libraries from your Linux distribution vendor (eg. RedHat, Caldera, SuSE etc.) or download them from your next sunsite mirror (eg. on sunsite <http://www.sunsite.unc.edu/pub/Linux/GCC>).

Compatibility

The Linux Version should be fully compatible to the HP-UX version with the following exceptions:

- The eloq program (providing virtual terminals - aka. TASKS) is currently not available on Linux. The Linux kernel does not support the `ioctl()` functions we use to communicate with ptys.
- There is no Motif Dialog Driver available on Linux. The Linux version is currently limited to forms and ASCII dlg. However, you can use Linux as a server for Windows PCs using graphical dialogs.
- The Intel processors have a different byte order than PA-RISC processors. This may affect you when you access a packed buffer (eg. DBINFO or DBGET) because Eloquence builds them in the order which is native to the underlying system (PACK/UNPACK USING and IN DATA SET takes care of it). However if you unpack buffers manually, you have to take care of the different byte order.
- On HP-UX, the HP-Roman8 character set encoding is usually used (and Eloquence internally uses it for backwards compatibility). Please be aware, that with Linux the ISO8859-1 character set encoding is usually used. Files written by Eloquence may need to be converted if used outside Eloquence. You can use GNU recode to convert files.
- The Linux utilities are a different from HP-UX. For example: Linux uses the BSD printing system (lpr) instead of the SYSV one (lp). So any program which uses lp or lpstat directly needs some minor adaption. In addition all modifications which were made to printer interface files must be adapted to lpr filters.
- The Eloquence terminal adaption of the Linux console does not support underline. This is a limitation of the Linux console driver.
- The following X11 based terminal emulators have been tried:

rxvt	(version 2.18) works with TERM=dtterm
xterm	works partially (no line drawing) with TERM=dtterm
dtterm	dtterm is part of the CDE 1.1 product which is available for Linux from either RedHat/TriTeal or Xig.

Installation

Eloquence is available in rpm format and as a compressed tar archive. *We recommend to install Eloquence using rpm*, since this makes future updates easier and checks for dependencies. In addition, the rpm based installation will create a temporary license key and perform some basic configuration steps automatically.

Please read the release notes *before* installing Eloquence on your system. They may provide additional information on installation and configuration.

Installation and configuration of Eloquence requires root capabilities. Please logon as root to your computer.

Installation with rpm

Most Linux distributions use the rpm package manager to install and maintain software. Please refer to <http://www.rpm.org> for more information on rpm.

Installing Eloquence

To install Eloquence with the rpm package manager, execute the command below:

```
rpm -i B1368B-A.06.00-1.i386.rpm
```

B1368B-A.06.00-1.i386.rpm is the rpm archive containing the Eloquence software. The rpm package manager installs the Eloquence software in `/opt/eloquence6`, creates the Eloquence configuration directory `/etc/opt/eloquence6` and copies the default configuration files unless they are already present.

Updating Eloquence

To update the Eloquence software with the rpm package manager, execute the command below:

```
rpm -U B1368B-A.06.00-1.i386.rpm
```

B1368B-A.06.00-1.i386.rpm is the rpm archive containing the Eloquence software. The configuration files in the `/etc/opt/eloquence6` directory are not overwritten.

Uninstalling Eloquence

To uninstall the Eloquence software with the rpm package manager, execute the command below:

```
rpm -e B1368B
```

B1368B is the rpm package name. Please note, that configuration files in the `/etc/opt/eloquence6` directory are not removed automatically.

Manual Installation

In addition to the rpm archive Eloquence is available as a (compressed) tar file. Please follow the steps below to install the Eloquence software:

1 Unpack the software

```
cd /  
tar xzf /cdrom/A0600/linux/B1368B-A.06.00-1.tar.gz
```

2 If this is the first time you install Eloquence on your system, you should create additional Eloquence directories and copy the default configuration files:

```
mkdir -p /etc/opt/eloquence6  
mkdir -p /var/opt/eloquence6  
chmod 777 /var/opt/eloquence6  
cd /etc/opt/eloquence6  
cp /opt/eloquence6/newconfig/config/d.eloq.config eloq.config  
cp /opt/eloquence6/newconfig/config/eloqsd.* .  
cp /opt/eloquence6/newconfig/config/eloqdb6.cfg .  
cp /opt/eloquence6/newconfig/config/eloq.ini .  
cp /opt/eloquence6/newconfig/config/eloqcl.ini .  
/opt/eloquence6/etc/tmplic > /etc/opt/eloquence6/license
```

Configuring your System

After Eloquence has been installed on your system, you should configure your system. Please note, that all Eloquence configuration files are located in the directory `/etc/opt/eloquence6`.

