IQSV8

References Document

Version 8

Contents

Reference A: System and Security Requirements

The IQSV8 application can be installed and configured for a variety of hosting situations based on your organization's preferences. Two basic scenarios are described below that you can select from depending on the number of machines/servers you have, whether you want to expose the application through the internet or keep it inside your intranet and how you have your firewall(s) configured. Pick the scenario that best fits your organizations Information Technology guidelines to see the requirements for security, software and hardware.

1. Installing on a Single Machine

When the application is hosted locally on a single machine, it has to be behind the firewall on the intranet. The application must not be opened to the public because the database also resides on the same machine and if the server (machine) and the application are exposed to the public, the security risk for the data is very high.

- **Minimum Software/Hardware Requirements:**
  - If using a server
    - Microsoft Windows 2019 Server or newer (Windows Server 2025 recommended) or Windows 10 or newer (Windows 11 recommended)
    - 64-bit OS and CPU are required
    - Processor: 1.4 GHz (x64); 2.0 GHz or faster recommended
    - Memory: 1 GB RAM; 4 GB RAM or more recommended
    - Hard Drive: 32 GB minimum; 40 GB or greater recommended
    - Internet Information Services (IIS) 7.x or higher
    - SQL Server 2016 or newer (SQL Server Express also supported)
    - Please Note: Windows Server 2022 or Windows 11 or higher is required to enable TLS 1.3

2. Installing on a Multi-Server (two machines) Environment

When the application is hosted in a Multi-Server environment, the application can operate on the intranet or on the internet (opened to public).

The hosting process is the same for both scenarios with the security requirements being different.

In the Intranet hosting, both the web server machine and the database server machine reside behind the firewall in a secured zone.

With the Internet hosting (application being opened to public over the WWW), the web server machine resides in the DMZ (De-Militarized Zone) which is secured by a firewall and the Port

80 (or 443 if using SSL) of the web server is open for the public requests. In this mode the database server resides behind a firewall in a secured zone and the only traffic allowed to this machine is from the web server over port 1433. All the communication between web server and the database server is using port 1433. It is recommended that all communication be encrypted using SSL (Secure Socket Layer) or IPSec (Internet Protocol Security). The web server hosts the web application. The database server hosts the database.

Minimum Software/Hardware Requirements:

- Web Server **- same as above**
- Database Server
    - Microsoft Windows 2016 Server or newer
    - Processor: 1.4 GHz (x64); 2.0 GHz or faster recommended
    - Memory: 512 MB RAM; 2 GB RAM or more recommended
    - Hard Drive: 32 GB minimum; 40 GB or greater recommended
    - SQL Server 2016 or newer (SQL Server Express also supported)

Reference B: SQL Server 2025 and Express Installation Instructions

Please note: SQL Server 2016 is the minimum required version

Step 1: SQL Server 2025 Installation files

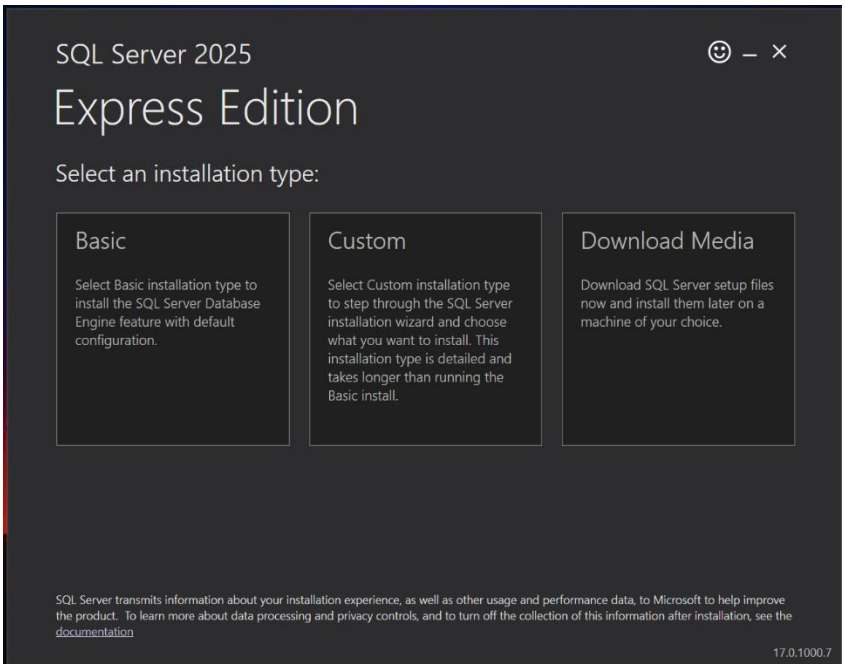
1. If installing the full version of SQL Server, make sure that the Microsoft SQL Server 2025 installation media or installer files are available on the server.

If installing the Express version, download Microsoft SQL Server 2025 Express and SQL Server Management Studio from the following link:

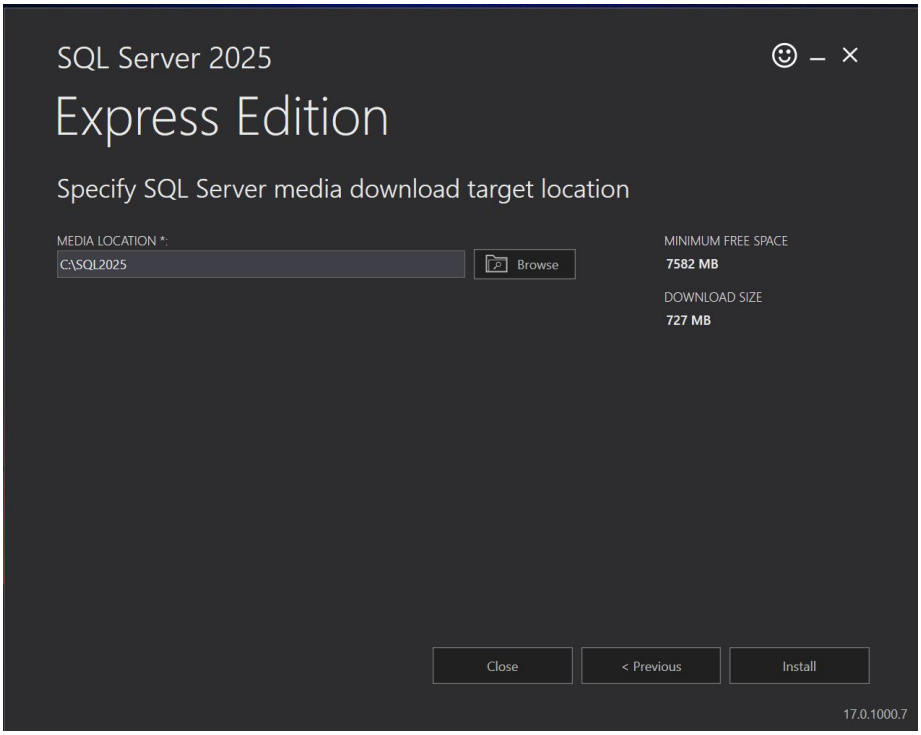
https://go.microsoft.com/fwlink/p/?linkid=2216019

Step 2: Install Microsoft SQL Server 2025

1. Select Start/Run. From the Run screen, browse to the location where the SQL Server 2025 installer file is located and select that file to open. The installer will extract a number of setup files to a temporary folder. This could take a few minutes. Once the installer has extracted all of its files, you should see the SQL Server Installer Window. Click on **Custom** to begin installation.

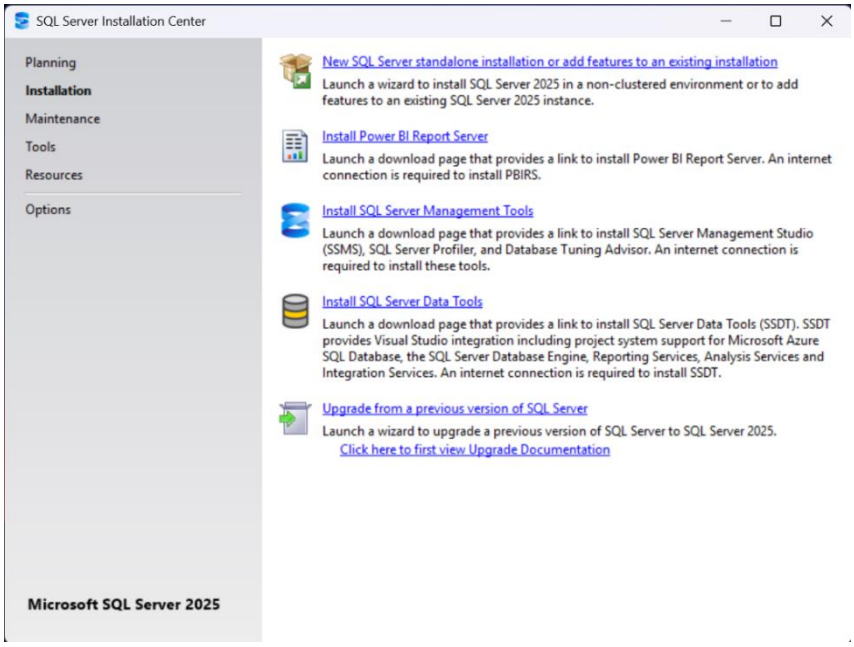


2. Select the location to download setup files.



3. Click **Install**. The installer will download the setup files.

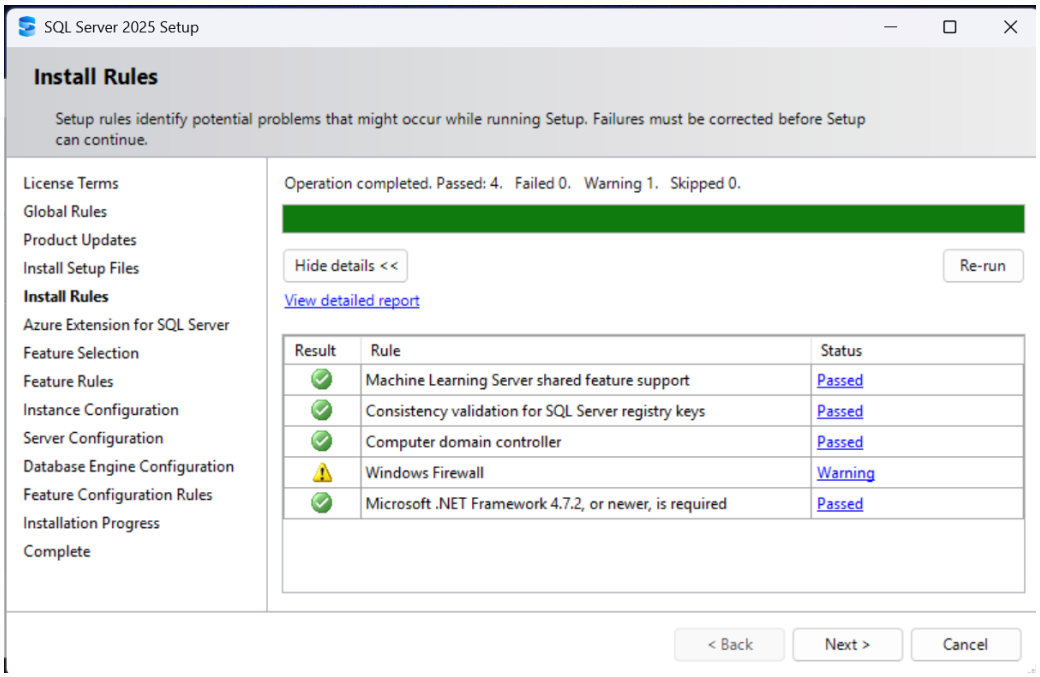
4. The SQL Server Installation Center will appear.



Select **New SQL Server stand-alone installation or add features to an existing installation**. The installer will setup files needed for the installation and perform checks to ensure that the installation can continue.

5. Click the checkbox to accept the license terms. Click **Next**.

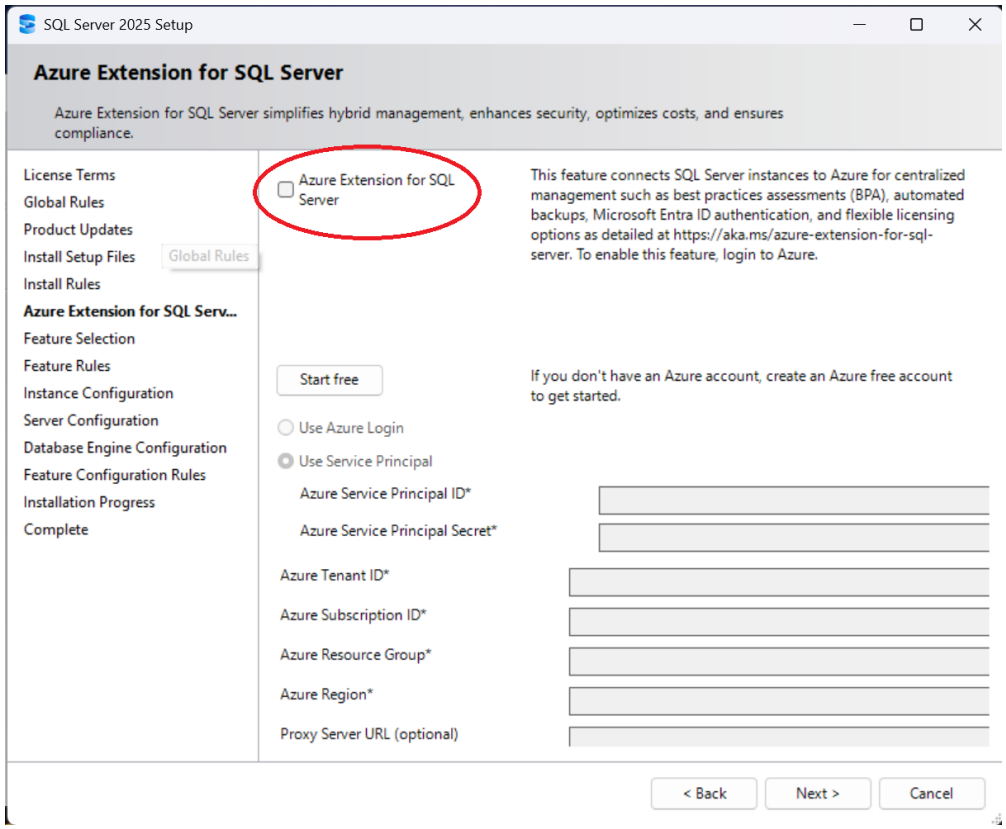
Depending on whether you are installing the full or Express version, you may see a slightly different list of rule checks. The example shown below is from the Express version.



If you have a firewall enabled, then you will probably see that item in the detailed list with a Warning. This just indicates that the installer recognizes that you are running a firewall and need to make sure that it is properly configured.

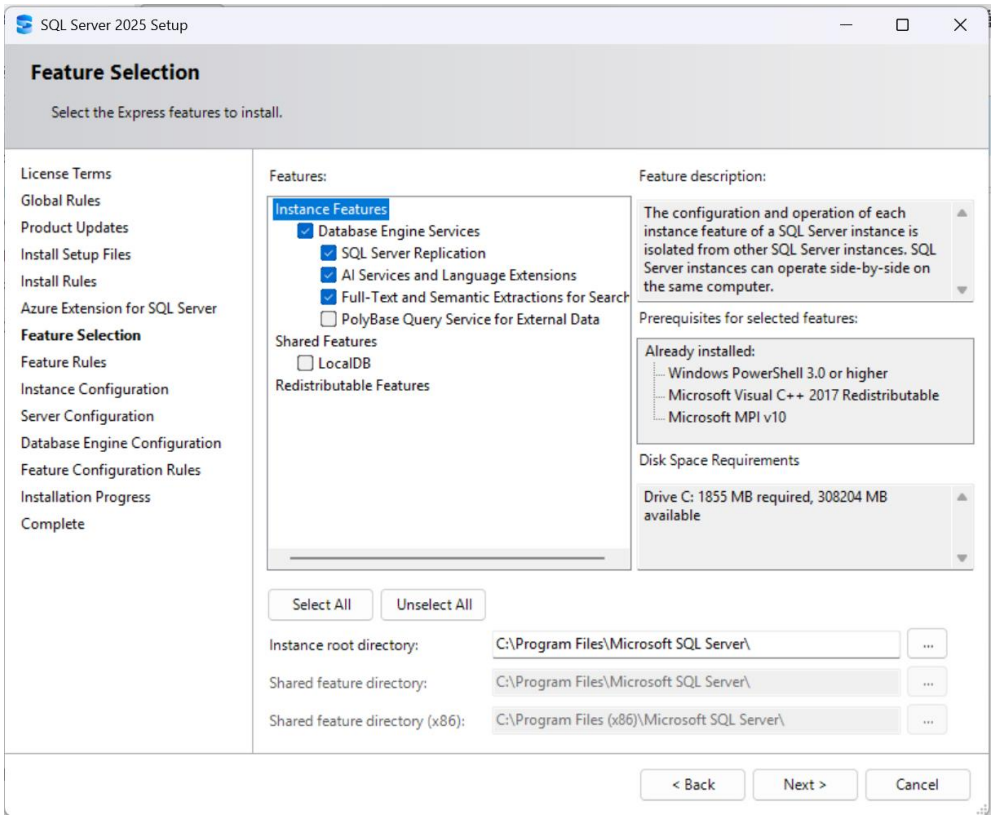
Click **Next**.

