



Saphyr[®] ICS v5.2 Release Notes

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Revision History

Revision	Notes
A	Initial Release

Overview

This document describes the v5.2 releases of Saphyr ICS (Instrument Control Software). In this document we will provide an overview of the changes in this release to best understand the impact of upgrading the instrument control software. Should you have any questions, please contact support@bionanogenomics.com.

Introduction

Saphyr ICS v5.2 is a new release of the Instrument Control Software which operates the Saphyr instrument and interfaces the Bionano Access® webservice for data processing. ICS runs on Windows 10 on the PC supplied with the Saphyr instrument.

Compatibility

Saphyr ICS v5.2 is compatible with Bionano Access® v1.6.1 and higher.

This software release is compatible with Saphyr Instruments with part number **60325**, **60239**, **60375** and **60396**.

ICS v5.2 Feature Highlight

Loading

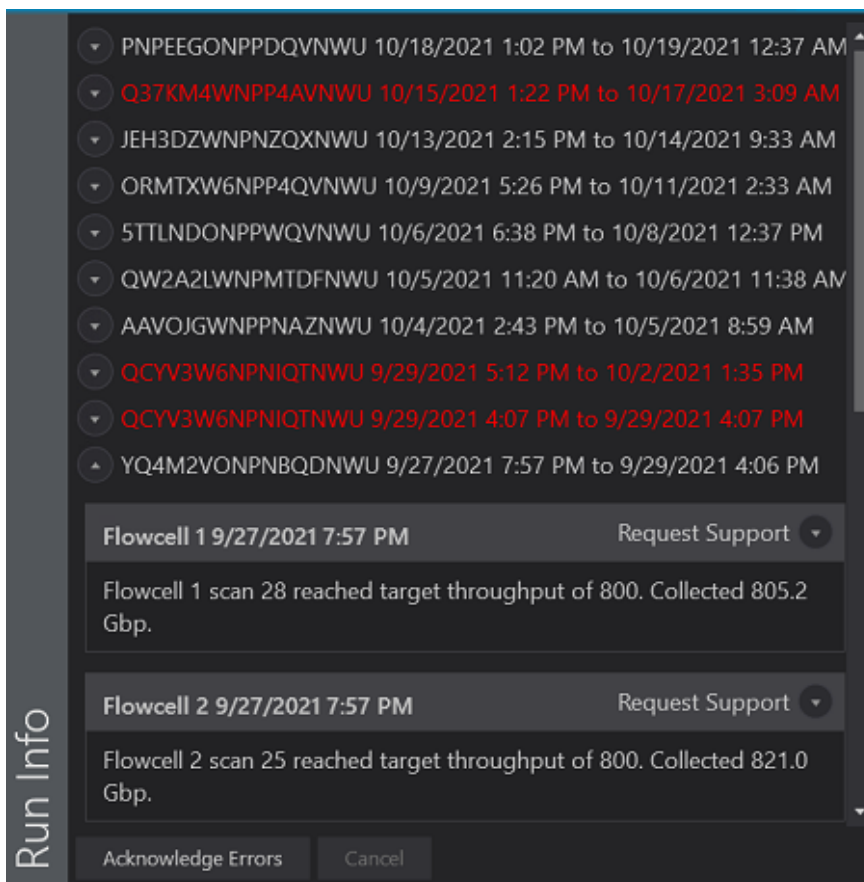
- Improved throughput for difficult samples with updated DNA loading conditions.

Data Quality

- Increased data quality through automated focus target reset.

Status Icon Tool Update - Run Info

- Drop down tool includes flagging errors (in red) and includes the ability to Acknowledge Errors



Run Info Diagnostic Request Submission Form

Status Icon Tool Update - Bionano Access

- Drop down tool includes a new feature to Test Connection

Feature List

Category	Description	JIRA Ticket(s)
Loading	Improve DNA loading for low concentration samples. Applicable to samples at the low end of the supported concentration range (4ng/ul) as well as below the supported range (down to 2 ng/ul) NOTE: The software doesn't know the concentration of the DNA sample. Does not affect nominal concentration samples.	ICX-3162
Workflow	Clean objective option is available in the Help Screen to improve the previously cumbersome workflow.	ICX-1625
Workflow	Support multiple projects per experiment provided by Access v1.7, allowing customer to combine samples from many projects into a single cartridge.	ICX-3760
Reliability	Notify users as soon as possible when issues require their attention and that may be resolved quickly with Access v1.7. Example notifications include new chip started, run complete w/ summary info, or fatal evaporation error which halts running.	ICX-1875
Reliability	Monitor the focus target and reset if it goes out of spec. Also, record focus reset-events for evaluation in Assure.	ICX-3929
Workflow	Provide an Add Chip button in the ICS Create Run Page that hosts the Bionano Access "Add Chip" webpage and workflow within the ICS application.	ICX-3962
Service / Workflow	Allow customers with Project Lead credentials install ICS and Windows updates.	ICX-3964
Service	User may upload Tier 0 diagnostic files (logs and config, no run data) without the need to opt-in to Health Monitoring, same as a diagnostic request. Provides a method to collect diagnostic information if the instrument is having a problem such as startup or other pre / post run sequence of events. It is now possible to upload log or configuration files without remoting into the system which removes the need to stop runs and restart outside of kiosk mode. Revamp tiered diagnostics levels.	ICX-3988
Service	Remove the Tier 3 export capability. This is obsoleted by the Tier 2 integrated workflow. (ICX-3988)	ICX-4013
Misc	General user interface improvements, service, data analytics and remote support features.	Various

Resolved Issues

Description	JIRA Ticket(s)
Improved to ability to cancel operations and close the software when laser cleaning.	ICX-2406
Improved User Interface instructions to avoid prematurely opening the instrument lid, causing an interlock failure during chip eject. UI now instructs user to please wait while the stage finishes moving.	ICX-3966
Improved messaging during the network test operation to indicate Assure connection failed with a timeout instead of an exception.	ICX-3978
Improved error handling and messaging for focus errors during flatfield.	ICX-4006
Improved X-Axis label readability in crowded FC Status graphs.	ICX-4028
Resolved a potential issue when the user pauses a run and swaps chips.	ICX-4036
ICS currently only supports Genome Type 0 - Human. Improved error checking and messaging to handle attempts to scan unsupported Genome Types (i.e., non-human)	ICX-4110
Resolved an issue where flatfield images may include chip fiducial features.	ICX-4118
Fixed an issue in which the Instrument Control Software window could move in kiosk mode.	ICX-4126
Fixed an issue where the flowcell progress bar was not updated when the software recovered from a trivial issue.	ICX-4132

Known Issues

Description
A crash can occur if the USB flash drive is removed while exporting diagnostic files to it. Always wait for the operation to complete before removing the drive.

Technical Assistance

For technical assistance, contact Bionano Genomics Technical Support.

You can retrieve documentation on Bionano products, SDS's, certificates of analysis, frequently asked questions, and other related documents from the Support website or by request through e-mail and telephone.

Type	Contact
Email	support@bionanogenomics.com
Phone	Hours of Operation: Monday through Friday, 9:00 a.m. to 5:00 p.m., PST US: +1 (858) 888-7663
Website	www.bionanogenomics.com/support