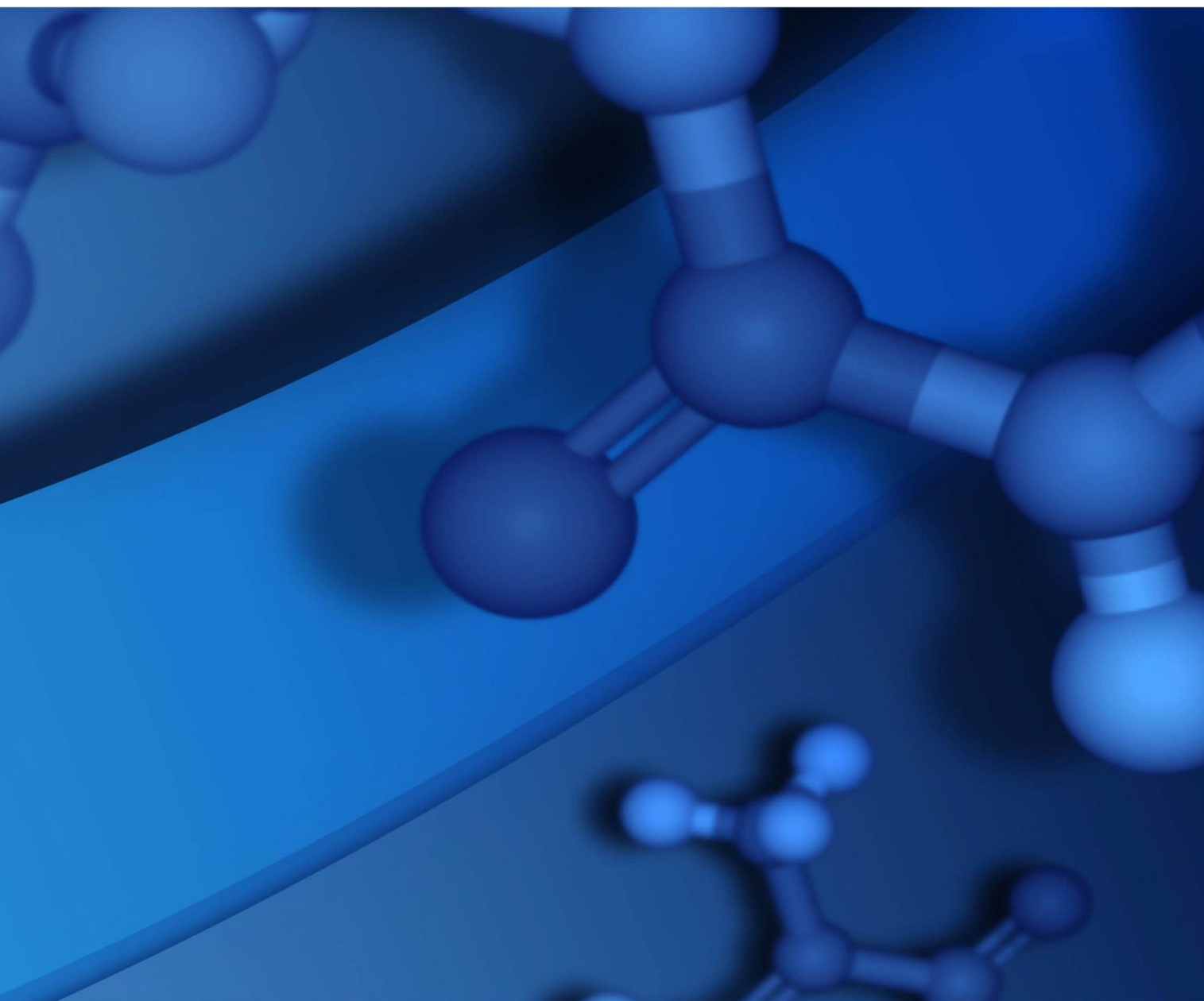


PRODUCT RELEASE DOCUMENT

BIOVIA Notebook

2021 SP1

Service Pack



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Third Party Notification

Your BIOVIA Notebook 2021 SP1 installation contains third-party software components. For details, refer to the BIOVIA Program Directory at <https://media.3ds.com/support/progdir/>.