6. Uncheck the checkbox for Azure Extension for SQL Server



Click **Next.**

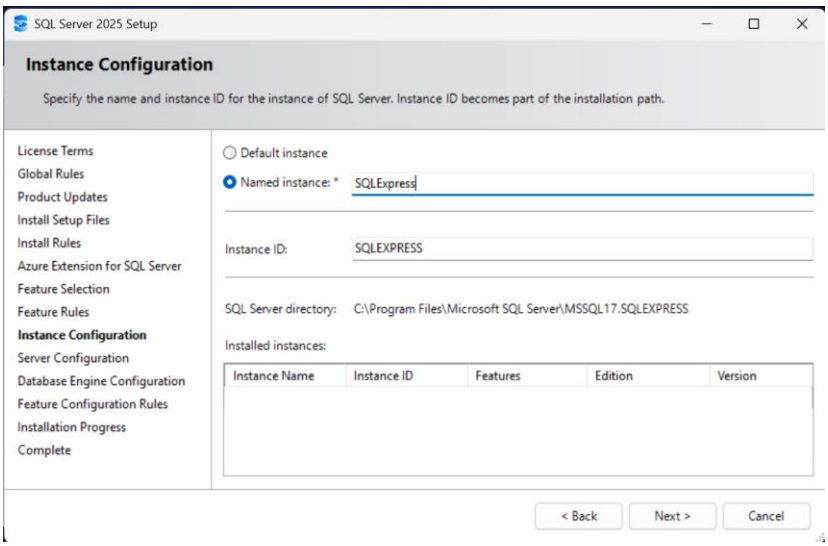
7. Select the Installation location and confirm the features installed. You can accept the default values for instance features.



Click **Next**.

8.

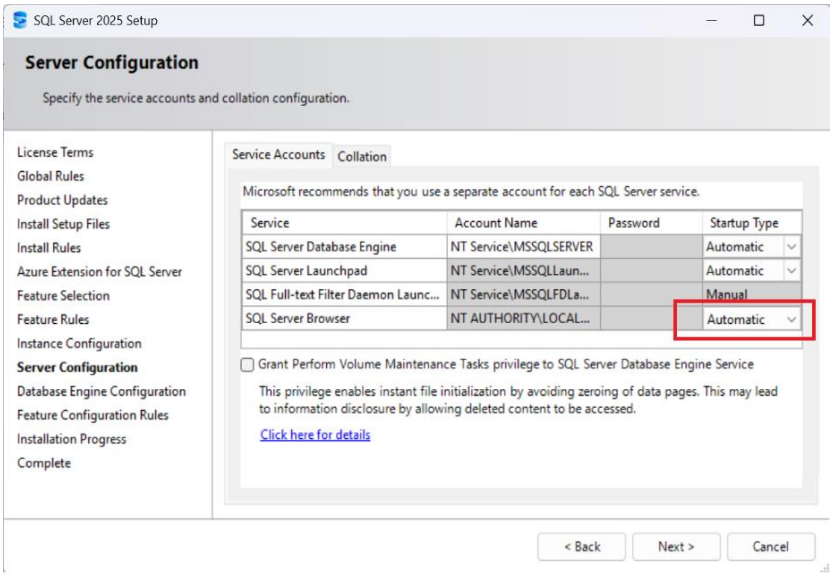
9. Make note of the instance name. If using the default instance, the database server will be accessible at [Computer name]. If a named instance is provided, the database server will be accessible at [Computer name]\[Instance name] (e.g. localhost\SQLExpress).



Click **Next.**

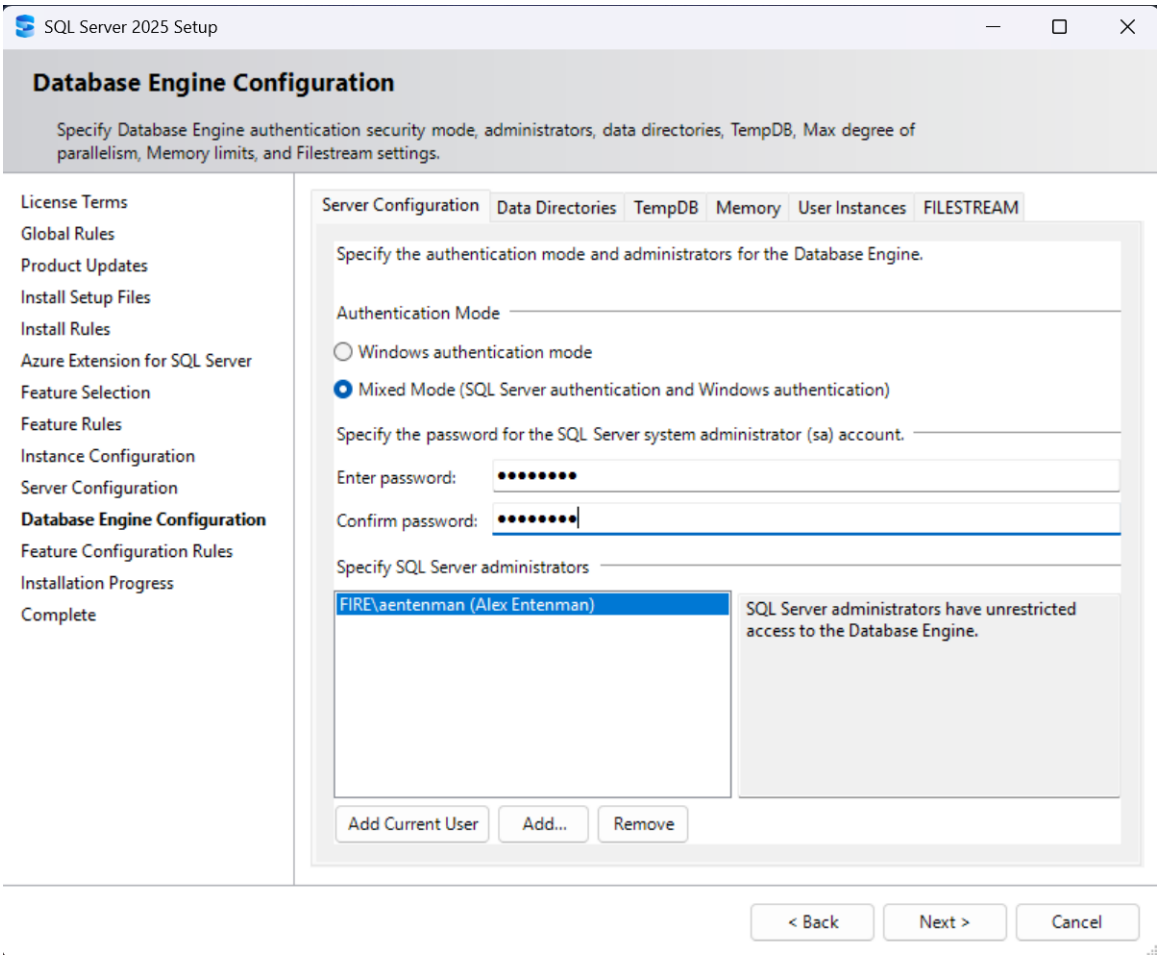
10. You will see a page where you select the accounts database services utilize.

Change the Startup Type for SQL Server Browser from Disabled to Automatic. Click **Next**.



11. Next, you will be presented with a window where you will choose the authentication mode and administration account(s) for the Database Engine.

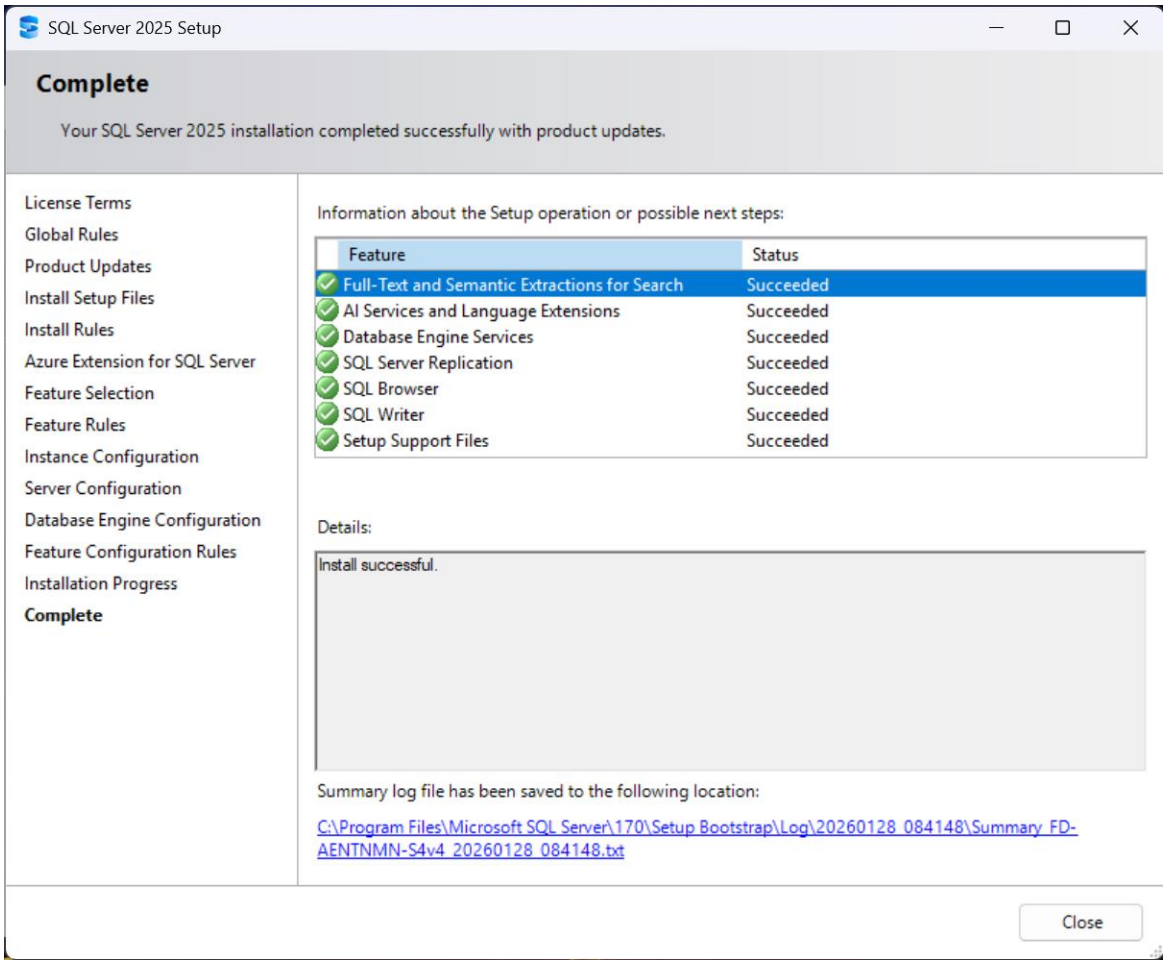
Select **Mixed Mode** authentication mode and enter a password for the database administrator account (sa). Make sure that there is a user account listed in the **Specify SQL Server administrators** box. Once this is completed, you can click on **Next**.



As the installer starts installing the database server, you will see a blue progress bar, and the files names listed as they are being installed.

12. The installation will begin.

13. Once the installation has finished, you should see a window like the one shown below, indicating that the Installation is complete. This window will also show the location of the Summary Log file for the installation.



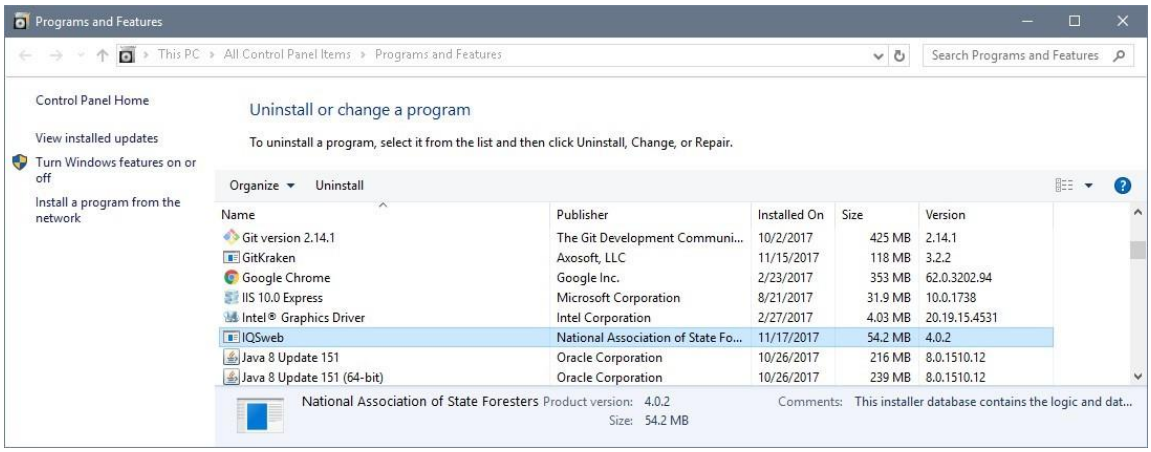
When you click **Close** in the Complete window, you will be returned to the SQL Server Installation Center Window. From there you can choose to install SQL Server Management Studio using the Install SQL Server Management Tools link, search for product updates with Windows Update, or you can close the SQL Server Installation Center Window. You can also download and install the SQL Server Management Studio latest version from https://aka.ms/ssms/22/release/vs_SSMS.exe

See the instructions in Step 3 of the main Installation Instructions for details on how to use the SQL Server Management Studio to configure SQL Server 2022.

Reference C: Uninstallation Instructions

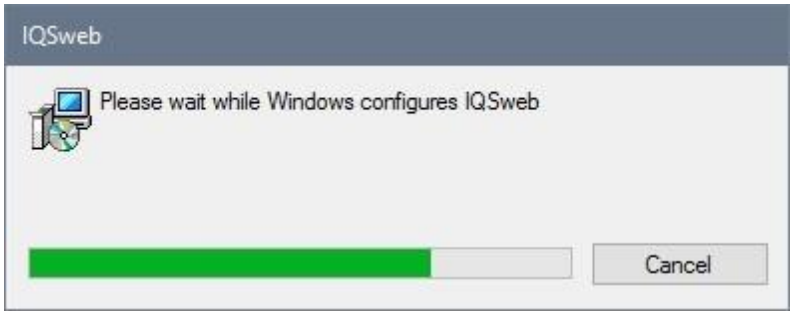
Step 1: Remove the IQSWeb v7.x application

1. To remove the IQSWeb v7.x application, open the **Control Panel** and select "**Programs and Features**".
2. Click on **"IQSWeb**" and then click the **"Uninstall**" button.



3. Click "**Yes**" to remove IQS Web.

4. You will see a progress bar:

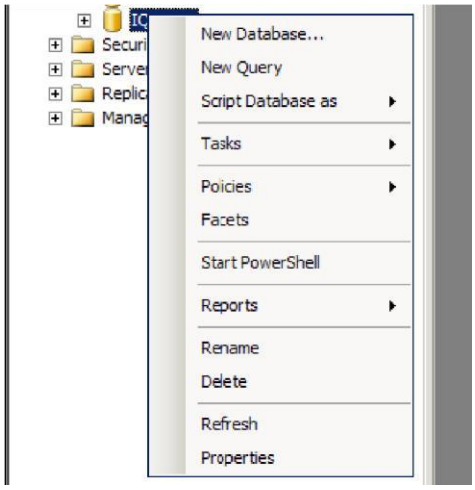


5. When the un-installation is complete, the "IQSweb" entry will be removed from the "Programs and Features" screen.

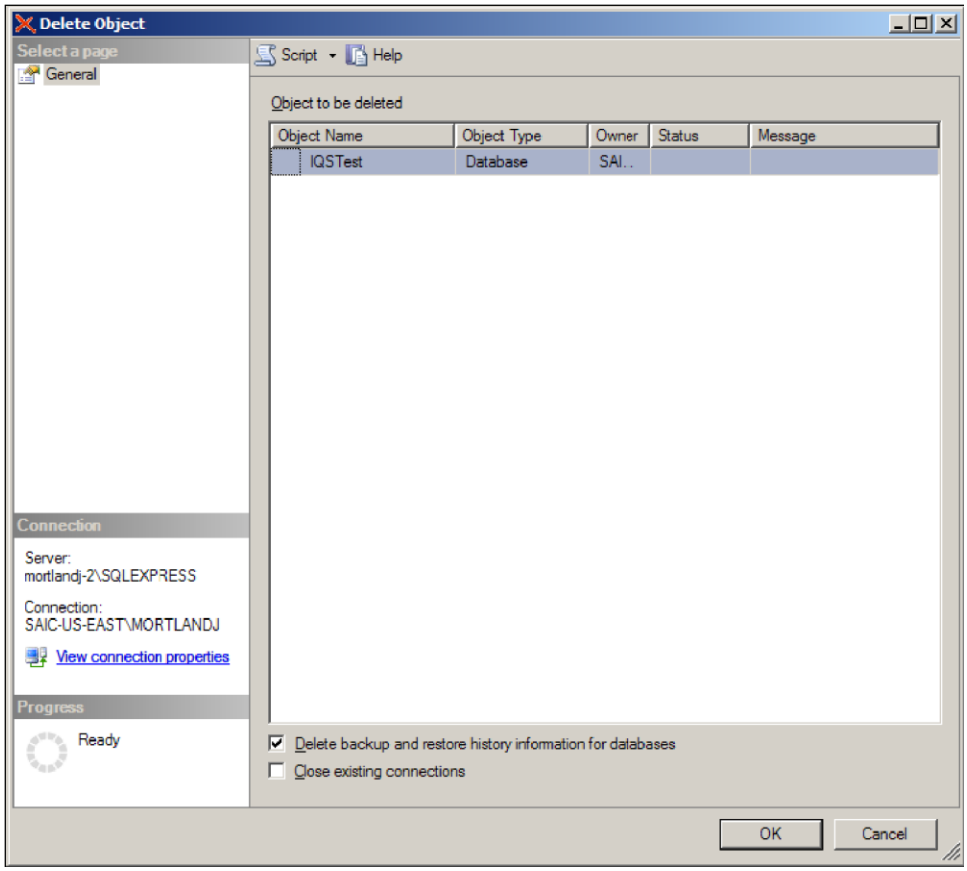
Step 2: Remove the IQSweb Database

IMPORTANT NOTE: If you remove the IQSweb database, all data will be lost. Before removing the database, backup the database to preserve the data. (See Reference D for database backup instructions).

