



# **Alcatel 1677 SONET Link Release Notes**

**Release V2.0R2.0**

**Part No. 105501-A  
Revision 02  
September 2002**

## Alcatel 1677 SONET Link Release Notes

## Topics Covered

This document provides the following information about the Alcatel 1677 SONET Link, Release V2.0R2.0.

### General Information About This Release

- Software Revisions
- Cards Supported
- Related Documentation

### Hardware and Software Requirements

- UNIX Server Configuration
- PC Client Configuration
- UNIX Client Configuration

### Startup and Installation Information

- Starting up the Alcatel 1677 SONET Link
- Reinstalling the Alcatel 1677 SONET Link system software
- Preparing the Solaris system for the initial Oracle and *ONset* EMS installation
- Installing the Oracle 9.0.1 Enterprise Edition for Solaris
- Performing the post-installation of Oracle 9.0.1 for Solaris
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### Operating Guidelines and Restrictions

- 1677 SONET Link
- *ONset* EMS
- TL1
- Configuring loopbacks
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## General Information About This Release

### Software Revisions

Release V2.0R2.0 comprises the Alcatel 1677 SONET Link system, the Modular Optical System, and the following software revisions:

Alcatel 1677 SONET Link Runtime Software	V2.0R2.0-01
Alcatel 1677 SONET Link Diagnostics	V2.0R2.0-02
Alcatel 1677 SONET Link Bootcode	V2.0R1.0-17
ONset EMS Software	V2.0R1.0-21

### Cards Supported

This release supports the installation of the following I/O cards (IOCs) in the 1677 SONET Link:

- DS3
- OC-3
- OC-12
- OC-48
- OC-192

### Related Documentation

The components of this release are described in the following manuals:

- *Installing and Maintaining the Alcatel 1677 SONET Link*, 105498-A
- *Installing and Maintaining the Modular Optical System*, 105497-A
- *ONset EMS Administrator's Guide*, 105499-A
- *Alcatel 1677 SONET Link TL1 Interface User's Guide*, 105505-A

## Hardware Requirements for ONset EMS Installation

To install ONset EMS server and client, the system must meet the following *minimum* system configuration requirements:

### UNIX Server Configuration for Supporting 1 to 10 Nodes

- Recommended Server: SUN Enterprise 450
- CPU - 1 CPU (480 MHz)
- Physical Memory - 1 GB RAM (expandable)
- Disk Controllers - 2x Disk Controllers
- Hard Disk - 2x 36 GB HD
- CD ROM Drive
- Tape Backup (optional)
- Solaris 8 Operating System
- Oracle 9i database

### PC Client Configuration

- Recommended Workstation: Intel based PC
- CPU - 500 MHz or higher
- Physical Memory - 384 MB RAM or higher
- Hard Disk - 10 GB or higher
- CD ROM Drive
- Microsoft Windows NT or Microsoft Windows 2000

### UNIX Client Configuration

- Recommended Server: SUN Ultra 10+ workstation
- CPU - 400 MHz or higher
- Physical Memory - 512 MB RAM
- Hard Disk - 10 GB or higher
- CD ROM Drive
- Solaris 7 or 8 Operating System

## Starting Up the 1677 SONET Link

After powering up the 1677 SONET Link, you must run the 1677 SONET Link installation script to perform a new installation. The installation script enables the node to communicate with other 1677 SONET Link nodes and the ONset Server.

1. With the console connected to the console port on the front of the Timing Card (TC), log in.
2. Enter username **administrator** and the appropriate password. (If you have not yet defined a password, use the default password **astral**.)
3. If this is the first login, change the default password using the TL1 command **ED-PID**. (The default password is **astral** and the second password is user-defined, for example, **astral1**).
4. Define the node's IP address using the TL1 command **ED-NE**.
5. Define the node's Ethernet IP address using the TL1 command **ED-NE**. This address should be different from the node's IP address.
6. Define the SNMP community name, ONset EMS Server, and the ONset user name using the TL1 command **ENT-NE-SNMP**.
7. If needed, define appropriate IP routes using the TL1 command **ENT-NE-IPRT**.

The following session shows an example of the start-up procedure:

```
Alcatel - 1677 SONET Link
Copyright (c) 1999 - 2002, All rights reserved.
Version: v2.0R1.0-17
PowerPC 750/8260

CARD INITIALIZATION IN PROGRESS
INITIALIZING INCLUDED COMPONENTS
INITIALIZING SYSTEM MANAGER...
STARTUP COMPLETE.
Command Line Interpreter
Copyright (c) 2002 Alcatel, Inc., All Rights Reserved

PCM file load complete : CLI, TL1 and Snmpd enabled
NOTICE: This is a private computer system.
Unauthorized access may lead to prosecution.

on7000 TL1 Agent v5.0

NOTICE: This is a private computer system.
Unauthorized access may lead to prosecution.
```

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```
agent>act-user::administrator:100::*****;  
  
ALCATEL-1677SL 2002-07-25 14:58:12  
A 1 REPT EVT SESSION  
"administrator:Y,"  
/* */  
/* Last Login was never*/  
/* NOTE: Password has expired. Change the password with ED-PID command.*/  
/* */  
;  
  
ALCATEL-1677SL 2002-07-25 14:58:12  
M 100 COMPLD  
;  
agent>  
  
ALCATEL-1677SL 2002-07-25 14:58:12  
A 2 REPT EVT COM  
"CHASSIS:SEC,,07-25,14-58-12,,,,,\\"User administrator has started a console  
TL1 session.\""  
;  
agent>ed-pid:::101::*****,*  
  
ALCATEL-1677SL 2002-07-25 14:58:46  
M 101 COMPLD  
/* ED-PID */  
;  
  
ALCATEL-1677SL 2002-07-25 14:58:46  
A 3 REPT DBCHG  
"TIME=14-58-46,DATE=2002-07-25,SOURCE=101,USERID=administrator,DBCHGSEQ=3:ed-pid:"  
;  
agent>ed-ne:::102:::ipaddr=10.2.254.71,ipmask=255.255.255.255;  
  
ALCATEL-1677SL 2002-07-25 15:08:57  
M 102 COMPLD  
/* ED-NE */  
;  
  
ALCATEL-1677SL 2002-07-25 15:08:57  
A 5 REPT DBCHG  
"TIME=15-08-57,DATE=2002-07-25,SOURCE=102,USERID=administrator,DBCHGSEQ=4:  
ed-ne:::ipaddr=10.2.254.71,ipmask=255.255.255.255"  
;  
agent>ed-ne:::103:::ethipaddr=10.2.201.71,ethipmask=255.255.255.0;IP 103  
<IP 103  
<IP 103  
<  
  
ALCATEL-1677SL 2002-07-25 15:09:55  
M 103 COMPLD  
/* ED-NE */  
;  
  
