MiSeq i100 Series v1.1.0.26158 Software Release Notes & Update Instructions

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Introduction

This document details changes and known issues for the MiSeq i100 Series Sequencing System v1.1.0.26158, and provides instructions on how to update the system to v1.1.0.26158 software.

For more information on the MiSeq i100 Series Sequencing System, see the MiSeq i100 Series Product Documentation available on the Support site.

Contact Illumina Technical Support for additional assistance.

New Features

- Added support for the new 50M Read and 100M Read consumables.
- Added support for the new 1000 cycle consumables.
- Added the following improvements to the Export Logs feature:
    - Notify the user if an output folder has not been set up in External Storage prior to starting Export Logs workflow.
    - Perform disk space check on USB Drive/Network Attached Storage (NAS) prior to copying logs to an output folder on a USB Drive.
    - Updated selection from 'Small, Medium, and Large' to 'Standard, Illumina Run Manager logs, and DRAGEN logs' Logs
- Updated Run Setup workflow to separate selections between Planned Runs, Sample Sheet Import, and BCLs Only.
- Several Improvements to External Storage configuration:
    - Allow the user to create a new folder within an External Storage configuration from the control software (CSW).
    - Improved error messaging for when spaces are included in the output folder path.
- Improved sample sheet import validation error messages.
- Added a Forgot My Password workflow when a user forgets their password.
- Updated settings to modify the inactivity log out.
- Allow instrument nickname to be set by non-admin users.
- Improved Illumina Run Manager (IRM) browser access setup workflow.
- Enable users to create new folders in their external storage configurations from the Control Software file browse UI
- Display the amount of space that needs to be cleared on USB Drives/Network Attached Storage (NAS) mounted to the system if there is insufficient disk space during PRC or Export Logs.

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Resolved Issues

- Increased specification margin to mitigate false positive failures of the Waste Level Sensor test in the System Health Checks and First Time Setup.
- Fixed an issue where the Factory Restore functionality does not work from the Critical Error Dialog modal.
- Fixed an issue where the option to "Sign in with local account" is disabled when the cloud login page is failing to load.
- Fixed issue where CSW is unresponsive and requires an instrument power cycle.
- Mitigated CPE Valve check false positive failure in System Health Checks and First Time Setup.
- Added robustness to mitigate failures in the Imaging Checks in the Pre-Run Checks.
- Improved error messaging for failures when loading/unloading test cartridges for the First Time Setup and System Health Checks.
- Mitigated risk of file system corruption when power is cut from the instrument.
- Fixed an issue that prevented mounting an external storage path that only has read access (not write access). Nested output folder will still require write access.
- Fixed an issue where the data transfer to Illumina Cloud will fail in network configurations if all communications to the internet are required to route through a proxy server.
- Fixed an issue that prevents cancelling an ongoing run data copy when the output folder is on a USB drive.
- Allows users to browse for software update packages from the user interface.
- Made usability improvements to the Software update workflow.

Known Issues

Known issues of the MiSeq i100 Series Software v1.1.0.26158 release.

Component	Summary	Resolution/Workaround
Instrument Software	When users are logged out due to inactivity, users may be navigated back to the Setting Menu instead of the screen they were on when logging back in.	Exit the Setting Menu and navigate to previous screen.
Run Planning	Users will be unable to requeue analysis for sequencing runs performed in Manual mode until a sample sheet is added. Requeue dialog will become unresponsive.	Add a sample sheet to the run before entering the requeue analysis workflow.
Storage Settings	If USB device is physically removed without first using the 'Eject' function on the software user interface, users may not be able to mount the same USB device and software will throw an error.	'Eject' the USB device from the External Storage screen before mounting the USB device again.
Storage Settings	Default folder not automatically configured when mounting a new storage device.	Users will need to go to the 'Folder Settings' after mounting storage to configure and select

