AGFA 🐠	NX 3.0.23.00 / NX 4.0.23.00	Type 4406	No. 02
Radiology Solutions Services	DR 100e	Type 6012	No. 42
	DR 100s	Type 6013	No. 31
	DR 400	Type 5520	No. 154
	DR 600	Type 5530	No. 195
	DR 800	Type 6010	No. 47
	DR Retrofit	Type 5400	No. 125
	DX-D 100	Type 5410	No. 136
	DX-D 100 Wireless	Type 5411	No. 179
	DX-D 300	Type 8207	No. 163
	DX-D 400	Type 5420	No. 119
	DX-D 500	Type 8206	No. 83
	DX-D 600	Type 5430	No. 184
	Mammo DR Retrofit	Type 5400	No. 16
		Document	ID: 77378094

Service Bulletin

NX 23.00 SU1 available

Task

Timing		Category		Scope
Next service as agreed with customer	\bigcirc	Apply at all sites	•	
	•	Apply at affected sites as listed below		Problem Record: PRB2000331
	0	Optional to improve functionality of product		

Task Tracking

After completion of your task the following entry in your Service Report is required:

* Insert the document number into the field "Comment" (SMS form).

Purpose of this document:

This document introduces software update NX 23.00 SU1.

Affected systems: NX 23.00 SU1 can be installed on all systems where NX 23.00 is installed.

The signatures on the approval page indicate the solutions described in this Service Bulletin have been reviewed and are NOT reportable because no actions are taken to reduce a "Risk to Health" according to our risk assessment process.

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1 Introduction

A software update NX 23.00 SU1 is available.

Main purpose of the software update: Further develop the grid line suppression algorithm:

- to solve a grid line detection related Problem Record and
- to allow introduction of Dura-line Flat Panel Detectors (XD 10, XD+10, XD 14, XD+14; XD 17, XD+17) in combination with a 132 lpi antiscatter-grid.

1.1 NX 23.00 SU1 in a nutshell

- Has an improved grid line suppression algorithm.
- Contains no new features which are relevant at the moment.
- Released for the same CR and DR systems like NX 23.00. For details refer to section 1.3.
- Can only be installed on top of NX 23.00.
- Installer can be run on an activated or non-activated system.
- New software on the Agfa Medimg Library:
 - o NX 23.00 SU1 update installer
 - o NX 23.00 SU1 Office Viewer (also included in NX 23.00 SU1 update installer)
- New service documents on the Agfa Medimg Library:
 - This Service Bulletin
- NX 23.00 SU1 is installed in production on all systems. On DR 800, DR 100e, DR 100s and DX-D 100 introduction in production is delayed by some weeks.
- No new clean install USB flash drive.
- No new user manual.

1.2 Interoperability of NX 23.00 and NX 23.00 SU1

- NX In Room and CMS (Central Monitoring System) as well as Office Viewer must be updated with SU1. No software mix allowed. Exception: CMS used only for Dose and Repeat/Reject analysis can be of a different version (this means, mix of NX 23.00 and NX 23.00 SU1 allowed).
- Configuration export files of an NX 23.00 SU1 system can be imported in the (online and offline) NX 23.00 Configuration Tool and vice versa.
- Natively exported images of an NX 23.00 SU1 system can be imported on an NX 23.00 system and vice versa.

1.3 Release status of NX 23.00 SU1 in the different CR and DR systems

NX 23.00 SU1 is released as a system component in the following CR and DR systems.

- NX 23.00 SU1 is released in the following CR systems*.
 - NX Workstation in a GenRad system connected to one of the following DICOM digitizers: CR 35-X, CR 85-X, DX-G, DX-M, CR 30-X 2nd, CR 30-Xm, CR 10-X, CR 12-X, CR 15-X.
 - NX Workstation in a CR Mammography system connected to one of the following Mammography digitizers: CR 35-X, CR 85-X, DX-M, CR 30-Xm
- NX 23.00 SU1 is released for SE+NX to update NX software*.
- NX 23.00 SU1 is released within the systems listed below.
 - DR 100e Digital
 - o DR 100s
 - o DR 400
 - o DR 600
 - o DR 800
 - DR Retrofit
 - DR Mammo Retrofit
 - o DX-D 100 / DX-D 100 Wireless
 - o DX-D 300
 - o DX-D 400
 - o DX-D 500
 - o DX-D 600

1.4 Released XRDI and DR Detector sub-components

NX 23.00 SU1 is released together with XRDI 23.1 and the following sub-components.

RFBC 4.5 / RFBC 4.8

- APC 4.8
- DMI 2.1

SPM 4.1

- ASC 10.1 / ASC 10.2*
- IRI 3.4

• TDI 2.2

- CDI 3.6
- 001.04

THS 1.10

- CPI 3.0
- SDL 2.1
- THX 1.0TRI 4.0 / 4.1
- DAP Controller SW 1.0
 Sedecal Console 5.9
 - SDR 3.1 / SDR 3.2*
- VDI 3.3 / 3.4 / VDI 4.0

- GGC 1.0GMP 4.0
- SMS 2.3
- VRN 8.0

The released combinations are published in the Simplified ELMS DR Subproduct Interoperability Matrix, Document ID 35878296.