- If you intend to use your Linux system as a server, you should enter your permanent license key into the license file.
- Add the required entries to the `/etc/services` file

```
runsv      8010/tcp      # Eloquence RUNSRV (Windows integration)
eloqsd     8100/tcp      # Eloquence A.06.00 eloqsd server
eloqdb     8102/tcp      # Eloquence A.06.00 data base server
eloqdb5    8104/tcp      # Eloquence A.06.00 ELOQDB5 server
```

- Edit the `eloq.config` configuration file. A template file is provided in `/opt/eloquence6/newconfig/config/d.eloq.config`
- If you intend to use your system as a server, you need to modify the `eloqsd.*` configuration files. Template files are provided in the directory `/opt/eloquence6/newconfig/config`
- If you intend to use your system as a database server, you need to modify the `eloqdb6.cfg` configuration file. A template file is provided in `/opt/eloquence6/newconfig/config/eloqdb6.cfg`.

Starting / Stopping Eloquence

The Eloquence servers (`eloqsd` and `eloqdb6`) can be configured to start automatically by default if runlevel 2 is entered (after a reboot or single user mode) and to shut down automatically on reboot.

A template configuration and startup/shutdown script is provided in the `/opt/eloquence6/newconfig/startup` directory. However, since startup and shutdown scripts depend on your Linux distribution they are not installed automatically. The provided scripts are derived from the HP-UX version and have been tried with the S.u.S.E Linux distribution. Other distributions should be similar, but some details may differ.

Configuring the User Environment

There are two files where the user environment can be configured:

- The environment defined in `/etc/profile` affects all users.
- The file `.profile` located in a user's home directory configures the user-specific environment.

Perform the following steps:

- In order to make Eloquence executables accessible to all users, please edit the file `/etc/profile`. Search for a line containing the directive `PATH=` and append `:/opt/eloquence6/bin`.
- If you want to make Eloquence executables accessible only to specific users, edit the `.profile` files in the appropriate home directories and append `:/opt/eloquence6/tools` to the `PATH=` directive.
- Make sure that the terminal type is configured properly for all users.
- Make your configuration changes active. This is done by logging off and back on again.

Configuring the eloqsd server

Eloquence A.06.00 no longer has an eloqd server. Beginning with this release, the former eloqd has been renamed to eloqsd. This has been done to improve the interoperability of Eloquence A.06.00 with previous releases on the same system.

The eloqsd server is an important part of Eloquence. It is responsible for the following task:

- Eloqsd coordinates the TASKID values.
- Eloqsd provides file sharing capabilities for the new graphical Eloquence development environment.
- Eloqsd is used to start eloqcore processes in the background.
- Eloqsd is used to count active users and does validate it against available user licenses.
- Eloqsd optionally provides a HTTP interface so server status information can be queried with a web browser.

Eloquence A.06.00 implements file sharing capabilities for the new graphical development environment through the eloqsd server. This makes it independent of the availability of specific network file systems (NFS/ SMB) and overcomes inappropriate limitations.

Running an eloqsd server on your system is not mandatory unless you are using eloq (providing virtual terminal capabilities). However, when no eloqsd process is active, TASKID values are no longer unique and are set to 1 by default.

In order to run the eloqsd server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqsd TCP service
- Configuring the default eloqsd account and group
- Configuring the eloqsd server startup
- Configuring the eloqsd server

Configuring the eloqsd TCP service

You may want to define the eloqsd service names in your `/etc/services` file. This is optional, as you can specify the port number directly in the `eloqsd.cfg` configuration file.

Please add a line like below to your `/etc/services` file:

```
eloqsd      8100/tcp      # Eloquence A.06.00 eloqsd server
```

the first column specifies the service name (eg. eloqsd) and the second column the associated port number and protocol (eg. 8100/tcp). The selected port numbers may not already be in use by another programs.

NOTE:

All systems must use the same port numbers in order to communicate.

Configuring the default eloqsd account and group

The **eloqsd** server requires you to specify an account and group name in the configuration file. Whenever **eloqsd** is started with root capabilities it will switch to the specified account/group instead. This is required, because for one it is generally not a good idea to run programs with root capabilities unless necessary, on the other hand this is used as the default account and group for users accessing files through the eloqsd or starting a background process.

While you can specify any user or group account in the configuration file, we recommend to create a specific user account and group for Eloquence which is used by the eloqsd server.

We recommend to create the user account *eloqsd* and the group *eloqsd* which should have the account *eloqsd* as a member. You should "disbale" the eloqsd account (by putting an asterisk in the password) to prevent logins using the eloqsd account.

Configuring the eloqsd server startup

You can start the eloqsd server from your startup configuration script when the operating system is starting up.

```
# Start Eloquence eloqsd server
/opt/eloquence6/bin/eloqsd
```

Configuring the eloqsd server

The eloqsd server is configured by editing the **eloqsd.cfg**, **eloqsd.user** and **eloqsd.share** configuration files. They are located in the Eloquence configuration directory. All configuration files provide complete inline documentation and are included at the end of this section for your reference.

The Eloquence configuration files are located in the directory `/etc/opt/eloquence6`. Each configuration file is responsible for a specific part of the eloqsd configuration:

- eloqsd.cfg** This is used for the general configuration of the server.
- eloqsd.user** Eloqsd provides its own user configuration. This makes it pos-

Installing Eloquence on the Linux platform

Configuring the eloqsd server

sible to define eloqsd users without the need to have a system account for each individual user. Instead eloqsd users are associated with system accounts and groups.