1. To Remove the IQSweb database, open **"SQL Server Management Studio**".
2. Connect to the database service the IQSweb database resides on.
3. In the "**Object Explorer**", expand the list of Databases.
4. Right-click on the IQSweb database and select **"Delete**".

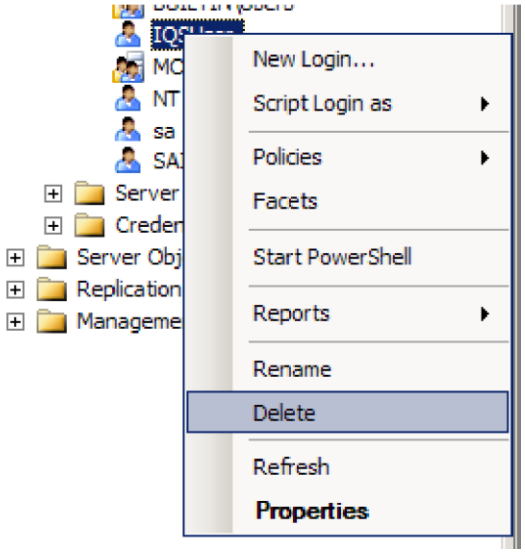


5. In the window that appears, click **OK.**

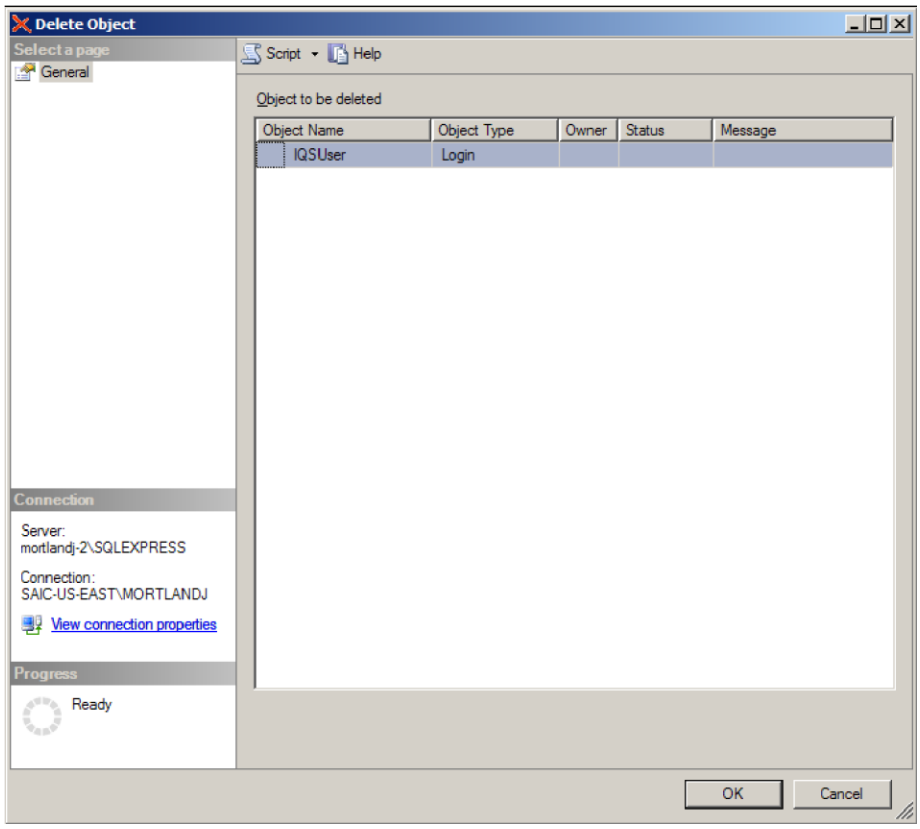


6. The IQSweb database is deleted.
7. **Optional**: Deleting the IQSweb database login.
   a. To delete the login that is used by IQSweb, in the "**Object Explorer**", expand the "**Security**" list and then the "**Logins**" list.

   b. Right-click on the IQSweb login and select "**Delete**".



c. Click **OK.**



d. The IQSweb database login is now deleted.

8. If you now re-install IQSV8, you will start from the beginning of the Installation Instructions, creating the database and (if you deleted the login) creating the database login.

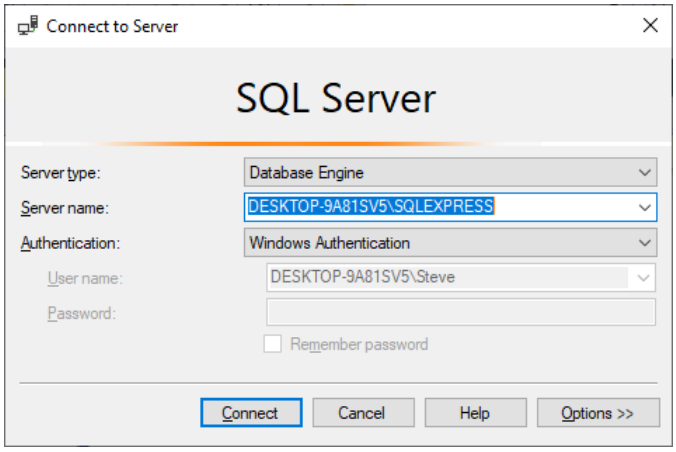
Reference D: Database Backup/Restore Instructions

If your IT department does not have scheduled periodic backups for your IQSV8 database, the following instructions can be used to manually create a backup of your IQSV8 database.

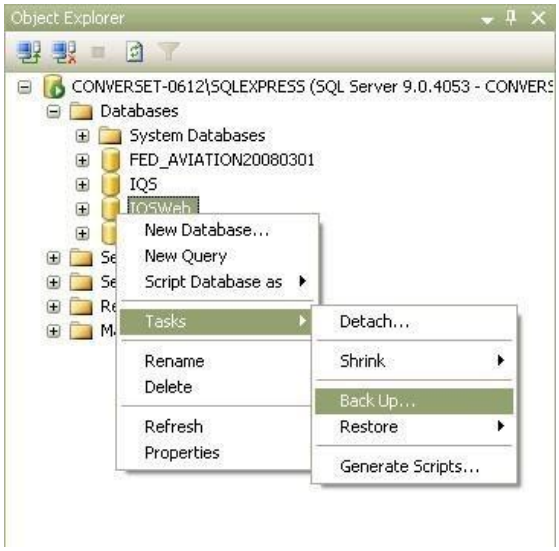
IMPORTANT NOTE: It is recommended that you talk to your IT department to understand what backup procedures are in place before manually backing up your database.

Backing Up Your IQSV8 Database

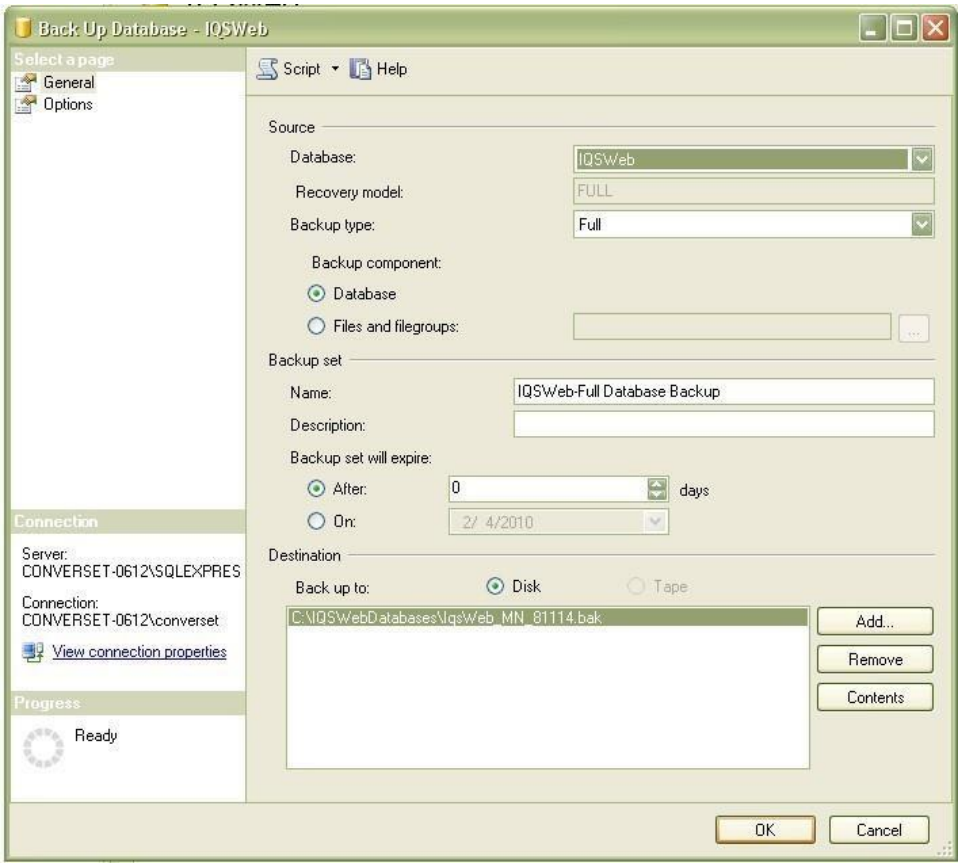
1. To create a backup copy of the IQSV8 database, open **"SQL Server Management Studio"**. Start SQL Server Management Studio, e.g., go to Start/Programs/Microsoft SQL Server 20xx/SQL Server Management Studio <Express>.



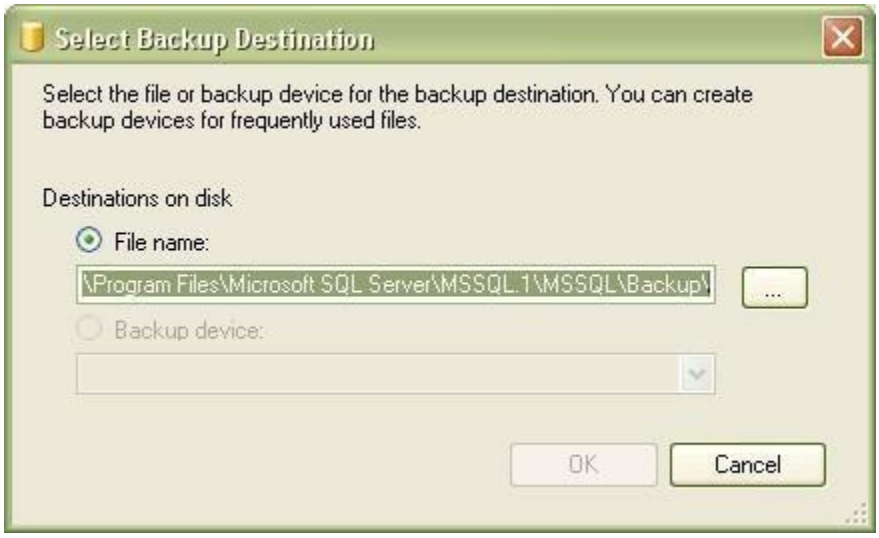
2. Connect to the database service the IQSV8 database resides on.
3. In the Object Explorer (left panel), expand the Databases object and right-click on the IQSV8 database and select **Tasks,** then select **Back Up**.



4. From the Back Up Database screen, make sure the Source Database is your IQSV8 database.



5. In the Destination block at the bottom, click the Add button to enter a destination path and file name.



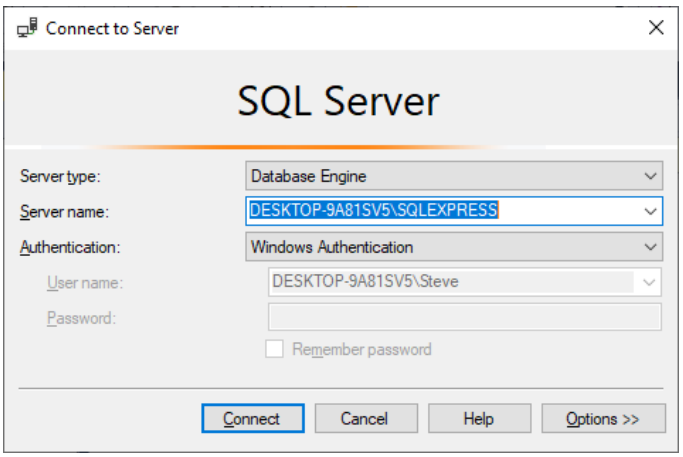
6. Click the OK button at the bottom of the screen to create the backup file. You will see the message below when the backup is complete.

Restoring an IQSV8 Database from a Backup

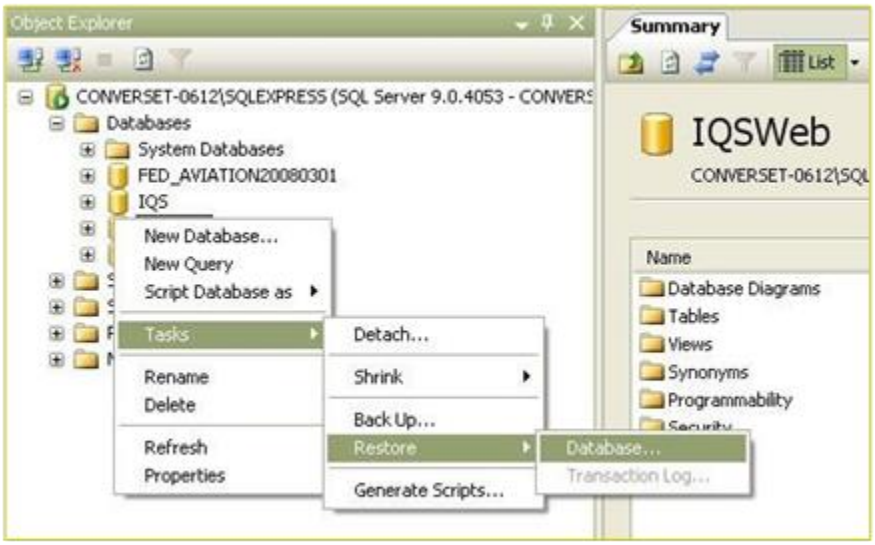
The following steps can be used to restore an IQSV8 database that was previously backed up. This process will completely replace the current database with the database file that you are restoring.

IMPORTANT NOTE: It is recommended that you talk to your IT department to understand what backup and restore procedures are in place before manually restoring a database.

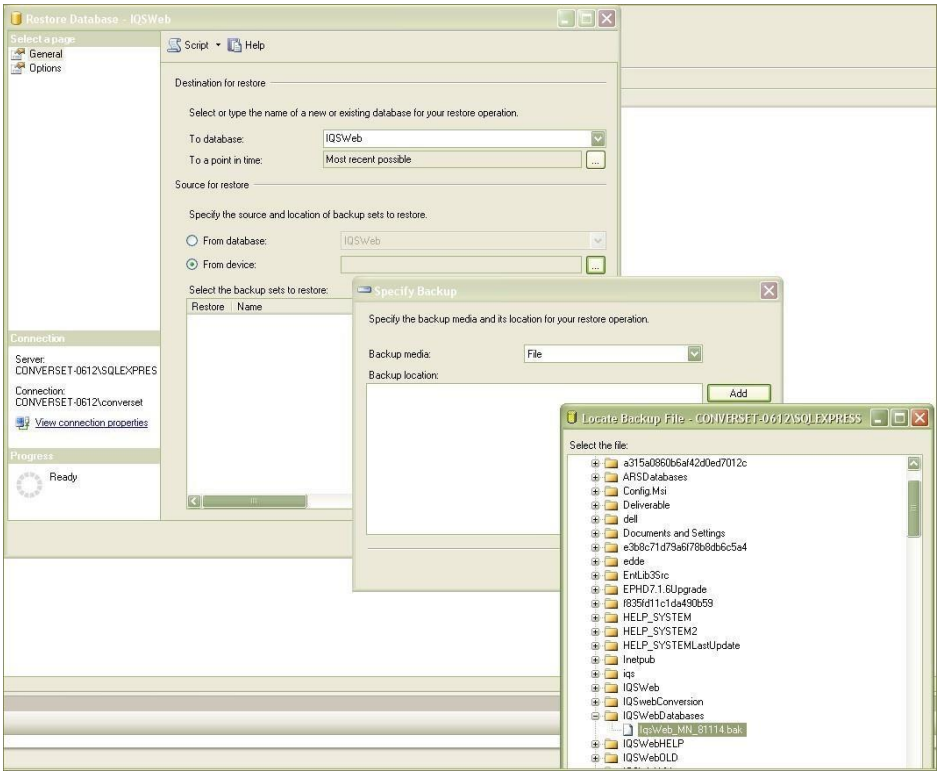
1. To restore a database that has been previously backed up, open **"SQL Server Management Studio**". Start SQL Server Management Studio, e.g., go to Start/Programs/Microsoft SQL Server 20xx/SQL Server Management Studio <Express>.



