Release Notes

Keysight D3000NFCA/D4000NFCA NFC InfiniiVision Compliance Application Software Release Notes

Keysight D3000NFCA/D4000NFCA Software Version 1.30.1

Released Date:	8 September 2021
Requirements category	Microsoft Windows 7, Microsoft Window 10
Requirements category	 3000T X-Series oscilloscope with the
	"DSOXT3NFC or D3000NFCA" license OR
	4000 X-Series oscilloscope with the
	"DSOX4NFC or D4000NFCA" license.
	2. Keysight I/O Libraries version 17.2 or greater.
	Keysight Host Processor Platform
	5.2.25313.11426. (included in NFC Test
	Application install package, requires .NET
	Framework 4.6).
	4. Keysight License Service 5.1.20822.10730
	(included in NFC Test Application install
	package).
	5. Keysight License Manager 5.3 (included in NFC
	Test Application install package).
	6NET Framework 4.5.2. (included in NFC Test
	Application install package).
	7. MATLAB Compiler Runtime 9.1. (included in
	NFC Test Application install package).
	8. NFC Test Application software.





Miscellaneous Notes

- Fixed installation issue on version 1.30.0000.

Keysight D3000NFCA/D4000NFCA Software Version 1.30.0

Released Date:	24 MAR 2021
Requirements category	Microsoft Windows 7, Microsoft Window 10
Requirements category	9. 3000T X-Series oscilloscope with the
	"DSOXT3NFC or D3000NFCA" license OR
	4000 X-Series oscilloscope with the
	"DSOX4NFC or D4000NFCA" license.
	10. Keysight I/O Libraries version 17.2 or greater.
	11. Keysight Host Processor Platform
	5.2.25313.11426. (included in NFC Test
	Application install package, requires .NET
	Framework 4.6).
	12. Keysight License Service 5.1.20822.10730 (included in NFC Test Application install package).
	13.Keysight License Manager 5.3 (included in NFC Test Application install package).
	14NET Framework 4.5.2. (included in NFC Test Application install package).
	15.MATLAB Compiler Runtime 9.1. (included in NFC Test Application install package).
	16.NFC Test Application software.
File Name:	SetupInfNFC01300000.exe

Miscellaneous Notes

- NA

Keysight D3000NFCA/D4000NFCA Software Version 1.20.0

Released Date:	19 OCT 2020
Requirements category	Microsoft Windows 7, Microsoft Window 10
Requirements category	17.3000T X-Series oscilloscope with the
	"DSOXT3NFC or D3000NFCA" license OR
	4000 X-Series oscilloscope with the
	"DSOX4NFC or D4000NFCA" license.
	18. Keysight I/O Libraries version 17.2 or greater.
	19.Keysight Host Processor Platform
	5.2.25313.11426. (included in NFC Test
	Application install package, requires .NET

Framework 4.6).

- 20. Keysight License Service 5.1.20822.10730 (included in NFC Test Application install package).
- 21. Keysight License Manager 5.3 (included in NFC Test Application install package).
- 22..NET Framework 4.5.2. (included in NFC Test Application install package).
- 23.MATLAB Compiler Runtime 9.1. (included in NFC Test Application install package).
- 24.NFC Test Application software.

File Name:

SetupInfNFC01200000.exe

Miscellaneous Notes

- NA

New Features

- Added new trigger method for "Trigger Method for Signal Optimization". This trigger option is applicable for when polling doesn't begin with an NFC-A poll and when the polling carrier is continuous (no idle)."

```
File View Tools Help

Set Up Select Tests Configure Connect Run Automate Results HTML Report

Mode: Compliance Debug

All NFC Tests
System Test Settings
Poller Test Settings
NFC-A FTD: NFC-A Response to poller (52E-6)
NFC-B FTD: NFC-B Response to poller (180E-6)
NFC-F (212Kbps) FTD: NFC-F (212Kbps) Response to poller (2.65E-3)
NFC-V FTD: NFC-V Response to poller (321E-6)
Poller F trigger polarity (Normal)
AWG Amplitude (Response to poller) (3.0)

Trigger Method for Signal Optimization (Edge Trigger Method)
Immebase Setting for Signal Optimization (Edge Trigger Method)
Immebase Setting for Signal Optimization (S00E-9)
Command Analyzed (1st Poller Request)
Poller Reference Vertical Range (800E-3)
```