Acknowledgments and References

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Dassault Systèmes Customer Support
10, Rue Marcel Dassault
78140 Vélizy-Villacoublay
FRANCE

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Customer Release Details

Release of BIOVIA Notebook 2021 SP1

Release Type: Service Pack

22 Apr 2021

Key Technical Points

- BIOVIA Notebook 2021 SP1 can be installed as a new installation or as an upgrade from Accelrys or BIOVIA Notebook versions 4.11.3 to 2021.
- The legacy Windows desktop client is no longer supported and does not work with any release after BIOVIA Notebook 2018.

Support Dates

For information regarding currently supported releases and the dates on which mainstream support ends, see <https://www.3ds.com/support/policies-offers/lifecycle-policy/>

For complete details about support policies, see <https://www.3ds.com/support/policies-offers/>.

Getting Help

If you have questions, visit Dassault Systèmes Customer Support at <https://www.3ds.com/support> and click either **Call us** or **Submit a request**.

System Requirements and Installation

System Requirements

The system requirements for BIOVIA Notebook 2021 SP1 are identified in the document *BIOVIA Notebook 2021 SP1 Server System Requirements*. This document is included in the BIOVIA Notebook documentation zip file.

Other BIOVIA Applications

If you are installing other BIOVIA applications, install the following applications before you install BIOVIA Notebook:

- BIOVIA Foundation
- BIOVIA Pipeline Pilot

Installation

The installation instructions are provided in the *BIOVIA Notebook 2021 SP1 Installation Guide*. The instructions to upgrade from earlier versions are detailed in the document *BIOVIA Notebook 2021 SP1 Upgrade Guide*. These files are included with the BIOVIA Notebook 2021 SP1 documentation zip file.

Release Notes

This section provides cumulative information about all new features, enhancements, and fixed defects since the last major BIOVIA Notebook 2021 release. It also identifies known issues in this release.

Change Advice

Per the GAMP 5 and ICH Q9 Guideline, BIOVIA understands the requirement to apply Quality Risk Management to computerized systems. The Release Notes include Change Advice information to aid in the risk assessment of changes to a validated environment and determines the required effort to validate the release of BIOVIA Notebook. The Change Advice:

- Provides a measure of the potential harm of the issue in the environment
- Identifies the complexity of change

Risk Definition

- **High:** Update affects several distinct areas of the code or is in a complex area of the code
- **Medium:** Update affects a few distinct areas of the code or is in a stable area of the code
- **Low:** Update affects an isolated area of the code or is in a stable area of the code

New Features

- More fields are available in the library views, such as **Created** (the date of creation) and **Size**.
- The new Chemistry View in library listings allows fast browsing of reactions.
- Support has been added for installation using Oracle schema separation.
- Installation and upgrade have been improved.

Enhancements

This release of BIOVIA Notebook includes the following enhancements:

Description	Areas Affected	Risk	User Story
Experiment sizes are now shown in library listings. Note that the displayed sizes might deviate slightly from the sizes of the uploaded files.	Database	1 (Low)	CELN-7487
In library listings, the user can view structures from Chemical Reaction or Chemical Sketch sections by selecting the Chemistry view.	Navigation, Search	2 (Low)	CELN-6396
The api/v1/convert/compound endpoint now returns more detailed information. With default parameters, the response status is now 200/OK, even when the posted structure data is invalid. To reproduce the old behavior, whereby invalid structure data returns the status 400/Bad Request, specify the query parameter rejectinvalidstructure=1.	API	1 (Low)	CELN-11982
The Desktop Connector Service can be configured to redirect the download of desktop client installers to another Desktop Connector Service instance. This allows a newer client version, for example one that supports the latest ChemDraw release, to be distributed without an upgrade the original server installation being necessary. In particular, this feature makes it easier for a customer to use the Desktop Connector with multiple applications, such as Notebook and Pipeline Pilot.	Desktop Connector, Install/Upgrade	1 (Low)	CELN-11966
The method for keeping upgrade version records for the ElnUpgrader application has been refactored to be more robust.	Install/Upgrade	1 (Low)	CELN-11960
The method for resolving structures or fragments defined as labels in ChemDraw has been refined. Previously, the molecular weight calculation and naming would fail if the labels could not be resolved correctly. For labels that still cannot be resolved, a warning is now shown.	API, Chemistry, Desktop Connector, Editor	4 (Medium)	CELN-11866, CELN-9548
Installation packages are now distributed as EXE rather than MSI files to allow execution with elevated privileges and from command line. The Desktop Connector Windows client is still distributed as an MSI package.	Install/Upgrade	1 (Low)	CELN-11830

Description	Areas Affected	Risk	User Story
Chemical reactions can be exported using the new RXN format in BIOVIA Draw 2021, where reagents are shown above the arrow.	API, Chemistry	1 (Low)	CELN-11815
Verification of the installed Oracle objects can be performed by the CreateOracleDatabase.exe application. This should be useful during (for example) IQ testing.	Database	1 (Low)	CELN-11809
The API endpoints relating to experiments (such as GET v1/experiments, GET v1/users/{id}/experiments and GET v1/queries/{id}/results) now return a subset of the properties of each section if \$expand=simplesections is included as query parameter. This improves performance by avoiding extra API calls for retrieving section data.	API	1 (Low)	CELN-11808
ETags have been introduced for the GET v1/sections/{id} and GET v1/experiments/{id}/sections API calls to improve performance. A 304/Not Modified response is returned when the section and section data are unchanged. Otherwise, the response is 200/OK.	API	1 (Low)	CELN-11807
The CreateOracleDatabase.exe application has been refactored to facilitate installation and enhance security. For example, Data Archive can be installed without an extra step.	Install/Upgrade	1 (Low)	CELN-11801
The API can return an image of the Chemical Reaction structure drawing or a Chemical Sketch. This allows for faster display of chemical structures, for example in experiment lists.	API	1 (Low)	CELN-11792
The user can show or hide columns in search results lists.	Editor	1 (Low)	CELN-11790
The user can modify the Table View in library listings by adding more fields from the table cogwheel. Such fields include experiment Created, Submitted, Rejected and Signed dates, Co-signer and My Role. Corresponding filters are also shown.	Navigation	2 (Low)	CELN-11788, CELN-10679, CELN-9570, CELN-11465, CELN-7946

Description	Areas Affected	Risk	User Story
For Notebook installations running on the Microsoft Azure platform, a mechanism to renew the AzureAccess cookie has been added. The session cookie is renewed whenever a Notebook page is loaded. This reduces the risk of session termination.	Data Archive, Editor, Navigation, Search, Submission	2 (Low)	CELN-11783
The Ansible installation scripts can now perform IQ testing.	Install/Upgrade	1 (Low)	CELN-11780
When an RXN file is downloaded from a Chemical Reaction section, the downloaded file can now contain reagent data.	API, Editor	1 (Low)	CELN-11764
ElnUpgrader now detects if Data Archive is installed, and upgrades it when upgrading Notebook. The option to upgrade only Data Archive has been removed.	Install/Upgrade	1 (Low)	CELN-11763
The Ansible installation script now provides options for recycling the application pools.	Install/Upgrade	1 (Low)	CELN-11762
The Ansible installation scripts can now install Notebook under a non-default subpath, for example https://<server>/notebook.	Install/Upgrade	1 (Low)	CELN-11754
The Ansible installation scripts can now be used to register Notebook with Foundation Hub.	Install/Upgrade	1 (Low)	CELN-11746
The Ansible installation scripts can now add HTTPS binding and an SSL certificate to the web site, and update the configuration files to use HTTPS URLs.	Install/Upgrade	1 (Low)	CELN-11744
When registering a BIOVIA Notebook instance with Foundation Hub, the administrator can now use configuration settings to override the automatically detected Notebook URL and, optionally, any alias URLs.	Authentication	2 (Low)	CELN-11732
Perkin Elmer ChemDraw 20 is now supported on Windows.	Chemistry, Desktop Connector	1 (Low)	CELN-11709
Perkin Elmer ChemDraw 20 is now supported on macOS.	Chemistry	1 (Low)	CELN-11708
ChemAxon MarvinSketch 20 is now supported on Windows.	Editor, Chemistry	1 (Low)	CELN-11645
Reactions containing reagents created in BIOVIA Draw 2021 can now be imported into a Chemical Reaction section.	Desktop Connector, Editor	1 (Low)	CELN-11631

