NETWORK DETECTIVE™

QUICK START GUIDE

SQL Server Assessment Module

Instructions to Perform a SQL Server Assessment

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Performing a SQL Server Assessment

SQL Server Assessment Overview

The Network Detective **SQL Server Assessment Module** is composed of:

- the **SQL Server Assessment Data Collector** used to assess the integrity of the SQL Server database being scanned
- the **Network Detective application** used to manage Sites and generate assessment reports

The Network Detective **SQL Server Assessment Module** is quick and easy to use. There are just a few basic steps:

1. **Download and install the Network Detective application**

   Visit https://www.rapidfiretools.com/nd-downloads to download and install the Network Detective application.

2. **Create a New Site**

   Create Site files to manage assessments for specific customer accounts, remote office locations, data centers, departments, organizational units, or any structure that is applicable to the environment on which you are performing an SQL Server Assessment — or any other assessment type.

3. **Start a New SQL Server Assessment**

   Once the **Site** is created, start a **New Assessment** and perform the SQL assessment data collection process using the guided **Checklist**.

4. **Perform SQL Server Scan Data Collection**

   Run the SQL Server Assessment Data Collector on the target server. The output of the SQL scan will be an .DDF used to generate reports via Network Detective. **Be sure that you document the name of the folder used to store scan data to import into your assessment**. When the SQL Scan is complete, import the scan file into the assessment in Network Detective.

5. **Generate SQL Server Assessment Reports**

Customize your reports by setting up your company's branding of the report to be generated with your logos and client information, and run the reports. The Network Detective Report Wizard will step you through this process.

What You Will Need

SQL Assessment Component	Description
Network Detective	The Network Detective Application and Reporting Tool guides you through the assessment process from beginning to end. You use it to create sites and assessment projects, configure and use appliances, import scan data, and generate reports. The Network Detective Application is installed on your workstations/laptops; it is not intended to be installed on your client or prospect sites.
SQL Assessment Data Collector	The Network Detective SQL Server Assessment Data Collector is a windows application that performs the data collections for the SQL Server Assessment Module.

Follow these steps to perform a SQL Server Assessment.

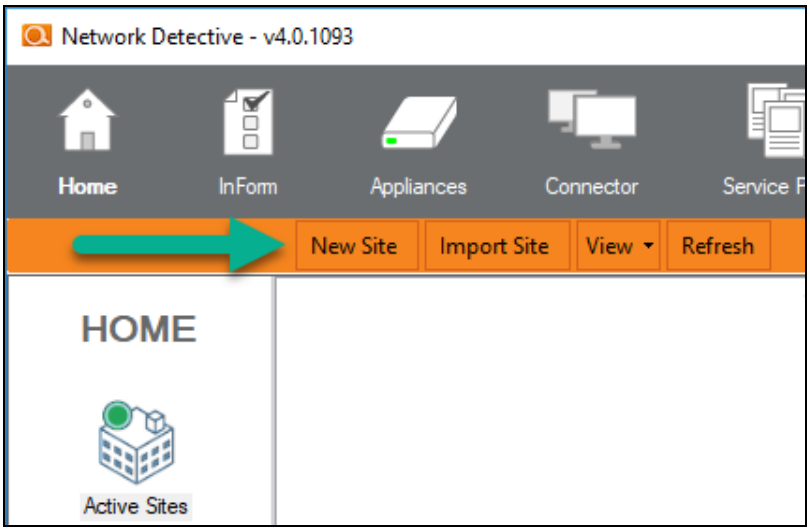
Step 1 — Download and Install the Network Detective Application

Go to https://www.rapidfiretools.com/nd-downloads to download and install the Network Detective application. Then run Network Detective and log in with your credentials.

