

OMNIC Paradigm Software Release Notes

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About This Document

This document contains a revision history of OMNIC Paradigm software, including new features that may not be included in the user guide, resolved issues and known issues.

OMNIC Paradigm 2.6

- **Release date:** April 2024
- **Supported operating systems**
 - Windows 10 64-bit
 - Windows 11 64-bit

New Features and Enhancements

See the updated user guide for OMNIC Paradigm software on our knowledge base for more information about using these new features and enhancements.

General Features

New Performance tests

The new performance test for the Nicolet iS50 spectrometer checks your combination of beamsplitter, detector, and sampling location to verify that your instrument setup will measure high-quality data. To use this test, go to the Acquire Data menu and select Diagnostics > Performance Test.

Manual baseline correction

When viewing spectra in the Spectrum tab, you can now correct the baseline manually to ensure that you view the spectrum exactly as you want it. You can still use automatic baseline correction for a quick, accurate correction.

New option for the x-axis format in the spectral view

In the Options dialog, you can now set the x-axis format to split at 2000 cm⁻¹. In this format, the x-axis is split into two regions with a change of scale at 2000 wavenumbers. The scale of the region below 2000 wavenumbers is expanded by a factor of two as compared with the scale of the region above 2000 wavenumbers. Note that this setting only applies to spectra in the Spectrum tab and not in reports or session tabs.

Change the look of the text

Use the new font settings in the Options dialog to customize the look of the text in the spectrum view and other data view. These font choices do not apply to reports.

It is easier to find and organize all your data

Now you can search for workflows and packages by name, just like you were able to before with measurements, reports, and other data. And with the new tag management tools, you can view all the tags you have already used.

Easier to work with tabs

You have more control over tabs and can send data to a tab more easily with the new controls in this version. Right-click the name on a tab to rename it. From the spectrum view, navigate to the spectrum history and right-click to duplicate a measurement and send it to a specific tab.

Measure background after collecting data

View your background settings if you want to measure the background after the sample instead of before the sample. Before, you could only measure the background before measuring the sample or use a previously measured and saved background spectrum. Now you can measure your sample and then the background.

More control over your saved reports

In this release, you can now rename or delete your saved reports, just like saved measurements. If you need to control access to these options, we recommend using our Security Suite software.

The History tab in the Spectrum view now shows more changes to the spectral metadata

If you edit the tags on a spectrum with the Manage Tags tool or add comments or custom fields, the History tab in the Spectrum shows these changes.

Rapid scan available when using a Nicolet Apex spectrometer

If you are using the Nicolet Apex spectrometer, you can enable the Rapid Scan option in Time Series measurements to capture data more quickly. This is useful if your samples change quickly but it will require more storage space to save the full Time Series measurement. Note that for now, this option is available only with the Nicolet Apex spectrometer.

Time Series Measurements

These features and enhancements apply to Time Series measurements.

3D Analysis tools

This version of OMNIC Paradigm software introduces 3D analysis for your Time Series measurements, including waterfall and surface plots. This view provides another way to visualize and analyze your Time Series data.

Note: Outdated graphics drivers are the primary cause of display errors. 3D features should run on any graphics system (board and driver) that provides a complete implementation of OpenGL 4.1. Please

note that some features may require OpenGL 4.6. However, boards and driver bugs are not unusual. We recommend updating to the latest drivers available from your hardware's manufacturer.

Use a previous background measurement for your time series analysis.

Now you can use a background measurement that you measured and saved earlier instead of measuring before collecting sample data. This option is not yet available for measurements with the RaptIR microscope or the Raman module.

Blank a time region in a Time Series measurement

You can blank a region of time in your Time Series measurements.

Split Time Series data into individual measurements

Select a region in your Time Series data and send all the spectra in that range to the dashboard as individual measurements or select a single point to send only one spectrum. From the dashboard, you can quickly export these measurements as files.

Workflows

This version of OMNIC Paradigm software introduces two new workflow tiles and adds more options to familiar tiles.

Read or modify data about your spectrum with the new Spectral Metadata tile

With this new tile, you can read data from the spectrum and use it later as a variable or you can change the data to a new value. For example, you can set the spectrum title to a new custom value or set it equal to an existing variable. Or you can read the data to convert it to a variable that you can use elsewhere in the workflow, such as in a Report tile.

Add to, select from, and iterate through lists with the new List tile

The List tile is useful for modifying a list or reading data from a list. For example, this is useful when paired with Repeat tile. You can use the number of times the loop has repeated to automatically select an element from the list and then perform some processing or analysis on that item. This is a straightforward way to repeat the same processing on every spectrum in a list.

Import a list of spectra with the Load Spectrum tile

Now you can import a list of spectra with the Load Spectrum tile instead of only a single spectrum. Modify or read from the list with the List tile.

Updates to the Measure tile

The Measure tile now has new options, including the ability to match the measurement settings from a SPA, QNT, or EXPX file or a measurement in your database. Select Match Settings and select the source file or measurement to match.

Resolved Issues

Software would crash if you switched to viewing Time Series measurements on the dashboard

For some users, the software would close unexpectedly when trying to view Time Series measurements on the dashboard. This is now fixed so you can safely switch to viewing your saved Time Series measurements.

The results from some search operations were in an incorrect format

When performing a multi-component search or some other library searches, the results may not have matched the final format of your spectrum. For example, if you searched using a spectrum in %T format, the results may have been in absorbance units. The results are fixed to now match the format of the spectrum used in the search.

The Export tile in a workflow now correctly exports SPC files

Previously, when you attempted to export a SPC file with the Export tile in a workflow, the workflow would incorrectly export an SPA file. The tile now works correctly to export SPC files.

Moving a label after peak pick

Peak annotations were incorrect if you moved the label. This is fixed so that the peak values remain correct even after moving labels.

Open spectrum view showing mixed previews for SPG files

When you viewed the preview of an SPG file in the Open dialog, clicking a second SPG file would add the preview to the preview of the previous file. Now the preview shows only the correct SPG file.

Known Issues

The Smart NIR Accessory does not flip the internal mirror during user-created workflows

If you use the Smart NIR Accessory in a workflow, the NIR Background Mirror setting does not correctly move the mirror in or out of the beam path. This only affects user-created workflows. The mirror works correctly in all qualification workflows.

As a workaround, enable Use Sample Shuttle in the Measure tile to move the mirror in and out of the beam path.

Factory-created workflows will sometimes fail to run

Previously, factory-created workflows would sometimes open in the Workflow Editor view instead of running. This no longer happens, but in certain circumstances, the workflow may fail to run. If this happens, the software prompts you to restart the software and run the workflow again.

The Run button in the Workflow Editor and the Camera view in microscopy interfere with one another

Occasionally, these features will interfere with one another and prevent the other from working. For example, if you use the camera view in an FTIRaman session, you may not be able to use the Run button in the Workflow Editor afterward. If this happens, the software prompts you to restart the software.

Spectra sent to the dashboard from a Session are missing metadata

If you send spectra to the dashboard from a Session, the spectral metadata may be missing information or showing incorrect information.

Imported sessions not showing in the Sessions list on the dashboard

When you import a session file, the new session is not added to the list of sessions on the dashboard immediately. To see the new session, you must either click Refresh to update the list of sessions or restart the software.

Repeatedly converting the x-axis units can cause errors

If you convert the x-axis units several times between wavenumbers, microns, and nanometers, errors may occur.

