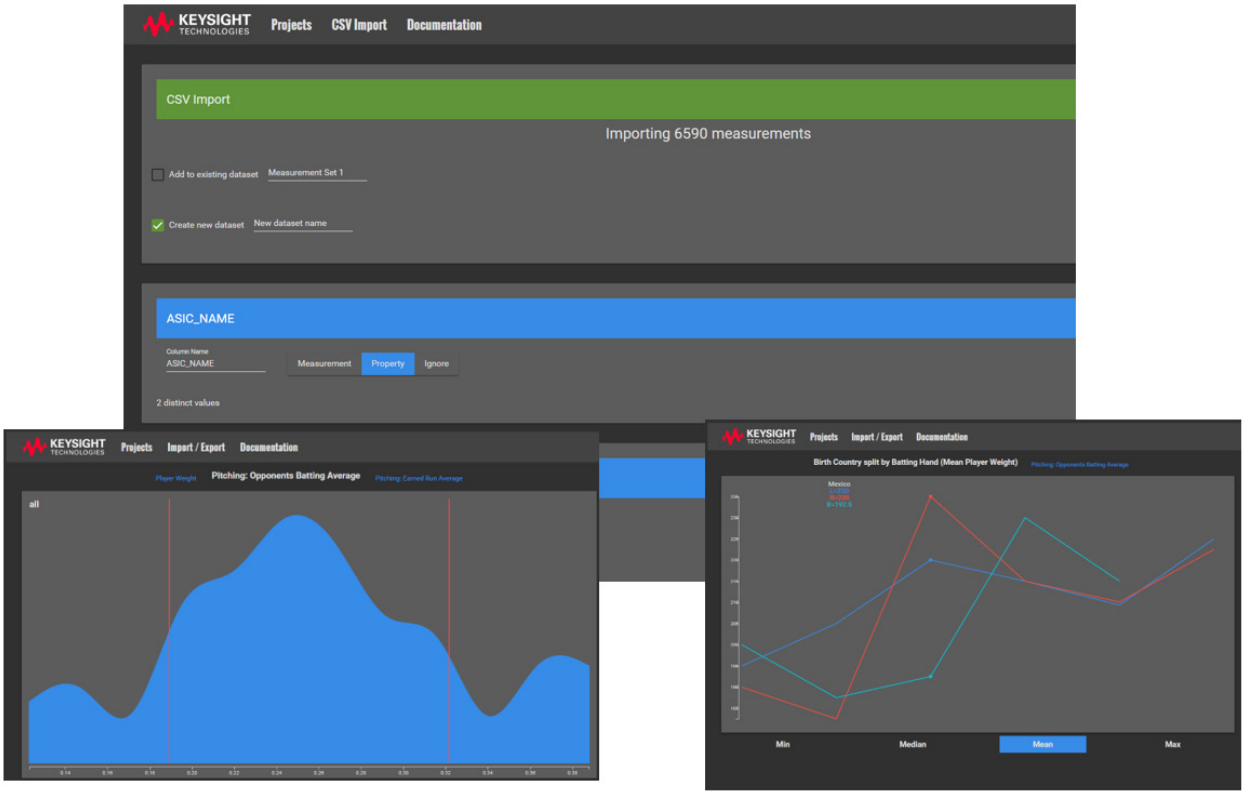
Keysight N8844A
Data Analytics Web Service Software

Data Sheet



KEYSIGHT TECHNOLOGIES

Unlocking Measurement Insights

Introduction

The Keysight Technologies, Inc. Data Analytics Web Service software provides an interface that allows users to import their test data to a data repository server. It protects the data repository server from data corruption and allows version control. It also allows for a simple interface which abstracts away the implementation details. The N8844A Data Analytics Web Service software supports multiple data sources and also a wide range of data import clients.

Key features

- Supports multiple data sources
  - Infiniium Compliance Application Software
  - Keysight ADS Simulation input (via Infiniium Offline software)
  - Keysight data sources (measurement result from Keysight test equipment)
  - Non-Keysight data sources (measurement result from other vendor test equipment or customized data source from user test environment)

- Supports a wide range of clients for data import
  - Infiniium Compliance software framework
  - Web CSV import tool
  - C# Import program
  - Python Import program

- Data can be retrieved and analyzed with the KS8400A Test Automation Platform software or the Web tool reference application included in the N8844A Data Analytics Web Service software

- Data can be retrieved offline for result viewing

Setting up the N8844A Data Analytics Web Service Software

The user would set up a web server that hosts the N8844A Data Analytics Web Service software and a data repository server that hosts the data repository infrastructure with either MySQL, SQL Server or Oracle data repository management system. It is recommended that the web and data repository servers are setup separately to ensure scalability, performance and data repository security. The user is responsible to provide backup, restore and replication of the data repository server. It is recommended that the user set up the servers through their Information Technology (IT) department.

