Service Level Agreement (SLA)
Reports User's Guide

Ascend Communications, Inc.

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About This Guide

The *Service Level Agreement (SLA) Reports User's Guide* describes how to install and use Service Level Agreement Reports for Report Generator. This guide should be used as a supplement to the *NavisXtend Report Generator User's Guide*.

What You Need to Know

This guide assumes that you have the Report Generator installed and that you know how to perform basic Report Generator tasks such as generating, viewing, and managing reports, which are described in the *NavisXtend Report Generator User's Guide*.

Since Report Generator components run on Windows 95 or Windows NT and Sun Solaris, this manual also assumes that you have a working knowledge of these platforms.

Be sure to read the software release notice (SRN) that accompanies this product. The SRN contains the most current product information and requirements.

Audience

This guide is intended primarily for service providers who are responsible for installing and managing SLA reports. However, since service providers will be offering SLA reports to customers for the verification of Service Level Agreements, the guide also includes information for the service providers' customers.

How to Use This Guide

The *SLA Reports User's Guide* describes the features supported in Release 1.0 of the SLA Reports for Report Generator product.

The guide contains the following information:

Read	To Learn About
Chapter 1	The SLA Reports for Report Generator product, hardware/software requirements, and an overview of the installation process.
Chapter 2	Installing the SLA Reports for Report Generator product.
Chapter 3	Generating and viewing SLA reports.
Appendix A	Field descriptions for SLA detailed reports.
Appendix B	Uninstalling SLA report executables.
Appendix C	Defining the Customer ID attribute in NavisCore.
Appendix D	Troubleshooting problems.

Conventions

This guide uses the following conventions:

Convention	Indicates	Example
<***bold italics***>	Variable parameters to enter.	<***your IP address***>
`Courier Regular`	Screen or system output; command names in text.	`Please wait...`
Bold	User input in body text.	Type **cd install** and...
`Courier Bold`	User input in a command line.	> **`show ospf names`**
Menu => Option	A selection from a menu.	NavisCore => Logon
Italics	Book titles, new terms, and emphasized text. Also directories, pathnames, and filenames.	*Network Management Station Installation Guide*
Boxes around text	Notes, warnings, cautions.	See examples below.

Notes provide additional information or helpful suggestions that may apply to the subject.

Cautions notify the reader to proceed carefully to avoid possible equipment damage or data loss.

Related Documents

This section lists the related Ascend and Actuate documentation that may be helpful to read.

Ascend Documentation

You can order the following guides from Ascend Core Switching or access them directly through CaseView:

- *NavisXtend Report Generator User's Guide* (Product Code: 80057)
- *Networking Services Technology Overview* (Product Code: 80001)
- *Network Management Station Installation Guide* (Product Code: 80014)
- *Network Configuration Guide for B-STDX/STDX* (Product Code: 80017)
- *Bulk Statistics Collector for B-STDX/STDX User's Guide* (Product Code: 80032)
- *Bulk Statistics Collector for CBX-500 User's Guide* (Product Code: 80047)

Actuate Documentation

Actuate documentation is shipped in PDF format on NavisXtend Report Generator CD-ROMs. You can locate the following manuals in a directory called Docs on the CD-ROM:

- *Actuate Report Server Guide* (rs-guide.pdf)
- *Administering the Report Encyclopedia* (rs-admin.pdf)
- *Using Reports* (using.pdf)
- *Actuate Web Agent Guide* (webagent.pdf)

Customer Comments

Customer comments are welcome. Please respond in one of the following ways:

- Fill out the Customer Comment Form located at the back of this guide and return it to us.
- E-mail your comments to cspubs@ascend.com
- FAX your comments to 978-692-1510, attention Technical Publications.
- Open a case in CaseView for documentation.

Customer Support

To obtain release notes, technical tips, or support, contact the Technical Assistance Center at:

- 1-800-DIAL-WAN or 1-978-952-7299 (U.S. and Canada)
- 0-800-96-2229 (U.K.)
- 1-978-952-7299 (all other areas)

Acronyms

This guide uses the following acronyms:

Acronym	Description
DLCI	Data Link Connection Identifier
DTE	Data Terminal Equipment
FDR	Frame Delivery Ratio
FR	Frame Relay
FTD	Frame Transit Delay
HTML	Hypertext Markup Language
ROI	Report Object Instance
ROX	Report Object Executable
SLA	Service Level Agreement

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Overview

Service Level Agreement (SLA) Reports provide an additional set of report executables for the Ascend NavisXtend Report Generator 1.0. These executables are designed specifically for service providers and customers who need to verify Frame Relay Service Level Agreements. SLA reports enable these users to monitor the traffic performance data retrieved by the Bulk Statistics Collectors for Ascend's B-STDX 9000 switches. SLA reports do not affect the report executables already delivered with Report Generator 1.0.

SLA Reports consists of a total of 18 Frame Relay report executables, which are grouped as follows:

- Six general SLA reports
- Six weekly SLA reports
- Six monthly SLA reports

Each of the above groups includes summary, exception, and detailed reports for both ROI and HTML reports.

SLA reports organize report data according to Customer Name. Before you can use the SLA Report product, you may have to use NavisCore to associate a Customer Name with the circuits that you intend to monitor. For more information, see Appendix C, "Associating a Customer Name with a Circuit."

What Are Service Level Agreements?

Service Level Agreements are set up by service providers to define and differentiate their services to customers. The service provider guarantees specific levels of service to customers depending on the customers' networking needs. The levels of service are based on a set of measurable service indicators. When a customer subscribes to a specific level of service, the service provider agrees to meet the specified service indicators.

How SLA Reports Can Be Used

SLA reports provide a visual snapshot of the traffic performance indicators that are defined in SLA agreements. Customers and service providers can use SLA reports to see the real-time performance statistics of a customer's network and then compare those statistics to the performance levels guaranteed in the Service Level Agreements.

Service providers can use SLA reports in the following ways:

- To determine what levels of service are reasonable to offer customers.

  Initially, service providers can run detailed reports to view the performance of the customer's network over time. Once the actual performance statistics are available, service providers can more accurately define the service levels that should be guaranteed.

- To provide customers visual documents to help them understand the performance levels outlined in the Service Level Agreement.

- To troubleshoot problems on a customer's network.

  Service providers can use the SLA exception reports to quickly identify "problem" circuits. Then they can run a detailed report for that circuit and see the exact time and extent of the problem.

- To prove that the service provided meets contractual obligations.

Service providers' customers, in turn, can use SLA reports in the following ways:

- To monitor the performance of their network.

- To verify the service provider's compliance with the Service Level Agreements.

Figure 1-1 illustrates the ways SLA reports can be used.

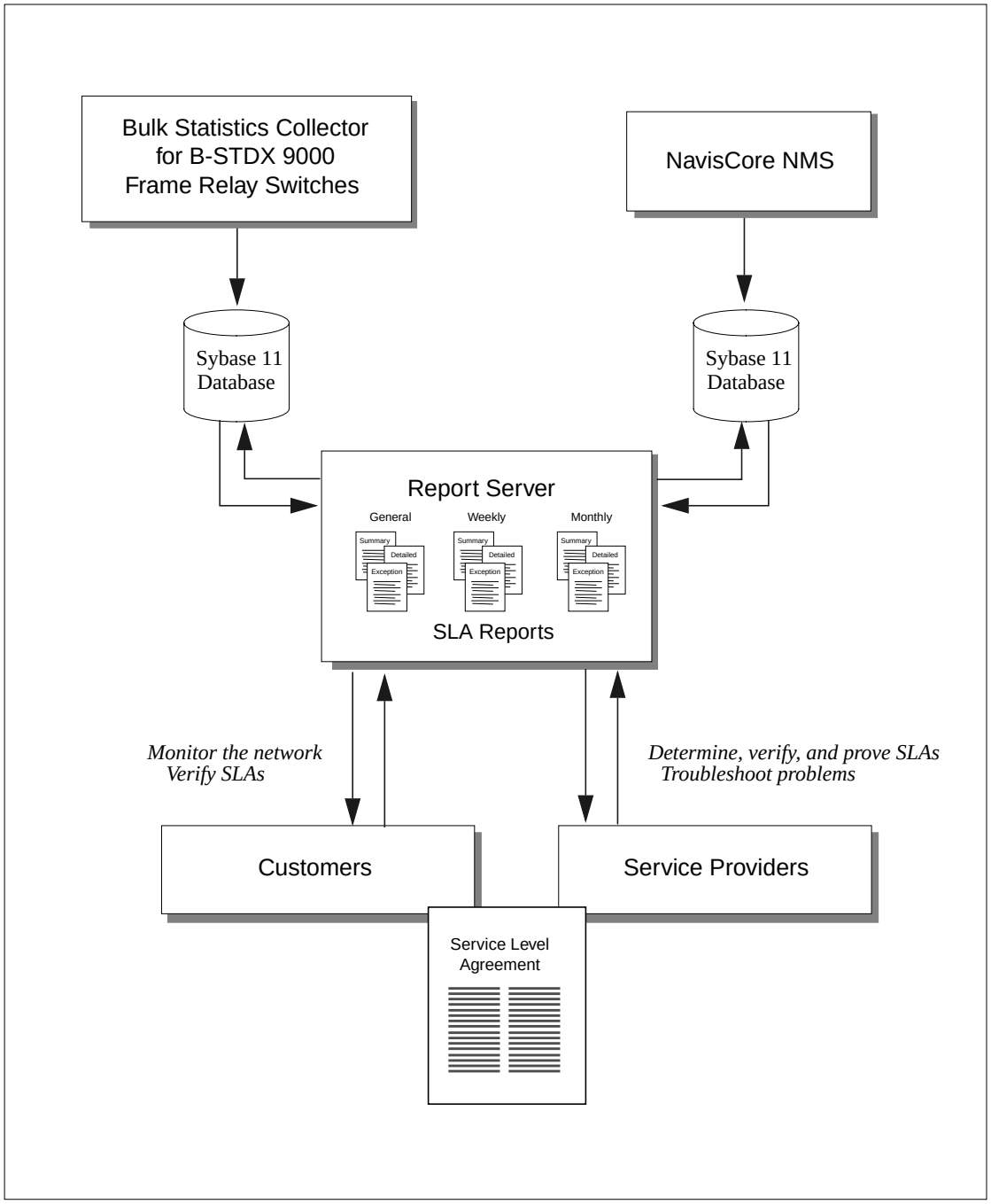


Figure 1-1. The SLA Reports Workflow Process

About SLA Edge-to-edge Metrics

Ascend's switches provide statistics for the transmission of information through the public Frame Relay network (the cloud). This is the segment of the network that the carrier directly controls. As a result, the carrier can guarantee a level of service for this segment.

The measurements in Service Level Agreements relate to the transmission of data from the ingress switch at one edge of a Frame Relay network cloud to the egress switch at the other edge. This is referred to as an "edge-to-edge" measurement.

Do not confuse edge-to-edge measurement with end-to-end measurement. End-to-end measurement includes all circuit sections in the transmission path from the source Frame Relay Data Terminal Equipment (DTE) to the destination DTE. This path might include private Frame Relay networks and other equipment that the carrier cannot control.

Figure 1-2 illustrates the two ways to measure the end points of data transmission.

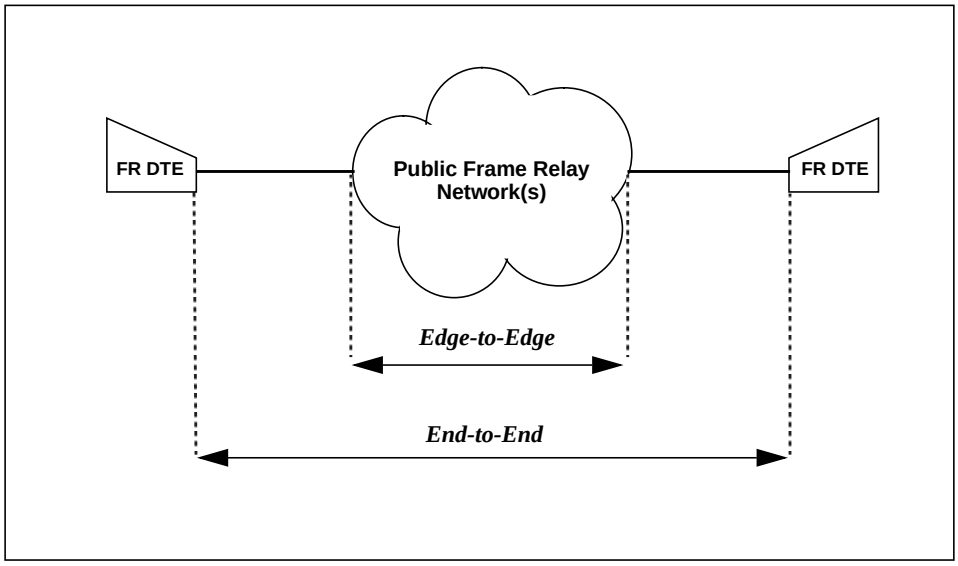


Figure 1-2. End-to-end versus Edge-to-edge Measurements

SLA Report Types

SLA Report executables allow customers and service providers to create three types of reports: summary, exception, and detailed. This section provides some suggestions for when and how to use each type of report.

Summary Reports — For Quick SLA Verification

SLA summary reports provide an overall snapshot of the performance of a customer's circuits. The tabular section of the report lists all the customer's circuits. The graphical section of the report shows, at a glance, whether the aggregate performance of all the circuits meets the service levels guaranteed in the SLA contract.

Customers should run summary reports on a weekly or monthly basis. If the summary report indicates a problem, the customer should notify the service provider who can then generate exception and detailed reports to analyze the problem. Typically, weekly or monthly summary reports are scheduled late at night because the execution may take more time than a daily report.

Exception Reports — For Locating Problem Circuits

SLA exception reports identify the "problem circuits" for a given day. Problem circuits are defined as circuits with Frame Delivery Ratio (FDR) values that fall below the defined FDR threshold or circuits with Frame Transit Delay (FTD) values that exceed the defined FTD threshold. (Exception reports are empty if all FDR or FTD values fall within the defined thresholds.) If the exception report indicates a problem, the service provider should generate a detailed report for each problem circuit to view the exact time and extent of the problem.

Detailed Reports — For Diagnosing the Time and Extent of the Problem

SLA detailed reports provide a detailed view of a specific circuit's performance. The service provider can identify the exact time when problems occur and the severity of the problem by running a detailed SLA report on the circuit in question.

The typical detailed report includes 24 hours of data broken down into time intervals. The time interval is determined by the collection interval used by the Bulk Statistics Collector.

SLA Summary Reports

SLA summary reports are displayed in both tabular and graphical formats. The tabular section displays reference information; the graphical section displays real-time, performance statistics.