OMNIC Paradigm v2.5 HF1

Release Date: October 2023

Supported Operating Systems: Windows 11 64-bit; Windows 10 64-bit

Resolved Issues

Incorrect values when importing spectra data

%T values were 100 times greater than they should be when you imported these files types:

- Grams (*.spc)
- JCAMP-DX (*.jdx)
- Perkin-Elmer (*.sp)
- Jasco (*.jws)

This is fixed and the software now displays the correct values for %T.

Repeated prompt asking if you trust the connection to a Nicolet Summit or Summit PRO spectrometer

A bug caused you to have to indicate that you trust the connection every time you started the software and connected to a Nicolet Summit or Summit PRO spectrometer. This is fixed, and the software now remembers if you trust the connection.

OMNIC Paradigm v2.5

Release Date: September 2023

Supported Operating Systems: Windows 11 64-bit; Windows 10 64-bit

New Features

General Features

OMNIC Paradigm software now supports more file types

You can now import spectral data from other applications, including the following:

- Grams (*.spc)
- JCAMP-DX (*.jdx)
- Perkin-Elmer (*.sp)
- Bruker (*.F0-9])
- Jasco (*.jws)
- TSV Text (*.tsv)

Enhancements for using OMNIC Paradigm software with Security Suite software

The new version of OMNIC Paradigm software supports a full audit trail for tagging, including tags created in workflows, supports showing multiple digital signatures in reports, and shows the database and security server hostnames in the system status information. We have also added a security policy in Security Administration software to allow you to buffer and save data.

The software now uses HTTPS

OMNIC Paradigm software now uses HTTPS instead of HTTP. This means that the data you send over the network is encrypted for improved security and privacy. This change also means that the first time you connect to a remote instrument, such as a Summit spectrometer on your network, you will be asked if you trust the instrument. This is expected.

OMNIC Paradigm Configuration Utility

The new OMNIC Paradigm Configuration Utility is used to set up and customize your SSL certificate for the software. This utility should be used only by administrators and should use only the default settings unless your organization's policies require a change.

Time Series Measurements

Zoom in on profiles

You can now zoom in on the profile pane for a closer look at the profile. Right-click the profile and select zoom. Then, click and drag to draw a box and click in the box to zoom to that area. Double-click to return to the full profile.

Save interferograms with your time series measurements

You now have the option to save interferograms with the time series data. After setting your analysis type as Time Series, select More to view more settings. Saving interferograms will increase the size of the saved data.

Add comments and custom fields to time series measurements.

Now you can add comments and custom fields to time series data, just like you could with standard measurements previously. To add a comment or a custom field, select Time Series in the measurements pane of the dashboard and then select More to view details.

Import legacy time series measurements from OMNIC software

You can now import legacy Time Series files (files with a .srs file name extension), allowing you to work with your older OMNIC data in OMNIC Paradigm software.

Workflows and Packages**New qualification workflows for the Nicolet iN5 microscope**

OMNIC Paradigm software now supports a suite of qualification workflows for the Nicolet iN5 microscope.

Analyze peak areas with the Peak Analysis tile

The Peak Analysis tile now supports the Peak Area and Peak Area Ratio operations.

Microscopy**Support for the Nicolet iN5 Microscope**

OMNIC Paradigm software now supports the Nicolet iN5 microscope. See the new Nicolet iN5 Microscope with OMNIC Paradigm software user guide for more information.

Apply atmospheric suppression after collecting data

You can now apply atmospheric suppression to your session data after finishing your measurement. Previously, you had to set this before measuring.

Live spectrum view shows interferogram minimum, maximum, and range values

The live spectrum view now shows the minimum and maximum voltage for the interferogram and the total difference or range.

Better filters and search with security

When finding saved sessions, you can now use security-related filters to find sessions more quickly. Before, you could do this with measurements and time series data but not with sessions.

The Live Spectrum pane shows a saturation warning

The Live Spectrum pane now shows a warning that the detector is saturated when the interferogram voltage is too high.

Use the RaptIR microscope as a right-side emission source

If your microscope is installed on the right-side of your spectrometer, you can now use it as emission source. Select right-side collimated as your source in the software.

The camera view available on the dashboard

We added the Camera View to the toolbar on the dashboard so that you can more easily view your sample before you start your session.

Added Roundness to particle analysis results

Particle analysis now shows a value for roundness in addition to the previous results.

Raman Module: Turn off the laser after a period of inactivity

When using the Raman module, you can now have the laser turn off automatically after a set period of inactivity. This can help protect your sample from accidental damage.

Raman module: The system will automatically cancel

If you open the accessory door or turn the laser off while collecting data, the system will now automatically cancel and will stop collecting.

Resolved Issues

General Features

Improved spectral images in reports

Reports now show a smoother, higher-resolution image of your spectra.

Reports from a Factory Qualification workflow did not always open in the Touchscreen view.

This has been resolved the reports now correctly open when using the Touchscreen view.

Unexpected initial value when calibrating the laser

When calibrating the laser, if the actual laser frequency was outside of the range the software expected, the software would start the calibration at a default value before calibrating. Calibration was working correctly but the screen showed an incorrect starting value. The software now shows the correct, actual starting frequency.

Problem with navigation in the Touchscreen view

When using the Touchscreen view, when doing a Search or QCheck analysis, if you set your Final Format to Single Beam, you may have been unable to navigate to other setup tabs, such as the Summary tab. Single Beam was not a valid option for these types of analysis, so we removed this option and you can no longer encounter this issue.

Missing result in the Quantification and Algorithms Workflow report

The Quantification and Algorithms workflow report was missing the result of the Similarity Match test. The test was still running but the report was not showing the result. This is fixed and the report now shows the Similarity Match result.

Default time range is now All instead of Past Week

By default, the measurements pane now shows you all your measurements, reports, and other saved data rather than showing only data collected in the past week.

You can no longer set your beamsplitter in the software if you do not have an ABX.

It was possible to select a beamsplitter in the software that was not actually installed in the instrument. Now, if you do not have an ABX installed, the beamsplitter is read from the instrument and cannot be incorrectly changed.

Microscopy

Improved file handling when closing a session

Previously it was possible to close the software without saving your session. Now when you close a session, you always have the option to save your data or to cancel and continue working.

Improved the circularity calculation in particle analysis

The previous calculation for circularity when doing particle analysis was incorrect. We have improved the calculation and now the results are more accurate for particles with a high value for circularity.

RaptIR microscopes no longer incorrectly report that the detector is not optimized

For RaptIR microscopes that did not have a swappable detector, the software sometimes incorrectly reported that the detector needed to be optimized. This has been fixed and you will no longer see this message on these systems.

You can set different scan numbers for each point in the region queue

In earlier versions of software, all points were measured using the same number of scans. Now you can set a separate scan number for each point.

Add comments and custom fields to time series measurements.

Now you can add comments and custom fields to time series data, just like you could with standard measurements previously. To add a comment or a custom field, select Time Series in the measurements pane of the dashboard and then select More to view details. Previously, these fields were not working correctly.

Corrected the area % calculation in MCR analysis

The area percent value was incorrect when doing MCR analysis. This is fixed and now shows the correct area percent.

The stage moves automatically when prompting you to insert or remove the ATR attachment.

When the software prompts you to insert or remove the ATR attachment, the stage now moves automatically to provide clearance.

Fixed the option to use the analyzer when using a polarizer

In previous versions, when using the polarizer with a RaptIR microscope, the No Analyzer option doing the opposite of what was desired. Now it is fixed and selecting No Analyzer will move the analyzer out of the beam path.

