PureSight Log Server Installation Manual

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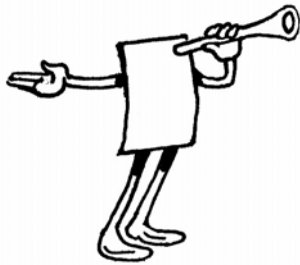
About This Manual

This manual provides instructions for installing the PureSight Log Server. It contains the following chapters:

❖ **Chapter 1, Introduction**, introduces PureSight and its system architecture, and describes the functionality of the PureSight Log Server.

❖ **Chapter 2, Installing PureSight Log Server on a Linux Platform**, provides step-by-step instructions for the PureSight installation procedure on a Linux platform and describes the basic configuration features.

❖ **Chapter 3, Installing PureSight Log Server on a Windows Platform**, provides step-by-step instructions for the PureSight installation procedure on a Windows platform.

❖ **Chapter 4, Uninstalling PureSight Log Server**, provides instructions for removing the PureSight Log Server.

❖ **Chapter 5, PureSight Log Server Database**, describes the structure of the PureSight Log Server database.

❖ **Chapter 6, Troubleshooting**, provides information to assist in troubleshooting problems that may arise in the installation process.

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Chapter 1

Introduction

PureSight was created especially for the complex requirements of the modern online corporation or institution. PureSight combines precision Internet filtering capabilities with powerful management tools to offer a highly accurate and reliable Internet content-filtering solution. PureSight is suitable for small, medium, and large organizations, as well as service providers.

PureSight is based on proprietary Artificial Content Recognition™ (ACR) technology. Using Artificial Intelligence (AI) algorithms, ACR enables PureSight to analyze the HTML page of each requested Web site and categorize the page based on its content. PureSight allows Internet usage policies to be defined, implemented and modified according to the changing needs of the organization.

DisCo System Architecture

PureSight employs an advanced Distributed Collaborative (DisCo) System architecture. This modular system architecture is designed to maximize management investments by providing flexible integration, improved performance and scalability.

Designed to simplify management of a high availability network, PureSight's distributed architecture utilizes three basic modules: PureSight Management Server, PureSight Content Filtering Server and PureSight Log Server.

This next generation architecture provides for:

✦ Centralized management and configuration of all PureSight Content Filtering Servers by a single PureSight Management Server. This also enables large organizations to manage remote branch office sites using the same Management Server, and thereby implementing a centralized policy throughout the organization regardless of physical location.

✦ Automatic, unified distribution of configuration changes to all Content Filtering Servers, eliminating the need to configure each server individually.

✦ Scalability. One or more additional Content Filtering Servers can be installed as new gateways are added or increased performance is required. PureSight is easily deployed in systems where load-balancing is used to distribute traffic between multiple Content Filtering Servers.

✦ Reduced risk for single point of failure. The distributed modular structure enables the PureSight Content Filtering servers to continue filtering, even if the PureSight Management Server or the PureSight Log Server fails or other PureSight Content Filtering Servers are down for maintenance. Cross platform support. Each module can be installed on a different operating system (Windows or Linux) and each PureSight Content Filtering Server can be installed on a different platform (Squid or ISA). The selected platform is transparent to the other modules installed.

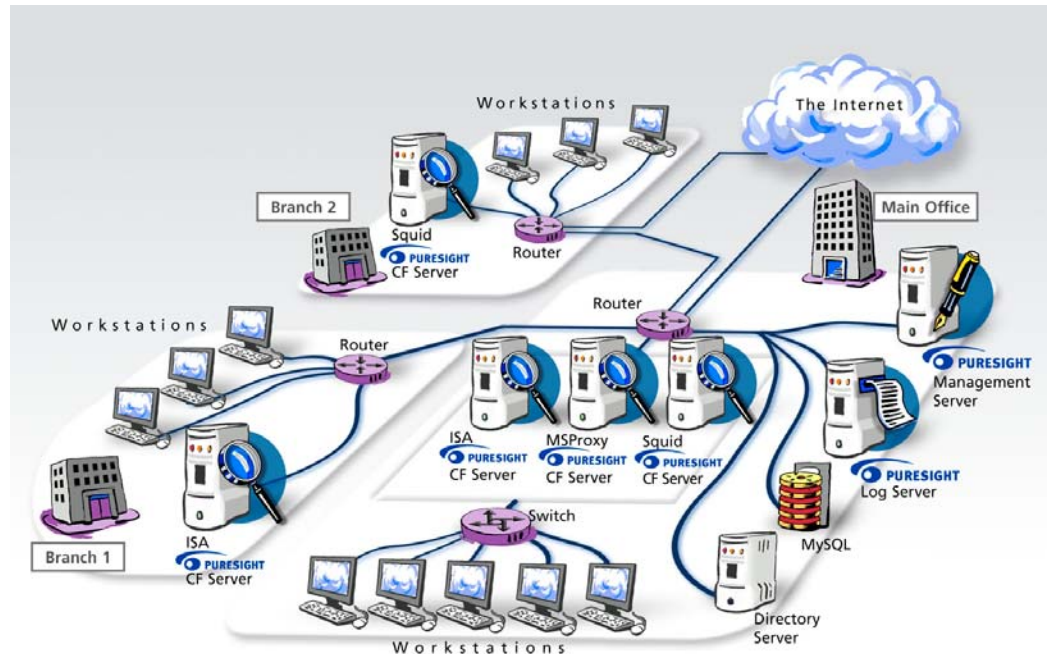The role of each of the system modules is described in the next section.

System Modules

The basic system architecture is comprised of three modules that interact to provide a complete content-filtering solution. The functionality of each of the modules is clearly defined as follows:

✦ **PureSight Management Server** - responsible for configuring and managing all PureSight modules and functions, including the PureSight Log Server and the PureSight Content Filtering Server(s). The PureSight Management Server features an intuitive user-interface that allows the administrator to define and manage the users and filtering policies that support the organization's Internet Acceptable Use Policy.

✦ **PureSight Content Filtering Server(s)** - responsible for analyzing all Internet traffic on the network. PureSight Content Filtering Servers can be installed on platforms located in the organization's Server Farm or on remote machines. The PureSight Content Filtering Server analyzes all HTTP traffic on the gateway where it is installed, and categorizes the content in real-time. According to the Internet Acceptable Use Policy defined on the PureSight Management Server, the PureSight Content Filtering Server then executes an Allow, Block, Monitor or Warn response, as required.

✦ The PureSight Management Server configures all PureSight Content Filtering Servers on the network, regardless of their location. This system-wide configuration includes the users and filtering policies that support the organization's Internet Acceptable Use Policy. The PureSight Content Filtering Servers also interact with a single PureSight Log Server, which is responsible for logging all of the filtering activity that takes place in the network.

✦ **PureSight Log Server** - provides real-time tracking, monitoring and accounting information for all Internet activity - the details of all HTTP requests and replies, including time, users and the resulting filtering actions (allow/block/warn).

The PureSight Management Server accesses the data on the PureSight Log Server to generate reports on the sites that were visited, the users that access those sites and other information that helps managers to evaluate employee productivity, bandwidth consumption and Internet usage. A single PureSight Log Server logs the activity for all PureSight Content Filtering Servers in the network, regardless of location or platform to enable generating unified reports for all activity. The PureSight Log Server supports logging to the file system or to an SQL database (MySQL).

These independent modules can be installed together on one machine or on separate machines, on varying combinations of platforms and operating systems. This architecture is highly flexible and customizable, allowing the systems administrator to easily adapt the deployment to the organization's network environment.