Keysight D3000NFCA/D4000NFCA Software Version 01.10.0000

Microsoft Windows 7, Microsoft Window 10 25.3000T X-Series oscilloscope with the DSOXT3NFC license OR 4000 X-Series oscilloscope with the DSOX4NFC license. 26.Keysight I/O Libraries version 17.2 or greater. 27.Keysight License Service 5.1.20822.10730 (included in NFC Test Application install package).
DSOXT3NFC license OR 4000 X-Series oscilloscope with the DSOX4NFC license. 26.Keysight I/O Libraries version 17.2 or greater. 27.Keysight License Service 5.1.20822.10730 (included in NFC Test Application install
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27.Keysight License Service 5.1.20822.10730 (included in NFC Test Application install
(included in NFC Test Application install
28. Keysight License Manager 5.3 (included in NFC Test Application install package).
29NET Framework 4.5.2. (included in NFC Test Application install package).
30.MATLAB Compiler Runtime 9.1. (included in NFC Test Application install package).
31.NFC Test Application software.

Miscellaneous Notes

- Updated the product number from "DS0XT3NFC/DS0X4NFC" to "D3000NFCA/D4000NFCA" to support PPKS licenses.

New Features

- Added support for new export to repository feature where user can export test results to a repository (such as a database). [File->Export Results...->Repository]
- Added device ID and comment selections in Set Up tab.

Enhancements

- Migrated application to use new graphics user interface environment.
- Removed support for "TCI-II" antenna testing.
- Updated option of "Reference Antenna" type in Set Up tab from "Reference" to "NFC-Forum".
- Updated test limit file name from "Specification 2.00 (official)" to "NFC Analog Technical Specification 2.1"

Bug Fixes

- Fixed connection diagram not shown for NFC-F (424 Kbps) test group.
- Fixed report captions in HTML test report.
- Fixed app not responding when connecting instrument.

Keysight DS0XT3NFC/DS0X4NFC Software Version 01.06.0000

Released Date:	24 January 2019
Requirements category	Microsoft Windows 7, Microsoft Window 10
Requirements category	32.3000T X-Series oscilloscope with the
	DSOXT3NFC license OR 4000 X-Series
	oscilloscope with the DSOX4NFC license.
	33. Keysight I/O Libraries version 17.2 or greater.
	34. Keysight License Service 5.1.20822.10730
	(included in NFC Test Application install package).
	35.Keysight License Manager 5.3 (included in NFC Test Application install package).
	36NET Framework 4.5.2. (included in NFC Test Application install package).
	37.MATLAB Compiler Runtime 9.1. (included in NFC Test Application install package).
	38.NFC Test Application software.
File Name:	SetupInfNFC01060000.exe

New Features

- Added the following new tests to support NFC-V Listener Tests:
 - o Test ID: 10401 Listener: NFC-V, Parameter: FDT
 - o Test ID: 10403 Listener: NFC-V, Parameter: Response Data
 - o Test ID: 10404 Listener: NFC-V, Parameter: Number of capture attempts
 - o Test ID: 10405 Listener: NFC-V, Parameter: Screen capture
 - o Test ID: 10406 Listener: NFC-V, Parameter: LMA (Specification Version 2.0)
- Added the following new tests to support NFC-V Poller Tests:
 - o Test ID: 20402 Poller: NFC-V, Parameter: Vov
 - o Test ID: 20403 Poller: NFC-V, Parameter: Fc
 - o Test ID: 20404 Poller: NFC-V, Parameter: t1
 - o Test ID: 20405 Poller: NFC-V, Parameter: t2
 - o Test ID: 20406 Poller: NFC-V, Parameter: t3
 - o Test ID: 20407 Poller: NFC-V, Parameter: t4
 - o Test ID: 20408 Poller: NFC-V, Parameter: t5
 - o Test ID: 20409 Poller: NFC-V, Parameter: Modulation Depth
 - o Test ID: 20410 Poller: NFC-V, Parameter: Modulation Index
 - o Test ID: 20411 Poller: NFC-V, Parameter: Overshoot
 - o Test ID: 20412 Poller: NFC-V, Parameter: Response Data
 - o Test ID: 20414 Poller: NFC-V, Parameter: Data Rate
 - o Test ID: 20413 Poller: NFC-V, Parameter: Number of capture attempts
 - o Test ID: 20415 Poller: NFC-V, Parameter: Screen capture
- Added configurable option of "Trigger Method for Signal Optimization" (with remote name
 of "TriggerMethodSignalOptimization") in Configure tab. This configurable option is used to
 specify the trigger method used to acquire signal for initial vertical scaling signal
 optimization. This option is applicable for NFC-A, NFC-B, NFC-F and NFC-V Poller tests
 only.