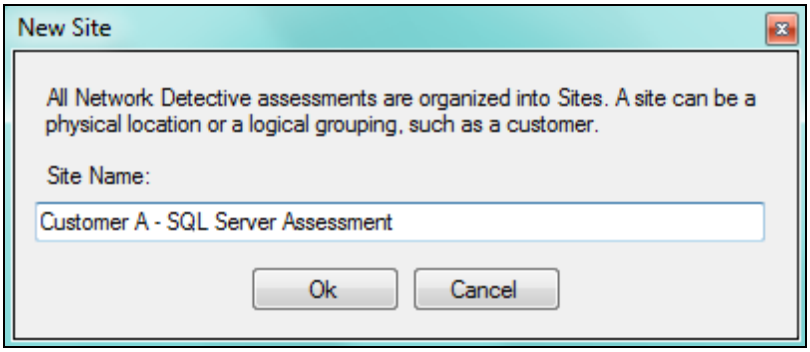
Step 2 — Create a New Site

To create a new site:

1. Open the Network Detective Application and log in with your credentials.
2. Click **New Site** to create a new Site for your assessment project.

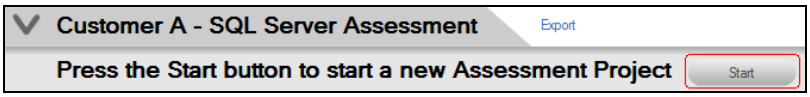


3. Enter a **Site Name** and click **OK**.

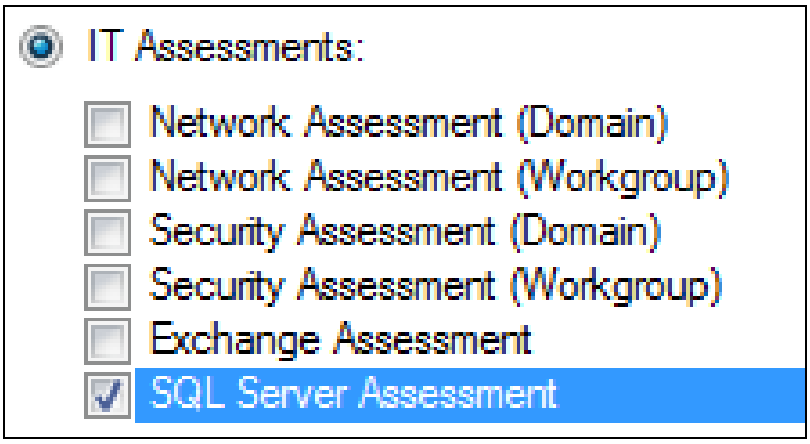


Step 3 — Start an SQL Server Assessment

1. From within the **Site Window**, select the **Start** button that is located on the far right side of the window to start the **Assessment**.

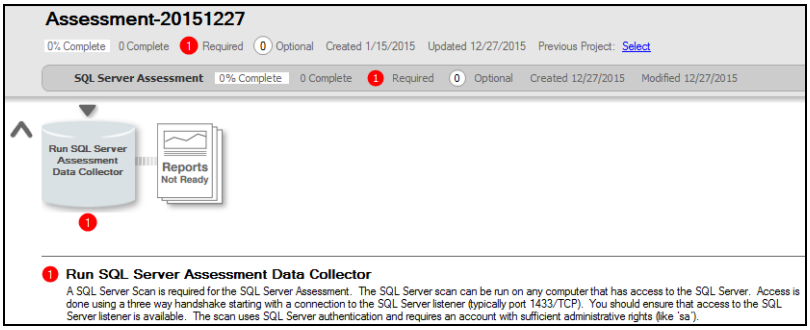


Next, select the **SQL Server Assessment** option presented.



Then follow the prompts presented in the **Network Detective Wizard** to start the new **Assessment.**

2. Once the new **SQL Server Assessment** is started, a **"Checklist"** is displayed in the **Assessment Window** presenting the **"Required"** and **"Optional"** steps that are to be performed during the assessment process. Below is the **Checklist** for a **SQL Server Assessment**.



3. Complete the required **Checklist Items** and use the **Refresh Checklist** feature to guide you through the assessment process at each step until completion.

