

OMNIC Release Notes

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About This Document

This document contains a revision history of OMNIC, including new features that may not be included in the User's Guide, resolved issues, and known issues.

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OMNIC 9.14

- **Build number:** 9.14.0.97
- **Release date:** January 2024
- **Supported operating systems**
 - Windows 10 64-bit
 - Windows 11 64-bit

New Features

None

Resolved Issues

Incorrect Spectral Resolution Reported on Some Systems

Spectra collected with Zero Fill set to None report half the resolution (e.g. collected at 4 cm⁻¹, reported as 8 cm⁻¹) on some systems. This is due to a bug in how the software handles the laser frequency correction when no zero fill is specified.

Auto Align Hangs on iN10 with Core Card 5

Auto Align fails to complete on some iN10 instruments with Core Card 5 due to an issue with peak hop rejection. Peak hop rejection has been disabled during auto align on the iN10 to prevent this failure.

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

Spectral Interpretation Does Not Display Expected Information Page

Spectral Interpretation requires Internet Explorer to work properly. Pressing the spy glass icon in the info column results in the user's default browser being opened, but no informational page being displayed on systems that do not have Internet Explorer.

OMNIC 9.13 Hotfix 6

- **Build number:** 9.13.6.1308
- **Release date:** November 2023
- **Supported operating systems**
 - Windows 10 64-bit
 - Windows 11 64-bit

New Features

Add Support for New MCT/A+ Detector

Add support for the new MCT/A+ detector. This detector is only available on the iS20 and iS50 instruments.

Added DDE Command to Run System Suitability

New DDE command named **SysSuitabilityRun** has been added to OMNIC. It accepts an optional parameter **auto** which will suppress the UI.

Resolved Issues

Bad Scan Counter Doesn't Reset

If a measurement has bad scans, the counter for bad scans does not reset when a new measurement is started until its first scan is completed.

QCheck Does Not Display the Correct Result

The QCheck command in OMNIC fails to display a result when there is a space character in the filename immediately preceding the file name extension (e.g. **Referentiespectrum_PVC EVA new .spa**).

Reprocess Command Produces Wrong Resolution

When an *.SPA file with saved interferograms is re-processed to a different resolution, OMNIC generates a new spectrum with the wrong resolution. For example, if the original is 0.5 cm^{-1} and the user selects "Reprocess to 1 cm^{-1} ", the resulting spectrum instead has a resolution of 2 cm^{-1} .

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

Spectral Interpretation Does Not Display Expected Information Page

Spectral Interpretation requires Internet Explorer to work properly. Pressing the spy glass icon in the info column results in the user's default browser being opened, but no informational page being displayed on systems that do not have Internet Explorer.

OMNIC 9.13 Hotfix 5

- **Build number:** 9.13.5.1294
- **Release date:** June 2023
- **Supported operating systems**
 - Windows 10 64-bit
 - Windows 11 64-bit

New Features

None

Resolved Issues

OMNIC reports incorrect resolution for collected spectrum on iS20

The wrong resolution to be reported on systems with a VCSEL that had an unusually low laser frequency.

OMNIC gets locked into one experiment file

Switching experiment files while using smart accessories would eventually lead to OMNIC no longer changing the experiment file when the user tried to do so.



See OMNIC Atlpys Release Notes and OMNIC SST Release Notes for additional resolved issues.

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

Spectral Interpretation Does Not Display Expected Information Page

Spectral Interpretation requires Internet Explorer to work properly. Pressing the spy glass icon in the info column results in the user's default browser being opened, but no informational page being displayed on systems that do not have Internet Explorer.

OMNIC 9.13 Hotfix 4

- **Build number:** 9.13.4.1282
- **Release date:** April 2023

- **Supported operating systems**

- Windows 10 64-bit
- Windows 11 64-bit

New Features

Future support for iS20

Add support for the iS20 to use new instrument hardware.

Resolved Issues

Smart Accessory experiment files not listed in Experiment Setup

Despite the appropriate experiment files being present on the system, they do not appear in the list in Experiment Setup when the accessory is present in the sample compartment.

