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NovaSeq Software
Customer Release Notes

NovaSeq Control Software 1.8.1

NovaSeq Service Software 1.8.0

Real Time Analysis 3.4.4

Universal Copy Service 2.7.3

Firmware 1.26.10

Recipes 1.8.0

Install Notes

For NovaSeq 6000 RUO

March 27, 2023

Introduction

These Software Release Notes detail new features, improvements, and known issues for the NovaSeq™ 6000 Sequencing System for improved sequencing robustness. Contact your field representative to schedule an upgrade to NovaSeq Control Software (NVCS) v1.8.1.

For more information on the NovaSeq 6000, see the NovaSeq 6000 Sequencing System Guide (document # 1000000019358) available on the [NovaSeq 6000 Sequencing System support pages](#).

The software package includes:

- NovaSeq Control Software 1.8.1
- NovaSeq Service Software 1.8.0
- Real Time Analysis 3.4.4
- Universal Copy Service (UCS) 2.7.3
- Firmware 1.26.10
- Recipes 1.8.0

Prerequisite: NovaSeq Suite Installer v1.7.0 or v1.7.5 must have previously been installed to the instrument before upgrading to v1.8.1. If a software version prior to v1.7.0 is currently installed, run the v1.7.0 installer before upgrading to v1.8.1.

I.   NovaSeq Control Software 1.8.1

NEW FEATURES:

- None

FIXED ISSUES:

- Report the correct System Suite Installer and Universal Copy Service (UCS) software versions in the Instrument Performance Data logs.

KNOWN ISSUES:

- UCS Version may be missing from the Proactive Dashboard.
- In rare occurrences, the reagent chiller door sensor warning during Pre-Run Checks may prevent continuation for both flow cell sides (instead of only the failed side) during a dual flow cell run. User is required to exit the workflow and setup runs for both sides again.
- 10X Genomics users: Demultiplexing using mkfastq (cellranger, cellranger-arc, cellranger-atac, or spaceranger) can cause reads to be assigned to the Undermined FASTQ files.
    - o 10X Genomics has released a workaround available on their [Knowledge Base](#)

II.   NovaSeq Service Software 1.8.0

NEW FEATURES:

- None

FIXED ISSUES:

- None

KNOWN ISSUES:

- None

III.   Real Time Analysis 3.4.4

NEW FEATURES:

- None

FIXED ISSUES:

- None

KNOWN ISSUES:

- None

IV.   Universal Copy Service 2.7.3

NEW FEATURES:

- Ensures secure communication by binding instrument to localhost.

FIXED ISSUES:

- None

KNOWN ISSUES:

- None

V.   Firmware 1.26.10

NEW FEATURES:

- None

FIXED ISSUES:

- None

KNOWN ISSUES:

- None

VI.   Recipes 1.8.0

NEW FEATURES:

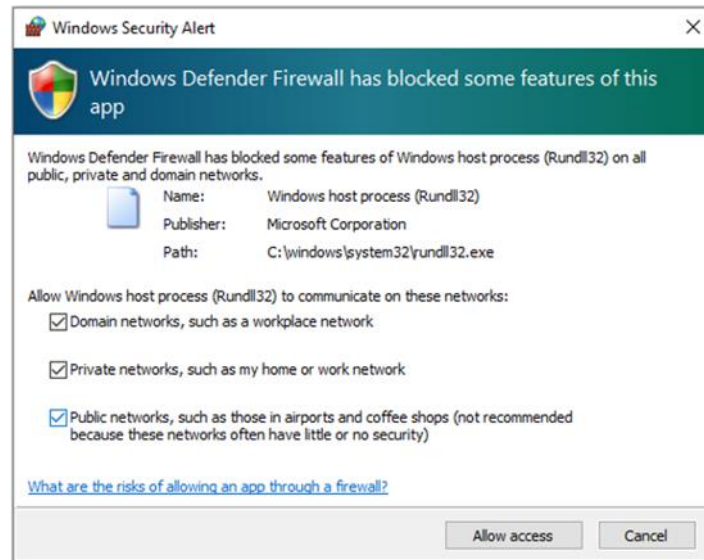- None

FIXED ISSUES:

- None

KNOWN ISSUES:

- None

VII. Manual Install Notes

- Before upgrading, check the Recipe Fragment Version currently installed within the NovaSeq Control Software About screen (screenshot below).
    - o The 1.8.1 System Suite Installer will install the 1.8.0 Recipe Fragment version.
    - o Please contact Illumina tech support techsupport@illumina.com to schedule an FSE visit to restore Recipe Fragment Version 1.8.1 if previously installed.
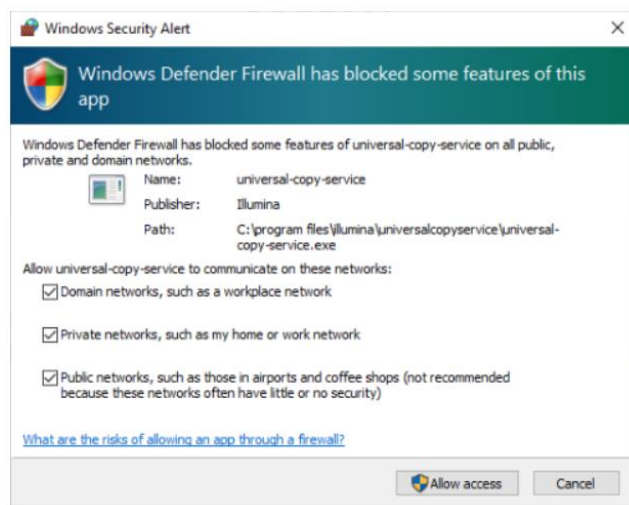   - o No action needed if previously using Recipe Fragment Version 1.8.0.

- Prior to performing a manual software upgrade, <u>power cycle</u> the instrument and ensure the following:
    - o The system is powered on.
    - o The system is not currently performing a sequencing run or system wash.

- o The system is not currently uploading sequencing run data.

- Log in using a Windows administrator account on the NovaSeq, then download the installer from the Illumina Support Site and unzip to C:\Program Files\Illumina.

- Run the NovaSeq Software Suite Installer.

  - o Confirm time on system matches local time.

  - o If prompted, ensure firewall settings allow network communication for NVCS (see below).

- Reboot system as prompted by NovaSeq Software Suite Installer.

- On first-time launch of NovaSeq Control Software 1.8, navigate to Settings, update any options as necessary, and click Save.

  - o If prompted, ensure firewall settings allow network communication for UCS (see below).

KNOWN ISSUES:

- A manual power cycle is **required** to complete the installation if "Restart" button on the "Setup Successful" screen does not function.

- Login screen appears blank or continually loads on first-time launch of NovaSeq Control Software 1.8 when Settings have not been saved once after update.

  - If seen, please follow these steps:

    - Navigate to Settings.

    - Switch to a different Hosting Region (e.g. switch to CAC1, then back to USE1).

    - Deselect BaseSpace Sequence Hub, hit save, then reselect BaseSpace Sequence Hub, hit save.

    - Attempt to set up run with BSSH Login.

  - If the issue is not resolved, please call technical support for next steps.

- On rare occasions, the installer can fail to communicate with one of the devices on the system in the required time and the software update process will not complete.

  - If seen, please power cycle and run the installer package again.

  - If the issue persists, please call technical support for next steps.

  - If encountering this issue via BSSH download, please call technical support for next steps.

- On rare occasions, UCS or Rclone processes may persist in the background and cause install to fail.

  - If seen, please follow these steps:

    - Power cycle.

    - Navigate to C:\ProgramData\Illumina\Universal Copy Service and move the Runs and Logs folder to another location to ensure that the Universal Copy Service folder is empty.

    - Run the installer package again.

  - If the issue persists, please call technical support for next steps.

Release History

Revision	Release Reference	Originator	Description of Change
00	1082437	J. Nguyen	Universal Copy Service update