Description	Areas Affected	Risk	User Story
The name of a file uploaded to a Chemical Sketch section is now preserved, and the correct extension retained. Previously, the name always defaulted to Chemical Sketch.(ext).	Desktop Connector, Editor	2 (Low)	CELN-11629
The performance of inserting a large sequence from BIOVIA Draw to a Chemical Sketch section has been improved.	Desktop Connector	1 (Low)	CELN-11614
Notebook can now be installed with configurable Oracle schema names and runtime account names, for example to enable hosting of multiple Notebook systems on the same database instance.	Database, Install/Upgrade	1 (Low)	CELN-11584
The Task Planner section checks that the correct Foundation Hub collaborative space is used. If the user cannot open a Task Plan, they can change the collaborative space from the experiment Cogwheel.	API, Authentication, Editor	4 (Medium)	CELN-11556
The Ansible installation scripts have been extended to include configuration of the connection to Foundation Hub.	Install/Upgrade	1 (Low)	CELN-11516
Query objects to search for experiments can now contain the search criterion "COUNTERSIGNED" to search by a date interval. For example: countersigned in (custom range, 2020-11-07 22:36:00, 2021-02-15 22:36:00)	API, Search	1 (Low)	CELN-11445
The Desktop Connector can now be used in Messaging Service mode in a Microsoft Azure environment where the desktop client must provide authentication to access the Messaging Service. This only applies to Windows client computers.	Desktop Connector	4 (Medium)	CELN-11348
Voice control is now available on macOS using Chrome.	Editor	1 (Low)	CELN-11322
Local users (that is, users not synchronized from an AD) automatically obtain a GUID. This change mitigates some problems with user management for Data Archive.	Database	1 (Low)	CELN-11289
The structures of compounds from Hub materials, listed in the Task Planner section, are now shown in My Compounds in the Reaction Section. This makes it easy to add to a reaction. The compounds are also indexed for structure searching from the Advanced search.	Chemistry	1 (Low)	CELN-11235

Description	Areas Affected	Risk	User Story
The Upgrade application now detects if installation executables are marked as "downloaded from the internet" by the operating system, and therefore not trusted. The upgrade is then stopped, and the status flag can be changed.	Install/Upgrade	1 (Low)	CELN-11041
The filter drop-down boxes in the library list views now show a "Loading" indicator when they are being populated.	Editor	1 (Low)	CELN-10536
The Citrix version of the Desktop Connector installer is available as an *.exe file, to allow installation with elevated privileges (in other words, Run as Administrator).	Install/Upgrade	1 (Low)	CELN-10416
The Desktop Connector client now reports opening and closing of chemistry editors in the Windows App notifications area.	Desktop Connector	1 (Low)	CELN-10386

Enhancements - Component Collection

This release of BIOVIA Notebook Component Collection for PipelinePilot includes the following enhancements:

