



# Report Writer Version 2.0

## User Guide

# Please Read

## **Important**

Please read this entire guide. If this guide provides installation or operation instructions, give particular attention to all safety statements included in this guide.

# Notices

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# About This Guide

## Introduction

The Report Writer software enables you to generate reports that collect data from the Digital Network Control System (DNCS) database, poll Digital Home Communication Terminals (DHCTs) for information, and collect system information. The reports are created in a Hypertext Markup Language (HTML) format, so you can view them through a web browser, and you can print them.

This guide supports Report Writer 2.0, which is compatible with System Release 5.0.

## Purpose

This guide provides the following information about the Report Writer software:

- Descriptions of new features introduced in this version of Report Writer
- Descriptions of the reports you can access in Report Writer
- Instructions for installing Report Writer on your system
- Instructions for using Report Writer to access reports through a web browser
- Instructions for troubleshooting the most common Report Writer error situations

## Audience

This document is written for system operators. Our engineers may also find this document to be useful.

## Document Version

This is the second formal release of this document. This release contains minor text changes.





# 1

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## Installing Report Writer Version 2.0 Software

### Introduction

This chapter describes the software you need to install this version of Report Writer on your system, and it provides the procedures to complete the installation process.

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## What's New in Report Writer 2.0?

### Introduction

Report Writer software enables you to generate reports that collect data from the DNCS database, poll DHCTs for information, and collect system information. The reports are created in a Hypertext Markup Language (HTML) format, so you can view them online or through a web browser, and you can print them.

### Features and Enhancements

Report Writer 2.0 introduces the following features and enhancements:

- DHCT-related reports display IPv6 addresses
- The CSS Report retrieves all of the SDV source and session information (Headend Name, Hub ID, QAM Name, and QAM MAC address). This report includes all multicast session information built on GQAMs, Netcrypts, generic QAMs. PPV services are also included.

## Before You Begin

### System Requirements

Before installing this version of Report Writer, you must have DNCS 5.0 software installed on your DNCS server.

### Installation CD

To install this version of Report Writer, you must have the Report Writer Software 2.0 CD.

**Note:** The Report Writer software package is included with the system release DVD and is installed by default during the initial setup of a new DNCS server and during any subsequent system release upgrade. These instructions are for installing incremental versions of Report Writer between system release upgrades.

## Install the Software

### Mount the CD

- 1 Insert the **Report Writer** CD into the CD-ROM drive of the DNCS server.
- 2 Allow the File manager window to appear, which may take several minutes; then, type **df -n** and press **Enter**. A list of the mounted file systems appears.
- 3 Does the output from step 2 show that the system mounted the CD?
  - If **yes**, go to *Install the Report Writer Software* (on page 4).
  - If **no**, continue with step 4.
- 4 Type **/etc/init.d/volmgt stop** and press **Enter**. The volume manager utility stops.
- 5 Did the CD user interface appear?
  - If **yes**, go to *Install the Report Writer Software* (on page 4).
  - If **no**, type **/etc/init.d/volmgt start** and press **Enter**. The volume manager utility starts.
- 6 Repeat steps 2 through 5. If the system still does not recognize the CD, contact Cisco Systems for assistance.

### Install the Report Writer Software

- 1 From the xterm window, type **su - root** and press **Enter** to login as the root user.
- 2 Type **cd /cdrom/cdrom0** and press **Enter** to access the cdrom0 directory.
- 3 Type **/usr/sbin/install\_pkg** and press **Enter**.  
**Results:**
  - The system lists the packages that will be installed.
  - A confirmation message appears asking you to confirm that you want to proceed with the installation.
- 4 Type **y** and press **Enter** to start the installation. When the installation is complete, the system displays a message stating that the installation was successful and a prompt for the root user appears.  
**Note:** The installation should take less than 30 seconds.
- 5 Was the installation successful?
  - If **yes**, go to step 6.
  - If **no**, contact Cisco Systems for assistance.
- 6 From the xterm window where you are logged in as root, type **exit** and press **Enter**. You are logged out as root user.

- 7 Complete one of the following steps:
  - a **If the File Manager is present:** From the File Manager window, click **File** and select **Eject**. The CD is ejected from the CD drive and the File Manager window closes.
  - b **If the File Manager is not present:** From an xterm window, type the following command: **cd /; eject; exit**. The CD is ejected from the CD drive.
- 8 Type **exit** and press **Enter** to close the xterm window.

## Rollback Procedures

In the event that you experience a problem installing the software, you must first delete all of the files in the Report Writer directory before reinstalling the Report Writer software.

### Deleting the Report Writer Directory Files

Complete the following steps to delete the Report Writer directory files.

- 1 Log in as **root** on the DNCS.
- 2 Type **pkgrm SAirptwrt** and press **Enter**.
- 3 Type **cd /dvs/RepWriter** and press **Enter**.
- 4 Type **rm -rf \*** and press **Enter**. The files in the Report Writer directory are deleted. You can now reinstall the Report Writer software.

