



# DNCS Report Writer 4.2

## 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

This guide provides the following information about the Digital Network Control System (DNCS) Report Writer 4.2 software provided in System Release (SR) 2.7/3.7/4.2:

- 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 who use Cisco's DNCS. Cisco engineers may also find this document to be useful.

## Document Version

This is the second release of this document.





# 1

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## What's New In Report Writer 4.2?

### Introduction

The DNCS 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.

This chapter describes the enhancements and new reports introduced in this version of Report Writer.

### In This Chapter

- Existing Reports Enhanced..... 2
- New Reports Introduced ..... 3

## Existing Reports Enhanced

### DNCS Database Reports

Report	Enhancement
Channels, Sources and Sessions Report	<ul style="list-style-type: none"><li>■ A Security Mode column is added</li><li>■ GQAM sessions and Switched Digital Video (SDV) sources are displayed</li></ul>
QAMs Report	Bandwidth values are displayed, based on the QAM modulation type
TSID List	The option to return to the DNCS Report page is added

### SNMP Poll Reports

Report	Enhancement
Non-Responding DHCTs – SNMP Poll	The intermediate page with the Display Data button is removed; the data is displayed as soon as these reports are generated
OS/App Version	
Memory Report	
DHCT Uptime	

## New Reports Introduced

This version of Report Writer introduces three new reports that collect data only from the DNCS database:

- The **PCG Report** lists the PowerKEY Conditional Access System Gateways (PCGs) in the system and their status (This report is available only if PCG is enabled on the DNCS.)
- The **NetCrypt Report** lists the status of NetCrypt servers in the DNCS database (This report is available only if NetCrypt is enabled on the DNCS.)
- The **SDV Servers Report** lists the settings of the switched digital video servers in the DNCS database. (This report is available only if SDV is enabled on the DNCS.)

### DNCS Reports

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#### Reports that Collect Data Only from the DNCS Database

[PPV Events](#)  
Report on currently pending pay per view events.

[Zero Credit](#)  
Report on boxes with credit limit of 0.

[Channels, Sources and Sessions Report](#)  
Report on channel mappings, and associated sources and sessions, including resources used.

[DHCT Report](#)  
List of all DHCTs in the system and their status.

[QAMs Report](#)  
List of QAMs in the system and their settings.

[NetCrypt Report](#)  
List of NetCrypts in the system and their status.

[SDV Servers Report](#)  
List of SDV Servers in the system and their settings.

[QPSK Modems](#)  
List of QPSK Modems in the system and their settings.

[QPSK Demods](#)  
List of QPSK Demods in the system and their settings.

[In Service One-Way](#)  
Identifies DHCTs that have been configured for 1-way service.

[Non-Responding DHCTs - Never Connected](#)  
Identifies DHCTs that have been configured for 2-way service but have never established a 2-way connection.

[Non-Responding DHCTs - Lost Connection](#)  
Identifies DHCTs that have been configured for 2-way service but have lost a previous 2-way connection.

[TSID list](#)  
Identifies All TSIDs that have been used in the system.

#### Reports that Poll DHCTs for Information Using SNMP

[SNMP Poll Reports](#)  
Polls DHCTs via SNMP to determine the current 2-way communications ability of all DHCTs that have previously established a 2-way connection.

#### Reports that Collect System Information from the DNCS Server

[DNCS System Reports](#)  
Report information on DNCS System.

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[Documentation](#)

Done



# 2

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## Installing Report Writer 4.2 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.

### In This Chapter

■ Before You Begin.....	6
■ Install the Software .....	7
■ Rollback Procedures .....	8

## Before You Begin

### System Requirements

Before installing this version of Report Writer, you must have the following software installed on your system:

- SR 2.7/3.7/4.2
- Application Server 3.4.1 or later.
- Netscape version 4 (or later) or Internet Explorer version 4 (or later)
- SAIttools version 4.2.0

### Installation CD

To install this version of Report Writer you must have the Report Writer 4.2 CD.

### Identifying the SAIaprsrv and SAIttools Packages Currently Installed

In the unlikely event that you experience a problem installing Report Writer, you may need to roll back to the previous versions of SAIaprsrv and SAIttools packages for Report Writer. Complete the following steps to identify your current SAIaprsrv and SAIttools packages.