ALCATEL-1677SL 2002-07-25 15:09:55  
A 7 REPT DBCHG  
"TIME=15-09-55,DATE=2002-07-25,SOURCE=103,USERID=administrator,DBCHGSEQ=5:  
ed-ne:::ethipaddr=10.2.201.71,ethipmask=255.255.255.0"  
;
```

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```
agent>ent-ne-snmpp:::104::sysadmin,readwrite,10.2.1.51,apc,v2trap,y;

ALCATEL-1677SL 2002-07-25 15:10:36
M 104 COMPLD
/* ENT-NE-SNMP */
;

ALCATEL-1677SL 2002-07-25 15:10:36
A 8 REPT DBCHG
"TIME=15-10-36,DATE=2002-07-25,SOURCE=104,USERID=administrator,DBCHGSEQ=6:ent-ne-
snmpp::sysadmin,readwrite,10.2.1.51,apc,v2trap,y"
;
agent>ent-ne-iprt:::105::10.2.1.0,255.255.255.0,10.2.201.254,1;

ALCATEL-1677SL 2002-07-25 15:11:08
M 105 COMPLD
/* ENT-NE-IPRT */
;

ALCATEL-1677SL 2002-07-25 15:11:08
A 9 REPT DBCHG
"TIME=15-11-08,DATE=2002-07-25,SOURCE=105,USERID=administrator,DBCHGSEQ=7:ent-ne-
iprt::10.2.1.0,255.255.255.0,10.2.201.254,1"
;
agent>
```

## Reinstalling 1677 SONET Link System Software

The Alcatel 1677 SONET Link is shipped with required system software pre-installed. However, if the need arises to reinstall the software, you can use either of the following procedures:

- Reinstalling system software using the 1677 SONET Link system software (recommended)
- Reinstalling system software after a Boot Failure or File Corruption

### Reinstalling System Software Using the 1677 SONET Link System Software (Recommended)

You can also use an FTP server to load the 1677 SONET Link system software from the 1677 SONET Link to the node's PCMCIA flash disk. The FTP server must have direct access to the 1677 SONET Link software. The following process copies the software from the installation CD-ROM to the FTP server and then to the 1677 SONET Link.

1. Insert the CD into the CD-ROM drive.
2. Copy the contents of the CD-ROM's **bin** directory to the FTP server's directory. This directory must be a subdirectory of the default FTP Site (for example, **/opt/ems/ftpboot/images**)
3. Connect to the workstation through either the console port on the Timing Card or a Telnet TL1 session.
4. Use the TL1 **act-user** command to log in as **administrator**, and enter the appropriate password (default is **astral**).



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5. Use the TL1 **COPY-RFILE** command to retrieve the files from the FTP server and store the files onto the flash disk. You must use the FTP server username/password that you specified for the FTP User Account.
6. Use the TL1 **OPR-DISK** command to activate the newly downloaded images.
7. Use the TL1 **INIT-SYS** command to reset the node.

The following session shows an example of reinstalling software from the operational software:

```
agent>copy-rfile::disk-a:200::imaged1,"ftp://test:test@10.2.1.1/on7000/v2images",
      "file:///release";IP 200
<IP 200
<IP 200
  ||
  ||
<IP 200
<IP 200
<

      ALCATEL-1677SL 2002-07-25 15:30:18
M 200 COMPLD
/* COPY-RFILE */
;
agent>opr-disk:::201::type=image,action=activate,src="release";IP 201
<IP 201
<IP 201
  ||
  ||
<IP 201
<IP 201
<

      ALCATEL-1677SL 2002-07-25 16:00:12
M 201 COMPLD
/* OPR-DISK */
;

      ALCATEL-1677SL 2002-07-25 16:00:12
A 17 REPT DBCHG
"TIME=16-00-12,DATE=2002-07-25,SOURCE=201,USERID=administrator,DBCHGSEQ=8:
  opr-disk::type=image,action=activate,src="release"
;
agent>init-sys::all:202::2;

      ALCATEL-1677SL 2002-07-25 16:07:25
M 202 COMPLD
/* INIT-SYS (Will reset entire node) */
;

      ALCATEL-1677SL 2002-07-25 16:07:25
A 19 REPT EVT COM
"CHASSIS:MANRESET,,07-25,16-07-25,,,,,:\\"Manual system reset\\""

```

## Reinstalling System Software after a Boot Failure or File Corruption

If the system fails to boot because it cannot find the 1677 SONET Link system software or the software has become corrupted, you can restore the 1677 SONET Link by reinstalling the system software during the boot process. Use the following procedure, which requires that the FTP server have direct access to the 1677 SONET Link system software CD-ROM:

1. Insert the CD into the CD-ROM drive.
2. Copy the contents of the CD-ROM's **bin** directory to the FTP server's directory. This directory must be a subdirectory of the default FTP Site (for example, **/opt/ems/ftpboot/images**)
3. Connect the workstation to the console port of a Timing Card (TC), and reboot the node.
4. Wait for the following message to appear during the boot process.

Press Any Key to Stop Auto-boot...

5. Press any key before the countdown completes to interrupt the boot process. The following prompt appears:

LOADER>

6. Define the node's Ethernet IP address and subnet mask using the `ethernet ip` command.
7. Optionally define the node's Gateway IP address using the `gateway ip` command.
8. Download the operational and diagnostic images using the `image download` command.
9. Remove the node's Ethernet IP address using the `ethernet ip clear` command, if desired.
10. Remove the node's Gateway IP address using the `gateway ip clear` command, if desired.
11. Activate the downloaded images using the `image activate` command.
12. Resume the boot process using the `reboot` command.

The following session shows an example of reinstalling software after a boot failure:

```
Alcatel - 1677 SONET Link
Copyright (c) 1999 - 2002, All rights reserved.
Version: v2.0R1.0-17
PowerPC 750/8260
Image source: A ( ff000000 )
```

Press any key to stop auto-boot...

6

← Carriage Return

```
LOADER> ethernet ip 10.2.201.71:ffffff00
LOADER> gateway ip 10.2.201.254
LOADER> image download release on7000/v2images 10.2.1.1 test test
netStart sra ..
MAC ADDRESS : 00D0FE00088D
Attached TCP/IP interface to motfcc0.
Attaching network interface lo0... done.
ok
```