- Added configurable option of "Timebase Setting for Signal Optimization" (with remote name of "TimebaseScaleSignalOptimization") in Configure tab. This configurable option is used to specify the timebase scale(s/div) used to acquire signal for initial vertical scaling signal optimization. This option is applicable for NFC-A, NFC-B, NFC-F and NFC-V Poller tests only.
- Added configurable option of "NFC-V Smoothing Points for Envelope Waveform" (with remote name of "SmoothingNFCVPoller") in Configure tab. This configurable option is used to specify the smoothing points for the envelope waveform. This config is only applicable to NFC-V Poller tests.

Enhancements

- Removed configurable option of "Resonance Frequency Channel" (with remote name of "ResFreqChan") from Configure tab. It is now replaced with "Poller J2/RX and Resonance Frequency Channel" (with remote name of "PolJ2Chan").
- Renamed configurable option of "Poller J2/RX Channel" to "Poller J2/RX and Resonance Frequency Channel".
- Regrouping configurable options in Configure tab. Updated all configurable options to debug mode only except the following:
 - o Poller J2/RX and Resonance Frequency Channel
 - o Listener J1/Vr Channel
 - o Listener J4/Sense Channel
 - o Poller F trigger polarity
- Updated "Listener DUT Antenna Category" selection in Set Up tab. Changed default value to "Tag".
- Updated the zoom timebase for NFC-A and NFC-B poller tests during screenshot.
- Updated options of "Smoothing Points for Envelope Waveform" (with remote name of "Smoothing") configurable option in Configure tab. The default value is updated to "51".
- Updated to display "Resonant Test Frequency" message at the beginning of Resonant Test Frequency test.
- Added Keysight License Service(KLS) and Keysight License Manager(KLM) requirement checking in NFC installer.

Bug Fixes

 Fixed issue where user needs to click "RUN" twice to execute the "RUN" task at the end of running all tests.

Miscellaneous Notes

- NFC compliance application requires 64-bit Windows operating system with Matlab Runtime version 9.1 installed

Keysight DS0XT3NFC/DS0X4NFC Software Version 01.05.0000

Released Date:	12 January 2018
Requirements category	Microsoft Windows 7
Requirements category	 3000T X-Series oscilloscope with the DSOXT3NFC license OR 4000 X-Series oscilloscope with the DSOX4NFC license. Keysight I/O Libraries version 17.2 or greater. .NET Framework 4.5.2. MATLAB Compiler Runtime 9.1. NFC Test Application software.
File Name:	SetupInfNFC01050000.exe

Feature:

- 1. Added LMA measurement as per NFC Specification 2.0.
- 2. Updated compliance limit specification to 2.0.

- 3. "Trigger Delay" settings in the Configure tab is now replaced with "NFC-X FTD: NFC-X Response to poller".
- 4. Added "Poller F trigger polarity" in the Configure tab to support reserve polarity for NFC-F.
- 5. "Use Arm and Trigger method" in the Configure tab is now replaced with "Command Analyzed".
- 6. Added "Poller B and F Trigger Level" in the Configure tab.
- 7. Added "Listener DUT Antenna Category" selection in the Set Up tab.
- 8. Minor bug fixes.

Keysight DS0XT3NFC/DS0X4NFC Software Version 01.04.0000

Released Date:	15 July 2016
Requirements category	Microsoft Windows 7
Requirements category	 3000T X-Series oscilloscope with the DSOXT3NFC license OR 4000 X-Series oscilloscope with the DSOX4NFC license. Keysight I/O Libraries version 17.2 or greater. .NET Framework 4.5.2. MATLAB Compiler Runtime 7.15. NFC Test Application software.
File Name:	SetupInfNFC01040000.exe

Feature:

New creation