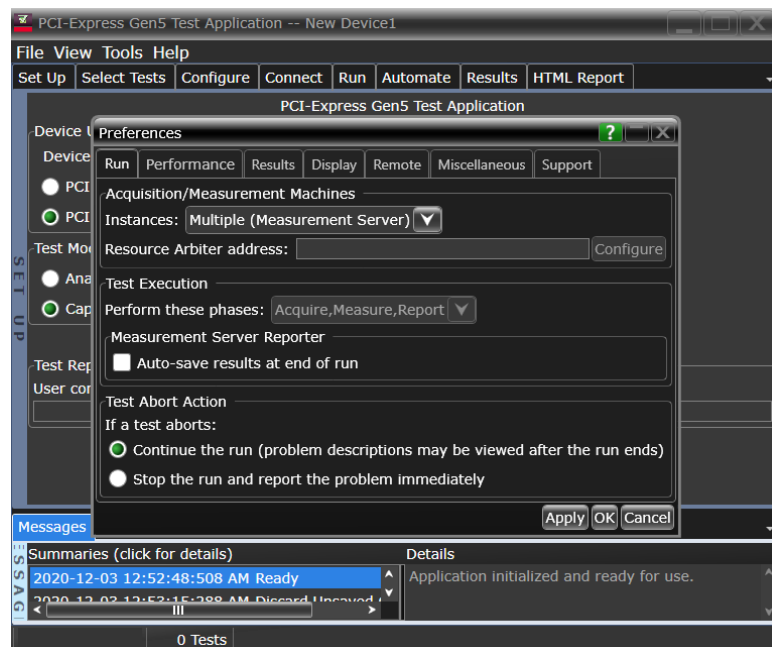


D9010AGGC Compliance Test Software Measurement Server

The Keysight Technologies, Inc. Compliance Software Measurement Server software provides the capability to offload the measurements from the compliance test software running on an oscilloscope to one or multiple virtual machines or measurement servers. This allows continuous data acquisition and computation of the test result to run in parallel, reducing the overall test time.

Significant improvement in test and measurement speed can be achieved using the D9010AGGC Compliance Test Software Measurement Server.

The D9010AGGC measurement system or farm consists of multiple processing engines or worker PCs. Each processing engine or PC will require a separate D9010AGGC license.



Features

- Supports Keysight high speed digital compliance test software – PCIe5, DisplayPort, LPDDR5, USB4, etc.
- Provides scalable computation/processing capabilities. Test time can be further reduced with multiple physical PCs or virtual machines setup.
- Provides scalable acquisition capabilities. Test time can be further reduced with continuous waveform acquisitions through multiple oscilloscopes.
- Enables effective and optimized utilization of available resources, i.e., virtual machines, oscilloscopes, etc. through Resource Arbiter license.
- Enables test sequencing, execution, result collection, and report generation through a single machine.

The D9010AGGC Measurement Server Architecture

Keysight D9010AGGC Measurement Server setup can be realized through multiple configurations. The below example shows one PC as manager or test automation engine, two physical PCs or virtual machines as processing engines (requiring the D9010AGGC license), two oscilloscopes as acquisition engines, and a Resource Arbiter server (requiring the KS8108A license) for effective resource allocation. The test results are transferred to the manager PC which automatically generates the test report once the test run has completed.