Known Issues

Repeated prompt asking if you trust the connection to a Nicolet Summit or Summit PRO spectrometer

When connecting to a Nicolet Summit or Summit PRO spectrometer with a built-in computer, a prompt may appear asking if you trust the connection. This prompt should appear only once and then remember your response. However, there is currently an issue that may cause this prompt to appear every time you start the software and connect to the instrument.

Thermo Software IQ reports missing files after upgrading from version 2.3

If you are upgrading from version 2.3, Thermo Software IQ may show that there are missing files after installing the new version. To fix this issue, repair the installation using the operating system tools. When the OMNIC Paradigm software installation screen opens, select Repair.

You may encounter an error during installation.

If you see a message during the software installation that says –an error has occurred during installation of OMNIC Paradigm,– click Yes to cancel the remainder of the installation. Restart your computer and then start the installation again. This should resolve the issue. If the issue persists, contact a support representative.

Canceling the low-magnification mosaic stops all automation

If you cancel the low-magnification (such as 4x) mosaic, the system should still switch to the high-magnification (such as 15x) objective and perform autofocus. Instead, it does not switch or autofocus automatically. To bring the sample into focus, change objectives in the software and use the autofocus tool.

OMNIC Paradigm v2.4

Release Date: July 2023

Supported Operating Systems: Windows 11 64-bit; Windows 10 64-bit

New features in OMNIC Paradigm software

General Features

Support for FT-Raman with the Raman module

OMNIC Paradigm software now supports FT-Raman measurements using the Raman module with a compatible spectrometer.

Bundle log files

Use the Gather Log Files tool to quickly package your log files and share them with a support representative. This will help us better diagnose and resolve any issues.

Clear all annotations

You can now delete all spectral annotations with just one click, instead of having to manually remove each annotation one by one.

Reset spectrometer

Use can use the Reset Spectrometer tool to move internal components back to the default position and more easily return to an ideal state.

Time Series Measurements

Identify peaks in Time Series data

Like Mercury GC in OMNIC software, the Identify Time Series Peaks search in OMNIC Paradigm software helps you identify materials at different points in your time series measurements.

New report template for Identify Time Series Peaks search

With the new report template, you can save and print your Identify Time Series Peaks search results.

Post-processing atmospheric suppression for Time Series measurements

You can now apply atmospheric suppression to time series data after the measurement. Previously, you had to apply the correction during the measurement.

Workflows and Packages

Sub Workflow tile

With the Sub Workflow tile, you can run another workflow as part of your main workflow, and you can send and receive specific data between them.

Use Workflow variables in the name of template reports

Use a variable in the name of a template report in your workflows to keep your reports organized and easy to find.

Microscopy

The live spectrum view displays the signal min/max

Now you can see the signal maximum and minimum values in the live spectra view.

The software can detect if the microscope is no longer connected (unplugged or turned off)

Previously, the software might not recognize if you suddenly lost connection to the microscope.

Can close the session from the close session dialog

We added a close button to the Close Session dialog to make it easier to end your session.

Resolved Issues

Time Series Measurements

Now you can import TGA files from Mettler Toledo instruments

Before, you could only import TGA files from TA Instruments products.

Microscopy

The mosaic opacity image slider now works correctly with 4x and 15x mosaic images.

The slider was not correctly blending these different mosaic images, but now it works correctly.

You no longer see errors related to the RaptIR microscope when it was not selected as the active sampling location.

Before, the software would sometimes show error messages related to the microscope even when the microscope was not in use as your active sampling location.

Corrected an issue causing missed scans

During the measurement, stage movement would occasionally cause missed scans in line and area regions. We have introduced some changes to prevent these missed scans.

Known issues

General Features

You must prepare your database before restoring a backup created in v2.2 or earlier

If you are using the default database and have a backup created in OMNIC Paradigm v2.2 or earlier, you must prepare your database before you can restore the backup. See [Preparing to restore database backups from earlier versions of OMNIC Paradigm](#) at <https://knowledge1.thermofisher.com> for instructions.

Selecting Single Beam as your final format can prevent some navigation

If you have your Final Format set to Single Beam, you may see an error indicating that navigation is blocked when you try to view Search Setup or QCheck setup. In the Touchscreen view, you may be blocked from navigating to some other tabs. This is expected because this format is not compatible with those features, but the message and navigation errors are incorrect. Change your final format to another option to use these features.

Microscopy**After canceling a mosaic on the 96 well plate it never switches to the 15x to autofocus**

When you cancel the mosaic capture, the system should switch automatically to the 15x objective and begin autofocus. When you are capturing a 96-well plate mosaic, the system does not do this and you must switch manually in the software and then bring your sample into focus.

OMNIC Paradigm v2.3

Release Date: April 2023

Supported Operating Systems: Windows 11 64-bit; Windows 10 64-bit

Before upgrading to version 2.3

Back up your database before upgrading

If you are using the default MariaDB database, back up your database using the Database Backup tool in the software before upgrading. Version 2.3 of OMNIC Paradigm software upgrades the version of MariaDB, so you should have a backup available in case you have any problems with this upgrade and need to recover your data.

If the installation fails during the Instrument Support step, select Yes to cancel the remainder of the installation. Return to the beginning and attempt to install the software again. This should resolve the issue. If it does not, contact technical support or your sales representative.

New features in OMNIC Paradigm software

Import qualification standards

With the new qualification standards tool, you can import DST and QDF standards files and track expiration dates, serial numbers, and more conveniently in the software.

Straight line

Use the straight line tool in the Processing menu to replace a region of the spectrum with a straight line. As with Blank Region, this is useful for removing unwanted features of your spectrum.

Post-processing atmospheric correction

With single measurements, you can now apply atmospheric correction after the measurement is complete. Before, you could only apply the correction before measuring data.

Add many spectra to a library at once

You can now add many spectra to a custom library at once. Before, spectra could only be added one at a time.

NIR Sample compartment qualification workflows

The software now features PHEUR and PV qualification workflows for the NIR Module.

Resolved Issues

Database backups were taking up extra disk space

In previous versions of the software, backing up the database would create extra, duplicate files rather than overwriting the existing backup files. These duplicates could be very large files that would eventually fill your disk space. This is now fixed so that when you back up your database, the new data replaces the old data rather than creating extra files.

Reports now show signatures when you are using Security Suite software

Reports now show digital signatures used with Security Suite software.

The lightbar on Summit spectrometers connected with by USB was not responsive

The Lightbar was not responsive to commands from the software if the instrument was connected with USB. The Lightbar now works correctly over USB.

Changes made to library reader to account for older libraries with different data structures

Some older libraries used in OMNIC had a different data structure that was not supported in OMNIC Paradigm software. We have corrected this issue so that these libraries can now be used.

Added username to reports

The windows account username is included in the reports generated in the software.

We fixed a bug in Advanced Spectral Math

A bug in Advanced Spectral Math prevented you from calculating A/B. This worked in regular spectral math but not Advanced Spectral Math. This has been fixed.

New features and resolved issues for FTIR Microscopy

New features

Measure Time Series data

Now you can measure Time Series data. With a Time Series analysis, you can measure a series of data to identify and analyze change over time, such as in a TGA or GC analysis.

Identify components in time series data

Use Search in your Time Series analysis to identify components in your data. This search is similar to Mercury TGA in OMNIC software and uses MCR and multi-component search to show you what components appeared during your analysis and when they were present.