# 2

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## Using Report Writer

### Introduction

Report Writer provides a web server that enables you to access reports through a web browser, which is installed by default on the DNCS.

The Firefox web browser on the DNCS server enables you to display and generate reports at the DNCS console. You can then generate up-to-the-minute data-on-demand by simply clicking a button on each page of a report.

This chapter describes how to use Report Writer to add users and display reports.

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## Report Writer Users

Access to Report Writer requires that the user ID and password are different and unrelated to the system user ID and passwords.

Report Writer is shipped with the user name *sareports* and the password *report*. When adding users or changing passwords, follow these guidelines:

- The user name *sareports* should be the first entry after the group name.
- Each user name is separated by a space.
- In the following example, only the "normal" group has access to the reports.

**Example:** normal: sareports [username] [username]

**Note:** To remove a user, remove the user's name from the groups file.

### Adding New Users or Changing Passwords

- 1 Log in as **root** on the DNCS.
- 2 Type **cd /use/apache2/bin** and press **Enter**.
- 3 Type **/htpasswd /etc/apache2/users [username]** and press **Enter**. Replace [username] with the user you are adding or the user whose password you are changing. Do not type the brackets [ ] in the command.
- 4 Type and confirm the **password**.
- 5 Add the user to the groups file. Use a text editor to open the **/etc/apache2/group** file and append the user name to the line that begins with the word "normal."



## Displaying Reports



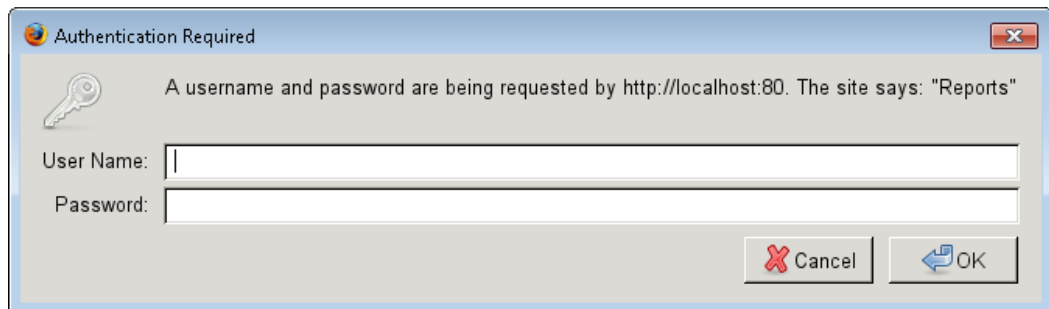
### CAUTION:

Before opening Report Writer to display reports, exit all instances of Firefox associated with your UNIX user ID. When you try to open Report Writer with more than one instance of Firefox associated with your UNIX user ID, a message appears on the screen stating that Firefox has detected a locked file. Do not continue. If you attempt to continue, Report Writer may exhibit unpredictable behavior.

### Launch Report Writer

Report Writer can be accessed directly from the DNCS Administrative Console or by launching Firefox.

- 1 Use one of the following options to launch Firefox:
  - From the DNCS Administrative Console, click the **Reports** button on the **Utilities** tab. The web server will open in a Firefox browser window.
  - From an xterm window on the DNCS, type **firefox** and press **Enter**.
- 2 From the web server browser window, click the **Report Manger** link. A prompt for the user ID and password appears for the DNCS host server.



- 3 Type your user ID and password and then click **OK**. The web browser displays the DNCS Reports page. Notice the hyperlinks to the specific reports and a brief description of each report. For more information about reports and how to access them, refer to the chapter, *Generating Reports* (on page 13).

**Note:** The default user name is **sareports** and the default password is **report**. See *Adding New Users or Changing Passwords* (on page 8) for user and password management instructions.

## Customize Reports

### Insert Your Company Logo

You can customize reports by inserting your company's logo, in GIF format, at the top of each Report Writer page. To do this, exit your browser, name your logo file **top.gif**, and place it in the **/dvs/RepWriter/current/webSPACE/images** directory.

