

MiniSeq Software Release Notes

MiniSeq System Suite Installer v2.0.0

MiniSeq Control Software v2.0.0

MiniSeq Service Software v2.0.0

MiniSeq RTA v2.11.4

MiniSeq Recipe Installer v2.0.0

Universal Copy Service v1.6.3

Illumina DMA Driver v4.5.3

Local Run Manager v2.4.1

For MiniSeq Systems

Revision History

Revision	Date	Description of Change
00	21/SEP/2016	Initial release
01	17/FEB/2020	MiniSeq v2.0 software changes

Introduction

These release notes detail new features, improvements, and issue fixes for the Illumina MiniSeq Software.

Software Application	Prior Version	New Version
Windows 10 (OS)	Windows 7	Windows 10
MiniSeq System Suite Installer	1.1.8	2.0.0
MiniSeq Control Software (MNCS)	1.0, 1.1	2.0.0
MiniSeq Service Software (MNSS)	1.0, 1.1	2.0.0
MiniSeq Real Time Analysis (RTA)	2.8.6	2.11.4
MiniSeq Recipe Installer	1.0.0	2.0.0
Universal Copy Service (UCS)	None	1.6.3
BaseSpace Broker	2.9.1	Replaced by UCS
Run Copy Service	1.0.20	Replaced by UCS
Illumina DMA Driver	4.5.3	4.5.3
Local Run Manager (LRM)	1.3.1	2.4.1

For more information about the MiniSeq System and how to use the software included with it, see the product and support pages at illumina.com:

www.illumina.com/systems/miniseq.html

support.illumina.com/sequencing/sequencing_instruments/miniseq.html

I. MiniSeq System Suite Installer v2.0.0

NEW FEATURES:

- Updated versions of:
 - Windows Operating System (OS)
 - MiniSeq Control Software (MNCS)
 - MiniSeq Service Software (MNSS)
 - MiniSeq Real-Time Analysis (RTA)
 - MiniSeq Recipe Installer
 - Local Run Manager
- Replaced BaseSpace Broker and Run Copy Service with Universal Copy Service.
- Updated firmware to r1.0.3 for two service software bug fixes.
- Moved installer log files from C:\illumina to D:\illumina.

IMPROVEMENTS:

- None

KNOWN ISSUES:

- None

II. MiniSeq Control Software v2.0.0**NEW FEATURES:**

- MiniSeq Control Software 2.0 is no longer compatible with BaseSpace PrepTab for run setup. See the Local Run Manager Software Guide for run setup information.
- Added nonadmin support to allow software to be run as a nonadmin account.
- Added Dual Mode and Ground Control support.
 - Dual Mode adds ability to send run data to BaseSpace when running Local Run Manager.
 - Ground Control allows access to new instances of BaseSpace as they become available without the requirement for a control software update.
- Integrated BaseSpace Sequence Hub into the Sequencing workflow.
- Provided capability to perform the following:
 - Select BaseSpace Workgroups.
 - Select BaseSpace hosting location.
 - Send Instrument Performance Data to Proactive. This is enabled by default.
 - Edit run details via MiniSeq Control Software for runs that were set up in Local Run Manager.
- Changed minimum number of cycles required for Read 1 to 7 cycles.
- Removed Demonstration mode option from system customization screen.
- Implemented the feature to copy the Operational Qualification results to run folder, and the prompt message to ask the user whether to do it.
- Provided run setup validation with RTA on review screen.
- Implemented check that prevents users from starting sequencing if there is an ongoing Local Run Manager analysis.
- Provided validation for invalid output run folder paths.
- Moved miscellaneous files in C:\Illumina folder
- Moved control software log files from C:\illumina to D:\illumina.
- Moved installation directory of control software from C:\illumina to C:\Program Files\Illumina.

IMPROVEMENTS:

- User Interface (UI) updates:
 - Updated to screen flow to support Manual mode and Local Run Manager mode.
 - Added run mode screen to allow user to opt in or out of using BaseSpace Manual or Local Run Manager modes.
 - Implemented Local Run Manager preview samples screen.
 - Updated to show Local Run Manager and MNCS connection status.
 - Implemented Run Setup screen for run setup through Local Run Manager mode.
 - Added login screen to Local Run Manager sequencing workflow to support Local Run Manager integration.
 - Added shortcut to manage Local Run Manager runs.
 - Removed support for BaseSpace Onsite.
 - Changed "BaseSpace" to "BaseSpace Sequence Hub".
 - Replaced Analysis Setup screen with a BaseSpace Sequence Hub Setup Screen.
 - Updated to accommodate BaseSpace Sequence Hub Login requirements. The Next button is hidden on the BaseSpace Sequence Hub Login page until user has logged in and selected a workgroup.
 - Updated to allow for user login to BaseSpace Sequence Hub.
 - Updated preview sample screen to show custom indexes.
 - Updated to display Custom Primer Checkboxes.
 - Enabled Custom Primer Checkboxes only when associated reads are entered.
 - Enabled Custom Primer Checkboxes on Run Setup Screen.
 - Updated to select custom recipes on the Load Consumables screen.
 - Updated to continue playing videos after consumables loaded.
- Download of Camera Corrections data from firmware failure: Added the retry mechanism for downloading camera correction files from firmware and handled corrupted or invalid correction file downloaded.
- The Library Prep Kit Name is passed to BaseSpace Sequence Hub through the RunParameters.xml file.
- Added RunStartTimeStamp, BSSHRunMode information and removed InstrumentHealthID in the RunParameters.xml.