Import TGA data

If you are measuring TGA data on a TA Instruments analyzer, you can import a TGA file to add weight, temperature, and derivative weight to your profiles.

Single point measure on demand

Added the ability to measure a spectrum at any time and add it to the dashboard. A button was added to the Live Spectrum view that will start a single point collect. The resulting spectrum can be found on the dashboard in the →Measurements← section.

Backgrounds are now placed at the reticle when the background tool is selected

When the background tool is selected, a background point is automatically placed in the center of the field of view. This allows the user to quickly select a background they have found before they touch the background tool.

Added "return to mosaic" option when using the slide holder reference background location

When using the fixed background reference location, an option has been added to the right hand menu that returns the stage to the center of the initial mosaic.

Support for other objectives

Added support for 10x and 40x optical objectives as well as a Grazing Angle objective, and Diamond ATR.

Resolved issues**Enable "measure background once" for points.**

With →measure background once← selected on the dashboard, after an initial measurement, any subsequent point measurements no longer trigger a new background to be measured.

Improvements to stage control

Improvements have been made to address occasional stage timeouts.

No duplicate request to sign when renaming session

When renaming a Session file with Security Suite software, a duplicate request to sign the file has been removed.

RaptIR error states no longer reported until RaptIR beampath is selected

Camera, stage, and other RaptIR specific error or status dialogs are no longer checked until the RaptIR beampath is selected.

Imported sessions displayed correctly

Fixed situation where imported sessions may not be displayed. Note: large session files still take time to import and will not appear until that import has completed.

Known Issues

Cannot apply atmospheric suppression on Time Series and microscopy session measurements after data measurement

Currently, you can apply atmospheric suppression from the Processing menu to single measurements after they are measured. However, you cannot use this feature with measurements that you collected as part of a Time Series measurement or from a microscopy session. These measurements record a different set of data and do not have the information required for atmospheric suppression. Note that you can use atmospheric suppression during these measurements. You just cannot apply it after the measurement is complete.

OMNIC Paradigm v2.2

Release Date: September 2022

Supported Operating Systems: Windows 10 64-bit

New features in OMNIC Paradigm software

Time-Series Analysis

In version 2.2, OMNIC Paradigm software introduces Time-Series analysis. Time-Series analysis is useful for exploring how sample measurements change over time. For example, you can open a collection of standard measurements to see if your measurements remain consistent throughout a given week or month, helping you identify trends in your data. In version 2.2, you can analyze data in Time Series but you cannot yet collect data directly as a Time-Series Analysis.

Offset scale

Use Offset Scale in the Spectra view to offset your spectra somewhat in an overlay view. Offset scale can help you visually compare peaks.

New features for FTIR microscopy

The Live Spectrum control has been moved from the camera view to the toolbar.

The Live Spectrum control is now in the toolbar and easier to access. When you're using an IR capable objective, use the Live Spectrum control to toggle the live view of the spectrum.

Resolved Issues

Historical results table in workflows

The historical results table in workflows was not correctly showing all results. This is now fixed.

Session files are now backed up and restored when you back up or restore the database

Known Issues

Display scale resets to Full XY Scale after exiting zoom

Previously, only the portion of the session data that was saved in the database was backed up. Now, the entire session is backed up and restored when you back up and restore your database. In the spectra view, the display resets to Full XY Scale after zooming in on a portion of the spectrum.

OMNIC Paradigm v2.1

Release Date: July 2022

Supported Operating Systems: Windows 10 64-bit

New features in OMNIC Paradigm software

Contaminant analysis: Identify contaminants in your sample

Use Contaminant Analysis to quickly identify and quantify potential contaminants in your sample. You provide a known material, and OMNIC Paradigm tells you what potential contaminants are in your sample.

Data smoothing: Reduce noise in your spectra with data smoothing

Use Smooth in the Processing menu to reduce noise in your spectra. Apply either automatic smoothing for fast improvements or fine-tune the smoothing by adjusting how the Savitsky-Golay algorithm is applied.

Normalize: Make comparison simple by normalizing the scale of spectra

You can now change the Y-axis scale of spectra to a "normal" scale, in which the Y values of the data points range from 0 absorbance units for the lowest point to 1 absorbance unit for the highest peak or from 10% to 100% transmittance. These normal scales are typical of spectra in commercial libraries.

Clean Up Database: Keep your records tidy with the database cleanup tool

With the new database cleanup tool, you can automatically delete old measurements when they reach a preset age.

Search setup shows the current spectrum

If you open the Search Setup from the Spectral view, the region selection now shows your currently selected spectrum instead of the default example spectrum, making it easier to specify regions around peaks in your specific spectrum.

Filter records by signature status (with Security Suite software)

If you are using Security Suite software, you can now use the Signature filter to find records based on their signature status. For example, you can now quickly find all your records that need to be approved and approve them all at once.

Print the system status

Now you can print your system status from the System Status dialog.

New features for FTIR microscopy

Polarizers are enabled

If your Nicolet RaptIR FTIR microscope includes the optional polarizers, you can now control the visible and IR polarizers in the software.

QNT methods can be used as a profile type

You can now use a quant method created in TQ Analyst software as your chemical image profile in FTIR microscopy. The quant profile can be applied only after collecting data.

Automatically move the stage to a background reference position

When using the RaptIR sample holder, you can automatically move the stage to the built-in reference location for easier background collection.

Switch between three objectives

If you have three objectives installed, you can now easily cycle between them or choose a specific objective.

Additive mosaics

Move the stage and collect a new mosaic (high or low magnification) and add it to your mosaic sky view. Makes it easier to examine a large area of your sample or to focus on a new portion of the sample.

Analyze MAP files from OMNIC software

Open .map files created in OMNIC software and automatically convert them to a .session file that you can explore in OMNIC Paradigm software.

Import / Export RaptIR Settings

Now you can export and import your saved settings used with the Nicolet RaptIR FTIR microscope, just as you could for spectroscopy settings.

Delete sessions to clear space on your system

Previously, you could not delete a session. Now you can right-click a session on the dashboard and delete it.

View the exact stage position

In the microscopy session view, you can now see the exact X, Y, and Z stage position.

Resolved Issues

Workflow editor: Sample prompt screen was not able to display a PDF

Previously, if you added a PDF to the Sample Prompt screen in a Measure workflow tile, the PDF would not be saved with the prompt and could not be displayed. Now the PDF is correctly attached to the Sample Prompt.

Workflows: The Equation tile and Variable tile would break if you copied or renamed a workflow

Variables that used the workflow name were not updated if you copied or renamed the workflow, which caused the tiles to break. Now the variables are automatically renamed to match the updated workflow name.

If you created workflows in earlier versions of the software, you need to update your Equation and Variables tiles manually before the variable can be renamed automatically. To update the tiles, open them and replace any variables so that they use the new workflow name. Then close the tile and save the workflow.

When you have an accessory installed, the Settings list on the dashboard shows only the settings that were created with the matching accessory.

Previously, the list showed all settings, including those that were created for a different accessory and not useable by the accessory you have installed. Now the system only lists settings that were created for the currently installed accessory.

We repaired Restore Database, so you can once again restore from a previously backed up database.

With the 2.0 version of OMNIC Paradigm software, you could back up your database but not restore it. Now, Restore Database is once again working correctly.

Known Issues

The database backup tool backs up only a portion of session data.