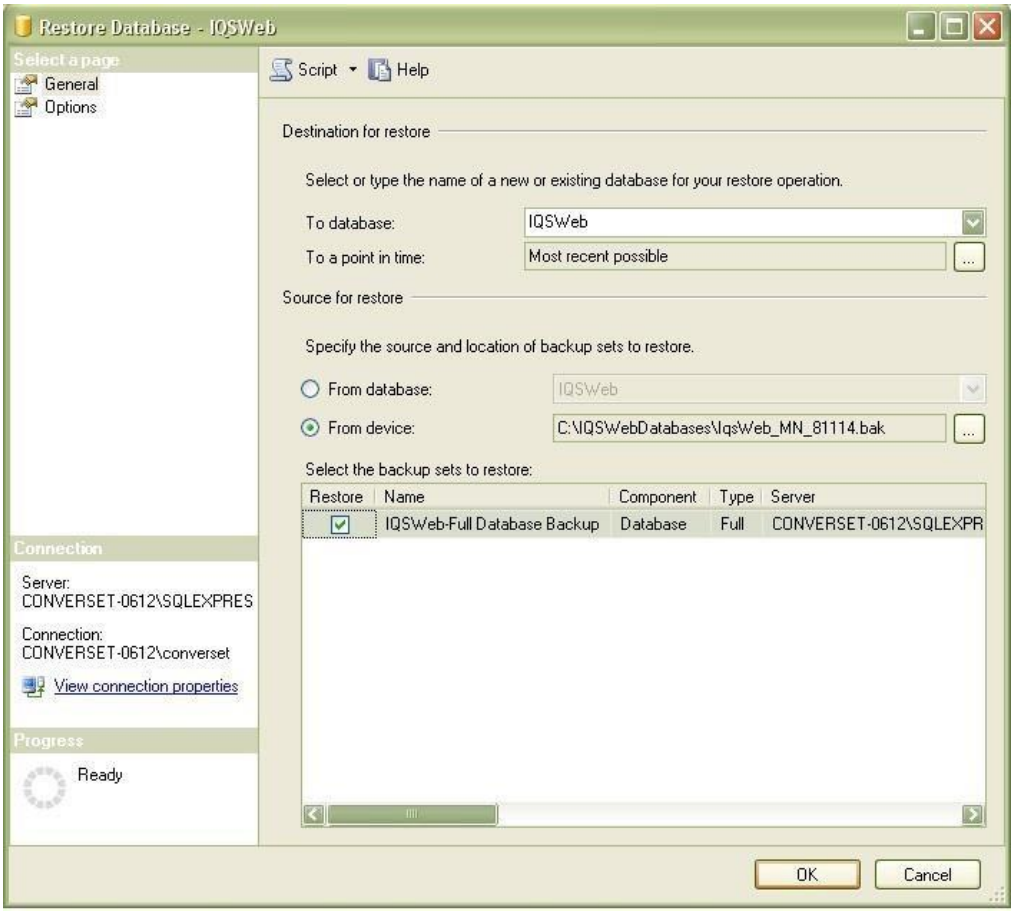
2. Connect to the database service the IQSV8 database resides on.
3. In the Object Explorer (left panel), expand the Databases object and right-click on the IQSV8 database and select **Tasks,** then select **Restore,** then select **Database**.



4. From the Restore Database screen, make sure that your IQSV8 database is selected in the “To Database” field.
5. Click the From Device radio button and then click the “more” button to the right of the From Device section.

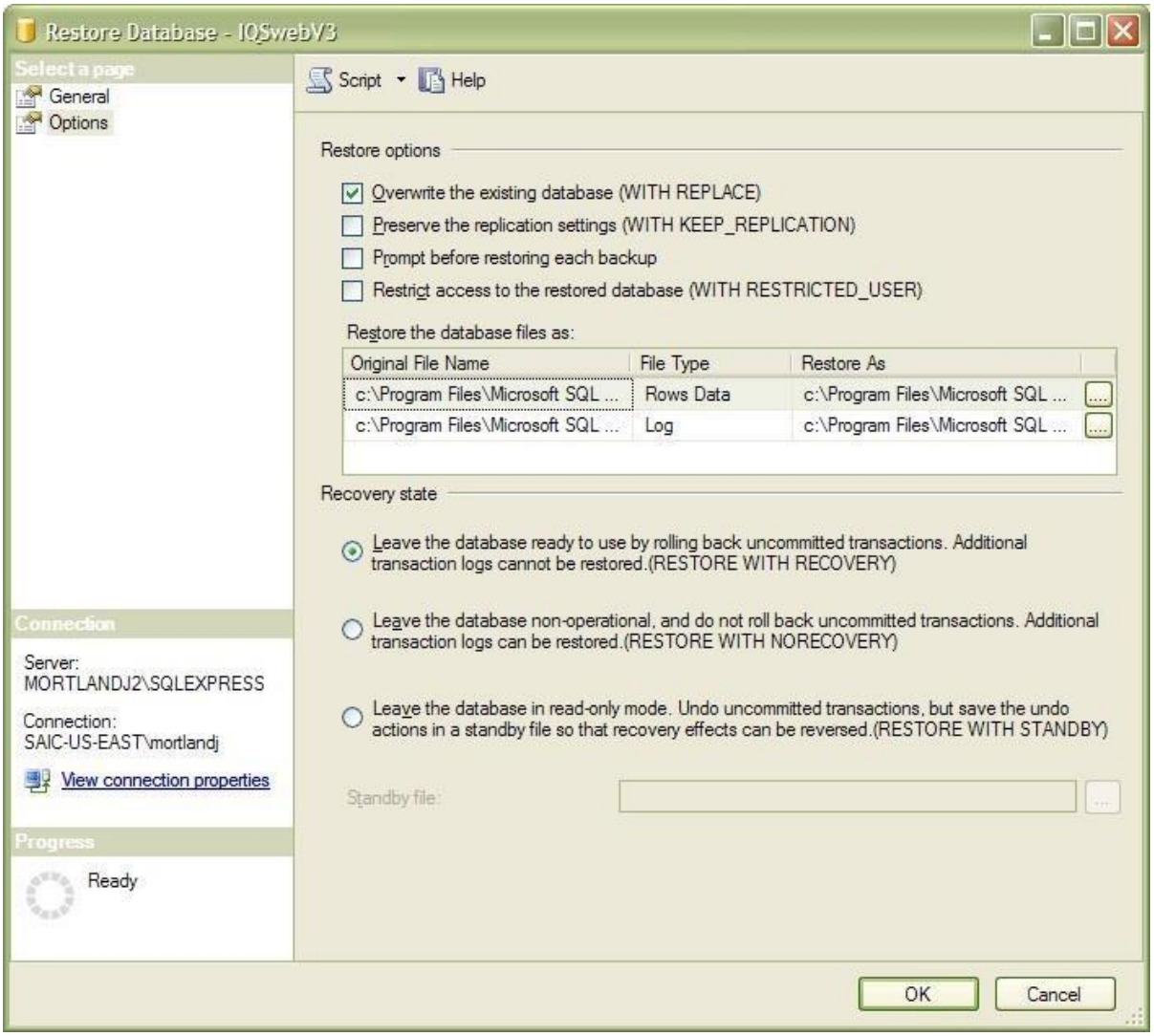


6. From the Specify Backup screen, click **Add** and then from the Locate Backup File screen, navigate to the backup file that you would like to restore and click **Add**.
7. From the Restore Database screen, make sure the Restore file is checked.



IMPORTANT NOTE: If you backup a database to the same file multiple times, SQL Server Management Studio appends successive backups of a database to that file. When you try to restore the database from that backup file, in step 7 above, there will be multiple entries to choose from. The latest database backup is the bottom entry (there is also a backup date column to the right).

8. Click on the **Options** page on the left and in the Restore Options section, check **Overwrite the existing database.**



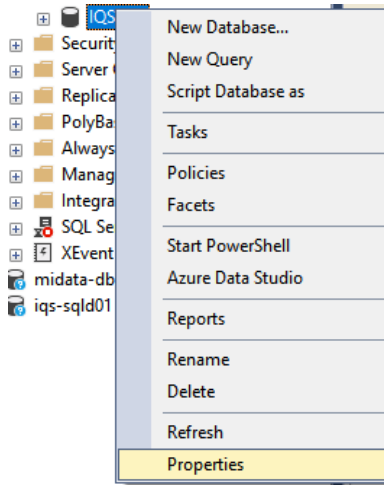
9. Click **OK** at the bottom of the screen. You will be notified when the restore has completed successfully.

Reference E: Updating Database Compatibility

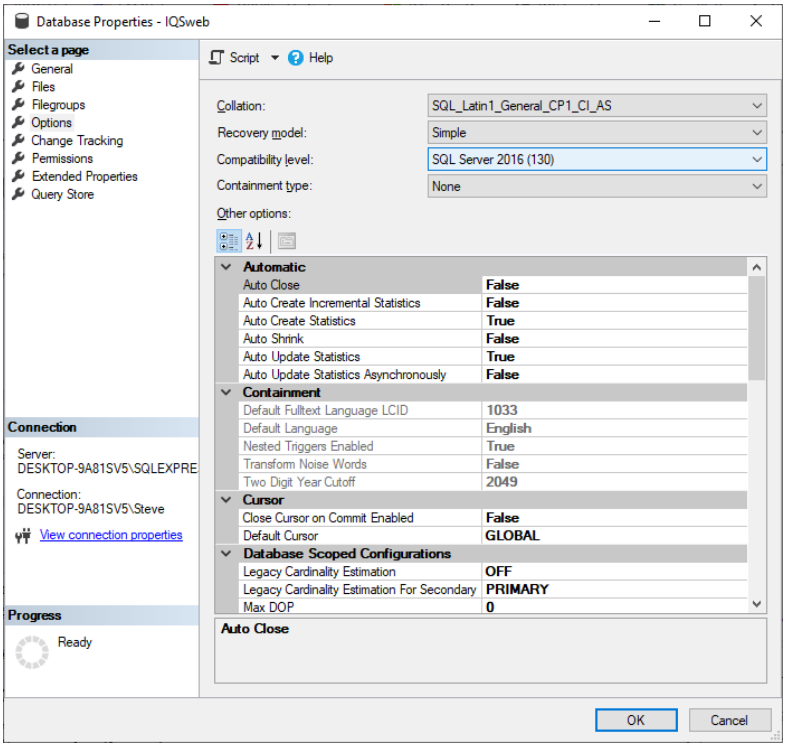
IMPORTANT NOTE: When upgrading the SQL Server instance, it does not automatically upgrade the IQSV8 database. That requires changing the compatibility level of the database.

To change the compatibility level:

1. Open SQL Server Management Studio.
2. Connect to the SQL Server instance where the IQSweb database resides.
3. **Right**-click on the IQSweb database.



4. In the Database Properties window, go to the Options page.



5. Ensure that the Compatibility level is set to **SQL Server 2016 (130)** or later. For the longest-term compatibility in the future, select the latest level (currently **SQL Server 2022 (160)**).
6. Click **OK**.

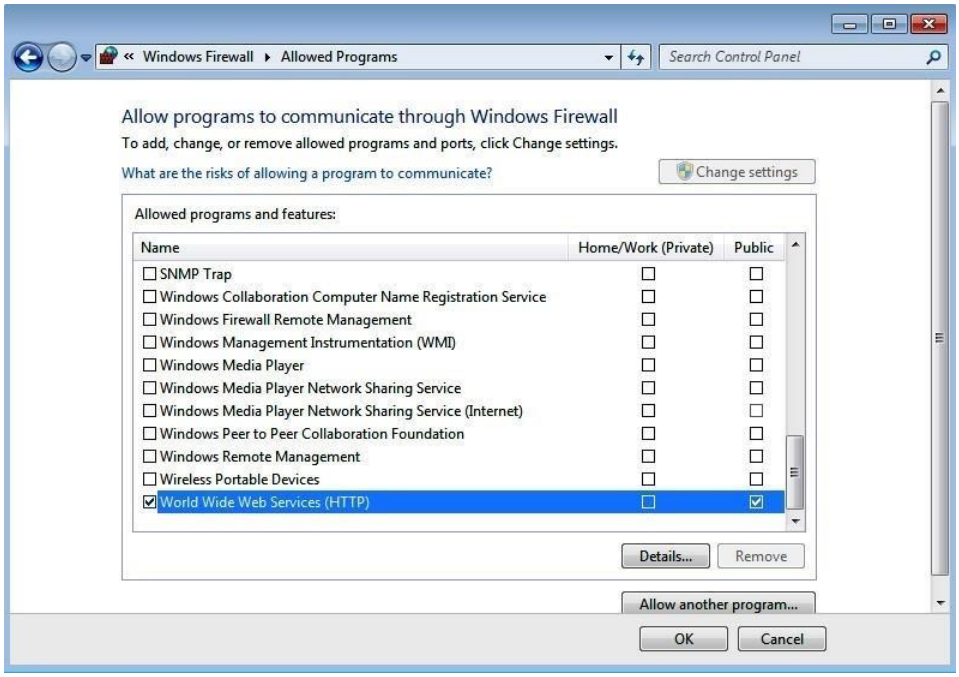
Reference F: Microsoft Windows Workstation Firewall Settings

This reference addresses the Microsoft Windows Workstation Firewall settings related to IIS, when using Desktop Operating Systems for IQSV8 servers for the following Desktop Operating Systems.

Windows 10 or Later

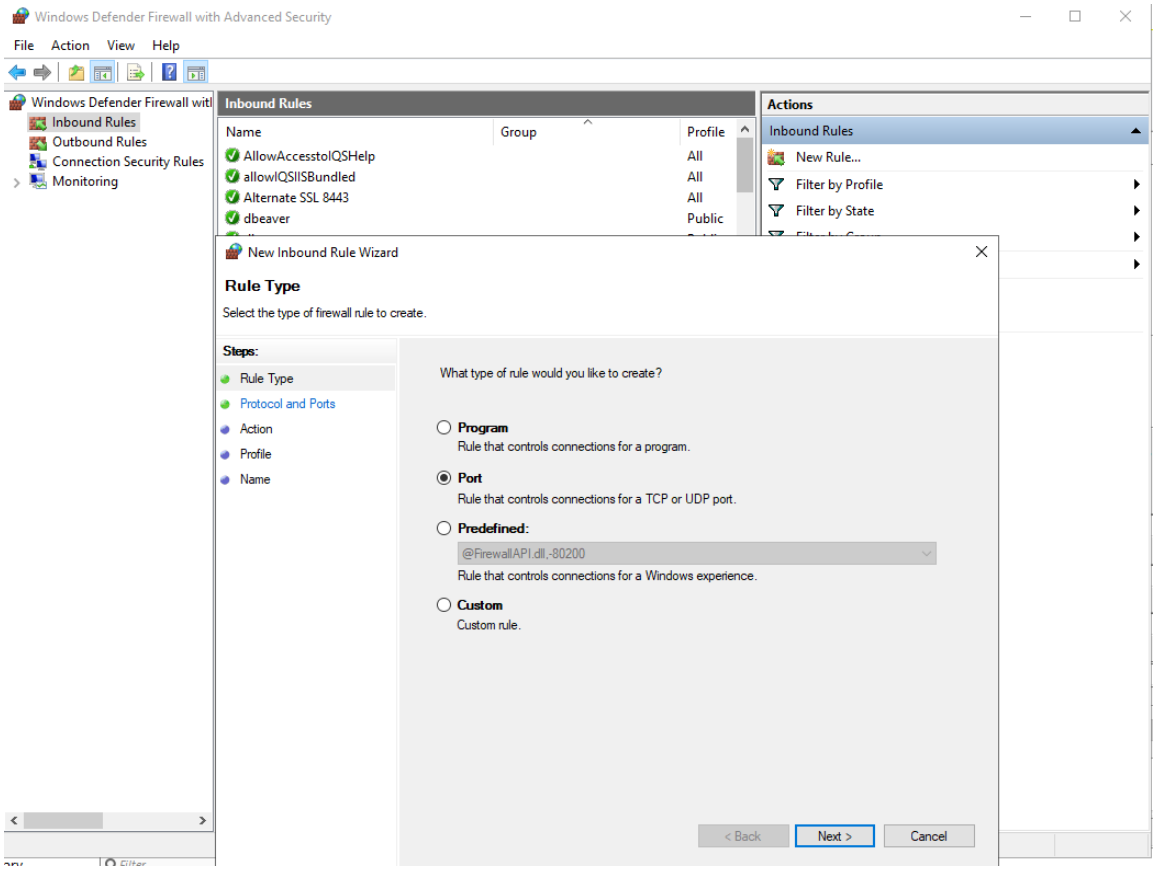
1. From the **Control Panel**, open **System Security** and then in the **Windows Firewall** category, click on the Allow a program through Windows Firewall link.