Network Architecture Diagram

One possible implementation of the PureSight network architecture is shown in the following diagram:

This example shows PureSight deployed in a network with a headquarters and two remote branch offices.

This network includes one PureSight Management Server for the system-wide configuration of five PureSight Content Filtering Servers and one PureSight Log Server. This system-wide configuration includes the users and filtering policies that support the organization's Internet Acceptable Use Policy.

Internet traffic originating in the Headquarters' workstations is monitored by one of three PureSight Content Filtering Servers located in the PureSight Server Farm. The PureSight Content Filtering Server located on the branch gateway routers monitors Internet traffic originating in the remote branch workstations.

The PureSight Log Server generates logs and the log contents are stored in a file system or in an SQL database (MySQL) on a separate server.

PureSight Log Server Functionality

The PureSight Log Server is responsible for the centralized logging of user activity in the system, including time and date of URL requests, their classification and the action taken, according to user and IP address. The PureSight Log Server logs activities for all of the PureSight Content Filtering Servers connected to the associated PureSight Management Server. The data collected is used to generate reports regarding users' Internet activity and bandwidth consumption.

The PureSight Log Server can log data to two types of storage:

✦ **File system** – all log data is stored on the PureSight Log Server machine local file system. The log files are in a unique XML format and can be accessed via the PureSight Management Server Administration tool to generate reports.

✦ **Database** – all log data is stored in an SQL database (MySQL). The MySQL database can be located either on the PureSight Log Server machine or on a different machine on the network, which is accessible to the PureSight Log Server. The log data in the MySQL database can be accessed via the PureSight Management Server Administration tool for generating reports or from a third party application (like Crystal Reports).

The PureSight Content Filtering Servers send the log data to the PureSight Log Server, which saves the data in log files on the local file system. Each log file is limited both in size (KB) and in the period of time the log file can stay open (hours). Once either of the limits is reached, the current log file is closed and a new one is opened.

If the defined PureSight Log Server storage type is database, the log files are imported, one by one, into the designated MySQL database, once they are closed. After importing the log file, it is removed from the file system.

Reports that are generated will not include data in the open log file (both in file system storage and in database storage). Therefore, defining large log files (and setting a long maximum time that a log file can remain open) is not recommended if reports need to contain real live data.

The total volume of log files saved in the file system is restricted by the amount of space allocated for the storage of log files. When the total size of the log files reaches the maximum defined size, the log files are automatically overwritten on a first-in-first-out-basis.

When working with a MySQL database, the stored data is saved in the MySQL database indefinitely, unless manually removed by the database administrator.

The PureSight Log Server database is described in detail in *Chapter 4, PureSight Log Server Database*.

Although PureSight Log Server settings are designated during the installation process, PureSight Log Server settings can be configured in the PureSight Management Server via the Administration tool. These settings, including the log storage type, log size and log storage location, are configured in the Log Server tab of the *Settings* pane. (For details on editing the PureSight Log Server settings, refer to the *PureSight User's Guide*.)

Chapter 2

Installing PureSight Log Server on a Linux Platform

This chapter describes how to install the PureSight Log Server on a Linux platform. It also details the system requirements for the installation.

System Requirements

The following minimum system requirements must be met in order to run the PureSight Log Server on a Linux platform:

✦ **Hardware**

❖ The equivalent of Pentium II 400 mHz processor or higher; Pentium III recommended

❖ 128 MB RAM (minimum)

❖ 100 MB free disk space

✦ **Software**

❖ RedHat Linux versions 7.2, 7.3, 8.0 or 9.0 or Advanced Server 3 or Fedora Core Linux versions 1.0 or 2.0.

❖ MySQL 3.22.xx (optional, required only if logging is to an SQL database and not to the local file system). The MySQL database can be installed on any machine on the network.

❖ PureSight Management Server installed and running on any machine on the network.

Installing PureSight Log Server

The PureSight Management Server must be installed prior to installation of the PureSight Log Server. The PureSight Log Server is installed via an installation script, **install_pslogsrv.sh**. The installation script can be run in script mode or in graphic mode. The procedure described herein details the installation process as it takes place in script mode.

This installation process installs the following components:

✦ **PureSight Log Server** – server that listens and accepts log data from the connected PureSight Content Filtering Servers.

✦ **PureSight database** – if the selected storage type is database, then PureSight database and tables are created on the designated MySQL server.

✦ **PureSight Log Server daemon** – controls and monitors PureSight Log Server components at run time.

During the installation you will be prompted to confirm or enter various settings. The default value for each setting is indicated within brackets. You can accept the default settings or enter alternate values, as required.

Before You Begin

The PureSight Management Server must be installed before you attempt to install the PureSight Log Server. In addition, the PureSight Log Server must have access to the OpenLDAP port of the PureSight Management Server storage. Verify that this port is open and allowed in order to retrieve and update the server configuration.

➢ **To install PureSight Log Server:**

1 Log in as root.

2 Go to the directory where the **install_pslogsrv.sh** file is located.

NOTE:

The installation script must be run from the directory in which it is located.

The installation script can be run in the graphic mode (non X like linuxconf) using **run.setup.sh ./ install_pslogsrv.sh**. In some cases, depending on your terminal settings, the graphic mode may not display properly

3 Run the **install_pslogsrv.sh** file.

The installation process begins and you are prompted to accept default values or enter new settings on a line-by-line basis.

4 The License Agreement is displayed. Select [Y]es to accept the terms of the license agreement.

If a previous version of PureSight Log Server is found, installation will ask whether to upgrade. The upgrade procedure will alter data storage while preserving existing data. If you wish to create a new data storage without preservation of old log data, run first uninstall before proceeding. Select [Y]es to upgrade or [N]o to abort installation.

5 Click **Enter** to accept the default setting for each of the parameters described in the sections below, or enter the required setting and then click **Enter**.

❖ **Installation Path:** The path where the application is to be installed.

❖ **PureSight Management Server:** The PureSight Log Server connects to the PureSight Management Server configuration storage (OpenLDAP) to retrieve the configuration settings of the PureSight Log Server.

♦ **PureSight Management Server OpenLDAP server IP:** The IP address of the OpenLDAP server on the PureSight Management Server machine. The default value displayed will be the IP address of the local machine. If the default IP address is 127.0.0.1, then it means that there is a misconfiguration in the /etc/hosts. The /etc/hosts should include the machine's real name and IP address.

♦ **PureSight Management OpenLDAP server port:** The port of the OpenLDAP server on the PureSight Management Server machine.

❖ **PureSight Log Server General Settings:** The PureSight Log Server uses a port for receiving log data from PureSight Content Filtering Servers and a local storage path for storing PureSight log files.

   ♦ **PureSight Log Server port:** The port used for connecting to the PureSight Log Server.

   ♦ **PureSight Log files path:** The path to where the log files are generated on the PureSight Log Server.

❖ **PureSight Log Server Storage Settings:** The PureSight Log Server can log data to local file system or to a MySQL database.

   ♦ **PureSight Log Server storage type:** There are two log storage types:

      (1) **Local file system:** Log files are saved in a file system in a predefined path. When the storage reaches its maximum size, files are automatically removed on a first-in-first-out-basis.

      (2) **MySQL database:** The content of the log files is imported into the MySQL database from the file system and then the files are removed from the storage location on the Log Server.

      You must enter a value for this parameter (1 or 2; any other input is illegal).

NOTE:

If you select 1 (local file system), the installation process will not include the MySQL-specific parameters and will skip directly to the PureSight Log Server daemon stage of the installation.

