

Simoa® HD-X Analyzer IT Setup Guide

USER-0069 01





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1 Overview

This guide explains how to set up the Simoa® HD-X Analyzer on a customer network and provides technical operating information about the following:

- Proxy PC ICS set up
- User account configuration
- Network connections
- Remote desktop support

2 Related Documentation

See the *Simoa HD-X Analyzer User Guide* for information on using the instrument.

See the *Simoa Proxy PC ICS Setup Guide* for information on setting up a proxy PC ICS.



It is essential that a computer network professional perform this task. Improper configuration of the proxy PC can cause network issues that could create loops, which might be hard to diagnose and resolve.

Contact Quanterix Technical Support if you have any questions.

See the *Customer Support Tool User Guide* for information on the following topics:

- Generating troubleshooting materials, such as support packages or IPL files
- Submitting instrument reliability data to Quanterix
- Creating System Qualification Test (SQT) reports
- Scheduling database backups

3 Proxy PC ICS Setup

See the *Simoa Proxy PC ICS Setup Guide* for information on setting up a proxy PC ICS.

Using a Router to Isolate the HD-X PC

An alternative approach to preserve the original factory settings of the HD-X PC is to isolate it behind a router that sits between the instrument PC and customer network.

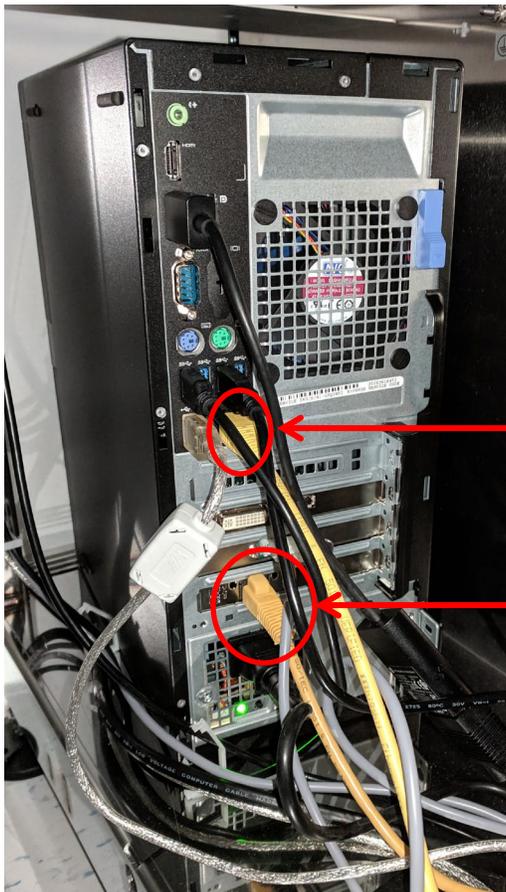
4 Configuration

Connecting to the Network

Each instrument PC comes equipped with two Ethernet cards: one Intel PCIe card and one built-in card that is attached directly to the computer's motherboard. The Intel PCIe card is dedicated to the CCD camera used for image acquisition. The built-in card can be used to connect the instrument computer to a network via an Ethernet cable.



Note! Do not disconnect the CCD camera cable from the Intel PCIe Ethernet card. Disconnecting this cable will cause the instrument to malfunction.



The built-in Ethernet port can be used to connect to a network.

Do not disconnect the CCD camera cable from its dedicated Ethernet port on the PCIe card. If the cable is disconnected, the instrument will not operate properly, resulting in sample loss.

Remote Desktop Support

Quanterix uses remote access software to provide support. Inform the Field Service Engineer performing the installation if your policies do not allow remote access to run on computers at your facility.

5 Data Management

The instrument database has the capacity to store up to approximately 250 batches of 96 jobs each. Regular data management is required to ensure space availability.

Routine Manual Export of Results

Quanterix recommends the following process for exporting results as they are generated:

- Use the HD-X Analyzer software to export results after each batch is completed. Batches can also be archived as XML files and be restored onto a separate PC running the HD-X software in offline mode.
- Immediately copy the resulting generated reports and CSV files from the HD-X Analyzer PC to a network shared folder, an external disk, or other external storage before the next batch is run.
- Store the exported data following your company standard backup procedures.

Routine Database Backups

Quanterix recommends performing regular database backups.

Note that database backups should not be stored locally on the instrument computer, for two reasons:

- Data can be lost if the disk fails.
- Database backups are very large and consume disk space that is needed to operate the instrument

See the *Customer Support Tool User Guide* for database backup instructions.

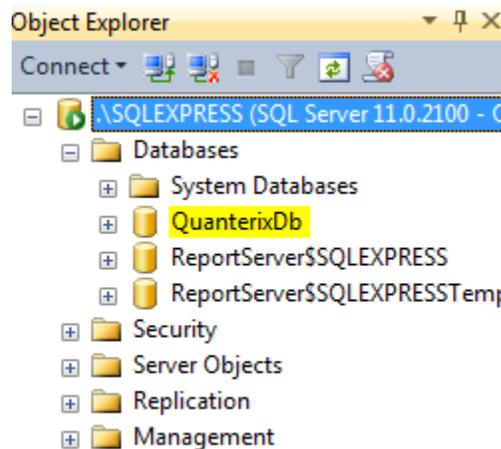
Performing a Partial Database Restore

Partial database backups that have been created with the Customer Support Tool can be restored to an offline computer using a command line tool.

