



Hyper Historian Upgrade to Version 10.90



APPLICATION NOTE

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Description: This application note is intended for users who want to upgrade their current version of Hyper Historian to version 10.90.

General Requirement: Hyper Historian version 10.80 - 10.83 or 10.85 - 10.87.

Introduction

This application note will guide you through the process of upgrading a previous version of Hyper Historian to 10.90. It will also give detailed guidance on how to upgrade four node and two node redundancy setups with zero data loss.

Before proceeding with the upgrade, please note that previous versions of the license must be upgraded to version 10.90 using the Web Licensing Utility. This applies to both software and hardware licenses.

Please contact the ICONICS Orders Department to verify that your SupportWorX plan covers this upgrade and to receive instructions on how to perform the upgrade.

Recommended Pre-Upgrade Actions

- Check that your SupportWorX Plan is valid and covers the upgrade – you can contact the ICONICS Orders Department for this information.
- Check that your hardware and software components meet the minimum requirements – see the DVD readme.
- Obtain account credentials for an account with local administrator rights to the machine where you will be doing the upgrade.
- Obtain account credentials for the Microsoft SQL Server you will be using for your configuration and logging databases.
- Check the ICONICS website for any patches or known issues prior to the upgrade.

Preparation

Follow these steps before running the 10.90 installation:

1. Back up all display files and configuration and logging databases.
 - This is recommended to be done as a Pack and Go Project
2. Kill your license, credit it to the ICONICS Web Licensing Utility site, then use the Upgrade License action on the web to upgrade your license to 10.90.

NOTE: For more details on how to kill, credit, and reauthorize your license, see one of these app notes, depending on your license type:

Licensing – Using the ICONICS Web Licensing Utility for Software Key Licenses

Licensing – Using the ICONICS Web Licensing Utility for Hardware Key Licenses

3. Stop any running ICONICS processes and services.

Due to enhancements added to Hyper Historian, the 10.90 installation requires any ICONICS products of 10.87 or earlier versions be uninstalled. The 10.90 installation will automatically uninstall any 10.80 to 10.83 or 10.85 to 10.87 products for you as part of the install. The upgrade process is very intuitive and the user can follow the steps given by the 10.90 installation.

The following products will be uninstalled automatically if you select the "Upgrade option" or can be uninstalled manually before installing Hyper Historian version 10.90.

- GENESIS64 - available on the GENESIS64 DVD
- Energy AnalytiX - available on the AnalytiX DVD
- Facility AnalytiX - available on the AnalytiX DVD
- Quality AnalytiX - available on the AnalytiX DVD
- Hyper Historian - available on the Hyper Historian DVD
- AlarmWorX64 Multimedia - available on the Hyper Historian DVD
- MobileHMI - available on the MobileHMI DVD

ICONICS Technical Support recommends that previous versions be uninstalled manually if the user wants to completely remove all files and clean up the system. In this case the user should follow the next section.

Manual uninstallation of existing pre-10.90 versions

- Go to Start → Control Panel → Programs and Features.
- Right click on the existing Hyper Historian installation and click on Uninstall.
- Follow the uninstall steps.
- Right click on any other existing ICONICS products, and select Uninstall.
- Follow the uninstall steps.
- After everything is uninstalled, go to C:\Program Files\ folder delete the ICONICS folder if it wasn't already deleted by the uninstall.
- Go to C:\ProgramData\ folder and delete the ICONICS folder it wasn't already deleted by the uninstall.

- Go to folder C:\Program Files\Common Files and delete the ICONICS folder if it wasn't already deleted by the uninstall.
- You can also delete any configuration or supporting files created using the previous version if you do not want to use them later.

Upgrading an existing Hyper Historian configuration (without redundancy)

If you have both GENESIS64 and Hyper Historian installed on your machine with no redundancy, first insert the GENESIS64 version 10.90 DVD and run the GENESIS64 setup. This would upgrade your GENESIS64 to version 10.90 and also uninstall your existing version of Hyper Historian. After the GENESIS64 installation, you can insert the Hyper Historian DVD and install Hyper Historian for version 10.90.