- 1 In an xterm window on the Application Server, type **pkginfo -l SAIaprsrv** and press **Enter**.
- 2 Write the current Application Server version here: \_\_\_\_\_
- 3 In the same xterm window, type **pkginfo -l SAIttools** and press **Enter**.
- 4 Write the current SAIttools version here: \_\_\_\_\_
- 5 Locate the SAIaprsrv and SAIttools CD(s) and keep them available in case you need to roll back.

## Install the Software

- 1 Insert the **Report Writer Software V4.2** CD into the CD-ROM drive of the DNCS.
- 2 Did the File Manager window display?
  - If **yes**, the CD mounted successfully.
  - If **no**, type **df -k** to determine where the CD is mounted and then go to step 3.
- 3 Is `/cdrom` listed in the output?
  - If **yes**, go to step 4.
  - If **no**, contact Cisco Services.
- 4 From the xterm window where you are logged in as root, type **cd /cdrom/cdrom0** and press **Enter** to access the `cdrom0` directory.
- 5 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.
- 6 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.
  - 7 Was the installation successful?
    - If **yes**, go to step 8.
    - If **no**, contact Cisco Services.
  - 8 From the xterm window where you are logged in as root, type **exit** and press **Enter**. You are logged out as root user.
  - 9 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.
  - 10 Type **exit** and press **Enter** to close the xterm window.

## Rollback Procedures

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

### Deleting the Report Writer Directory Files

- 1 On the DNCS, log in as **root**.
- 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 DNCS Report Writer software.



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## Using Report Writer

### Introduction

Report Writer provides a Web server that enables you to access reports through a Web browser. You must have Web browser software installed on the workstation from which you access Report Writer.

If you do not have access to Web browser software, use the Netscape Navigator on the DNCS server 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.

### In This Chapter

- Add Report Writer Users..... 10
- Displaying Reports ..... 11
- Customize Reports..... 12

## Add Report Writer Users

Access to DNCS Report Writer requires that the user ID and password are different and unrelated to the DNCS 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 DNCS 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 /usr/local/apache/bin` and press **Enter**.
- 3 Type `./htpasswd /usr/local/apache/conf/users <username>` and press **Enter**. Replace <username> with the user you are adding or the user whose password you are changing.
- 4 Type and confirm the **password**.
- 5 Add the user to the groups file. Use a text editor to open the `/usr/local/apache/conf/groups` file and append the user name to the line that begins with the word "normal."

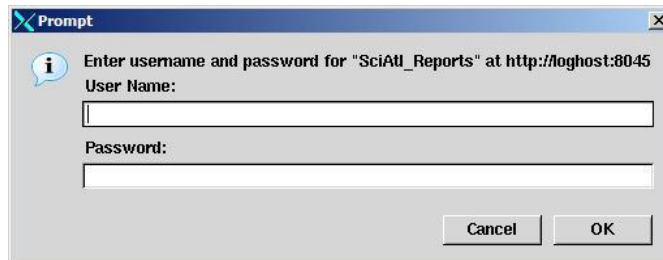
## Displaying Reports



### CAUTION:

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

- 1 From the DNCS Administrative Console, click the **DNCS** tab and then click the **Utilities** tab. The Utilities tab moves to the forefront.
- 2 Click **Reports**. A Web browser opens and displays the DNCS web server Welcome page.
- 3 Click **DNCS Report Manager**. A prompt for the user ID and password appears for the DNCS server where Report Writer software is located.



- 4 Type your user ID and password and then click **OK**. The default user name is sareports and the default password is report. The Web browser displays the DNCS Reports page. Notice the hyperlinks to the specific reports and a brief description of each report. Chapter 4 provides more information about the reports and provides instructions for accessing and generating the different types of reports.

## 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 Web browser, name your logo file **top.gif**, and place it in the `/dvs/RepWriter/current/webpace/images` directory.

### Sort the Reports

You can display report data in a different order by sorting any column field. To sort a 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 the report does not regenerate the report data; it only displays the report data in a different order.

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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.

### In This Chapter

- Before You Begin..... 14
- Generating DNCS Database Reports ..... 16
- Generating SNMP Poll Reports ..... 19
- Generating DNCS System Reports..... 22

## Before You Begin

Before you read about the each type of report and its description, you need to understand that some of the reports refer to the DHCT 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.

