

Knowledge Base Article #INS849

Upgrading to v7.0.2 of the ETM® System on Linux

Synopsis

This article explains how to upgrade to v7.0.2 of the ETM® System on Linux.

*****IMPORTANT NOTES*****

- Ensure that you are running a supported version of Oracle before you continue. Oracle 10g v10.2.0.1 or later (Enterprise, Standard, or XE) and 11g R2 (Enterprise, Standard, or XE) are supported.
 - If you upgraded from one version of Oracle to another prior to beginning the ETM System upgrade, ensure that you replaced the ODBC driver in the ETM Software installation directory with the upgraded Oracle driver version. This includes Oracle patch updates. Copy **ojdbc14.jar** (10G) or **ojdbc6.jar** (11G)—from **<ORACLE_HOME>/jdbc/lib**.
 - **<INSTALL_DIR>** is used in these instructions to refer to the directory where the ETM System is installed. ETM System RPMs install the applications under **/opt** and the installation directory cannot be changed.
-

Steps

1. **Connect to the database via the Database Maintenance Tool.** Verify that no errors exist before beginning the upgrade. If errors are present, contact SecureLogix Customer Support before you continue. See the *ETM® System Administration Guide* for instructions for using the Database Maintenance Tool, if necessary.
2. **Back up the ETM System directory.** The entire directory is replaced during upgrade, meaning customized properties and configuration files are overwritten upon upgrade. These must be manually restored from backup during upgrade on Linux.
3. **Shut down any running ETM System applications.** See the Appendix in this document for instructions for starting, stopping, and viewing the status of the applications.
4. **Grant a new user permission PRIOR TO BEGINNING THE UPGRADE.** A new permission is required in this release to facilitate the Deadlock prevention capability (see below). This permission is required on all ETM systems (even those in which Deadlock prevention is not activated). To grant this permission, connect to the database as SYSDBA and grant Execute permission to the ETM user on the **DBMS_LOCK** package. For example, assuming the ETM user account is ETMUSER, type:

```
GRANT EXECUTE ON DBMS_LOCK to ETMUSER
```

If you want to verify that the permission was successfully granted, type:

```
select * from dba_tab_privs where table_name='DBMS_LOCK' ;
```

5. **Uninstall the previous version of software and then install the ETM System v7.0.2 software.** Refer to the Appendix of this document for detailed software installation instructions.

- **IMPORTANT** Be sure to upgrade all remote ETM System Clients before trying to use them to connect to the upgraded ETM Server. **Pre-7.0.2 Clients DO NOT connect to a 7.0.2 Server.**

6. Restore custom configuration files.

- Use a tool such as **CompareIt** to identify customization in the backed-up **.properties**, **.cfg** and **.ini** files you backed up before you began. Copy those changes into the newly installed files and directories so that any updates in the files are retained. Do not replace the new files or directories, because they may contain new settings for this release. Restore changes to the following files and directories:
 - **ETMManagementServer.cfg**
 - **ETMReportServer.cfg**
 - **twms.properties**
 - **delivery.properties**
 - **npconfig.properties**
 - **smdr.properties**
 - **/ps/software_repository/smdr/**—Entire directory, which contains the SMDR parse files.
 - **/ps/software_repository/ini/**—Entire directory, which contains the Dialing Plans and package files from previous releases.

7. Upgrade the database.

- a. Connect to the database via the Database Maintenance Tool.
 - b. You are prompted to upgrade the database. Click **Yes**. (If any errors occur while upgrading the database, note the error and call Customer Support at the number at the bottom of this technical bulletin.)
- ## 8. Start the ETM System applications and verify operation.
- See the Appendix of this document for instructions for starting, stopping, and verifying the status of the applications.
- a. Start the ETM Server and Report Server. Check for errors in the **error** and **serverfatal.log** files. The **server-fatal.log** is stored in the root of the **<INSTALL_DIR>** and is only present if the ETM Server terminates unexpectedly. The error logs are stored in the **<INSTALL_DIR>/ps/errors** directory.
 - b. If no errors appear, start the ETM System Console, log in to the Server, and then open the Performance Manager.
- ## 9. Upgrade the Card software.
- After the Cards connect to the Server, upgrade the Card software.