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		default folder to be used for saving sequencing run data, analysis requeue results, and exporting log files.
Storage Settings	When mounting NFS storage, the system may throw a 400 error message.	This is a temporary issue and retrying the mount of the NFS system should resolve the error.
Storage Settings	System does not allow spaces in the output folder name.	Rename the folder to exclude any spaces before remounting the folder.
Export Logs	Export Logs screen may fail to load if instrument software crashed unexpectedly.	Power cycle instrument according to instructions in the Product Documentation.
Networking	IP addresses in the following range cannot be used to be assigned to the instrument: 10.42.xx.xx or 10.43.xx.xx	Assign a different IP address to the instrument.
Software Update	When updating from 1.0.0.5080 software, the "Software Update Version" will be wrongly indicated as 1.0.0.5080.	If upgrading from 1.0.0.5080, disregard the information and proceed with the update.
Software Update	The software update workflow will throw an error when connecting to an NTFS formatted USB drive.	When upgrading the software, use an exFAT-formatted USB drive and ensure that the drive has only a single partition.
Software Update	Outdated notifications reported in CSW may misinform of updates being available after the update operation completes.	Disregard and dismiss the initial "software updates available" notification after the digital package update.
Restart file transfer	"Restart file transfer button" is not clickable after cancellation of the ongoing transfer.	Button will be clickable after navigating away and back to the page.
Software Update	Cannot close SW update window prior to upgrade completion.	Proceed with full upgrade as per instructions below.
Software Update	With updating through USB or networked drives, you might be misled to think about selecting a file.	Take note that the software update process (after the initial update of the Software Updater) involves a folder selection.
Software Update	DRAGEN Microbial Enrichment Plus is only available through a manual offline update.	Follow the app install instructions.
Software Update	There is a chance of running into a false disk space checks failure during pre-run checks or logs export after a software update.	Power cycle instrument according to instructions in the Product Documentation.
Software Update	Optional dependent bundles are shown as required in the Update Selection Wizard.	Disregard the "Requires" label and proceed with installation.
Run Planning	BCLs only runs will be deleted after a reboot.	When planning runs for BCLs-only, ensure the run is performed within the same session.

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Software Update Work Instructions

This section covers the Procedures necessary to update the system to the v1.1.0 MiSeq i100 System Software Suite. The update is comprised of two procedures that must be performed in order and completed prior to normal instrument operation.

1. Procedure A: The Illumina Software Update Manager (ISUM) updated to 2.0.
2. Procedure B: The v1.1.0 system software installed.

Before You Begin

1. The update must be performed using an administrator account. This can be done by selecting 'Sign Out' from the hamburger menu and selecting 'Sign In' using the local account option. Enter the username and password for the administrator account.
2. Navigate to the MiSeq i100 Series Software Downloads support page and download the ISUM 2.0 installer.
3. Copy the ISUM v2.0 installer file to an External Storage Drive or USB.

   IMPORTANT: If using a USB drive, ensure that the USB Drive is formatted to exFAT and has a single partition.

   a. Place the installer in the following folder structure from the root directory of your USB or External Storage Drive:

      - /{rootDirectoryOfDrive}/MiSeqi100Software/miseq-i100-series-isum-2025.1.ipb

4. If the instrument is not connected to the internet, additional installers should be downloaded from the Support site and placed in the same folder on the External Storage Drive or USB from Step 3:

   - miseq-i100-series-digital-package-2025.1.ipb2
   - ipb2 files for any DRAGEN Apps, Reference Genomes, or Resource Files to be installed

   Ensure that the External Storage Drive or USB (which contains the installer files) is configured correctly in the External Storage screen under Networking Settings. Refer to the Product Documentation for more information on External Storage configuration.

5. Ensure the system is idle. This can be achieved by visiting "Runs" and ensuring no runs are present on the Active tab. The update process cannot occur during sequencing nor analysis.

IMPORTANT: It is required to perform the above steps 1-3 and 5 for all instruments and additionally step 4 for non-internet connected instruments.

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Procedure A: Update to ISUM 2.0

Navigate to the About Screen by clicking on the Hamburger Menu, selecting 'Settings', and selection 'About' under the Instrument column. Note the currently installed System Suite Software Version (whether it is v1.0.0 vs. v1.0.1). Follow the instructions below based on the currently installed version.