NOTE: For more details about upgrading GENESIS64 version 10.8x to version 10.90, please read the application note *GENESIS64 - Upgrade to Version 10_90*.

If you only have a Hyper Historian installation with no GENESIS64, simply insert the Hyper Historian DVD for version 10.90 and run the setup file and continue with the installation. This will uninstall the existing version and install Hyper Historian version 10.90.

Some users prefer to use the default Hyper Historian database for their configurations. In this case, is it is **extremely important** not to overwrite any databases during the Hyper Historian database installation, or else the existing default configuration **will be permanently overwritten**. When the option is shown, make sure that the checkbox for "Overwrite all Databases" is **unchecked** as in Figure 1. You can check the other boxes as you see fit for your installation.

ICONICS recommends that all configuration databases be backed up before upgrading the software to the new version.

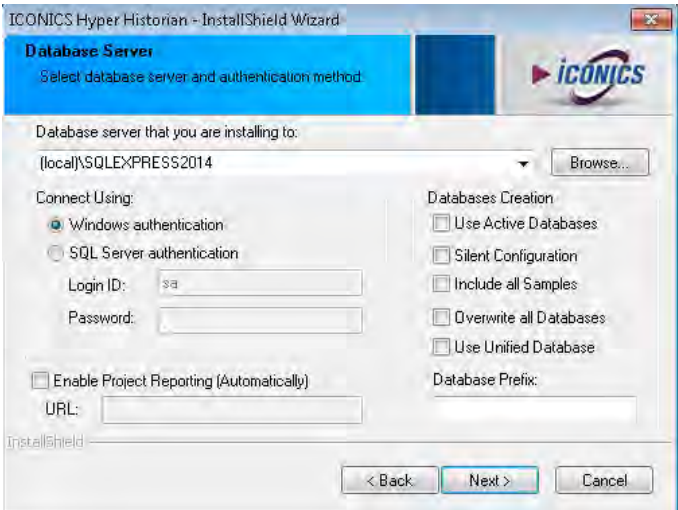


Figure 1 - Do not overwrite default databases if they are being used in the configuration.

In the System Setup step of the installation, again make sure that "Overwrite all database configurations" is **unchecked**, and make sure that the Overwrite checkbox is unchecked for any individual configurations as well. During this step you also have the option to "Upgrade automatically all database configurations".

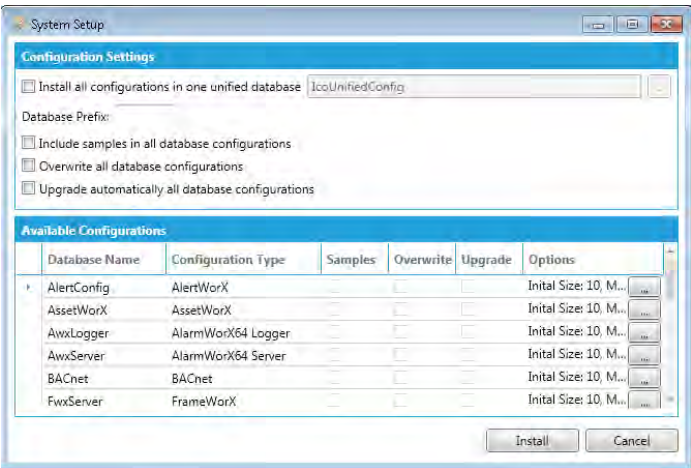


Figure 2 - System Setup step of installation

The following databases will be affected during the Hyper Historian database installation.

- Hyper Historian
- UdmConfig
- GasConfig
- Snmp
- BACnet



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- Icosec
- FrameWorX Server

If you decided not to overwrite these databases, you will have to upgrade them after the installation, starting with Icosec (the default security database).

NOTE: There are other databases that require upgrading following the GENESIS64 upgrade to 10.90 as well. Please read the application note *GENESIS64 - Upgrade to Version 10_90* for further details.