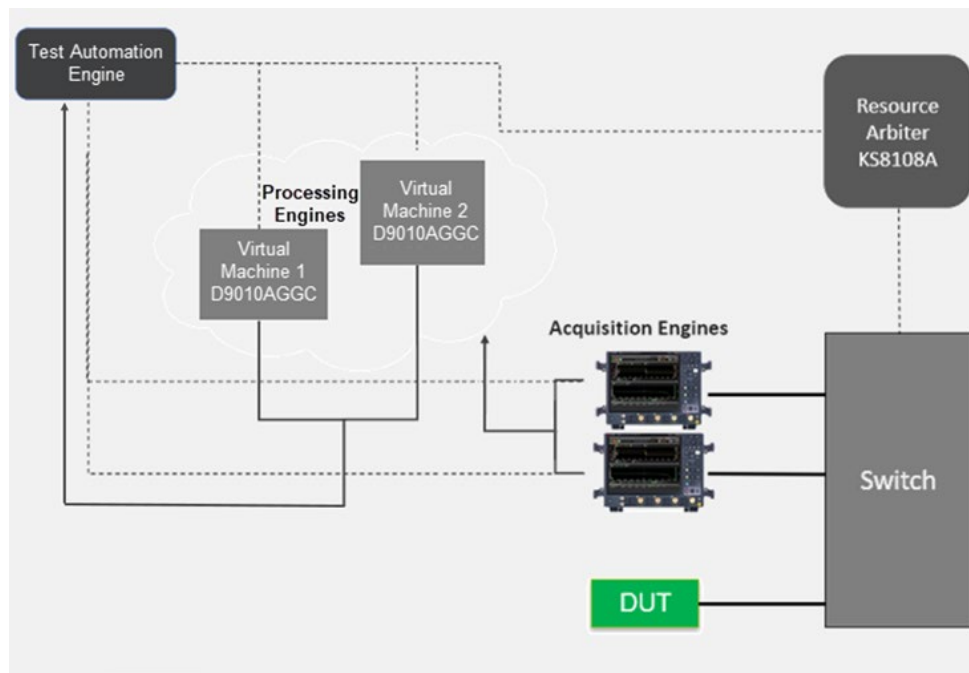


Figure 1. Keysight D9010AGGC Measurement Server setup

Setting up the Compliance application software with the D9010AGGC Measurement Server license

Compliance applications that support this feature have the option Multiple (Measurement Server) available in the Instances drop down in the Run tab of the Preferences dialog box. To open the Preferences dialog box, please select View > Preferences in the test app user interface.

To use the measurement server feature, install the same version of the compliance app on all the machines that need to participate in a run. These application instances will divide test execution into three tasks: acquire, process, and report. A minimum viable setup consists of three machines:

- One oscilloscope to acquire the waveforms and manage the test sequence
- One PC or virtual machine to perform the measurements

There is no limitation on number of machines participating in the measurement server environment, it is a scalable solution. However, there is an optimal mix that depends on the performance characteristics of the oscilloscopes and PCs. The combination of the oscilloscopes, virtual machines, and device under test (DUT) in the measurement farm is managed by the KS8108A Resource Arbiter for optimal utilization. For detailed steps on setting up the measurement server environment, please see the “Keysight D9010AGGC Compliance Test Software Measurement Server User Guide”.

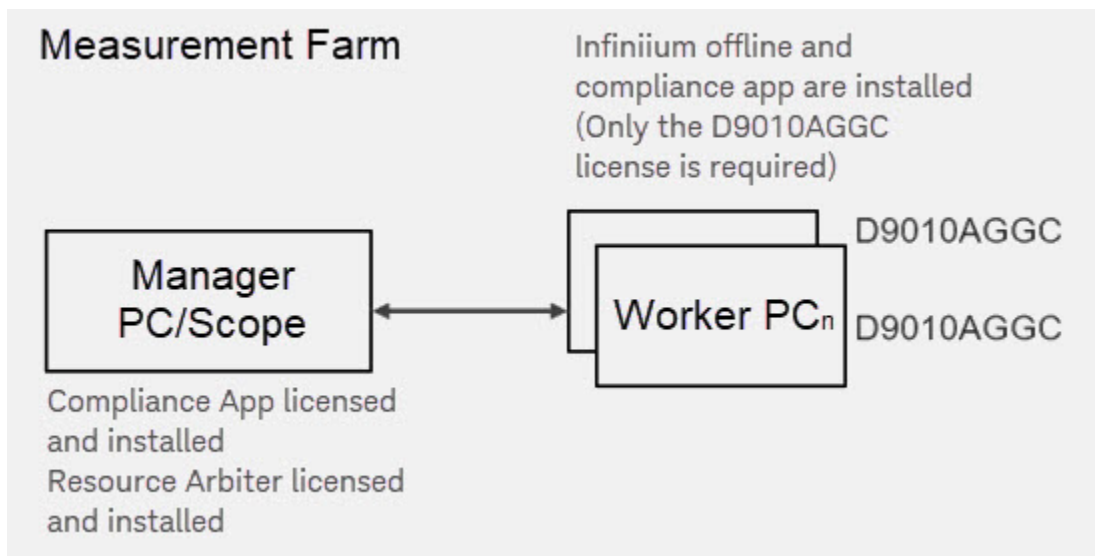


Figure 2. Licensing and software installation to support the measurement server setup of the Keysight compliance test software.