### Sort the Generated Reports

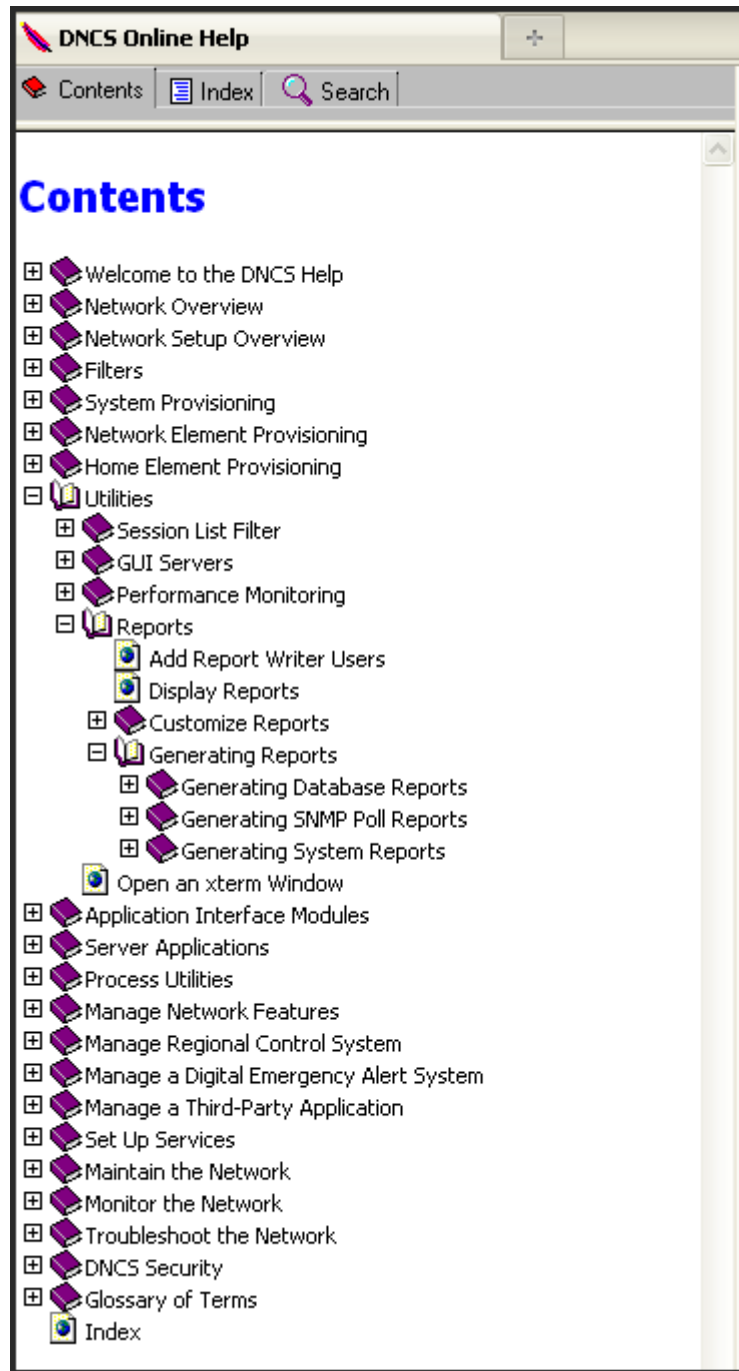
You can display report data in a different order by sorting any column field. To sort a generated report, click the underlined column heading. After you click the column heading, it is no longer underlined. This indicates that the report was sorted by the selected column.

**Note:** Sorting a report does not regenerate the report data; it only displays the report data in a different order.

## Online Help

Follow the steps below to navigate to the DNCS online help for Report Writer.

- 1 From the DNCS Administration console, click **Help**.
- 2 From the Contents tab, click **Utilities**, then, **Reports**.





# 3

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## Generating Reports

### Introduction

This chapter describes the different report categories and provides instructions for generating the reports. Also included in this chapter are detailed descriptions of the reports within each category.

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## Overview of Reports

Before you read about each type of report and its description, you need to understand that some of the reports refer to the DHCT (set-top) administrative status.

Each DHCT stored in the DNCS database has an associated administrative status, assigned through the Business Operations Support System (BOSS) Application Programming Interface (API). The administrative status can be set by the billing systems or through the DNCS Administrative Console.

The four DHCT administrative statuses are as follows:

- Out of Service
- Deployed
- In Service-One Way
- In Service-Two Way

### Report Types

Reports are categorized into three types:

- *Reports that Collect Data Only from the DNCS Database* (see page 21).
- *Reports that Poll DHCTs for Information Using SNMP* (see page 22) (Simple Network Management Protocol).
- **Note:** SNMP Poll Reports are not applicable to environments. This link is disabled or suppressed in the implementation.
- *Reports that Collect System Information from the DNCS Server* (see page 24).

If you do not see data that you expect in a particular report, refer to the description for that report. It is possible that some filtering has been applied by the report that caused the expected data to be excluded.

About DNCS Database Reports

The following table provides a description of each of the reports that collect data from the DNCS database. These reports are listed in the order in which they are shown on the DNCS Reports window.