There are four DHCT administrative statuses. The DNCS would like the DHCT to be in one of the following administrative status states:

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

**Note:** A DHCT whose upstream plant is not two-way mode capable will not function in two-way mode, even though its administrative status has been set to In Service-Two Way.

## Report Types

Reports are categorized into three types:

- **DNCS Database Reports** (on page 16) collect data only from the DNCS database.
- **SNMP Poll Reports** (on page 19) poll DHCTs for information using SNMP (Simple Network Management Protocol).
- **DNCS System Reports** (on page 22) collect system information from the DNCS server.

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.

## 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 15) and the *Web Browser Unable to Display Data* (on page 29).

### 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 DNCS Database Reports

- 1 From the DNCS Reports page, click the hyperlink of one of the DNCS Database reports. While the report is being generated, you may see the following message: **Running <report name>. Please wait.** A message appears stating that the report is completed and the number of records processed.
- 2 Click **Display Data** to display the data for the selected report.

### Notes:

- When the report generation is completed, the report name, the resulting data, and the message **Data Refreshed on MM/DD/YYYY @ HH:MM** appears, along with a Run Report button. (The HH:MM portion of the date/time stamp is in military time.)
- If there is not any qualifying data for the report, only the report name, date/time stamp, and the Run Report button appear on the screen.

## Descriptions

The following table provides a description of each of the reports that collect data only from the DNCS database. These reports are listed in the order in which you will see them when you open Report Writer.

Report Title	Description
PPV Events	<p><b>Data listed:</b> All pending pay-per-view (PPV) events</p> <p><b>Data sorted by:</b> Service description and then by start date and time</p>
Zero Credit	<p><b>Data listed:</b> All Non-Responding DHCTs – Never Connected that have impulse pay-per-view (IPPV) events enabled and a credit limit of 0 (zero)</p> <p><b>Data sorted by:</b> IP address</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>
Channels, Sources and Sessions Report	<p><b>Data listed:</b> Each display channel in the system, starting from the list with Service to the QAM, including all information about “carriage” of that channel</p>



<b>DHCT Report</b>	<p><b>Data listed:</b> All DHCTs 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. 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>
<b>QAMs Report</b>	<p><b>Data listed:</b> All the QAMs that are in the DNCS database and information about their configuration</p> <p><b>Normal condition:</b> A QAM listed in the DNCS database will not appear on the report if it does not have valid RF ports in the DNCS 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>
<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>SDV Servers Report</b>	<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>
<b>QPSK Modems</b>	<p><b>Data listed:</b> All QPSK Modulators in the DNCS database and information about their configuration</p> <p><b>Normal condition:</b> A QPSK Modulator listed in the DNCS database will not appear on the report if it is associated with a <i>hub</i> that is not in the DNCS database*</p>
<b>QPSK Demods</b>	<p><b>Data listed:</b> All QPSK Demodulators in the DNCS database</p> <p><b>Normal condition:</b> A QPSK Demodulator listed in the DNCS database will not appear in the report if it is associated with a <i>QPSK Modulator, hub, or node set</i> that is not in the DNCS database*</p>
<b>In Service One-Way</b>	<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>

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<b>Non-Responding DHCTs – Never Connected</b>	<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. These DHCTs should have an IP address, but they do not</p>
<b>Non-Responding DHCTs – Lost Connection</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><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 DNCS database to identify all TSIDs that have been used in the DNCS system</p>

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\*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.

## Generating SNMP Poll Reports

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

[ [Home](#) | [DNCS Reports](#) ]

### 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.

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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**

Done

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

## Chapter 4 Generating Reports

- 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 **Back** 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 23). 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 **Back** 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.

## Descriptions

The SNMP Poll Reports collect data by issuing up to three SNMP poll requests to each candidate DHCT. 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.