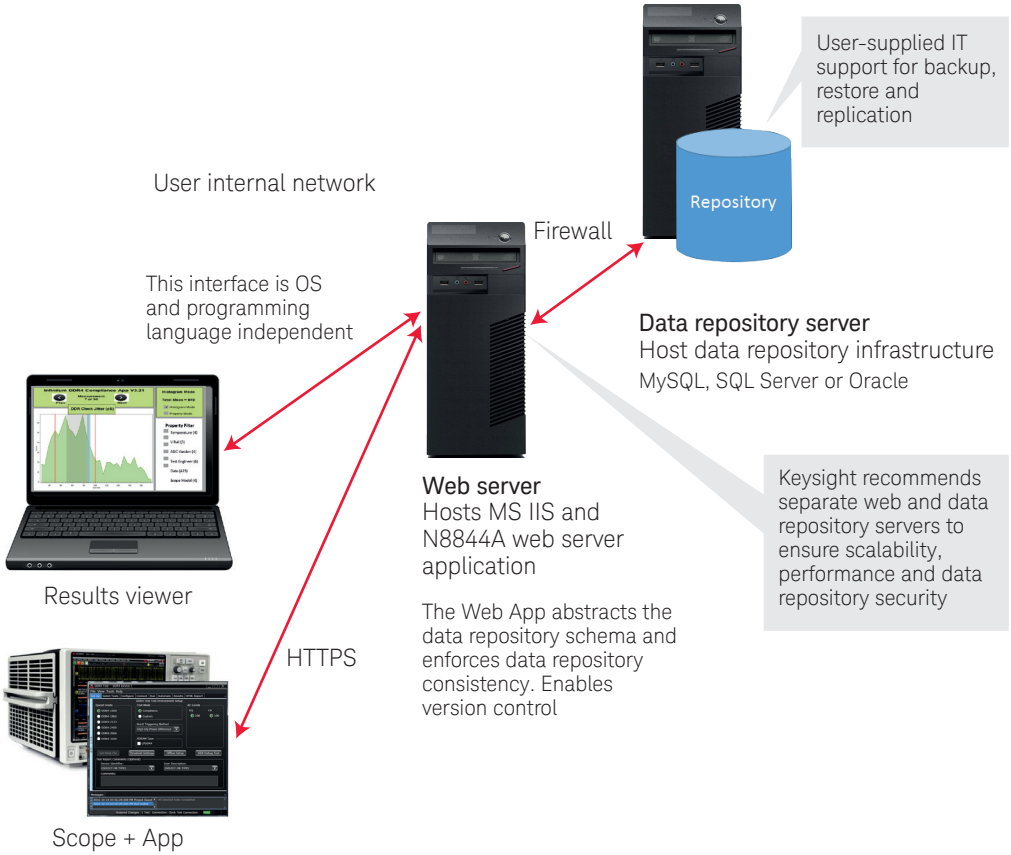


Figure 1. The N8844A Data Analytics Web Server application software and the Data Repository Server is setup separately. The user will utilize the N8844A web service application to import data to the data repository.

Data Sources and Data Import

The Infiniium N6462A-5FP DDR4 and LPDDR4 data analytics web service software provides an interface that allows the user to export their test result directly to the data repository server via a URL. The user would first configure the compliance application software, run the test suite and then review the measurement results in the Infiniium user interface. If the results are deemed valid, the user would export the test result to the data repository. In this use model, the user would need to set up the N8844A Data Analytics Web Service software.

The second use model allows data viewing for Keysight Advanced Design System (ADS) users. The W2351EP DDR4 Compliance Test Bench outputs simulated waveforms which the user can use to run on the Infiniium N6462A-1FP DDR4 and LPDDR4 compliance test software in offline mode.