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```
Downloading images to A10:/bin/release
ftp.. on7000/v2images/ccc.cmp => A10:/bin/release/ccc.cmp
Transferring file on7000/v2images/ccc.cmp
4049716
ftp.. on7000/v2images/swc.cmp => A10:/bin/release/swc.cmp
Transferring file on7000/v2images/swc.cmp
2315300
ftp.. on7000/v2images/dcc.cmp => A10:/bin/release/dcc.cmp
Transferring file on7000/v2images/dcc.cmp
1179784
ftp.. on7000/v2images/ccc_diag.cmp => A10:/bin/release/ccc_diag.cmp
Transferring file on7000/v2images/ccc_diag.cmp
1036972
ftp.. on7000/v2images/swc_diag.cmp => A10:/bin/release/swc_diag.cmp
Transferring file on7000/v2images/swc_diag.cmp
1185776
ftp.. on7000/v2images/dcc_diag.cmp => A10:/bin/release/dcc_diag.cmp
Transferring file on7000/v2images/dcc_diag.cmp
848908
ftp.. on7000/v2images/apc750.rom => A10:/bin/release/apc750.rom
Transferring file on7000/v2images/apc750.rom
3211264
ftp.. on7000/v2images/apc8260.rom => A10:/bin/release/apc8260.rom
Transferring file on7000/v2images/apc8260.rom
3211264
LOADER> image activate release
Activating images from A10:/bin/release
remove.. A10:/bin/last/swc_diag.cmp
remove.. A10:/bin/last/swc.cmp
remove.. A10:/bin/last/dcc_diag.cmp
remove.. A10:/bin/last/dcc.cmp
remove.. A10:/bin/last/ccc_diag.cmp
remove.. A10:/bin/last/ccc.cmp
remove.. A10:/bin/last/apc8260.rom
remove.. A10:/bin/last/apc750.rom
copy.. A10:/bin/apc8260.rom => A10:/bin/last/apc8260.rom
copy.. A10:/bin/apc750.rom => A10:/bin/last/apc750.rom
copy.. A10:/bin/dcc_diag.cmp => A10:/bin/last/dcc_diag.cmp
copy.. A10:/bin/swc_diag.cmp => A10:/bin/last/swc_diag.cmp
copy.. A10:/bin/ccc_diag.cmp => A10:/bin/last/ccc_diag.cmp
copy.. A10:/bin/dcc.cmp => A10:/bin/last/dcc.cmp
copy.. A10:/bin/swc.cmp => A10:/bin/last/swc.cmp
copy.. A10:/bin/ccc.cmp => A10:/bin/last/ccc.cmp
remove.. A10:/bin/apc8260.rom
remove.. A10:/bin/apc750.rom
remove.. A10:/bin/dcc_diag.cmp
remove.. A10:/bin/swc_diag.cmp
remove.. A10:/bin/ccc_diag.cmp
remove.. A10:/bin/dcc.cmp
remove.. A10:/bin/swc.cmp
remove.. A10:/bin/ccc.cmp
copy.. A10:/bin/release/ccc.cmp => A10:/bin/ccc.cmp
copy.. A10:/bin/release/swc.cmp => A10:/bin/swc.cmp
copy.. A10:/bin/release/dcc.cmp => A10:/bin/dcc.cmp
copy.. A10:/bin/release/ccc_diag.cmp => A10:/bin/ccc_diag.cmp
copy.. A10:/bin/release/swc_diag.cmp => A10:/bin/swc_diag.cmp
copy.. A10:/bin/release/dcc_diag.cmp => A10:/bin/dcc_diag.cmp
copy.. A10:/bin/release/apc750.rom => A10:/bin/apc750.rom
copy.. A10:/bin/release/apc8260.rom => A10:/bin/apc8260.rom
LOADER> ethernet ip clear
LOADER> gateway ip clear
LOADER> reboot
Reboot in progress...
```

## Preparing the Solaris System for the Initial Oracle and ONset EMS Installation

Before you install the Oracle 9.0.1 Enterprise Edition for Solaris, verify the following:

- You have at least Solaris 8 (5.8) O.S. installed with Solaris Operating System Patches version 108528-14+.
- At least 256 MB of RAM is required to install Oracle9i Server.
- At least 512 MB of swap space.
- You are administering NIS+, NIS, or None (recommended).
- The Oracle Software Partition is **/oracle** with a minimum size of 3.5 GB.
- The Oracle Database Partition is **/oradb** with a minimum size of 1.5 GB.
- The **/oracle** and **/oradb** partitions are configured on different physical disks, if possible. The partitions may have different names other than **oracle** and **oradb**, as long as you reference the names consistently for installation and applications.
- The CD drive can be auto-mounted.
- At least 5 GB of space is available on the disk where you will install the Oracle 9.0.1 software.
- At least 400 MB of space is available on the Solaris system disk for applications that the Oracle Installer will place in the **/tmp** directory.
- That you have the Oracle9i Release 9.0.1 Enterprise Edition CD-ROM.

Before you can install the Oracle 9.0.1 Enterprise Edition and the initial ONset EMS installation, you must perform the following pre-installation steps:

1. Login as the root user, as follows:

```
su - root
```

```
# DISPLAY="X_SERVER_MACHINE":0.0;export DISPLAY
```

(where "X\_SERVER\_MACHINE" is the name of the X server machine for the display)

2. If the "X\_SERVER\_MACHINE" is a remote machine, login as the root user and enter the command on the "X\_SERVER\_MACHINE" as follows:

```
#xhost +
```

The system displays "access control disabled, clients can connect from any host"

3. Add the following lines to `/etc/system` (to make Shared Memory and semaphore allocations):

```
set shmsys:shminfo_shmmax=4294967295
set shmsys:shminfo_shmmin=1
set shmsys:shminfo_shmmni=100
set shmsys:shminfo_shmseg=10
set semsys:seminfo_semmni=100
set semsys:seminfo_semmns=256
set semsys:seminfo_semmns=256
set semsys:seminfo_semopm=100
set semsys:seminfo_sevmx=32767
```

4. Start the admintool, as follows:

```
# /user/bin/admintool &
```

5. From the admintool, choose **Browse > Groups**, then **Edit > Add** to define the oinstall, dba, oper, apache and onset groups. For example:

```
Group Name: oinstall
Group ID: 101
Members List: oracle,apache
```

```
Group Name: dba
Group ID: 102
Members List: oracle
```

```
Group Name: oper
Group ID: 103
Members List:
```

```
Group Name: apache
Group ID: 104
Members List: apache
```

```
Group Name: onset
Group ID: 105
Members List: onms,test
```

As a result of these commands, the following lines are added to the `/etc/group` file:

```
oinstall::101: oracle
dba::102:oracle
oper::103:
apache::104:
onset::105:
```

6. From the admintool, choose **Browse > Users**, then **Edit > Add** to define to the system users: oracle, onms, test, and apache. For example:

User Name: **oracle**

Password: **oracle** or user-defined (Click **Cleared Until First Login**, and change it to **Normal Password**. You will be prompted to add the password and confirm it.)

User ID: **1001**

Primary Group: **oinstall**

Secondary Group: **dba**

Comment: **Oracle Database Manager**

Home Directory Path: **/opt/oracle**

Login Shell: **/bin/ksh**

User Name: **onms**

Password: **onms** or user-defined (Click **Cleared Until First Login**, and change it to **Normal Password**. You will be prompted to add the password and confirm it.)

User ID: **1002**

Primary Group: **onset**

Secondary Group: **oinstall**

Comment: **EMS application internal user account**

Home Directory Path: **/opt/onms**

Login Shell: **/bin/ksh**

User Name: **test**

Password: **test**

User ID: **1003**

Primary Group: **onset**

Secondary Group:

Comment: **EMS default ftp user account**

Home Directory Path: **/ftpboot**

Login Shell: **/bin/ksh**

User Name: **apache**

Password: **apache** or user-defined (Click **Cleared Until First Login**, and change it to **Normal Password**. You will be prompted to add the password and confirm it.)

User ID: **1004**

Primary Group: **apache**

Secondary Group: **oinstall**

Comment: **apache user**

Home Directory Path: **/opt/apache**

Login Shell: **/bin/ksh**

As a result of these commands, the following lines are added to the **/etc/passwd** file:

**oracle:x:1001:101:Oracle Database Manager:/opt/oracle:/bin/ksh**

**onms:x:1002:105:EMS application internal user account:/opt/onms:/bin/ksh**

**test:x:1003:105:EMS default ftp user account:/ftpboot:/bin/ksh**

**apache:x:1004:104:apache user:/opt/apache:/bin/ksh**

7. To modify the environment variables in **.profile** file for the oracle user, type:

```
# su - oracle
```

```
$ vi .profile (vi proficiency required)
```

Add the following environment variables:

```
DISPLAY="X_SERVER_MACHINE":0.0; export DISPLAY
```

(where "X\_SERVER\_MACHINE" is the name of the X server machine for the display)