Report Title	Description	Filter Options
PPV Events	<b>Data listed:</b> All pending pay-per-view (PPV) events.	
Zero Credit	<p><b>Data listed:</b> All In Service-Two Way DHCTs that have impulse pay-per-view (IPPV) events enabled and a credit limit of 0 (zero).</p> <p><b>Normal condition:</b> Report should not show any data.</p> <p><b>Troubleshooting:</b> DHCTs listed may have been incorrectly staged using the BOSS API. Restage and then re-run the report.</p>	
CableCARD Report	<b>Data listed:</b> All CableCARD modules that are bound to the system.	<ul style="list-style-type: none"> <li>■ CableCARD MAC Address</li> <li>■ Host MAC Address</li> </ul>
CableCARD-DHCT Combo Devices Report	<b>Data listed:</b> All CableCARD modules-to-DHCT associations, and the status of the associations.	
Channels, Sources and Sessions Report	<p><b>Data listed:</b> Each display channel in the system, including all information about “carriage” of that channel.</p> <p><b>Normal conditions:</b> This report includes all multicast session information built on GQAMs, Netcrypts, generic QAMs. PPV services are also included.</p>	

Report Title	Description	Filter Options
<b>DHCT Report</b>	<p><b>Data listed:</b> All DHCTs (set-tops) in the DNCS database and some DHCT configuration information.</p> <p><b>Normal conditions:</b> This report can be extensive and not viewable on a workstation that has little free memory. It may take several minutes to generate/display this report.</p> <p>This report is most useful if you have a small number of DHCTs in your system. A DHCT listed in the database will not appear on this report if it is associated with a DHCT type that is not in the DNCS database.*</p> <p><b>Note:</b> CableCARD information is not available in this Report. Only the DHCT information is populated.</p>	
<b>DHCT Packages Report</b>	<p><b>Data listed:</b> All DHCTs and their associated packages with package details.</p> <p><b>Note:</b> This report can be generated using the DHCT MAC Address or Package Name filtering options.</p>	<ul style="list-style-type: none"> <li>■ DHCT MAC Address</li> <li>■ Package Name</li> </ul>
<b>DNCS Packages Report</b>	<p><b>Data listed:</b> All packages and their associated sources on the DNCS. Includes details of the sources which are assigned to a package. Reports can be run based on the package name or the source name.</p>	<ul style="list-style-type: none"> <li>■ Package Name</li> <li>■ Source Name</li> </ul>
<b>QAMS Report</b>	<p><b>Data listed:</b> All of the QAMs that are in the database and information about their configuration.</p> <p><b>Normal conditions:</b> A QAM listed in the database will not appear in the report if it does not have valid RF ports in the database.*</p>	
<b>PCG Report</b>	<p><b>Data listed:</b> All PowerKEY® Conditional Access Gateways in the system and their status.</p> <p><b>Note:</b> This report <i>only</i> appears if PCG is enabled on the DNCS.</p>	



Report Title	Description	Filter Options
QPSK Mods	<p><b>Data listed:</b> All QPSK Modulators in the database and information about their configuration.</p> <p><b>Normal condition:</b> A QPSK Modulator listed in the database will not appear on the report if it is associated with a VHO that is not in the DNCS database.*</p>	
QPSK DeMods	<p><b>Data listed:</b> All QPSK Demodulators in the database.</p> <p><b>Normal condition:</b> A QPSK Demodulator listed in the database will not appear in the report if it is associated with a QPSK Modulator, hub, or node set that is not in the DNCS database.*</p>	
In Service One-Way	<p><b>Data listed:</b> DHCTs with an administrative status of In Service-One Way.</p> <p><b>Normal condition:</b> Report Writer queries the DNCS database to identify DHCTs that have been configured for one-way service.</p>	
Non-Responding DHCTs – Never Connected	<p><b>Data listed:</b> DHCTs with an administrative status of In Service-Two Way or Deployment that do not have an IP address.</p> <p><b>Normal condition:</b> Queries the DNCS database to identify DHCTs configured for two-way service that have never established a two-way connection in a DNCS.</p>	
SDV Servers Report	<p><b>Data listed:</b> All switched digital broadcast servers in the DNCS database and their settings.</p> <p><b>Note:</b> This report <i>only</i> appears if SDV is enabled on the DNCS.</p>	
Service Group Report	<p><b>Data listed:</b> The service groups created on the DNCS.</p>	

Report Title	Description	Filter Options
<b>Netcrypt Report</b>	<p><b>Data listed:</b> All Netcrypt™ servers in the DNCS database and their status.</p> <p><b>Note:</b> This report <i>only</i> appears if Netcrypt is enabled on the DNCS.</p>	
<b>Non-Responding DHCTs-Lost Connection Report</b>	<p><b>Data listed:</b> DHCTs with an administrative status of In Service-Two Way which have an IP address, but whose operational status is "Unknown," "MAC initialization failed," or "DSMCC boot failed."</p> <p><b>Normal condition:</b> Queries the DNCS database to identify DHCTs configured for two-way service that have lost a previous two-way connection.</p>	
<b>TSID List</b>	<p>Transport Stream ID</p> <p><b>Data listed:</b> Lists transport stream IDs (TSIDs) used by QAMs from Cisco and other vendors.</p> <p><b>Normal condition:</b> Queries the database to identify all TSIDs that have been used in the system.</p>	

\*This situation should occur infrequently, if at all, and could indicate that some sort of DNCS database corruption has occurred. Try to open the applicable DNCS Administrative Console GUIs to ensure that the data is intact for a particular device.

