Testing System Performance and Scalability

What, why, and how to use the Qlik® Scalability Tools for better, faster discovery across your enterprise

LEAD WITH DATA™ Qlik

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Introduction

It's important to determine how your system performs in terms of responsiveness, scalability and stability. That's why we give you access to our Qlik® Scalability Tools so you can be sure our products will work well in your enterprise.

These tools are designed by our Scalability Center, which is responsible for testing the performance and scalability of all our products. Download our Scalability Tools for free from the Qlik Community to confidently plan and maintain your Qlik deployment.

Tools Packages

The following table lists the tools packages available.

Tools package	Target deployments	Based on	Runs on
QlikView Scalability Tools	QlikView 10 and later	Apache JMeter	Microsoft Windows
Qlik Sense Scalability Tools	Qlik Sense 2019 (including Qlik Sense Desktop) and later* Qlik Sense Enterprise on Windows April 2019 and later	Qlik Sense .NET SDK	Microsoft Windows
Qlik Sense Enterprise Scalability Tools	Qlik Sense Enterprise on Windows April 2019 and later Qlik Sense Enterprise on Kubernetes April 2019 and later	enigma-go	Containerized Kubernetes MacOS Microsoft Windows

*Legacy packages for Qlik Sense 2.x and 3.x are also available.

The tools packages are updated on a regular basis and published in Qlik Community.
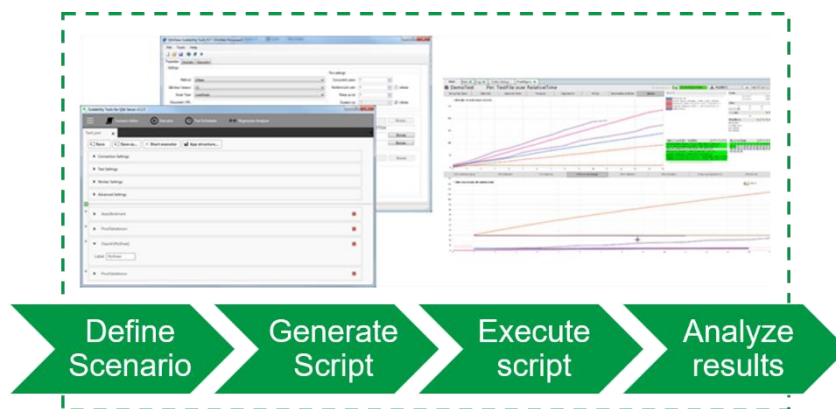
Regular Load and Performance Testing

Our load client and performance tools simulate how your users work with applications so you can better understand performance and scalability challenges.

When you initially size your hardware or plan a hardware expansion, you can use our tools to check your resource consumption and identify the best deployment configurations.

When you deploy an application, our tools can help you identify the right application designs from a scaling and performance perspective. In test-driven development, for example, our tools can be part of your acceptance test procedures.

Our load and performance testing is based on sequences of actions that your users are likely to perform. Once you define a sequence, you can iterate on it or execute it in parallel to emulate your desired scenario. You can also tailor tests using our tools' various test set up and execution options.

To simplify the analysis of your performance test results you can use our Scalability Results Analyzer, which can be downloaded for free from Qlik Community.

Reference these articles to learn more:

- QlikView Scalability Tools: http://community.qlik.com/t5/Qlik-Scalability/QV-Scalability-Tools-QV10-QV11-QV12/gpm-p/1486942#M1175

- Qlik Sense Scalability Tools: http://community.qlik.com/t5/Qlik-Scalability/Qlik-Sense-Scalability-Tools/gpm-p/1490846#M1348

- Qlik Sense Enterprise Scalability Tools: https://community.qlik.com/t5/Qlik-Scalability/Qlik-Sense-Enterprise-Scalability-Tools/gpm-p/1579916#M1610

- Scalability Results Analyzer: http://community.qlik.com/t5/Qlik-Scalability/Scalability-Results-Analyzer/gpm-p/1493648#M1497

Additional Use Cases

Besides regular load and performance testing, you can use our Qlik Scalability Tools for many other types of testing.

Availability Testing

The tools can be used to make sure that your deployment is always available. By applying a low, constant workload, you can check that the deployment is up and running and that acceptable performance levels are maintained.

Reference these articles to learn more:

- Qlik Sense Enterprise Scalability Tools: https://community.qlik.com/t5/Qlik-Scalability/Scalability-tools-use-case-package-Setting-up-an-availability/gpm-p/1699731

Stress Testing

You can use the tools to determine the robustness of your deployment by testing it beyond the limits of normal operation. This is done much in the same way as a regular performance test, except that the purpose is to find the point where your deployment fails.

Reference these articles to learn more:

- Use the links under Regular load and performance testing

Pre-caching

Our pre-caching process triggers certain application selections and actions to cache their calculations. This process can save your users valuable time because fetching data from the cache is much faster than having the users perform the calculations they need when they first enter the system. Pre-caching creates a single user script triggering the actions you want to have pre-calculated.

Reference these articles to learn more:

- QlikView Scalability Tools: http://community.qlik.com/t5/Qlik-Scalability/Quick-tips-15-Pre-caching-with-JMeter/gpm-p/1482964#M1092

- Qlik Sense Scalability Tools: https://community.qlik.com/t5/Qlik-Scalability/Pre-caching-using-the-Qlik-Sense-Scalability-Tools-NET-SDK/gpm-p/1477822

- Qlik Sense Enterprise Scalability Tools: Use the link under Regular load and performance testing

Regression Testing

Our regression testing tool allows you to compare and analyze differences in result sets that older and newer versions of our Qlik products, data models, and/or expressions deliver. This can show you where changes are impacting performance.

Reference these articles to learn more:

- QlikView Scalability Tools: Use the link under Regular load and performance testing

- Qlik Sense Scalability Tools: Use the link under Regular load and performance testing

Hardware Benchmarking

The hardware benchmarking package included in our Qlik Scalability Tools collects and compares information about how Qlik products perform in different environments. You can use this package to verify that certain whitelisted hardware is optimally configured. You can also use it to compare the performance of a non-whitelisted server to a whitelisted server of corresponding size.

Reference these articles to learn more:

- QlikView 11 Hardware Benchmarking Package: http://community.qlik.com/t5/Qlik-Scalability/QlikView-11-Hardware-Benchmarking-Package/gpm-p/1492879#M1467

- QlikView 12 Hardware Benchmarking Package: http://community.qlik.com/t5/Qlik-Scalability/QlikView-12-Hardware-Benchmarking-Package/gpm-p/1478647#M1078

- Qlik Sense Scalability Tools: Use the link under Regular load and performance testing

App Evaluation

You use our App Evaluator tool during your quality assurance process to evaluate Qlik Sense applications before you deploy them into your production environment. In addition to blocking low-performing applications, App Evaluator helps you determine how to improve and deploy your applications so your users enjoy the best possible experience.

Reference these articles to learn more:

- Qlik Sense Scalability Tools: <u>Use the link under Regular load and performance testing</u>

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About Qlik

Qlik's vision is a data-literate world, one where everyone can use data to improve decision-making and solve their most challenging problems. Only Qlik offers end-to-end, real-time data integration and analytics solutions that help organizations access and transform all their data into value. Qlik helps companies lead with data to see more deeply into customer behavior, reinvent business processes, discover new revenue streams, and balance risk and reward. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

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