2. Make sure that **World Wide Web Services (HTTP)** is checked and then click **OK**. The Windows Firewall is now configured to allow web traffic for IIS and IQSV8 in Windows.

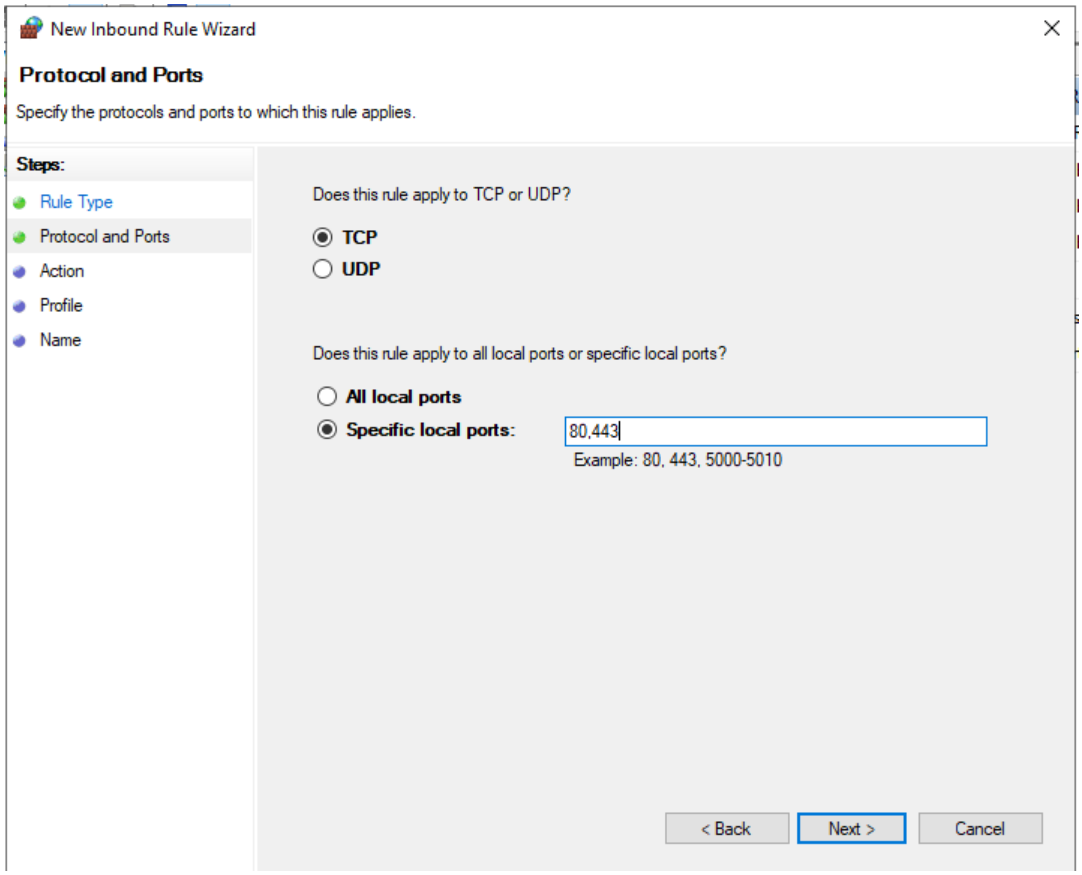


Windows Server

1. Open up by typing wfmsc in the search
2. Add a new rule and select open a port

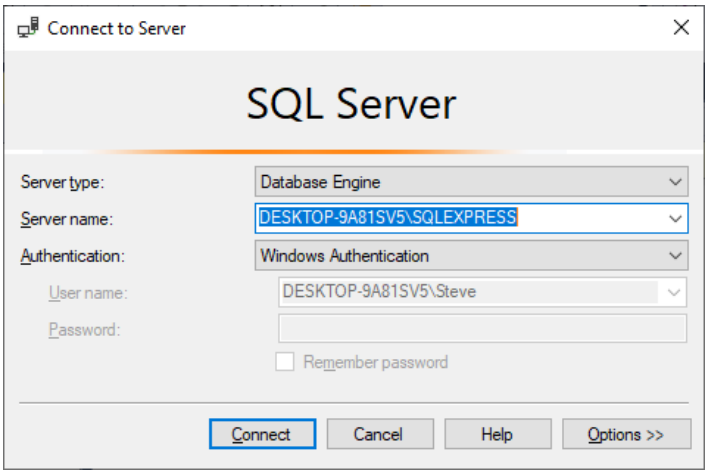


3. Add port 80 for http and 443 secure (https) connections.

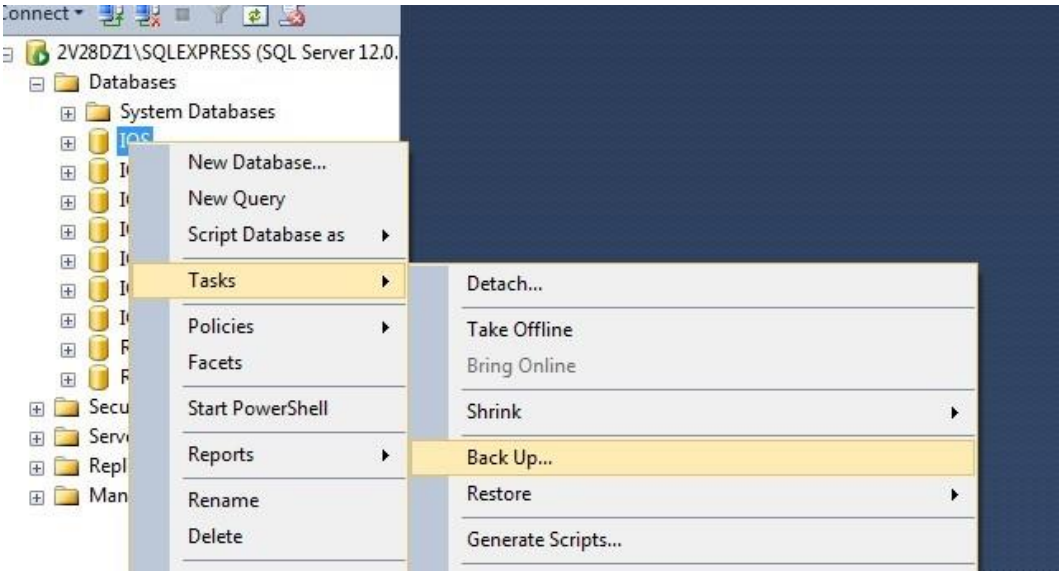

New Inbound Rule Wizard
Protocol and Ports
Specify the protocols and ports to which this rule applies.
Steps:
Rule Type
Protocol and Ports
Action
Profile
Name
Does this rule apply to TCP or UDP?
TCP
UDP
Does this rule apply to all local ports or specific local ports?
All local ports
Specific local ports:
80,443
Example: 80, 443, 5000-5010
< Back
Next >
Cancel

Reference G: Server Migration Steps

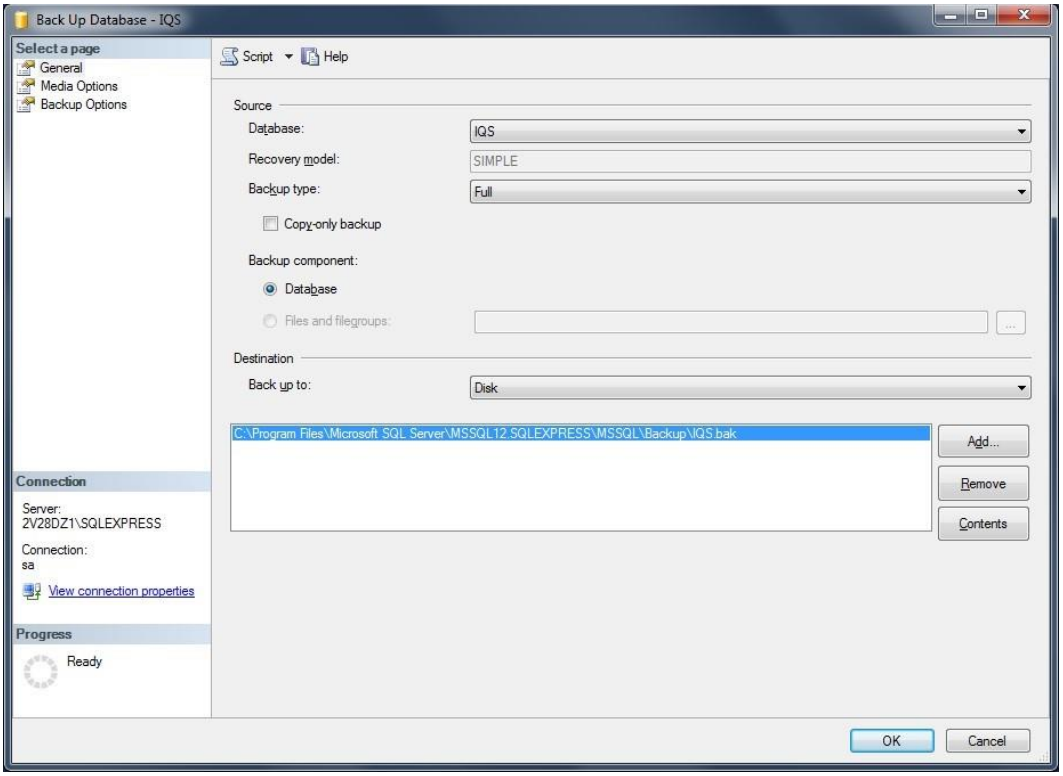
1. On the old server, perform a backup of the IQSV8 database.
    a. To create a backup copy of the IQSV8 database, open "**SQL Server Management Studio**". Start SQL Server Management Studio, e.g., go to Start/Programs/Microsoft SQL Server 20xx/SQL Server Management Studio.
    b. Connect to the database service the IQSV8 database resides on.



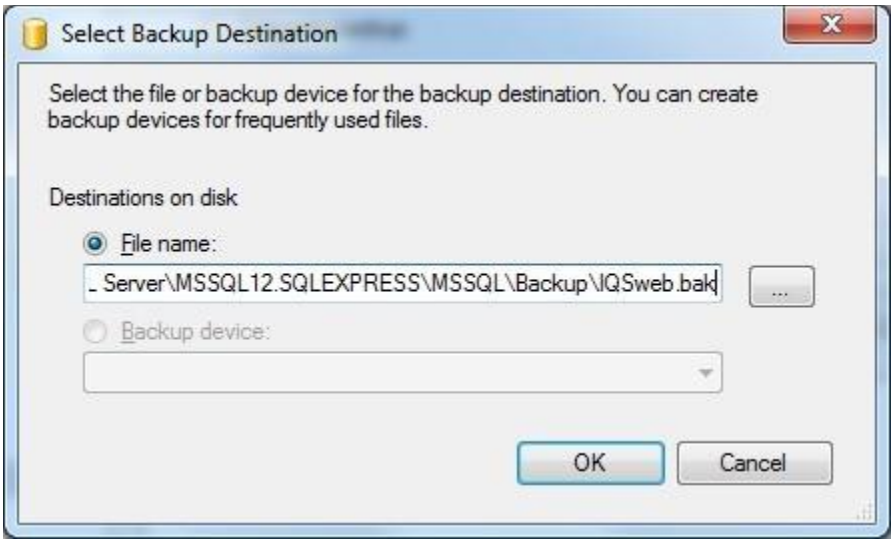
    c. In the Object Explorer (left panel), expand the Databases object and right-click on the IQSV8 database and select Tasks, then select Back Up.



    d. From the Back Up Database screen, make sure the Source Database is your IQSV8 database.

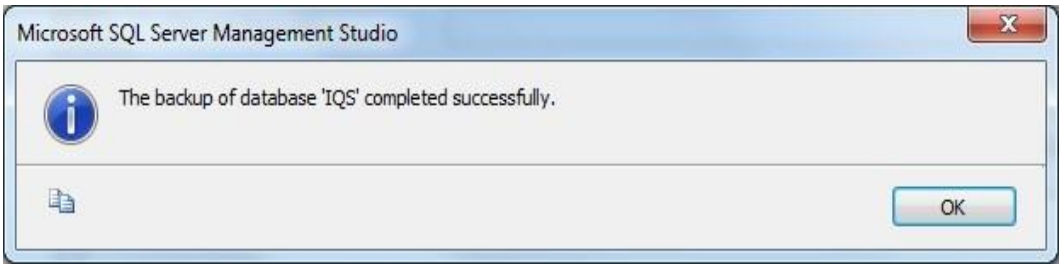


e. In the Destination block at the bottom, click the Add button to enter a destination path and file name if the box is empty.



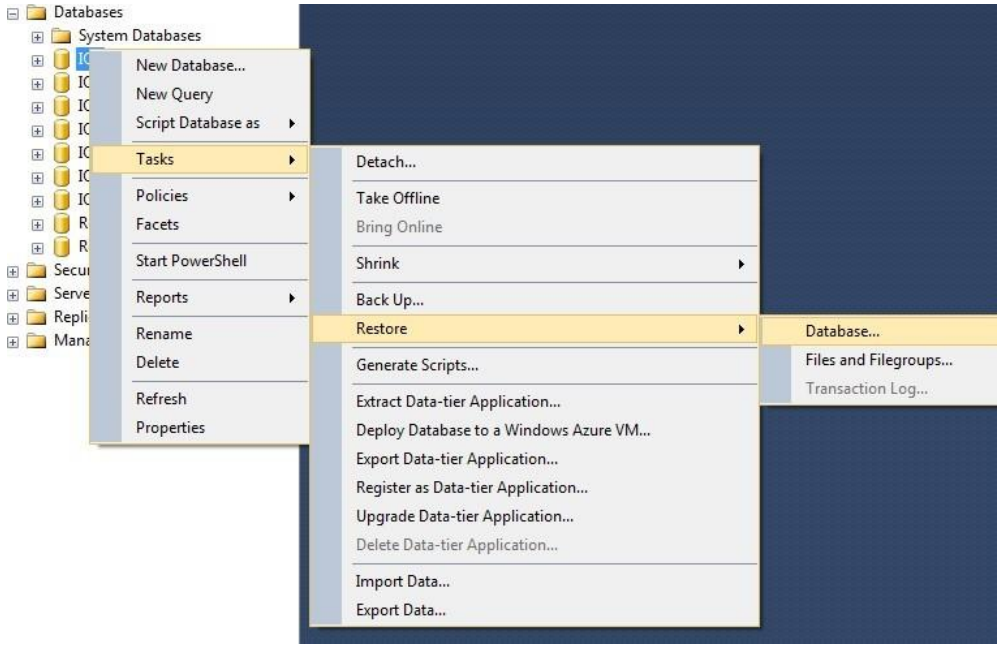
f. **<u>Make note of the location of the backup file. This file will need to be copied over to the new server.</u>**

g. Click the OK button at the bottom of the screen to create the backup file. You will see the message below when the backup is complete.