### About SNMP Poll Reports

The SNMP Poll Reports collect data by issuing up to three SNMP poll requests to each candidate DHCT (set-top).

**Note:** The term *candidate DHCTs* refers to DHCTs in the DNCS database that have an associated MAC address, IP address, QPSK Modulator, and QPSK Demodulator, along with an administrative status of In Service-Two Way. If a DHCT listed in the DNCS database does not meet all of these criteria, it will be excluded from the SNMP Poll Report. The SNMP poll request determines the current two-way communication ability of each DHCT.

When the SNMP Poll Report is run, each candidate DHCT is polled (this is also called an SNMP "get" request). This SNMP poll collects all of the data necessary for generating the four SNMP Poll reports. The SNMP Poll reports are different views into the data collected.

If a DHCT does not respond to the initial SNMP poll, it is polled up to two more times (for a maximum of three attempts). If the SNMP poll is unsuccessful after three attempts, the DHCT is considered to be a non-responder and will appear only on the Non-Responding DHCTs-SNMP Poll Report. However, if at least one of the three SNMP poll attempts succeeds, then the DHCT will appear in the OS/App Version, Memory, and DHCT Uptime Reports.

**Note:** You can view the list of candidate DHCTs from the last SNMP Poll Report that was run by examining the `/dvs/RepWriter/current/bin/maclist` file.

The following table provides a description of each of the SNMP Poll Reports. These reports are listed in the order in which you will see them when you open Report Writer.

**Note:** Not all of the following reports are applicable to the DNCS.

Report Title	Description
Non-Responding DHCTs-SNMP Poll	<b>Data listed:</b> All DHCTs that did not respond to one of three SNMP "get" requests.
OS/App Version*	<p><b>Data listed:</b> The PowerTV® Operating System and Resident Application versions installed in each DHCT.</p> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>■ SARA is a Cisco resident application that is run on the DHCT that provides all basic functionality for the DHCT, including navigation, changing channels, volume control, etc.</li> <li>■ Set-tops manufactured by other vendors have a different resident application installed to handle this functionality.</li> </ul>
Memory Report*	<b>Data listed:</b> The total memory in each DHCT, and the amount of memory currently free.
DHCT Uptime*	<b>Data listed:</b> The amount of time since each DHCT last rebooted.

\*The OS/App Version, Memory, and DHCT Uptime reports display data collected from both the SNMP "get-next" request and from the DNCS database. The OS/App Version, Memory and DHCT Uptime reports show 0 records when there is no Host/STB responded to the SNMP query.

## Descriptions

The following table provides a description of each of the reports that collect and display information to provide a quick overview of the health of the DNCS system. These reports are listed in the order in which you will see them when you open Report Writer.

**Note:** Not all of the following reports are applicable to the DNCS.

Report Title	Description
<b>General System Information</b>	<b>Data listed:</b> DNCS system information (CPU, memory, and processes currently running).
<b>File System Information</b>	<b>Data listed:</b> Total and available disk space for the DNCS system.
<b>Network Information</b>	<b>Data listed:</b> Network interfaces and the routing table.
<b>Database Information</b>	<b>Data listed:</b> Information about the INFORMIX database on the DNCS. <b>Note:</b> This is the database used by the DNCS.

## Report Formats

### HTML Format

The HTML format allows you to view and/or print reports from any workstation on your network. You can view reports generated in HTML format online with any web browser and print them from the web browser.

**Note:** If the web browser is unable to display all of the columns and rows on your screen, a message will appear on the screen. When this occurs, it is recommended that you view the DAT file. For more information about DAT files, see *Pipe-Delimited Text (.dat) File Format* (on page 20) and *Web Browser Unable to Display Data* (on page 32).

### Pipe-Delimited Text (.dat) File Format

Pipe-delimited text files have a .dat extension. For example, ZeroCredit.html.dat is the pipe-delimited Report Writer file for the Zero Credit report.

Report Writer automatically generates pipe-delimited text files for internal processing and/or importing into other software programs such as Excel. The "pipe" delimiter is the | symbol. Each field in the pipe-delimited text files has the pipe symbol separating it from the next field. Pipe-delimited text files reside in the /dvs/RepWriter/current/webpace/reports directory on the hard drive, and you can view them as text files using a text editor.

## Generating Database Reports

- 1 From the DNCS Reports page, click the hyperlink for one of the DNCS Database reports. Did the selected report appear?
  - If **yes**, this indicates that this report has been generated at some point in the past. The date and time that the report was last generated appears just beneath the report title (**Data Refreshed on MM/DD/YYYY @ HH:MM**). The HH:MM portion of the date/time stamp is in 24-hour time.
 