   ♦ **MySQL server IP:** The IP address of the MySQL database server.

♦ **MySQL server port:** The port of the MySQL database server.

♦ **MySQL Administrator username:** The MySQL database administrator username.

♦ **MySQL Administrator password:** The MySQL database administrator password.

NOTE:

MySQL administrator should have permissions to connect to the MySQL server from the PureSight Log Server machine (even if the PureSight log server is installed on the same machine as the MySQL server, the connection is made via TCP/IP and thus localhost permissions will not suffice).

NOTE:

If a PureSight database already exists, you will be asked whether to keep and convert the data in the existing database or to overwrite the database and loose all log history.

♦ **Database size limit:** the maximum size of the PureSight database

❖ **PureSight Log Server daemon:** PureSight Log Server daemon is used for running the PureSight Log Server.

♦ **Run PureSight Log Server daemon at startup (y / n):** The daemon process is run in the background. This parameter defines whether or not the daemon process is to be automatically run at startup.

After accepting or editing each of the above parameters, the installation process is completed.

NOTE:

If the selected storage type was database, the MySQL server must be running before the PureSight Log Server is started. Therefore, if PureSight Log Server was set to run at startup, the MySQL database must also be started and run before the PureSight Log Server.

Installation Script (Default Installation)

The example below illustrates an installation based on the default values.

NOTE:

The License Agreement is displayed before the script is run. Select [Y]es to accept the license or [N]o to exit the installation.

```
##############################################################

Welcome to the PureSight Log Server Installation, version 1.2

PureSight Log Server includes a number of settings. To accept
the default settings press 'Enter'.

##############################################################

Installation path [ /user/local/ ]:

Please enter [B]ack\[N]ext\[C]ancel [N]:

Extracting files ...

##############################################################

PureSight Management Server

PureSight Log Server connects to PureSight Management Server
configuration storage (OpenLDAP) to retrieve configuration
settings.


PureSight Management Server OpenLDAP server IP [127.0.0.1]:

PureSight Management OpenLDAP server port [389]:

Please enter [N]ext\[C]ancel [N]:


##############################################################

PureSight Log Server general settings

PureSight Log Server uses a port for receiving log data from
PureSight Content Filtering servers and a local storage path
for storing PureSight log files.

PureSight Log server port [5701}:

PureSight Log Server logs path [usr/local/iCognito/log]:

Please enter [B]ack\[N]ext\[C]ancel [N]:

##############################################################
```

<u>PureSight Log Server storage settings</u>

PureSight Log Server can log data to local file system or to a MySQL database.

Choose PureSight Log Server storage type [1]:

(1) local file system only

(2) MySQL database

(any input other than 1 or 2 is illegal)

Please enter [B]ack]\[N]ext\[C]ancel [N]:

MySQL server IP [127.0.0.1]:

MySQL server port [3306] :

During installation of PureSight Log Server, a MySQL database Administrator (username and password) is required to initialize the PureSight database and tables.

MySQL Administrator username [root]:

MySQL Administrator password[]:

Please enter [B]ack]\[N]ext\[C]ancel [N]:

Database size limit(MB) [2000]:

Please enter [B]ack]\[N]ext\[C]ancel [N]:

Note - if there is a PureSight database already installed in the specified location you will be asked whether or not to keep the old Database, or to overwrite it.

##

<u>PureSight Log Server daemon</u>

PureSight Log Server daemon is used for running the PureSight Log Server.

Run PureSight Log Server daemon at startup (y / n) [y]:

Installing pslogsrvd daemon…

```
Log Server daemon Usage: /etc/rc.d/init.d/pslogsrvd [ start
 | stop]


###########################################################
PureSight Log Server installation completed successfully.

PureSight Log Server is running.
```

Chapter 3

Installing PureSight Log Server on a Windows Platform

This chapter describes how to install the PureSight Log Server on a Windows platform. It also details the system requirements for the installation.

System Requirements

The following minimum system requirements must be met in order to run the PureSight Log Server on a Windows platform:

✦ **Hardware**

❖ The equivalent of Pentium II 400 mHz processor or higher; Pentium III recommended

❖ 128 MB RAM (minimum)

❖ 100 MB free disk space

✦ **Software**

❖ Windows 2000 Server or Advanced Server, Service Pack 3 or above, or Windows 2003 Enterprise.

❖ MySQL 3.22.xx (optional, required only if logging is to an SQL database and not to the local file system). The MySQL database can be installed on any machine on the network.

❖ PureSight Management Server installed and running on any machine on the network.

Installing PureSight Log Server

The PureSight Management Server must be installed prior to installation of the PureSight Log Server.

The PureSight Log Server is installed on the Windows platform via an installation wizard, as described herein.

This installation process installs the following components:

✦ **PureSight Log Server** – server, installed as a service, that listens and accepts log data from the connected PureSight Content Filtering Servers.

✦ **PureSight database** – if the selected storage type is database, then PureSight database and tables are created on the designated MySQL server.

Before You Begin

The PureSight Management Server must be installed before you attempt to install the PureSight Log Server. In addition, the PureSight Log Server must have access to the OpenLDAP port of the PureSight Management Server storage. Verify that this port is open and allowed in order to retrieve and update the server configuration.

The PureSight application is installed via a self-extracting installation file, **PureSight_Log_Server_1.2_win32.exe**.

➢ **To install PureSight Log Server:**

1   Log in with administrator privileges.

2   Close all open applications and windows.

3   Double-click **PureSight_Log_Server_1.2_win32.exe** to run the PureSight Log Server installation program.

The *Welcome* window of the PureSight Log Server Setup wizard is displayed:
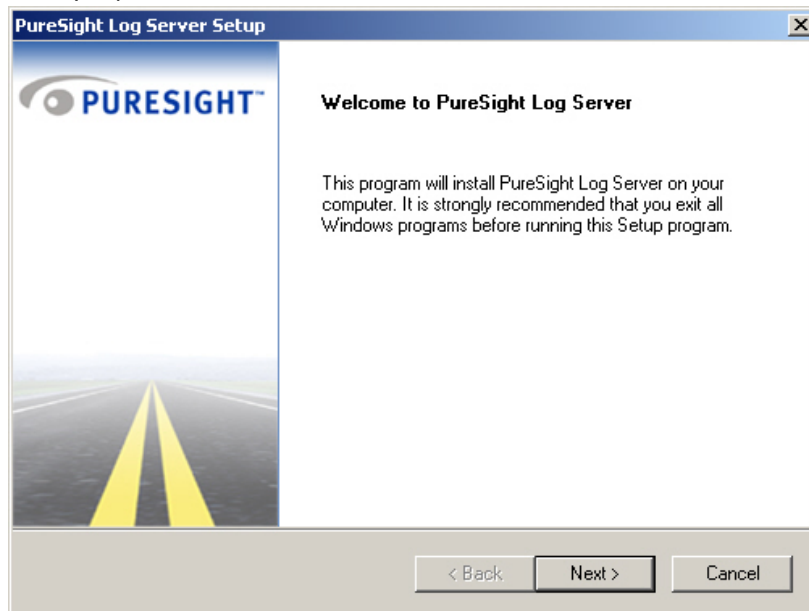
**4**   Click **Next** to begin the installation. The *License Agreement* window is displayed:
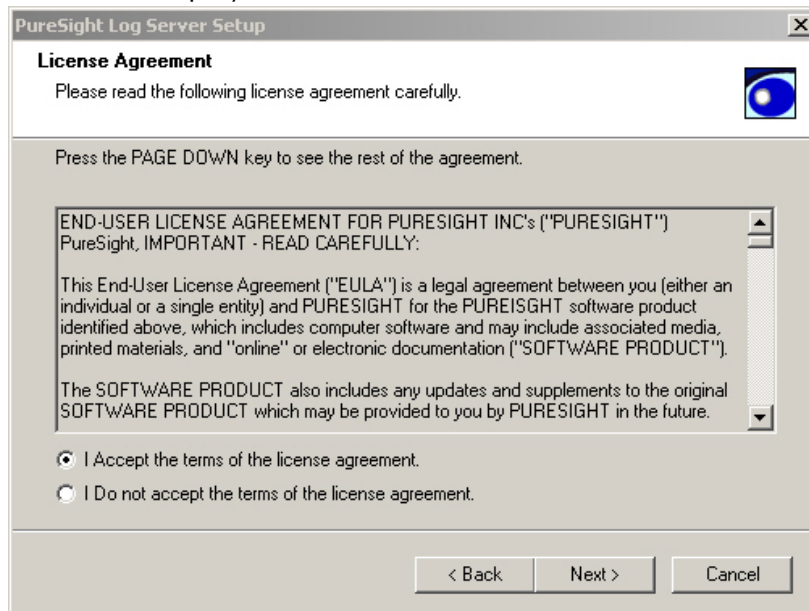
5   Read the license agreement carefully. (Scroll down to view the license agreement in its entirety.) If you agree to the terms, select the **I accept the terms of the license agreement** radio button and click **Next** to continue the installation.