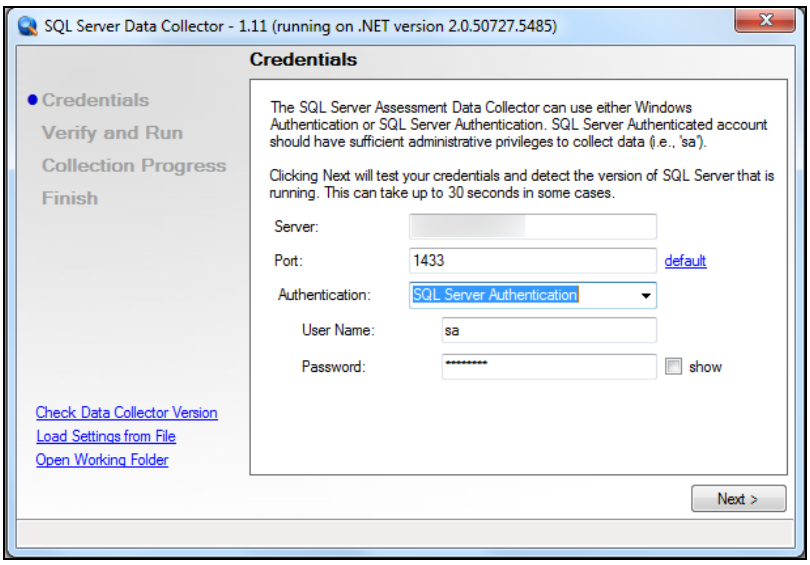
Step 4 — Perform SQL Server Scan Data Collection

1. On the target network, log in to the local machine with **Administrator** privileges.
2. Download the **latest SQL Server Data Collector** program from https://www.rapidfiretools.com/nd-downloads and save onto any machine that can

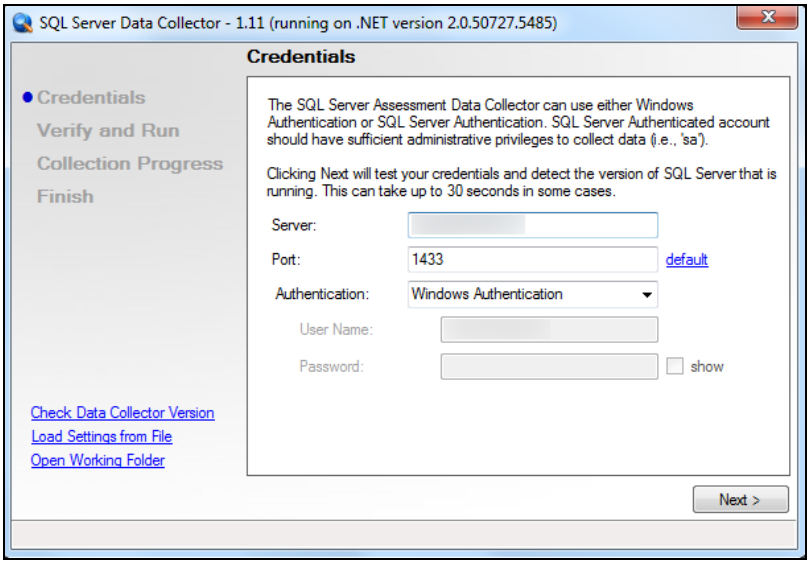
connect to the SQL Server. You can also save the program to a USB drive and run it on the machine.

> **Note:** This download is a self-extracting zip file and does not require installation when run on client systems. You may extract the SQL Server Data Collector files to a folder on either a machine that can connect to the SQL Server or a USB drive. Then you can run “RunSqlServerDataCollector.exe" to launch the GUI.

