

Installation Steps

MiSeq System Suite Installer v4.1.0

MiSeq Control Software (MCS) v4.1.0

MiSeq Recipe Fragments v4.1.0.24

Local Run Manager Framework v4.1.0

Real-Time Analysis (RTA) v1.18.54.4

Universal Copy Service v2.7.4

For MiSeq

This guide is only intended to be used for upgrading to MiSeq System Suite version (v) 4.1.0.

MiSeq System Suite v4.1.0 is only compatible with MiSeq instruments using Windows 10.

- If v4.0.0 is currently installed on your MiSeq instrument, your instrument is running Windows 10. You can view the system suite version installed on your instrument by selecting *About* from the Main Menu in MiSeq Control Software.
- If v3.1.0 or lower is currently installed on your MiSeq instrument, your instrument is running Windows 7. **Please contact your Illumina field representative to schedule an upgrade.** Illumina strongly recommends that you have your instrument upgraded to Windows 10 and MiSeq System Suite v4.1.0 to ensure continued access to BaseSpace Sequencing Hub and Illumina Proactive and to obtain Microsoft's latest security enhancements.

Please note that updating to MiSeq System Suite v4.1.0 retains MiSeq Control Software user-defined settings from v4.0.0, but it does not retain Local Run Manager user-defined settings, audit trails, user accounts, and runs.

Preparation

This section includes four sets of instructions that will help prepare you and your MiSeq instrument for a successful **MiSeq System Suite v4.1.0** installation. Please read each set of instructions carefully to prevent issues from occurring during installation.

Download the MiSeq System Suite Installer v4.1.0

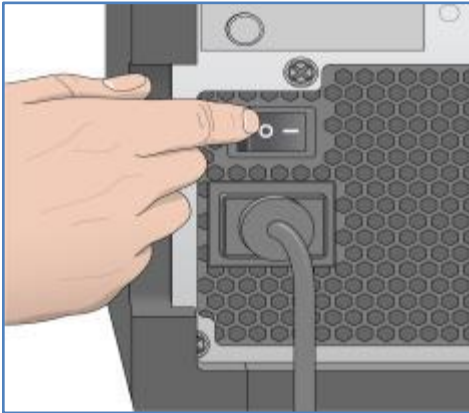
1. Download the MiSeq System Suite Installer v4.1.0 (file size 812 MB) from the Illumina Support Site. The downloaded file will be called **MiSeqUpdater.exe**. Download times may vary so consider downloading the installer the day before you plan to upgrade the instrument.
2. Place the **MiSeqUpdater.exe** file in C:\Illumina on the MiSeq instrument and continue to the **Power Cycle the Instrument** section.

Power Cycle the Instrument

Before you begin, ensure that your MiSeq instrument is not performing sequencing or analysis. For more guidance, see [How to Power Cycle the MiSeq Video](#).

1. From the Main Menu in MiSeq Control Software, select **Shut Down Instrument**. When prompted to exit the control software, select **Yes**.

2. After the instrument computer has shut down, switch the toggle power switch at the back of the instrument to the **O** (Off) position. Refer to the image below for the power switch location.