Session data contains two parts: a portion of the session is stored in the database and a portion of the session is saved in files on the disk drive. The database back up tool in OMNIC Paradigm software backs up only the data stored in the database. To ensure you can restore your data, you must use a backup utility program to back up the files stored in the following directory:

C:\Users\Public\Documents\thermo scientific\omnic paradigm\Sessions

The polarizer cannot be used to measure lines, only areas and points.

Currently, the polarizer can be used to measure areas and points, but not lines. If you draw a line and then enable the polarizer, the line will be measured with the polarizer at only the fixed, starting position.

ATR settings must be adjusted and saved for each new session

Currently, every time you start a new microscopy session using ATR analysis, you must open the ATR Contact dialog, change the settings, and then save the changes.

RaptIR qualification workflows may fail if the polarizers are in the beam path

If your microscope has the optional polarizers, make sure they are moved out of the beam path before you run the qualification workflows. If they are left in the beam path, the data will be poor and the tests may fail.

A new background measurement is collected before measuring points

When measuring points, a new background measurement is always collected before measuring any points, even if you accepted and collected a background measurement manually. The correct location is used, but the system performs an extra step.

Returning to the dashboard returns the visual polarizer to the default settings

If you return the dashboard during your microscopy session, the visual polarizer settings are returned to their default position.

OMNIC Paradigm v2.0

Release Date: February 2022

Supported Operating Systems: Windows 10 64-bit

New Features

New FTIR microscopy tools and support for Nicolet RaptIR FTIR Microscope

OMNIC Paradigm software now includes a new interface and set of tools for FTIR microscopy with the Nicolet RaptIR FTIR Microscope.

Support for Nicolet iS50 spectrometer and common sampling accessories

You can now use OMNIC Paradigm software to configure and run the Nicolet iS50 spectrometer and sampling accessories. Supported accessories include the built-in ATR module, the Smart iTR, the Smart Diffuse Reflectance, the Smart NIR Integrating Sphere, the Smart Golden Gate, the Smart iTX, the Smart ARK, Smart OMNI-Sampler, Smart SAGA, and the Smart OMNI-Transmission.

Better multi-tasking with tabs

The spectra and session views support a tabbed view, so you can open measurements in separate tabs.

Workflow enhancements

The Measure tile in Workflows now includes more instrument and measurement settings, including gain, aperture, sample spacing, and zero fill.

Resolved Issues

Operator view: Workflows report that a workflow is already running

When using the Operator view, if you tried to start a workflow, the system would sometimes show that a workflow was already running in the background.

Optical Resolution tests failing in CP, JP, and Factory Qualification workflows

"A change was made to the Optical Resolution tests in the –Nicolet FTIR - CP Qualification–, –Nicolet FTIR - JP Qualification– and –Nicolet FTIR - Factory Qualification– workflows. This change makes the measurement immune to baseline shifts caused by variations in the finish of the Polystyrene standard.– This improvement to the measurement is consistent with the approach used in OMNIC ValPro tests.– Customers upgrading from OMNIC Paradigm v1.9 will observe larger reported values for these tests after upgrading to OMNIC Paradigm v2.0.– This is expected.– All previous results are valid.– This change is just an improvement to the measurement."

Known Issues

Measurements collected in a workflow may show an invalid signature

Occasionally, when measuring and signing data in a workflow, the signature event may incorrectly occur and be saved before the measurement event. This can happen because all measurement data is stored at once, rather than in a specific, predefined order. If this happens and the data is saved out of order, the measurement shows an invalid signature since it appears that the data was changed after it was signed.

When collecting very large maps, the computer may enter power saving mode and suspend the USB devices

If you are collecting large maps, such as large area maps, the computer may enter a power saving mode and suspend the USB devices, interrupting the collection and disconnecting the mouse and keyboard. To ensure that the collection finishes, disable "USB selective suspend" settings in the Windows power options.

Cannot access QCheck Setup in the Touchscreen interface

When viewing a spectrum in the Touchscreen interface, the menu item for QCheck Setup appears enabled but does not open the setup screen. To edit your QCheck settings, select QCheck from the Home screen.

OMNIC Paradigm 1.9 HF2

Release Date: October 2021

Supported Operating Systems: Windows 10 64-bit

Resolved Issues

Improved services for distributed installations of OMNIC Paradigm software with Security Suite software

Modified service startup logic for the IR Instrument Engine to ensure that the service responds to the Windows service control manager in a timely manner.

OMNIC Paradigm v1.9 HF1

Release Date: October 2021

Supported Operating Systems: Windows 10 64-bit

Resolved Issues

Workflows were returning incorrect results on systems using certain language settings

In version 1.9, if you were running your system using languages that use the comma as a decimal separator, workflows would return incorrect results.

OMNIC Paradigm v1.9

Release Date: October 2021

Supported Operating Systems: Windows 10 64-bit

New Features

Use Reprocess in the Process menu to transform the original interferogram data for your spectrum with new settings

With Reprocess, you can transform your original data to better match library or other reference spectra, giving you a more accurate comparison.

With Blank Regions in the Process menu, you can clear unwanted data from your spectrum

Blanking a region is useful when your spectrum contains unwanted noise that would otherwise interfere with your analysis. Use Blank Regions to clear, or delete, a region of the spectrum. Blank Regions is also available in the Processing tile in Workflows.

You can now calculate average and standard deviations of spectra using the Statistical Spectra tool in the Process menu

With Statistical Spectra, you can generate new spectra that represent the average or standard deviation of 2 or more spectra. You can also use Statistical Spectra in the Processing tile in Workflows.

Add custom logos to reports and template reports

Go to Configure > Options to use your own company logo in reports and template reports. Your logo replaces the default Thermo Scientific logo on any custom reports you create and any template reports created in a workflow.

Workflow enhancements

Find Peaks, Blank Regions, and Statistical Spectra are now all available in workflows.

Enhanced system status information

The system status information has been updated to provide more accurate information. New icons indicate if your system is using security or not, clearer messages describe connection status, and updated messages help you troubleshoot any potential issues.

Thermo Scientific Web API Server requires inbound connections on TCP Port 9004

The new Thermo Scientific Web API Server is required for instrument connections. Make sure your firewall settings allow inbound connections over TCP Port 9004 on Private, Public, and Domain profiles.

Resolved Issues

Spectra in workflows are automatically deresolved to match quantification methods

Previously, in a workflow, if the resolution of your spectrum did not match the data in a quantification method, the method would fail. Now, the resolution of the spectrum is automatically lowered, or deresolved, to match the quantification method.

Known Issues

You cannot reprocess older sample measurements that were collected in a workflow

In OMNIC Paradigm software versions 1.8 and earlier, any sample measurements collected in a workflow stored interferograms incorrectly. Reprocessing these measurements will result in incorrect results. Measurements that you collect in version 1.9 and later can be reprocessed correctly.

When installing OMNIC Paradigm with Security Service pack, the installer incorrectly attempts to install Audit Manager software on the client

To install Paradigm with Security Service Pack on a distributed installation, run Start.exe on DVD 1 on the server. When prompted, select –initial installation.– On the client, go to Apps and Features and uninstall Audit Log Service, if it is present. Then, run Start.exe on DVD 1. When prompted, select –Subsequent Instruments.– When DVD 1 is complete, run Start.exe on DVD 2.

OMNIC Paradigm v1.8

Release Date: June 2021

Supported Operating Systems: Windows 10 64-bit

New Features

Support for more Quantification Methods

Now you can use five more quantification methods in OMNIC Paradigm software, including –

- QC Compare
- Search Standard
- Distance Match
- SMLR (Stepwise Linear Regression)

- PCR (Principal Component Regression)

See the help information TQ Analyst software for more information on these quantification methods

Copy and paste spectra to other applications

Copy and paste spectra from the spectra view to external applications, including office applications or image editing software.