Starting from SW Version 1.0.0

1. Navigate to the Software update screen by clicking the hamburger menu on the top-left of the CSW, selecting 'Settings' then 'Software update'.
2. Under 'Browse for software update file', click 'Select'.
3. Select the external storage type where the installers are placed (USB, SMB, or NFS).
4. For USB:
    a. Enter the following into the field titled "Relative path to software update file": MiSeqi100Software/miseq-i100-series-isum-2025.1.ipb
    b. If using an encrypted USB, enter the password to decrypt the USB Drive into the optional field titled 'Password'.
5. For SMB:
    a. Enter the following into the field titled 'Share Path': //{SMBShareDriveName}/MiSeqi100Software
    b. Enter the following into the field titled 'Relative path to software update file': miseq-i100-series-isum-2025.1.ipb
    c. Enter the username and password which will be used to mount the SMB share, and optionally the Active Directory Domain.
6. For NFS:
    a. Enter the following into the field titled 'Share Path': //{NFSShareDriveName}/MiSeqi100Software
    b. Enter the following into the field titled 'Relative path to software update file': miseq-i100-series-isum-2025.1.ipb
7. Click 'View files'.

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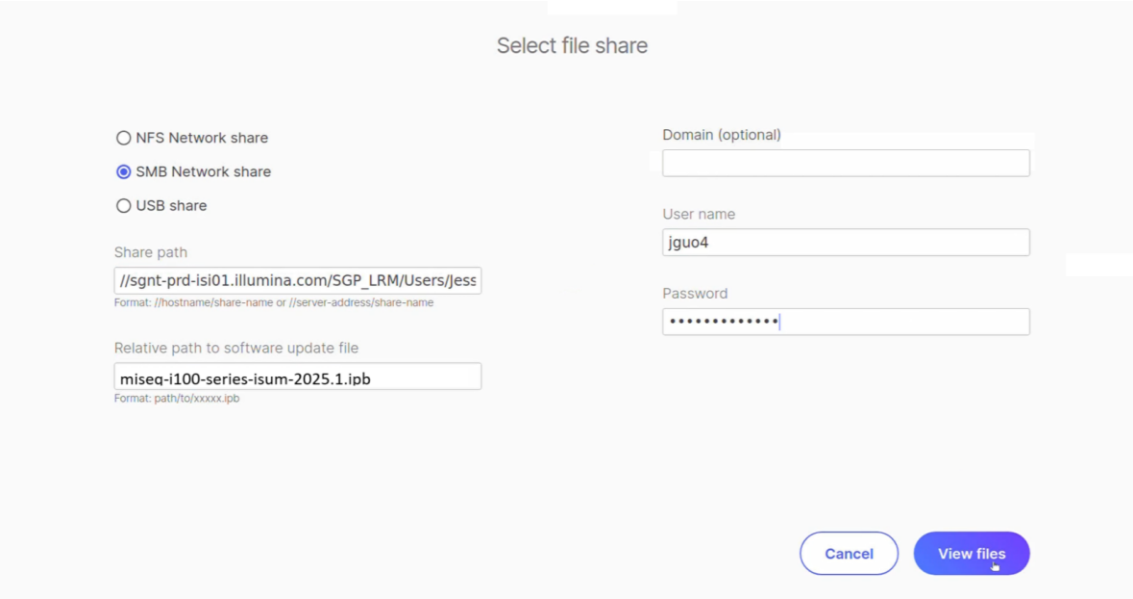
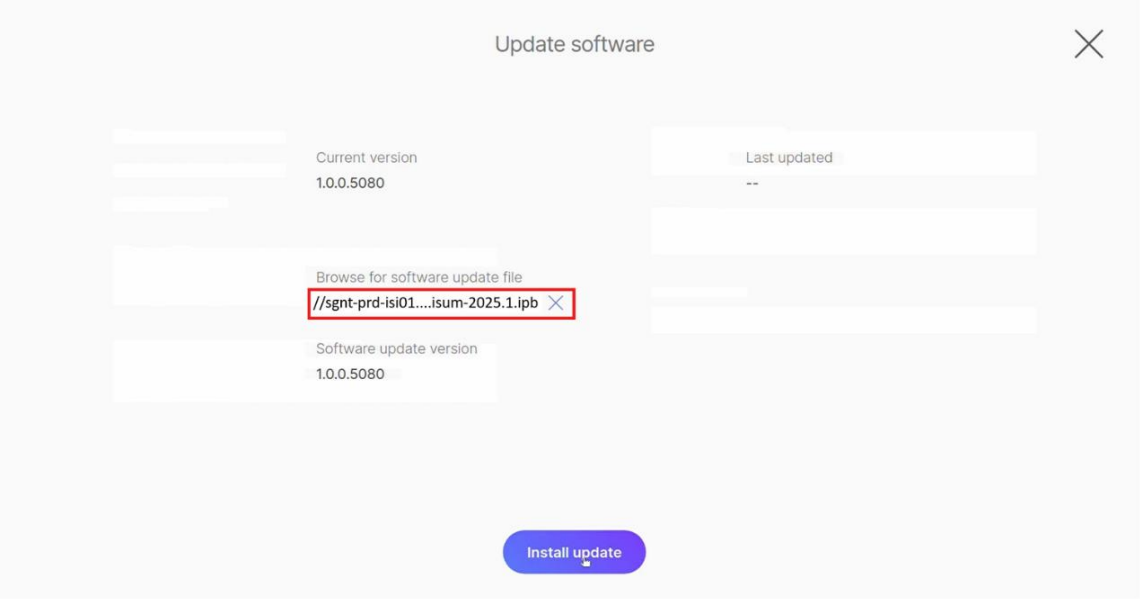