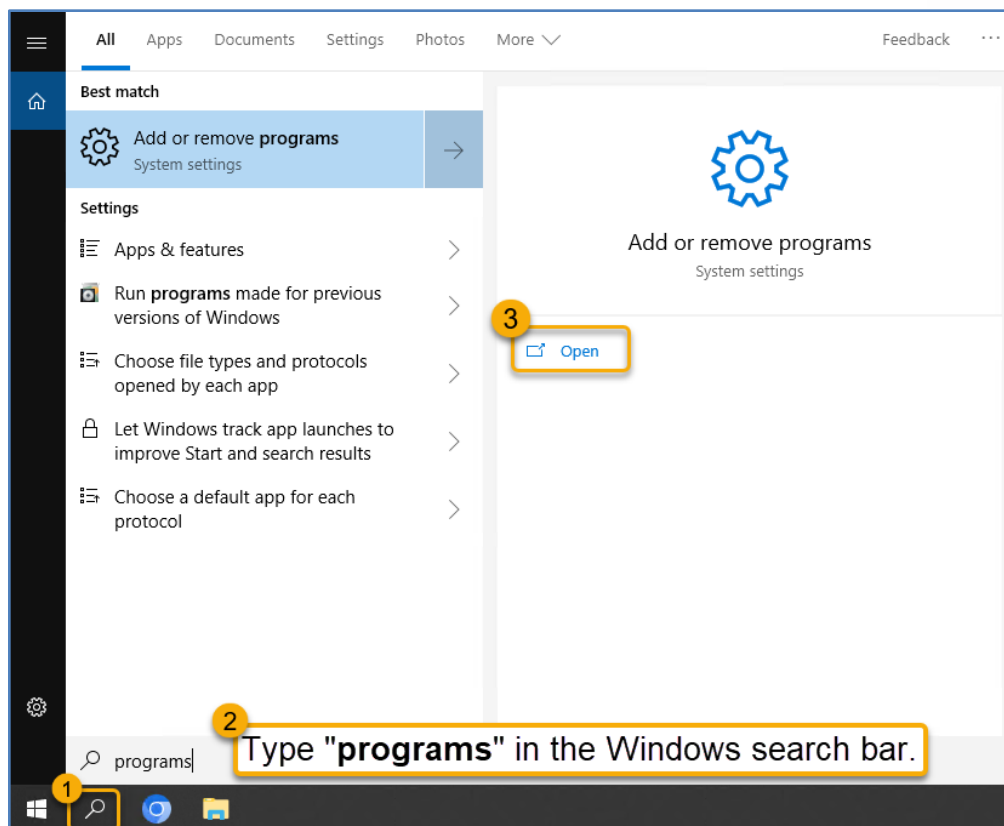


3. Wait a **minimum** of **60 seconds**.
4. Switch the toggle power switch on the back of the instrument to the **|** (On) position. The instrument computer will boot automatically.
5. When the instrument powers back on and the Windows sign-in screen appears, sign in to Windows with an administrator account (by default this will be **sbsadmin**).
6. Do not open any software, including MiSeq Control Software and Local Run Manager, and continue to **Uninstall Local Run Manager Analysis Modules**.

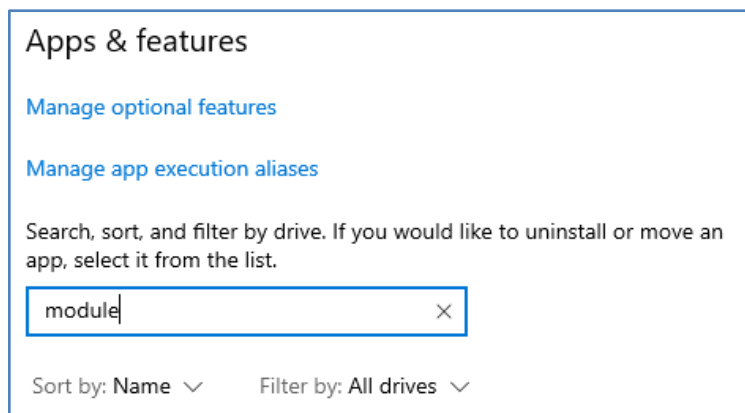
Uninstall Local Run Manager Analysis Modules

Before you begin, please read the following notes:

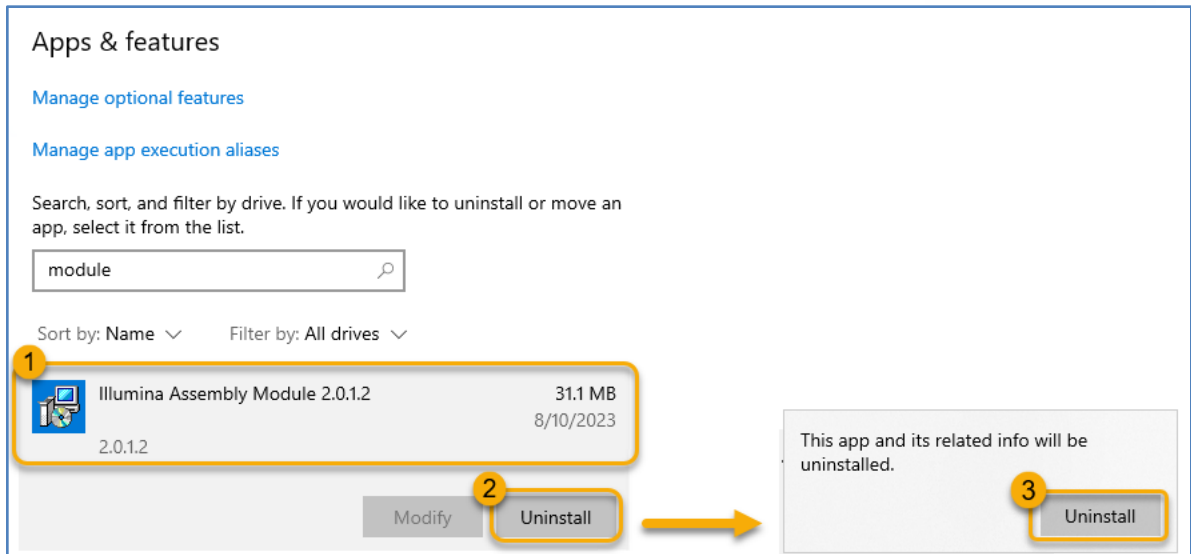
- These instructions are only for uninstalling Local Run Manager (LRM) **analysis modules**, such as GenerateFastQ, that may be currently installed on your MiSeq instrument. Any LRM analysis modules that you need for on-instrument analysis will need to be reinstalled after you install MiSeq System Suite v4.1.0 and set up LRM.
 - If you only use cloud analysis, you may not have any LRM analysis modules installed.
 - **Do not uninstall Local Run Manager.** Uninstalling the LRM software may cause issues during MiSeq System Suite v4.1.0 installation. Following the instructions below carefully will prevent you from accidentally uninstalling the LRM software.
1. Open the *Apps & features* application in Windows. To find *Apps & features*, use the search tool in the Windows taskbar and type *programs*. Refer to the image below for an example.



- In *Apps & features*, type **module** (not “modules”) in the search bar as shown in the image below. If you do not see any LRM analysis modules listed, proceed to **Document the Current Configuration of the Illumina Service Accounts** section.



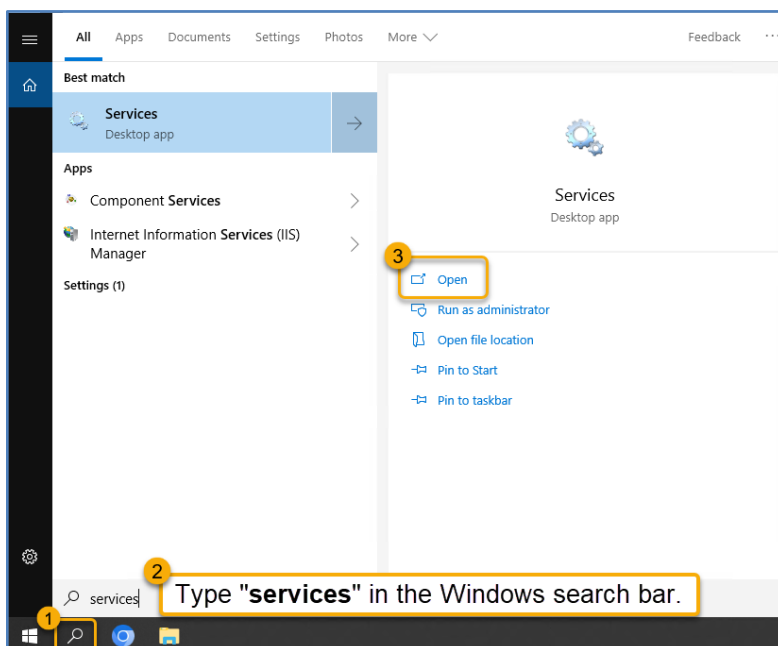
- For any LRM analysis module that appears, select the module name to display the uninstallation option and then select **Uninstall**. When a confirmation prompt for uninstallation appears, select **Uninstall**. For an example, see the image below.



4. When the confirmation prompt, “Do you want to allow this app to make changes to your device?” appears, select **Yes**.
5. Close *Apps & features* after you have completed uninstalling all the LRM Analysis modules and continue to the **Document the Current Configuration of the Illumina Service Accounts** section.