More security controls for creating and managing settings

If you are using OMNIC Paradigm software with Security Suite applications, you can now set Access Controls for the New, Rename, Save, and Delete buttons for measurement settings. There are now also audit events for logged for these and other modifications. You can also control permissions for the More button to restrict access to advanced settings.

Resolved Issues

Multi-component search was not respecting regions

If you set limited regions in your Search Setup for multi-component search, the entire range was searched. Now, multi-component search correctly respects the specified range.

Multi-component search report now shows the selected composite result

Previously, reports for multi-component search results showed only the first composite result. Now, the report shows whichever composite result you have selected when you create the report.

Known Issues

OMNIC Paradigm software no longer supports Oracle 12c Release 2 or 18c for the database engine.

If you are already using Oracle 12c Release 2 or Oracle 18c for your database engine, you can continue to use them, but you should consider upgrading to Oracle 19c for the best support. See Oracle's help documentation for more information on upgrading your database.

If you have upgraded from Paradigm 1.6 (or earlier) to 1.7 (or newer), you may be unable to link your instrument to Thermo Fisher Connect.

If you have an issue linking an instrument after an upgrade:

1. Delete these folders if they exist:

C:\ProgramData\Thermo Scientific\Paradigm\deeplaser\

C:\ProgramData\Thermo Scientific\Paradigm\deeplaser-1.8.4\

2. Reboot the computer.

OMNIC Paradigm v1.7

Release Date: April 2021

Supported Operating Systems: Windows 10 64-bit

New Features

Support for the Nicolet Summit OA spectrometer

OMNIC Paradigm software now supports the Nicolet Summit OA FTIR spectrometer. The software comes pre-installed on all Summit OA spectrometers.

Link your instrument to your Thermo Fisher Connect account

Use the Instrument Health feature in the software to link your instrument to your Thermo Fisher Connect account.

Run an Executable file from within a workflow

With the Run Program tile, you can run an EXE file from within a workflow. Pass arguments to the EXE file and use any returned values as variables in your other workflow tiles.

Resolved Issues

The software notifies you if the security services connection is lost

It was possible for the software to become disconnected from security services running in the background without providing any notification. Now, if the connection is lost, the user is notified and is forced to exit the software.

Audit Manager software reported that a workflow was **Finished** even if it was exited early

When canceling a workflow early, the Audit Manager software displayed **Finished** in the audit event. Instead, it now shows **Cancelled** if the workflow was exited early.

Custom reports created in workflows now correctly encode all characters

Custom reports created with a workflow did not correctly encode some characters. These reports now correctly use UTF-8 character encoding. The fix does not correct previously created reports, but it does apply to your current workflows.

Known Issues

You cannot use region selections with a multi-component search

Multi-component search does not use any regions you specified in search setup. The regions correctly apply to a correlation search, but not to a multi-component search.

OMNIC Paradigm v1.6 HF1

Release Date: February 2021

Supported Operating Systems: Windows 10 64-bit

Resolved Issues

Cloud Connector could not fully connect

Several files needed by Cloud Connector were not installed. We have restored these files so that Cloud Connector can fully connect.

OMNIC Paradigm v1.6

Release Date: December 2020

Supported Operating Systems: Windows 10 64-bit

New Features

Custom labels and annotations

You can now add custom annotations and peak annotations to spectra. Your annotations are displayed on any reports you create.

Add tables to custom reports in workflows

Add a table of results to custom reports in your workflows. The table displays results from the current run and from previous runs.

Derivative in the Processing tile

Calculate first and second order derivatives with the Processing tile in workflows.

Run a workflow automatically

Use the Auto Run feature to schedule a package workflow to run automatically in Operator mode.

Resolved Issues

Axis labels were too big on exported reports

Labels on reports were sometimes too large and overlapped the data. The labels are now a more appropriate size.

The handles to adjust your selection with Find Peak were too small

We increased the size of the handles to adjust the Find Peak region so that they are easier to use.

Default file path changed from Schema to Paradigm

Previously, packages and workflows used a default file path that included the word Schema. We have updated this to say Paradigm instead. The update does not affect any current data and the system will continue to use your current file location.

There was not a notification when the database became disconnected

If the database became disconnected while you were collecting data, there was no notification letting you know that your data was not being saved. Now, a notification alerts you that you need to restore the database connection. In Operator mode, you are prevented from running a workflow while the database is disconnected.

Known Issues

You cannot define custom colors to use with annotation tools

You can choose colors to use with annotation tools, but you cannot currently specify your own color. The Define Custom Color tools are disabled.

Align and Calibrate tools are incorrectly disabled

The Align and Calibrate menu options are sometimes incorrectly disabled after previewing a background or viewing a spectrum. If the options are disabled while you are viewing the dashboard, click Dashboard in the toolbar again (even if you are already viewing the dashboard) to enable Align and Calibrate.

OMNIC Paradigm v1.5 HF1

Release Date: November 2020

Supported Operating Systems: Windows 10 64-bit

Resolved Issues

The software did not always close after running workflows

We fixed an issue that prevented you from exiting the software after running a workflow.

Updating the software caused multiple versions to appear in the list of installed applications

After updating the software, you may have seen multiple versions in your list of installed applications. Now only the latest version appears.

OMNIC Paradigm v1.5

Release Date: September 2020

Supported Operating Systems: Windows 10 64-bit

New Features

Support for the Nicolet Summit LITE spectrometer

You can now connect to and operate a Nicolet Summit LITE spectrometer.

Develop and Run Custom Solutions with the Package Editor and Operator Interface

Use the new Package Editor to bundle workflows and their required files into RDEP files. Open and run package workflows in the Operator interface.

Spectral Math in Workflows

The Processing tile in Workflows now supports spectral math, including addition, subtraction, multiplication, and division using two spectra.

Measurements and Reports Created in Workflows Support Digital Signatures

When using Security Suite software, measurements and reports created in workflows now support digital signatures.

Resolved Issues

When Using a Discriminant Analysis Method with the TQ Analyst Tile, Class Names are Now Available as Variables.

Previously, Class Names from discriminant analysis were not available as variables which meant that some results could not be used in other tiles, such as the Decision tile.

The Match Settings Option in the Measure Tile Now Correctly Matches Zero Fill

When using the Match Settings option in the Measure tile, the settings did not correctly match the Zero Fill setting. We fixed this so the Zero Fill is correctly matched.

You can now install Paradigm successfully on non-English versions of Windows.

If you installed OMNIC Paradigm software on a non-English version of Windows 10, the software would hang when you tried to measure a sample. This is resolved and you can now run the software as expected on non-English versions of Windows 10.

Spectrum History Information Displays Correctly after Importing a SPA File that Was Created on a System using Double-Byte Characters.

The spectrum history information did not display correctly when importing a SPA file from a system that was using double-byte characters. The history is now correct if your system is also using double-byte characters. The history information may still have display problems if your system is using single-byte characters and you import a SPA file from a system using double-byte characters.

Known Issues

The Library Title Does Not Display double-byte Characters Correctly in the Library Manager.

When running the software with a system using double-byte characters, the Library Title field in the Library Manager does not display correctly.