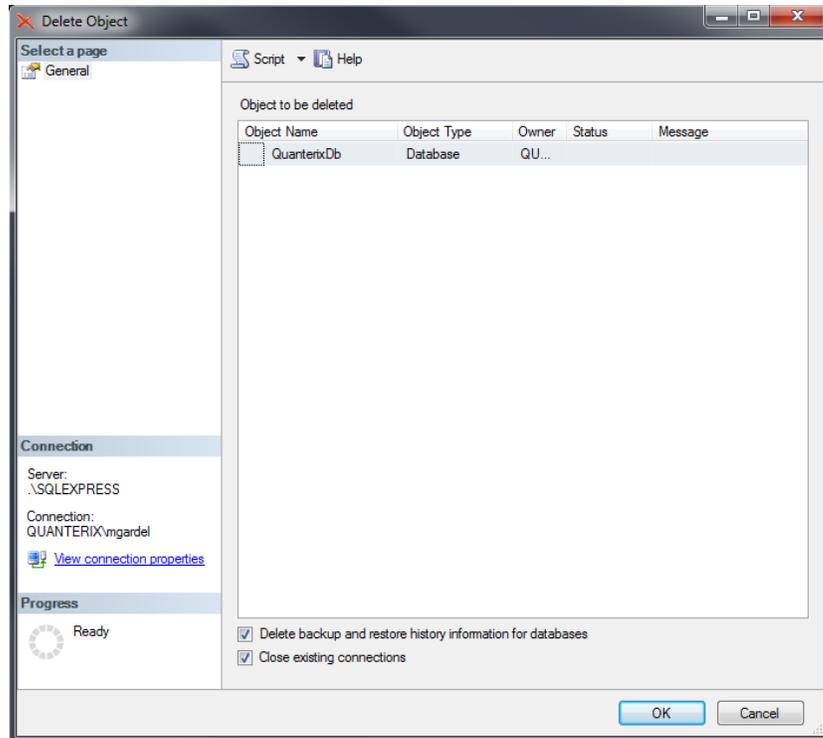
- 1 Delete the QuanterixDb from SQL Server Management Studio
 - a Open SQL Server Management Studio and log in using the Server name “.\SQLEXPRESS” and Windows Authentication



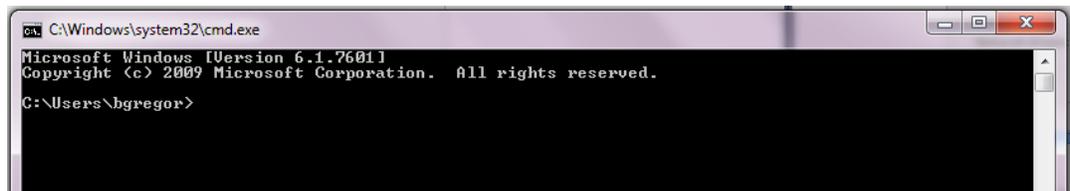
- b In Object Explorer, expand “Databases.”
 - c Right-click QuanterixDb and delete.



- d Check the box for “Close existing connections” so both boxes are checked, then click OK.

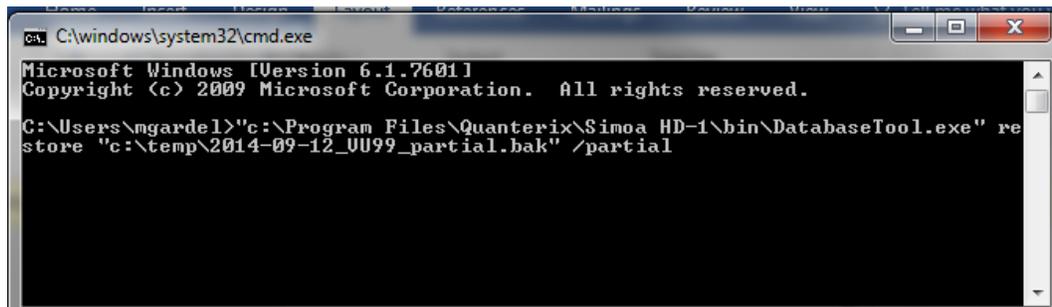


- 2 Copy the partial database to the C:\temp folder. It can only be restored from this location.
- 3 Click on the Windows Start Menu.
- 4 Type `cmd` in the Search box, and press Enter to open the command shell.



- 5 Type the following command including the quotes. The partial filename in this example is `c:\temp\2014-09-12_VU99_partial.bak`.

`"c:\Program Files\Quanterix\Simoa HD-X\bin\DatabaseTool.exe" restore "c:\temp\2014-09-12_VU99_partial.bak" /partial`



After the restore process is complete, you can run the HD-X Analyzer software. When it launches, the software displays a warning that the database has been partially restored.

Database Clean Task

The Simoa HD-X Analyzer generates a lot of data for each sample—approximately 115 MB per result—mostly consisting of raw camera images. For example, a batch with 96 samples results in approximately 11 GB of data. This data is stored in a database on the instrument computer.

Each *week*, you must perform the Database Clean task to purge old data so that new data can be stored. The task removes all data for runs older than 30 days from the first time that you perform the task.

If you want to retain data older than 30 days or to protect data against potential disk failure, it is *your responsibility* to back up the database prior to running the Database Clean task (at least monthly).

The **Database Clean** task permanently deletes data, so it is highly recommended that you back up the database before performing this task, especially if retention of raw sample images is required.