As passwords are defined in this file we consider it good practice to make this file unreadable for regular users. You should chown it to root and chmod it to 400.

eloqsd.share This configuration file is used to define resources which can be accessed through the eloqsd server.

The eloqsd command line options

The eloqsd server supports the following command line options which can be used to temporarily override configured settings in the eloqsd.cfg configuration file.

```
usage: eloqsd [options]
options:
  -help           = show usage (this list)
  -c name         = configuration file
  -d flags        = debug mode
  -l name         = log file name (or console/syslog/default)
  -f             = run in foreground
  -s name         = service name (tcp/ip transport)
  -F facility     = syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
  -I ident       = syslog identifier
```

Option	Description	Equiv.*
-c name	Specifies the configuration file name	
-d flags	Specifies the server log flags.	LogFlags
-l name	Specifies the server log file.	LogFile
-f	Run in foreground. This is used for debugging the eloqsd server.	
-s name	The service name (as defined in /etc/services) or the port number where the server should listen for requests. The default value is eloqdb6.	Service
-F facility	When logging to the syslog daemon, you can define a syslog facility (USER/DAEMON LOCAL0..LOCAL7)	SysFacility

Option	Description	Equiv.*
-I ident	When logging to the syslog daemon, you can define a syslog identifier. The default is eloqsd	SysIdent

*Equivalent configuration file directive.

The eloqsd HTTP status display

When the ServiceHttp is defined in the eloqsd.cfg configuration file, you can use a WEB browser such as Netscape to view the configuration and state of the eloqsd process in your network.

To access the eloqsd server, you need to provide a URL like below:

`http://server:port/`

where server is the host name or IP number of the system running the eloqsd server and port is the port number used for serviceHttp in the eloqsd.cfg file.

Default eloqsd.cfg file

```
# eloqsd.cfg
#
# @(#)Revision: 1.5 1997/07/15 00:00 $
# The purpose of this file is to define the eloqsd properties.
# The location depends on the operating system:
#
#   HP-UX 9.x:  /opt/eloquence6/etc/eloqsd.cfg
#   HP-UX 10.x: /etc/opt/eloquence6/eloqsd.cfg
#   Linux:     /etc/opt/eloquence6/eloqsd.cfg
#
# This file is read once at eloqsd startup.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
# Default values are provided commented out.

### Server configuration

[Config]

# Service          The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for requests. The default value is eloqsd.
#
# ServiceHttp      The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for HTTP requests. If this is not specified, the
#                  HTTP status is disabled.
#
# UseKeepAlive     Numeric flag if the KEEP ALIVE socket option
#                  should be used. Valid values are 1/0.
#                  The default value is 1.
#                  If this option is active, the server will check
#                  after a system defined period of inactivity, if the
#                  client is still alive.
#
#Service = eloqsd
#ServiceHttp =
#UseKeepAlive = 1

# panic           This option defines what should happen if a fatal
#                  error is encountered.
#
#                  The following options are valid:
#                  exit      Terminate the process. This is the default.
#                  dump      Terminate the process and create a core dump.
#
#                  This is a problem tracking option. Unless you know what
#                  you need the core dump for you probably want to stay with
#                  the default
```

```
#panic = exit

# HttpFrame      Numeric flag if the links should be omitted in
#               HTTP status. The default value is 0.

# HttpFrame = 0

# Lang           This configuration option defines the locale, the
#               server should use. The default value is "C".
#               The only locale currently supported is "C".
#
# Messages       This configuration option defines the language
#               for server messages. This value defaults to Lang.
#               The only locale currently supported is "C".
#
# Charset        This defines the character set encoding, the server
#               should use internally.
#
#               Valid settings are:
#               HPROMAN8 - HP Roman8
#               ISO8859/1 - ISO 8859/1
#               The default value for HP-UX is HPROMAN8, all other
#               platforms default to ISO8859/1.
#
#               This setting is used by the server to translate
#               client strings like user or file names.

#Lang = C
#Messages = C
#Charset = HPROMAN8

# AuthPolicy     This entry specifies, how user names and passwords
#               are validated. The following entries are valid:
#
#               server - The server will validate passwords
#                       and user names using eloqsd.user
#
#               The default value is "server".
#
# userFile       The path/name of the eloqsd.user file.
#               The default value depends on your operating system:
#               HP-UX 9.x: /opt/eloquence6/etc/eloqsd.user
#               HP-UX 10.x: /etc/opt/eloquence6/eloqsd.user
#               Linux: /etc/opt/eloquence6/eloqsd.user
#
# shareFile      The path/name of the eloqsd.share file.
#               The default value depends on your operating system:
#               HP-UX 9.x: /opt/eloquence6/etc/eloqsd.share
#               HP-UX 10.x: /etc/opt/eloquence6/eloqsd.share
#               Linux: /etc/opt/eloquence6/eloqsd.share

#AuthPolicy = server
#userFile = /etc/opt/eloquence6/eloqsd.user
#shareFile = /etc/opt/eloquence6/eloqsd.share

# DefaultUID     The default name (or numeric id) of the system account
#               to run client processes as, unless a different setting
#               is provided for the user.
#
# DefaultGID     The default name (or numeric id) of the system group
#               to run client processes as, unless a different setting
```