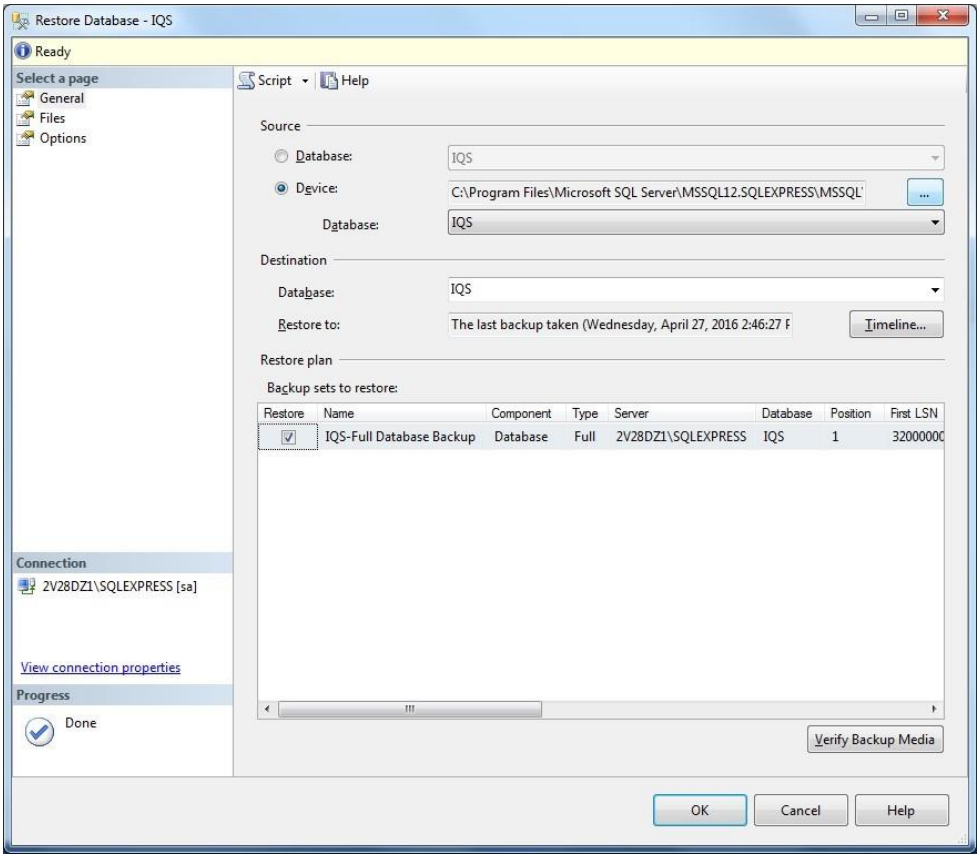


2. On the new server, create a new IQSV8 database in SQL Server. This database will house the restored database.
3. On the new server, restore the copied database backup.
   a. To restore a database that has been previously backed up, open **"SQL Server Management Studio**". Start SQL Server Management Studio, e.g., go to Start/Programs/Microsoft SQL Server 20xx/SQL Server Management Studio <Express>.
   b. Connect to the database service the IQSV8 database resides on.

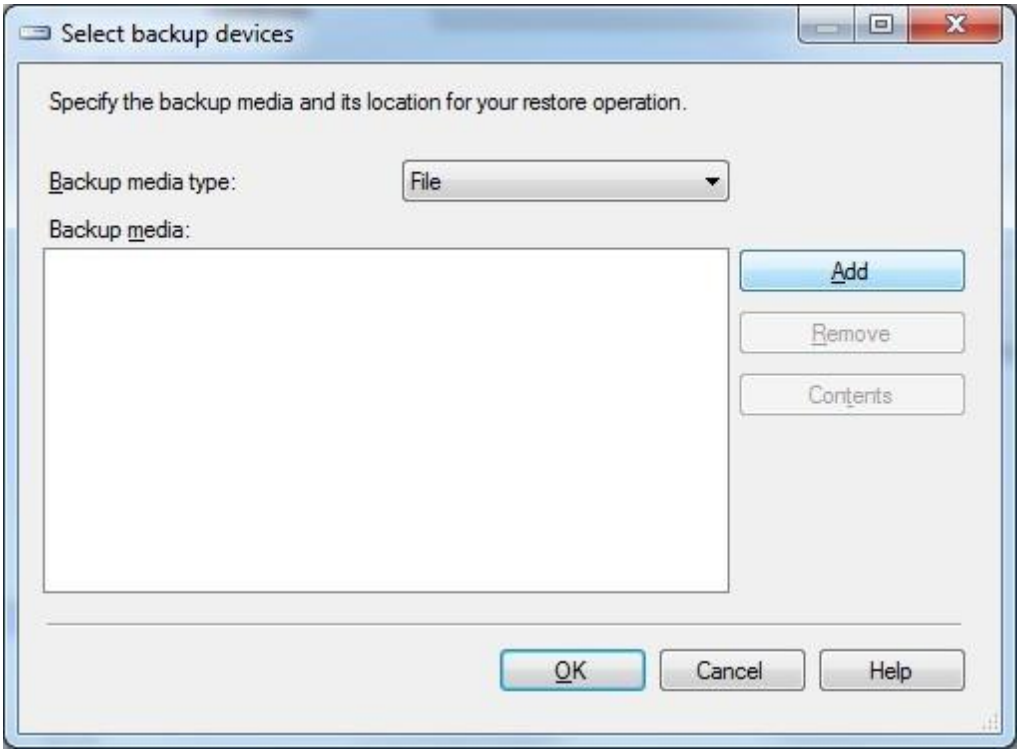
   c. In the Object Explorer (left panel), expand the Databases object and right-click on the IQSV8 database and select **Tasks,** then select **Restore,** then select **Database**.

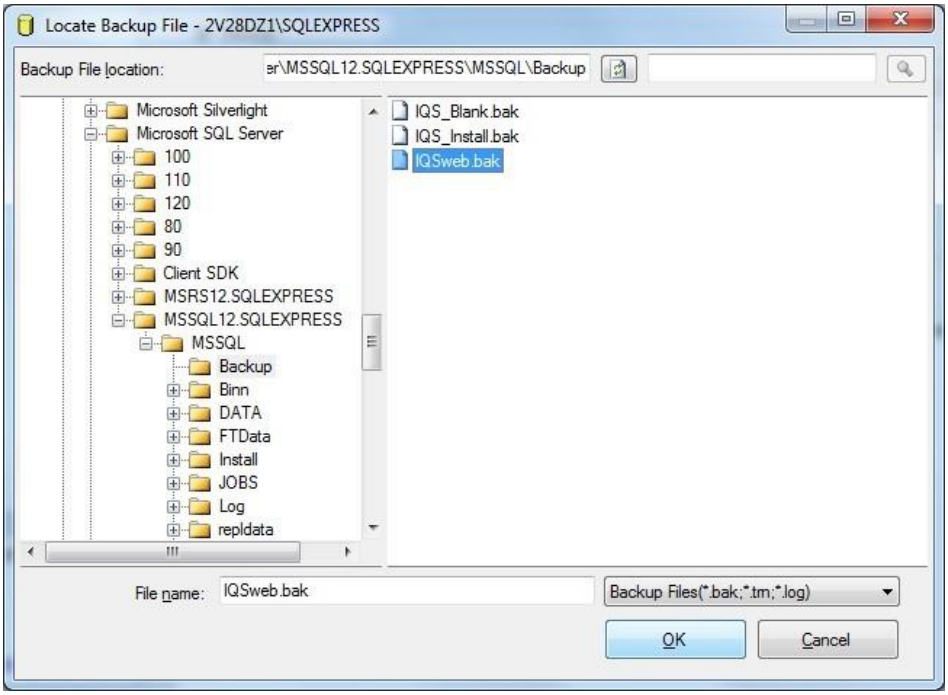


d. Click the Source Device radio button and then click the "…" button to the right of the Source Device section. Then click the "Add" button and select the backup file created in step 1.

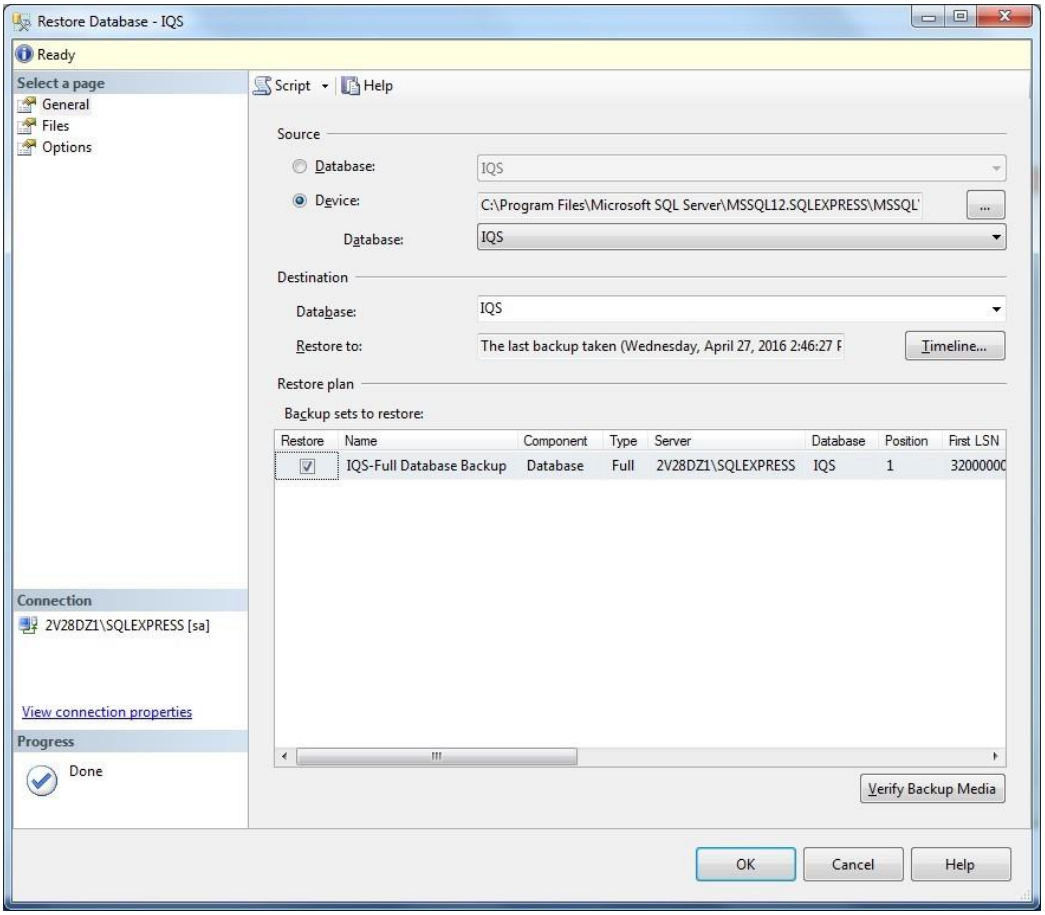


e. From the Specify Backup screen, click **Add** and then from the "Locate Backup File" screen, navigate to the backup file that you would like to restore and click **Add**.



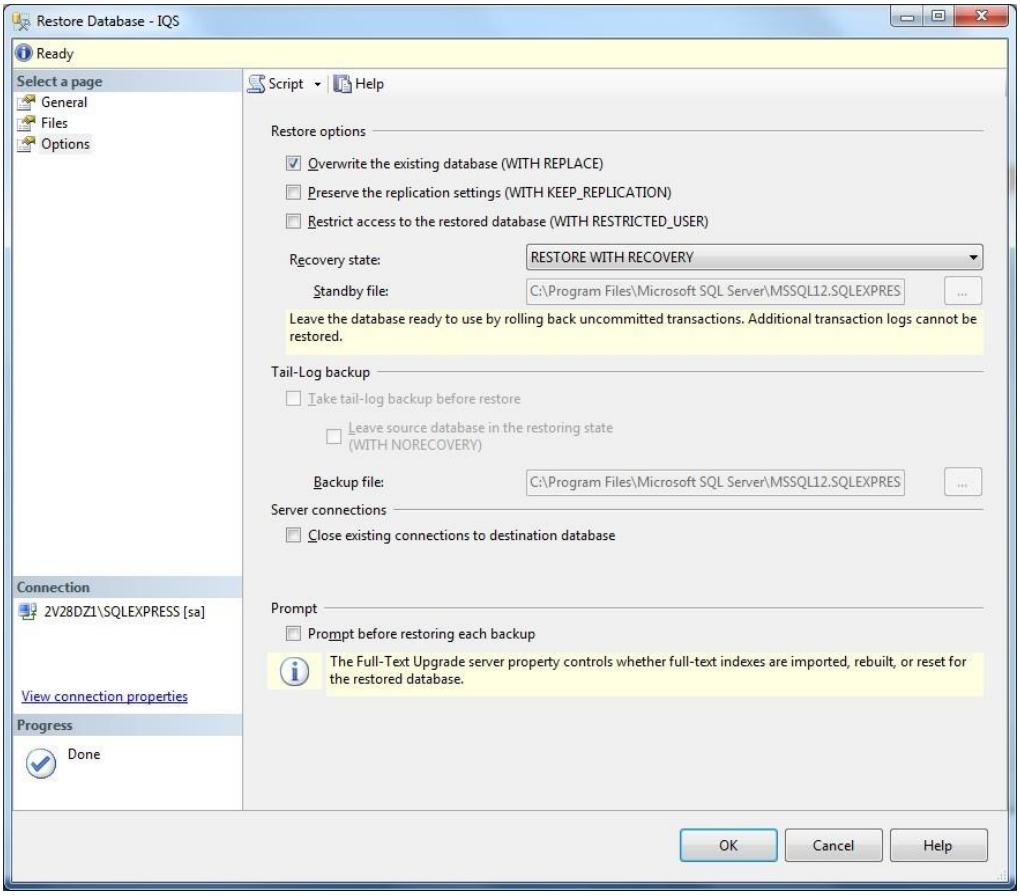


f. From the Restore Database screen, make sure the Restore file is checked.



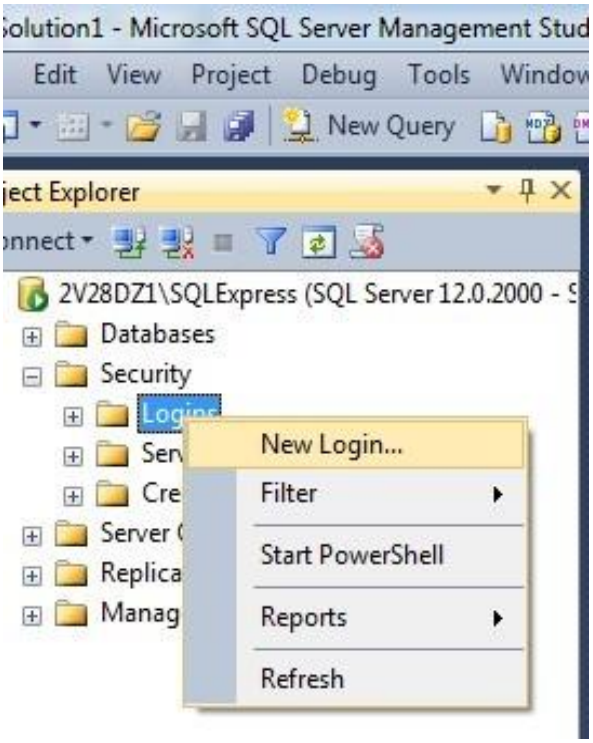
IMPORTANT NOTE: If you backup a database to the same file multiple times, SQL Server Management Studio appends successive backups of a database to that file. When you try to restore the database from that backup file, in step e above, there will be multiple entries to choose from. The latest database backup is the bottom entry (there is also a backup date column to the right).

g. From the Restore Database screen, make sure that your IQSV8 database is selected in the "Destination Database" field.
h. Click on the **Options** page on the left and in the Restore Options section, check **Overwrite the existing database.**

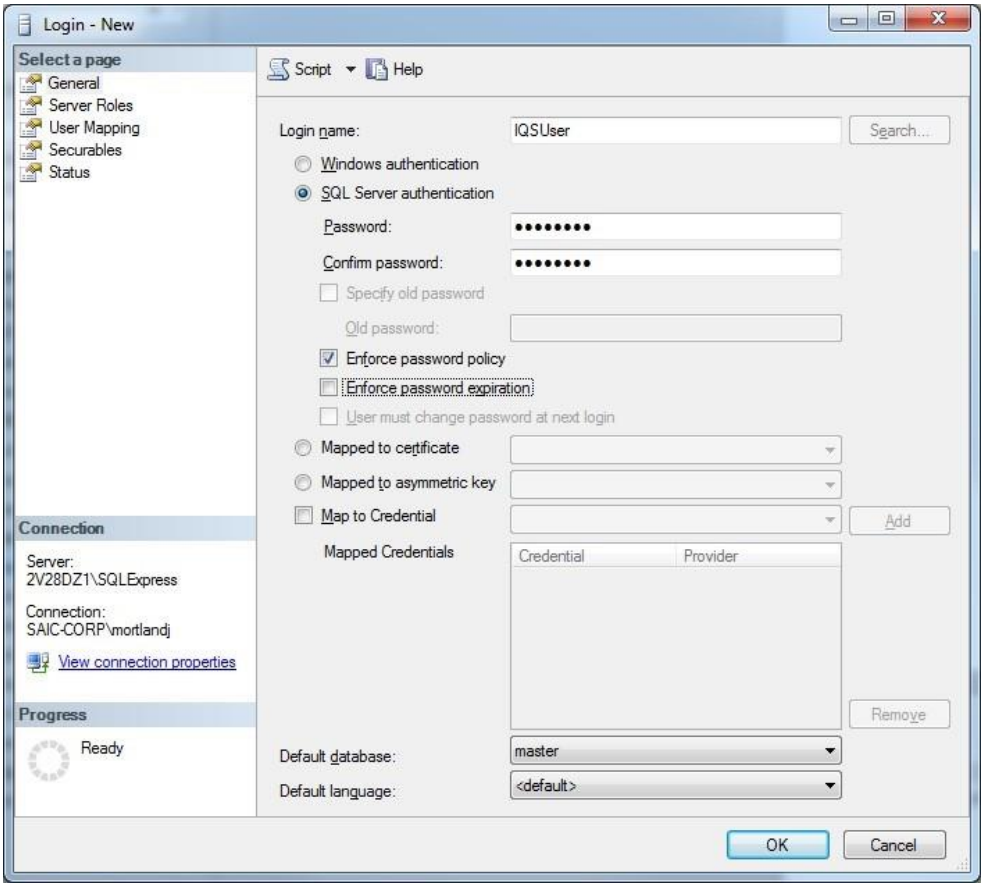


i. Click **OK** at the bottom of the screen. You will be notified when the restore has completed successfully.