6   If a previous copy of the same version of PureSight Log Server is found, The *PureSight Log Server Reinstall* window is displayed:
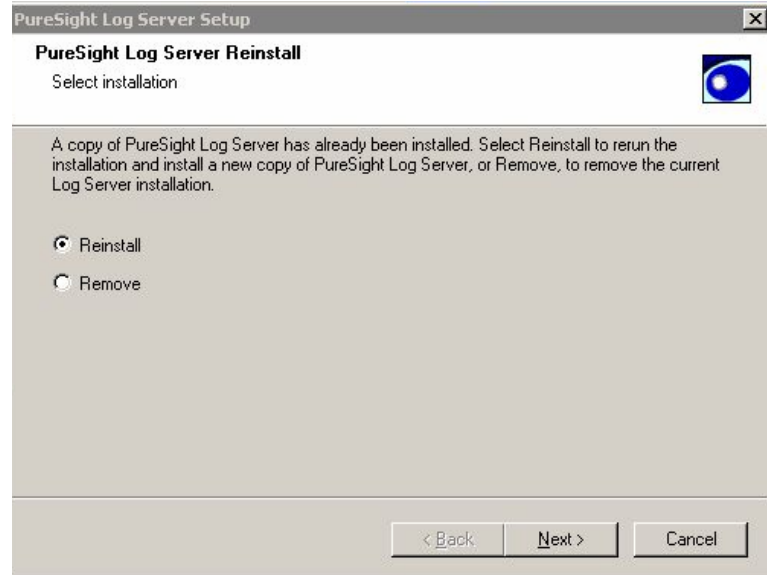
Select Reinstall to rerun the installation or Remove to uninstall all files and components.

If a previous version of PureSight Log Server is found, the *PureSight Log Server Upgrade* window is displayed:
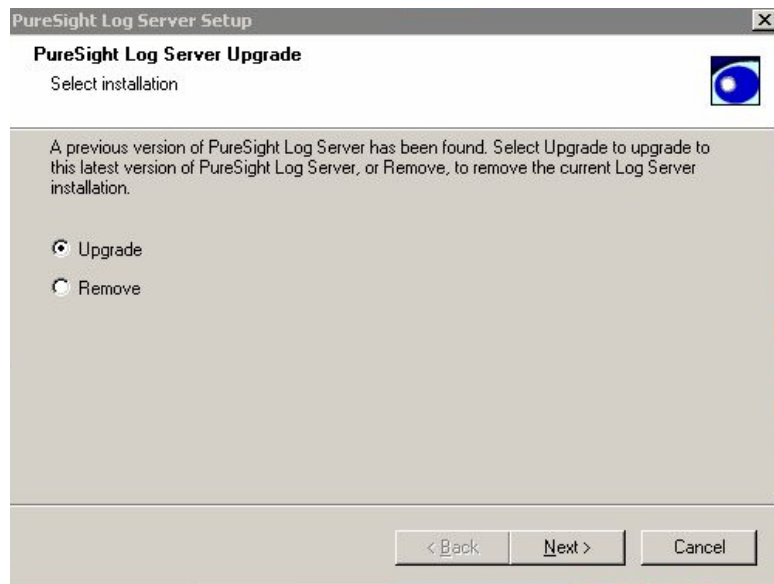
Select Upgrade to upgrade the system to the new version or Remove to uninstall all files and components. If upgrade is selected, continue to step 10. For all other cases, continue to step 7.

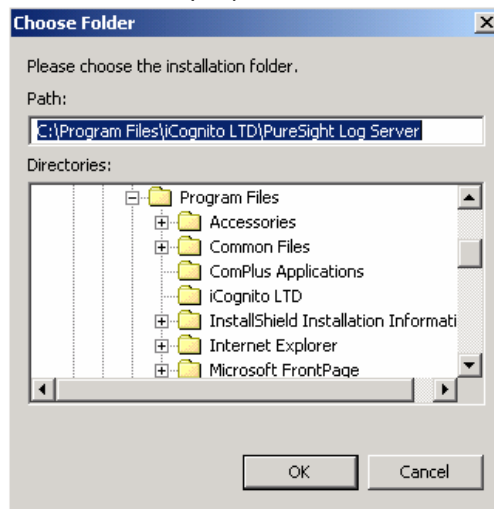**7**   The *User Information* window is displayed:

8 Enter your user name and company name in the designated fields, and click **Next.**

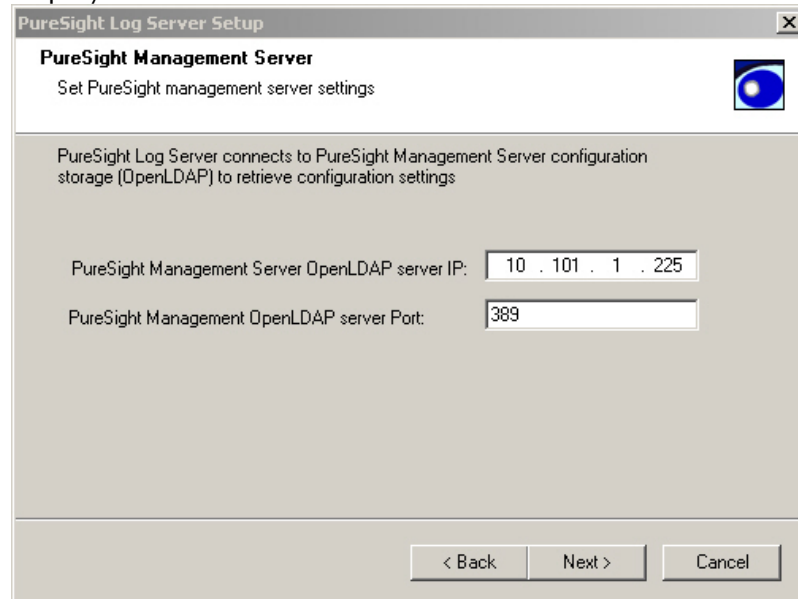The *Choose Destination Folder* window is displayed:
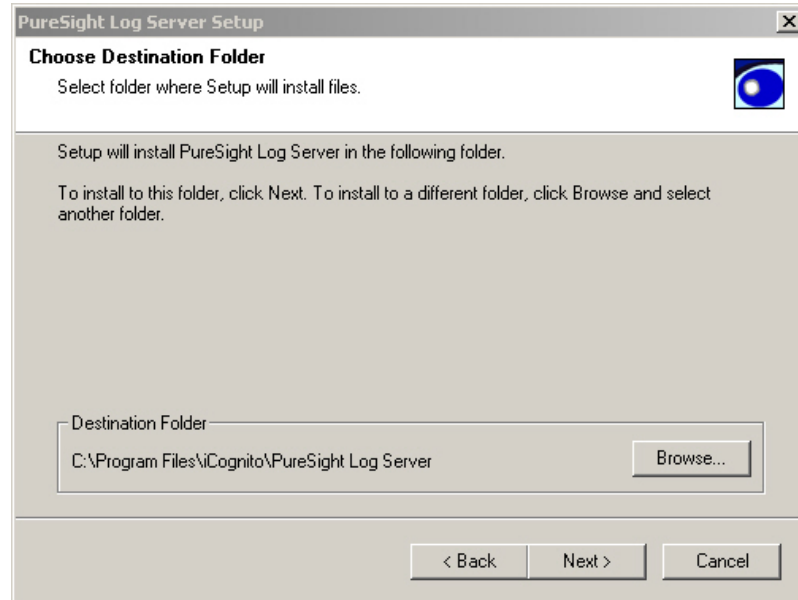
9 Click **Next** to accept the default location for the destination folder,

Or,

Click **Browse** to select an alternate location. The *Choose Folder* window is displayed:

Select the desired folder location and click **OK**. The *Choose Destination Folder* window is redisplayed, detailing the selected folder destination.

10 Click **Next.** The *PureSight Management Server* window is displayed:


Enter the IP address of the OpenLDAP server on the PureSight Management Server machine in the **PureSight Management Server OpenLDAP server IP** field. The default value displayed will be the IP address of the local machine.

11 Enter the port of the OpenLDAP server on the PureSight Management Server machine in the **PureSight Management OpenLDAP server port** field.

12 Click **Next.** The following message is displayed as the PureSight Log Server Setup application attempts to connect to the PureSight Management Server.

NOTE:

If the PureSight Log Server Setup application is unable to connect to the
PureSight Management Server the following error message is displayed:
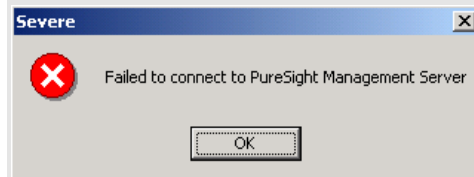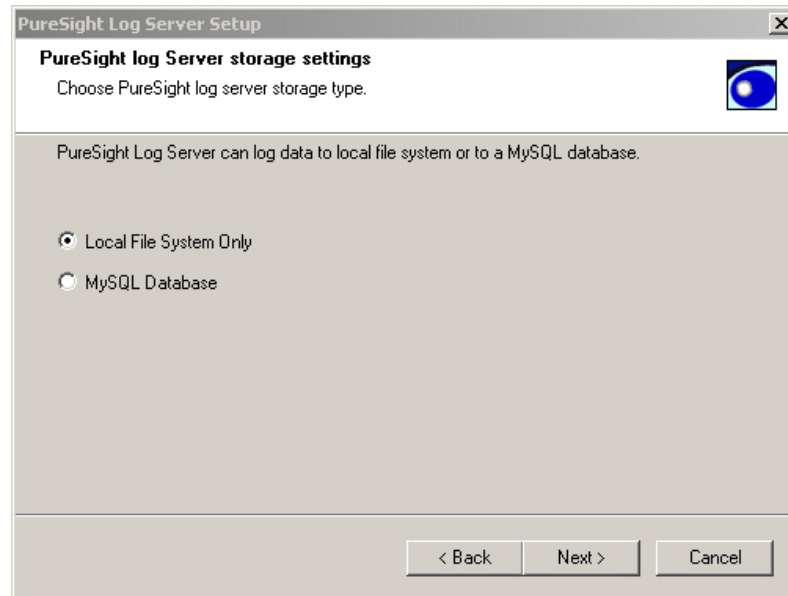

When the connection is complete, the *PureSight Log Server Port
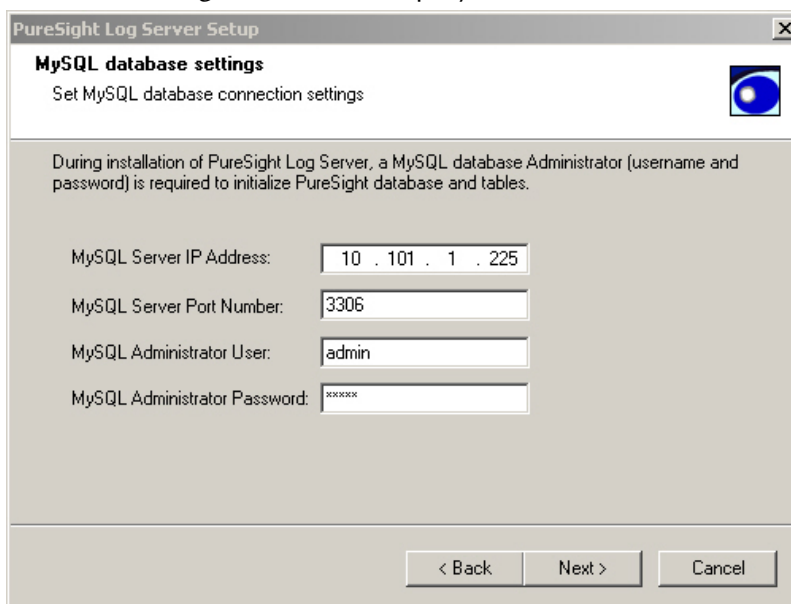Number* window is displayed:
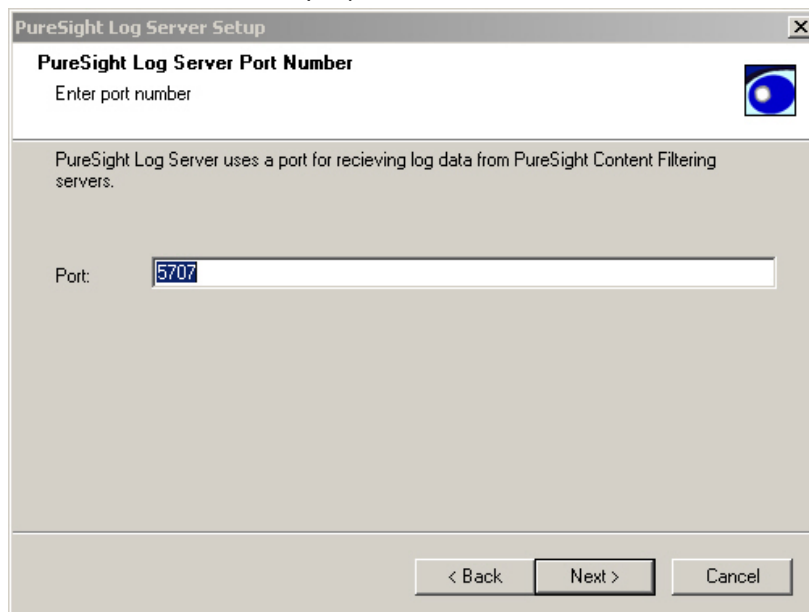
13 Enter the port to be used for receiving log data from PureSight
Content Filtering Servers in the **Port** field, and click **Next.**

The *PureSight Log Server storage settings* window is displayed:

14 Select the log storage type to be used, as follows:

❖ **Local File System Only**: Log files are saved in a file system in a predefined path. When the storage reaches its maximum size, files **are** automatically removed on a first-in-first-out-basis.

