

Knowledge Base Article #INS514

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

Synopsis

This article explains how to upgrade to v7.0.2 from v5.2.x or later of the ETM® System on Windows. If you are upgrading from an earlier version, contact Customer Support before beginning the upgrade, because interim upgrade steps are required.

*****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. By default, the ETM Applications are installed at the following path: **C:\Program Files\SecureLogix\ETM**.
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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.
 - **Pre-7.0.0 upgrades:** If you are upgrading from a version prior to v7.0.0, a new feature introduced in v7.0.0 causes the Database Object in the ETM System Console to be lost upon upgrade and it must be recreated. Before you begin the software installation, note the following information
 - Server IP Address
 - Port Number
 - Database Name
 - User Name*
 - Password*

This information can be found in the **TWMS.properties** file in the **<INSTALL_DIR>**. **Locate the lines following lines and note their values:**

```
## The instance name
## The user id to log into the database
## The passphrase to log into the database.
```

2. **Grant new database permissions to the ETM® Database, according to the version from which you are upgrading, PRIOR TO BEGINNING THE UPGRADE.**

New in 7.0.2:

```
EXECUTE DBMS_LOCK
```

This 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' ;
```

New in 7.0.0

Run-User Account: If you are running with a separate user account that does not own the actual database objects, ensure that the following database permissions are granted to the run-user account.

```
ALTER SESSION  
CREATE PROCEDURE  
CREATE SESSION  
CREATE MATERIALIZED VIEW  
CREATE TABLE  
CREATE VIEW
```

3. Shut down any running ETM System applications.

- Shut down all ETM Management Server and Report Server instances, using the Windows Services Control Panel.
- If multiple ETM Management Server or Report Server instances are running on the machine, deregister all application instances with the Service Control Manager using the **AppManager.exe** utility as follows:

- a. Open a command prompt window and change to the ETM Server installation directory.
- b. Obtain a list of the registered application instances by typing the following at the prompt:

```
AppManager /list /type:both
```

- c. For each instance ID in the list, type the following command at the prompt:

```
AppManager /remove /type:both /ID:<instance_id>
```

4. Install the ETM System v7.0.2 software. Run the installer (**setup.exe**) from the software CD and follow the onscreen prompts. The installer automatically removes the previous version and backs up certain files that may have been user-modified.

- **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.

- When the ETM Management Server is uninstalled, the following files are automatically backed up from the <INSTALL_DIR> to the <INSTALL_DIR>\Backup\MS_<DATE_TIME> directory:
 - **delivery.properties**
 - **ETMManagementService.cfg**
 - **npconfig.properties**
 - **PagerService.properties**
 - **smdr.properties**
 - **twms.properties**
 - **\ps\software_repository\smdr**—Entire directory, which contains the SMDR parse files. If a file with a default name has been user-modified, it must be restored to the ETM Server <INSTALL_DIR>\ps\software_repository\smdr\ directory after upgrade. User-defined files with custom names are not deleted nor overwritten during upgrade and therefore do not need to be restored.
 - **\ps\software_repository\ini**—Entire directory, which contains the Dialing Plans. Upon upgrade, the Dialing Plans installed on the Appliances are not deleted, but user-modifications to the Dialing Plans need to be copied to new Dialing Plan file in the <INSTALL_DIR>\ps\software_repository\ini\ directory on the ETM Server.
- When the ETM Report Server is uninstalled, the following files are automatically backed up to the <INSTALL_DIR>\Backup\RS_<DATE_TIME> directory:
 - **ETMReportService.cfg**
 - **twms.properties**

Refer to the *ETM® System Installation Guide* for detailed software installation instructions, if necessary. PDFs of all of the ETM System user guides are located on the ETM software CD in the top-level **Documentation** folder.

5. Restore custom configuration files.

- Use a tool such as **CompareIt** to identify customization in the backed-up **.properties** and **.cfg** and **.ini** files listed in step 2. Copy those changes into the newly installed files so that any updates in the files are retained. Do not copy over the new files, because they may contain new settings for this release.
- **SMDR parse file**—Copy the custom SMDR parse file(s) to the <INSTALL_DIR>\ps\software_repository\smdr folder (*not necessary if the files had custom names, since they were not overwritten nor deleted*).

6. Upgrade the database.

- a. Start the **ETM Database Maintenance Tool**
- b. **If you upgraded from a version prior to 7.0.0:** Create a new Database Object using the information you noted in step 1.

- a. Expand the **Systems** node.
 - b. Unless instructed otherwise by SecureLogix personnel, right-click **Standalone Databases** and select **New Standalone Database**.
 - c. Type the **Server IP Address** and **Port** noted in step 1
 - d. In the **Database Instance** box, type the Database name noted in step 1.
 - e. In the **Database** schema box, type the user name noted in step 1.
 - c. Connect to the database using the user name and password noted in step one.
 - d. You are prompted to upgrade the database. Click **Yes**. (If any errors occur while upgrading the database, note the errors and call Customer Support at the number at the bottom of this technical bulletin.)
 - e. If you upgraded from a version prior to v7.0.0, due to changes in the database, the **Set as Default** option does not work with v7.0.2. Restore the database instance information to the global **twms.properties** file.
7. **Recreate multiple MS and RS instances, if these are used.** If multiple instances of the MS and RS are in use, use the **AppManager** utility to recreate the instances removed in Step 1. Refer to "Creating Multiple Application Instances" in the *ETM® System Technical Reference* for detailed instructions.
- If multiple instances were in use before the upgrade, the instance-specific **twms.properties** files were not changed or deleted and therefore should require no modification. Recall that the values in the global **twms.properties** file are used unless explicitly overridden by a value in the instance-specific file; therefore, any new fields in the global file are implemented in the instances. If a specific instance needs a different value, specify that value in the instance-specific file. If all instances need a different value, you can change it once in the global file and it will apply to all instances.
8. **Start the ETM System applications and verify operation.** Perform the following for each set of Server instances:
- 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, 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_7.0.205.pkg**.
 - For 8540 Signaling Link Cards, select **ETM_4070_7.0_205.pkg**
 - 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, both manually and automatically created backup directories can be deleted to free the hard drive space they use.

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.

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