Figure 1-3 illustrates the tabular section of an SLA summary report. The tabular section contains the following reference information:

- Customer name and contact information
- Time period for the report
- FDR and FTD thresholds guaranteed in the SLA contract
- A list of all circuits associated with the customer and the DLCI numbers that identify the end points of each circuit. Circuits are sorted alphabetically by circuit name.

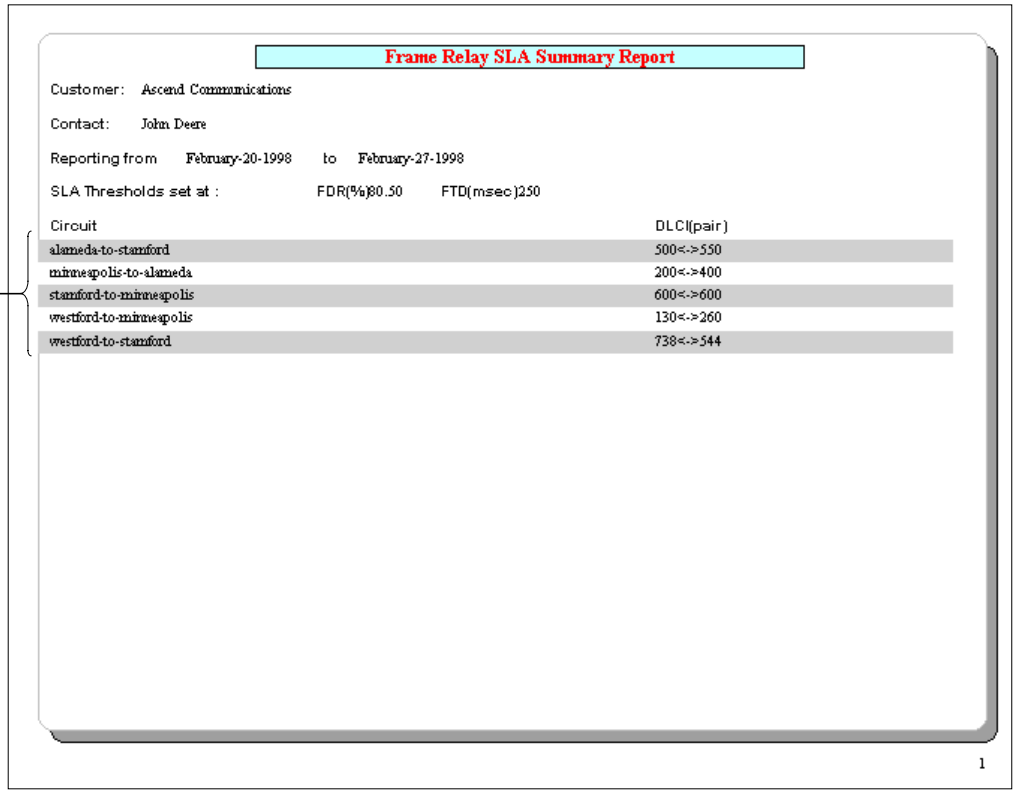


Figure 1-3. Tabular Section of an SLA Summary Report

Figure 1-4 illustrates the graphical section of the SLA summary report. The graphical section helps you compare the actual performance of your network to the performance levels guaranteed in the SLA contract. When you view summary reports, remember that performance statistics are aggregate numbers. (In other words, the Report Generator calculates the average FDR and FTD for each circuit and then averages the averages of all the circuits together.)

Notice these details in the SLA summary report:

- The Frame Delivery Rate graph shows that the average FDR for all the circuits falls below the guaranteed FDR threshold by the end of the week. In this situation, the customer should notify the service provider that a problem exists.
- The Frame Transit Delay graph shows that the average FTD rate remains below the guaranteed FTD threshold. This means that the FTD numbers are normal.

If the average FDR drops below the FDR threshold, a problem exists.

If the average FTD exceeds the FTD threshold, a problem exists.

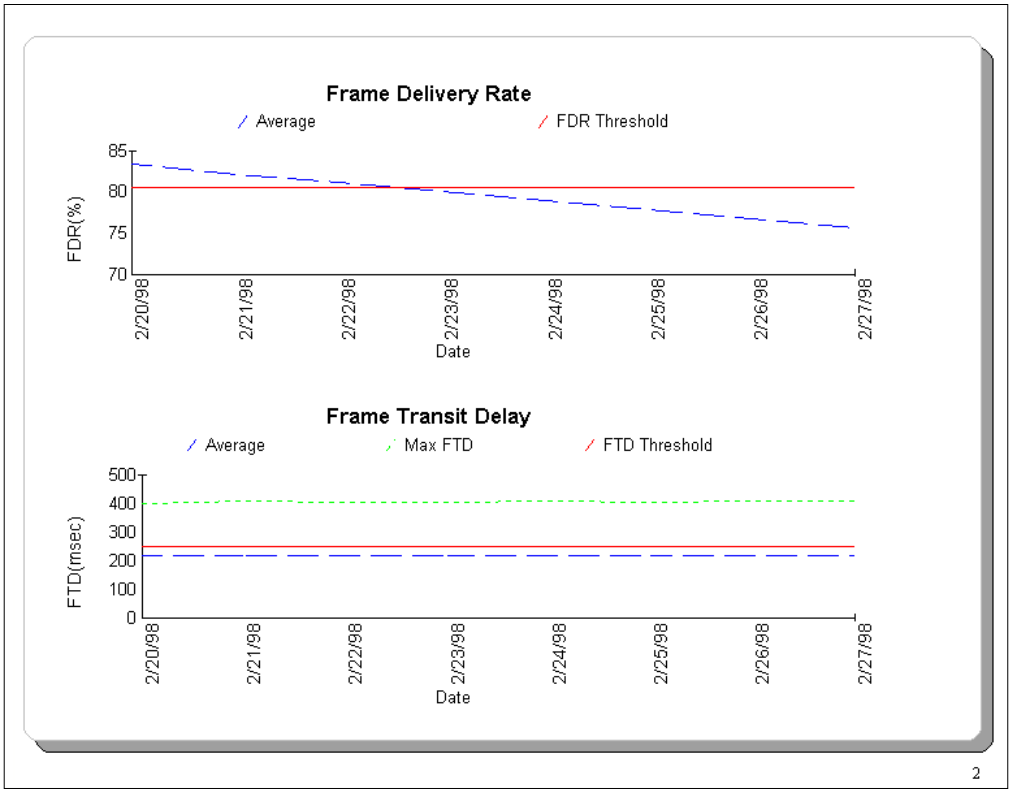


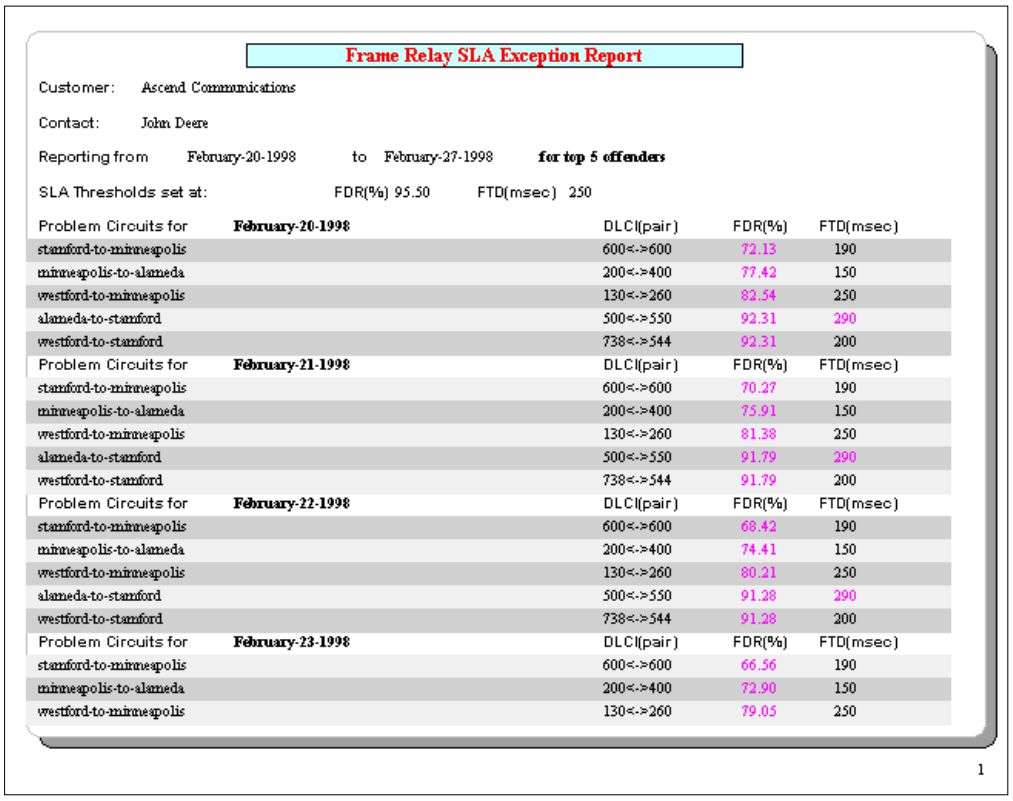
Figure 1-4. Graphical Section of an SLA Summary Report

SLA Exception Reports

SLA exception reports are displayed in a tabular format only. These reports identify the problem circuits within a given day.

Figure 1-5 illustrates a sample exception report. Notice these details in the report:

- The exception report contains customer information and the defined FDR and FTD thresholds in the report header.
- The exception report displays a list of circuits that qualify as “Top Offenders.” Users define the maximum number of top offenders when they create the report request.
- Circuits are sorted according to the severity of the performance problem. The circuit with the worst performance appears at the top of the list. The Report Generator uses FDR values as the primary sort key and FTD values as the secondary sort key. If two FDR values are the same, the Report Generator sorts on FTD values.
- FDR and FTD values that do not meet the defined thresholds are displayed in a red font.



Frame Relay SLA Exception Report

Customer: Ascend Communications

Contact: John Deere

Reporting from February-20-1998 to February-27-1998 **for top 5 offenders**

SLA Thresholds set at: FDR(%) 95.50 FTD(msec) 250

Problem Circuits for **February-20-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis	600<->600	72.13	190
minneapolis-to-alameda	200<->400	77.42	150
westford-to-minneapolis	130<->260	82.54	250
alameda-to-stamford	500<->550	92.31	290
westford-to-stamford	738<->544	92.31	200
Problem Circuits for **February-21-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis	600<->600	70.27	190
minneapolis-to-alameda	200<->400	75.91	150
westford-to-minneapolis	130<->260	81.38	250
alameda-to-stamford	500<->550	91.79	290
westford-to-stamford	738<->544	91.79	200
Problem Circuits for **February-22-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis	600<->600	68.42	190
minneapolis-to-alameda	200<->400	74.41	150
westford-to-minneapolis	130<->260	80.21	250
alameda-to-stamford	500<->550	91.28	290
westford-to-stamford	738<->544	91.28	200
Problem Circuits for **February-23-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis	600<->600	66.56	190
minneapolis-to-alameda	200<->400	72.90	150
westford-to-minneapolis	130<->260	79.05	250

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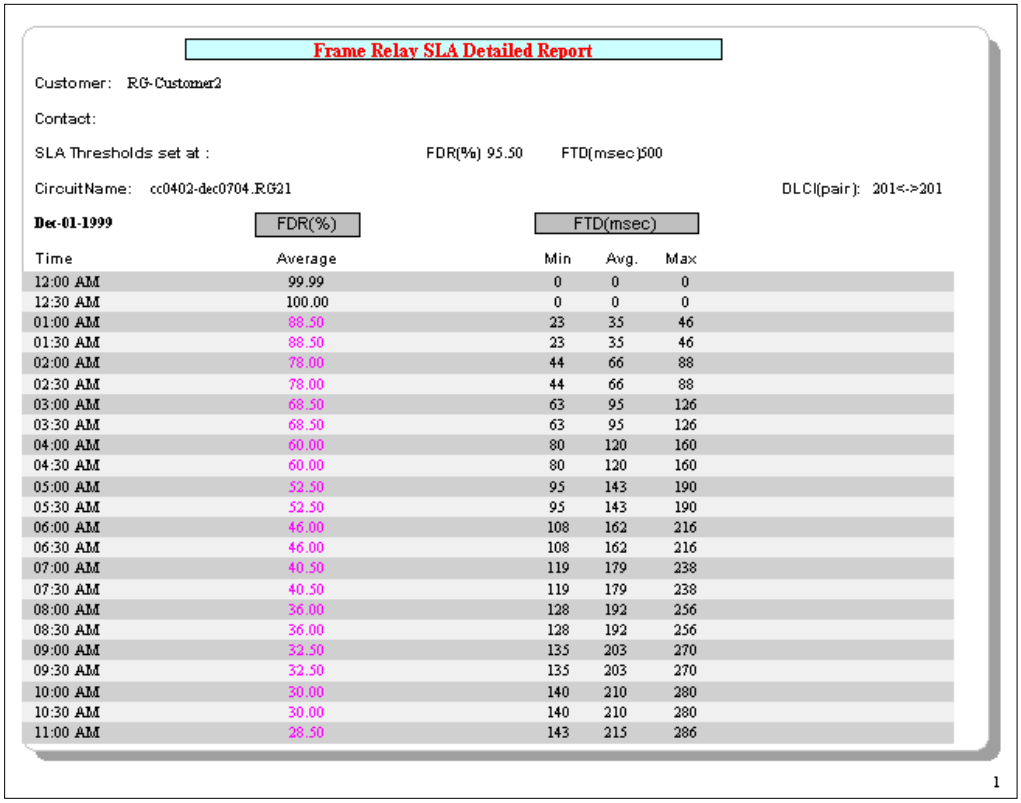
Figure 1-5. Tabular Section of an Exception Report

SLA Detailed Reports

SLA detailed reports are displayed in both tabular and graphical format. SLA detailed reports provide a performance record of a specific circuit.

Figure 1-6 illustrates the tabular section of an SLA detailed report. Notice these details in the report:

- The detailed report contains customer information, the specific circuit name, and the defined FDR and FTD thresholds in the report header.
- FDR and FTD values that do not meet the defined thresholds appear in a red font.
- The FTD column contains minimum, average, and maximum values, which identify the severity of the performance problem.