8. Verify that the correct file is selected for update in the review screen and select 'Install update'. It is a known issue that the "Software update version" is wrongly reflected as 1.0.0.5080. Please disregard this and proceed with the update.



9. Upon successful installation, the software will automatically restart itself. After restart, sign into the system (as administrator) to return to the 'Software update' home screen.

Starting from SW Version 1.0.1

1. Navigate to the Software update screen by clicking the hamburger menu on the top-left of the CSW, selecting 'Settings' then selecting 'Software update'.
2. Under 'Browse for software update file', click 'Select'.

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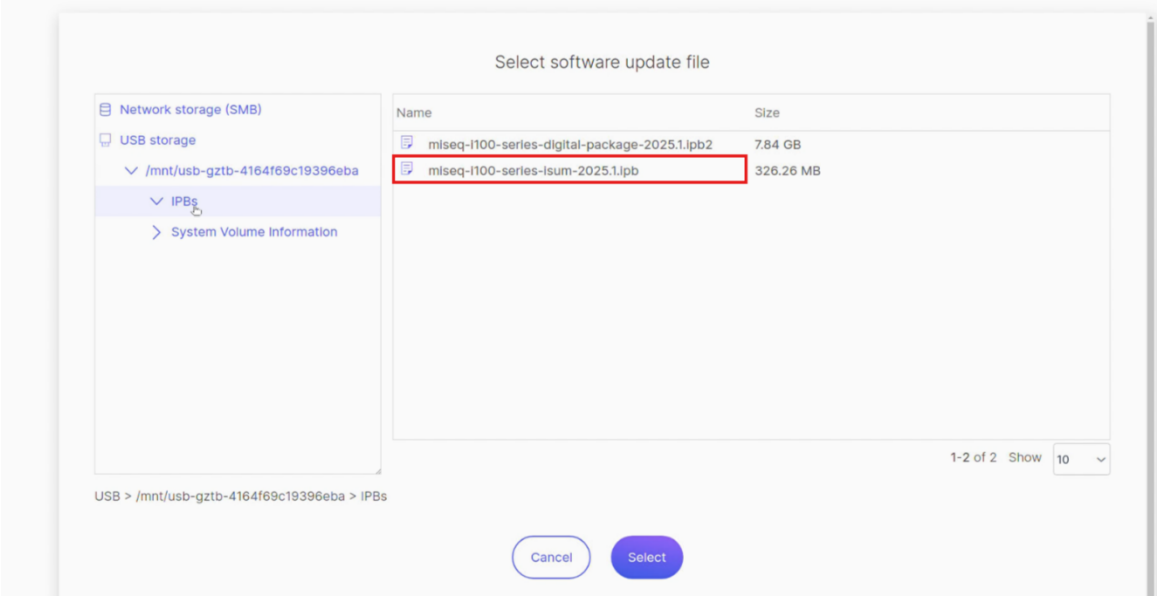
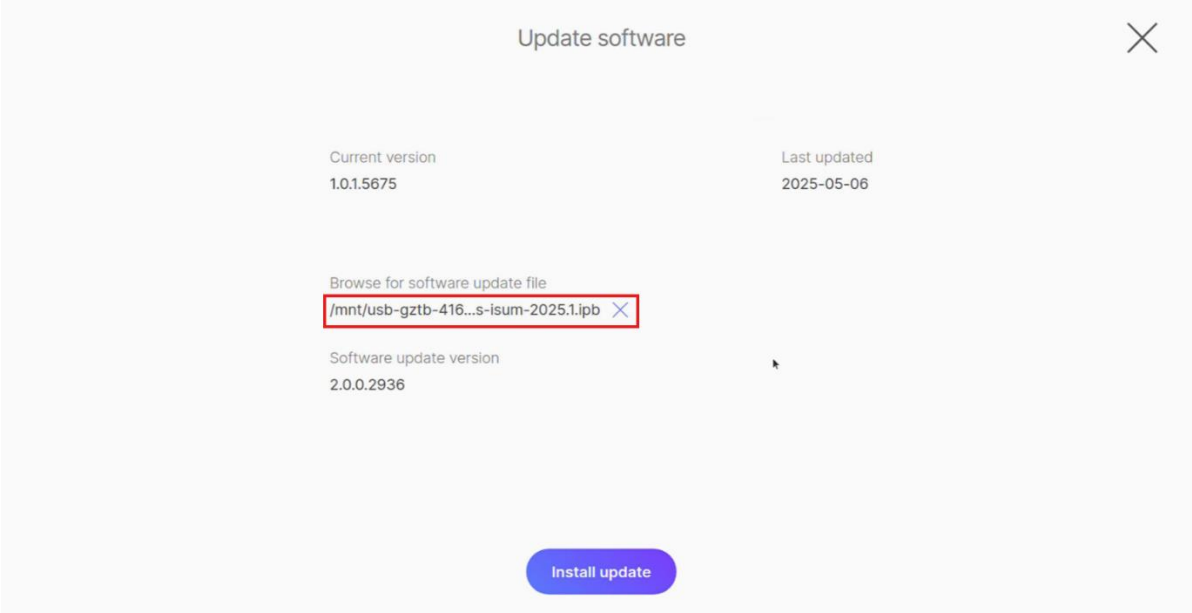
3. Use the File Browse dialog to navigate to the ISUM v2.0 installer on the USB or External Storage Drive.
4. Click 'Select' to view files.