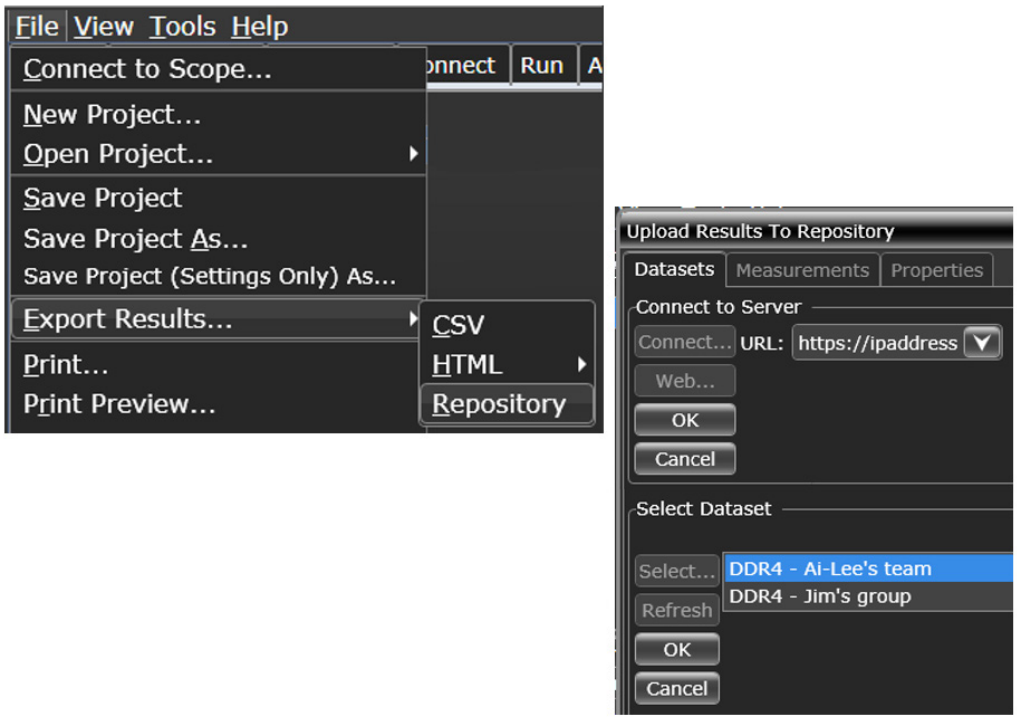


Figure 2. Infiniium DDR4 and LPDDR4 Compliance Test Software with Data Analytics option. The user exports the compliance test result to the repository via an URL address that connects to the server.

The N8844A Data Analytics Web Server application software enables users to upload test results from other sources to the data repository. The data source can come from Keysight test equipment such as the oscilloscopes. The software also supports non-Keysight test equipment measurement data as well as other user defined measurement methods. The user would collect the measurement result and save it into a .CSV format. Users can use the Web CSV import tool (included in the N8844A Data Analytics Web Server application software) to import the data to the repository. The .CSV data import tool allows users to specify the number of measurements and properties available in the .CSV format test result. If the user chooses not to use .CSV format, the N8844A software includes C# and Python import program reference applications to help the user script a customized data import tool.

Results Viewer

Users can retrieve the test results from the data repository server to be viewed with the KS8400A Results Viewer software. The KS8400A Results Viewer software allows the user to see their compiled measurement result in histogram or line mode. The plots can be filtered by properties. Examples of properties include temperature, ASIC version, work bench, date and equipment model. The user can navigate to each measurement taken. Another alternative is to view the test result with the N8844A Web tool reference application. The web tool is included as part of the N8844A Data Analytics Web Service software.