Report Title	Description
<b>Non-Responding DHCTs-SNMP Poll</b>	<b>Data listed:</b> All DHCTs that did not respond to one of three SNMP "get" requests
<b>OS/App Version*</b>	<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>■ The Resident Application is the application that is run on the DHCT that provides all basic functionality for the DHCT, including navigation, changing channels, volume control, etc. For Cisco DHCTs, the resident application is the Cisco Resident Application (SARA).</li> <li>■ Set-tops manufactured by other vendors have a different resident application installed to handle this functionality.</li> </ul>
<b>Memory Report*</b>	<b>Data listed:</b> The total memory in each DHCT, and the amount of memory currently free
<b>DHCT Uptime*</b>	<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" request and from the DNCS database.

## Generating DNCS 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](#)

### About this page

This page contains some system level reports about DNCS, its disk space, memory and so on. This is a convenient page that will allow you a quick glance at the system without having to logon. The information contained in this report is broken up into sections.

### General System Information

This section contains general information about your system. This includes memory, cpu, and process information.

The system appears to have **4** processor(s). Details about the processor(s) can be found in the following table

Done

## 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.

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.

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## Troubleshooting Guidelines and Solutions

### Introduction

This chapter describes the most common situations that may cause errors with the DNCS 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 was complete.

- 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:

**STATUS: completely installed**

**VERSION: <product\_version\_1>.x.x**

- 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 8).



## Web Server Not Running

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 **ps -ef | grep httpd** and press **Enter**.
- 3 Does the information on your screen look similar to the following example:  
**root 458 1 0 08:36:10 ? 0:00 ./httpd**
  - If **yes**, the Apache HTTP Server is running.
  - If **no**, type **/etc/rc2.d/S99http** and press **Enter** to start the Apache HTTP Server.

## Cannot Access the Report Writer URL

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

- 1 From the DNCS Admin window select the **DNCS** tab. A prompt for the user ID and password appears on the screen.
- 2 From the **Utilities** tab, click **Reports**.
- 3 Select **DNCS Report Manager**.
- 4 Does the Prompt window open?
  - If **yes**, your Web browser successfully accessed Report Writer.
  - If **no**, type **http://<ip\_address>:80** and press **Enter**. In this command, <ip\_address> represents the DNCS server IP address.
- 5 Did you successfully access the Web site?
  - If **yes**, click **DNCS Report Manager**.
  - If **no**, repeat this procedure from step 1.
- 6 Does the Prompt window open?
  - If **yes**, your Web browser successfully accessed Report Writer.
  - If **no**, see the *Report Writer Not Installed Properly* (on page 24) section of this document 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, determine if Report Writer is connecting to the DNCS database.

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

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

- 4 Type `cat <report_name>.err` and press **Enter**. Replace `<report_name>` with the name of the report you are requesting.
- 5 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.
- 6 Does the **ERROR: failed to connect!** message appear on your screen?
  - If **yes**, Report Writer was unable to 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.

## Runtime Errors

Runtime errors generated by Report Writer are displayed in the Web 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 Web browser **Back** button.

**Important:** Cisco recommends 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, the Web 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>DNCS Database Reports</b>	<b>File Generated</b>
PPV Events	PPVEvents.html.dat
Zero Credit	ZeroCredit.html.dat
Channels, Sources and Sessions Report	CSSReport.html.dat
DHCT Report	Converters.html.dat
QAMS Report	Qams.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
<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>DNCS System Reports</b>	<b>File Generated</b>
No file generated	

## 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 the Web 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 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. It is also recommended that you do not click any buttons on your Web 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.

### 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 enter the password.
- 3 Type **cd /dvs/RepWriter/current/webpace/gen** and press **Enter**.
- 4 Type **ls** and press **Enter**.  
**Note:** The "l" in **ls** is a lowercase letter L.
- 5 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.
- 6 Type **cp snmp.html.refresh snmp.html** and press **Enter**.

- 7 Type **exit** and press **Enter**.



**CAUTION:**

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

- 8 Relaunch 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.

## 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/CSSReport.err
	/tmp/Converters.err
	/tmp/Qams.err
	/tmp/QPSKMods.err
	/tmp/QPSKDemods.err
	/tmp/InServOneWay.err
	/tmp/NRNeverConn.err
/tmp/NRLOstConn.err	
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 files 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 goqam.err** and press **Enter**. The goqam represents one of the error file names listed in Error Files earlier in this section. 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** and select **Navigation Toolbar**. The Navigation Toolbar appears.



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