Document the Current Configuration of the Illumina Service Accounts

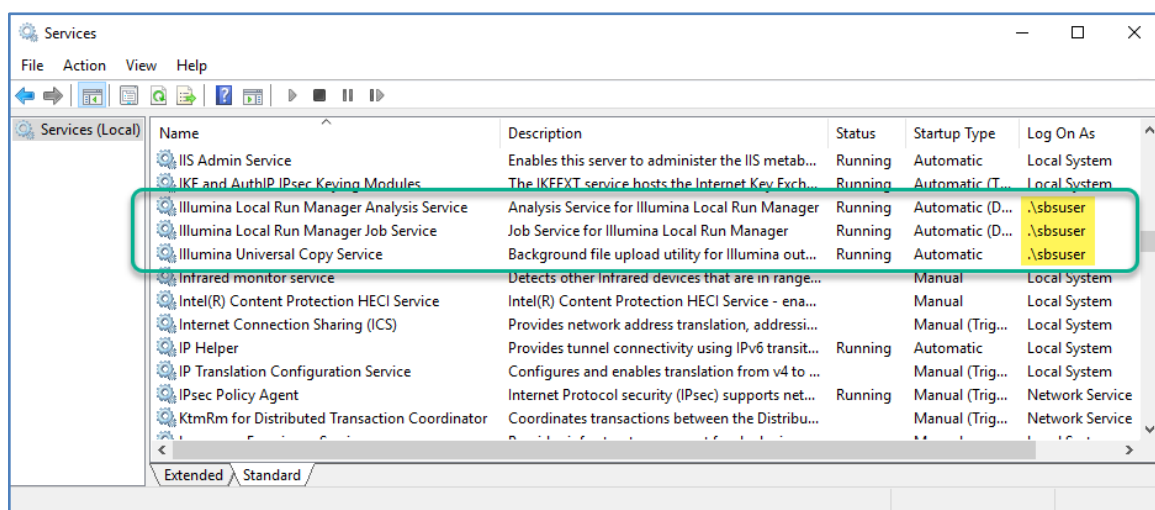
1. Open the Windows *Services* application. To find *Services*, use the search tool in the Windows taskbar and type *services*. Refer to the steps within the image below for guidance.



- Under the **Name** column in *Services*, find the three Illumina services listed in the table below and document the value from the **Log On As** column that corresponds to each service. You can use the table below to document the **Log On As** value.

Name	Log On As (fill in value below)
Illumina Universal Copy Service	
Illumina Local Run Manager Job Service	
Illumina Local Run Manager Analysis Service	

The **Log On As** values will be required in a later step under the **Installation** section. Refer to the image below for more guidance.



In the example above, `.\sbsuser` is the **Log On As** value for all three Illumina services. Please note that the values on your instrument may be different from the example above since they depend on your instrument's configuration.

- Close Windows *Services* after you have documented the **Log On As** value for each Illumina service and continue to the **Installation** section below.

Installation

Before you begin, ensure that you have completed all four sets of instructions from the **Preparation** section. This includes:

- Download the MiSeq System Suite Installer v4.1.0
- Power Cycle the Instrument
- Uninstall Local Run Manager (LRM) Analysis Modules
- Document the Current Configuration of the Illumina Service Accounts

Important Notes:

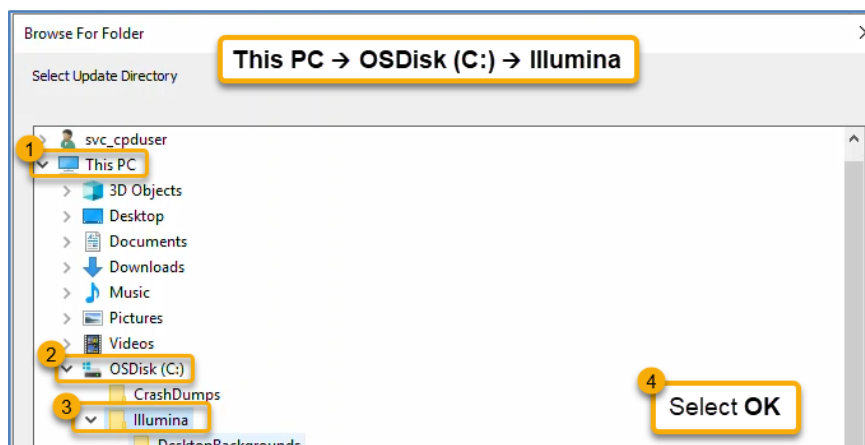
- Ensure that all software, including web browsers, on your instrument are currently closed before continuing.
- The total installation time (not including download time) usually takes 20 minutes, but it may take up to an hour due to pre-installation dependencies.