**Note:** If the report will generate a large amount of data, a dialog box appears to inform you of this and gives you the option to stop or continue. Click **OK** to continue generating the report, or click **Cancel** to prevent the report from being generated.
  - If **no**, continue with step 2.
- 2 Click the **Run Report** button. While the report is being generated, you may see the following message: **Running [report name]. Please wait.** When the report is generated, the message appears stating that the report is completed and the number of records processed. The following illustration shows an example of most report formats and summarizes ways you can interact with the report.

**Note:** If there is no data for the report, the message **Report Finished. 0 Records Processed. Report contains no data.** appears beneath the report title.

To display specific data, enter data in the Search field and click the **Search** button. The system displays all pages that contain the data you entered.

To filter for categories of data, use the **By Field** option to select the type of field you want to view and then enter a unique value in the **By Value**. When you click **Run Report**, Report Writer displays only the data you selected.

To regenerate a report and display the most recent data, click the **Run Report** button.

The screenshot shows a web browser window with the following content:

Named Entitlements Report  
Data Refreshed on 04/20/2009 @ 15:05

Filter Options  
By Field: **Display Name**  
By Value: [ ]

Run Report

Feature ID	Feature Name	Display Name	EID	Package ID	Package Name
1	Brick	Brick	213	2650	Brick2
2	DVR	DVR	200	2654	marllyn
3	TR069	TR069	200	2654	marllyn
4	IP1394	1394	205	1172	NonTR69
9	IPRBLST	R. Blaster	201	1069	unil
10	IPSERIAL	Serial	205	1172	NonTR69
13	IPUSB	USB	205	1172	NonTR69
15	IESTAR	Energy Star	20c	2388	EnergyStar

Done

## Generating SNMP Poll Reports

- 1 From the DNCS Reports page, click **SNMP Poll Reports**.

**Note:** SNMP Poll Reports are not applicable to i4.2 or IP-only environments.

### SNMP Poll Reports

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Non-Responding DHCTs - SNMP Poll

List the DHCTs that did not respond to the poll.

OS/App Version

OS/Res App Version report from SNMP polling.

Memory

DHCT Total/Free Memory report from SNMP polling.

DHCT Uptime

DHCT up-time report from SNMP polling.

---

To refresh the data on the reports, press the button below. It will regenerate all the reports on this page after querying all relevant data from the DHCTs.

**Run Report**

- 2 Click the hyperlink for one of the SNMP Poll Reports.
- 3 Does the report appear on the screen?
  - If **yes**, the data is from the last run of the SNMP Poll Report. Click **SNMP Reports** link to return to the SNMP Poll Reports page; then click **Run Report** to refresh the report data.
  - If **no**, go to step 4.
- 4 Does the following message appear on the screen?

**This report has not yet been generated on your system. Please press the back button on your browser to return to the SNMP page.**

  - If **yes**, click the back button on your browser to return to the SNMP Poll Reports page.
  - If **no**, click **Run Report** to generate all of the SNMP Poll Reports.

**Important:** The SNMP Poll Reports can take a significant amount of time to complete, depending on the number of DHCTs in the system. While the SNMP Poll Reports are being generated, do not exit your web browser. Exiting the web browser while the reports are being generated can cause errors in the Report Writer software that will require some manual clean-up steps (see *Troubleshooting Guidelines and Solutions* (on page 25)). It is also recommended that you do not click anywhere in your web browser until the SNMP Poll Reports are completely generated.

**Notes:**

- While the reports are being generated, the following message appears:  
**Running [report name]. Please wait.**
  - Concurrently, a table appears on the screen, and as each SNMP Poll report is generated, its status is updated from “working” to “complete.”
- 5 When all the SNMP Poll reports are generated, click the web browser **SNMP Reports** link button.
  - 6 Click the hyperlink for a specific SNMP Poll Report.
  - 7 Does the report appear on the screen?
    - If **yes**, you have completed this procedure and all of the SNMP Poll Reports have been generated.
    - If **no**, repeat this procedure beginning with step 1.

## Generating System Reports

- 1 From the DNCS Reports page, click **DNCS System Reports**.
- 2 The data for all the following reports are on this page. Click the hyperlink to generate a specific report.



- ◆ [General Information](#)
- ◆ [File System Information](#)
- ◆ [Network Information](#)
- ◆ [Database Information](#)



# 4

## Troubleshooting Guidelines and Solutions

### Introduction

This chapter describes the most common situations that may cause errors with the Report Writer software and provides troubleshooting guidelines and possible solutions.

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## Report Writer Not Installed Properly

If Report Writer is not functioning as expected, verify that the Report Writer software is installed on the DNCS server and that the installation successfully completed.

- 1 Log in to the DNCS server as **dncs** and type the password.
- 2 Type **pkginfo -l SAirptwrt** and press **Enter**. The Report Writer installation status and version number appear on the screen.
- 3 Does the STATUS field indicate completely installed?
  - If **yes**, the Report Writer software installation was completed.
  - If **no**, you must uninstall, then, reinstall the Report Writer software. See *Rollback Procedures* (on page 6).