Installing Eloquence on the Linux platform

Configuring the eloqsd server

```
#           is provided for the user.

DefaultUID = eloqsd
DefaultGID = eloqsd

# LogFile      This defines where log messages are written to.
#             This configuration value either specifies a path/file
#             or one of the keywords below:
#
#             console - log messages are written to the console
#             syslog  - log messages will be sent to the
#                   syslog daemon
#
#             The default value is "syslog".

LogFile = syslog

# SysIdent     When logging to the syslog daemon, you can define
#             a syslog identifier. Default is eloqsd.
#             See syslogd(1M) for more information
#
# SysFacility  When logging to the syslog daemon, you can define
#             a syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
#             The default setting is "USER".
#             See syslogd(1M) for more information

#SysIdent = eloqsd
#SysFacility = USER

# LogFlags     Each log message has an associated origin and
#             severity. The log flags define, which messages will
#             be logged. The "*" origin matches all message origins,
#             so it can be used to setup a default which can be
#             overridden for a specific message origin (eg. "*1N0"):
#             Default LogFlags are "*0"
#
#             The following origin are in use:
#             * = All origins
#             C = Configuration subsystem
#             N = Network transport
#             P = Protocol handling
#
#             The following severities are in use:
#             L_ERROR  = 0   - error messages
#             L_INFO   = 1   - information
#             L_DEBUG  = 2   - debug
#             L_VDEBUG = 3   - verbose debug
#
#             When using syslog, the following priorities
#             are mapped:
#             L_ERROR  = LOG_ERR
#             L_INFO   = LOG_NOTICE
#             L_DEBUG  = LOG_DEBUG
#             L_VDEBUG = LOG_DEBUG
#
#             Enabling log messages with L_DEBUG or L_VDEBUG severity
#             may result in a huge number of log messages.
#             To enable only fatal messages, you would want to set the
#             LogFlags to "*0", to enable regular log messages you
#             would want to set the LogFlags to "*1"
```



```
LogFlags = *0

# Configuration items below are the more traditional eloqsd
# settings.
#
# MaxUsers      Maximum number of eloqcore processes on the local
#               system. The default value is 40.
#
# MaxTasks      Maximum number of TASKIDs to reserve for "secondary"
#               eloqcore processes. If you don't know what this is good
#               for, you probably don't need it :-)
#               The default value is 20
#

MaxUsers = 40
MaxTasks = 20
```

Default eloqsd.user file

```
# eloqsd.user
#
# @(#) $Revision: 1.5 1997/07/15 00:00 $
# The purpose of this file is to define all users which are known to
# Eloquence. The location depends on the operating system:
#
#   HP-UX 9.x:  /opt/eloquence6/etc/eloqsd.user
#   HP-UX 10.x: /etc/opt/eloquence6/eloqsd.user
#   Linux:     /etc/opt/eloquence6/eloqsd.user
#
# This file is read at the startup time of the eloqsd process.
# Changes are automatically detected and honored.
#
# This makes it possible to define Eloquence users without the
# need to have a system account for each individual user.
# As passwords are defined in this file we consider it good practice
# to make this file unreadable for regular users. You should chown
# it to the administrator (probably root) and chmod it to 400.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
#
# Each user definition is a different section.
#
# The following configuration items are recognized for each section:
#
# [user_id]
# Name      The full user name (currently unused)
# Email     Email address of the user (currently unused)
# Password  The user password. This is currently clear text.
# uid       System account to execute client processes
# gid       System group to execute client processes
# Profile   Template user entry. User defaults will be taken from
#           this section.
# Home      Home path. Defaults to the home directory associated to
#           the UID by the system.
#
# There are two predefined sections:
#
# [public] is used, if a client does not provide a user id. This
# can only happen, if an eloqcore has been started locally and
# requests a remote operation. (currently unused)
#
# [default] is used as the default user profile.

[public]
Name = Anonymous

[default]
Name = Default user profile

[demo]
```

```
Name = Joe Average  
Password = secret
```

Default eloqsd.share file

```
# eloqsd.share
#
# @(#) $Revision: 1.5 1997/07/15 00:00 $
# The purpose of this file is to define all disk resources which are
# known to Eloquence. The location depends on the operating
# system:
#
#   HP-UX 9.x:  /opt/eloquence6/etc/eloqsd.share
#   HP-UX 10.x: /etc/opt/eloquence6/eloqsd.share
#   Linux:     /etc/opt/eloquence6/eloqsd.share
#
# This file is read at the startup time of the eloqsd process.
# Changes are automatically detected and honored.
#
# Eloquence A.06.00 provides its own file sharing capabilities.
# This will make you independent of the availability of specific
# network file systems (NFS/SMB) and overcomes possible file system
# limitations.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.
#
# Each share definition is a different section.
#
# The following configuration items are recognized for each section:
#
# [share_id]
# Path      Absolute path
# Comment   Share description. This is displayed by the client.
# Users     Comma separated list of individual users or user profiles
#           (currently unused)

[example]
Path = /opt/eloquence6/share
Comment = A.06.00 shared files
```

Configuring the eloqdb6 server

The eloqdb6 server is the new Eloquence A.06.00 data base server. Eloquence A.06.00 uses a new data base using the client/server approach. Eloquence A.05.xx data bases can be accessed from Eloquence A.06.00 using the eloqdb5 server.