Install MiSeq System Suite v4.1.0 Manually through MiSeq Control Software

Before you begin, please read the following notes:

- Ensure that you have completed *Step 2* from the **Download the MiSeq System Suite Installer v4.1.0** section for placing the **MiSeqUpdater.exe** file in C:\Illumina.
1. Launch the MiSeq Control Software. From the Main Menu in the MiSeq Control Software, select **Software Update**.
 2. Select **Browse** and then navigate to **C:\Illumina** and select **OK**.

Refer to the image below for more guidance.

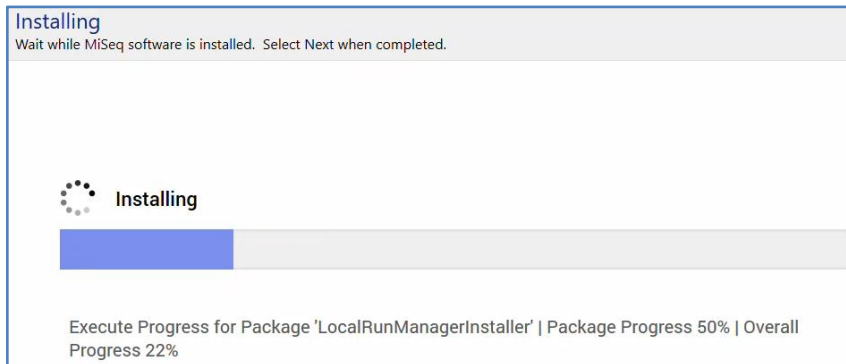


3. Select **Update**.
4. When the confirmation prompt, “Do you want to allow this app to make changes to your device?” appears, select **Yes** to start installation.

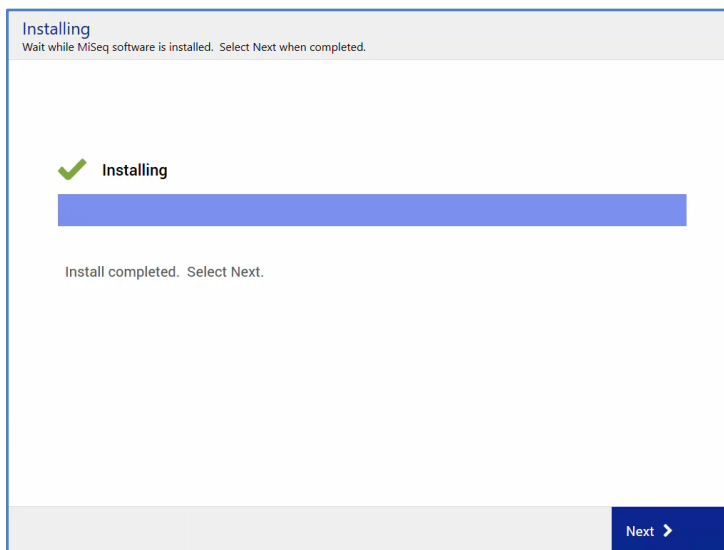
Important Notes During Installation:

- Do not use any software on the MiSeq instrument while the installation is in progress or installation may fail. It is best to leave the instrument alone during installation and check on the progress every 30 minutes.
- If the installation time takes longer than 90 minutes, please contact your Illumina field representative. Never force close the installer software unless instructed by your Illumina field representative.

- The installation progress bar, shown in the image below, takes a significantly longer time to complete during the first 25%. It may appear that the installer software has stalled, but this is expected, and the progress bar will eventually resume.