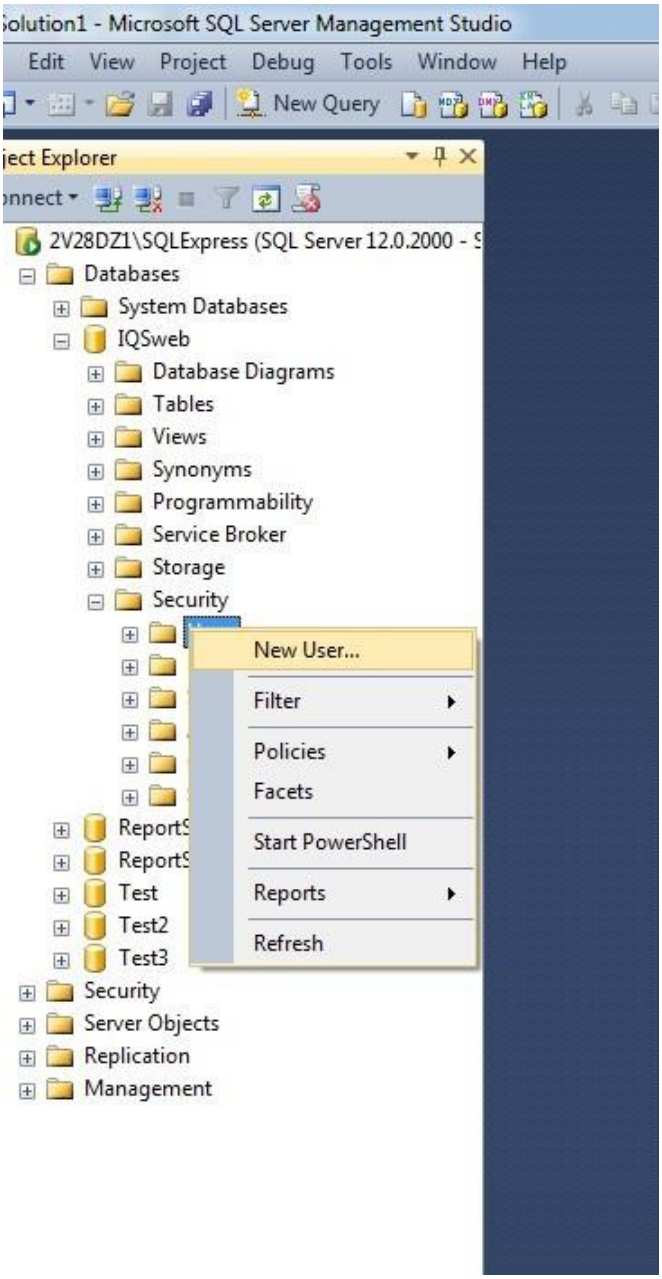
4. On the new server, recreate the database login for IQSV8.
   a. In the Object Explorer (left panel), expand the Security object for the SQL Server instance and right-click on Logins. Select **"New Login"**.



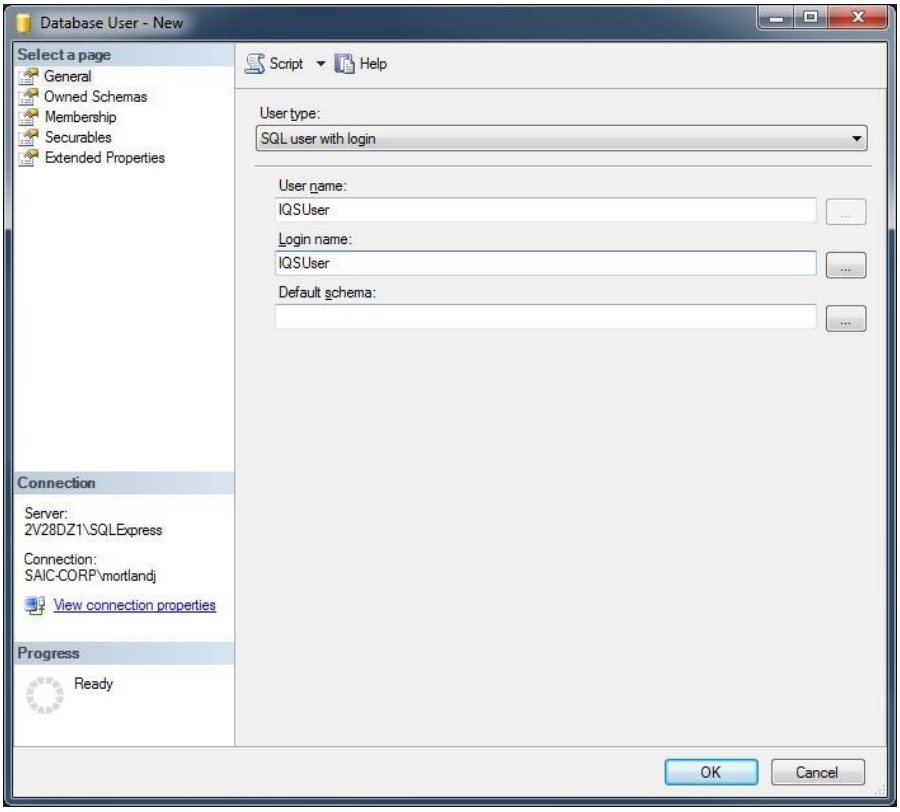
b. On the Login - New screen, enter the **Login Name, e.g., IQSuser. Select the SQL Server Authentication** radio button. Enter a **Password** and confirm the password. Continue to the next steps BEFORE clicking OK.



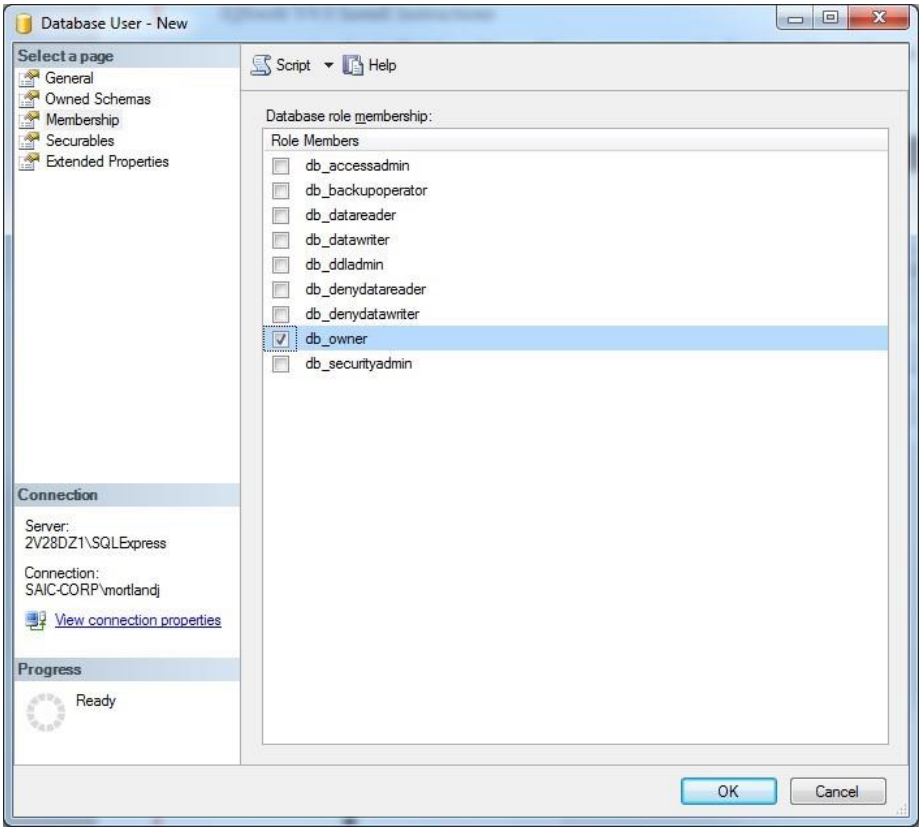
c. Uncheck the **User must change password at next login** and **Enforce password expiration** checkboxes. You can optionally uncheck the **Enable password policy** checkbox, depending on your organization's security policies.
d. Click **OK**.
e. Go into the Object Explorer, expand the Databases object and find the IQSV8 database you created. Expand the IQSV8 database object and then expand the database's Security object. Under the Security object, right-click on **Users** and select **"New User".**



f. In the Database User – New screen, enter the login name in the **User Name** and **Login name** fields.



g. Click on the **"Membership"** page on the left.
h. In the "Database role membership" section at the bottom, check the **"db_owner"** checkbox. You may need to scroll down to see this role.



i. Click **OK.**

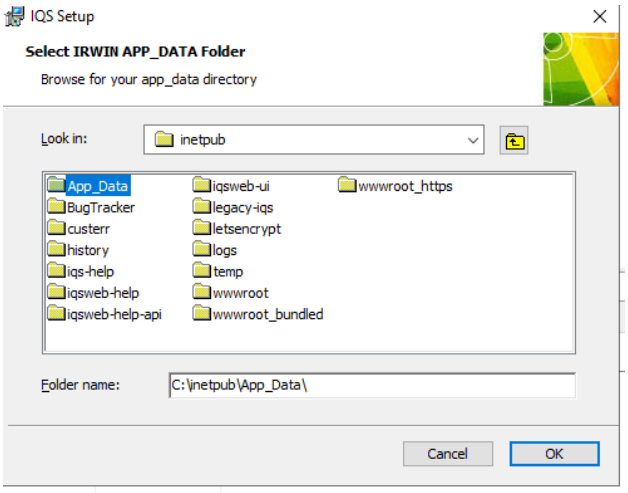
5. On the new server, run the IQSV8 installer. When prompted to enter the database information, use the new SQL Server database information and login.

Reference H: IRWIN Integration

The purpose of this reference is to help IQS users understand the integration features within IQS V8. If you are upgrading from a previous version of IQS, most of the functionality is the same. If this is your first time using IQS or connecting to IRWIN, read this document thoroughly to understand the functionality of IQS and IRWIN integration. A series of several questions and answers appear at the end of this section as to how IQS and IRWIN communicate specifically.

Upgrading from an existing version to IQS V8

Migrating from a previous version of IQS that is already integrated to IQS V8 is simple. During the installation process, ensure the person who performs your installation selects the App_Data folder containing your IRWIN connection credentials. IQS V8 will automatically migrate the connection upon first startup and no further action is required.



If you did not choose the folder during installation, your installation will show as **Disconnected** in the Status screen as shown in the top right User icon -> Status. If this is the case, you can simply enter your IRWIN username and password as described in the section below, "Connect IQS to IRWIN Integration Service" at any time to re-connect IQS to IRWIN.

IQS V8 Integration Features

The list below represents a summary of features in IQSv8 for connecting to the IRWIN integration service.

1. An IRWIN username and password will be required for each installation of IQS. Steps for applying for IRWIN credentials have been sent to you via your geographic IQS representative.
2. Person/qualification updates will be sent to IRWIN by background processes rather than manually sending the updates. Unsuccessful updates can be reviewed, reconciled and resent.
3. All resources shared through IRWIN will be assigned a unique IRWIN resource ID.
4. Reconciling potential duplicates will be handled by the IQS Manager.
5. IQS will share the "Dispatch Level" on National, Compact, and State qualifications allowing IROC users to fill compact orders.
6. Experience will be available for all incidents including initial attack when tracked by IRWIN-integrated systems. Experience will be updated weekly.

Enter Required Information for IRWIN Integration

Once IQSv8 has been successfully installed on your IQS server, and this is your first time using IRWIN integration, you will need to prepare your database for the IRWIN integration.

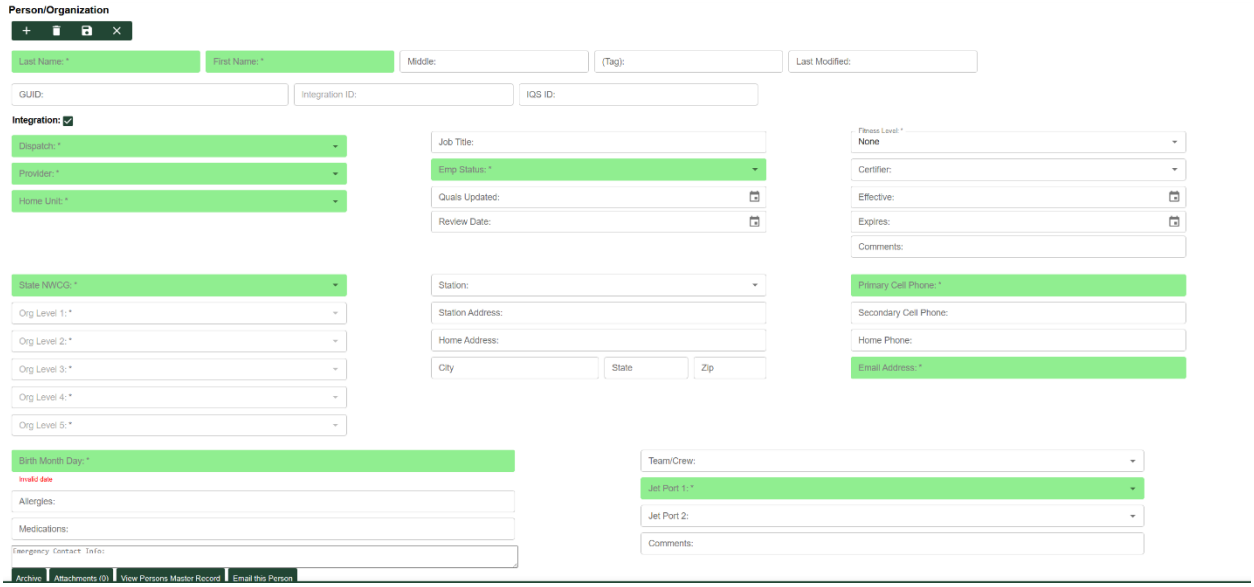
IMPORTANT NOTE: It is important to enter the required fields for as many resources as you can before actually connecting to the integration service which is explained in the next section.

Person/Org and Certifications

The Integration check box flags a Person to be sent to IRWIN.

1. Go to the Person/Org page and enter the required integration fields for the persons you want to send to the integration service.
2. Optional - Go to the Certifications page and review the qualifications that will be sent to the integration service.

All the required fields for IRWIN are shaded green.



IMPORTANT NOTE: It is strongly suggested to enter a person's middle name or initial as it will reduce the possibility of conflicting with an existing person in IRWIN.

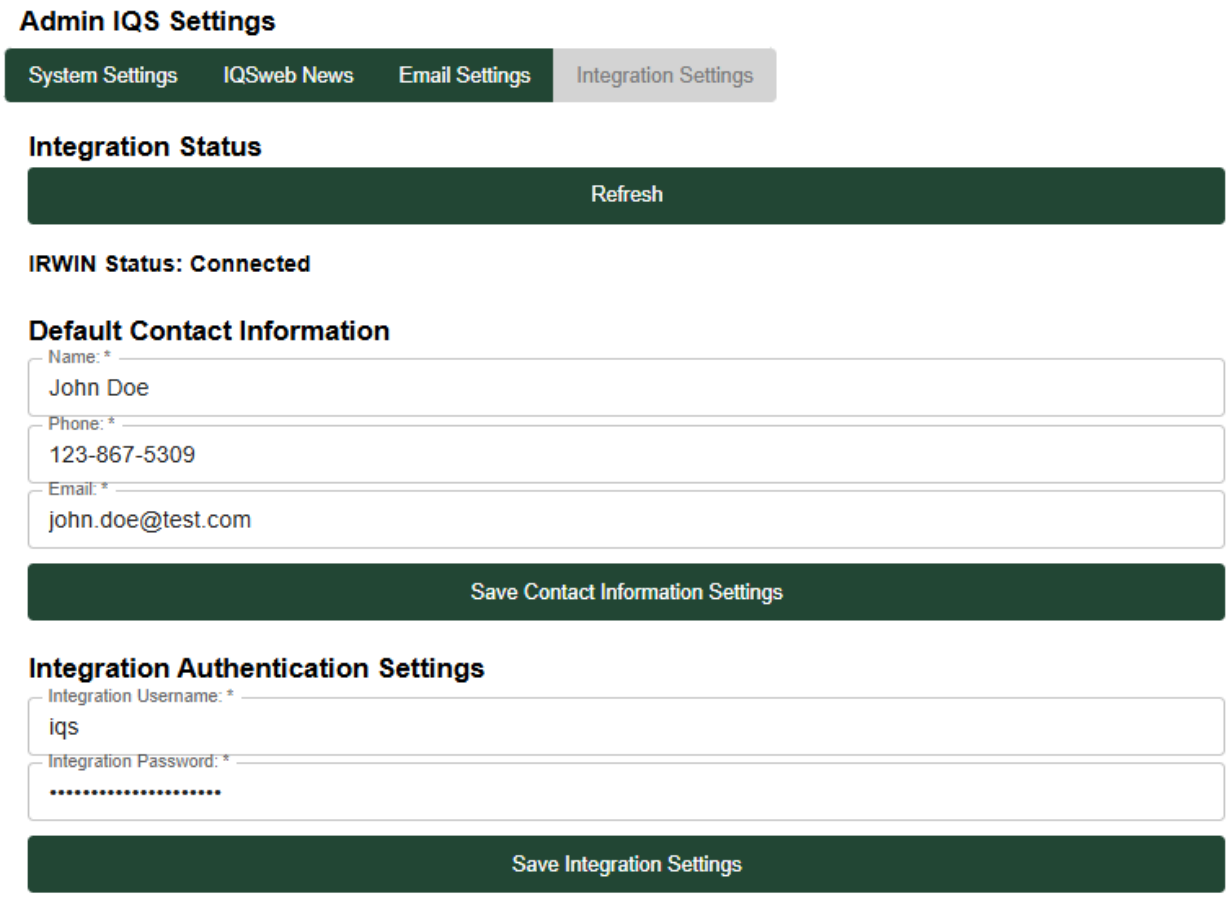
Connect IQS to IRWIN Integration Service

PLEASE, before proceeding, CONTACT your IQS Regional Representative to Schedule an appointment to receive your IRWIN credentials and complete the connection.