```
ORACLE_SID="apconms"; export ORACLE_SID
```

```
ORACLE_BASE="/oracle/app/oracle"; export ORACLE_BASE
```

```
ORACLE_HOME="/oracle/app/oracle/product/9i";export ORACLE_HOME
```

```
PATH=$PATH:$ORACLE_HOME/bin:/bin:/usr/bin:/usr/sbin:/usr/ucb;;export PATH
```

```
LD_LIBRARY_PATH=$ORACLE_HOME/lib32;export LD_LIBRARY_PATH
```

```
CLASSPATH=$ORACLE_HOME/JRE:$ORACLE_HOME/jlib:$ORACLE_HOME/product/jlib;export CLASSPATH
```

8. To save the **.profile** file, type:

```
<Esc> wq <CR>
```

```
$ exit (To become the su user again)
```

9. To create the **.profile** file for the onms user, type:

```
# su - onms
```

```
$ cp /opt/oracle/.profile .
```

```
$ vi .profile
```

Add the following command line to the end of file:

```
. $ONMS_ROOT/bin/env.sh
```

10. To save the **.profile** file, type:

```
<Esc> wq <CR>
```

```
$ exit (To become the su user again)
```

11. Add the following line to **/etc/services**:

```
listener 1521/tcp #Oracle Net8 Listener
```

12. Add the following change owner and change group commands to change **/oracle** and **/oradbse**:

```
chown -R oracle /oracle
```

```
chgrp -R oinstall /oracle
```

```
chown -R oracle /oradbse
```

```
chgrp -R oinstall /oradbse
```

13. Reboot the system.

## Installing Oracle 9.0.1 Enterprise Edition Software for Solaris

The installation procedure for the Oracle 9.0.1 software will take about 2 hours.

To install the Oracle 9.0.1 Enterprise Edition for Solaris, perform the following steps:

1. Log in as oracle user:

```
# su - oracle
```

2. Set the DISPLAY as follows:

```
# DISPLAY="X_SERVER_MACHINE":0.0;export DISPLAY
```

(where "X\_SERVER\_MACHINE" is the name of the X server machine for the display)

3. If the "X\_SERVER\_MACHINE" is a remote machine, login as the root user and enter the command on the "X\_SERVER\_MACHINE" as follows:

```
#xhost +
```

The system displays "access control disabled, clients can connect from any host"

4. Place the Oracle9i Disk1 CD in the CD-ROM drive; the File Manager Disk1 window appears.
5. Close the File Manager Disk1 window (and do not use the command **cd /cdrom**) to avoid locking up the cdrom drive for disk changing later.
6. To start the installation, type the command **/cdrom/disk1/runinstaller**.

Once the Installer is started, the Welcome window appears.

7. The Inventory Location screen appears.

Take the default value of **/oracle/app/oracle/oraInventory**, and click **Next**.

The UNIX Group Name window appears.

8. In the UNIX Group Name field, specify the group that will have permission to update Oracle software on your system (type **oinstall**).
9. Click **Next**. You are prompted to run **/tmp/orainstRoot.sh** in another terminal window.

**Note:** A configuration script needs to be run as root before the installation can proceed. Please leave this window up, and run **/tmp/orainstRoot.sh** as root from **another** window, then return to this window, and click **OK** to continue.

10. The File Location window appears.

11. Take the default **/oracle/app/oracle/product/9i** location, and click **Next**.

The Available Products window appears.



12. Accept the default of **Oracle 9i Database** and click **Next**.

The Installation Types window appears.

13. Accept the default of **Enterprise Edition**, and click **Next**.

The Database Configuration window appears.

14. Accept the default of **General Purpose**, and click **Next**.

The Database Identification window appears.

15. Enter the hostname of the **Oracle Server machine** for **Global Database Name** field and take the default of **apconms** for **SID** field, and click **Next**.

The Database File Location window appears

16. In the Directory for Database Files field, enter the path of the database mount point, (type **/oradb**), and click **Next**.

The Database Character Set window appears

17. Accept the default of **Use Default Character Set**, and click **Next**.

The Summary window appears.

18. Click **Install**.

You will be prompted with a message “Please leave this window up, and run **/oracle/app/oracle/product/9i/root.sh** as root from **another** window, then return to this window, and click **OK** to continue.”

When prompted, you will need to run you the Setup Privileges root.sh script.

19. You will also be prompted to insert installation Disk2 and Disk3 during the install process.

When a Disk Location window appears, type the command **eject** from other window to eject the disk1 from cdrom.

Insert Disk2. The File Manager Disk2 window appears. Close the File Manager Disk2 Window.

Change the disk path in the Disk Location window to **/cdrom/disk2/**, and click **OK** to continue.

Repeat the same procedure for changing Disk3 when prompted.

**Note:** If you cannot eject the CD-ROM (that is, device busy), close the user window that directly accesses the CD-ROM device with the command **cd /cdrom**.

The Configuration Tools window appears at the end of the installation and, based on your selections above, starts the following assistants to create and configure your database and network environments.

The Configuration Tools window displays the results of running these assistants.

20. Click **Next** to continue.

The End of Installation window appears.

21. Click **Exit** to exit the Oracle Universal Installer.

## Performing the Oracle for Solaris Post-Installation

After installing the Oracle database, you must perform the following post-installation steps:

1. Log in as root user

```
su - root
```

2. Modify the `/var/opt/oracle/oratab` file and change N to Y, as follows:

```
apconms:/oracle/app/oracle/product/9i:Y
```

Save the changes, and exit the file.

3. Copy the `dbora` file from the **ONset EMS** CD-ROM to your system, as follows:

```
# cp /cdrom/cdrom0/solaris/oracle/dbora /etc/init.d/dbora (copies the dbora file from the CD-ROM to your system)
```

```
# chmod 755 /etc/init.d/dbora (makes file executable)
```

```
# ln -s /etc/init.d/dbora /etc/rc0.d/K10dbora (creates symbolic link for DB shutdown)
```

```
# ln -s /etc/init.d/dbora /etc/rc2.d/S99dbora (creates symbolic link for DB startup)
```

4. Log in as oracle user:

```
su - oracle
```

5. Specifying the target drive used for the Oracle installation, edit the following file:

```
$ORACLE_BASE\admin\<hostname>\pfile\init$ORACLE_SID.ora  
(that is, initapconms.ora)
```

Search for the entry **PROCESSES=50** and change that entry to **PROCESSES=200**.

Add a new entry **job\_queue\_processes=1**

6. Reboot the system, which reinitialize the Oracle.

## Setting Up the ONset EMS Software Oracle User Account

This section will create the Oracle User Account, apconms. After installing the Oracle database, you must set up the ONset EMS software's Oracle User account. Follow these steps:

1. Log in as root user:

```
su - root
```

2. Create the dbtools directory that will contain three files:

**createdbuser.sh** – The script to create the ONset EMS user for Oracle.

**exportdb.sh** – A tool used to export the EMS database.

**importdb.sh** – A tool used to import the EMS database.

3. Type:

```
# mkdir /opt/oracle/dbtools
```

```
# chmod 777 /opt/oracle/dbtools
```

**Note:** Insert the ONset EMS CD if it is not already in the CD drive.