After the Hyper Historian installation, follow these steps to reactivate your configuration database:

1. Open the Workbench right-click on the "MyProject" item at the top of the Project Explorer and select "Configure Application(s) settings".
2. Look at the Hyper Historian row. Click on the item in the "Catalog" column of this row to expose a dropdown menu, and then select the database you would like to use for Hyper Historian. Apply your changes.
3. If necessary, execute the Upgrade Database command from the ProjectWorX tab of the Ribbon.
4. Check if the configuration is okay.

Note: Connecting may take some time depending on the size of your configuration.

Upgrading a four node redundancy setup to 10.90

This section is for upgrading a four node redundancy setup for Hyper Historian, pictured in Figure 3.

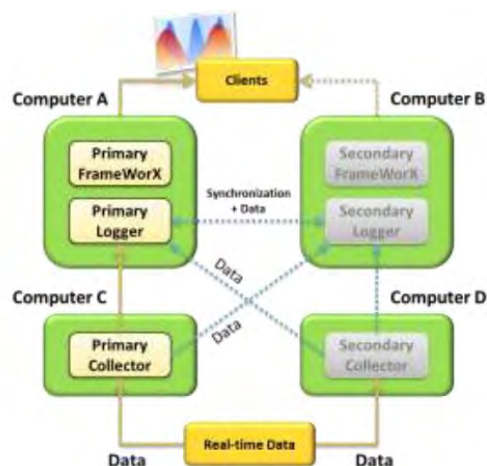


Figure 3 – Four node redundancy setup

Here is a summary of the steps to upgrade this system, with more detailed explanations to follow:

- Upgrade Secondary Collector to version 10.90
- Upgrade Secondary Logger to version 10.90, and the license
- Upgrade Primary Collector to version 10.90
- Upgrade Primary Logger to version 10.90, and the license

NOTE: This application note should be followed to the exact step to eliminate data loss during the upgrades.

Upgrade Secondary Collector to version 10.90

1. Open the NT Services console (services.msc) and stop the Hyper Historian collector service on the Secondary Collector. Verify the Secondary Collector is offline through the redundancy viewer of MonitorWorX.
2. Insert the Hyper Historian DVD and upgrade the Secondary Collector to version 10.90.
3. Once upgraded, open the services console and start the collector service.
4. In the MonitorWorX redundancy viewer for Hyper Historian, verify that the secondary collector is once more available and both loggers have the secondary collector under their tree similar to Figure 4.

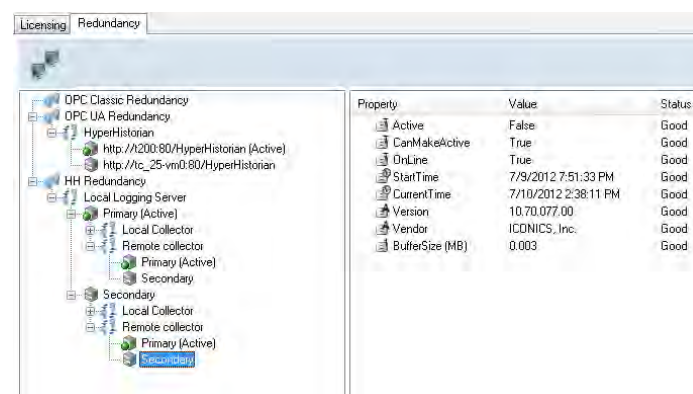


Figure 4 – Secondary collector should be available for both loggers after the upgrade

Upgrade Secondary Logger to version 10.90

1. From services.msc, stop the logger service on the Secondary Logger and verify it is offline through the redundancy viewer. Also verify that data is still being logged to the Primary Logger.
2. Kill the license and proceed with the license upgrade
3. Upgrade GENESIS64 and Hyper Historian to version 10.90 on the machine with the Secondary Logger.



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It is **extremely important** not to overwrite any databases during the Hyper Historian database installation, or else the existing default configuration **will be permanently overwritten**. When prompted, always make sure that "Overwrite all Databases" and "Overwrite all database configurations" is **unchecked**.