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

OMNIC 9.13 Hotfix 3

- **Build number:** 19.13.3.1279
- **Release date:** January 2023
- **Supported operating systems**
 - Windows 10 64-bit

New Features

Future support for iS20

Add support for the iS20 to use new instrument hardware.

Resolved Issues

None

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

Smart Accessory experiment files not listed in Experiment Setup

Despite the appropriate experiment files being present on the system, they do not appear in the list in Experiment Setup when the accessory is present in the sample compartment.

OMNIC 9.13 Hotfix 2

- **Build number:** 9.13.2.1256
- **Release date:** October 2022
- **Supported operating systems**
 - Windows 10 64-bit

New Features

None

Resolved Issues

Crash when using both BDiagUSB and OMNIC

In certain service situations, using both BDiagUSB and OMNIC could result in one or both programs unexpectedly closing.

The "SpectrumHeaderToText" DDE command does not read dispersive Raman headers

The command was a custom command for a mid-IR user and did not consider the special parts of the Raman spectrum header. This is now properly handled, and the command will process dispersive Raman spectral header information.

Series Profile Setup Crashes

Performing Series Profile Setup on certain variants of series files can crash if the computer is not using English language settings.

Improved scan rejection

Peak hops could fail to generate rejected scans resulting in invalid spectral results.

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

Smart Accessory experiment files not listed in Experiment Setup

Despite the appropriate experiment files being present on the system, they do not appear in the list in Experiment Setup when the accessory is present in the sample compartment.

OMNIC 9.13 Hotfix 1

- **Build number:** 9.13.1.1229
- **Release date:** June 2022
- **Supported operating systems**
 - Windows 10 64-bit

New Features

Future support for iN10

Add support for the iN10 to use new instrument hardware.

Resolved Issues

Crash while initializing iZ10

Initializing an iN10 with an iZ10 would result in OMNIC crashing. Affects both old and new core cards

Crash when using both DDiag and OMNIC Picta

In certain service situations, using both DDiag and OMNIC Picta could result in one or both programs unexpectedly closing.

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

Smart Accessory experiment files not listed in Experiment Setup

Despite the appropriate experiment files being present on the system, they do not appear in the list in Experiment Setup when the accessory is present in the sample compartment.

OMNIC 9.13



See TQ Analyst release notes for other changes that may be seen in OMNIC.

- **Build number:** 9.13.0.1224
- **Release date:** April 2022
- **Supported operating systems**
 - Windows 10 64-bit

New Features

Inform users that an external executable is being run

OMNIC now warns each user the first time a request to run an external program is made (or example, when a program is run from a toolbar button). If the user allows the external program to run, the warning will not be displayed to that user again unless the program is changed. This warning was added to ensure users are aware a program that could potentially harm their computer is being run with their credentials.

Need to open and close the integrating sphere flag

With the NIR accessory for OMNIC, need a way to open and close the integrating sphere flag during data collect. This could have been added to the collect command, but an explicit command is also effective. The command syntax is `[SetNIRISFlag OPEN]` or `[SetNIRISFlag CLOSE]`.

Add ability to extract all spectra from a library and save the spectra

Add a DDE command `SplitAndMakeNew` that will take the spectra from a library and either write them back into a new library or write them as spa spectral files. The arguments to the command determine whether the new library is written or the spectra are saved as distinct spa files.

Add DDE command to split a bidirectional interferogram series file into the forward and reverse interferograms

This special, custom DDE command is called `SeriesOddEven` and it splits the contents of a bidirectional series file of the form `*ifg.srs`. It writes the interferograms (or absorbance spectra) to either of two directories `.\ODD` or `.\EVEN`.

Add autobaseline correct for map files

Add an autobaseline correct option for map files.

Open a tsv spectrum and write out as a wavenumber spectrum

Open a tsv spectrum (that is in the same form as a csv spectrum). Provide the ability to create as a wavenumber spectrum without interaction. Previously auto-opened as a wavelength file.

Save an accessible parameter that describes any data collect error in the pipeline

Add a collect parameter (`COLLECT OMNICCOLLECTERROR`) that holds a coded error from a problem that may have occurred during data collect. The no error value of this parameter is zero.