```
# cp /cdrom/cdrom0/Solaris/dbtools/* /opt/oracle/dbtools
```

```
# chmod 755 /opt/oracle/dbtools/*
```

4. Log in as oracle user:

```
# su - oracle
```

```
$ cd /opt/oracle/dbtools
```

5. Run the following command to create the ONset Oracle user:

```
$ createdbuser.sh $ORACLE_HOME $ORACLE_SID apconms apconms
```

(where Oracle user login id is apconms and the password is apconms)

6. The createdbuser.sh command creates an Oracle SQL statement file to actually create the apconms ONset Oracle user. Type the following to verify the file was created:

```
$ ls createdbuser.sh (check to see if the file exists)
```

7. Type:

**\$ sqlplus “ / as sysdba”**

```
SQL*Plus: Release 9.0.1.0.0 - Production on Thu Apr 4 17:43:57 2002
(c) Copyright 2001 Oracle Corporation. All rights reserved.
Connected to:
Oracle9i Enterprise Edition Release 9.0.1.1.0 - 64bit Production
With the Partitioning option
JServer Release 9.0.1.1.0 - Production
SQL> @createdbuser.sql
CREATE USER apconms IDENTIFIED BY apconms DEFAULT TABLESPACE USERS
TEMPORARY TABLESPACE TEMP PROFILE DEFAULT ACCOUNT UNLOCK
.
.
. Grant succeeded.
User altered.
Commit complete.
Disconnected from Oracle9i Enterprise Edition Release 9.0.1.1.0 - 64bit
Production
With the Partitioning option
JServer Release 9.0.1.1.0 - Production
```

**Upgrading a V1.1 Database to V2.0**

This section describes how to convert an *ONset* EMS V1.1 database from the Windows NT/Oracle8i system to an *ONset* EMS V2.0 Solaris8/Oracle9i system.

The following procedures must be performed before upgrading *ONset* EMS V2.0 software:

1. Shut down all *ONset* EMS Windows NT services from the Services Control Panel:
  - APCTrapD
  - APCFactoryServer
  - Iona Orbix Daemon
  - RMIRegistry
2. Setup a working directory (for example, **d:\dbtools**) on *ONset* EMS V1.1 NT server machine. The working directory must have at least 2 MB of disk space available.
3. Copy *ONset* EMS database utility scripts from the CDROM dbtools folder to the working directory.
4. From the working directory on NT, enter the following command:  
**exportdb.bat apconms apconms nt816exportdata**
5. Review the export log file **nt816exportdata.log**. You should see a message “Export terminated successfully without warnings” at the end of the log file. Do not continue, if there is any error in the exporting operation.

6. Log in as oracle on ONset EMS V2.0 UNIX server machine and set up a working directory (for example, **/opt/dbtools**). The working directory should have enough disk space for holding the **nt816exportdata.dat** data file.
7. Copy ONset EMS database utility scripts from the CDROM dbtools folder to the working directory and enter the following command:  
**chmod 755 \***
8. FTP the **nt816exportdata.dat** data file to the working directory on ONset EMS V2.0 UNIX server machine with the binary mode option.
9. From the working directory on UNIX, enter the following command:  
**importdb.sh \$ORACLE\_HOME \$ORACLE\_SID apconms apconms nt816exportdata**
10. Review the import log file **nt816exportdata.log**. You should see a message “Import terminated successfully without warnings” at the end of the log file. Do not continue, if there is any error in the importing operation.
11. From the working directory on UNIX, enter the following command:  
**\$ORACLE\_HOME/bin/sqlplus apconms/apconms @ems11to20upg.sql**
12. Install ONset EMS V2.0 software on the UNIX server machine.

## Installing ONset EMS Software for Solaris

To install the Release v2.0 ONset EMS software for Solaris, insert the ONset EMS CD-ROM into the workstation, and follow these steps:

**Note:** For an initial ONset EMS installation, skip steps 2, 3 and 4.

1. Log in as root user:  
**su - root**
2. Exit the ONset EMS client application from the client machine.
3. To stop the ONset EMS server processes, type the following sequence of commands:  
**# /etc/init.d/apctrpd.sh stop**  
**# /etc/init.d/factoryserver.sh stop**  
**# /etc/init.d/orbixd.sh stop**  
**# /etc/init.d/rmiregistry.sh stop**
4. To back up your existing ONset EMS software, type the command  
**\$ONMS\_ROOT/bin/backupems.sh**

5. Insert the *ONset* EMS CD-ROM, and type:

# **cd /cdrom.cdrom0** (changes directory to the CD drive)

# **cp install.bin /tmp** (copies the file from the CD drive)

# **chmod 755 /tmp/install.bin** (makes install.bin executable)

# **DISPLAY="X\_SERVER\_MACHINE":0.0; export DISPLAY** (ensures that your DISPLAY variable is set)

# **/tmp/install.bin** (runs the install.bin *ONset* EMS Installer)

The installation program opens with a Welcome screen. Follow the on-screen instructions. After reading or completing entries to a screen, click **Next** to continue.

6. Specify the pathname of the directory in which to install the *ONset* EMS software.

The default location is **/opt/ems**. (User may change to any desired location that has enough disk space.)

7. Click the button for the type of installation you want: **Full**, **Server**, or **Client**.

8. Specify the pathname of the Oracle software home directory.

You can either modify the pathname shown, or click the **Choose** button to locate the Oracle home directory. For example, **/oracle/app/oracle/product/9i**.

9. Specify the following information about the Oracle database:

**Hostname**

Enter the host name of the machine on which you installed the Oracle database.

**Database Port Number**

Enter **1521**.

**Database SID**

Enter the Oracle System Identifier (SID) that you specified when you installed Oracle 9i.

The default SID is **apconms**.

**User Login**

Enter the username that you specified for the *ONset* software's Oracle User account.

The default username is **apconms**.

**User Password**

Enter the password that you specified for the *ONset* software's Oracle User account.

The default password is **apconms**.

10. For Full or Client installations, specify the name of the *ONset* EMS Server.
11. Enter the host name of the machine on which you installed the *ONset* EMS Server.
12. Specify the ftpboot directory that you created above, which is **/ftpboot**.

## Running ONset EMS Server for Solaris

To start the ONset server, start the ONset EMS Server processes, and then type:

```
#ONMS_ROOT/install/startems.sh
```

## Running ONset EMS Client for Solaris

To start the ONset client, follow these steps:

1. Type:

```
$ONMS_ROOT/ONset_EMS
```

You will be prompted to enter a username and password.

2. Enter the default username/password pair: apconms/apconms.

## Running ONset EMS Client for Windows NT and Windows 2000

To start the ONset EMS client, follow these steps:

1. Double-click the shortcut created when you installed the ONset EMS software, or select **Start -> Programs -> ONset EMS**.

You will be prompted to enter a username and password.

2. Enter the default username/password pair: apconms/apconms.

## Deinstalling ONset EMS Software for Solaris

To deinstall the ONset EMS software for Solaris, follow these steps:

1. Exit the ONset EMS client application.
2. Stop ONset EMS server processes, type the following sequence of commands:

```
#/etc/init.d/apctrpd.sh stop
```

```
#/etc/init.d/factoryserver.sh stop
```

```
#/etc/init.d/orbixd.sh stop
```

```
#/etc/init.d/rmiregistry.sh stop
```

3. Remove installed ONset EMS software, type the command:

```
#$ONMS_ROOT/UninstallerData/Uninstall_ems
```

4. The InstallAnywhere Uninstaller will guide you through the uninstall process.
5. Remove user-defined folders and files under \$ONMS\_ROOT directory if necessary.

## Deinstalling ONset EMS Software for Windows NT and Windows 2000

To deinstall the ONset EMS software for Windows NT and Windows 2000, follow these steps:

1. Exit the ONset EMS client application.
2. Select **Start ->Settings ->Control Panel ->Add/Remove EMS from Windows**
3. The InstallAnywhere Uninstaller will guide you through the uninstall process.
4. Remove user-defined folders and files under \$ONMS\_ROOT directory if necessary.

## Restoring ONset EMS Software from a Backup Data File for Solaris

In case of ONset EMS upgrade failure, you may restore your previously installed ONset EMS from a backup file created by the **backupems.sh** command in the “**Installing ONset EMS Software for Solaris**” section.

To restore your ONset EMS software, type:

```
#$ONMS_ROOT/bin/restoreems
```

## Restoring ONset Database from a Backup Data File for Solaris

In case of database upgrade failure, you may restore your original database from a backup data file. The ONset EMS installer always save a copy of your current database in a file namer **lastbackupMMDDYYYYHHSS.dat** in the \$ONMS\_ROOT/data directory before any database upgrade automatically.

To restore your database, type the following command.