5. Verify that the correct file is selected for update in the review screen and select 'Install update'.



6. Upon successful installation, ISUM will restart itself. After restart, sign into the system (as administrator) to return to the 'Software update' home screen.

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Procedure B: Install the v1.1.0 System Software Suite using ISUM 2.0

The instructions in this section are the same regardless of whether the system is starting from v1.0.0 or v1.0.1 system software.

If the system is connected to the internet, perform Procedure B using Online Mode.

If the system is not connected to the internet, perform Procedure B using Offline Mode and Network Attached Storage (NAS).

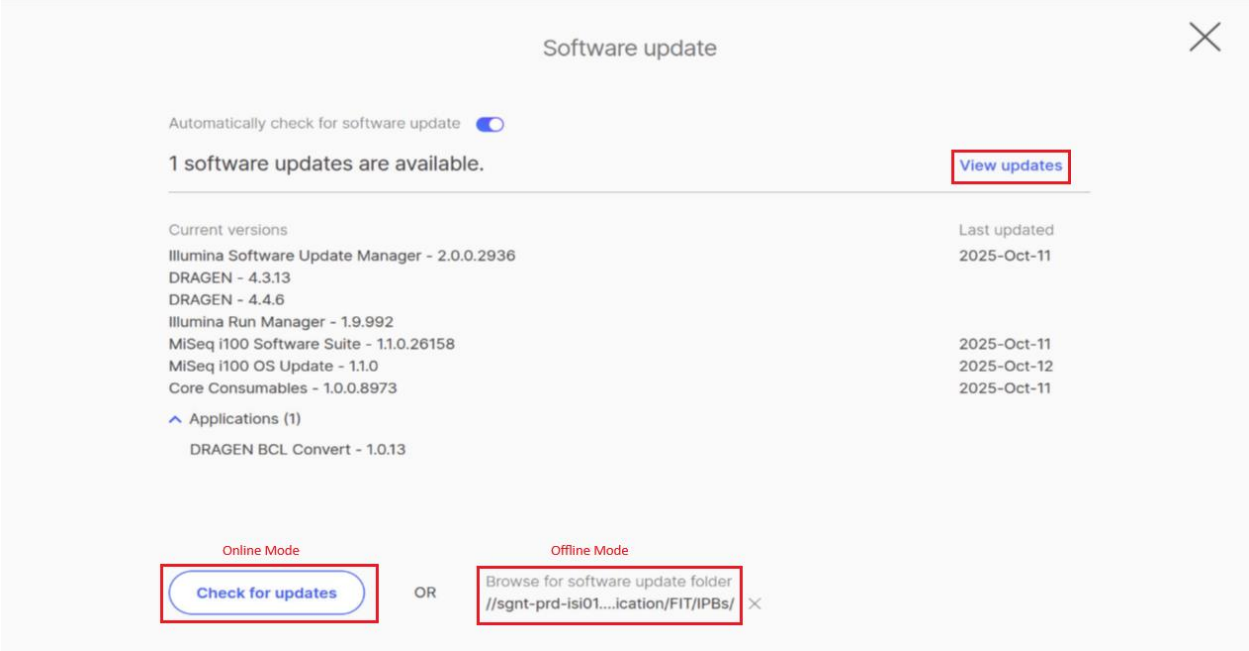
- If you are unable to use NAS, use a USB drive instead. Refer to Illumina Knowledge Article #9310 on "Tested Product Guidance for USB External Storage Devices on the MiSeq i100 Series" for a list of compatible devices.