## Web Server Not Running

### Verify Apache is running using svcs command

To run Report Writer, the Apache HTTP Server must be running on the DNCS server.

- 1 Log in to the DNCS server as **root**.
- 2 Type **svcs -a apache2** and press **Enter**.
- 3 Do the results indicate online as shown in the example below?

#### Example:

```
svcs: -a ignored when used with arguments.  
STATE          STIME      FMRI  
online         0:08:08   svc:/network/http:apache2
```

- If **yes**, then Apache is up and running.
- If **no**, then execute the following steps:
  - Type **svcadm clear http** and press **Enter**.
  - Type **svcadm enable http** and press **Enter**.
  - Type **ps -ef | grep httpd** and press **Enter**.
  - Repeat steps 2 and 3.

## Cannot Access the Report Writer URL

If you are unable to access the Report Writer website from your browser, verify that you are typing the correct URL.

- 1 From the DNCS Admin window, select the **DNCS** tab.
- 2 From the **Utilities** tab, click **Reports**.
- 3 Select **Report Manager**. A prompt for the user ID and password appears on the screen.
- 4 Does the Prompt window open?
  - If **yes**, your browser successfully accessed Report Writer.
  - If **no**, type **http://[ip\_address]:8045** and press **Enter**. In this command, [ip\_address] represents the DNCS server IP address.
- 5 Did you successfully access the website?
  - If **yes**, click **Report Manager**.
  - If **no**, repeat this procedure.
- 6 Does the Prompt window open?
  - If **yes**, your browser successfully accessed Report Writer.
  - If **no**, see *Report Writer Not Installed Properly* (on page 26) to verify that the correct version of the Report Writer software is installed on your DNCS.

## No Data or Old Data in the Report

### No Data in Report

Occasionally, after you run a report, the resulting web page displays only the name of the report, a timestamp, and the Run Report button. If you believe that the report should contain data, use the following procedure to determine if DNCS is connecting to the DNCS database.

- 1 Log in to the DNCS server and enter the password.
- 2 Open an xterm window on the DNCS.
- 3 Type `cd /tmp` and press **Enter**.
- 4 Type `ls *.err` and press **Enter**.
 

**Note:** The "l" in `ls` is a lowercase letter L.
- 5 Type `cat [report_name].err` and press **Enter**. Replace [report\_name] with the name of the report you are requesting. Do not type the brackets [ ] in the command.
- 6 Locate the `[report_name]/ open Db() error: + an error msg.Exiting` line in the list. The [report\_name] represents the name of the requested report.
- 7 Does the **ERROR: failed to connect!** message appear on your screen?
  - If **yes**, Report Writer could not connect to the DNCS database; this is the reason that the reports do not contain data.
  - If **no**, Report Writer is connected to the DNCS database, and there is no data to report or some other error has occurred.

### Old Data in Report

If a report contains old data, click **Run Report** to refresh the report with current data.

### Regenerating SNMP Poll Report Data

If the SNMP Poll Reports do not appear to be regenerating data, complete the following steps to correct the situation.

- 1 Exit your web browser.
- 2 From an xterm window on the DNCS, type `su root` and press **Enter**.
- 3 Enter the root password and press **Enter**.
- 4 Type `cd /dvs/RepWriter/current/webspace/gen` and press **Enter**.
- 5 Type `ls` and press **Enter**.
 

**Note:** The "l" in `ls` is a lowercase letter L.

- 6 Does the file **snmprunning** appear on the screen?
  - If **yes**, type **rm snmprunning** and press **Enter** to delete the file.
  - If **no**, then the failure of SNMP Poll Reports to regenerate is not the problem. Review other sections in this chapter and try another resolution.
- 7 Type **cp snmp.html.refresh snmp.html** and press **Enter**.
- 8 Type **exit** and press **Enter**.



**CAUTION:**

Before running Report Writer, exit all instances of your web browser associated with your UNIX user ID. When you try to run Report Writer with more than one instance of your web browser associated with your UNIX user ID, a message appears on the screen stating that your browser has detected a lock file. Do not continue. If you attempt to continue, Report Writer may exhibit unpredictable behavior.

- 9 Launch your web browser, and run the SNMP Poll Reports.

**Important:** Do not attempt to use the web browser until the SNMP Poll Reports are complete.

## Runtime Errors

Runtime errors generated by Report Writer are displayed in the browser. The display includes the name of the file that contains the errors, along with the error messages.

To exit the error display, click the browser **Back** button.

**Important:** We recommend that you get assistance from your system administrator to resolve runtime errors.

## Web Browser Unable to Display Data

Some reports generate a large amount of data. Due to its limitations, your browser may not be able to display very large reports.