KNOWN ISSUES:

- Mapped network sequencing output folders and sample sheet in mapped network location are no longer supported. Locations can be on the network, but it cannot be a mapped location.
- Intermittent Bit Error Rate Failure during pre-run checks caused by PCIe board being disconnected from the BIOS. Current workaround is to perform a hard power cycle.

III. MiniSeq Service Software v2.0.0

NEW FEATURES:

- After completing Preventive Maintenance (PM) tests, the service software will prompt if the user wants to upload the PM Results to BaseSpace Sequence Hub. If confirmed, the control software will zip and upload the PM data to BaseSpace Sequence Hub at the end of the next successful BaseSpace Sequence Hub storage run (sequencing run must be using BSSH - Run Monitoring and Storage mode).
- Moved Service Software log files from C:\illumina to D:\illumina.
- Moved installation directory of Service Software from C:\illumina to C:\Program Files\Illumina.

IMPROVEMENTS:

- Saving Camera Corrections data to SD card failure: Added retry mechanism to perform three save attempts when saving camera correction data.
- FAM burn-in test failure: Resolved an issue where the FAM Burn-In Cycling Test failed due to connection interruption between software and firmware. This was fixed by incorporating a new version of firmware.
- For First Time Setup and Thermal Tests, if the RFID tag of the flowcell wired to the Minco HCT (Heater Calibration Tool) is blank or cannot be read, proceed with tests anyway instead of asking the user or producing error.

KNOWN ISSUES:

- None

IV. MiniSeq RTA v2.11.4

NEW FEATURES:

- Now allows software to run with a non-admin user logged into Windows.
- Fixed bug where duplicate clusters can be introduced at high density.
- Other minor bug fixes and optimizations.

IMPROVEMENTS:

- None

KNOWN ISSUES:

- None

V. Universal Copy Service v1.6.3

NEW FEATURES:

- Replaces BaseSpace Broker and Run Copy Service.

IMPROVEMENTS:

- None

KNOWN ISSUES:

- Large file uploads that take longer than 10 minutes to upload will fail data integrity check.
 - Workaround is to update the config file parameter OrphanFileDetectionTimeoutMinutes to a value in minutes to accommodate the time required to upload largest anticipated file(s).

VI. Local Run Manager v2.4.1

NEW FEATURES:

- Provided capability to monitor runs via Local Run Manager.
- Updated to provide consistency across instrument platforms.
- Moved miscellaneous files to C:\ root folder.
- Provided full HTTPS support for security enhancements. HTTPS auto-redirect support if HTTP is used to access Local Run Manager.
- Local Run Manager installer now enabled for HTTPS communication.
- Added support for local machine accounts. Users can now set Service Accounts to local admin users.
- Local Run Manager Framework is now integrated with Illumina Proactive in sending analysis performance data. Analysis performance data sent are installed modules, installed custom Library Prep kits and analysis performance metrics (time of analysis start and finish). Decoupled index kits and library prep kits during run setup.
- Improved file copy service by integrating with UCS v1.6.3.

IMPROVEMENTS:

- None

KNOWN ISSUES:

- If user management is enabled in LRM and the LRM user account is NOT an administrator account, the following error will prevent the run from starting: "Local Run Manager Error Originally caused by: Invalid Role". The user should switch to an LRM user account with administrator privileges or disable user management and restart the run.
- Bundled Local Run Manager Modules (.exe) require that the computer's Software Restriction Policy (SRP) be disabled prior to install because they install third party programs such as a new .NET framework.
 - Contact ILMN Tech Support for assistance in installing these modules.
- The version of bcl2fastq (2.18.0.8) used in the TruSight RNA Fusion Local Run Manager Module has a bug where a byte is randomly skipped in the IndexMetricsOut.bin file, causing all other bytes afterwards to be off by one. This results in an error viewing the 'Indexing' tab in SAV.
- Users may experience a duplicate run folder created inside the original run folder.
- A pop-up window with the message "Would you like to include the Operational Qualification results with this run?" may still occur even after choosing "Do not ask again". Users will have to make the selection again.