Frame Relay SLA Detailed Report

Customer: RG-Customer2

Contact:

SLA Thresholds set at : FDR(%) 95.50 FTD(msec)500

CircuitName: cc0402-dec0704.RG21 DLCI(pair): 201<->201

Dec-01-1999	FDR(%)	FTD(msec)		
Time	Average	Min	Avg.	Max
12:00 AM	99.99	0	0	0
12:30 AM	100.00	0	0	0
01:00 AM	88.50	23	35	46
01:30 AM	88.50	23	35	46
02:00 AM	78.00	44	66	88
02:30 AM	78.00	44	66	88
03:00 AM	68.50	63	95	126
03:30 AM	68.50	63	95	126
04:00 AM	60.00	80	120	160
04:30 AM	60.00	80	120	160
05:00 AM	52.50	95	143	190
05:30 AM	52.50	95	143	190
06:00 AM	46.00	108	162	216
06:30 AM	46.00	108	162	216
07:00 AM	40.50	119	179	238
07:30 AM	40.50	119	179	238
08:00 AM	36.00	128	192	256
08:30 AM	36.00	128	192	256
09:00 AM	32.50	135	203	270
09:30 AM	32.50	135	203	270
10:00 AM	30.00	140	210	280
10:30 AM	30.00	140	210	280
11:00 AM	28.50	143	215	286

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Figure 1-6. Tabular Section of an SLA Detailed Report

Figure 1-7 illustrates the graphical section of an SLA detailed report. Notice these details in the report:

- The graphical report displays the same real-time performance information as the tabular report; only the format is different.
- The graphical report does not include the FDR and FTD threshold values guaranteed in the SLA.

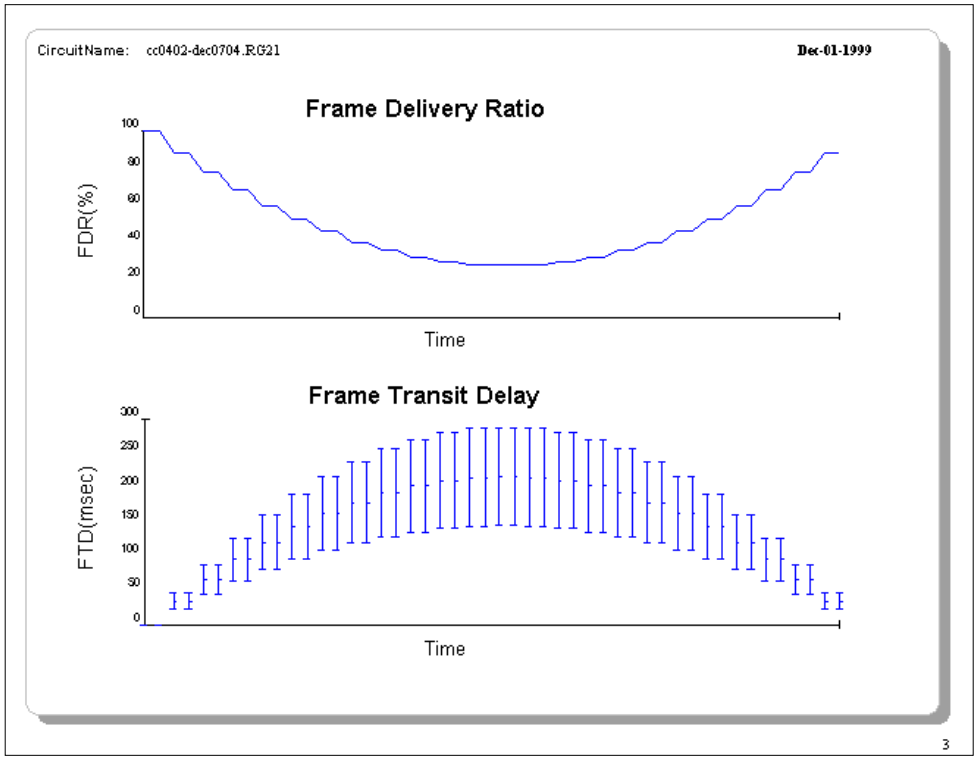


Figure 1-7. Graphical Section of an SLA Detailed Report

Source Data for SLA Reports

The Report Generator retrieves statistical information for SLA reports from the Bulk Statistics database and configuration data from the NavisCore database. Table 1-1 and Table 1-2 describe the specific database tables that are used in SLA reports.

Table 1-1. Source Table for Statistical Data (Bulk Statistics Database)

Table Name	Description
FrCktStat	B-STDX 8000/9000 Frame Relay circuit average and peak statistics

Table 1-2. Source Tables for Configuration Data (NavisCore Database)

Table Name	Description
NetWideParam	Network-wide object
CustomerInfo	Customer information
Circuit	Circuit related to the two DLCIs
VCircuit	Virtual Circuit table compiled with information from the following tables, which relate to the circuit: • Switch — Unique switch name • Pport — Relationship between the Physical Port and the card on which it resides • Lport — Logical Port on the switch • DLCI — The Data Link Connection Identifier numbers related to the Logical Port

Requirements

This section lists the software, hardware, and disk space requirements for the SLA Reports for Report Generator 1.0 product.

Software and Hardware

The software/hardware requirements for SLA Reports are as follows:

- NavisXtend Report Generator, release 1.0 installed and running on the client and server systems as specified in Chapter 1 of the *NavisXtend Report Generator User's Guide*.
- All components required in the Report Generator 1.0 environment (NavisCore, Bulk Statistics Collectors, and the optional Web Server) as specified in Chapter 1 of the *NavisXtend Report Generator User's Guide*.

You do not have to upgrade any components in the Report Generator environment when you install the SLA Report product. SLA Reports do not affect in any way the functioning of other report executables delivered with the NavisXtend Report Generator product.

Disk Space

Table 1-3 lists disk space requirements for SLA Report executables and various types of report documents. Since the size of report documents will vary depending on the number of circuits, reporting interval, and the time period of the report, use this table only as a guideline for estimating your disk space needs.

Table 1-3. Disk Space Requirements

Report Type	Disk Space
The complete set of SLA report executables provided in the SLA Reports product	2.5 MB
A sample HTML SLA detailed report document for 1 day using hourly intervals	100 circuits = 5.4 MB
A sample HTML SLA exception report document for 5 days	6 problem circuits < 120 KB 1 problem circuit < 20 KB
A sample ROI SLA detailed report document for 1 day using hourly intervals	100 circuits = 2.5 MB
A sample ROI SLA exception report document for 5 days	6 problem circuits < 60 KB 1 problem circuit < 10 KB

Installation Overview

This section provides an overview of the SLA Reports installation process.

Perform installation tasks in the following sequence:

1. Insert the SLA Reports CD-ROM in the CD-ROM drive of the Report Server system and copy the sample graphic files (Ascend.gif and blank.gif) from the *Logo* directory on the CD-ROM to the */var/tmp* directory. Then copy the graphic file that you wish to use to a file called *Logo.gif*.

Do not skip over this step. The */var/tmp/Logo.gif* graphic is used in the header of HTML report documents. If the Report Server cannot locate this graphic file, it will not generate SLA HTML report documents.

2. Insert the SLA Reports CD-ROM in the CD-ROM drive of the Administrator Desktop system and install SLA report executables on that system.

Even though report executables reside on the Report Server, you cannot install SLA reports directly on the Report Server. You must install them on the Administrator Desktop system first so they are configured correctly for the Actuate client.

3. From the Actuate Administrator Desktop, set up the appropriate SLA directories on the Report Server. Then copy the SLA reports executables to the Report Server system.

Figure 1-8 illustrates the installation process.

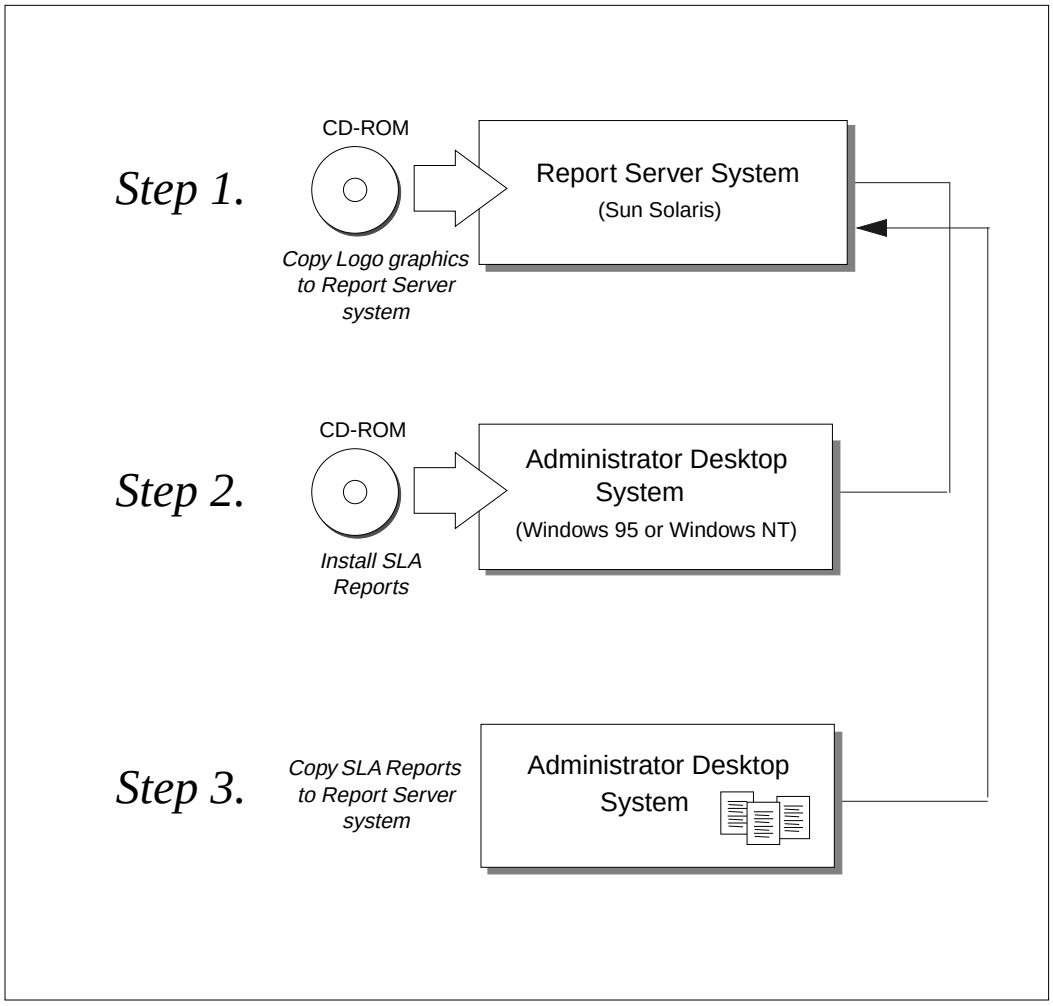


Figure 1-8. Installation Process

2

Installing SLA Reports

This chapter describes how to install the SLA Reports for Report Generator product. During these installation procedures, you:

- Copy the sample HTML logo graphics from the CD-ROM to the Report Server system.
- Install the SLA Report executables on the Administrator Desktop client system.
- Use the Actuate Administrator Desktop to create folders for the SLA report executables on the Report Server.
- Copy the executables from the Administrator Desktop to the Report Server.

Before You Begin

This chapter assumes that you have already installed the Report Generator and are familiar with the report generation process.

Before you begin the tasks in this chapter:

- Verify that the Report Server is running.

  For more information, see “Verifying That Server Processes Are Running” in Chapter 7 of the *NavisXtend Report Generator User’s Guide*.

- Verify that the Actuate Administrator Desktop can access the Report Server.

  For more information, see “Verifying Client-Server Connectivity” in Chapter 3 of the *NavisXtend Report Generator User’s Guide*.

For information on upgrading SLA Reports from a previous version or for the most recent installation updates, refer to the Software Release Notice that accompanies this product.

Installing the HTML Logo Files on the Report Server

SLA HTML reports are preformatted with a 1.25 x 1.25-inch field for a company logo. This field is located on the right side of the page in the header of each report. When the Report Generator generates an SLA HTML report, it looks for the */var/tmp/Logo.gif* file on the Report Server system and copies it into the report.

If the Report Generator cannot locate a file called *Logo.gif* in the */var/tmp* directory on the Report Server system, it will not generate the HTML report. The */var/tmp/Logo.gif* is essential for report generation. Do not skip the steps in this section.

To copy the GIF files from the CD-ROM to the Report Server system:

1. Log on to the Report Server system and insert the SLA Reports CD-ROM into the CD-ROM drive.
2. When the LED on the CD-ROM stops blinking, enter the following command to move to your local CD-ROM directory:

   ```
   cd  <cd-rom pathname>
   ```

   For example, if your CD-ROM directory is */cdrom/cdrom0*, you would enter:

   ```
   cd  /cdrom/cdrom0
   ```

3. Enter **`ls`** to view the files that are on the CD-ROM. In the list of files, you should see a directory called *Logos*.
4. Use the **cd** command to move to the *Logos* directory:

   ```
   cd  Logos
   ```

5. Enter **`ls`** to view the files that are in the *Logos* directory. You should see two files: *Ascend.gif* and *blank.gif*.
6. Enter the following command to copy the two GIF files to your */var/tmp* directory:

   ```
   cp Ascend.gif   blank.gif   /var/tmp
   ```

The SLA Reports product includes two graphic files, *Ascend.gif* and *blank.gif*, which you can use in HTML reports. The *Ascend.gif* is a sample Ascend logo. The *blank.gif* is a transparent GIF, which you can use if you do not want any logo on your HTML reports.

7. Decide which graphic file you need for HTML reports. (We suggest you use the *Ascend.gif* so you can see what a logo looks like in HTML documents.)
8. Use the **cp** command to copy the GIF file of your choice to a file called *Logo.gif*. For example, if you want the *Ascend.gif*, you would enter:

   ```
   cp Ascend.gif Logo.gif
   ```

9. Enter **ls** to view the files that are now in the */var/tmp* directory.

   The system displays all files in */var/tmp*, including these graphic files:

   ```
   Ascend.gif     Logo.gif    blank.gif
   ```

10. Enter the following commands to move out of the CD-ROM directory and eject the CD-ROM:

    ```
    cd /
    eject
    ```

Later, when you are familiar with SLA reports, you can design your own 1.25 x 1.25-inch logo and overwrite the sample logo provided with the SLA Reports product. These procedures are described in the section, "Customizing the Logo for HTML Reports," in Chapter 3.

The *Logo.gif* file must be a legitimate GIF file. Although UNIX will let you name any file *Logo.gif*, SLA Reports requires a genuine GIF file called *Logo.gif*.

Installing Report Executables

After you install the HTML logo on the Report Server, you can begin installing SLA report executables. SLA report executables are installed on the Administrator Desktop system so they are configured correctly for the Actuate client. (You cannot install them directly on the Report Server.) After you install the Report executables on the Administrator system, you copy the reports to the Report Server system.

To install Report executables on the Administrator Desktop system:

1. Insert the SLA Reports CD-ROM in the CD-ROM drive of the Administrator Desktop system.
2. Double-click the CD-ROM drive icon.

   The CD-ROM window appears.

