

Upgrading to MiSeq™ Control Software 3.1

MiSeq Control Software (MCS) version 3.1 is an optional, but recommended, upgrade to the MiSeq systems. Before upgrading the control software on your system, it is important to take these key tips into consideration.

With MCS version 3.1, MiSeq Reporter is replaced with Local Run Manager (LRM) to enhance data analysis capabilities, simplifying software maintenance and improving user experience.

Local Run Manager software is an integrated solution designed to create sequencing runs, monitor run status, analyze sequencing data, and view results. LRM integrates with the instrument control software and can be directly accessed on the instrument through a web browser. An off-instrument version of the same easy-to-use LRM software is available and compatible with the MiSeq.

Various optional analysis software modules are available to perform analysis procedures designed for different library types.

Before Upgrading to MCS version 3.1

Save or back up the following files from your system:

- Sequencing output files.
- Manifest files.
- Sample plates files.
- Sample sheets.
- Custom genome files.

Important Considerations after Upgrading to MCS 3.1

Important: When using LRM with MCS v3.1, run setup information is retrieved through Local Run Manager, and not via the sample sheet.

Analysis modules must be downloaded and individually installed. Use Administrator credentials when installing new analysis modules. Modules are available for download from:

https://support.illumina.com/sequencing/sequencing_software/local-run-manager/downloads.html#

Additional Notes:

- Chromium browser is recommended to use with LRM (especially for Dx customers). Chromium will be installed as part of this software update.
- Refresh browser page after module installation to update LRM Modules list.

- When entering file paths, Universal Naming Convention (UNC) path is required. Refer to the system guide for more detail.
- To change account type used for LRM, navigate to the LRM system settings. Refer to the system guide for more detail.
- For antivirus configuration, refer to the system guide for more detail.

Recommendation for Legacy sample sheets in LRM

Sample sheet formatting has been updated. Certain legacy sample sheet settings are not compatible with LRM. Refer to the LRM module guides for more information. We recommend creating new sample sheets directly within LRM.

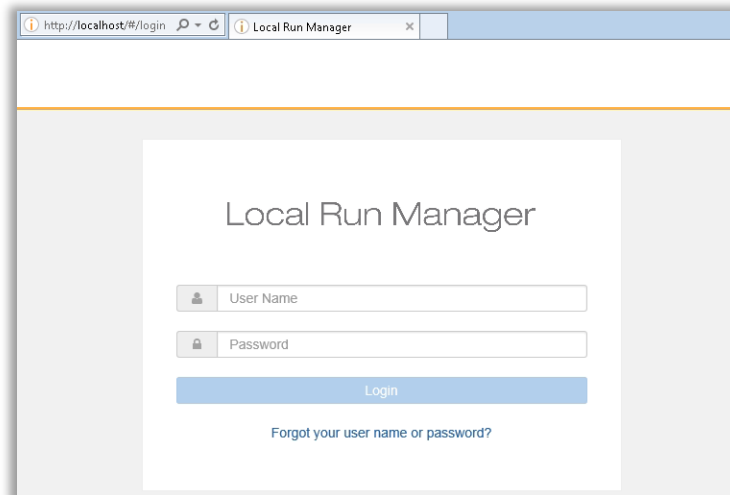
Q1: How about Reference Genome files?

Move all Reference Genome files under C:\Illumina\MiSeq Reporter\Genome to C:\Illumina\Genomes (C:\Illumina\Genomes folder is created automatically with LRM installation).

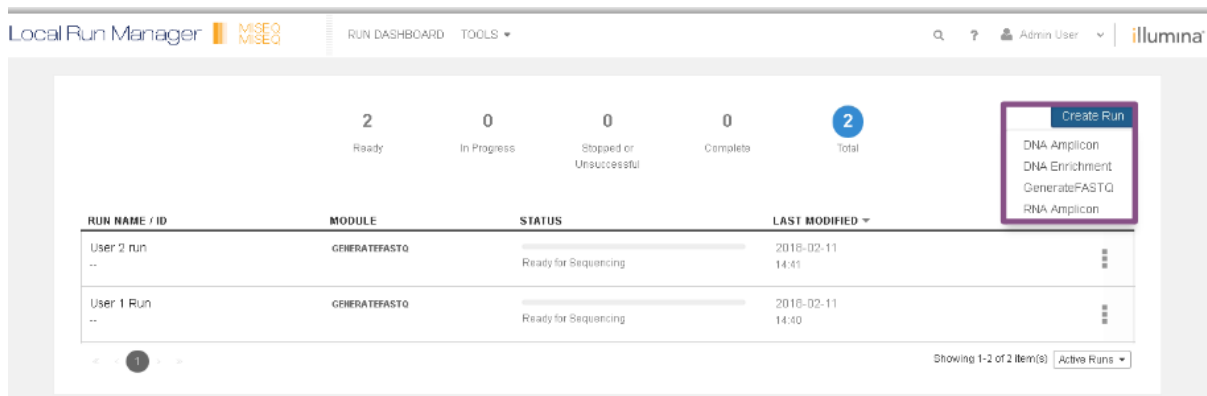
Q2: How do I start a run with MCS3.1?

Option 1: Start a run with Local Run Manager (Preferred):

1. Open Chromium or Chrome: <http://localhost>
2. Login to Local Run Manager on your instrument (Note: The default User Name is *admin* and default Password is *password*. Ensure to add your new account/password combination, and check password expiration settings from LRM system settings.)



3. Select Create a New Run and select application



4. Enter the sample and analysis information.

5. Save the run.

OPTION 2: Start a run using the Sample Sheet

Information parsed from the SampleSheet.csv will be sent to Local Run Manager for validation. After validation is complete, the run is available in MCS.

Note: Please be aware that the Sample Sheet must be compatible with current Local Run Manager version. All required information (e.g. manifests) must be present at that time, otherwise validation will fail, and the run cannot be started. To test compatibility, you can import a Sample Sheet into Local Run Manager.

Note: Please be aware that current analysis options are FASTQ, Enrichment, DNA Amplicon, RNA Amplicon and TruSight Tumor 15 (TST15) only.

OPTION 3: Manually set up a Run

Run setup requires only information on read length and index length in order to start a new run without any sample and analysis information. In this scenario, no analysis will be started when the run completes.

The run information (e.g. sample and analysis information) can be edited and the run can be re-analyzed onboard the instrument (with Local Run Manager) or off-instrument (using MiSeq Reporter, Local Run Manager, or bcl2fastq on a Linux server).

Resources

MiSeq User guide for LRM

http://support.illumina.com/content/dam/illumina-support/documents/documentation/system_documentation/miseq/miseq-system-guide-for-local-run-manager-15027617-04.pdf

LRM support documentation and module guides (please ignore the information “off instrument”)

http://support.illumina.com/sequencing/sequencing_software/local-run-manager/documentation.html

LRM online training

https://support.illumina.com/content/dam/illumina-support/courses/local-run-manager-overview/story_html5.html?iframe

Link to LRM and workflow comparison

<https://www.illumina.com/products/by-type/informatics-products/local-run-manager.html>

https://support.illumina.com/sequencing/sequencing_software/local-run-manager/compatible-libraries.html

Please contact Illumina Technical Support at techsupport@illumina.com with any questions.