

NextSeq Software Release Notes

NextSeq Control Software 2.1.0

NextSeq Service Software 2.1.0

NextSeq Software System Suite 2.1.2

Real Time Analysis (RTA) 2.4.11

BaseSpace Broker 2.4.2

NextSeq Recipe Fragments 2.1.2

Sequencing Analysis Viewer (SAV) 1.9.1

DMA Driver 4.5.2

Run Copy Service 1.0.14

.Net 4.5.1

For NextSeq 500 & 550

July 25, 2016

Introduction

These release notes describe key changes to software components for the NextSeq 500/550 since the release of 2.0.2. If you are updating from a version prior to 2.0.2, please review the release notes for 2.0.2 for information on the changes introduced in that release.

The software package includes:

- NextSeq Control Software 2.1.0
- NextSeq Service Software 2.1.0 – no change to this release
- NextSeq Software System Suite 2.1.2
- RTA 2.4.11 – no change in this release
- BaseSpace Broker 2.4.2 – no change in this release
- NextSeq Recipe Fragments 2.1.2
- SAV 1.9.1 – no change in this release
- DMA Driver 4.5.2 – no change in this release
- Run Copy Service 1.0.14 – no change in this release
- .Net v4.5.1 – no change in this release

I. NextSeq Control Software (NCS) 2.1.0

NEW FEATURES:

- Added consumable RFID lot number to run parameters
- During flow cell registration (fiducial finding), try different exposures if the fiducial is not identified. If the image background intensity is high, reduce the exposure. If the background intensity is low, increase the exposure.

OPTIMIZATIONS:

- Moved all uses of config parameter [FocusParams] FiducialExposureTimeMs to [PreRunChecks] FiducialExposureTimeMs. These config parameters are the same thing and having them in 2 places causes problems if only 1 of them is updated.
- Replace the fiducial finding algorithm with a newer version that was used on HiSeq.

DEFECT REPAIRS:

- Improve error handling for the AutoCenter algorithm.

II. NextSeq Service Software 2.1.0

No changes were made to this application in this release.

III. NextSeq Software System Suite 2.1.2

New Features:

- Support for NextSeq Control Software v2.1.0
- Support for NextSeq Service Software v2.1.0
- Support for NextSeq Recipe Fragments v2.1.2

IV. RTA 2.4.11

No changes were made to this application in this release.

V. BaseSpace Broker 2.4.2

No changes were made to this application in this release.

VI. NextSeq Recipes 2.1.2

New Features:

- Added Veriseq PGS recipe

Optimizations:

- Updated the v2.1.1 High and Mid recipes.
 - Read1: change from 3 frames to 5 frames, keep total exposure same
 - Index1 and index2: change from 3 frames to 5 frames, keep total exposure same
 - Linearization 2: add SBM wash both pre and post BLM2
 - Index2 prep: move temperature ramp post BDR, add BB2 wash post BDR

VII. Sequence Analysis Viewer 1.9.1

No changes were made to this application in this release.

VIII. VIII. DMA Driver 4.5.2

No changes were made to this application in this release.