The purpose and release history of the different sub-components is described in the XRDI Service Manual, Document ID <u>72453884</u>.

Detector components are explained in the related Detector Service Manual.

Version 1.0 NX 23.00, DR 100e, DR 100s, DR 400, DR 600, DR 800, DX-D 100, DX-D 100 Wireless,

^{*} No additional Service Bulletin announcing the release is published for CR systems and SE+NX.

^{*} DR 800 in combination with ASC 10.2 only. DR 600 with SmartXR option with ASC 10.2 / SDR 3.2 only.

1.5 Solved software issues in NX 23.00 SU1

The following software issue may appear on all DR systems listed on the front page of this document.

1.5.1 Very sporadic grid lines in the image [PRB2000331]

Symptom

Very sporadically grid lines appear in the image, despite a supported anti-scatter grid is used, with the right SID for the selected grid.

The issue can appear on all NX versions and all released Detector / anti-scatter grid combinations. It does not appear on CR systems.

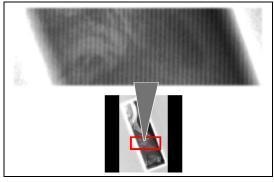


Figure 1



NOTE:

User manual "Anti-scatter grids for DR Systems", Document number 0037, indicates, whether the used anti-scatter grid is released for the DR Detector / DR system.

Cause

An anti-scatter grid is not visible in a saturated area. If parts of the image are saturated, the detection algorithm of the grid line suppression is sometimes not detecting the grid.

Workaround Try to lower the dose to a decent dose level or narrow the collimation field to exclude direct exposure.

Solution

Install NX 23.00 SU1 on top of NX 23.00. This contains an improved detection algorithm of the grid lines.

1.6 Additional solved software issues and new features

- The grid line suppression software in NX 23.00 was not able to prevent grid lines in all cases for the new Dura-line flat panel detectors (XD 10, XD+10, XD 14, XD+14; XD 17, XD+17). This is solved now in NX 23.00 SU1 by a further improved grid line suppression algorithm for the combination "Dura-line panel / 132 lpi anti-scatter grid". Other grids, for example 215 lpi, are not supported.
- NX 23.00 SU1 supports the dongle-less licensing, which is planned to be introduced in Q4-2021.
- The Clinical exam tree for DSA (Factory.Import.ExamTree.DR800_DSA) got some improvements:
 - DSA Abdomen: Body part and anatomic region are changed from Leg to Abdomen
 - DSA Leg, DSA Leg CO2 and DSA arm: Exposed Area is changed to 30x30 mm
- The technical exam tree for DSA (Factory.Import.ExamTree.SystemDiagnosis.DR800_DSA) got the following improvement:
 - For DSA QC package, 'Dynamic QC' for Fluo is applied.
- The NX 23.00 SU1 installer sets the codemeter proxy setting to no proxy, what prevents the issue "NX 23.00 on Windows 7 hangs in splash screen after startup" in most cases. For details refer to NX 23.00 SB03, Document ID 77451433.
- NX 23.00 SU1 has an updated Tomosynthesis software component integrated, to support future graphic adapters for image reconstruction.

2 Prerequisites



SOFTWARE:

- Download the following software from the Agfa Med Img Library:
 - o NX 23.00 SU1 installer, size ≈ 1 GB, Document ID <u>77378972</u>
 - o Office Viewer NX 23.00 SU1, size ≈ 300 MB, Document ID <u>77378283</u>*
- Obtain a new ALF (Application License File) for the NX Workstation which shall be updated to NX 23.00 SU1.

As alternative, download the software directly from the AgfaBox. For details refer to the Service Information Bulletin "AgfaBox replaces Fileshare for software downloads", Document ID 71987422.

*Office Viewer NX 23.00 SU1 not mandatorily required as it is included in the NX 23.00 SU1 installer.



IMPORTANT:

The installation and service of the product(s) described herein is to be performed by qualified personnel who are employed by Agfa NV or one of its affiliates or who are otherwise authorized by Agfa NV or one of its affiliates to provide such services.



IMPORTANT:

Strictly observe all safety directions within the "Generic Safety Directions", Document ID 11849633.

3 **Instructions**



REQUIRED TIME:

- 10 minutes installation of NX 23.00 SU1
- 10 minutes verification

Installing NX 23.00 SU1

(1) Follow the readme which is part of the NX 23.00 SU1 ZIP file on the Medimg Library.

Verification 4

Verify the software update as described in the readme which is part of the NX 23.00 SU1 ZIP file on the library.



NOTE:

After the NX 23.00 SU1 update, the NX shows Type 23.00 SU1 and Build 23.0.1212.



Figure 2

Keywords 5

NX 3.0.23, NX 4.0.23, software update

Version history 6

Version	Change	Date
1.0	Initial Version	07-2021



Details as of PDF Creation Date

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Version & Status History

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