Online Mode: For Instruments Connected to the Internet

1. From the Software update screen, select the option 'Check for updates'.
2. If there are new software upgrades available, you will see the number of software updates available. Select the option 'View updates'.

Offline Mode: For Instruments Not Connected to the Internet

1. Under 'Browse for software update folder', select 'Select folder…'. Follow the folder browse navigation to select the folder where the installer files are downloaded and stored during the pre-requisites steps.
2. Once the folder is selected and the contents are validated, select the option to 'View updates' to launch the Update Selection Wizard.



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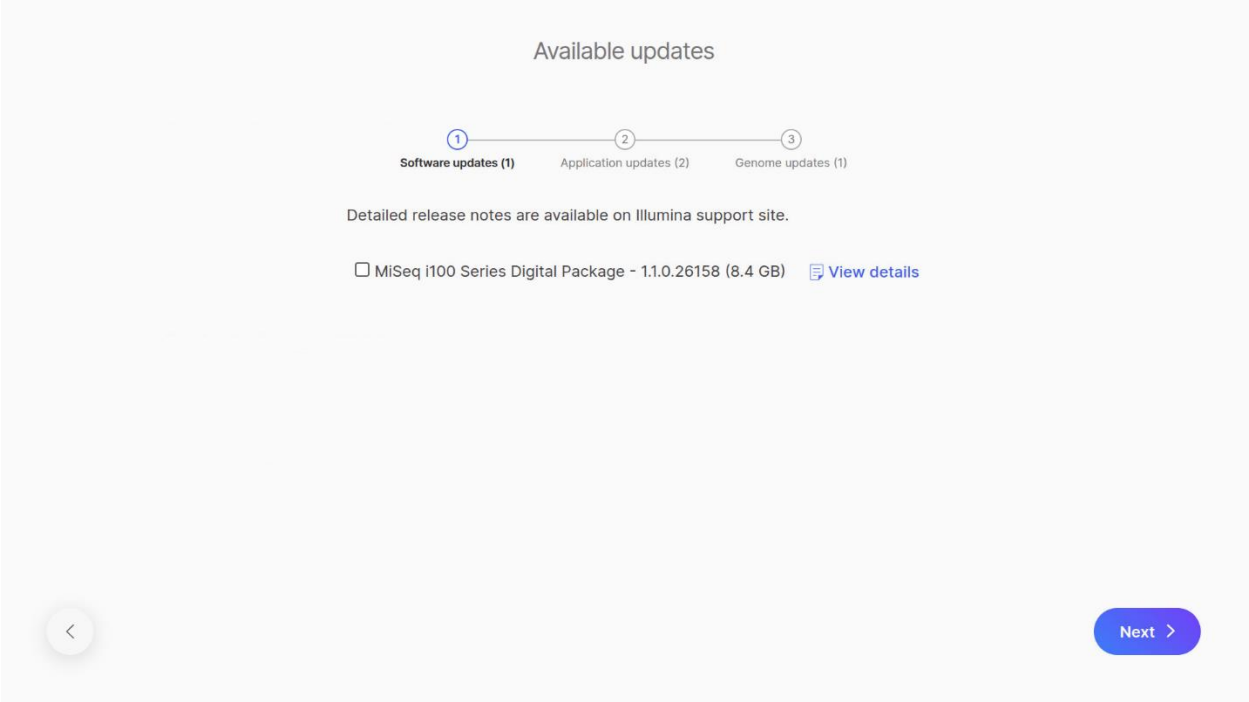
For Both Online and Offline Systems

Digital Package

1. Follow the update selection wizard. The first tab will be for "Software updates". In this tab, select the "MiSeq i100 Series Digital Package – 1.1.0.26158". This will install the new v1.1 Control Software and other core software packages (Illumina Run Manager, RTA, etc…). This will also install the new DRAGEN v4.4.6 available.