Reports May Be Displayed Incorrectly in the Reports Pane

Occasionally, the reports pane will display a duplicate report after creating a new report. Additionally, the report preview image may not be updated and will show a different report than the currently selected report. These are display issues only and do not affect your data. Click Refresh in the reports pane to refresh the list. If this does not solve the problem, restart the computer to clear the duplicate reports.

OMNIC Paradigm v1.4

Release Date: July 2020

Supported Operating Systems: Windows 10 64-bit

New Features

Advanced Spectral Math

While standard spectral math supports spectral subtraction, addition, multiplication, and division using a single reference spectrum, you can now use Advanced Spectral Math to build custom equation using up to 10 reference spectra and using a wider range of powerful operations.

Revert Measurement

You can now revert your measurement to an earlier step in your processing and analysis, allowing you to undo any changes that degrade your data. Previously, you may have had to measure the sample again to have clean, unprocessed data.

Duplicate Measurement

With the new Duplicate Measurement feature, you can make a copy of a measurement from its current state or from an earlier step.

View Measurement History

You can now view the measurement history to quickly visually compare your measurement data at different stages of processing and analysis. For example, the measurement history view is great for quickly comparing the spectrum before and after applying a baseline correction.

Measurement History Report

The measurement history report displays the spectrum at each stage in you processing and analysis so that you have a convenient record of how the data was changed.

Export Spectra from Sub Panes

Previously, you could export only top-level measurements from the Results Pane of the spectral view. Now you can also export sub items, such as reference spectra or spectra used in spectral math operations.

Enhanced Security Features when Paired with Security Suite Software

We added new policies, access controls, and default settings to Security Administration software for managing OMNIC Paradigm. You can now prevent the measurement preview from displaying during measurement or disable the pause button during a measurement and an audit event is logged when a workflow is cancelled.

New Software OQ Procedure for OMNIC Paradigm v 1.4 and later

There is a new, updated Operational Qualification procedure for use with Security Suite software and OMNIC Paradigm software. The updated procedure includes changes to access controls and updated system policies.

Resolved Issues

Custom reports created in a workflow are now displayed correctly in print preview

When printing a custom report created in a workflow, the print preview screen showed a mostly empty page. This is fixed and the print preview now shows the custom report correctly.

The preview image for embedded workflows is now updated correctly

If you used the Embedded Workflow tile, the preview image wouldn't update to show any recent changes to the embedded workflow after you used the Update Embedded Workflow(s) command. The command now correctly updates the preview image so you can see the latest changes to the workflow.

New tags are now displayed immediately when added to a measurement

If you add a tag to a measurement and then immediately click **Manage Tags**, the new tag now correctly shows up immediately.

You can now import multiple SPA files at once.

Previously, an error occurred if you tried to import multiple SPA files at once. We fixed this so now you can import multiple spectra successfully.

Known Issues

It is possible to exit a workflow when working in a secure environment

If you are running a workflow in the touchscreen interface, the Home button in the menu is still enabled, allowing you to exit the workflow even if the prevent cancel policy is enabled.

OMNIC Paradigm v1.3 HF1

Release Date: May 2020

Supported Operating Systems: Windows 10 64-bit

Resolved Issues

The Spectrum Information Now Shows the Correct Detector Name

The spectrum information showed an incorrect detector name. It now correctly displays DTGS KBr as the detector in the in the Spectrometer tab of the Spectrum Information.

Cannot Click the More button in the Measurement Pane during Laser Calibration

Clicking the More button caused laser calibration to lock up. The button is now correctly disabled during laser calibration.

Commercial Library Spectra Cannot be Exported

When multiple spectra are selected in the Spectra view, only the non-commercial library spectra can be exported to a folder.

The iS5 System Recognizes when an Accessory is Removed

The iS5 system did not always recognize if an accessory was removed, which prevented the Laser Calibration from being performed.

Known Issues

Software Installation Status Icon Shows Simulation

After you install the software, it may show "Simulation (Nicolet iS5)" in the status icon. If this is the case, use the Connectivity menu's Connection command to reselect the iS5. When the switch is complete, ignore the status icon and leave the instrument connected to the PC's USB port. Close the software and reboot the PC. The status icon should now show: "Nicolet iS5".

OMNIC Paradigm v1.3

Release Date: March 2020

Supported Operating Systems: Windows 10 64-bit

New Features

Nicolet iS5 Support

OMNIC Paradigm software is now available to be installed on a computer controlling a Nicolet iS5 spectrometer. This software can be installed on any Windows 10 computer. The OMNIC Paradigm iS5 software is also compatible with our Security Suite software and can be used with a Distributed installation.

Discriminate Analysis

Discriminate Analysis quantitative method created in the TQ Analyst can be used in OMNIC Paradigm.

Options

You can now customize the color and line weight of spectra in the spectral display and set the number of digits shown on the display and in peak tables.

Faster Multi-component Search

Multi-component search is now at least four times faster. The total time for the search depends on the number of libraries used in the search, the number of spectra in the libraries, and the processing power of the computer.

Powerful New Workflow Tiles

We added four new, advanced workflow tiles to the Workflow Editor:

- Variable tile: Create custom variables or modify the value of an existing variable
- Equation tile: Use built-in functions and custom equations for calculations
- Embedded Workflow tile: Embed one workflow within another
- Workflow Table tile: Import a table of values to use throughout the workflow

Report Configuration

You can now configure reports to optionally show spectra, table data, and meta-data.

Translations

OMNIC Paradigm software is now available in Italian. The Japanese translation has been updated.

Security Suite New Features

All new options listed above are included in the Security Suite software updates for the OMNIC Paradigm software. Access Control policies are provided to manage users within the Thermo Scientific Security Administration application.

Resolved Issues

Spectral Name Changes Now Appear in the Spectral History

OMNIC Paradigm software now displays an entry in the spectral history for a spectral name change.

Fixed Crash Caused by Clicking in the Spectrometer tab

We fixed an issue that caused the software to crash if you clicked in the Spectrometer tab of the Spectrum Information.

Correct Number of Scans in Workflows for the French Translation

In the French translation, measurements in workflows allowed only scans of 1, 2, 3, or 4 and the scans entered were multiples of 256. Workflows now allow the correct number of scans.

Zooming in Multi-component Search Upper Pane is Now Reflected in the Lower Panes

The limits on the panes were not in sync when zooming (boxing).

Library Search in Workflows Now Correctly Handles Libraries of Different Ranges, such as Raman and NIR

If you used libraries with different spectral ranges in a search, such as FTIR, NIR, and RAMAN, the result would be "No search results found". The search now returns correct results.

In Spectral Math, We Changed the Sample and the Reference Positions

The Result is in the top pane, the Sample is the middle pane, and the reference is the bottom pane.

The Search Tile in Workflows Now Retrieves Libraries from all the Paths Defined in the OMNIC Paradigm Software

Previously, the search tile retrieved libraries only from the default OMNIC Paradigm library path.

Known Issues

Dashboard toolbar disappears and doesn't come back from a Workflow

This issue is caused due to an invalid workflow. Restart the software.

OMNIC Paradigm v1.2

Release Date: November 2019

Supported Operating Systems: Windows 10 64-bit

New Features

Workstation Support

OMNIC Paradigm software is now available to be used on a separate computer as workstation. This software can be installed on any Windows 10 computer. The Workstation software is also compatible with our Security Suite software and can be used with a Distributed installation.