IMPORTANT

- The CIDA feature is only supported on T1 PRI on the 3200 and 2100 appliances in v7.0.2. It is not supported on the 1090.

- NFAS PRI and SS7 spans on Cards running v7.0.2 cannot communicate with other NFAS PRI or SS7 spans on Cards that are running prior versions. Therefore it is recommended that all of the Cards whose spans belong to a given NFAS PRI group or SS7 group be upgraded at the same time.
- ETM 1010, 1020, 1030, and 1040 Appliances cannot be upgraded to v7.0.2 and have not been tested nor warranted to work with the 7.0.2 Server. The last release that supported connections from these Appliances was v5.2.
- It is imperative that you do not reboot or power cycle the Card while the software is being downloaded until the upgrade and software installation is complete, or the firmware may become corrupted, rendering the Card inoperable and requiring Last Resort Card recovery. The Card automatically reboots when the upgrade is complete. If you believe the Card has become unresponsive, be certain that 15 minutes have elapsed since you began. If possible, connect via the Console port and call SecureLogix Customer Support. Do not manually power cycle or reboot the Card.
- How long a Card upgrade takes varies depending on the size of the package and which firmware devices are being reprogrammed. During a Card upgrade, the compact flash (hard drive) is first reprogrammed; then, depending on the upgrade, the boot flash and one to six other firmware devices may be reprogrammed. The firmware devices are verified against the new code; if different, they are reprogrammed. Verification can take from 20 to 120 seconds per device (depending on the size of the device) and reprogramming can take from 30 to 240 seconds per device.

Upgrading the Card Software

- a. In the **Platform Configuration** subtree, right-click the Card, then click **Manage Software**. You can upgrade multiple same-model Cards at once. The **ETM Platform Software Installation** dialog box appears.
- b. Under the **Software Package** box, click **Modify**. The **Software Version Selection** dialog box appears, listing packages that apply to the selected Card type.
 - For 1012 and 1024 Appliances, use the **ETM_1012_7.0.205.pkg**.
 - For 1060 Appliances, select **ETM_1060_7.0.205.pkg**.
 - For the 1090 Appliance, select the **ETM_1090_7.0.xx.pkg**.
 - For 8240 Signaling Link Cards, select **ETM_3070_7.0.205.pkg**.
 - For 8240 Cards in the 2100 and 3200 Appliances, select **ETM_3000_7.0.205.pkg**.
 - For 8540 Cards in the 2100 and 3200 Appliances, select **ETM_4000_7.0.xx.pkg**.
 - For 8540 Signaling Link Cards, select **ETM_4070_7.0_205**
 - For SIP Appliances and the inline SIP application on the ISR module, select **ETM_5xxx_7.0.101.pkg**.
 - For UTA applications, select **ETM_xxx_7.0.101.pkg**

- c. Click the software package to install, and then click **OK**. You are returned to the **ETM Platform Software Installation** dialog box.
 - d. Be sure that the **Install** box is selected, and then click **OK**. The software is downloaded to the Card. You can view the progress of the upgrade in the **Status Tool** and **Diagnostic Log**.
10. **Download and install the latest software update.** From time to time, software updates to released versions are provided. Visit <http://support.securelogix.com/update> and download the latest software update for your system, if one is available. Install the software update according to the instructions provided with it.
 11. **Remove backup files.** When the upgrade is complete and the ETM System is verified to be operating correctly, you can delete the backup copy of the install directory you created prior to upgrading, to free the hard drive space it uses.

NEXT STEPS

- If you are using the Caller ID Authentication (CIDA) feature, refer to the *ETM[®] System Caller ID Authentication (CIDA) Guide* for instructions for licensing and configuring the feature.
- Refer to the *ETM[®] System Administration and Maintenance Guide* for instructions for configuring the Enhanced Policy Push feature.
- Refer to the 7.0.2 Release Notes for instructions for configuring Deadlock prevention.