To view the data files of reports that have large amounts of data, use a text editor. You can find the data files for each report generated by Report Writer in the `/dvs/RepWriter/current/webpace/reports` directory.

### Data Files

The following tables list the data files generated for each type of report.

<b>Database Reports</b>	<b>File Generated</b>
PPV Events	PPVEvents.html.dat
Zero Credit	ZeroCredit.html.dat
CableCARD Report	CableCard.html.dat
Channels, Sources, and Sessions Report	CSSReport.html.dat
DHCT Report	Converters.html.dat
DHCT Packages Report	DhctPkg.html.dat
DNCS Packages Report	DNCSPkg.html.dat
Service Group Report	SvcGroup.html.dat
QAMS Report	Qams.html.dat
PCG Report	Pcg.html.dat
Netcrypt Report	Netcrypt.html.dat
SDV Servers Report	SDV Servers.html.dat
QPSK Modems	QPSKMods.html.dat
QPSK Demods	QPSKDemods.html.dat
In Service One-Way	InServOneWay.html.dat
Non-Responding DHCTs – Never Connected	NRNeverConn.html.dat
Non-Responding DHCTs – Lost Connection	NRLostConn.html.dat
DHCT Sign-on Failed Report	DhctSignOnFailed.html.dat
PCG Sessions Report	PcgSession.html.dat



<b>SNMP Poll Reports</b>	<b>File Generated</b>
Non Responding DHCTs – SNMP Poll	NRSNMPPoll.html.dat
OS/App Version	ResAppVersion.html.dat
Memory	FreeMem.html.dat
DHCT Uptime	Uptime.html.dat
<b>System Reports</b>	
No file generated	None

## SNMP Poll Reports Do Not Regenerate Data

Occasionally, the Report Writer software assumes that the SNMP Poll Reports are in the process of running, when in fact they are not. This situation can occur if you exit your browser while the SNMP Poll Reports are running.

**Important:** The SNMP Poll Reports can take a significant amount of time to complete, depending on the number of set-tops in the system. While the SNMP Poll Reports are being generated, do not exit your browser. Exiting the web browser while the reports are being generated can cause errors in the Report Writer software that will require some manual clean-up steps. We also recommend that you do not click any buttons on your browser until the SNMP Poll Reports are completely generated.

**Notes:**

- While the reports are being generated, the following message appears on the screen: **Running [report name]. Please wait.** In this message, [report name] represents the name of the SNMP Poll report being generated.
- Concurrently, a table appears on the screen, and as each SNMP Poll report is generated, its status is updated from working to complete.

## General Troubleshooting

If errors occur while Report Writer is generating a report, those errors are logged into one or more files, depending on the report type. By examining the contents of these files, it may be possible to determine why Report Writer is not providing the results you expect.

### Error Files

The Report Writer creates one or more of the following files if errors occur while Report Writer is generating a report. Examine the contents of these files to determine why Report Writer is not providing the results you expect.

Report	File
All Reports	/tmp/PPVEvents.err
	/tmp/ZeroCredit.err
	/tmp/CableCard.err
	/tmp/CSSReport.err
	/tmp/Converters.err
	/tmp/DhctPkg.err
	/tmp/DNCSPkg.err
	/tmp/Qams.err
	/tmp/NetCrypt.err
	/tmp/Pcg.err
	/tmp/SDVServers.err
	/tmp/QPSKMods.err
	/tmp/QPSKDemods.err
	/tmp/InServOneWay.err
	/tmp/NRNeverConn.err
	/tmp/NRLostConn.err
	/tmp/SvcGroup.err
	/tmp/DhctsignOnFailed.err
tmp/PcgSession.err	

## Chapter 4 Troubleshooting Guidelines and Solutions

<b>Report</b>	<b>File</b>
SNMP Poll Reports	/tmp/NRSNMPPoll.err
	/tmp/ResAppVersion.err
	/tmp/FreeMem.err
	/tmp/Uptime.err
	/tmp/asnmp.err
	/tmp/getdhcts.err

## Determining if Error Files Exist

When you successfully generate a report, the files listed in the Error Files table are either non-existent or exist but have been cleared (zero content).

- 1 To determine if an error file exists, log in to the DNCS server and enter the password.
- 2 Type `cd /tmp` and press **Enter**.
- 3 Type `ls -l *.err` and press **Enter**.

**Note:** The "l" in `-l` is a lowercase letter L.

- 4 Type `cat [filename].err` and press **Enter**. The [filename] represents one of the error file names listed in *Error Files* (on page 35). If the file contains errors, its contents will appear on the screen.

## Displaying the Web Browser Toolbar

If the web browser Navigation Toolbar is not displayed (Back, Forward, etc.), click **View > Toolbars > Navigation Toolbar**. The Navigation Toolbar appears.



# 5

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## Customer Information

### If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.

Access your company's extranet site to view or order additional technical publications. For accessing instructions, contact the representative who handles your account. Check your extranet site often as the information is updated frequently.







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