

HiSeq X Instrument Software Release Notes

HiSeq Control Software (HCS) HD 3.5.0

Real-Time Analysis (RTA) v2.7.7

Recipe Fragments HD 3.6.0

Microsoft .Net Framework 4.5.1

Sequencing Analysis Viewer (SAV) v1.10.2

BaseSpace Broker v2.9.2.15

Run Copy Service v1.0.19.0

For HiSeq X[®] Systems

October 2017

Introduction

These Release Notes detail the key changes to instrument software components for the HiSeq X since the release of the previous HiSeq X Control Software (HCS) package. The previous release contained (HCS) HD 3.4.0, RTA v2.7.7, Run Copy Service 1.0.19.0, Recipe Fragments HD 3.5.0, and BaseSpace Broker v2.9.2.15.

If you are upgrading from a version earlier than HiSeq X Control Software v3.4.0, review the release notes for HCS v3.4.0. These release notes contain a list of features and bug fixes introduced in that version.

If installing on an instrument containing version HCS 3.3.39 or later the software included in this release is customer-installable. Software versions prior to HCS 3.3.39 will require additional support from trained Illumina service personnel.

The Recipe Fragments installation overwrites any custom recipe files. Therefore, recreate any custom recipes after receiving this update.

The BaseSpace Send Instrument Health data option is activated during this software installation. After receiving this update, update your BaseSpace Send Instrument Health settings.

The software package includes:

- HCS HD 3.5.0
- RTA v2.7.7 – no change
- Recipe Fragments HD 3.6.0
- Microsoft .Net Framework 4.5.1 – no change
- SAV v1.10.2 – no change
- BaseSpace Broker v2.9.2.15 – no change
- Run Copy Service v1.0.19.0 – no change

I. HiSeq X Control Software HD 3.5.0

NEW FEATURES:

- Ability to run dual indexed libraries on HiSeq X instruments.

IMPROVEMENTS:

- Updated Recipe Fragments to enable dual indexing
- Updated graphical user interface to reflect new PLM2v2 reagent and dual indexing functionality

DEFECT REPAIRS:

- None

KNOWN ISSUES:

- Dual indexing not compatible with SeqLab installations
- Selecting the Abort button to stop a run during imaging puts the camera in an unknown state and stops the adjacent run.

- To recover from this issue, restart HCS.
- The sequencing run for either flow cell cannot be resumed.

II. RTA v2.7.7

DEFECT REPAIRS:

- None

KNOWN ISSUES:

- PhiX error rate quantized at 0.2% at lowest allowed spike-in of 0.1%. Illumina recommends using a minimum spike-in of 0.5% to recover.

III. Recipe Fragments v3.6.0

IMPROVEMENTS:

- Added new dual indexing recipe to software
- Updated single indexing and non-indexing recipe to improve system performance

DEFECT REPAIR:

- None

KNOWN ISSUES:

- None

IV. Sequencing Analysis Viewer v1.10.2

- No changes in this release.

V. BaseSpace Broker v2.9.2.15

NEW FEATURES:

- None

IMPROVEMENTS:

- None

DEFECT REPAIR:

- None

KNOWN ISSUES:

- None

EXTERNAL CONSIDERATIONS:

- The following domains should be whitelisted for the user site firewall to enable run file uploading:
 - euc1.sh.basespace.illumina.com

- api.euc1.sh.basespace.illumina.com
- euc1-prd-seq-hub-data-bucket.s3-eu-central-1.amazonaws.com

VI. Run Copy Service v1.0.19.0

NEW FEATURES:

- No changes in this release