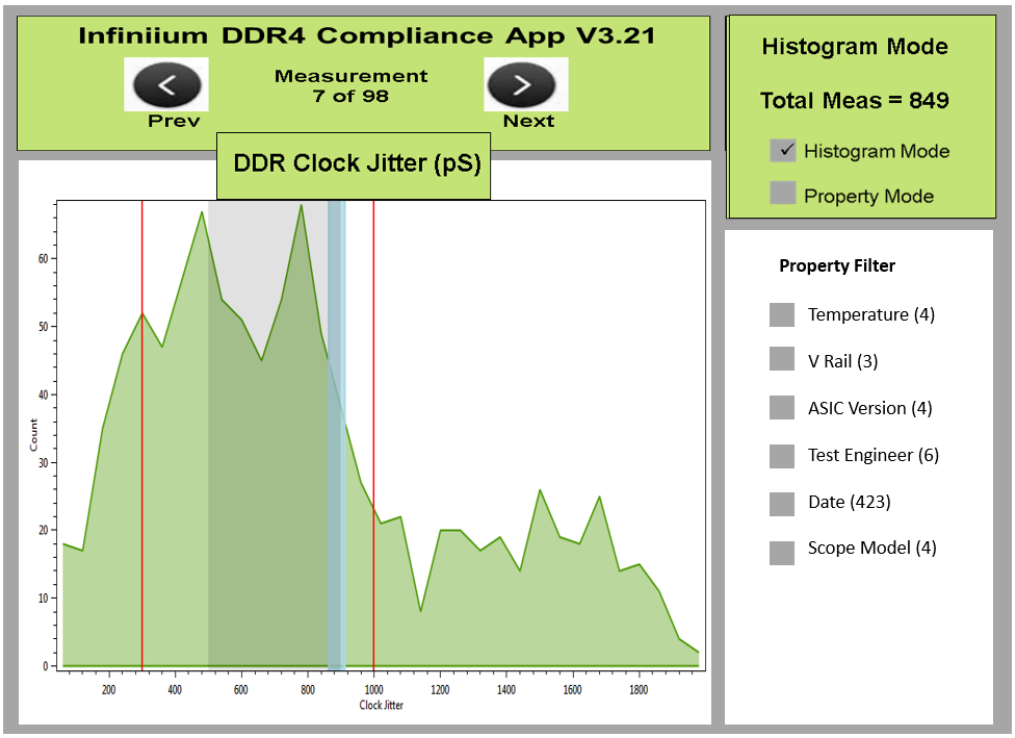


Figure 3. KS8400A Results Viewer software reveals the plot of a DDR4 clock jitter measurement in histogram mode. The blue bar indicates the last run of test result exported to the data repository and the red lines show the upper and lower test limits of the measurement as specified in the JEDEC specification.

Ordering Information

The configuration below is for DDR4 and LPDDR4 Compliance Test Software users. The user will need to order the N6462A DDR4 and LPDDR4 compliance test software with option -5FP and N8844A Data Analytics Web Service software. Users can use the KS8400A Test Automation Platform, Developer's System software or the web tool reference application included in the N8844A software for results viewing.

Software options

Application	License type		Infiniium V-Series/Z-Series	Infiniium S- Series	Infiniium 90000 X-Series
DDR4 and LPDDR4 Compliance Test Software (required)	Fixed	Factory-installed	N6462A-1FP	N6462A-1FP	DSO90000-058
		User-installed	N6462A -1FP	N6462A-1FP	N6462A-1FP
	Floating	Transportable	N6462A-1TP	N6462A-1FP	N6462A-1TP
		Server based	N5435A-087	N5435A-087	N5435A-087
DDR4 and LPDDR4 Data Analytics Web Service Software (required)	Fixed	Factory-installed	N6462A-5FP	N6462A-5FP	DSO90000-904
		User-installed	N6462A-5FP	N6462A-5FP	N6462A-5FP
	Floating	Transportable	N6462A-5TP	N6462A-5TP	N6462A-5TP
		Server based	N5435A-108	N5435A-108	N5435A-108

Note: Please see N6462A data sheet (**www.keysight.com/find/n6462a**) for other software requirements.

N8844A web service software (required)

Application	License type		Installed on a web server
Data Analytics Web Service Software (1 license)	Fixed	Factory-installed	–
		User-installed	N8844A-1FP
	Floating	Transportable	N8844A-1TP
		Server based	–
Data Analytics Web Service Software (15 licenses)	Fixed	Factory-installed	–
		User-installed	N8844A-4FP
	Floating	Transportable	N8844A-4TP
		Server based	–

The KS8400A software works on all Infiniium oscilloscopes

Application	License type		Installed on a web server
Test Automation Platform, Developer's System (optional)	Fixed	Fixed	KS8400A-1FP
		12 months fixed	KS8400A-1FY
	Floating	Floating	KS8400A-1NP
		12 months floating	KS8400A-1NY
	Transportable	Transportable	KS8400A-1TP
		12 months transportable license	KS8400A-1TY

Ordering Information (Continued)

The below configuration works with .CSV or any other test result format. The user will need to order N8844A Data Analytics Web Service software which would be installed on the web server. The KS8400A Test Automation Platform, the Developer's System software, or the web tool reference application (included in the N8844A software) can be used to view results.