5. When installation is complete, as shown in the image below, select **Next**.



6. In the next screen, select **Reboot** and then wait until the Windows Operating System (OS) restarts and the Windows OS sign-in screen appears.
7. From the Windows OS sign-in screen, click the **Power** button and then select **Shut down**.
8. When Windows OS is turned off, power cycle the instrument by flipping the instrument power switch in the back of the instrument to the OFF position, waiting a *minimum* of 60 seconds, and then flipping the instrument power switch to the ON position. If needed, refer to the **Power Cycle the Instrument** section for an image of the power switch location.
9. When the instrument powers back on and the Windows sign-in screen appears, sign in to Windows with an administrator account (by default this will be **sbsadmin**).

10. Launch MiSeq Control Software v4.1.0. When MiSeq Control Software v4.1.0 initializes for the first time, you will receive a message saying that you need to change the Local Run Manager (LRM) password.
11. After successful installation, navigate to C:\Illumina, right-click on **MiSeqUpdater.exe** and click **Delete**. Then navigate to the *Recycle Bin* on the Windows desktop and delete the file from there.
12. Proceed to the **Change the Local Run Manager Default Password** section below.

Change the Local Run Manager Default Password

Before you begin, please read the following note:

- If you plan to not use Local Run Manager (LRM) for on-instrument analysis, an account is still needed to configure the Illumina services from *Step 2* in the **Document the Current Configuration of the Illumina Service Accounts** section.
1. Open Local Run Manager (LRM) by double-clicking the *Local Run Manager* shortcut on the Windows Desktop.
 2. Sign in to LRM with the following credentials for the default admin account:

Username: admin

Password: illumina (all lowercase)

Once signed in, LRM will require you to change the default password and set up security questions in case you forget the new password.