```
$ONMS_ROOT/data/restoredb $ONMS_ROOT username password  
backup_data_file
```

(For example, **#\$ONMS\_ROOT/data/restoredb /opt/ems apconms apconms lastbackupMay1820021501.dat**)



## Operating Guidelines and Restrictions

### Alcatel 1677 SONET Link

#### Using the Node

- Do not remove a CCC, STS switch card (SSC), or timing card (TC) from the 1677 SONET Link until its amber In Use light goes off.
- Whenever you insert a CCC card, you must activate the disk(s).
- When you install or replace an I/O card (IOC), the card takes a minimum of 100 seconds to initialize. Please allow *at least* 100 seconds before determining whether or not you inserted and seated the card correctly.

**CAUTION:** Before inserting or removing an IOC, refer to “Removing or Hot Swapping an IOC,” later in this section.

- For protected operation, IOCs must be set up in protection groups as defined by the “Rules for IOCs operating in protected, UPSR, or BLSR operation mode” in the *Installing and Maintaining the 1677 SONET Link* manual.
- **Pre-provisioning:** Do not configure cross-connects on IOCs that are not inserted. However, cross-connects do not need to be deleted for IOC hot-swap.
- If multiple rings are created using the same nodes and spans, ONset EMS will display only one graphical representation of a ring. This is to ensure that the graphical representation is as clean and easy to view as possible. Users can right-click on a node or span to see the underlying rings being represented.

#### Setting Timing

- **Recommendation:** Set all nodes to external timing.
- Do not use DS3 signals as a source for line timing.
- **NOTE:** The default line timing port locations are ports 1/A/1 and 17/A/1. If a DS3 card is inserted into slot 1A and/or 17A, the line timing should be reconfigured to a nonexistent slot or to a slot occupied by an OC-n IOC.
- Line A and Line B cannot be set to the same IOC.

#### Creating Cross-Connects

- When creating a cross-connect on an OC-n signal, the remaining portion of the OC-n payload is configured for STS-1 Unequipped signals. For example, if you create an STS-3c within an OC-48 starting at timeslot 1, timeslots 4 through 48 are configured as STS-1s transmitting an Unequipped signal. When using a test set to test the cross-connect, ensure that you are looking at the actual STS-3c. If you inject an STS-3c signal into timeslot 4, you will see B3 errors since you are transmitting an STS-3c signal, but receiving three STS-1 Unequipped signals.

### Using a DS3 Card

- Administratively disable all non-cabled DS3 ports that have interfaces created.
- **CAUTION:** Before installing a DS3 connector panel on the back of a chassis, refer to the *Installing and Maintaining the 1677 SONET Link* manual for instructions.

### Using an EDFA Card

- The EDFA card operates in standalone mode only. In standalone mode, the EDFA card's LED is amber while the module is receiving power from the 1677 SONET Link. Software commands such as TEST-LED do not affect the EDFA module.
- **CAUTION:** When the ambient temperature of the 1677 SONET Link is 50° C or greater, the temperature at the EDFA card installed in the chassis could rise above 60° C. As the EDFA card's temperature rises above 60° C, its performance degrades and the following events occur:
  - Above 60° C, an alarm is activated.
  - At 70° C, the card's amplifier shuts down (communication with the card and alarms, however, are still available).
  - At 65° C after the card has cooled, the amplifier restarts and returns to pre-event status.
  - At 57° C, the alarm turns off.

### Using an OC-192 Card

- The OC-192 card currently supports a pre-standard version of Forward Error Correction (FEC), and therefore there may be interoperability issues with other vendors' equipment. To allow the OC-192 card to interoperate with other vendors' equipment, disable the FEC. In a future release, the OC-192 Card will support G.709 FEC.

### **ONset EMS**

- Before using ONset EMS, you must first run the 1677 SONET Link software installation script. The node IP address must be on a different IP subnet from the Ethernet Interface IP address.
- After discovery completes, ONset must synchronize with each node. As a general rule, allow ONset one minute to synchronize with each node. For example, in a UPSR ring of ten nodes, expect ONset to take as long as ten minutes to synchronize with all the nodes.
- To create a logical link within a span, ONset EMS will automatically associate the link with a link bundle. Currently, only one logical link per link bundle is supported.
- ONset EMS uses the local time on the management workstation (Solaris), which varies by time zone and daylight saving time; the node uses GMT/UTC time.

- If a multi-user lock is deleted or preempted, the lock owner receives a message only when the owner attempts to complete the operation. The owner must close the current window of the operation, and then retry the operation.
- If multiple rings are created using the same nodes and spans, ONset EMS will display only one graphical representation of a ring. This is to ensure that the graphical representation is as clean and easy to view as possible. Users can right-click on a node or span to see the underlying rings being represented.
- In multi-user operation, if a user modifies or deletes an object (for example, node, disk, card, interface, port, circuit, alarm, or user profile), ONset EMS does not notify or refresh the screen of other users who are currently viewing that object.
- **Pre-provisioning:** Do not configure cross-connects on IOCs that are not inserted. However, cross-connects do not need to be deleted for IOC hot-swap.
- Currently, when the ONset EMS Server is upgraded, the remote client is not informed. Therefore, be sure to upgrade the server and all clients or problems may occur. A version mismatch may preclude the client from utilizing upgrade features such as multi-user locks and new cross-connect types. For example, if an upgrade has a new lock feature, only servers and clients with the upgrade will be able to use the new lock feature. An older client version will not have access to the new feature, which may cause unexpected and unsatisfactory results.

## TL1

The command interface varies slightly, depending on whether you are using a console, the raw port (default TCP port 3082), or the telnet port (default TCP port 3083).

### Using the Console Port or the TL1 Telnet Port (3083):

- Typing a semicolon (;) or pressing Enter terminates a command. When you type a semicolon, a return is generated automatically.
- The console/telnet interface provides echoing, line editing, a simple history mechanism (using the up- and downarrow keys of a VT100-compatible terminal or emulator only), and a help facility:
  - Pressing the TAB key after a partially entered command name of an entered message will autocomplete the command or cycle through the alternatives.
  - A question mark (?) lists the matches for a partially entered command name, or, if the command name portion has been completed, lists the arguments to the command. To enter a question mark in a quoted string, precede the questionmark with a backslash: \?
- Although you can enter multiple commands at a time, commands are echoed and processed one at a time. (That is, if you continue typing after entering a semicolon (;) but before the command completes, the typing is saved.) If you use a terminal emulator's paste function to send multiple commands, limit such type-ahead to 256 characters.

### Using the TL1 Raw Port (3082)

- Because it is intended for machine-to-machine communication, this port does not support command echoing or line editing. Autonomous messages, however, are displayed.
- Terminate each command with a semicolon.
- You can enter multiple commands at a time (that is, without waiting for commands to complete) but no more than 256 characters are stored beyond the currently processed command.

### Changes to Commands and Parameter Types

- For the ED-NE command, the input parameter **diskmde** (disk mode) has been removed.