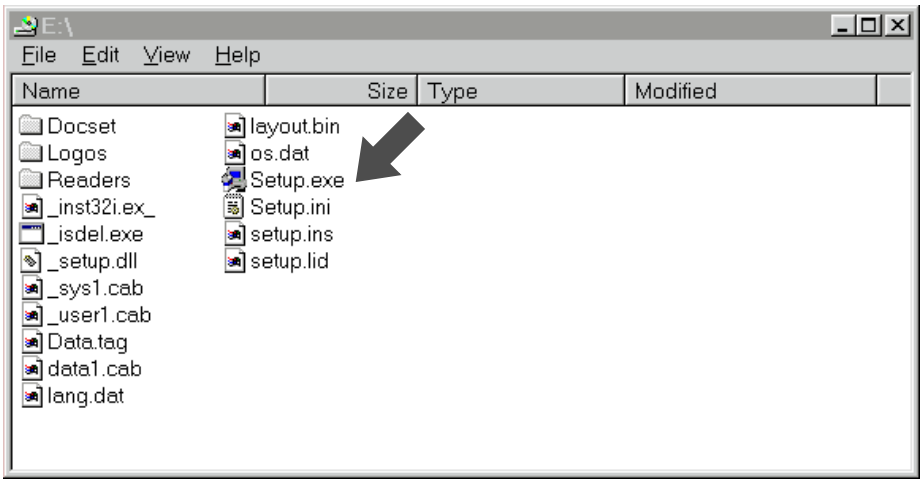


Figure 2-1. Installing Report Executables

You should see the following files on the CD-ROM:

- The *Docs* folder, which includes a README file and the PDF version of the SLA Reports User's Guide (sla_rpts.pdf).
- The *Logos* folder, which includes the sample logo GIFs.
- The *Readers* folder, which includes Adobe Acrobat Readers.
- The *Setup.exe* script, which installs the SLA report executables.
- Thirteen other files, which are used in the SLA Reports product.

3. Double-click the *Setup.exe* script to begin the installation.

   Setup.exe starts the InstallShield Wizard, which guides you through the installation. The first dialog box to appear is the Welcome dialog box.

4. After you read the information in the Welcome dialog box, choose Next to continue.

   The Report Generator Software License dialog box appears.

5. After you read the Software License Agreement, choose Yes to continue.

   The User Information dialog box appears. See Figure 2-2.

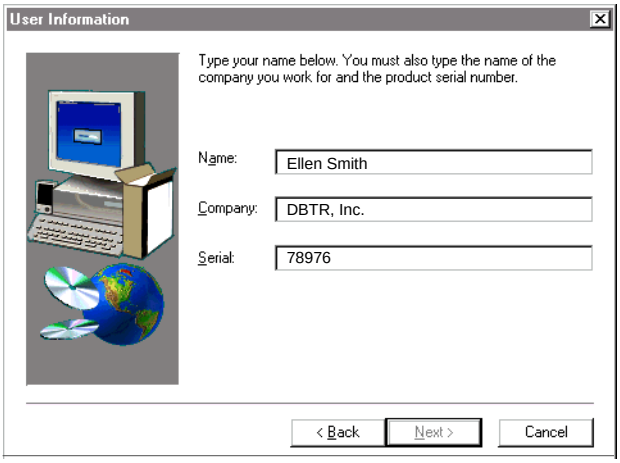


Figure 2-2. User Information Dialog Box

6. Provide the following information in the User Information dialog box:

   Name — Enter your user name.

   Company — Enter your company name.

   Serial — Enter the part number located on the cover of the CD-ROM.

7. When you are finished, choose Next to continue.

The Choose Destination Location dialog box appears. By default, the target installation directory is *C:\SLA Reports*. See Figure 2-3.

8. In the Choose Destination Location dialog box, specify the destination (installation) folder and choose Next.

After the program copies SLA Reports to the directory that you specified, the Setup Complete dialog box appears. See Figure 2-3.

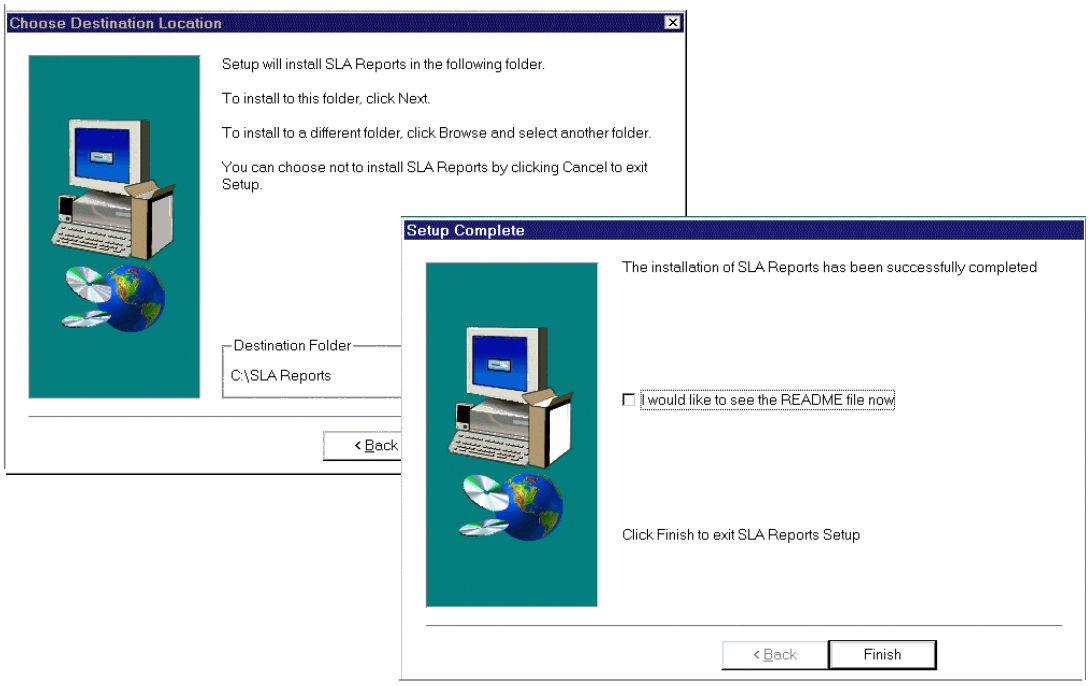


Figure 2-3. Choose Destination Location and Setup Complete Dialog Boxes

9. If you want to view the *README* file, check the appropriate box in the Setup Complete dialog box. Then choose Finish to complete the installation.

The program completes the setup and closes the installation dialog box. If you checked the README file box, the *README* file is open for you to review.

SLA Report executables are now installed in the target installation directory.

10. Double-click the SLA Reports folder (by default, *C:\SLA Reports*) to view the files that you installed.

The SLA Reports window appears. See Figure 2-4.

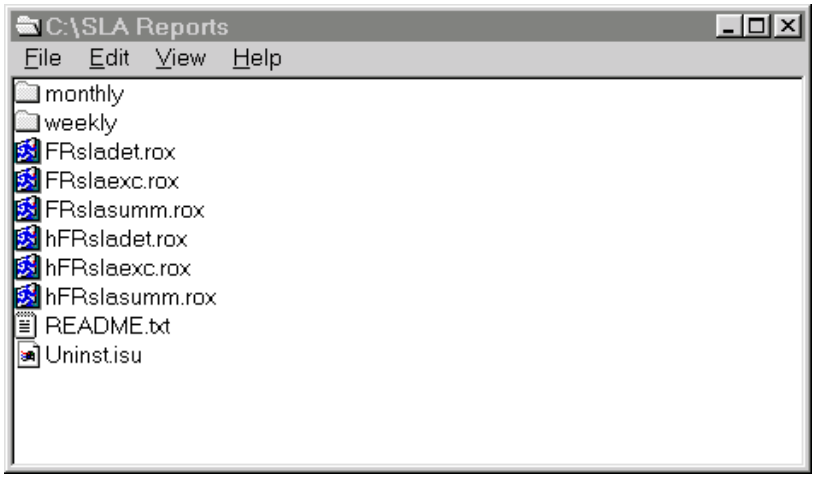


Figure 2-4. SLA Reports Window

You should see the following folders and files in the SLA Reports window:

- The *monthly* folder, which includes SLA report executables preconfigured for a monthly time period.
- The *weekly* folder, which includes SLA report executables preconfigured for a weekly time period.
- A set of three executables that generate ROI report documents. (These executables do not have the “h” prefix.)
- Another set of three executables that generate the HTML version of the report documents. (These executables begin with the “h” prefix.)
- The *README.txt* file, which provides the version number of the SLA Reports product.
- The *Uninst.isu* program, which Windows InstallShield uses to uninstall report executables.

Continue to the next section to learn about naming conventions for SLA report executables.

Naming Conventions for SLA Reports

While you have the SLA Reports window open, take some time to understand how the names of report files are constructed.

Notice that the name of each report file consists of four basic parts, as illustrated in Figure 2-5. Each part of the file name provides information about the report.

- Part 1, in capital letters, indicates the service that is supported. For SLA reports, it is always Frame Relay (FR).
- Part 2 indicates the function of the report. For SLA reports, this is always Service Level Agreement (sla).
- Part 3 indicates the type of report (summ = summary, det = detailed, exc = exception).

  Report executables in the monthly and weekly folders have "_mth" or "_wk" appended to Part 3 of the filename.
- Part 4 indicates the type of file (.rox = report object executable, .roi = report object instance, .rov = report object parameter value, .row = report object for the web).

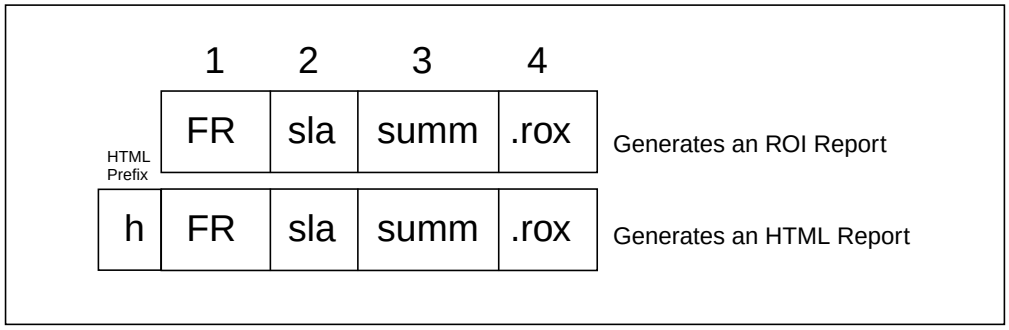


Figure 2-5. The Four Basic Parts of a Report Executable Name

Notice in Figure 2-5 that the illustrated filenames contain 4 parts and the second filename has an additional HTML prefix. Parts 3 and 4 show you that the files are report executables for summary reports. Parts 1 and 2 show you that these report executables will generate Frame Relay Service Level Agreement reports. The HTML prefix on the second filename indicates that the report executable will generate the HTML version of the report.

Setting Up the Report Server

After you install the report executables on the Administrator Desktop system, you need to set up the Report Server for SLA reports.

In this section, you use the Actuate Administrator Desktop to:

- Connect to the Report Server.
- Create folders on the Report Server for the SLA report executables.
- Copy the SLA report executables from the Administrator Desktop to the appropriate folders on the Report Server.

Connecting to the Report Server

To connect to the Report Server:

1. Open the Administrator Desktop by choosing the Start button and selecting Programs => Actuate => Administrator Desktop.

   The Administrator Desktop appears.

2. Select the Administrator button or the Administrator option in the File menu.

   The Report Encyclopedia Login dialog box appears. See Figure 2-6.

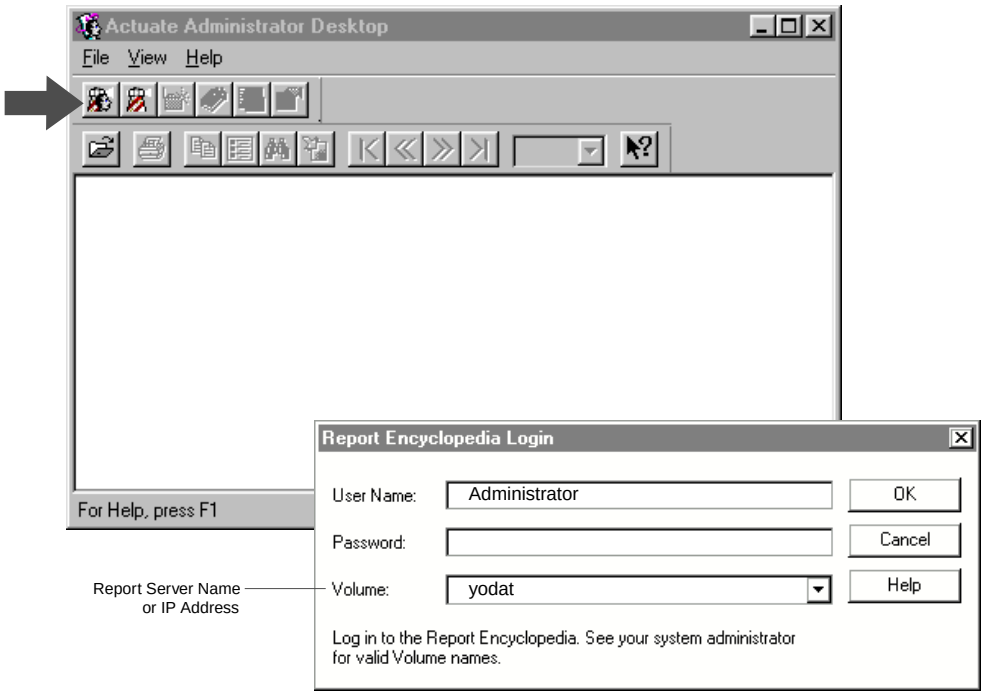


Figure 2-6. Administrator Desktop and Report Encyclopedia Login

3. Complete the fields in the Report Encyclopedia Login dialog box as follows:

   User Name — Enter your user name.

   Password — Enter your password.

   Volume — Enter the hostname or IP address of the Report Server system.

4. Choose OK to accept the entries.

   The Administrator Desktop connects to the Report Server and displays the Report Encyclopedia.

Creating Folders for SLA Report Executables

To create folders for the SLA report executables:

1. Click the right mouse button on the Report Server icon or an existing folder to bring up the Context menu. See Figure 2-7.
2. Choose New Folder.

   A new folder icon appears in the left panel.

3. Type the new folder name next to the icon.

   The new folder is now listed in the Administrator Desktop window.