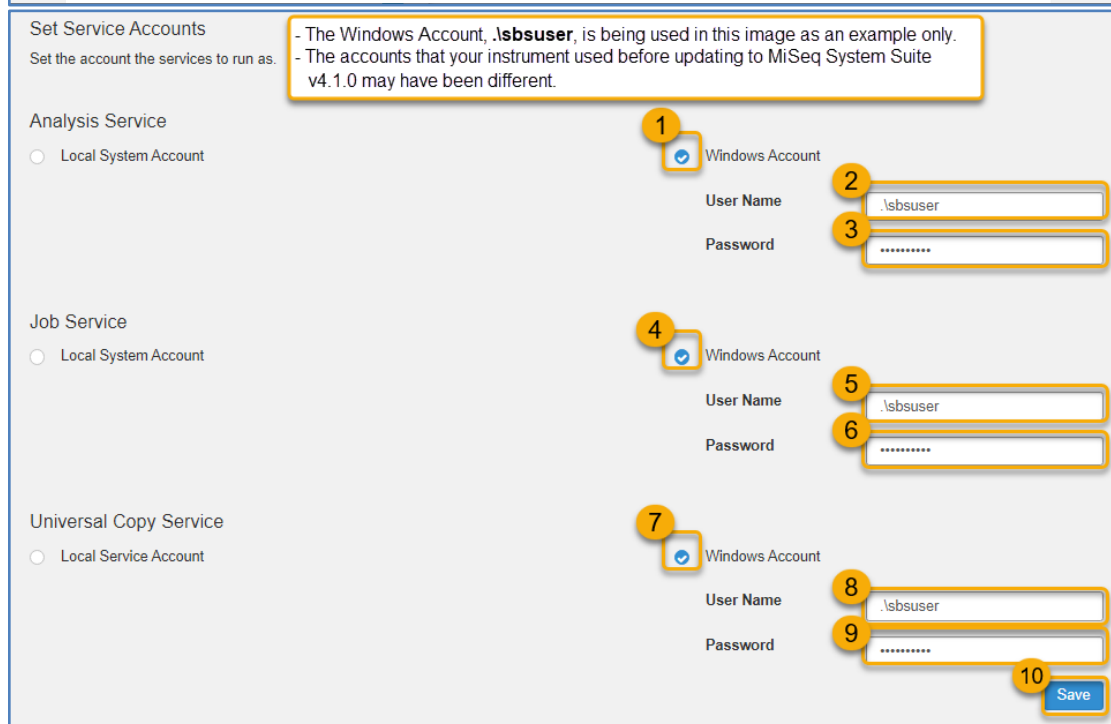
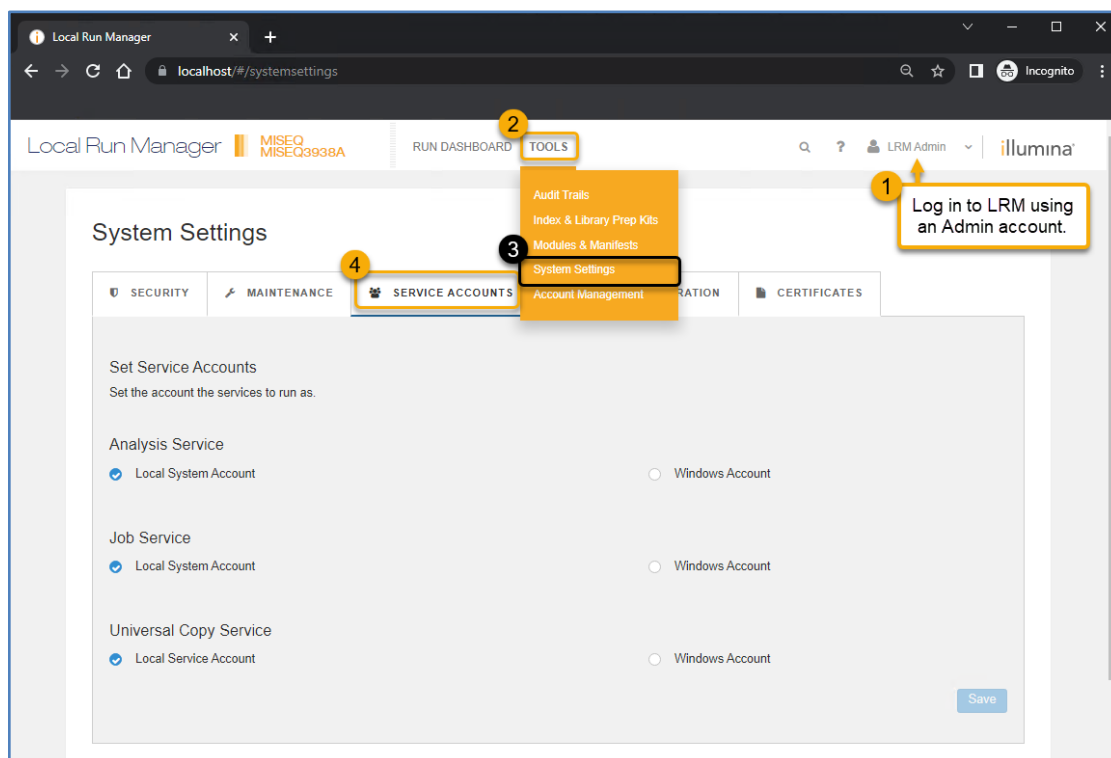
3. Proceed to the **Configure the Illumina Services through Local Run Manager** section below.

Configure the Illumina Services through Local Run Manager

Before you begin, please read the following note:

- **Never configure the Illumina service accounts using Windows Services** – Configuring the Illumina services in Windows *Services* and not in LRM may cause errors after installing MiSeq System Suite v4.1.0. If you accidentally configure these services in Windows *Services* and receive an error, you can simply resolve this by closing *Services* and configuring the services in LRM.
1. In Local Run Manager (LRM), configure the Illumina services to use the **Log On As** accounts that you documented in *Step 2* from the **Document the Current Configuration of the Illumina Service Accounts** section.

Refer to the steps in the two images below for how to navigate to the *Service Accounts* screen in LRM and configure the services to use Windows accounts.



Next Steps

- Illumina strongly recommends that you review Illumina's Best Practices at [Security and Networking](#) to keep your instrument secure.
- If using Local Run Manager (LRM) for on-instrument analysis, you are now ready to download and install LRM analysis module software. Refer to the [Local Run Manager Module Selector](#) on the Illumina support site where you can find the exact modules compatible with MiSeq Control Software (MCS) v4.1.
- Refer to the [Local Run Manager v4 Software Guide](#) on the Illumina support site for instructions on using and configuring LRM and installing LRM analysis module software.
- Illumina recommends creating at least one additional LRM account with an admin role in case one of the admin passwords was forgotten.