- For the ED-T3 command, the input parameter **fmt** (signal format) has been removed.

### Configuring Loopbacks

- Loopbacks are activated upon request without restriction. Since loopbacks will disrupt a circuit carrying traffic, care should be taken to ensure that service is not disrupted on an incorrect port.
- Facility loopbacks do not retime the looped-back signal, so a test set connected directly to an interface with a facility loopback should use internal or external timing, rather than recover timing from the received signal. **Note:** The OC-192 currently requires the test set to use receive timing when the OC-192 port is in Facility Loopback (refer to issue #12195 in the Resolved Issues section).

**NOTE:** If FEC is disabled, facility loopback on an OC-192 card does not work properly.

- Facility loopbacks can be used with or without a cross-connect in place. Terminal loopbacks are intended to be used with a cross-connect provisioned to the port.

### Managing Alarm Reporting

- When you manage a port interface, you can set the overall alarm mode for the port to either Enable Reporting (EN in the TL1 SET-ATTR command) or No Reporting (NR in SET-ATTR). When the alarm mode is NR, no alarm or event message is sent when the condition occurs on that port. Changes to this overall setting apply to existing alarms. For example, if you change the port from NR to EN with one or more existing conditions on the port, those conditions are then reported.
- For any port, you can also specify how specific alarm condition types are to be reported: either as EN (enable reporting) or NA (non-alarmed, report alarms as events). Changes to this setting, however, *do not* affect existing conditions. For example, if an LOS condition occurs while LOS conditions are reported as EN, changing the setting (to report LOS conditions as NA) does not stop the reporting of the existing condition as EN. After that LOS condition clears, subsequent LOS conditions are reported as NA.

- NR and NA can also be set on an alarm basis. For example, LOS can be set to NR when all the other alarms are NA.

## Known Anomalies

This section describes the service-affecting and non-service affecting issues.

### Issues That Disrupt Service

1. **Issue:** During CCC failover or hot swap, proper operation may not be fully restored.  
**Cards affected:** CCC  
**Service affecting:** Yes  
**Condition frequency:** Infrequent  
**Workaround:** Following a CCC failover or hot swap, if you see an assertion, exception, or a notice that the 1677 SONET Link is not operating properly, contact TAC at 888-377-6464. (12820)

### Issues That Do Not Affect Service

1. **Issue:** Unable to create network interfaces through ONset EMS, which prevents the DCC from passing routing information between the nodes.  
**Cards affected:** All IOCs  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Create the network interface through TL1. (11937)
2. **Issue:** When the OC-192 card receives a signal impairment such as LOS, the card transmits both RDI-L and REI-L upstream. It should transmit RDI-L only.  
**Cards affected:** OC-192  
**Service affecting:** No  
**Condition frequency:** Always when the OC-192 card responds to signal impairments.  
**Workaround:** None (12200)
3. **Issue:** When both cards of a 1+1 APS pair are present, removal of the working card on the left side causes a critical alarm instead of a minor alarm. Similarly, if the protect card on the right side is carrying traffic and the work card is not present on the left side, removal of the protect card (which disrupts service) results in a minor alarm.  
**Cards affected:** OC-n  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None (12464, 12672)

4. **Issue:** In *ONset* EMS, the Restore Configuration to Node option creates a backup of the configuration on the node but cannot activate the configuration. A Backup Configuration from Node can be made, but this configuration cannot be restored to the node.  
**Cards affected:** Not applicable  
**Service affecting:** Not directly, but a service outage that occurred for another reason might be extended.  
**Condition frequency:** Always  
**Workaround:** Use TL1 commands to copy the \*.CFG files to a subdirectory in A:cfg (for example, A:cfg/backup), and then use the **OPR-DISK** command to activate the configuration. (12658)
5. **Issue:** A Loss of Signal (LOS) on an OC-192 1+1 APS may result in a Signal Degrade (SD) instead of a Signal Failure (SF) alarm message.  
**Cards affected:** OC-192  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None. (12781)
6. **Issue:** When creating a cross-connect to an APS pair, *ONset* EMS should allow you to choose only the Working port as an endpoint. Currently, you can choose the Protection port as an endpoint, and then the command will be denied.  
**Cards affected:** OC-n  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Do not choose a Protection port as an endpoint. (12917)
7. **Issue:** An LOS is detected and cleared, but the alarm still appears in the alarm facility.  
**Cards affected:** All IOCs  
**Service affecting:** No  
**Condition frequency:** Rarely  
**Workaround:** Manually check the port status using the TL1 **RTRV-OCn** command, and use the CLI **clear alarm force** command to clear the alarm. For example, `config>clear alarm 648518346341351447 force` (12939)
8. **Issue:** For optical cards, *ONset* EMS displays the card Status as Not Present. This status is incorrect.  
**Cards affected:** OC-n  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None (13231)
9. **Issue:** For a large number of circuits, the circuit view may take longer to display.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Large configurations  
**Workaround:** None (13250)

10. **Issue:** Administratively downing a DS3 port will not result in an AIS signal being transmitted downstream for Unframed DS3 signals. For framed DS3 signals (C-Bit and M13) the signal may start to transmit AIS and then change over time to a signal without framing.  
**Cards affected:** DS3  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Do not admin down DS3 ports. (13433)
11. **Issue:** If both Timing Cards (TC) are removed or have failed, the 1677 SONET Link declares a Major alarm. A Critical alarm should have occurred.  
**Cards affected:** TC  
**Service affecting:** No  
**Condition frequency:** Both TCs removed or failed  
**Workaround:** None. (13437)
12. **Issue:** In the ONset EMS Node Details screen, the View CrossConnect Defaults function is not displaying any information.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None. (13485)
13. **Issue:** Stuck SD alarm can occur on an OC-192 protection pair (APS 1+1, UPSR, or BLSR).  
**Cards affected:** OC192  
**Service affecting:** No  
**Condition frequency:** Rarely  
**Workaround:** Reset the SWC. *CAUTION: This action will disrupt traffic.* (13572, 13669)
14. **Issue:** Ethernet does not function on a newly-inserted TC card (only Ethernet connection)  
**Cards affected:** TC card  
**Service affecting:** Cannot talk to node through Ethernet  
**Condition frequency:** Any time a TC card is newly inserted.  
**Workaround:** Plug the Ethernet cable back into the original TC, and then pull off the Ethernet cable again. The newly inserted TC Ethernet should take over. (13580)
15. **Issue:** When changing a BLSR one-node interconnect cross-connect from ONset EMS, only one of the two resulting cross-connects will display the modification.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Only when modifying one-node interconnect cross-connects through ONset EMS.  
**Workaround:** None. (13608)

16. **Issue:** Timing references are not currently monitored to respond to frequency offset on the incoming DS1 Signal or timing recovered from an incoming line signal. This behavior does not conform to Telcordia GR-1244-CORE, Issue 2 dated December 2000, CR3-29 and R3-43.  
**Cards affected:** TC and all Optical IOCs  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None. Will be resolved with a future ECO. (13663)
17. **Issue:** TL1 Gateway does not notify the user if a path to remote nodes fails.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None (13688)