Ordering Information

Example configuration for Keysight Compliance Test Software

| Model number | Description | Quantity | Notes |
|--------------|----------------------------|----------|--|
| D90X0XXXC | Compliance Test Software | 1 | <ol style="list-style-type: none">To be installed and licensed on the Infiniium scope, if scope is to be used as a manager. OR To be installed and licensed on a PC, if PC is to be used as a manager. <p>Note: D90X0XXC is an example model number, to know the exact model numbers, please see the table below, "List of Supported Compliance Test Applications".</p> |
| D9010AGGC | Measurement Server License | 1/PC | <ol style="list-style-type: none">To be installed on a virtual machine (VM) or a physical PC which is to be configured as a worker PC or a processing engine.1 license/machine <p>Note: Quantity depends on the desired speed improvement. Increasing the number of processing machines should result in further reduction in test time. Please see D90X0XXXC Compliance Test Software datasheet for more details.</p> |
| KS8108A | Resource Arbiter Server | 1 | To be installed on any of the participating machines. |

List of supported compliance test applications

| Model number | Compliance test application |
|--------------|--|
| D9050PCIC | Keysight D9050PCIC PCI Express 5.0 Transmitter Compliance and Validation Test Software |
| D9040DPPC | Keysight D9040DPPC DisplayPort 1.4 Transmitter Compliance and Validation Test Software |
| D9050LDDC | Keysight D9050LDDC LPDDR5 Transmitter Compliance Test Software |
| D9040USBC | Keysight D9040USBC USB4 Transmitter Compliance Test Software |
| D9050USBC | Keysight D9050USBC USB4 Version 2.0 Transmitter Compliance Test Software |
| D9042DPPC | Keysight D9042DPPC DisplayPort UHBR Transmitter Test Software |

Note: Installation, setup assistance, and consultation services are available for different use models and to integrate the setup into user's existing test automation platform. Please contact a Keysight sales representative for more details.

Flexible Software Licensing and KeysightCare Software Support Subscriptions

Keysight offers a variety of flexible licensing options to fit your needs and budget. Choose your license term, license type, and KeysightCare software support subscription.

License terms

Perpetual – Perpetual licenses can be used indefinitely.

Subscription – Time-based licenses can be used through the term of the license only (6, 12, 24, or 36 months).

License types

Node-locked – License can be used on one specified instrument/computer.

Transportable – License can be used on one instrument/computer at a time but may be transferred to another using Keysight Software Manager (internet connection required).

USB portable – License can be used on one instrument/computer at a time but may be transferred to another using a certified USB dongle (available for additional purchase with Keysight part number E8900-D10).

Floating (single site) – Networked instruments/computers can access a license from a server one at a time. Multiple licenses can be purchased for concurrent usage.

KeysightCare software support subscriptions

Perpetual licenses are sold with a 12 (default), 24, 36, or 60-month software support subscription. Support subscriptions can be renewed for a fee after that.

Time-based licenses include a software support subscription through the term of the license.

Selecting your license

Step 1. Choose your software product (eg. S1234567A).

Step 2. Choose your license term: perpetual or time-based.

Step 3. Choose your license type: node-locked, transportable, USB portable, or floating.

Step 4. Depending on the license term, choose your support subscription duration.

KeysightCare Software Support Subscription provides peace of mind amid evolving technologies.

- Ensure your software is always current with the latest enhancements and measurement standards.
- Gain additional insight into your problems with live access to our team of technical experts.
- Stay on schedule with fast turnaround times and priority escalations when you need support.

Keysight enables innovators to push the boundaries of engineering by quickly solving design, emulation, and test challenges to create the best product experiences. Start your innovation journey at www.keysight.com.