4. After the installation, reboot, open Workbench, and first upgrade the security database if necessary. Then upgrade all other databases that need to be upgraded including the Hyper Historian database. If you weren't using the default configuration, you will have to reconnect your former database, upgrade it, and apply your changes.
5. Start the logger service on the Secondary Logger. Verify that the Secondary Logger is back online through the redundancy viewer. Verify the active collector for the Secondary Logger is the Primary Collector. Also verify that the Primary Logger is still active.
6. At this point, the Secondary Logger (version 10.90) is getting data from the version 10.8x Primary Logger that is fed by the version 10.8x Primary Collector. It is important to verify that data is being correctly logged on the Secondary Logger before proceeding with rest of the upgrade.

Upgrade Primary Collector to version 10.90

1. Stop the collector service on Primary Collector from services.msc.
2. Verify the active collector for both Primary Logger (older version) and Secondary Logger (newer version) have switched to the Secondary Collector (upgraded version) similar to Figure 5.

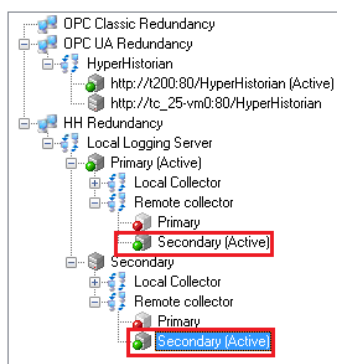


Figure 5 – Secondary Collector should be active for both loggers at this point

4. Upgrade the Primary Collector to version 10.90 by inserting the Hyper Historian DVD for version 10.90 and running the

setup file. Then open services.msc and start the Hyper Historian collector service.

5. Verify that the Primary Collector comes back online on the MonitorWorX redundancy viewer. Verify the Primary Collector becomes "active" for both loggers (with auto-failback on).
6. Verify that data is being correctly logged on both loggers. Note that at this point, the Primary Logger (older version) is collecting data from the Primary Collector (upgraded version) while the Secondary Logger (upgraded version) is getting data from the Primary Logger (older version). It is important to verify that data is logging on both loggers before proceeding.

Upgrade Primary Logger to version 10.90

1. Stop the Primary Logger service from services.msc. Verify that the Secondary Logger becomes active and it collects data from the Primary Collector.
2. Kill the license and proceed with the license upgrade.
3. Upgrade the Primary Logger machine with the version 10.90 versions of GENESIS64 and Hyper Historian using the DVDs and finally reboot the machine.
4. Open Workbench and upgrade the security database if necessary. Upgrade the Hyper Historian database. If you are not using the default database, you will have to connect to your old configuration database and upgrade it. Upgrade all databases that need to be upgraded on the Workbench.

NOTE: For more details about upgrading the databases in Workbench, please read the application note *GENESIS64 - Upgrade to Version 10.90*

5. After the upgrade, start the Hyper Historian logger service.
6. Open MonitorWorX redundancy viewer for Hyper Historian and verify that the Primary Logger is back online and it is active. Verify that the Primary Logger has the active Primary Collector under its tree. Verify the data is being correctly logged on both loggers.

At this point you have successfully upgraded your complete four node redundancy setup to version 10.90. If you followed the exact steps mentioned in this application note, you should have done the upgrade with zero data loss after data synchronization has finished.

Upgrading a two node redundancy setup to 10.90

The two node redundancy setup is arranged similar to that of Figure 6. Note that the Primary Logger is in a different machine compared to the Primary Collector and FrameWorX servers. This



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is often referred to as the “crossover setup” and is the recommended way of setting up two node redundancy.