18. **Issue:** On a fully redundant system, perform a card reset on the primary CCC (card 10). The secondary CCC became primary, however the LEDs on both CCCs are now amber. The LED on 9-CCC should have been green.  
**Cards affected:** CCC  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None (13695)
19. **Issue:** *ONset* EMS allows the user to delete the BLSR APS Port Pairing with circuits/cross-connects present. TL1 will be unable to display that the BLSR Ring is present even though it is present and functioning properly.  
**Cards affected:** OC48 and OC192  
**Service affecting:** No  
**Condition frequency:** Deleting BLSR APS Port Pairing through *ONset* EMS  
**Workaround:** Do not delete the BLSR APS Port Pairing until all circuit and cross-connects have been removed. Or use TL1 to delete the BLSR APS Port Pairing. The TL1 command will be denied if cross-connects exist. (13697)
20. **Issue:** If the Node Ring Maps are not correct, *ONset* EMS will be unable to discover the BLSR Ring.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Node Ring Maps incorrect  
**Workaround:** Fix the Node Ring Maps through TL1 and attempt to re-discover through *ONset* EMS. (13700)
21. **Issue:** *ONset* EMS will be unable to discover the BLSR ring properly if the Node Description in the BLSR APS pair is either empty or not the same across all the nodes.  
**Cards affected:** OC-48 and OC-192  
**Service affecting:** No  
**Condition frequency:** Whenever the node description for the BLSR APS pair is empty or not the same on all the nodes.  
**Workaround:** Ensure the Node Description is not empty and is the same on all the nodes in the ring. (13703)



22. **Issue:** A received unframed DS3 signal will generate a lot of TCA (Threshold Crossing Alerts).  
**Cards affected:** DS3  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None. (13725)
23. **Issue:** *ONset EMS* may consume all the CPU cycles on your workstation. *ONset EMS* is not affected but this may impact your ability to use other software applications on that workstation.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Sometimes.  
**Workaround:** Stop and restart the *ONset EMS* Services. (13726)
24. **Issue:** *ONset EMS* does not allow the user to properly configure the Alarm Reporting feature.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Use TL1 to enable or disable alarm reporting for a given port. (13734, 13736)
25. **Issue:** *ONset EMS* displays 4-fiber BLSR commands.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Ignore the 4-fiber BLSR commands. If used, the command should be properly denied. (13737)
26. **Issue:** When creating BLSR-related cross-connects, the user should only be allowed to select OC-48 or OC-192 ports through *ONset EMS*. Currently OC-3 and OC-12 ports are being displayed.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Creating BLSR cross-connects through *ONset EMS*  
**Workaround:** Ignore the OC-3 and OC-12 port options for network ports while creating BLSR-related cross-connects. (13747)
27. **Issue:** The protection status of a protected DS3 IOC and the protection DS3 IOC is not properly displayed from *ONset EMS*. TL1 will display proper protection state and status information.  
**Cards affected:** DS3  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Only use TL1 when displaying the protection status for DS3 IOCs. (13749)

28. **Issue:** ONset EMS lists the active Disk as available for formatting.  
**Cards affected:** CCC  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Only inactive disks can be formatted. This is only a display issue. An active disk is not allowed to be formatted. The node will enforce this. (13756)
29. **Issue:** Creating BLSR ring from ONset EMS fails if any of the nodes has an existing BLSR FFP (APS Pair).  
**Cards affected:** OC48 and OC192  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Before using ONset EMS to create a BLSR ring, make sure none of the nodes has BLSR FFP created on it. (13771)

## Resolved Issues

The following issues in the last release have been resolved:

1. **Issue:** When an alarm condition is reported as an event (nonalarmed), clear messages are not sent when that alarm condition is removed.  
**Cards affected:** All (including the system)  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** None. If an alarm condition is set to be reported as an alarm instead of an event, clear messages are sent. For many alarm types, you can monitor whether or not the condition is still present by viewing the status of an interface (Line Status or Section Status) or viewing SONET statistics. (9154, 12493)
2. **Issue:** A user cannot change their password, if while logged in, is deleted (by an admin user) and the CCC fails over. If the user is in this condition and attempts to change the password, the following error message appears: password too short.  
**Cards affected:** CCC  
**Service affecting:** No  
**Condition frequency:** Rarely  
**Workaround:** Reset the node. CAUTION: Resetting the node will cause traffic disruption. (10168)
3. **Issue:** If you connect a test set to an OC-192 card, set the timing of the test set to internal, and then execute a facility loopback, the test set reports loss of frame.  
**Cards affected:** OC-192  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Set the test equipment to use receive timing while the OC-192 port is in facility loopback. This will be resolved in a future hardware release of the OC-192 boards. (12195)

4. **Issue:** ONset EMS does not contain the Remove or Insert commands that are needed to properly replace an IOC.  
**Card affected:** All IOCs  
**Service affecting:** Potential for service disruption if the proper procedures are not followed.  
**Condition frequency:** Always  
**Workaround:** You need to enter the TL1 commands **RMV-EQPT** and **RST-EQPT**. (12450, 13741)
5. **Issue:** The list of disk devices that can be deactivated includes devices that were previously deactivated.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** Ignore previously deactivated devices. (12621)
6. **Issue:** During the software upgrade procedure, the system timing may be incorrectly set to Internal timing.  
**Cards affected:** Timing Card  
**Service affecting:** Yes  
**Condition frequency:** Often  
**Workaround:** During the software upgrade procedure, before the final reset:  
1) Determine the primary CCC  
2) Assuming the primary CCC is slot 9, perform: card/9>diagenable.  
3) Now perform the final reset. (12900)
7. **Issue:** Bit errors detected when failing over TC cards in a fully redundant system (3.0E7 ---> 1.0E8 bit errors)  
**Cards affected:** All, when failing over TC card  
**Service affecting:** Yes, lose bits  
**Condition frequency:** Often  
**Workaround:** None. Will be corrected with future ECO. (13002)
8. **Issue:** Hot Swap OC192 and get 2.3E8 bit errors and flickering AIS-P.  
**Cards affected:** OC192  
**Service affecting:** Yes, bit errors  
**Condition frequency:** Often  
**Workaround:** None. Will be corrected with future ECO. (13010)
9. **Issue:** If you reset a node that provides line timing to adjacent nodes, the timing on the adjacent nodes become invalid.  
**Cards affected:** All IOCs  
**Service affecting:** Yes  
**Condition frequency:** Always on a node reset  
**Workaround:** Before resetting the node, select another valid timing source on the adjacent nodes. (13103, 13330)

10. **Issue:** The CrossConnect View under the Circuit View does not show the correct state of the cross-connect.  
**Cards affected:** None  
**Service affecting:** No  
**Condition frequency:** Always  
**Workaround:** To get the correct cross-connect status, right click on a node and select the CrossConnect View. (13115)
11. **Issue:** For some failure scenarios, the DS3 APS switch times exceed the 50ms standard required by GR-253-CORE.  
**Cards affected:** DS3  
**Service affecting:** Yes  
**Condition frequency:** Infrequent  
**Workaround:** None. (13179)

## End of Release Notes