In order to run the eloqdb6 server it is required to adapt your system configuration. This involves the following steps:

- Configuring the eloqdb TCP service
- Configuring the default eloq account and group
- Configuring the eloqdb6 server startup
- Configuring the eloqdb6 server

Configuring the eloqdb TCP service

It is recommended, that you define the eloqdb service names in your `/etc/services` file. This is optional, as you can specify the port number directly in the `eloqsd.cfg` configuration file.

Please add a line like below to your `/etc/services` file:

```
eloqdb      8102/tcp    # Eloquence A.06.00 eloqdb6 server
```

the first column specifies the service name (eg. `eloqdb6`) and the second column the associated port number and protocol (eg. `8102/tcp`). The selected port numbers may not already be in use by another programs.

NOTE:

All systems must use the same port numbers for the same service in order to communicate.

You can have more than one instance of the eloqdb6 server running on a single system, however they must use different services/port numbers.

Configuring the default eloq account and group

The eloqdb6 server requires you to specify an account and group name in the configuration file. Whenever it is started with root capabilities it will switch to the specified account/group instead. This is required, because for one it is generally not a good idea to run programs with root capabilities unless necessary. In addition, all data base volumes are owned by this user and are thus protected from illegal access from other users.

Installing Eloquence on the Linux platform

Configuring the eloqdb6 server

While you can specify any user or group account in the configuration file, we recommend to create a specific user account and group for Eloquence which is used by the eloqdb6 server.

We recommend to create the user account *eloq* and the group *eloq* which should have the account *eloq* as a member. You should "disbale" the *eloqsd* account (by putting an asterisk in the password) to prevent logins using the *eloq* account.

Configuring the eloqdb6 server startup

You can start the eloqdb server from your startup configuration script when the operating system is starting up.

```
# Start Eloquence eloqdb6 server
/opt/eloquence6/bin/eloqdb6
```

Configuring the eloqdb6 server

The eloqdb6 server is configured by editing the **eloqdb6.cfg** configuration file. It is located in the Eloquence configuration directory. The **eloqdb6.cfg** configuration file provides complete inline documentation. The default configuration file is included at the end of this section for your reference. The Eloquence configuration files are located in the directory **/etc/opt/eloquence6**.

The eloqdb6 command line options

The eloqdb6 server supports the following command line options which can be used to temporarily override configured settings in the configuration file.

```
usage: eloqdb6 [options]
options:
  -help           = show usage (this list)
  -c name         = configuration file
  -d flags        = debug mode
  -l name         = log file name (or console/syslog/default)
  -f             = run in foreground
  -s name         = service name (tcp/ip transport)
  -F facility     = syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
  -I ident       = syslog identifier
```

Option	Description	Equiv.*
-c name	Specifies the configuration file name	
-d flags	Specifies the server log flags.	LogFlags
-l name	Specifies the server log file.	LogFile

Option	Description	Equiv.*
-f	Run in foreground. This is used for debugging the eloqdb6 server.	
-s name	The service name (as defined in /etc/services) or the port number where the server should listen for requests. The default value is eloqdb6.	Service
-F facility	When logging to the syslog daemon, you can define a syslog facility (USER/DAEMON LOCAL0..LOCAL7)	SysFacility
-I ident	When logging to the syslog daemon, you can define a syslog identifier. The default is eloqsd	SysIdent

*Equivalent configuration file directive.

The eloqdb6 HTTP status display

When the ServiceHttp is defined in the eloqdb6.cfg configuration file, you can use a WEB browser such as Netscape to view the configuration and state of the eloqdb6 server in your network.

To access the eloqdb6 server, you need to provide a URL like below:

`http://server:port/`

where server is the host name or IP number of their system running the eloqsd server and port is the port number used for serviceHttp in the eloqdb6.cfg file.