❖ **MySQL Database:** The content of the log files is imported into the MySQL database from the file system and then the files are removed from the storage location on the Log Server. Click Next.

15 If you selected **Local File System Only** as the storage type, the *Select Program Folder* window is displayed. Skip to step 15.

If you selected **MySQL Database** as the storage type, the *MySQL database settings* window is displayed:

16 Configure the MySQL database settings as follows:

❖ Enter the IP address of the MySQL database server in the **MySQL server IP** field.

❖ Enter the port of the MySQL database server in the **MySQL server port** field.

❖ Enter the MySQL database administrator username in the **MySQL Administrator username** field.

❖ Enter the MySQL database administrator password in the **MySQL Administrator password** field

NOTE:

MySQL administrator should have permissions to connect to the MySQL server from the PureSight Log Server machine (even if the PureSight log server is installed on the same machine as the MySQL server, the connection is made via TCP/IP and thus localhost permissions will not suffice).

NOTE:

If a PureSight database already exists, you will be asked whether to keep and convert the data in the existing database or to overwrite the database and loose all log history

17 Click **Next**. The MySQL Database Settings window is displayed:
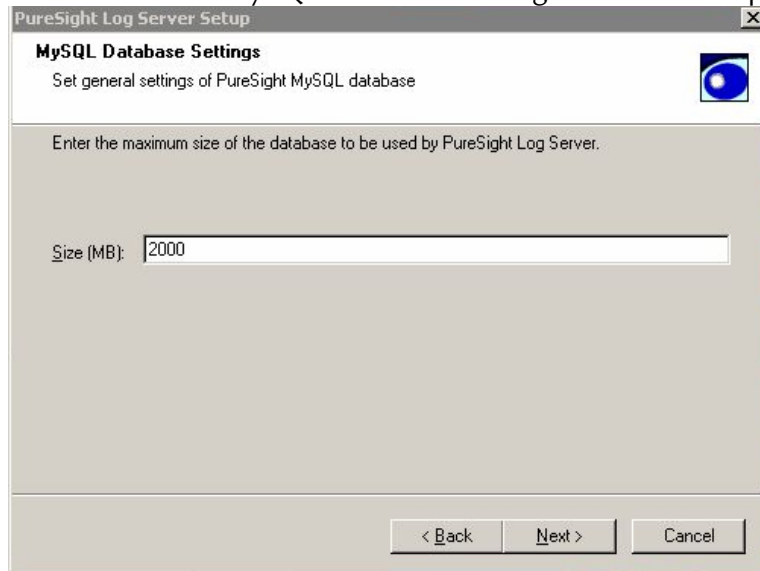
Enter the maximum size that the PureSight MySQL database can consume in MB.

18 Click **Next**. The *Select Program Folder* window is displayed:
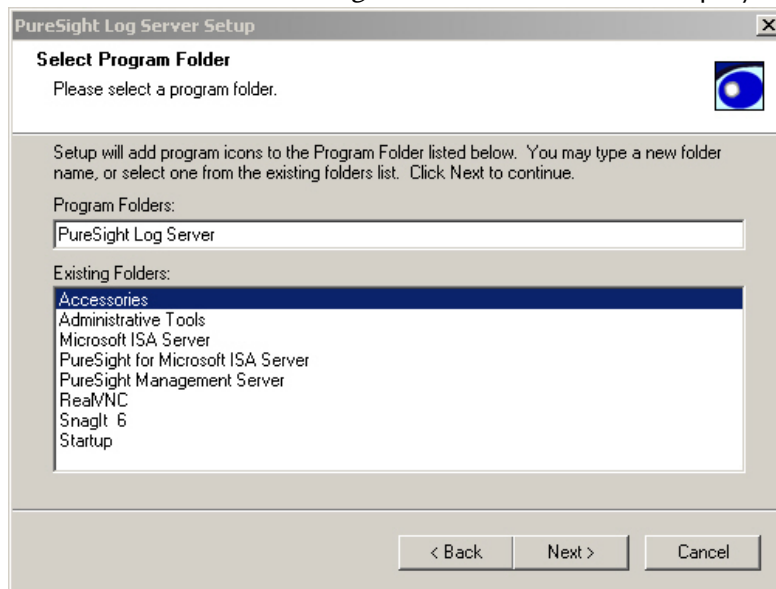
19 Select the program folder into which program icons are to be added from the list displayed and click **Next**. The *InstallShield Wizard Compete* window is displayed:

20 Click **Finish**. The installation process is complete.
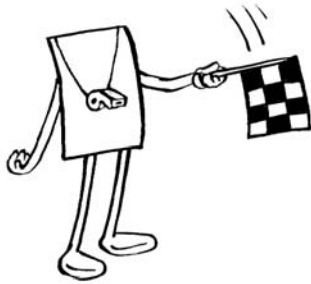
Chapter 4

Uninstalling PureSight Log Server

This chapter describes how to uninstall the PureSight Log Server.

Uninstalling PureSight Log Server

The uninstall process removes all of the files that relate to the PureSight Log Server, including the log files and database.

NOTE:

If you anticipate any future need for the existing log data, it is recommended that you back up the log files to another location. All of the PureSight files will be removed automatically from their default location during the uninstall process.

If PureSight database is installed you will be notified and asked whether to keep or remove it.

Uninstalling PureSight Log Server (Linux)
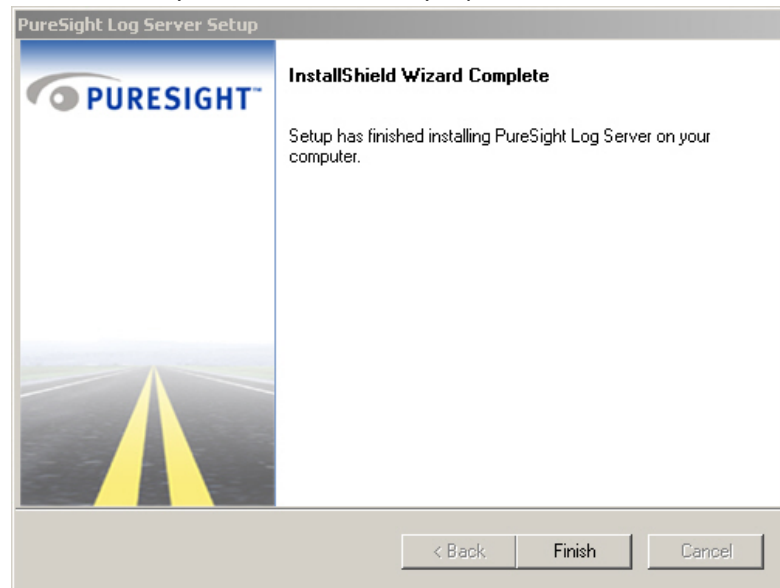
The PureSight Log server is uninstalled from a Linux platform by running an uninstall script (**uninstall_pslogsrv.sh**).