Here is a summary of the steps to upgrade this system, with more detailed explanations to follow:

- Upgrade Server B to Hyper Historian version 10.90, and the license
- Upgrade Server A to Hyper Historian version 10.90, and the license

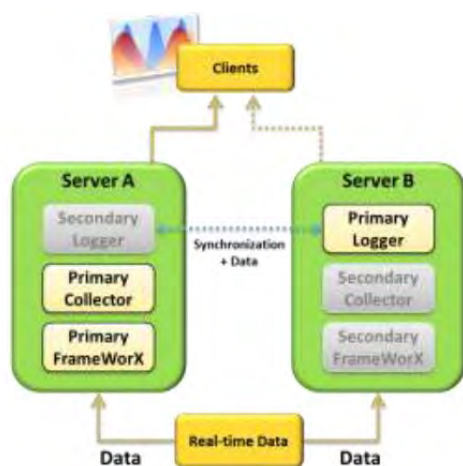


Figure 6 - Two node redundancy setup

A two node redundancy setup is similar to that of Figure 6. You can refer to the application note entitled *Hyper Historian – Redundancy Setup Options* for more details on this cross-over configuration for the two node redundancy setup.

Upgrade Server B

1. Go to run → services.msc and stop the Hyper Historian logger and collector services on Server B. Through the redundancy viewer on MonitorWorX, verify that the Secondary Logger starts collecting data from the Primary Collector.
2. Kill the license and proceed with the license upgrade.
3. Upgrade GENESIS64 and Hyper Historian on Server B to version 10.90.
4. Reboot the machine. Open Workbench and upgrade the security database if necessary. Upgrade the Hyper Historian database. If you are not using the default database, you will have to connect to your old configuration database and upgrade it. Upgrade all databases that need to be upgraded on the Workbench.

NOTE: For more details about upgrading the databases in Workbench, please read the application note *GENESIS64 - Upgrade to Version v10_90*

It is **extremely important** not to overwrite any databases during the Hyper Historian database installation, or else the existing default configuration **will be permanently overwritten**. When prompted, always make sure that “Overwrite all Databases” and “Overwrite all database configurations” is **unchecked**.

5. Start the Logger and Collector services on Server B and wait for the data to synchronize. Verify that the Primary Logger, Secondary Collector and the Secondary FrameWorX server come online through the MonitorWorX redundancy viewer.
6. Verify that the Primary Logger becomes active again and starts collecting data from the Primary Collector.
7. Verify that both Primary and Secondary Loggers have the Primary Collector active.

Upgrade Server A

1. We will now upgrade Server A to Hyper Historian version 10.90.
2. Kill the license and proceed with the license upgrade.
3. Stop collector and logger services on Server A. Verify the Primary Logger starts collecting data from the Secondary Collector. **Only proceed to the next step after verifying this.**
4. Upgrade GENESIS64 and Hyper Historian on Server A to version 10.90 using the DVD.
5. Reboot the machine. Open Workbench and upgrade the security database if necessary. Upgrade the Hyper Historian database. If you are not using the default database, you will have to connect to your old configuration database and upgrade it. Upgrade all databases that need to be upgraded on the Workbench.
6. Start the Logger and Collector services on Server A.
7. Verify that Primary Logger logs data and once more starts collecting data from the Primary Collector.
8. Also verify that all collectors and loggers are back online through the MonitorWorX redundancy viewer for Hyper Historian. Verify that both loggers are logging data.
9. Verify that the Primary Logger is “active” and that both Primary and Secondary Loggers have the Primary Collector as “active”.



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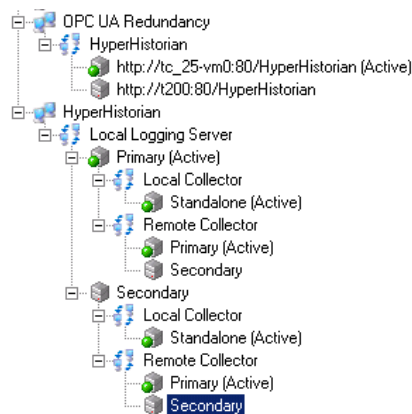


Figure 7 – Final two node redundancy setup after the upgrade to version 10.90.

If you follow these exact steps, there will be no data loss on your two node redundancy setup during the upgrade to 10.90.