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Using a TCA System on a Network

Application Note

version 1.3
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HL
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General Considerations

NOTE: For purposes of this document, TCA stands for both Telecom Conformance Analyzer (TCA 8200) and Telephony Conformance Analyzer (TCA 4100).

Standard usage of a TCA system does not require connecting it to the network or using network resources for storing any TCA information. Rather, the data base and the results are stored on the local hard disk of the built-in PC.

However there are several situations when the TCA should be connected to the network and remote storage used. These situations are:

- A single TCA system that uses network storage; this allows for use of the centralized process to backup the TCA data.

- Multiple TCA systems that share a common network-tests database and result storage.

Even though the situation might warrant a network configuration, bear in mind that using TCA in a networked environment is more complex than using it locally and should be performed with great care.

The purpose of this document is to explain how to configure the TCA in the situations described above. The TCA is configured through the Windows Registry editor at node:

HKEY_LOCAL_MACHINE\SOFTWARE\HL\TCA.

Using TCA Locally

This is the standard configuration. A local database is used and results are stored locally. This configuration allows backup and restore operations to be performed from the TCA application. Ensure that the Windows Registry node is configured as follows:

[HKEY_LOCAL_MACHINE\SOFTWARE\HL\TCA]

```
"LocalDBServer"="(local)\\tca"
"LocalDBName"="telsat"
"ServerDBServer"=""
"ServerDBName"=""
"SoundsDir"="d:\\TCA\\sounds\\"
"ResultsDir"="d:\\TCA\\results\\"
"ReportsDir"="d:\\TCA\\reports\\"
"ReportTemplatesDir"="C:\\Program Files\\Hermon Labs\\TCA\\report templates\\"
"ResultTemplatesDir"="d:\\TCA\\result templates\\"
```

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Configuring Single TCA System with Network Storage

NOTE: MS SQL Server 2005 or later is required.

In this case, all TCA data is stored on the network. Backup/Restore operations are not available from the TCA application. Instead, the centralized backup process is used.

To switch to this configuration:

1. Copy all relevant files to the network.

2. Copy the DB (referenced in ServerDBName) to the network DB server.

3. Ensure that the Windows Registry node is configured as follows:

[HKEY_LOCAL_MACHINE\SOFTWARE\HL\TCA]

```
"ResultsDir"="k:\\hl\\tca 8200\\development\\data\\results\\"
"ServerDBServer"="xeon"
"ServerDBName"="telsat"
"LocalDBServer"=""
"LocalDBName"=""
"ReportsDir"="k:\\hl\\tca 8200\\development\\data\\reports\\"
"ReportTemplatesDir"="k:\\hl\\tca 8200\\development\\data\\report templates\\"
"ResultTemplatesDir"="k:\\hl\\tca 8200\\development\\data\\result templates\\"
```

Software Upgrade of Single TCA Using Network Storage

To perform a version upgrade when the TCA uses network storage, complete the following procedure:

1. Copy the database (referenced in ServerDBName) and files from the network TCA system.

2. Switch to Local Configuration.
   To switch to Local Configuration, ensure that the two registry keys ServerDBServer and ServerDBName are empty.

3. Backup the data (click **System ➢ Backup/Restore ➢ Backup**).

4. Uninstall the old version of the software.

5. Install the new version of the software.

6. Import the data that was backed-up in step 3 (click **System ➢ Backup/Restore ➢ Import**).

7. Copy DB and files back to the network.

8. Switch to Network Configuration.
   To switch to Network Configuration, ensure that the two registry keys ServerDBServer and ServerDBName contain actual, accurate values.
   "ServerDBServer" must contain the computer hosting the Microsoft SQL Server.
   "ServerDBName" must contain the name of the database.

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Configuring Multiple TCA Systems with Network Database

NOTE: All TCA systems should use the same software version. MS SQL Server 2005 or later is required.

This case is more complex than the previous one, because there is system data (calibrations) that cannot be shared via the network database.

To switch to a multi-system network configuration use the following Window Registry settings. The only difference between this and the previous configuration is that LocalDBServer and LocalDBName are set as in Local Configuration.

[HKEY_LOCAL_MACHINE\SOFTWARE\HL\TCA]
"ResultsDir"="k:\\hl\\tca 8200\\development\\data\\results\\"
"ServerDBServer"="xeon"
"ServerDBName"="telsat"
"LocalDBServer"="(local)\\tca"
"LocalDBName"="telsat"
"ReportsDir"="k:\\hl\\tca 8200\\development\\data\\reports\\"
"ReportTemplatesDir"="k:\\hl\\tca 8200\\development\\data\\report templates\\"
"ResultTemplatesDir"="k:\\hl\\tca 8200\\development\\data\\result templates\\"

Software Upgrade of Multiple TCAs Using Network Database

In this configuration, local backup is available and should be performed to preserve calibrations.

To perform a version upgrade, complete the following procedure:

1. Copy the database (referenced in ServerDBName) and files from the network to *one* of the TCA systems.

2. Switch to Local Configuration.
   To switch to Local Configuration ensure that the two registry keys ServerDBServer and ServerDBName are empty.

3. Backup the data (click **System ➢ Backup/Restore ➢ Backup**).

4. Uninstall the old version of the software.

5. Install the new version of the software.

6. Import the data that was backed-up in step 3 (click **System ➢ Backup/Restore ➢ Import**).

7. Copy the database and files (from step 1) back to the network.

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8. Switch to Network Configuration.
   To switch to Network Configuration ensure that the two registry keys ServerDBServer and ServerDBName contain actual, accurate values. "ServerDBServer" must contain the computer hosting the Microsoft SQL Server. "ServerDBName" must contain the name of the database.

9. Steps 1–8 complete the configuration of the first TCA system. Complete the following step for each of the other TCAs using the network database

   a. Backup the data (click **System ➤ Backup/Restore ➤ Backup**).

   b. Switch to Local Configuration (see above).

   c. Uninstall the old version of the software.

   d. Install the new version of the software.

   e. Import the calibration (click **System ➤ Backup/Restore ➤ Restore calibration**).

   f. Switch to Network Configuration (see above).

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