Note: It is required to upgrade the Digital Package at this time. After selecting the Digital Package, you can optionally install Applications, Reference Genomes and Resource Files, or come back to install them later.

2. Next, in the 'Application updates', select any DRAGEN Applications to be installed.
3. In the next tab labeled 'Genome updates', select any reference genomes to be installed.
4. After this, you will be presented with a review screen, that lists all the items selected for installation. Review this list, and if it is correct, proceed to Install.

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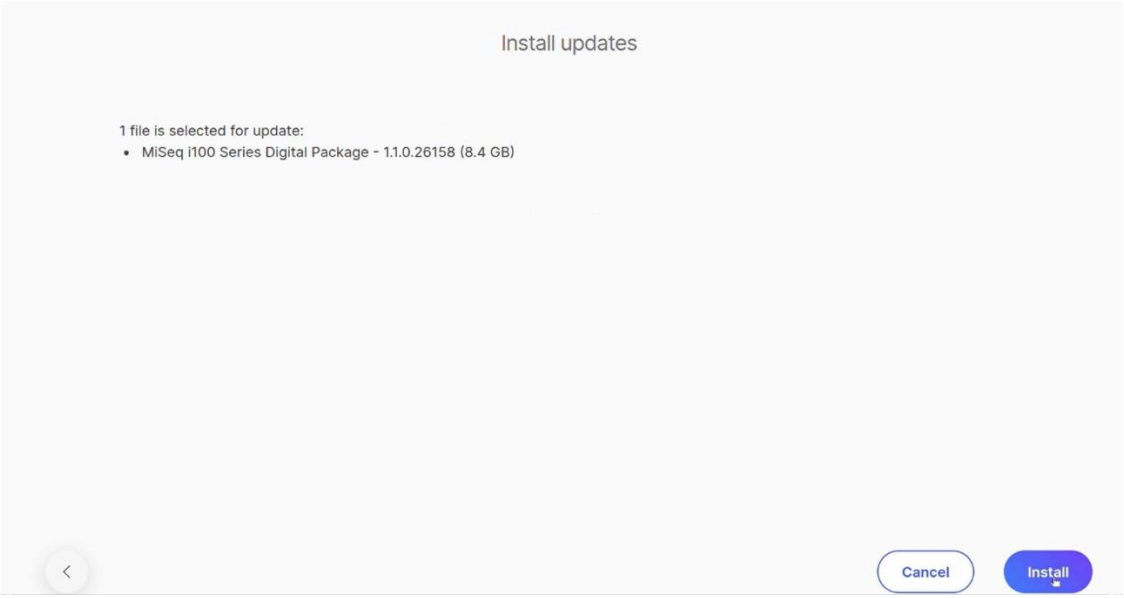

5. The Install screen will display progress indication. When the installation is successful, you will receive a message indicating that the installation is complete. At this point, you can return to the Software update home screen by selecting 'Return home'.
6. If finished with installing software, you can select the X button in the top right corner which will navigate out of the update manager and launch the new v1.1 CSW.
7. During CSW initialization, you will be prompted to shutdown and power cycle the instrument to complete the firmware update. Proceed with the shutdown and power cycle. Upon completion of this process, the software upgrade process is complete.
8. Upon completion, it is recommended to perform a full System Health Check. This can be done by accessing the System Checks screen from Settings.

Installing the DRAGEN Microbial Enrichment Plus App Reference Databases

If you chose to install the DRAGEN Microbial Enrichment Plus DRAGEN App Version 1.1.7, there are additional steps required to complete the upgrade of this application. Contact Illumina Technical Support for detailed instructions.

Release History

Revision	Release Reference	Originator	Description of Change
00	1121877	Aneesh Natarajan	Initial release

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