Description	Areas Affected	Risk	User Story
It is now possible to retrieve simple section data when querying experiments using the Experiment Query, Experiment Query (Advanced) or Experiment Query by Structure components.	API	1 (Low)	ANC-263
Editing a project section has been extended with functionality to append a project to the ones already in the section as well as clearing all the projects from a section.	API	1 (Low)	ANC-261
The Experiment Query component now supports searching by countersigned date.	API	1 (Low)	ANC-229

Fixed Defects

This release of BIOVIA Notebook includes the following fixed defects:

Severity	Description	Areas Affected	Risk	Defect
Major	The Upgrade application has been corrected to handle upgrades from new installations of Notebook 2020 SP2 and 2021. An earlier defect caused duplicate information to be generated in the configuration files after the upgrade was run.	Install/Upgrade	2 (Low)	CELN-11958
Major	The text selection in the Body Text section now works as expected. Because of a regression in Notebook 2021, the selection was lost when the cursor was moved over another section, making text formatting difficult.	Editor	1 (Low)	CELN-11853
Minor	Submission comments are now shown regardless of the user's UTC offset. Previously, comments were stored but not shown for users with negative UTC offset values.	Submission	1 (Low)	CELN-9218
Minor	The value login.aspx is automatically added to ElnAdminWeb/web.config during upgrade, so that users see the login page when calling <servername>/ElnAdminWeb.	Navigation	1 (Low)	CELN-9214
Minor	The settings for PDF section image generation have been optimized to avoid timeout when specific files are used.	Editor	1 (Low)	CELN-8749
Minor	The Desktop Connector upgrader for macOS now replaces the previous version without requiring a manual uninstall.	Desktop Connector	1 (Low)	CELN-12059
Minor	Changes in experiment fonts are now preserved, regardless of whether the experiment content is modified. This fixes a regression in release 2021.	Editor	1 (Low)	CELN-12045

Severity	Description	Areas Affected	Risk	Defect
Minor	When Notebook is used with SQL Server, database performance during insertion and updating of experiment sections has been improved. This affects mostly users with a very large number of experiments in the Me as Author library.	Database	2 (Low)	CELN-12022
Minor	PDF generation no longer skips any images when the experiment URL lacks a fully qualified domain name.	Submission	1 (Low)	CELN-11980
Minor	Registration of Notebook in Foundation Hub has been refactored to avoid problems when the IIS Server response header is disabled. Suppression of the header was introduced for security reasons in Notebook 2020 SP2 HF3.	Install/Upgrade	1 (Low)	CELN-11961
Minor	Previously, ETag response headers for very large experiments generated warnings in the log, and caused export to Word or PEF to fail. This issue has been fixed.	API	1 (Low)	CELN-11952
Minor	The limit of 100 users per group that could be synchronized from Foundation Hub to Notebook has been removed.	Administration	1 (Low)	CELN-11951
Minor	The microphone symbol is no longer shown when a user lacks the voice control privilege.	Editor	1 (Low)	CELN-11921
Minor	Synchronization of users to Data Archive now works for GUIDs in both uppercase and lowercase.	Data Archive	1 (Low)	CELN-11906
Minor	If the user pastes a corrupt image into a Body Text section, a warning message is shown, but any other images in the same section are stored correctly. Previously, no images were stored if one of them was corrupt.	API	1 (Low)	CELN-11878