Default eloqdb6.cfg file

```
# eloqdb6.cfg
#
# @(#)Revision: 1.8 1997/07/21 00:00 $
# This file defines the eloqdb6 configuration and the database
# environment. The default location depends on the operating system:
#
#   HP-UX 9.x:  /opt/eloquence6/etc/eloqdb6.cfg
#   HP-UX 10.x: /etc/opt/eloquence6/eloqdb6.cfg
#   Linux:     /etc/opt/eloquence6/eloqdb6.cfg
#
# This file is read once at eloqdb6 startup.
#
# Format:
#
# The section names are not case sensitive. String values can be
# enclosed in double quotes to protect leading or trailing spaces.
# Everything after a hash (#) character is considered a comment.

### Server configuration

[Server]

# Service          The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for requests. The default value is eloqdb.
#
# ServiceHttp      The service name (as defined in /etc/services)
#                  or the port number where the server should listen
#                  for HTTP requests. If this is not specified, the
#                  HTTP status is disabled.
#
# UseKeepAlive     Numeric flag if the KEEP ALIVE socket option
#                  should be used. Valid values are 1/0.
#                  The default value is 1.
#                  If this option is active, the server will check
#                  after a system defined period of inactivity, if the
#                  client is still alive.

#Service = eloqdb
#ServiceHttp =
#UseKeepAlive = 1

# panic           This option defines what should happen if a fatal
#                  error is encountered.
#
#                  The following options are valid:
#                  restart Restart the server process. This is the default.
#                  exit   Terminate the process.
#                  dump   Terminate the process and create a core dump.
#
#                  panic = dump is a problem tracking option. Unless you
#                  know what you need the coredump for you probably want
#                  to stay with panic = restart or panic = exit

#panic = restart
```


Installing Eloquence on the Linux platform Configuring the eloqdb6 server

```
# UID          The name (or numeric id) of the system account to run
#              client processes as when started as root.
# GID          The name (or numeric id) of the system group to run
#              client processes as when started as root.
#
#              Please note, that the server will refuse to start
#              as root unless UID and GID are valid.

UID = eloq
GID = eloq

# EnableIPC    When set, shared memory can be used to transmit data
#              between the database server and a client running on
#              the same system. This provides better performance
#              than using sockets because data are not passed through
#              the kernel. The default value is 1 (enabled).

#EnableIPC = 1

# LogFile      This defines where log messages are written to.
#              This configuration value either specifies a path/file
#              or one of the keywords below:
#
#              console - log messages are written to the console
#              syslog  - log messages will be sent to the
#                       syslog daemon
#
#              The default value is "syslog".

#LogFile = syslog

# SysIdent     When logging to the syslog daemon, you can define
#              a syslog identifier. Default is eloqdb6.
#              See syslogd(1M) for more information
#
# SysFacility  When logging to the syslog daemon, you can define
#              a syslog facility (USER/DAEMON/LOCAL0..LOCAL7)
#              The default setting is "USER".
#              See syslogd(1M) for more information

#SysIdent = eloqdb
#SysFacility = USER

# LogFlags     Each log message has an associated origin and
#              severity.
#              The log flags define, which messages will be logged.
#              The "*" origin matches all message origins, so it can
#              be used to setup a default which can be overridden
#              for a specific message origin (eg. "*1N0"):
#              Default LogFlags are "*0"
#
#              The following origin are in use:
#              * = All origins
#              A = Configuration subsystem
#              X = Network transport
#              P = Protocol handling
#              T = Thread kernel
#              I = IMAGE subsystem
#              B = BTREE subsystem
#              F = FIXREC subsystem
#              V = Volume handling
```

Installing Eloquence on the Linux platform

Configuring the eloqdb6 server

```
#           L = Transaction logging
#           C = Page cache
#           N = Node handling
#           D = The server framework
#           O = System catalog
#
#           The following severities are in use:
#           L_ERROR = 0 - error messages
#           L_INFO = 1 - information
#           L_DEBUG = 2 - debug
#           L_VDEBUG = 3 - verbose debug
#
#           When using syslog, the following priorities
#           are mapped:
#           L_ERROR = LOG_ERR
#           L_INFO = LOG_NOTICE
#           L_DEBUG = LOG_DEBUG
#           L_VDEBUG = LOG_DEBUG
#
#           Enabling log messages with L_DEBUG or L_VDEBUG severity
#           may result in a huge number of log messages.
#           To suppress anything but fatal messages, you can set
#           LogFlags to "*0". To enable informational log messages
#           you can set the LogFlags to "*1".

#LogFlags = *0

### Data base config

[Config]

# HttpFrame      Numeric flag if the links should be omitted in HTTP
#                status.The default value is 0

#HttpFrame = 0

# Threads        Number of threads in the data base server. A separate
#                thread is required for each client.
#                Default number of threads is 40.

#Threads = 40

# BufferCache     Size of page cache in megabytes. The page cache is
#                used to reduce the number of disc accesses. Large cache
#                size will speed up random database access, while a too
#                small cache size may cause bad server performance.
#                Default cache size is 5 MB.

#BufferCache = 5

# VnodeCache     Number of vnode cache elements. The VnodeCache is
#                used to cache Node open/close operations in the data
#                base kernel.
#                A Node is the data base equivalent to a file.
#                Default number of VNodesCache elements is 200.

#VnodeCache = 200

# VbufElements   Number of Vbuffer elements. Vbuffers are used as
#                scratch buffers by the database kernel.
```

```
#           About 3-5 are used per concurrent active thread
#           Default number of VBufElements is 20

#VbufElements = 20

# The server performs a checkpoint operation at fixed intervals. This
# flushes all modified buffers (including metadata) to the disk and
# resets log of committed transactions. A checkpoint is a point where
# the server knows all data are in a consistent state. Any data
# modification since the last checkpoint is recorded in the log
# volume.
#
# CheckPtFreq   Checkpoint frequency in seconds.
#               Default checkpoint frequency is 60 seconds.
#
# CheckPtSize   Checkpoint frequency based on accumulated log space
#               which would be freed by a checkpoint (in megabytes).
#               A zero CheckPtSize value disables size based
#               checkpoints.
#               Default checkpoint size is 5 megabytes.
#
# The database server performs a checkpoint operation at a fixed
# interval and optionally in addition when the accumulated log space
# which could be freed by a checkpoint operation reaches a given
# threshold.
# The frequency of the checkpoint operations has a great influence
# on the size of the log volume since the log volume must hold all
# committed transactions since between checkpoints

#CheckPtFreq = 60
#CheckPtSize = 5

# The syncer thread flushes modified buffer pages to the disk when
# they are likely to become reused in the near future.
#
# SyncerFreq    Syncer thread invocation frequency (in seconds)
#               Default interval is 10 seconds.
#
# SyncerMinFree Minimum number of pages which should be available in
#               a syncer state so they can be reused easily.
#               Default value is 16 pages.
#
# SyncerNFlush  Maximum number of pages to flush in a single syncer
#               run. Default value is 4 pages

#SyncerFreq = 10
#SyncerMinFree = 16
#SyncerNFlush = 4

[Volumes]

# List of data base volumes. Initially empty.
# This is usually filled in by dbvolcreate and dbvoextend utilities
```