4. Repeat Steps 1 through 3 for each new folder that you want to add.

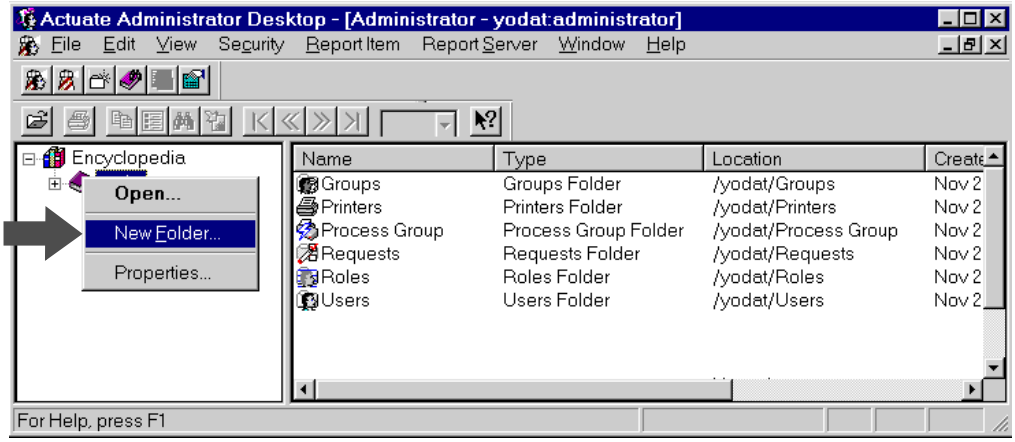


Figure 2-7. Creating a New Folder

Copying SLA Report Executables to the Report Server

You are now ready to copy the SLA Report executables from the Administrator Desktop system to the new folder(s) on the Report Server.

To copy executables to the Report Server:

1. In the Report Encyclopedia, open the destination folder for the reports. (SLA is the destination folder in Figure 2-8.)
2. In Windows Explorer, open the SLA Reports directory (by default, *C:\SLA Reports*).
3. Arrange both windows so you can see the SLA report executables in Windows Explorer and the destination folder in the Report Encyclopedia.
4. Drag the report executables to the destination folder. If you want to copy multiple reports at a time, hold down the Control key when you select entries.

   The cursor becomes an arrow with a file icon beneath it, indicating that you can now copy the file.

   Figure 2-8 illustrates the copy operation.

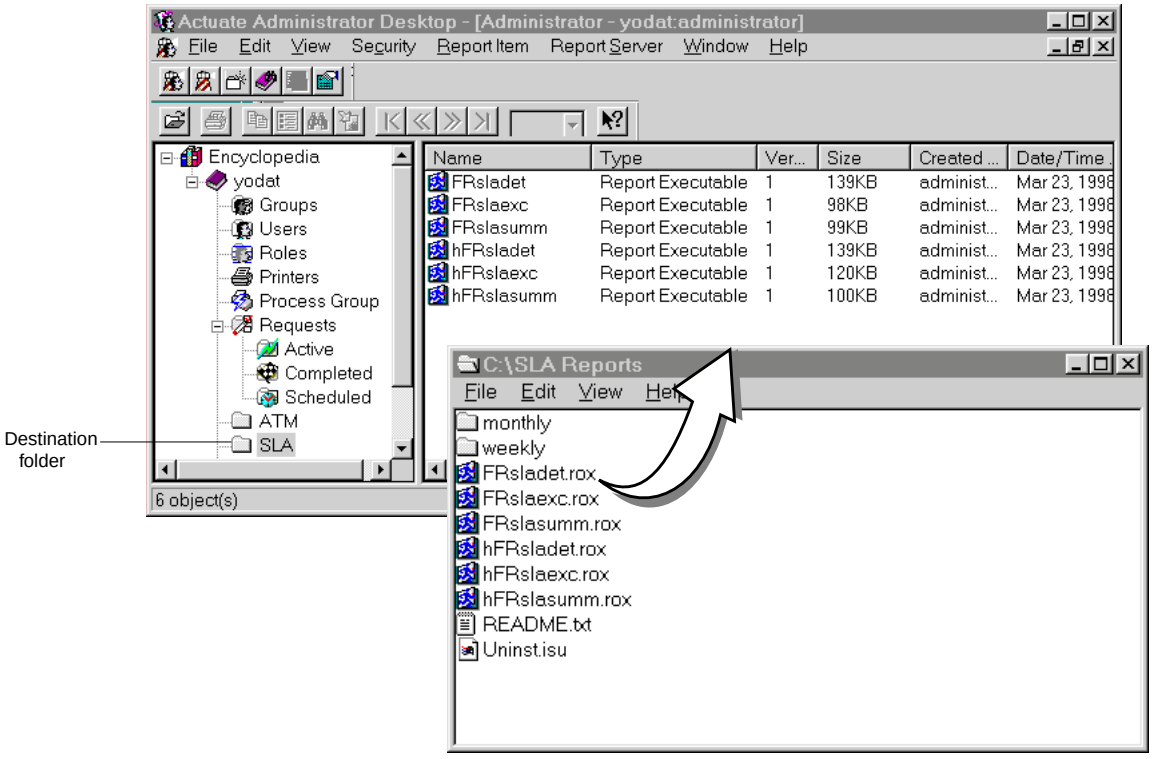


Figure 2-8. Copying SLA Report Executables to a Report Server Folder

You have now completed the installation of the SLA Reports product. Continue to the next chapter to learn how to generate the SLA report document.

3

Generating and Viewing SLA Reports

This chapter describes how to generate and view SLA reports with the Actuate client or a web browser.

The procedures in this chapter show you how to:

- Connect to the Report Server.
- Generate a basic SLA report request.
- View the report document.
- Customize the logo for HTML reports.

For a full description of Report Generator functionality, refer to the *NavisXtend Report Generator User's Guide*.

SLA reports organize report data according to Customer Name. Before you begin generating SLA reports, verify that NavisCore includes Customer Names for the circuits that you intend to monitor. For more information, see Appendix C, "Associating a Customer Name with a Circuit."

Connecting to the Report Server

The following sections show you how to connect to the Report Server using the Actuate client or a browser. Choose the section that is appropriate for you.

Actuate Client Procedures

To connect to the Report Server with an Actuate client:

1. Open the Actuate client application by choosing the Start button and selecting Programs => Actuate => <*Actuate Client*>.

   The client application window appears.

2. Select the Navigator button or choose the Navigator option from the File menu. (To identify a button, hold the cursor under the button until the label is displayed.)

   After you select the Navigator button, the Report Encyclopedia Login dialog box appears.

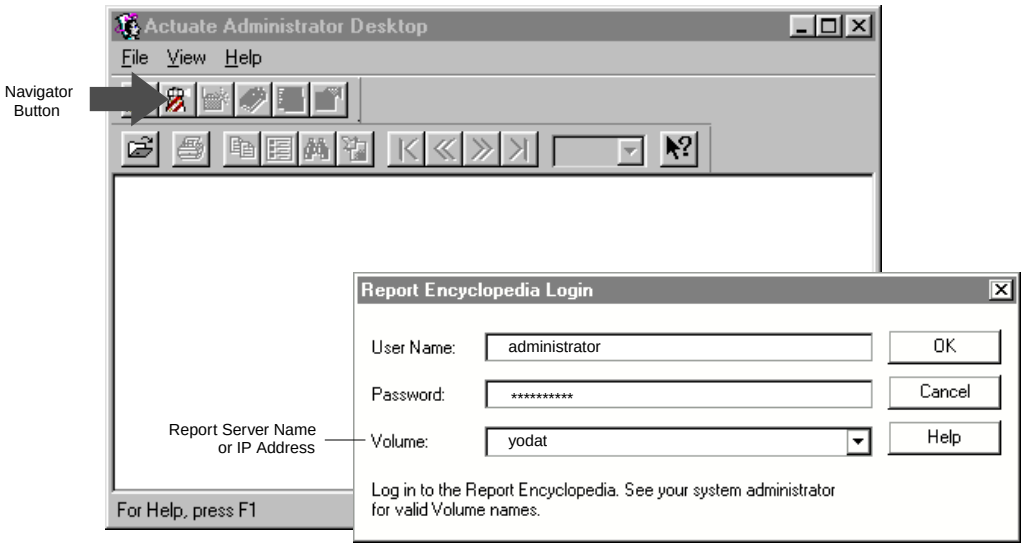


Figure 3-1. Report Encyclopedia Login Dialog Box

3. Enter the username and password that the Report Generator administrator assigned to you.
4. In the Volume field, enter the name or IP address of the Report Server system.
5. Choose OK.

   The Report Encyclopedia appears.

Web Browser Procedures

To connect to the Report Server with a web browser:

1. Open your browser.
2. In the Location field, type the URL for the Report Server and press Return.

   Use the following format for the Report Server URL:
   http://<*web server system hostname*>/acweb/<*Report Server system hostname*>.

   A Username/Password Required dialog box appears.

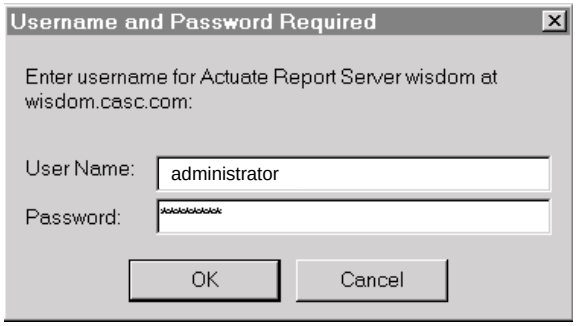


Figure 3-2. Username/Password Dialog Box

3. Enter the username and password that the Report Generator administrator assigned to you.
4. Press OK.

   The Report Encyclopedia appears.

Generating an SLA Report Request

To generate a basic report request with the Administrator Desktop, End User Desktop, or a web browser:

1. Open the folder that contains the ROI or HTML report executable. (You can run both HTML and ROI executables from your client or browser.)
2. Double-click the report executable.

   (On Actuate clients, you can also click the right mouse button on the report executable to display the context menu and choose New Request.)

   The Requester dialog box appears.
3. Enter the desired parameter values in the Parameter page of the Requester dialog box. See Table 3-1, Table 3-2, and Table 3-3 for parameter descriptions.

   Follow these guidelines when you enter parameters:

   - All required parameters have default values, which appear in a gray font. The report executable will use the default if you do not specify another value.
   - Click the [+] headings to view the parameters listed under the heading.
   - To restrict the scope of the Report Server query, define the optional [A] Ad Hoc parameters. Remember that multiple entries must be separated by commas.
   - To generate a report for the current date, use the default placeholder value (01/01/1980) for the Start Date and End Date. If you accept the default for the Start Date, be sure to accept the default for the End Date and vice versa. Start dates begin at 12:00 AM on the specified date. End Dates end at 11:59 PM on the specified date.
   - To generate a monthly or weekly report, use the monthly or weekly report executable and accept the default placeholder value (01/01/1980) for both the Start Date and End Date parameters. The Report Server will automatically generate a report for the period covering the 7 or 30 days prior to the current date. If you insert other dates in the Start Date and End Date fields, the report executable will use those dates even if the time period is not a week or a month.
   - If the names of trunks, circuits, switches, or Lports include special characters (%, -, <, >, !), use the backslash escape character (\) before each special character. For example, to specify an Lport named A-B-C, enter A\-B\-C for the Requester LportName parameter value.
4. Choose OK to submit the report request.

   The client submits the request to the Report Server.

   Figure 3-3 illustrates the Requester Parameter page on the Actuate client.

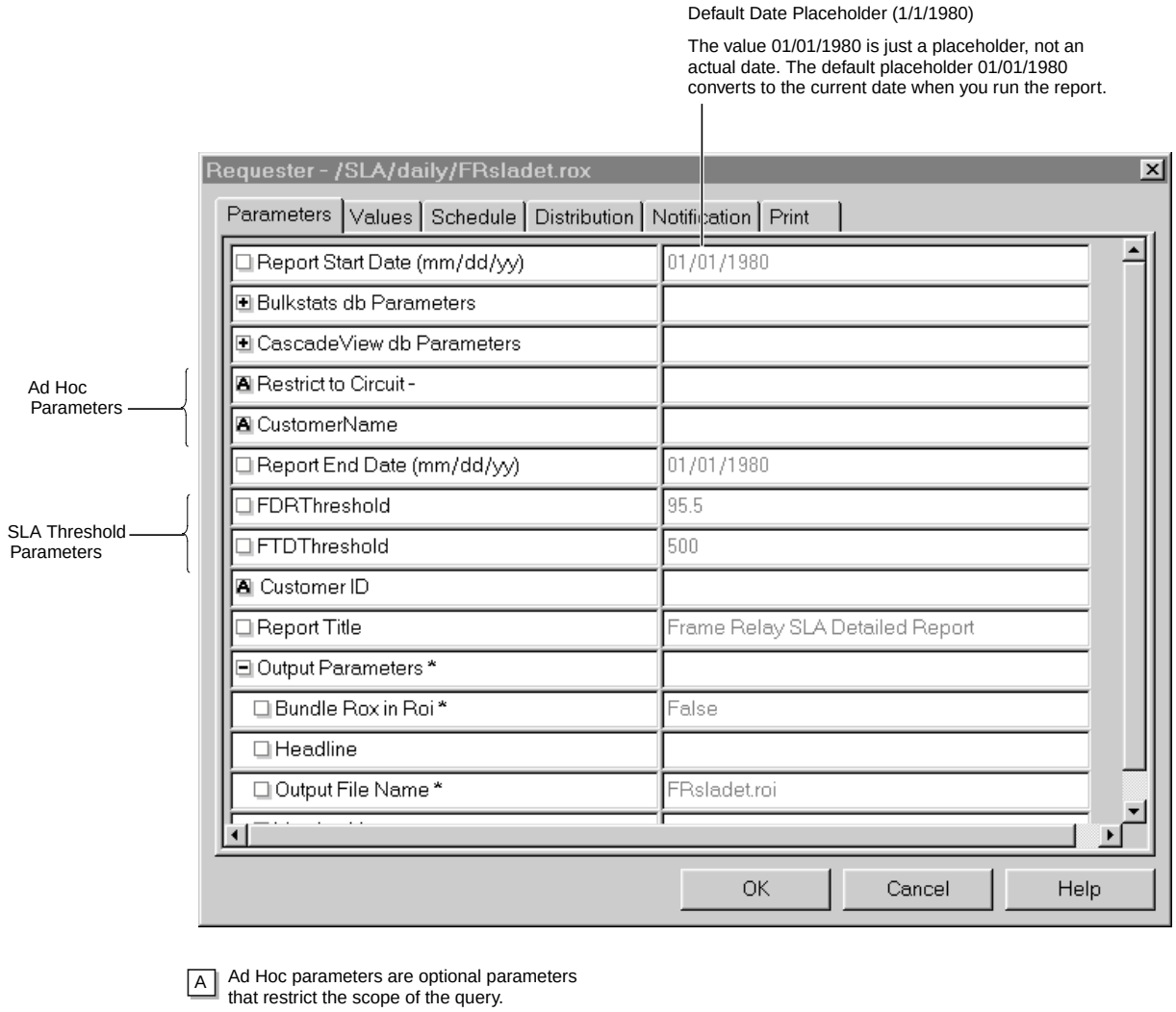


Figure 3-3. Requester Parameter Page

About Report Request Parameters

Table 3-1, Table 3-2, and Table 3-3 include SLA report parameters that you may see in the Requester dialog box. Parameters differ slightly with each type of report request.