Remote Connectivity

You can now control Nicolet Summit spectrometers remotely. Install OMNIC Paradigm Workstation software on a connected computer and use it to control the Nicolet Summit spectrometer. Connect over WiFi or Ethernet cable. **(See OMNIC Paradigm documentation for additional information.)**

Database Maintenance: Back Up and Restore

Back up and restore your default Thermo Fisher Scientific Built-in MariaDB by using the new database management tools. Use the Back Up tool to back up the database manually or automatically to a specified schedule. Use Restore to restore a previously saved database backup to the current database location.

QCheck now Supported with Workflows

Run a QCheck analysis with OMNIC Paradigm workflows. In the Workflow Editor, the QCheck tile can be configured with the same settings available in the OMNIC Paradigm desktop software. You can also include QCheck in a workflow when creating a workflow automatically from the Spectrum History Information.

Database Spectra can be Used with Workflows

When building workflows, you can now use the Load Spectrum tile to load data from the database rather than from only a saved SPA data file.

Kramers-Kronig Correction

Kramers-Kronig data correction is now available as a Processing option in the OMNIC Paradigm software and in the OMNIC Paradigm workflows.

Import and Export SPC Format Spectral Data

You can now import and export GRAMS SPC files from the OMNIC Paradigm desktop and touchscreen software. Additional file formats previously supported in OMNIC software can be converted using the TQ Analyst software and then imported into the OMNIC Paradigm software as either SPA for SPC file formats.

New Diagnostic Workflow for Testing ATR Accessories

A new diagnostic workflow is available to test the throughput of your ATR accessories. The workflow will walk you through the test to determine if your ATR accessory is working properly. Contact your Thermo Fisher Scientific Service Engineer for further information.

Translations Available

OMNIC Paradigm software is now available in the following languages: Chinese (Simplified), Japanese, Polish, French, Spanish and Russian.

Side Panel on Desktop Software Now has a Collapse Option

We added an arrow icon to the spectral view in the desktop software that you can use to collapse and expand the side panel.

Display Limits Options

You can now use the right-click menu in the spectral view to modify the display limits by entering the X and Y limit information. This option is available for both desktop and touchscreen.

Spectral Math Can Now be Used by Other Final Formats

Spectral math now works with single beam data.

Titles are Now Available in Overlay Mode of the Spectral View

Spectrum titles are now visible when in Overlay mode in the spectral view.

Security Suite New Features

All new options listed above are included in the Security Suite software updates for the OMNIC Paradigm software. Access Control policies are provided to manage users within the Thermo Scientific Security Administration application.

Resolved Issues

Workflow Generated Spectra with Attached Interferograms

OMNIC Paradigm software now handles interferograms attached to data that was collected with OMNIC Paradigm workflows similarly to data collected with the desktop and touchscreen versions of OMNIC Paradigm.

Clear Sample Name with Backspace Key

When changing the sample name using the backspace key, the previous name was not cleared properly.

Collect Background No Longer Disabled in Touchscreen

The Collect Background option is no longer disabled when the number of background scans is set to fewer than 10.

Create Report Not Working as Expected

We fixed issues that were causing Create Report to display different scaling and display limit information.

Spectrum Collection and Processing History was Not Capturing Title Change

Spectrum Collection and Processing history now shows any title changes for the spectral data record.

Select All was Not Processing All Selected Spectra

Select All was previously not operating on all selected spectra for processing functionality.

Removed Extra Dialogs that Appeared When Inserting and Removing Smart Accessories

We removed unnecessary dialogs that were appearing in the touchscreen interface when smart accessories were inserted or removed.

Collection & Processing Information for Zero Fill Reports Correct Values

Spectra collected using a workflow were reporting Unknown for the Zero Fill value in the Collection & Processing Information, but now display the correct zero fill values.

Number of Background Scans Value Not Set Properly

When trying to set the number of background scans for background options –Measure every _ minutes– and –Measure before sample,– the value could not be less than 10 and the tooltip was incorrect. These issues have now been corrected.

Smart Background Scans

Smart Background sometimes collected more scans than specified. It now collects the correct number of scans.

Improved Scroll Bars in Touchscreen Interface

We improved the scroll bars in the touchscreen interface to make them consistent and easier to use.

Peak Labels no Longer Cut Off When Printing

Peak labels displayed on the spectral display are no longer cut off when printing.

Hide All Now Hides All Spectra

The Hide All option on the spectral display side panel did not always hide all spectra. This is now fixed.

Import SPA and SPC Files From a Network Location on an Instrument

Supported files can now be imported from both the local computer and from a specified network location.

Improved Speed to Index Large Amounts of Data

Indexing large amounts of data in the database was very slow but is now much faster.

Fixed Text Search with User Libraries

Text search sometimes failed when searching User Libraries, but it now works consistently.

Known Issues

Spectral Display for Interferogram, Single Beam or Final Format spectrum under More button on Dashboard can appear cut off

This issue can be solved by modifying your Display Settings for your computer. Under Display Settings in the Windows Settings there are two settings that need to be set to the recommended values:

- Resolution must be set to the recommended value
- Change the size of text, apps and other items needs to be set to 100%.

This may also require a reboot of the computer to get the display to show properly

OMNIC Paradigm v1.1

Release Date: July 2019

Supported Operating Systems: Windows 10 64-bit

New Features

Security Suite Support

OMNIC Paradigm software is now supported with the Security Suite software in both Single computer installation and the Distributed installation. Administration of policies is controlled using Security Administration and the Audit Trail information can be found in Audit Manager.

Update Feature

You can now monitor a network location or USB location for updates so that you can be notified automatically of new software releases.

Resolved Issues

Localization

We fixed localization problems that were introducing errors throughout the software, including the System Status dialog.

Cloud Connector Enhancements

Improved the Cloud Connector to make it more robust so that it can better handle when the internet connection is inactive or lost.

Gain and the Interferogram

The interferogram is now automatically updated when you change the gain settings.

Usability improvements for Touchscreen

You can now toggle and scroll the main menu when using the touchscreen interface.

Database Configuration (Touchscreen Interface)

If you cancel your changes when configuring your database, the changes are now discarded. Previously, unwanted changes were saved.

Confirmation Dialog Added when You Delete a Workflow

We added a confirmation dialog to verify that you want to delete a selected workflow before it is deleted.

Clear Spectrum from right click menu only cleared last spectrum when all spectra are selected

When all the spectra in the window are selected and Ctrl W or Clear Spectrum is used from the right click menu, only the last spectrum was cleared instead of all the spectra. Now, all the spectra are cleared from the display.

Acquire Menu Items No Longer Disabled

We fixed an error that was causing all items in the Acquire menu to be disabled if you ended a workflow early.

Missing Checkbox in the Touchscreen Interface

A checkbox you would use to specify the number of background scans is not present in the touchscreen interface. The checkbox is present in the desktop interface.

Known Issues

Run Workflow Button is Incorrectly Disabled

If the instrument is not ready, the Run Workflow button may be disabled.

History is Not Showing Correlation Search or Multi-Component Search Information

Spectral histories are missing information for Correlation Search and Multi-Component Search. This information does appear in the Collection and Processing information.

Changing Library Location Requires an Update to Workflow Search Tiles

If you modify the location of a library that you have referenced in a Search tile in a workflow, you must update the Search tile again before running the workflow.

OMNIC Paradigm v1.0

Release Date: May 2019

Supported Operating Systems: Windows 10 64-bit

New Features

Initial release

This is the initial release of the OMNIC Paradigm software.

Resolved Issues

None - Initial version

Known Issues

None

How to Contact Us

Current contact information is located at www.thermofisher.com

Select the –Contact Us– icon at the top of the screen

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