Customizing the Eloquence Configuration Files

This discussion assumes that the Eloquence software has already been installed on your system. The information in this section is directed to the system administrator for the Eloquence software.

Before Eloquence can be used, its resources must be configured. Eloquence programs usually don't use system resources directly, instead they rely on a mapping of pathes, printers and device files in Eloquence configuration files.

There are three different levels of configuration:

System global	This is achived with the eloq.config configuration file which is located in the Eloquence configuration directory.
Group specific	This is achived with the group.<GroupName> configuration file which is located in the Eloquence directory.
User specific	This is achived with the .eloqrc configuration file which is located in the home directory of the user.

The Eloquence configuration files are read by the `eloqcore` process, when it is started. The configuration files are processed in an order such that more specific definitions override the more general ones. So a system global assignment can be overridden from a group specific configuration file, a user specific definition will override group and system global definitions.

The system global configuration file, **eloq.config** is usually copied during the installation process to Eloquence configuration directory and should be adapted to local requirements. Template configuration files are provided in the directory `/opt/eloquence6/newconfig/config`. The template configuration files provide complete inline documentation and are included at the end of this section for your reference.

Eloquence resource configuration

Eloquence resources go back to the "dark ages" when a predecessor of Eloquence was implemented in hardware (called HP250/HP260 at that time) and the resources definition actually were real OS resources. Since programs depended on a program independent resource configuration and it a convenient mechanism anyway, the concept was kept. Instead of real devices Eloquence resources can be mapped to whatever is appropriate. Eloquence is of course able to access native operating resources directly.

Since the following names are not commonly used, let's define them first:

- VOLUME** A **VOLUME** is the Eloquence concept of a directory. Instead of using the path directly, it is possible to assign an identifier for a path and refer to it in a symbolic manner.
- MSI** This is a short form of **MASS STORAGE IS** and species the default **VOLUME** on which pathes should be related unless an absolute path or another **VOLUME** is given.
- PRINTER** A **PRINTER** is the Eloquence concept of an output depvice. A **PRINTER** is identified by a number and could be mapped to a device file or to a sequence of commands.

The device numbers 8 to 10 have a special predefined meaning:

- 8: Display terminal.
- 9: Bit bucket (Eloquence equivalent of /dev/null)
- 10: Local terminal printer

- PORT** A **PORT** is the Eloquence equivalent of a (tty) device file. Eloquence provides prowefull machanisms to handle them in a efficient manner.

The eloq.config configuration file

The eloq.config file provides system global definitions and is usually copied during the installation process into the Eloquence configuration directory from the template file **d.eeloq.config**.

The group specific configuration file

To provide group specific definitions, you could install a group specific configuration file in the Eloquence configuration directory. Consider we would like to have a specific configuration for the *sales* group you would perform the following steps:

- 1 Change to the Eloquence configuration directory as follows:

```
cd /etc/opt/eloquence6
```

- 2 Create a group specfic configuration file from the template group configuration file. The group specific file should be named *group.sales*.

```
cp /opt/eloquence6/newconfig/config/d.group group.sales
```

- 3 Use a text editor, such as *vi* to edit the file

```
vi group.sales
```

Installing Eloquence on the Linux platform

Customizing the Eloquence Configuration Files

The user specific configuration file

To provide user specific definitions, you could install a user specific configuration file in the game directory of the user. Consider we would like to have a specific configuration for the user *mike*, you would perform the following steps:

- 1 Change to the home directory of the user:

```
cd ~mike
```

- 2 Create a user specific configuration file from the template user configuration file. The user specific file should be named `.eloqrc`:

```
cp /opt/eloquence6/newconfig/config/d.eloqrc .eloqrc
```

- 3 Use a text editor, such as `vi` to edit the file

```
vi .eloqrc
```

Template eloq.config file

```
# d.eloq.config
# Eloquence configuration file
# (C) Copyright Marxmeier Software AG, 2002
# @(#) $Revision: 20.4 $
#
# This file contains global available configuration
# It must be named eloq.config and located at:
#   HP-UX 9.x      /opt/eloquence6/etc
#   HP-UX 10.x     /etc/opt/eloquence6
#   linux          /etc/opt/eloquence6
#
# PLEASE NOTE:
# You MUST define at least one volume (typically SYSTEM, see below),
# or eloqcore will fail on startup.
#
# Globally defined volumes
#
# Format: VOLUME label [device] path
#
#   label    - Volume label (up to 8 characters)
#              must be unique per file
#   device   - Device specifier eg. ":F2,6,0"
#              ignored when present, no longer used
#   path     - HP-UX path to map volume on
#
# Globally defined printers
#
# Format: PRINTER no [model] type spec
#
#   no       - printer select code (-2 .. 7, 11 .. 99)
#   model    - PCL or OTHER
#              ignored when present, not used
#   type     - printer type PIPE, FILE or SYSTEM
#   spec     - path/command to process on printer selection
#
# Globally defined ports
#
# Format: PORT no spec
#
#   no       - port select code (11 .. 20)
#              may not conflict with PRINTER
#   spec     - path of tty devicefile
#
# Default date/time format
#
# Format: DATE spec
#         TIME spec
#
#   spec     - date/time specification. please refer to date(1) or
#              strftime(3) for more information.
#              For backward compatibility, the former specifications
#              "DD.MM.YY" and "MM/DD/YY" are silently converted.
#
#           Default: DATE "%m/%d/%y"
```

Installing Eloquence on the Linux platform

Customizing the Eloquence Configuration Files

```
#                               TIME "%H:%M:%S"
#
# Global MSI value
#
# Format: MSI label
#
#     label - Volume label. Default is the first defined volume.
#

# --- sample volumes

VOLUME SYSTEM /opt/eloquence6/share/prog
#VOLUMEEXAMPLE /opt/eloquence6/share/example

# --- sample printers

PRINTER 0 PIPE "lp -s 2>/dev/null"
#PRINTER 1 PIPE "lp -s -oc 2>/dev/null"
#PRINTER 2 FILE /dev/lp

# --- sample PORT

#PORT 11 /dev/tty0p5
```

Configuring the GUI Server

Eloquence uses the the **DLGSRV**, running on a remote host to provide a network transparent dialog user interface. Eloquence (running on the application server) establishes a connection to the remote dialog server using the **RUNSRV** utility running on the remote host. The information how to contact the **RUNSRV** is provided in the **eloq.ini** configuration file on the application server. The service name or port number used by the **RUNSRV** utility must be the same on the client and the server.

Customization of the **eloq.ini**

Eloquence uses the **eloq.ini** configuration file to configure how to contact the **RUNSRV** on the client system. The **eloq.ini** configuration file is located in the Eloquence configuration directory. A default **eloq.ini** file is located in the directory `/opt/eloquence6/newconfig/config`.

The ‘ini’ File format

The file **eloq.ini** contains several sections, each containing a group of related configuration items. The sections and configuration items have the following format:

```
[Section]
Item=Value
```

Section is the name of a section. The enclosing brackets ([]) are required and they must start at the first column.

Item=Value defines a value of a configuration item. *Item* is the name of a configuration item. It consists of any sequence of characters (case insensitive) and digits followed by a equal sign (=). Depending on item type, the value may either be an integer or a string (optionally enclosed in double quotes).

Comment lines must either start with a semicolon (;) or a hash character (#) in the first column.

The eloq.ini file

Section [runsrv]

This section is used by Eloquence to contact the **RUNSRV** utility program on a remote host.

The section [runsrv] may hold the following configuration items:

Service	Service=	<Servicename>
	Default:	runsrv
	Function:	Defines the service name (or port number) used to connect to RUNSRV on a remote host. The service name is used to lookup the port number in your /etc/services file.

NOTE:

You should provide the appropriate entry in your **/etc/services** file.

If the first character of the value is a digit, the value will be considered as a port number. It is recommended to use a service name.

The resulting port number *must* be the same on the client and server side.

Debug	Debug=	<level>
	Default:	0
	Function:	DebugLevel specifies the RUNSRV debug level. A zero value is recommended.

D

Debug 112, 130

dlgsrv_debug 69, 115, 134

E

eloq.ini 66, 111, 170

eloqcl.ini 67, 112, 130

I

ini file, format 64, 110, 129, 169

M

modules 116, 135

R

runsrv 112, 130