Table 3-1. Required Database Parameters for SLA Reports

Parameters	Description
Bulkstats db Parameters	
Bulkstats db password	Password for Bulkstats data server (default=superbase).
Bulkstats db servername	Bulkstats data server name (default=CASCBSTAT).
Bulkstats db username	Bulkstats database user name (default=sa).
Bulkstats db name	Bulkstats database name (default=cascstat).
CascadeView (NavisCore) db Parameters	
CascadeView db password	Password for CascadeView (NavisCore) db server (default=superbase).
CascadeView db servername	CascadeView (NavisCore) database server name (default=CASCADE).
CascadeView db username	CascadeView (NavisCore) database user name (default=sa).
CascadeView db name	CascadeView (NavisCore) database name (default=cascview).
Start/End Date & Report Title Parameters	
Report Start Date (mm/dd/yy)	Start date of the report period (default placeholder=01/01/1980, which converts to the current date). Start dates always begin at 12 AM on the specified date.
Report End Date (mm/dd/yy)	End date of the report period (default placeholder=01/01/1980, which converts to the current date). End dates always end at 11:59 PM on the specified date. If you accept the default Start Date and End Date, the Report Server runs the report for the current date.
Report Title	Title of report. If you want a unique report title on the report document, enter it in this field. (default=generic name of report)

Table 3-2. Required SLA Threshold Parameters

Threshold Parameters	Description
FDR Threshold	Frame Delivery Ratio Threshold — Ratio of frames received over those that were sent (default=95.5).
FTD Threshold	Frame Transit Delay Threshold — Average delay of frames traveling from one end of the circuit to the other (default=500).

Table 3-3. Optional SLA Report Parameters

Parameters	Description
Ad Hoc Parameters	
A Restrict to Circuit	Restrict the report data to the specified circuit(s). Separate multiple circuits with commas.
A Customer Name	Restrict the report to the circuits belonging to this customer. Customer Names are defined in CascadeView. If you do not specify a Customer Name or Customer ID, the report will include all circuits belonging to all customers. Separate multiple names with commas.
A Customer ID	Restrict the report to the circuits with this Customer ID. Customer IDs are defined in CascadeView. If you do not specify a Customer Name or Customer ID, the report will include all circuits belonging to all customers. Separate multiple IDs with commas.
Optional Output Parameters	
Bundle Rox in Roi	Bundle executable with the report (default=false).
Headline	Headline that should appear in the HTML channel message.
Output File Name	Name of output file (default= <*executable name*>.roi) You can enter an absolute pathname as long as the folder already exists.
Version Name	Unique version name.
Exception Report Parameter	
Maximum number of Problem PVCs	The number of circuits to display in the exception report as “top offenders,” in other words, the circuits with the worst performance averages (default=5)

Opening the Report Document

If the Completed folder lists the report request as successfully completed, you can view the report document with the appropriate viewer. Actuate clients can display standard ROI reports; browsers can display HTML reports.

To view a report document:

1. Open the Report Server directory that contains the report document.

   Figure 3-4 illustrates a directory that contains report executables and report documents. You can distinguish between files by referring to the Type field.

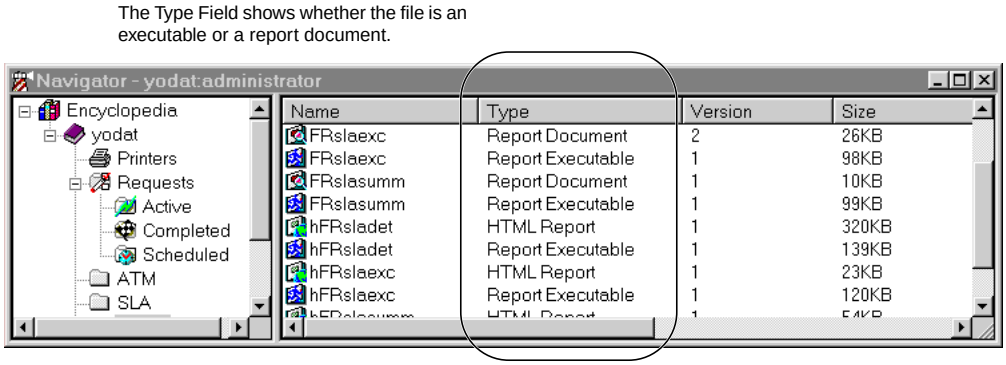


Figure 3-4. Report Executables and Report Documents

2. Open the report document in one of the following ways:
   - To open the most recent version of the report document:
     - For Actuate clients, double-click the icon of the report document or right-click the icon to bring up the Context menu. Then select View Report.
     - For web browsers, click the underlined report name.
   - To open a specific version of the report document:
     - For Actuate clients, double-click the version number listed under the document name or right-click the version number to bring up the Context menu. Then select View Report.
     - For web browsers, click the underlined version number.

   The report document appears. Figure 3-5.

Viewing the Report Document on an Actuate Client

Figure 3-5 illustrates a SLA sample report document viewed from an Actuate client. You can use the scrollbars and toolbar buttons to move through the whole report document.

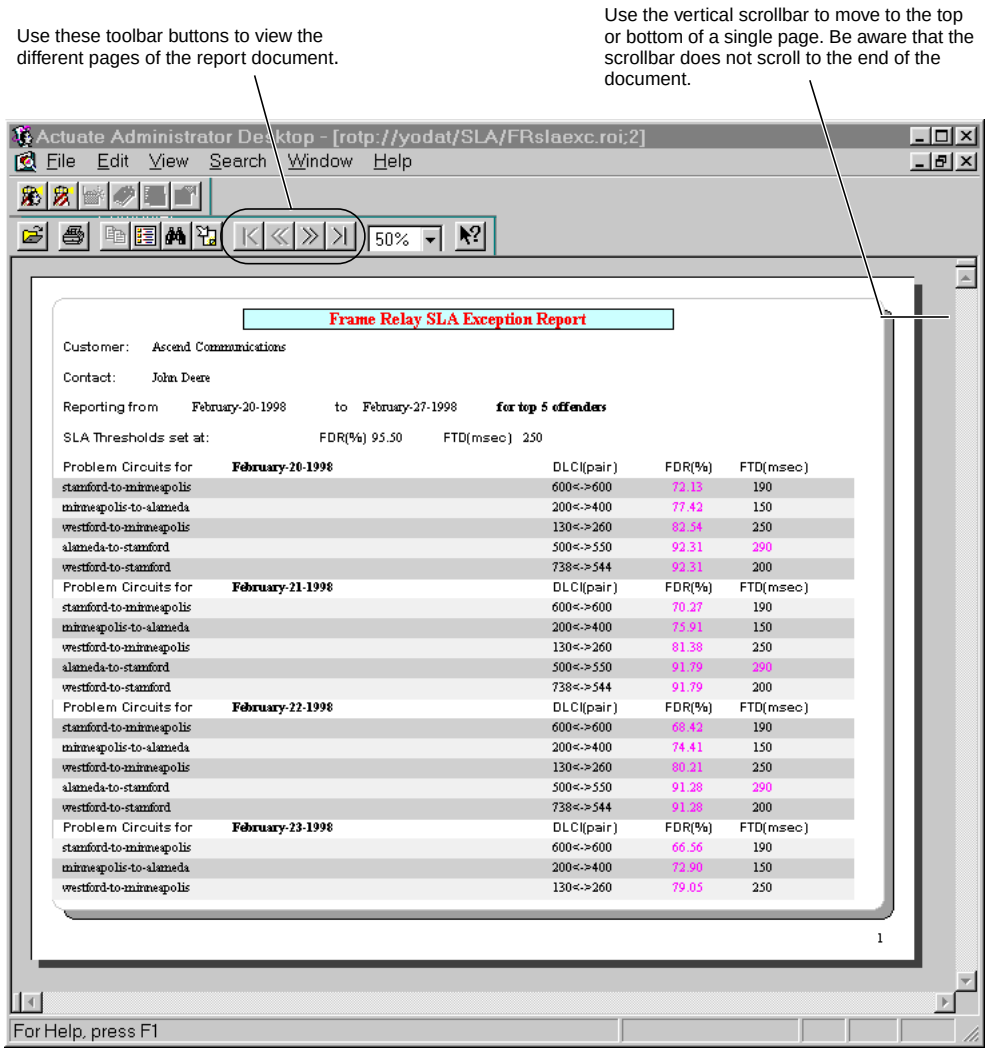


Figure 3-5. Sample ROI Report Document

Viewing a Report Document on a Web Browser

Figure 3-6 illustrates a sample report document viewed from a web browser. You can use the vertical scroll bar to move through the whole report document or click on a Table of Contents entry to move to a specific section of the report.

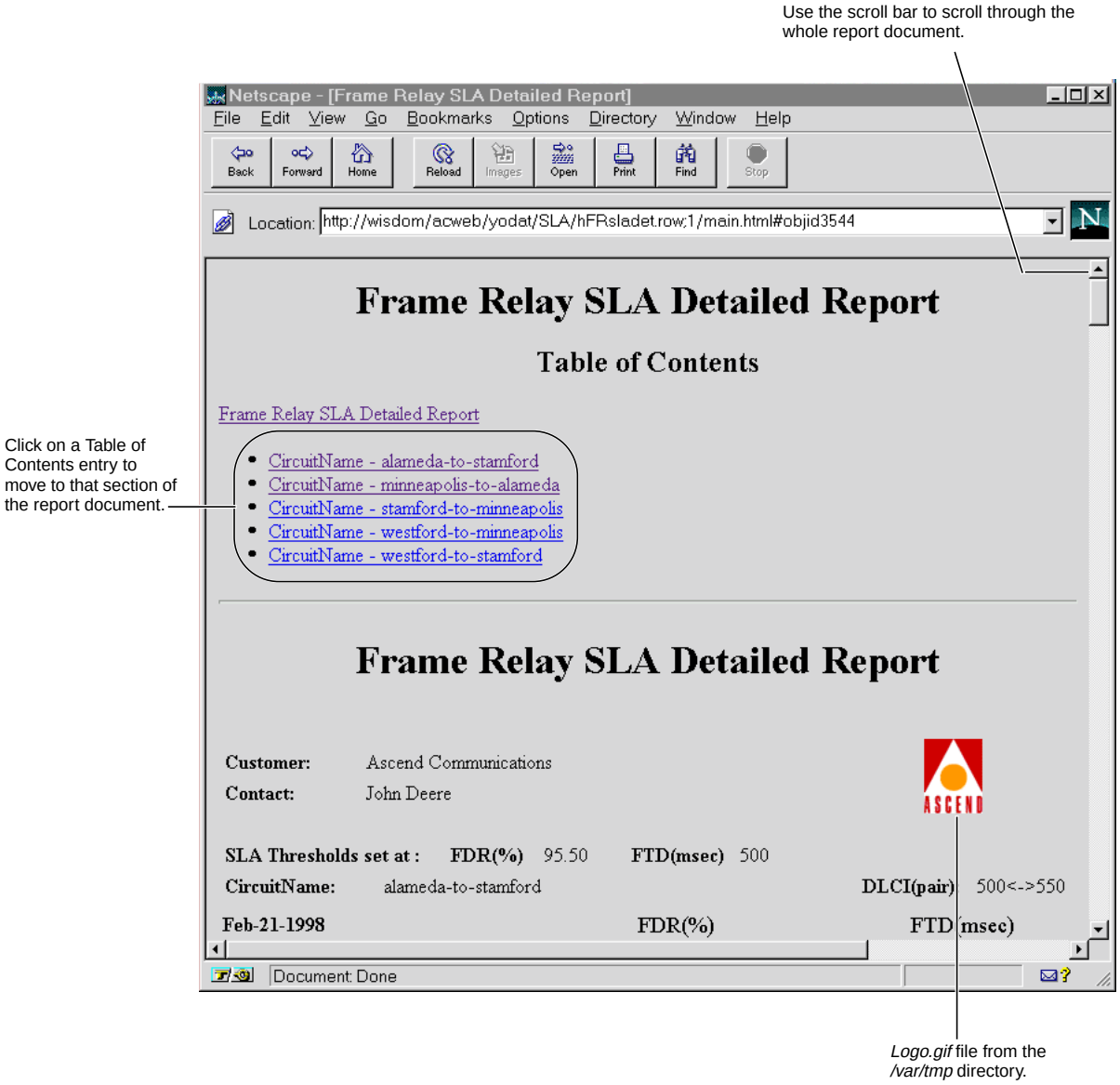


Figure 3-6. Sample HTML Report Document

Customizing the Logo for HTML Reports

HTML reports, by default, pull in a logo file called *Logo.gif* from the */var/tmp* directory on the Report Server system. This logo appears next to the Customer Name and Contact information in the header of the report (see Figure 3-6). When you first create SLA HTML reports, the report will contain the Ascend logo or the transparent logo that you copied into the *Logo.gif* file during installation. However, if you wish, you can create your own logo for HTML reports.

These are the important points to remember if you customize your HTML report logo:

- The logo should be 1.25 x 1.25 inches in size or smaller. If you create a logo that is larger, header information on the report may appear misaligned.
- The full pathname of the new logo file must be */var/tmp/Logo.gif*. (The first letter of the filename is capitalized.)
- The logo must be a GIF graphic.

To customize the SLA HTML report logo:

1. Use a graphic application to design a 1.25 x 1.25-inch logo.
2. Give the logo file a descriptive name (so you can identify it later) and save it in GIF format.
3. Copy your logo to the */var/tmp* directory on your Report Server system.
4. Use the following command to overwrite the *Logo.gif* file with your customized logo file:

   `cp <your_logo_file> Logo.gif`

   You are now ready to generate SLA HTML reports with a customized logo.

Do not delete the */var/tmp/Logo.gif* file. If the Report Generator fails to locate the Logo.gif file, it will not successfully complete report generation.