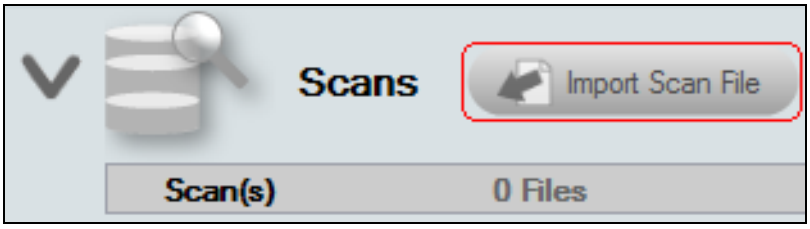
3. Right-click on the downloaded file and **run-as administrator** to ensure you are running with elevated credentials. (This is a self-extracting zip file and is completely non-invasive – it is not installed on any other machine on the client’s network.)
4. Next, after starting the **SQL Server Data Collector** enter the necessary credentials and follow the remaining wizard-driven prompts. You can use either:
    - **SQL Server credentials**, or:



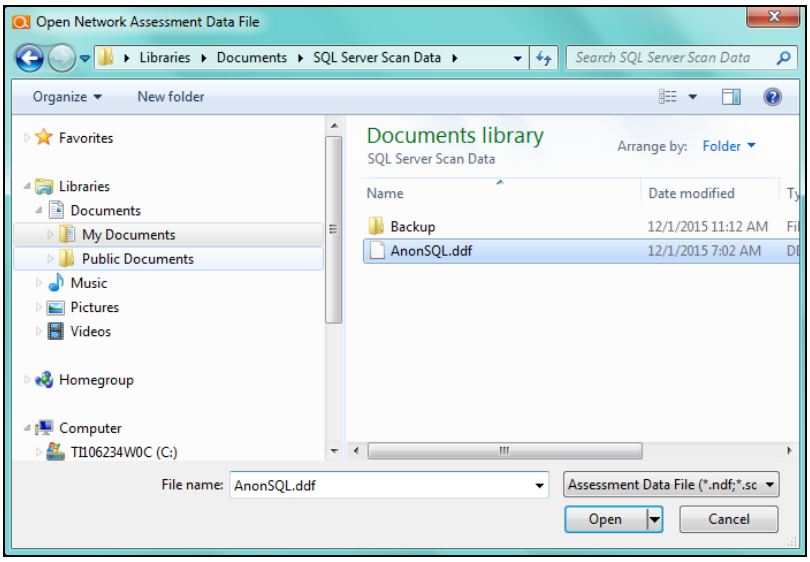
- **Windows Authentication** credentials.



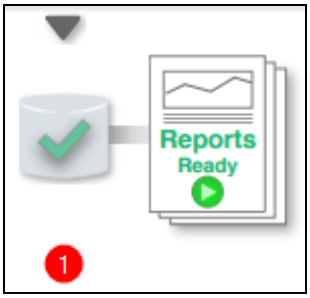
5. After the **SQL Server Scan** is complete, either save the scan results file to a USB drive for later importing of the results into the assessment or email the file for later access. **Make sure the USB has sufficient free space to extract and save the Data Collector files and to store the scan results data files.**
6. **Importing the SQL Server Scan file into your Assessment**: From within the **Scans** section of the **Assessment Window**, select the **Import Scan File** button.



7. Then, browse the folder storing the SQL Server Scan results data file generated by the SQL Server Data Collector, select the file, and then **Open** the file to import the scan results into your assessment.



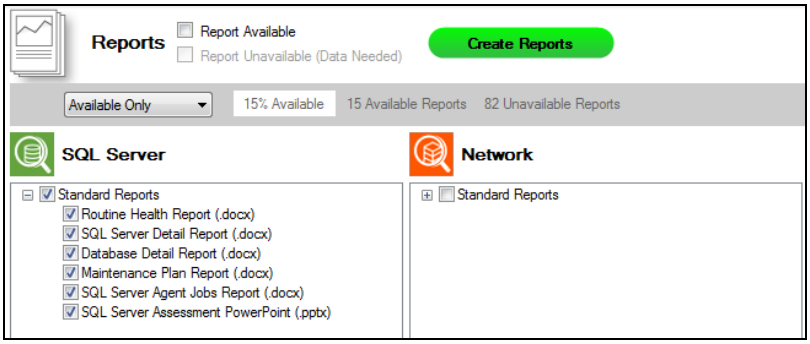
8. Once all of the scan data is imported into the **Assessment**, the assessment's **Checklist** will indicate that the **Reports** are ready to be generated.