Severity	Description	Areas Affected	Risk	Defect
Minor	In experiments, objects returned from the Notebook API, including experiment lists, the signed and co-signed or rejected dates, and the co-signer name and user name, are now always reported for the latest submitted experiment part. The properties COUNTERSIGNED, WITNESS, WITNESSUID of experiment objects from the Notebook API now remain set also after the experiment has been co-signed.	Database	2 (Low)	CELN-11873
Minor	The logic for detecting Internet Information Services (IIS) during installation has been improved.	Install/Upgrade	1 (Low)	CELN-11871, CELN-11870
Minor	The Undo/Back command used during dictation now works without focus on the first text entered being lost.	Editor	1 (Low)	CELN-11869
Minor	The code for adding projects to users and groups has been optimized to avoid timeout in ElnAdminWeb.	Administration, Database	2 (Low)	CELN-11854
Minor	In Notebook 2021, the ElnUpgrader application could skip updating the primary keys of the ELNSESSION table. This issue has been resolved. The issue is not known to exist in any other versions of Notebook.	Database, Install/Upgrade	1 (Low)	CELN-11845
Minor	If the web.config file is encrypted, the ElnUpgrader now stops the upgrade, so that the user can decrypt the file before continuing.	Install/Upgrade	1 (Low)	CELN-11839
Minor	Experiments larger than 2 GB can now be opened and shown in the experiment library listings. Previously, opening such experiments failed with the message, "Cannot convert value of column CONTENTSIZE." Please note that creating such large experiments is still not recommended.	API, Database	2 (Low)	CELN-11837
Minor	When multiple PowerPoint documents are open, the documents are now saved correctly.	Desktop Connector	1 (Low)	CELN-11813
Minor	The Desktop Connector client can now be used behind a forward proxy without causing connection problems.	Desktop Connector	2 (Low)	CELN-11803

Severity	Description	Areas Affected	Risk	Defect
Minor	A public template can be deleted by any user with the ELNGLOBALTEMPLATEADMINISTRATOR privilege. This reverts the logic added in the 2020 SP2 release, where only the author could delete the template.	Editor	1 (Low)	CELN-11799
Minor	The CreateOracleDatabase application now creates the datafiles with correct paths, independently of the DBPREFIX setting.	Database	1 (Low)	CELN-11779
Minor	Users with the privilege ELNMANAGECURRENTAUTHOR can now change the owners of public templates, in analogy with the capability to change experiment owners.	API, Database, Navigation	1 (Low)	CELN-11770
Minor	For installations using Ansible, the default paths for DataArchiveAPIPath and DataArchivePath have been corrected.	Install/Upgrade	1 (Low)	CELN-11767
Minor	Larger biological sequences created in BIOVIA Draw now scale correctly when inserted into a Chemical Sketch section.	Desktop Connector	1 (Low)	CELN-11757
Minor	The TLS 1.2 security protocol is now explicitly enabled in NotebookLoginService. Previously, depending on the configuration of the runtime .NET Framework version, it was not always enabled. Using TLS 1.2 is a requirement for Notebook integration with BIOVIA Foundation Hub 2021.	API, Security	1 (Low)	CELN-11750
Minor	The ElnDirectorySyncService now continues synchronizing (for example, Hub and Data Archive LDAP objects) even if the domain controllers specified in the configuration file are not responding.	Administration	1 (Low)	CELN-11748
Minor	Data Archive now works in an environment where Notebook is connected to Foundation Hub. In earlier releases, experiment submission was blocked by a Data Archive section.	Data Archive, Security	1 (Low)	CELN-11745
Minor	The Screen Capture function now minimizes the correct window when an experiment is open in multiple browsers in Windows.	Desktop Connector, Editor	1 (Low)	CELN-11643
Minor	The Desktop Connector page under Personal Settings has been refactored for improved performance and stability.	Editor	1 (Low)	CELN-11642