Once you have completed entering the required Integration data on the Person/Org screen, you can then connect IQS to the service to begin sending persons and their qualifications to IRWIN.

To connect your IQSweb V8 to IRWIN:

1. Log into IQSweb V8 as a user with IQS Manager role.
2. From the IQS main menu, go to **Administration/IQSweb Settings** .
3. Click on the tab at the far right **"Integration Settings"** .
4. Enter the Default Contact Information and then click **"Save Contact Information Settings".** See below for a description of how this information will be used in IQS.
5. Enter the Integration Authentication Settings and click **"Save Integration Settings"**.
   - Your IQS Regional Representative will help you to complete this section.
6. If the Integration Settings are successful, the IRWIN Status display will change to **Connected.**
7. If the IRWIN status does not change to show it is connected, verify you have the correct username and password.



Integration Status – indicates if IQS is successfully connected to IRWIN. Click the REFRESH button to update the status.

- **Not Configured**: Indicates that the IRWIN connection has not been set up. Typically, this indicates no username, or password has been entered for IQS to connect with.
- **Disconnected:** Indicates the IRWIN connection is configured but not functioning. This indicates that either the username or password entered is invalid, or the IRWIN service is offline temporarily.
- **Connected**: Indicates the IRWIN connection is active and functional. No action is needed.

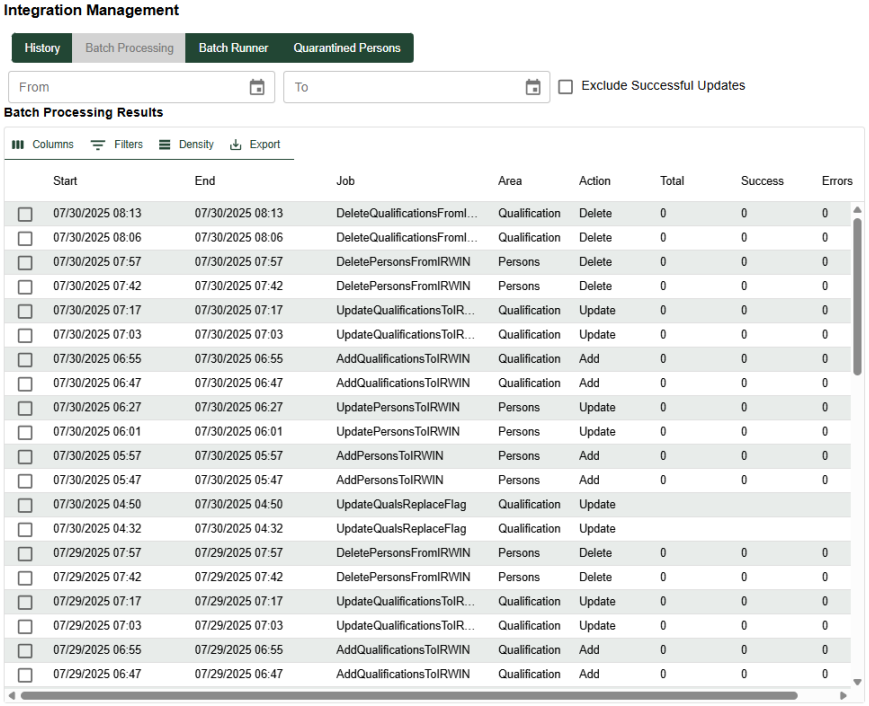
Default Contact Information – Enter the default name, phone and email sent with an update to IRWIN and then click "Save Contact Information Settings". This information is used when needing to contact another system to resolve duplicates, prepare for transfers, etc.

Integration Authentication Settings – Enter the IRWIN username, password that was provided to you by the IRWIN team. Click "Save Integration Settings". Once these settings have been saved, the IRWIN status display should change to show **Connected.**

Check the Integration Logs

Once your IQS system is successfully connected to IRWIN, the persons and qualifications that have been checked for integration will begin flowing into IRWIN. Once they are in IRWIN, they will be read by IROC.

1. From the IQS main menu, go to **Integration/Integration Management** to view the history of transactions and look for requests that may have failed.
2. Click on the **Batch Processing** tab to further inspect the integration results.
    a. It may take several hours up to a few days for batch processing results to appear, depending on the number of persons who were marked for integration.
    b. Your IQS Regional Representative can help you better understand this section.



Start	End	Job	Area	Action	Total	Success	Errors
07/30/2025 08:13	07/30/2025 08:13	DeleteQualificationsFroml…	Qualification	Delete	0	0	0
07/30/2025 08:06	07/30/2025 08:06	DeleteQualificationsFroml…	Qualification	Delete	0	0	0
07/30/2025 07:57	07/30/2025 07:57	DeletePersonsFromIRWIN	Persons	Delete	0	0	0
07/30/2025 07:42	07/30/2025 07:42	DeletePersonsFromIRWIN	Persons	Delete	0	0	0
07/30/2025 07:17	07/30/2025 07:17	UpdateQualificationsToIR…	Qualification	Update	0	0	0
07/30/2025 07:03	07/30/2025 07:03	UpdateQualificationsToIR…	Qualification	Update	0	0	0
07/30/2025 06:55	07/30/2025 06:55	AddQualificationsToIRWIN	Qualification	Add	0	0	0
07/30/2025 06:47	07/30/2025 06:47	AddQualificationsToIRWIN	Qualification	Add	0	0	0
07/30/2025 06:27	07/30/2025 06:27	UpdatePersonsToIRWIN	Persons	Update	0	0	0
07/30/2025 06:01	07/30/2025 06:01	UpdatePersonsToIRWIN	Persons	Update	0	0	0
07/30/2025 05:57	07/30/2025 05:57	AddPersonsToIRWIN	Persons	Add	0	0	0
07/30/2025 05:47	07/30/2025 05:47	AddPersonsToIRWIN	Persons	Add	0	0	0
07/30/2025 04:50	07/30/2025 04:50	UpdateQualsReplaceFlag	Qualification	Update			
07/30/2025 04:32	07/30/2025 04:32	UpdateQualsReplaceFlag	Qualification	Update			
07/29/2025 07:57	07/29/2025 07:57	DeletePersonsFromIRWIN	Persons	Delete	0	0	0
07/29/2025 07:42	07/29/2025 07:42	DeletePersonsFromIRWIN	Persons	Delete	0	0	0
07/29/2025 07:17	07/29/2025 07:17	UpdateQualificationsToIR…	Qualification	Update	0	0	0
07/29/2025 07:03	07/29/2025 07:03	UpdateQualificationsToIR…	Qualification	Update	0	0	0
07/29/2025 06:55	07/29/2025 06:55	AddQualificationsToIRWIN	Qualification	Add	0	0	0
07/29/2025 06:47	07/29/2025 06:47	AddQualificationsToIRWIN	Qualification	Add	0	0	0

Batch Processing

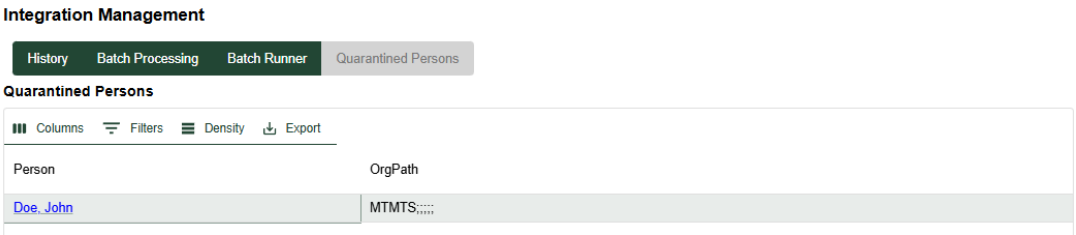
After the initial connection the IRWIN Integration Service, IQS V8 sends updates to IRWIN immediately whenever possible (e.g. adding a person who is marked as an Integration resource on the Person/Org page will immediately send the update to IRWIN).

IQS V8 also utilizes background processing to send batch updates (e.g. importing experience records or removing inactive qualifications) to IRWIN. The background processing jobs are scheduled and most run nightly. If a system is shut down overnight, the processing jobs will resume the following night.

Resolving Potential Duplicates

If a person is checked for "integration", the first time that person is saved in IRWIN, several criteria are checked against existing persons within IRWIN to ensure the person being entered is unique. For potential duplicates that need further inspection, the record will be quarantined. The following rules will ensure uniqueness. If there is an exact match found that already exists, the record will not be successfully submitted.

- NameFirst plus NameLast plus NameMiddle plus HomeDispatch plus ProviderUnit plus BirthMonthDay must be unique.
- If NameFirst plus NameLast plus NameMiddle plus BirthMonthDay match, the resource is quarantined.
- If all but one of the following are the same, the resource is quarantined - NameFirst plus NameLast plus NameMiddle plus HomeDispatch plus ProviderUnit plus BirthMonthDay.
- If the BirthMonthDay plus the NameLast match, the resource is quarantined.
- If the BirthMonthDay plus the NameFirst plus NameMiddle (first letter) match, the resource is quarantined.

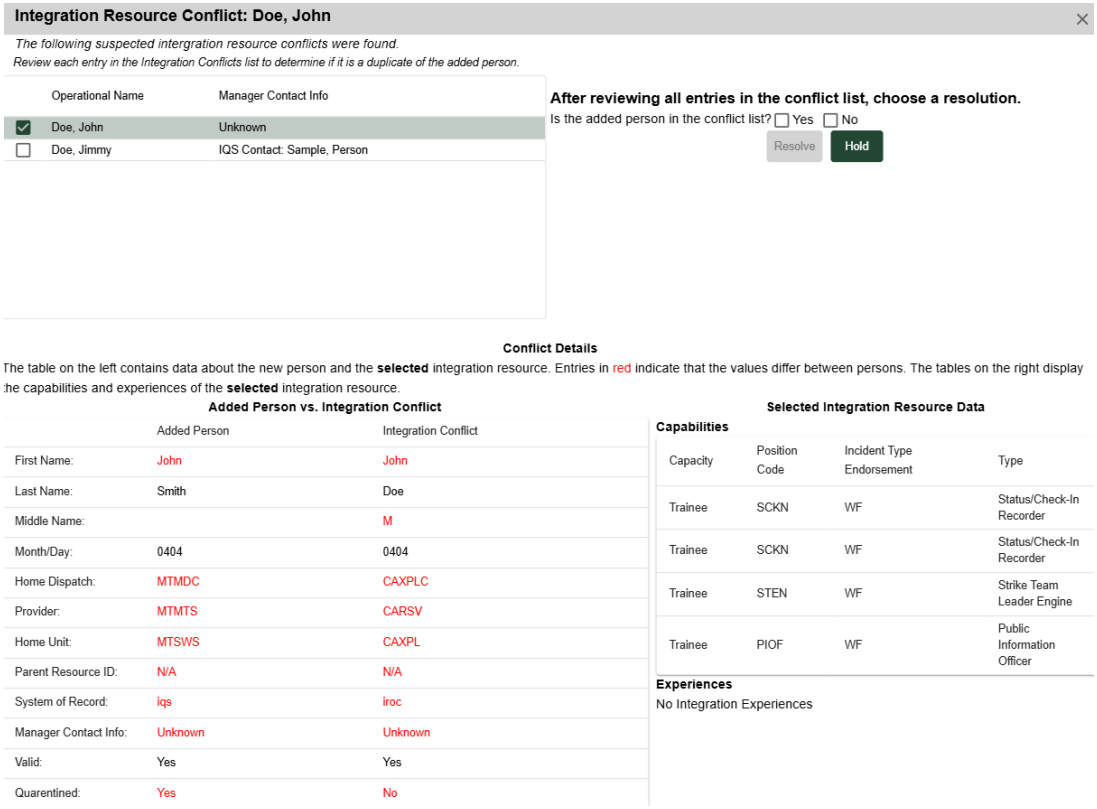


When a resource is "quarantined", IQS will allow you to inspect the record and resolve the potential duplicate.

1. From the **Integration Management** screen, click on the **Quarantined Persons** tab.
2. A list of quarantined persons will be displayed.
3. Click the Person's Name link and you will be displayed with a list of persons that are potentially in conflict with the person you have entered. Inspect the information displayed. You may need to reach out to another agency if you suspect the person you

are trying to enter is currently owned by another agency. If that is the case, you will need to work with that agency to have them transfer that person OUT of IRWIN.

a. Please work with your IQS regional representative if you have questions about this process.



Integration Status Header on All Pages

Click the User icon in the top right and select Status to see the status of the IRWIN integration connection. This display box contains the software versions currently installed of both IQS and SQL Server. In addition, there is a count of the total number of persons in the database and how many of those have been integrated with IRWIN as well as the size of the database itself in MB.

The Questions and Answers below are related to how and when IRWIN and IQS communicate with each other should your agency be concerned about open computer ports on the network.

1. **Connection Method**
    a. *How are requests sent between IQS and IRWIN?* **IQS transmits data and requests data over an HTTPS connection containing JSON data elements.**
    b. *Is the integration based on a push model (IQS sending data to IRWIN) or a pull model (IRWIN retrieving data from IQS)?* **IQS both pushes information (persons, qualifications) and pulls information (experiences, conflicted persons) from IRWIN. All requests are initiated from IQS, meaning there is no publish-subscribe mechanism with IRWIN.**
2. **Communication Protocol**
    a. *What protocol or interface is used for the communication (e.g., API, web service, message queue, file transfer, etc.)?* **IRWIN exclusively uses a REST interface over HTTPS for all traffic. No other protocol or port is used.**
3. **Authentication and Security**
    a. *What security mechanisms are in place for the connection?* **IRWIN uses username and password authentication exclusively. IQS administrators enter the password in the IQS application, and it will be encrypted at rest and stored in the SQL Server database**
    b. *Is the communication encrypted (e.g., HTTPS/TLS)?* **Yes IRWIN exclusively uses HTTPS for connections.**
    c. *How do the systems authenticate each other (API keys, certificates, service accounts, tokens, etc.)?* **See above - IRWIN exclusively uses username and password authentication to authenticate the connection between itself and an IQS system.**

   d. *Are there any firewall rules, IP allowlists, or network restrictions involved?* **Your network must allow outbound traffic to irwin.doi.gov on HTTPS/443 ports. No other domain or port is used for IRWIN.**

4. **Data Flow**
   a. *What type of data is exchanged between IQS and IRWIN?* **IQS transmits personnel records such as name, organization unit, etc, and the qualifications of those personnel (eg. Firefighter Type 1, Engine Boss) from IQS to IRWIN. It receives information such as experience on an incident, as well as information needed to handle integration and conflict resolution of other persons.**
   b. *Are requests synchronous (real-time) or asynchronous (queued/batch)?* **Requests are both synchronous and async depending on the operation. Many operations are synchronous such as adding or update a person or their qualifications. Other changes are sent on a schedule that typically runs overnight from the IQS application, such as marking qualifications expired and importing experience records, as well as retrying any failed operations from the day.**
   c. *Are there any retry or error-handling mechanisms if a request fails? How we confirm connection is up and secure?* **Yes, IQS flags failed requests to be re-tried and sent to IRWIN nightly, so your application server must be online 24/7. You can validate the connection status from the top right corner of the application - it will show "IRWIN Connected" if the connection is successful and healthy. Failed requests will be shown in the Integration Management page.**
5. **Infrastructure / Network Details**
   a. *Which servers or endpoints are involved in the connection?* **Your application server hosting the IQS application is the only server that initiates requests to IRWIN (irwin.doi.gov) and only requires outbound access on HTTPS/443**
   b. *Are there specific ports or services that need to be open between the systems?* **Outbound HTTPS/443 is the only traffic used. IQS does need to reach a few other systems for other features such as data catalog updates (vdatasys.com).**
6. **Documentation**
   a. *Do we currently have any architecture diagrams, interface documentation, or security documentation describing the integration between IQS and IRWIN?* **The DOI website for IRWIN has extensive documentation on all endpoints and data models used by the system - see https://www.wildfire.gov/application/irwin-integrated-reporting-wildfire-information**