A

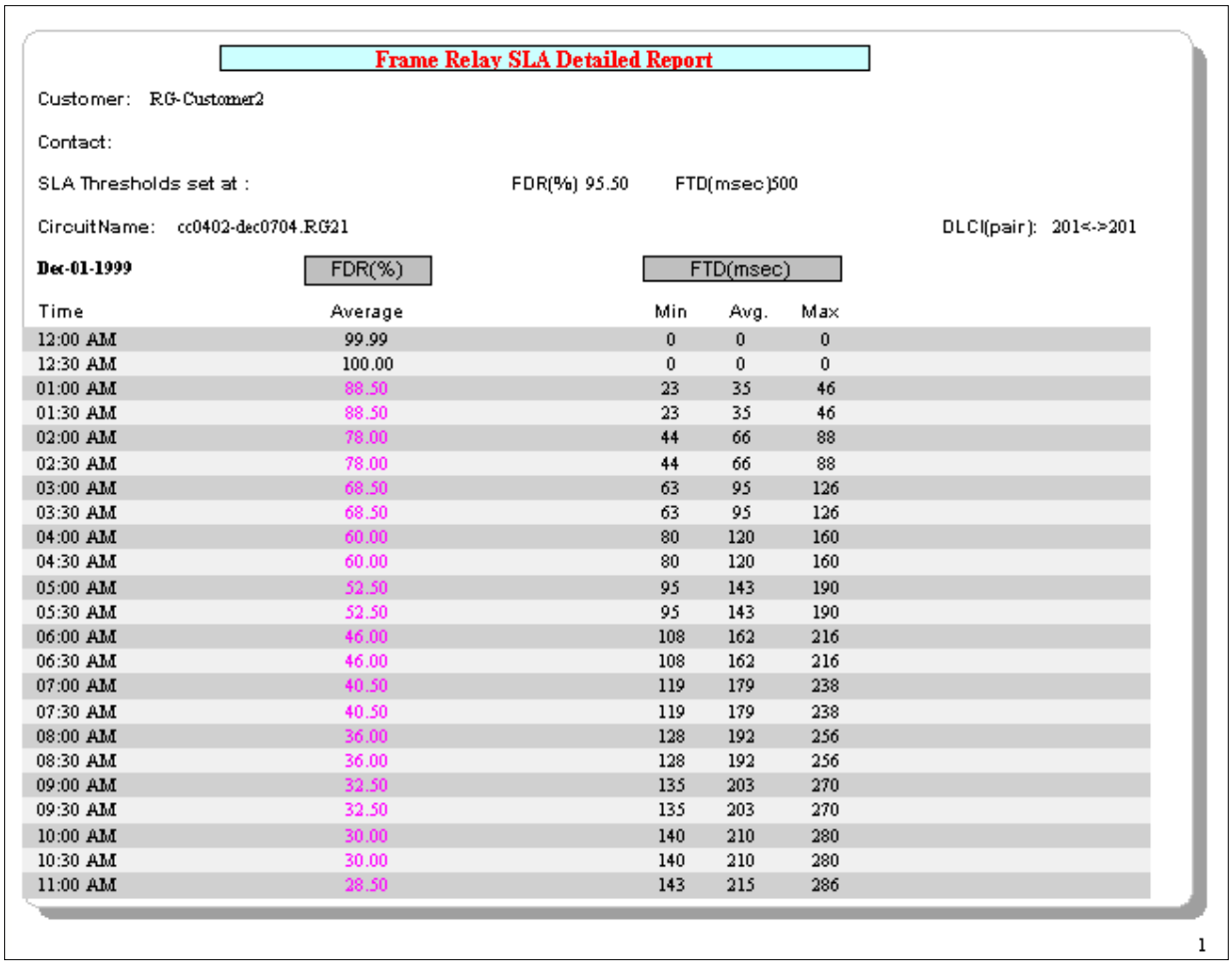
Field Descriptions for SLA Reports

This appendix provides field descriptions for the following sample SLA reports:

- Frame Relay SLA Detailed Report
- Frame Relay SLA Exception Report
- Frame Relay SLA Summary Report

The appendix also provides the formulas used for calculating the FDR and FTD values displayed in SLA reports.

Frame Relay SLA Detailed Report



Frame Relay SLA Detailed Report

Customer: RG-Customer2

Contact:

SLA Thresholds set at : FDR(%) 95.50 FTD(msec)500

CircuitName: cc0402-dec0704.RG21 DLCI(pair): 201<->201

Dec-01-1999	FDR(%)	FTD(msec)		
Time	Average	Min	Avg.	Max
12:00 AM	99.99	0	0	0
12:30 AM	100.00	0	0	0
01:00 AM	88.50	23	35	46
01:30 AM	88.50	23	35	46
02:00 AM	78.00	44	66	88
02:30 AM	78.00	44	66	88
03:00 AM	68.50	63	95	126
03:30 AM	68.50	63	95	126
04:00 AM	60.00	80	120	160
04:30 AM	60.00	80	120	160
05:00 AM	52.50	95	143	190
05:30 AM	52.50	95	143	190
06:00 AM	46.00	108	162	216
06:30 AM	46.00	108	162	216
07:00 AM	40.50	119	179	238
07:30 AM	40.50	119	179	238
08:00 AM	36.00	128	192	256
08:30 AM	36.00	128	192	256
09:00 AM	32.50	135	203	270
09:30 AM	32.50	135	203	270
10:00 AM	30.00	140	210	280
10:30 AM	30.00	140	210	280
11:00 AM	28.50	143	215	286

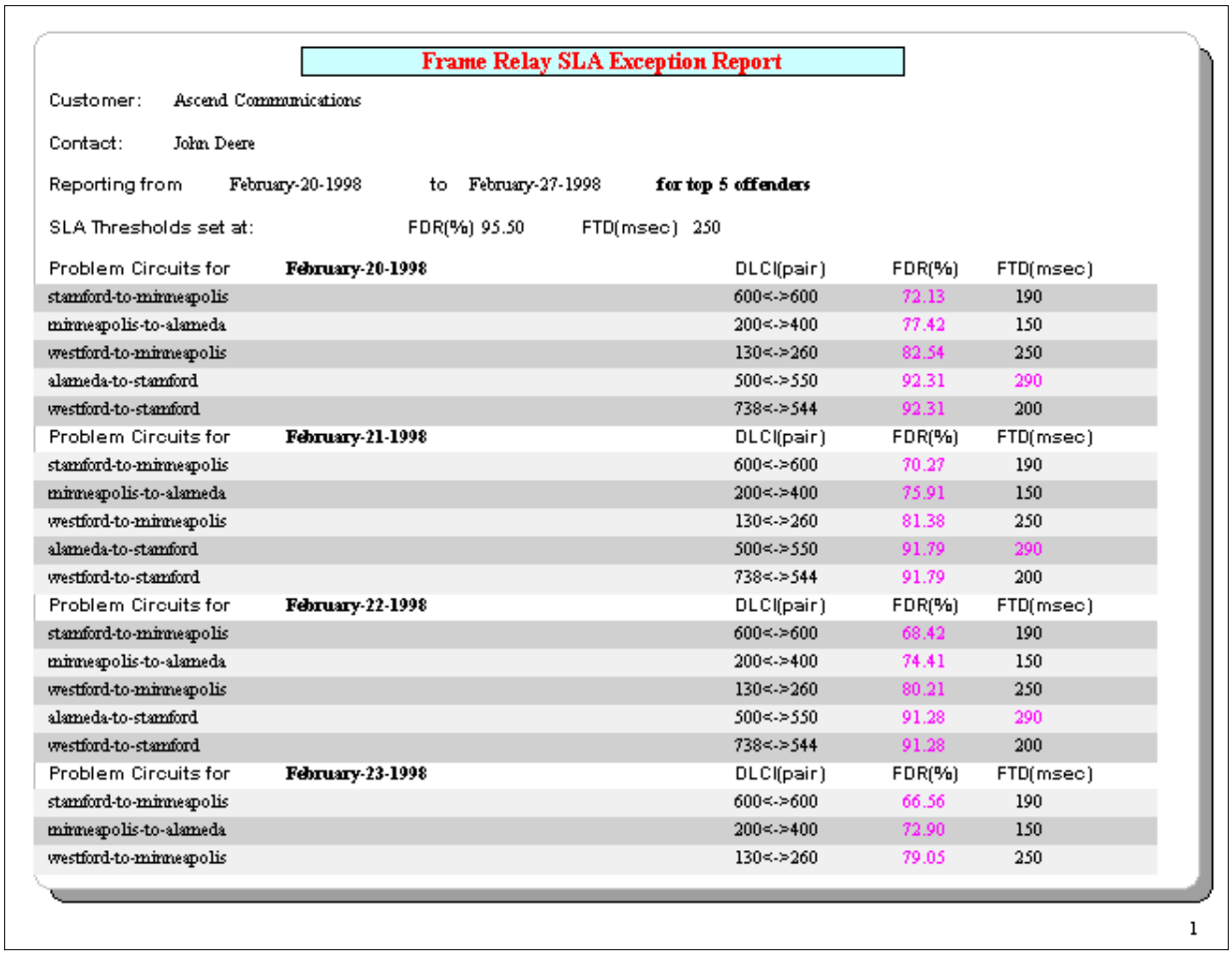
1

Figure A-1. Frame Relay SLA Detailed Report (FRsladet.roi)

Table A-1. FR SLA Detailed Report Fields

Field	Description
Customer	Customer assigned to this PVC. This entry is defined in NavisCore. For more information, see Appendix C, "Defining Customer Names in NavisCore."
Contact	Contact person. This is an optional entry in NavisCore and SLA Reports. If the Contact field is not defined in NavisCore, the field will be empty in the SLA report.
SLA Thresholds set at:	Frame Delivery Ratio and Frame Transit Delay thresholds specified by the Service Provider. These thresholds define the class of service guaranteed by the Service Provider in the SLA contract. Customers are guaranteed FDR rates *greater than* the FDR threshold rate specified and FTD rates *less than* the FTD threshold rate specified. Default FDR rate = 95.5%. Default FTD rate = 500 milliseconds.
FDR(%)	Frame Delivery Ratio. Ratio of frames received over those that were sent. In other words, the percentage of frames associated with a customer's PVC that are delivered successfully. See the formula for FDR on page A-8. FDR values appear red if they are *less than* the guaranteed FDR threshold value defined by the SLA contract.
FTD(msec)	Frame Transit Delay in milliseconds. Average delay of frames traveling from one end of the circuit to the other. The start and end points relate to Edge-to-Edge service, as opposed to End-to-End service. See the formula for FTD on page A-8. FTD values appear red if they are *greater than* the guaranteed FTD threshold value defined by the SLA contract.
CircuitName	Name of the circuit.
DLCI (pair)	Data Link Circuit Identifier. The two end points that identify a specific Permanent Virtual Circuit (PVC).

Frame Relay SLA Exception Report



Frame Relay SLA Exception Report

Customer: Ascend Communications

Contact: John Deere

Reporting from February-20-1998 to February-27-1998 **for top 5 offenders**

SLA Thresholds set at: FDR(%) 95.50 FTD(msec) 250

Problem Circuits for	**February-20-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis		600<->600	72.13	190
minneapolis-to-alameda		200<->400	77.42	150
westford-to-minneapolis		130<->260	82.54	250
alameda-to-stamford		500<->550	92.31	290
westford-to-stamford		738<->544	92.31	200
Problem Circuits for	**February-21-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis		600<->600	70.27	190
minneapolis-to-alameda		200<->400	75.91	150
westford-to-minneapolis		130<->260	81.38	250
alameda-to-stamford		500<->550	91.79	290
westford-to-stamford		738<->544	91.79	200
Problem Circuits for	**February-22-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis		600<->600	68.42	190
minneapolis-to-alameda		200<->400	74.41	150
westford-to-minneapolis		130<->260	80.21	250
alameda-to-stamford		500<->550	91.28	290
westford-to-stamford		738<->544	91.28	200
Problem Circuits for	**February-23-1998**	DLCI(pair)	FDR(%)	FTD(msec)
stamford-to-minneapolis		600<->600	66.56	190
minneapolis-to-alameda		200<->400	72.90	150
westford-to-minneapolis		130<->260	79.05	250

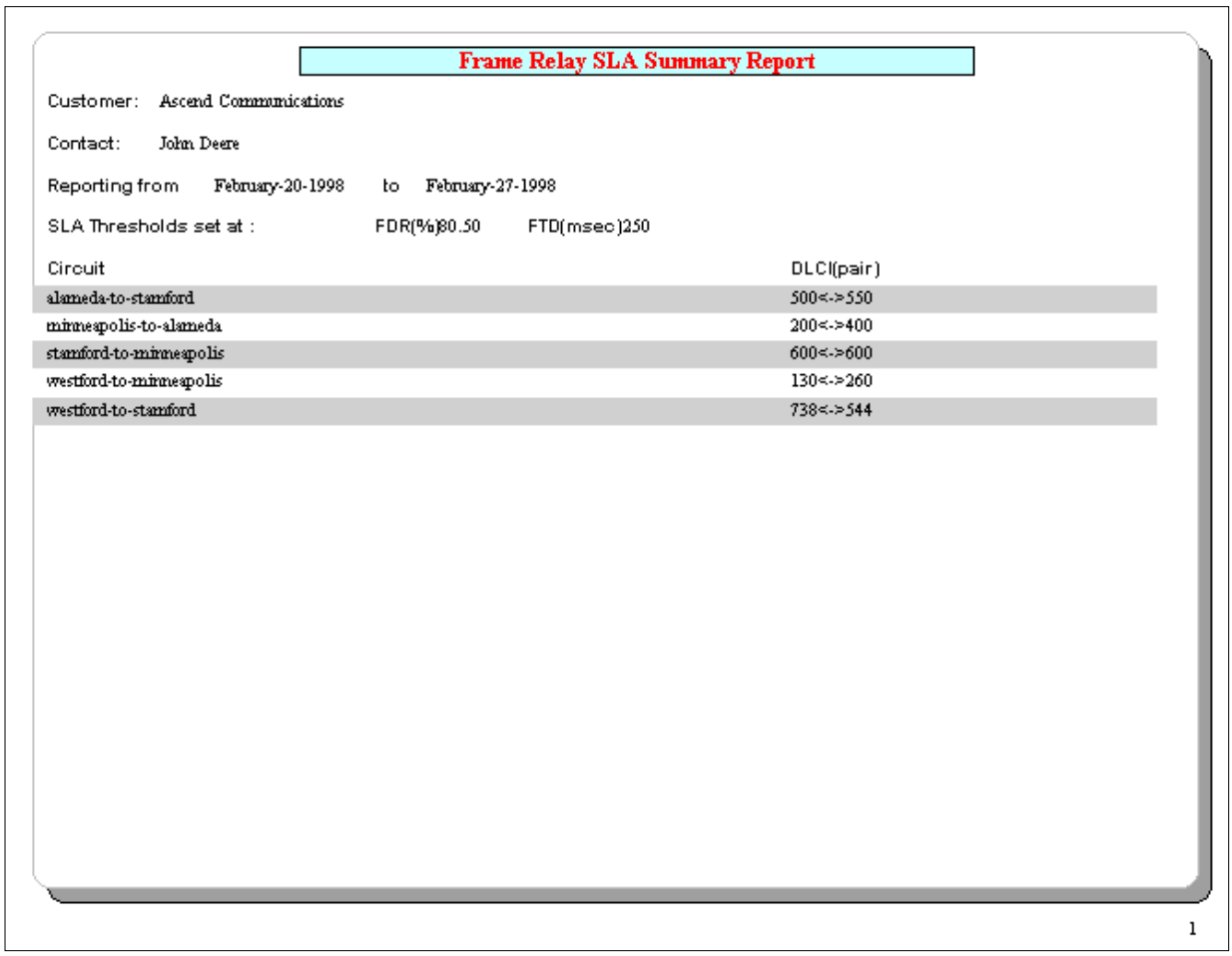
1

Figure A-2. Frame Relay SLA Exception Report (FRslaexc.roi)

Table A-2. FR SLA Exception Report Fields

Field	Description
Customer	Customer assigned to this PVC. This entry is defined in NavisCore. For more information, see Appendix C, "Defining Customer Names in NavisCore."
Contact	Contact person. This is an optional entry in NavisCore and SLA Reports. If the Contact field is not defined in NavisCore, the field will be empty in the SLA report.
Reporting from:	Start and end-time of the report. The customer specifies these times in the SLA report request. The minimum amount of time is one day.
for N top offenders	This entry specifies the number (N) of "top offender" circuits that the user wants included in the report. The user who creates the report request specifies this number in the report request. Problem circuits are sorted according to the severity of the performance problem. The circuit with the worst performance appears at the top of the Problem Circuit list. The Report Generator uses FDR values as the primary sort key and FTD values as the secondary sort key. If two FDR values are the same, the Report Generator sorts on FTD values.
SLA Thresholds set at:	Frame Delivery Ratio and Frame Transit Delay thresholds specified by the Service Provider. These thresholds define the class of service guaranteed by the Service Provider in the SLA contract. Customers are guaranteed FDR rates *greater than* the FDR threshold rate specified and FTD rates *less than* the FTD threshold rate specified. Default FDR rate = 95.5%. Default FTD rate = 500 milliseconds.
DLCI (pair)	Data Link Circuit Identifier. The two end points that identify a specific Permanent Virtual Circuit (PVC).
FDR(%)	Frame Delivery Ratio. Ratio of frames received over those that were sent. In other words, the percentage of frames associated with a customer's PVC that are delivered successfully. See the formula for FDR on page A-8. FDR values appear red if they are *less than* the guaranteed FDR threshold value defined by the SLA contract.
FTD(msec)	Frame Transit Delay in milliseconds. Average delay of frames traveling from one end of the circuit to the other. The start and end points relate to Edge-to-Edge service, as opposed to End-to-End service. See the formula for FTD on page A-8. FTD values appear red if they are *greater than* the guaranteed FTD threshold value defined by the SLA contract.
DLCI (pair)	Data Link Circuit Identifier. The two end points that identify a specific Permanent Virtual Circuit (PVC).