Severity	Description	Areas Affected	Risk	Defect
Minor	The Desktop Connector Windows client no longer writes a SocketException entry to the log file when the WebSocket connection is closed.	Desktop Connector	1 (Low)	CELN-11640
Minor	The appSettings key DefaultDomain in NotebookLoginService has been removed. In Notebook 2021, it prevented native users from logging on. A workaround for that release is to remove the DefaultDomain key.	Authentication	1 (Low)	CELN-11635
Minor	The ElnDirectorySyncService now works correctly after an attempt is made to synchronize a user with a blank (null) email address.	Data Archive	1 (Low)	CELN-11607
Minor	The DesktopConnectorService installer's behavior in Upgrade and Repair modes has been corrected.	Desktop Connector, Install/Upgrade	1 (Low)	CELN-11570
Minor	The performance of certain section queries has been improved through the use of a new database index.	Database	1 (Low)	CELN-11271
Minor	An index has been created on Experiment_number in the Document table to improve performance on SQL Server systems.	Database, Install/Upgrade	1 (Low)	CELN-10932
Minor	After an upgrade, the application server's Apps & Features listing now shows the new Notebook component versions.	Install/Upgrade	1 (Low)	CELN-10284
Trivial	The time that it takes to synchronize users to Data Archive has been drastically reduced. Previously, the ElnDirectorySynch service could time out for large installations.	API, Database	1 (Low)	CELN-11867
Trivial	The log file label for entries reporting failure of PDF generation has been changed from INFO to ERROR to facilitate troubleshooting.	API	1 (Low)	CELN-11816
Trivial	The CreateOracleDatabase command now gives a clearer log of actions. The administrator can further enhance it by setting EnableScriptLog to true.	Install/Upgrade	1 (Low)	CELN-11733
Trivial	To facilitate troubleshooting, the RIA web application writes messages to a new log file. The default location of this file is C:\temp\BIOVIA\Log on the application server.	Editor	1 (Low)	CELN-11431

Severity	Description	Areas Affected	Risk	Defect
Trivial	Groups created in ElnAdminWeb automatically grant access to the Synchservice user. In previous releases, lack of access to this user prevented Data Archive users from being added correctly.	Administration, Data Archive	1 (Low)	CELN-11373
Trivial	Installation of the Desktop Connector on macOS no longer gives the warning message "BIOVIA Desktop Connector.pkg can't be opened because Apple cannot check it for malicious software."	Install/Upgrade	1 (Low)	CELN-11035

Fixed Defects - Component Collection

This release of BIOVIA Notebook Component Collection for PipelinePilot includes the following fixed defects:

Severity	Description	Areas Affected	Risk	Defect
Minor	Authentication using Pipeline Pilot session tokens is now successful even if the api2 endpoint has not been defined on the Notebook server.	Authentication	1 (Low)	ANC-265

Known Issues

This release of BIOVIA Notebook has the following known issues.

Severity	Description	Defect
Major	The ElnDirectorySyncService stops if the SAMaccountNames and CN names are different.	CELN-11574
Major	EMF files are uploaded as JPG and the content appears black.	CELN-11463
Minor	Notebook affects ChemDraw's list of recent files.	CELN-9183
Minor	Images in Word sections are not shown correctly if the display scaling is set to 125%.	CELN-9103
Minor	The name of an SD file is not preserved when the file is uploaded to an SD File section.	CELN-8653
Minor	Reassigning an experiment to a new author after the original author submitted it does not update the original author's dashboard.	CELN-8622
Minor	Swedish characters in file names are not preserved when files are added to File Attachment sections.	CELN-8583

Severity	Description	Defect
Minor	Notifications that have not been acted upon are not cleared.	CELN-8200
Minor	A submitted invalid experiment does not display in the "Waiting for Co-Signer" section in the witness's Notebook web client.	CELN-8137
Minor	The IntegrationSection should not register with an ID of 300.	CELN-7941
Minor	Chinese characters in PDF sometimes do not display.	CELN-6971
Minor	When a new co-signer is assigned to an experiment, the experiment shows in the "Me to Sign" lists of previous co-signers.	CELN-5577
Minor	If Oracle throws an error when creating a new user the User_Details table still has an entry.	CELN-11919
Minor	Excel does not launch using the View button in File Attachment or Excel sections on MacOS.	CELN-11414
Minor	A polymer defined using bracket notation cannot be found using structure searching.	CELN-10923
Minor	Reagent and solvent names are sometimes indexed incorrectly.	CELN-10922
Trivial	An Advanced Search with the filter "Rejected by Co-signer" only searches experiments whose author is the current user. It is not possible to override this behavior by specifying another author in the filter.	CELN-9220
Trivial	Using the Mac Command key with X, C, or V in Chrome sometimes causes a Notebook section to disappear temporarily.	CELN-10345