Step 5 — Generate SQL Server Assessment Reports

Note: This step is NOT performed at the client site or network. Network Detective should be installed on your workstations or laptop. Install Network Detective from https://www.rapidfiretools.com/nd-downloads if you have not already done so. To generate the reports for your SQL Server Assessment, follow the steps below:

1. Run Network Detective and login with your credentials.



2. Then select the **Site**, go to the **Active Assessment**, and then select the **Reports** link to the center of the **Assessment Window** in order select the reports you want to generate.
3. Select the **Create Reports** button and follow the prompts to generate the reports you selected.
4. At the end of the report generation process, the generated reports will be made available for you to open and review.

The **SQL Server Assessment** module can generate the following reports:

Standard Reports

Report Name	Description
Database Detail Report	This report details the settings and health of individual databases that reside on the scanned SQL Server. It lists the database properties, potentially missing indexes, locks, statistics, fragmentation, and existing indexes. Without this tool, it would be a daunting task to collect all this information. Because this report documents each database individually, it can be run ad-hoc when specific database performance problems arise. But best practice is not to wait and react to these problems but plan to run this report on a regular basis (quarterly or monthly, depending upon the how critical the application is). This report will help identify opportunities to improve performance and accumulate trending data that will help you anticipate problems before they occur. The report is also a great way to document your work for both internal and external

Report Name	Description
	uses.
Maintenance Plan Report	This report details all maintenance plans and their sub-plans. Maintenance plans perform routine tasks on your SQL Server. Not all maintenance plans are active and in-use, and you can use the report to document what's in place and if adequate automation of maintenance and backups are being performed.
Routine Health Report	This report assesses the health of the SQL Server using three major categories. These include settings, file, and resources. Setting health looks for configuration issues that may go against prescribed best practices. File health looks at how the database interacts with the file system, looking for adequate space and compares the current configuration versus best practices. Resource health looks to ensure adequate resources are available to operate the SQL Server optimally and looks for indicators pointing to performance issues. Resource health comprises of three sub-categories – wait health, task health, and memory health. Wait health deals with issues with database processing waits and delays. Task health validates that scheduled tasks and jobs are working optimally. Memory health looks to ensure adequate memory is available to run the SQL Server properly.
SQL Server Agent Jobs Report	This report details all jobs (active and inactive) for the SQL Server agent. Some jobs may be maintenance plans and can be seen in detail in the Maintenance Plan Detail report (see above). Look in the Job History section of this report for entries in RED or that do not say "success" and see what jobs are causing errors and why. This report is so simple to generate, even non-DBA tech can use it to check for errors in jobs. And since some Remote Monitoring and Management (RMM) tools do not delve into the actual database level, it makes sense to run this report monthly to supplement your RMM tool, and also to keep it "honest."
SQL Server Assessment PowerPoint	A PowerPoint version of the SQL Server Assessment, including key assessment details.
SQL Server Detail Report	This report details the settings and health of the SQL Server as a whole. It looks at settings, configuration, performance, and backup. Information

Report Name	Description
	and detailed breakdown of databases can be found in the Database Detail report.
SQL Server Health Report	The SQL Server Report details the overall risk to the assessment environment. The Health Score represents the number of issues detected. An ideal environment would have a Health Score of 0 (indicating no risks found). The higher the score, the more likely a security, availability, or performance related incident will occur. Unresolved issues are detailed item by item and are organized by risk score.

Change Reports

Report Name	Description
Baseline SQL Server Health Report	The Health Report details the overall risk to the assessment environment. It compares the results of the current assessment with the previous.

SQL Server Assessment Reports

The **SQL Server Assessment** allows you to generate the following reports:

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