Appendix

Installing the ETM System v7.0.2 on a 64-Bit Linux Server

Before You Begin

1. When you install and configure your Linux platform, allocate space for the ETM applications under **/opt**. ETM RPMs are installed under **/opt** and the installation directory cannot be changed.
2. The JVM switch **java.awt.headless=true** is not supported, although most application functions appear to be unimpaired in such a configuration. For a supported configuration and especially to enable the Server to save reports to the tree in Usage Manager, install the **xorg-x11-server-Xvfb** package for RedHat or CentOS.

Installing the ETM Applications

Three installation (RPM) files are included for the Linux ETM Server installation:

1. `etm-esc-<version-build>.x86_64.rpm` – ETM System Console only
2. `etm-ms-<version-build>.x86_64.rpm` – ETM Management Server only
3. `etm-rs-<version-build>.x86_64.rpm` – ETM Report Server only

To Install the ETM applications

- Execute the following sequence of steps to install each required RPM (not order-dependent):
 1. Log in as 'root' user.
 2. Change to the directory containing the RPM files. Files are installed in the **/opt/SecureLogix/ETM** directory with the exception of the Service specific files, which are installed in the **/etc/init.d** directory. The installation directories cannot be changed.
 3. Determine whether previous RPMs are installed by typing **'rpm -qa |grep -i etm-'**
 - If RPMs exist, remove them by typing **'rpm -e <rpm_name>'** where `<rpm_name>` is one of 'etm-esc', 'etm-ms', or 'etm-rs'
 4. Install each required RPM by executing the command, ***rpm -ivf <complete_rpm_file_name>***

Files are installed in the **/opt/SecureLogix/ETM** directory with the exception of the Service specific files, which are installed in the **/etc/init.d** directory. The installation directories cannot be changed.

5. From within the ETM directory, execute the **GetSystemID** script by typing `'./GetSystemID'` . If the **GetSystemID** script returns an ID of 00000000, add the system's IP address and host name to the host file (`/etc/hosts`) and then execute the script again. Supply the system ID to SecureLogix Customer Support to obtain a server license file. Place this license file in the `/opt/SecureLogix/ETM` directory.
6. Use `chkconfig` command (`'chkconfig --level 345 <servicename> on'`) or the Services GUI to set the Management Server (**ETMMS**) and Report Server (**ETMRS**) services to start automatically when the system is started.

Starting, Stopping, and Viewing Status of the Applications

To start/stop/view status of the ETM applications

1. Log in as 'root' user.
2. Change to the `/opt/SecureLogix/ETM` directory.
3. Use the following commands:
 - To start the Database Maintenance tool, type:
`./ETMDBMaintTool`
 - To start the ETM System Console, type:
`./ETMSystemConsole`
 - ETM Management Server commands are:
`service ETMMS {start | stop | status}`
 - ETM Report Server commands are:
`service ETMRS {start | stop | status}`

Last Update: 02/19/2013

SecureLogix Corporation

13750 San Pedro, Suite 820 • San Antonio, Texas 78232 • (210) 402-9669 • www.securelogix.com

Support (877) SLC-4HELP • EMAIL support@securelogix.com • <http://support.securelogix.com>

ETM, TeleWatch Secure, TWSA, We See Your Voice, SecureLogix, SecureLogix Corporation, the ETM Emblem, the SecureLogix Emblem and the SecureLogix Diamond Emblem are trademarks and/or service marks or registered trademarks and/or service marks of SecureLogix Corporation in the U.S.A. and other countries. All other trademarks mentioned herein are believed to be trademarks of their respective owners.

© Copyright 2013 SecureLogix Corporation. All Rights Reserved. This product is protected by one or more of the following patents: US 6,249,575 B1, US 6,320,948 B1, US 6,687,353 B1, US 6,718,024 B1, US 6,760,420 B2, US 6,760,421 B2,

US 6,879,671 B1, US 7,133,511 B2, US 7,231,027 B2, US 7,440,558 B2, US 8,150,013 B2, CA 2,354,149, DE 1,415,459 B1, FR 1,415,459 B1, and GB 1,415,459 B1.

The ETM System includes: Data Encryption Standard software developed by Eric Young (eay@mincom.oz.au),
© Copyright 1995 Eric Young. All Rights Reserved.

,