➢ **To uninstall the PureSight Log Server on a Linux Platform:**

1 Log in as root.

2 Go to the directory where the **uninstall_pslogsrv.sh** file is located.

3 Run the **uninstall_pslogsrv.sh** file.

> **NOTE:**
>
> The uninstall script must be run from the directory in which it is located.

The uninstall process begins, as shown below, and all files associated with the PureSight Log server are removed from the server.

\#

Welcome to the PureSight Log Server version 1.2 Uninstall

\#

Removing files, this may take a few minutes ...

\#

PureSight Log Server version 1.2 Uninstall is complete

\#

> **NOTE:**
>
> If you installed PureSight Log Server with MySQL, the following question is displayed: Would you like to delete the PureSight database from your MySQL server? (y/n) Enter Y to confirm.

Uninstalling PureSight Log Server (Windows)

The PureSight Log server is uninstalled from a Windows platform using an Uninstall Wizard application.

➢ **To uninstall the PureSight Log Server on a Linux Platform:**

1 From the Windows *Control Panel*, select **Add/Remove Programs.**

2 Select the PureSight Log Server application, click **Remove** and then click **OK.**

The Welcome to PureSight Log Server Setup window is displayed:
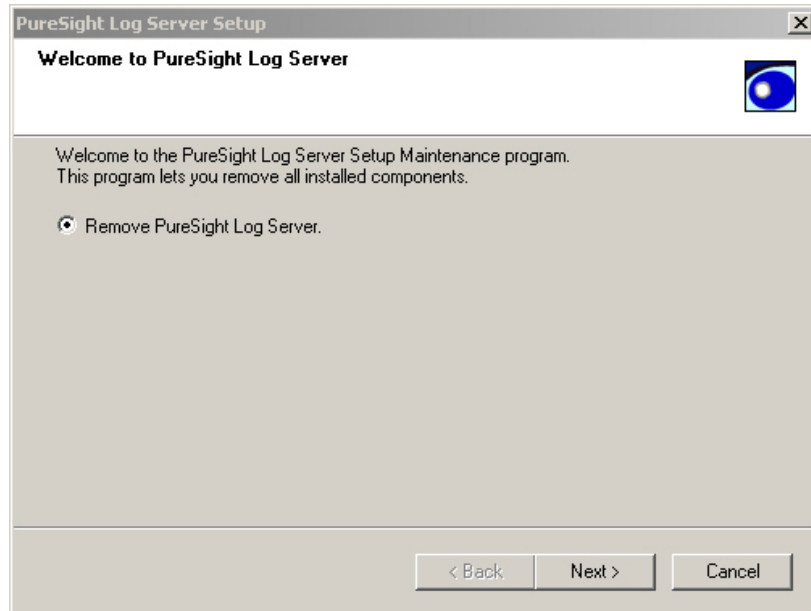
3 Select the **Remove PureSight Log Server** radio button and click **Next** to begin the uninstall process. The following confirmation message is displayed:
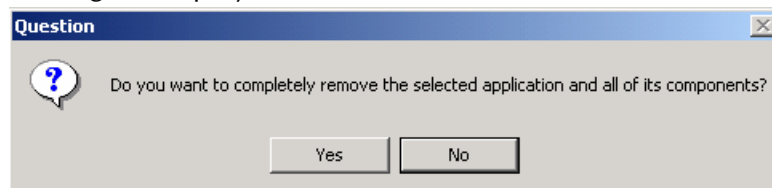
4 Click **Yes** to confirm that you want to remove the selected application and its components.

5   If **File Storage Only** was defined as the storage type during installation, skip to step 7.

Or

If **MySQL Database** was defined as the storage type during installation, the following confirmation message is displayed:
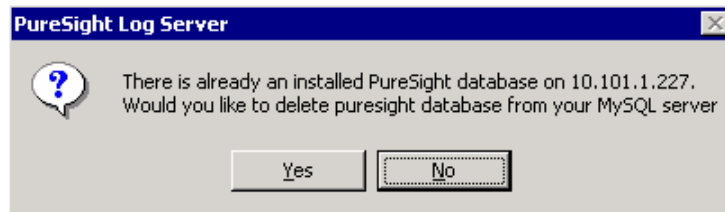
6   Click **Yes** to confirm that you want to remove the PureSight database from the MySQL server.

7   The *InstallShield Wizard Complete* window is displayed:
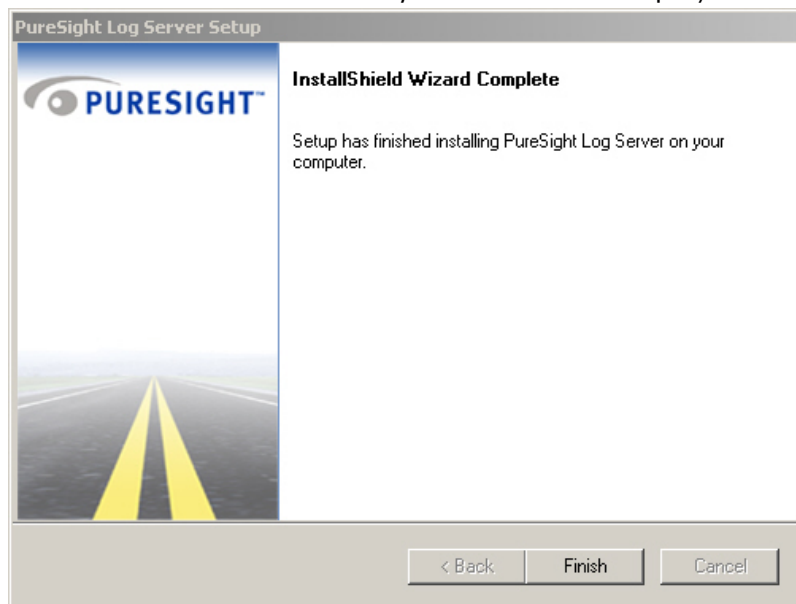
8   Click **Finish** to complete the uninstall process.
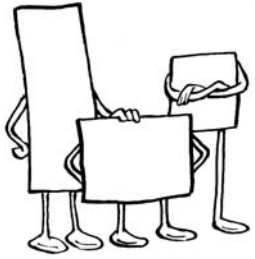
Chapter 5

PureSight Log Server Database

This chapter outlines the structure of the PureSight Log Server database.

Overview

The PureSight database contains several tables. The basic logging action of new data uses the following two tables, pslog_0 and classification_0. The pslog table contains the requested site information and the classification table contains the classification of the requested site.

These tables tend to grow over time, and therefore the database size is limited, according to the size set in the PureSight Management Server. Once the size limit is reached, the database is purged, and old records are deleted.

PureSight Database Tables

The following tables are included in the PureSight database:

✦ **categories** – contains all categories that PureSight Content Filtering Server can classify a site into.

✦ **blockmode** – contains all block modes that PureSight Content Filtering Server can apply.

✦ **blockreason** – contains all block reasons that PureSight Content Filtering Server can provide. The blocking reason explains why the specific block mode was applied for the specific site.

✦ **logcreationtimes** – contains the names and creation times of the pslog and classification tables.

✦ **pslog_0** – contains the requested site information.

✦ **classification_0** – contains the requested site's classification.

✦ meta_data – contains database status information for internal use during maintenance and upgrade.

NOTE:
The table names are all in lower case letters.