Frame Relay SLA Summary Report



Frame Relay SLA Summary Report

Customer: Ascend Communications

Contact: John Deere

Reporting from February-20-1998 to February-27-1998

SLA Thresholds set at : FDR(%)80.50 FTD(msec)250

Circuit	DLCI(pair)
alameda-to-stamford	500<->550
minneapolis-to-alameda	200<->400
stamford-to-minneapolis	600<->600
westford-to-minneapolis	130<->260
westford-to-stamford	738<->544

1

Figure A-3. Frame Relay SLA Summary Report (FRslasumm.roi)

Table A-3. FR SLA Summary Report Fields

Field	Description
Customer	Customer assigned to this PVC. This entry is defined in NavisCore. For more information, see Appendix C, "Defining Customer Names in NavisCore."
Contact	Contact person. This is an optional entry in NavisCore and SLA Reports. If the Contact field is not defined in NavisCore, the field will be empty in the SLA report.
Reporting from:	Start and end-time of the report. The user specifies these times in the SLA report request. The minimum amount of time is one day.
SLA Thresholds set at:	Frame Delivery Ratio and Frame Transit Delay thresholds specified by the user. These thresholds define the class of service guaranteed by the Service Provider in the SLA contract. Customers are guaranteed FDR rates *greater than* the FDR threshold rate specified and FTD rates *less than* the FTD threshold rate specified. Default FDR rate = 95.5%. Default FTD rate = 500 milliseconds.
FDR(%)	Frame Delivery Ratio. Ratio of frames received over those that were sent. In other words, the percentage of frames associated with a customer's PVC that are delivered successfully. See the formula for FDR on page A-8. FDR values appear red if they are *less than* the guaranteed FDR threshold value defined by the SLA contract.
FTD(msec)	Frame Transit Delay in milliseconds. Average delay of frames traveling from one end of the circuit to the other. The start and end points relate to Edge-to-Edge service, as opposed to End-to-End service. See the formula for FTD on page A-8. FTD values appear red if they are *greater than* the guaranteed FTD threshold value defined by the SLA contract.
Circuit	Name of the circuit.
DLCI (pair)	Data Link Circuit Identifier. The two end points that identify a specific Permanent Virtual Circuit (PVC).

FDR and FTD Formulas

Frame Delivery Ratio (FDR)

$$FDR = \frac{OutFrames}{InFrames - InDiscards}$$

where:

OutFrames = the number of frames sent by the network at the egress circuit.

InFrames = the number of frames received by the network at the ingress circuit.

InDiscards = the number of frames received by the network at the ingress circuit that were discarded.

Specific FDR Implementation for SLA Reports

FDR statistics are retrieved from the FrcktStat table in the Bulk Statistics database as follows:

OutFrames = cktOutframes

InFrames = cktInframes

InDiscards = cktInDiscards

FDR is calculated as the average FDR for both directions of the circuit.

Frame Transit Delay (FTD)

$$FTD = T(0) - T(1)$$

where:

T(0) = the time at which the frame entered the network from the egress circuit.

T(1) = the time at which the frame was received at the ingress circuit.

Specific FTD Implementation for SLA Reports

FTD is derived from the cktRtAvgDelay parameter in the FrcktStat table of the Bulk Statistics database. The cktRtAvgDelay parameter records the round-trip, average delay value. FTD is calculated as follows:

$$FTD = \frac{cktRtAvgDelay}{2}$$

B

Uninstallation Procedures

This appendix describes how to uninstall the following components of the SLA Reports product:

- The SLA report executables located on the Administrator Desktop system.
- The Logo files located on the Report Server system.

For complete Report Generator uninstallation procedures, see Appendix B of the *NavisXtend Report Generator User's Guide*.

Uninstalling Report Executables

To uninstall SLA report executables from the Administrator Desktop system:

1. Log on to the Administrator Desktop system.
2. Choose the Start button and select Settings => Control Panel.
3. In the Control Panel, select Add/Remove Programs.

   The Add/Remove Programs dialog box appears.
4. On the Install/Uninstall page, select SLA Reports.
5. Choose the Add/Remove button.
6. In the confirmation dialog box, choose Yes.

The Windows Add/Remove program uninstalls SLA report executables and deletes the SLA Reports directory.

Removing Logo Files from the Report Server System

To remove the logo files from the Report Server system:

1. Log on to the Report Server system.
2. To move to the */var/tmp* directory, enter:

   ```
   cd /var/tmp
   ```
3. Use the **rm** command to delete Logo files:
   - To delete the two logo files shipped with SLA Reports, enter:

     ```
     rm Ascend.gif
     rm blank.gif
     ```
   - To delete the Logo.gif file, enter:

     ```
     rm Logo.gif
     ```
   - Use the **rm** command to delete any other GIFs that you created for HTML reports.

C

Defining Customer Names in NavisCore

SLA report information is organized by the Customer Name associated the circuit. The Report Generator retrieves SLA statistics that relate to a specific customer and then organizes the information for the report. The Report Generator will not retrieve SLA data for those PVCs that lack a Customer Name.

You should be aware that the Customer Name parameter may not always be defined in NavisCore. NavisCore does not require that network administrators enter Customer Name and ID information when they configure circuits. Since the SLA report executables only retrieve data for PVCs that are associated with a Customer Name, you may need to define this parameter in NavisCore before you can generate SLA reports.

This appendix shows you how to define the Customer Name parameter in NavisCore. For more information, see the *Network Configuration Guide for B-STDX/STDX*.

Associating a Customer Name with a Circuit

To define the Customer Name associated with a circuit:

1. Open NavisCore and navigate to your network map.
2. From the Administer menu, select Cascade Parameters ⇒ Set All Customers.

   The Set All Customers dialog box appears.
3. Choose Add.

   The Add Customer dialog box appears.
4. Complete the fields in the Add Customer dialog box as follows:

   Name — Enter a unique customer name. NavisCore will prompt you for another name if the name is already in use.

   Customer ID — Enter a unique number. NavisCore will prompt you for another number if the number is already in use.

   Phone# — Enter the phone number.

   Contact — Enter the contact name.

   Comments — Enter any additional comments.

   VPN Name — You do not have to select the Virtual Private Network (VPN). It is not used by the Report Generator.
5. If desired, select the correct VPN from the list at the bottom of the dialog box. (This is an optional parameter.) The correct name should appear in the VPN Name field.
6. Choose OK to save the information and return to the Set All Customers dialog box.

   The new information now appears in the Set All Customers dialog box.
7. Repeat Steps 3 through 6 for each additional customer.
8. When you are finished defining customer names, choose Close to return to the network map.

   Figure C-1 illustrates the steps in this section.

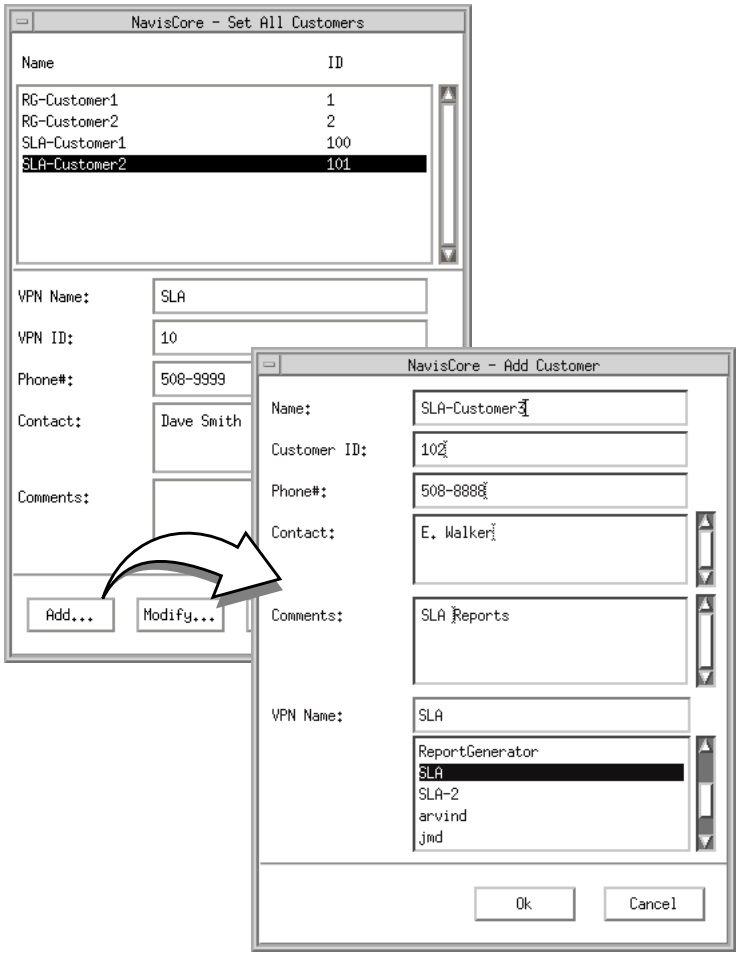


Figure C-1. Set All and Add Customer Dialog Boxes

D

Troubleshooting Problems

This appendix provides suggestions for troubleshooting the problems with SLA Reports.

Problems are grouped as follows:

- Version numbers
- Performance issues
- Problems with report generation
- Problems with report documents
- Error messages

Version Numbers

The version number of the Actuate Administrator Desktop product is displayed on a splash screen when you launch the Administrator Desktop. Note, however, that this is not the version number of the Ascend SLA Reports product. Because the SLA Reports product runs on an Actuate product (a third-party application), the version number of SLA Reports is not immediately visible when you launch the Administrator Desktop or when you generate or view reports.

To locate the version number of SLA Reports:

1. Log on to the Administrator Desktop system.
2. From the Start button menu, select Run.
3. In the Run dialog box, enter **regedit** and choose OK.
4. Select HKEY_LOCAL_MACHINE =>SOFTWARE =>Ascend Communications.
5. In the Ascend Communications folder, select SLA Reports. You will see the version number of SLA Reports on a folder icon.

Performance Issues

Report Generator performance is dependent on the performance of the Sybase SQL server that contains the Bulk Statistics database. You may be able to improve the performance of the Report Generator by tuning the Sybase SQL server. Ask your database administrator to check the SQL server's total memory configuration. If memory is set at 40960, the database administrator should reconfigure it to at least 122880.

Problems with Generating Reports

Problem: You cannot generate an HTML report.

Check the following:

- Make sure you have a *Logo.gif* file in the */var/tmp* directory of the Report Server system. The HTML executable will not generate a report if it cannot locate this file.
- Verify that the X server is running. The X server must be running because the Report Server uses X Windows resources to create HTML graphs.
  - In an OpenWindows environment, verify that the X Windows process (xinit) is running. Log on the X server system and enter the following command:

    ```
    ps -aef | grep xinit
    ```

    If you do not see the */usr/openwin/bin/xinit* process listed, start the system's windowing manager. It will automatically start the X server.
  - In a CDE environment, look for an X session process. Refer to the CDE documentation for information about starting the X server.
  - To make sure the Report Server has access to the X server, enter the following command on the X server system:

    ```
    xhost <Report Server system name>
    ```

Problems with Report Documents

Problem: The report lacks a Customer Name or Contact.

Make sure the Customer Name or Contact value is set in the NavisCore Customer ID profile. See Appendix C, "Associating a Customer Name with a Circuit."

Problem: The report is empty.

Check the following:

- Make sure the NavisCore Customer ID profile is complete.

  The Report Generator retrieves SLA statistics that relate to a specific customer and will not retrieve data for PVCs that lack a Customer ID/Name. For information about defining customer names in NavisCore, see Appendix C, "Associating a Customer Name with a Circuit."
- Check to see if there is data in the Bulk Statistics database for the selected dates.

  An empty report does not necessarily indicate a problem with the Report Server. It may simply mean that data does not exist in the Bulk Statistics or NavisCore databases.

Error Messages

Basic Error: 75

The error appears in this format:

```
Status no.1:
Basic Error: 75
Module: html.bas
Line 144
```

This error indicates that the Report Server could not save the HTML file to the requested destination folder. If you have a problem saving a report to a folder, check the following:

- Make sure you have write permission to the destination folder.
- Make sure you specified the name of the destination folder correctly.
  - From the browser, check the output name at the bottom of the Requester page.
  - From the Actuate client, check the output name on the Distribution page. If you are specifying the full path name, the radio button for Absolute folder should be selected.

Basic Error: 1011

The status of the report is “Request Failed.” The error appears in this format:

```
Status no.1:
Basic Error: 1011
Module: db.bas
Line 144
```

This error indicates that the Report Generator could not connect to the NavisCore or Bulk Statistics databases.

Check the following:

- Make sure that you entered the correct set of Bulk Statistics and NavisCore database parameters in the Report Request.
- Read the full status message carefully. A second message may come directly from the SQL server indicating the reasons for the problem.

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