Software options

Application	License type		Installed on a web server
Data Analytics Web Service Software (1 license)	Fixed	Factory-installed	–
		User-installed	N8844A-1FP
	Floating	Transportable	N8844A-1TP
		Server based	–
Data Analytics Web Service Software (15 licenses)	Fixed	Factory-installed	–
		User-installed	N8844A-4FP
	Floating	Transportable	N8844A-4TP
		Server based	–

The KS8400A software (optional)

Application	License type		Installed on PC for results viewing
Test Automation Platform, Developer's System	Fixed	Fixed	KS8400A-1FP
		12 months fixed	KS8400A-1FY
	Floating	Floating	KS8400A-1NP
		12 months floating	KS8400A-1NY
	Transportable	Transportable	KS8400A-1TP
		12 months transportable license	KS8400A-1TY

For more information

www.keysight.com/find/data-analytics

Related Literature

Publication type	Publication number
N6462A and N6462B DDR4/LPDDR4 Compliance Test Software - Data Sheet	5991-0853EN

Download your next insight

Keysight software is downloadable expertise. From first simulation through first customer shipment, we deliver the tools your team needs to accelerate from data to information to actionable insight.

- Electronic design automation (EDA) software
- Application software
- Programming environments
- Productivity software

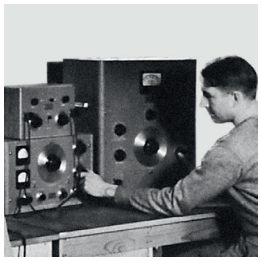


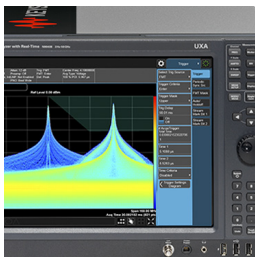
Learn more at
www.keysight.com/find/software

Start with a 30-day free trial.
www.keysight.com/find/free_trials

Evolving

Our unique combination of hardware, software, support, and people can help you reach your next breakthrough. We are unlocking the future of technology.







From Hewlett-Packard to Agilent to Keysight

myKeysight

myKeysight
www.keysight.com/find/mykeysight
A personalized view into the information most relevant to you.

KEYSIGHT SERVICES
Accelerate Technology Adoption.
Lower costs.

Keysight Services
www.keysight.com/find/service
Our deep offering in design, test, and measurement services deploys an industry-leading array of people, processes, and tools. The result? We help you implement new technologies and engineer improved processes that lower costs.

STANDARD 3 YR WARRANTY

Three-Year Warranty
www.keysight.com/find/ThreeYearWarranty
Keysight's committed to superior product quality and lower total cost of ownership. Keysight is the only test and measurement company with three-year warranty standard on all instruments, worldwide. And, we provide a one-year warranty on many accessories, calibration devices, systems and custom products.

CALIBRATION WARRANTY UP TO 10 YEARS ASSURANCE PLANS

Keysight Assurance Plans
www.keysight.com/find/AssurancePlans
Up to ten years of protection and no budgetary surprises to ensure your instruments are operating to specification, so you can rely on accurate measurements.

Keysight Channel Partners
www.keysight.com/find/channelpartners
Get the best of both worlds: Keysight's measurement expertise and product breadth, combined with channel partner convenience.

www.keysight.com/find/N8844A

For more information on Keysight Technologies' products, applications or services, please contact your local Keysight office. The complete list is available at:
www.keysight.com/find/contactus

Americas

Canada	(877) 894 4414
Brazil	55 11 3351 7010
Mexico	001 800 254 2440
United States	(800) 829 4444

Asia Pacific

Australia	1 800 629 485
China	800 810 0189
Hong Kong	800 938 693
India	1 800 11 2626
Japan	0120 (421) 345
Korea	080 769 0800
Malaysia	1 800 888 848
Singapore	1 800 375 8100
Taiwan	0800 047 866
Other AP Countries	(65) 6375 8100

Europe & Middle East

Austria	0800 001122
Belgium	0800 58580
Finland	0800 523252
France	0805 980333
Germany	0800 6270999
Ireland	1800 832700
Israel	1 809 343051
Italy	800 599100
Luxembourg	+32 800 58580
Netherlands	0800 0233200
Russia	8800 5009286
Spain	800 000154
Sweden	0200 882255
Switzerland	0800 805353 Opt. 1 (DE) Opt. 2 (FR) Opt. 3 (IT)
United Kingdom	0800 0260637

For other unlisted countries:
www.keysight.com/find/contactus
(BP-09-23-16)

DEKRA Certified
ISO9001 Quality Management System

www.keysight.com/go/quality
Keysight Technologies, Inc.
DEKRA Certified ISO 9001:2015
Quality Management System

KEYSIGHT TECHNOLOGIES
Unlocking Measurement Insights

This information is subject to change without notice.
© Keysight Technologies, 2016
Published in USA, October 26, 2016
5992-1910EN
www.keysight.com