The following diagram illustrates the relationship between the PureSight database tables.

pslog	
PK	**logid**
	userip
	username
FK1	**block**
FK2	**reason**
	time
	size
	domain
	resturl
	servername
	serverip
	ps_weekday
	ps_monthday
	ps_month
	ps_hour
	ps_date
	ps_time
	ps_categories
	ps_usergroupname

classification	
PK,FK1 **PK,FK2** **PK**	**logid** **categoryid** **serverip**

categories	
PK	**categoryid**
	categoryname

logcreationtimes
curlogtable **curclasstable** **time**

meta_data	
	ps_database_version **ps_first_old_record** **ps_last_old_record** **ps_upgrade_status**
FK1,FK2	**logid**

blockmode	
PK	**block**
	mode

blockreason	
PK	**reason**
	blockreason

- ϖ **PK** – indicates Primary Key for the table.
- ϖ **FK** – indicates Foreign Key table relationship.

categories

The **categories** table contains information regarding the categories that a requested page can be classified into by a PureSight Content Filtering Server. The **categories** table maps between a PureSight category id and the category name.

Field name	Type	Allow nulls?	Key	Default value	Description
categoryid	int(10) unsigned	No	Primary	0	The category identification number
categoryname	char(16)	No	None		The name of the category

The data contained in the table is static and its content is not changed by the PureSight Log Server.

blockmode

The **blockmode** table contains information regarding the possible actions that can be applied to a requested page. Block modes include: Block, Warn, Allow. The **blockmode** table maps between a PureSight block mode id and the block mode's name.

Field name	Type	Allow nulls?	Key	Default value	Description
block	int(10) unsigned	No	Primary	0	The block mode identification number
mode	char(16)	No	None		The name of the blocking mode

The data contained in the table is static and its content is not changed by the PureSight Log Server.

blockreason

The **blockreason** table contains information regarding the possible reasons a blocking action was applied to a requested page. Block reasons include: PureSight in non-blocking mode, Adult category found, etc. The **blockreason** table maps between the id and the name of a PureSight block reason. The data contained in the table is static and its content is not changed by the PureSight Log Server.

Last printed: 8/2/2005 2:32 PM

Last saved: 8/2/2005 2:32 PM

Field name	Type	Allow nulls?	Key	Default value	Description
reason	int(10) unsigned	No	Primary	0	The block reason identification number
blockreason	char(32)	No	None		The description of the blocking reason

logcreationtimes

The **logcreationtimes** table stores the names of all the log and classification tables created by the PureSight Log Server.

Field name	Type	Allow nulls?	Key	Default value	Description
curlogtable	char(20)	No	None		The name of the log table
curclasstable	char(20)	No	None		The name of the classification table
time	datetime	No	None	0000-00-00 00:00:00	The creation time of the two tables

After installation the table contains the following data:

curlogtable	curclasstable	time
pslog_0	Classification_0	2002-12-05 17:56:16

pslog_0 and **classification_0** are the active log and classification tables.

pslog

The **pslog** table is used to store logged data received from a PureSight Content Filtering Server. The data includes the URL requested, the user who requested the site (both IP address and directory user name), the blocking mode applied for the request, the reason for the blocking mode, the time of the request, and the PureSight Content Filtering Server information (name and IP address). The classification information for the requested page is stored according to the categories in the classification table.

Field Name	Type	Allow nulls?	Key	Default value	Description
logid	int(10) unsigned	No	Primary	0	The identification number of the log entry
userip	int(10) unsigned	No	None	0	The IP address of the requesting user in long format
username	varchar(200)	Yes	None	NULL	The directory username of the requesting user
block	tinyint(3) unsigned	No	None	0	The identification number of the blocking mode of the requested page
reason	tinyint(3) unsigned	No	None	0	The identification number of the blocking reason of the requested page

Field Name	Type	Allow nulls?	Key	Default value	Description
time	datetime	No	None	0000-00-00 00:00:00	The date and time the page was requested
size	mediumint (8) unsigned	No	None	0	The number of bytes the page contained
domain	text	No	None		The domain name of the requested page
resturl	text	No	None		The remaining text after the domain name that completes the URL
servername	varchar(16)	Yes	None	NULL	The name of the PureSight Content Filtering Server that logged the request
serverip	int(10) unsigned	No	Primary	0	The IP address of the PureSight Content Filtering Server that logged the request, in long format
ps_weekday	Int(10) unsigned	No	None	0	The weekday section of the time in which the page was requested.
ps_monthday	int(10) unsigned	No	None	0	The month day section of the date in which the page was requested.

Field Name	Type	Allow nulls?	Key	Default value	Description
ps_month	int(10) unsigned	No	None	0	The month section of the date in which the page was requested.
ps_hour	Int(10) unsigned	No	None	0	The hour section of the date in which the page was requested
ps_date	Int(10) unsigned	No	None	0	The date in which the page was requested
ps_time	Int(10) unsigned	No	None	0	The time in which the page was requested
ps_ categories	Int(10) unsigned	No	None	0	Bitmask containing all categories assigned to requested page
ps_usergroup name	Text	No	None	0	The group of the user
ps_browse time	Int(10 unsigned	No	None	0	The total browse time (seconds)

classification

The **classification** table is used to associate the categories of a requested page to the requested page information stored in the log table. Each log entry must have at least one classification entry that contains the category of the requested page. If the page was classified to more than one category, then for each category a classification entry will be added (for the same log entry, containing the same value for logid).

Field name	Type	Allow nulls?	Key	Default value	Description
logid	int(10) unsigned	No	Primary	0	The identification number of the log entry to which this classification belongs
categoryid	int(11)	No	Primary	0	The identification number of the category to which the page was classified
serverip	int(10) unsigned	No	Primary	0	The IP address of the PureSight Content Filtering Server that logged the request, in long format

meta_data

The meta_data table is used for storing database status information which is used during database maintenance and upgrade procedures.

Field name	Type	Allow nulls?	Key	Default value	Description
ps_database _version	Char(10)	Yes	No	NULL	The database version
ps_first_old_ record	Int(10 unsigned	Yes	No	NULL	The lowest logid that needs to be upgraded
ps_last_old_ record	Bigint(20) unsigned	Yes	No	NULL	The highest logid that needs to be upgraded
ps_upgrade_ status	Tinyint(3) unsigned	Yes	No	NULL	The current status of the upgrade process
logid	Bigint(10) unsigned	Yes	No	NULL	The identification of the newest log entry that the database maintenance process needs to delete
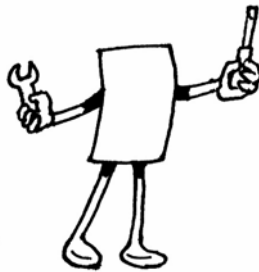
Chapter 6

Troubleshooting

This chapter includes information to assist you in troubleshooting problems that may arise in the installation process.

Installation Problems

Problem	Solution
Installation won't complete, displaying error message: "ERROR !!! Log server is already installed on this machine !!! Aborting Installation"	This error message can appear for two reasons: a. PureSight Log Server is already installed on the machine, and you are running the install script again. b. PureSight Log Server previous installation was aborted. To solve the problem, run the uninstall script and repeat the installation.

During installation the following error message appears: "Connection to PureSight Management Server Failed"	This error message appears if a connection to the PureSight Management Server configuration storage (OpenLDAP server) cannot be established. a. Check that the OpenLDAP server (slapd) is running on the PureSight Management Server machine b. Check that you entered the correct IP address and port number of the OpenLDAP server on the PureSight Management Server machine.
Failed to install PureSight database	Reverify the following parameters: 1. MySQL Server IP 2. MySQL Server Port 3. MySQL Server is running 4. Administrator username 5. Administrators password 6. Permissions for the Log Server IP address to connect as Administrator to the MySQL Server.