Generate a spectrum at many steps of the data collect pipeline

Based on a registry setting, generate a spectrum at various steps during Fourier processing to demonstrate how the processing alters the interferogram. The registry setting is under Nicolet Instrument\OMNIC as "TB2MakeSpecrum=1".

Resolved Issues

Collection and Processing System Status shows ValPro "Fail"

An extra blank line and then extraneous invalid results appear below the actual ValPro Qualification result. Remove these invalid lines to only show the correct (expected) results.

Enter a pathlength that will carry thru a series run

When a series run is started and the quant method associated with it has Constant or Known pathlength, then pass this pathlength information to the series data collect.

Signing a series file

Changes to allow series files to be signed in a DS environment.

There are occasional issue closing the search part of OMNIC

Fix an issue where the search parameters are not destroyed and eliminated when closing OMNIC. This removes the occasional issue.

The split bidirectional series collect failed

Fix a pipeline issue when creating a spectrum where data had been destroyed when it was still required. This fixed the special data collect for split bidirectional series experiments.

Occasional errors reading Perkin Elmer formatted spectra

NaNs were not checked when interpolating the Perkin Elmer data array.

Unable to read component and concentration info from a JCAMP-DX file in German

The comment information in the JCAMP-DX file should be written using English language delimiters. That allows them to be read properly. Also fix so that when component and concentration information is written to JCAMP-DX, that the text line begins with a (. This character was missing.

Remove repeated information from the spectrum comments section in JCAMP-DX spectra

Remove redundant background collect information and the instrument serial number from the JCAMP-DX comment information.

Add the spectrum file name and the reference file name to be QCheck report

Add the spectrum file name to the top of the QCheck report. Add a new column for the reference file name to the answer report for QCheck.

The maximum size of the series srs file and the max number of spectra doesn't seem to be correct

Changed to handle a maximum size of 1.5 GB per srs file. Also correctly set the expected size of each

spectrum in the series file. This is especially visible during 5 Hz high speed series data collect.

Known Issues

Unable to Collect Long, High Speed, Bidirectional Series Files for Long Times

With a computer with 4 GB of memory, you cannot collect more than 24 hours of high speed, bidirectional series data. This is not an issue with 8 GB of memory.

Smart Accessory experiment files not listed in Experiment Setup

Despite the appropriate experiment files being present on the system, they do not appear in the list in Experiment Setup when the accessory is present in the sample compartment.

OMNIC 9.12 Hotfix 6

- **Build number:** 9.13.6.1019
- **Release date:** November 2021
- **Supported operating systems**
 - Windows 10 64-bit

New Features

Future support for iS5

Add support for the iS5 to use new instrument hardware.

Resolved Issues

Communication failures with instruments on non-English versions of Windows

Addressed problems where system localization could cause instability in the instrument communication layer.

Access violation shutting down OMNIC

Shutdown code for OMNIC could cause an access violation to be logged in the Windows Event Log.

Known Issues

Problem pressing Run multiple times for Performance Verification

From System Status you are able to "Run" the "Performance Verification" tests. If you wish to run this a second time, then you must:

1. Close the "System Status Overview" window
2. Close the "PV Results Window" on the display

3. Go to the View menu and rerun "System Status..."
4. Run the "Performance Verification" tests again

OMNIC 9.12 Hotfix 5

- **Build number:** 9.12.5.1002
- **Release date:** July 2021
- **Supported operating systems**
 - Windows 10 64-bit

New Features

Command to copy a file from the OMNIC temp folder to a specified folder

Implement a DDE command called **RequestSecureCopy** that will copy a file from the OMNIC temp folder to a specified folder. The command is only available when Security is in use and can be controlled in TSA using an access control item called "Remote Secure Copy Request". The command syntax is: **RequestSecureCopy** **<SourceFileName> <DestinationFolder> <OptionalAuditEntryComment>**

Future support for iS5

Add support for the iS5 to use new instrument hardware.

Resolved Issues

None

Known Issues

None

OMNIC 9.12 Hotfix 4

- **Build number:** 9.12.4.993
- **Release date:** June 2021
- **Supported operating systems**
 - Windows 10 64-bit

New Features

None

Resolved Issues

Fix use auto save using title when greater than 99 characters

When using the feature save file using the title has more than 99 characters, it will crash OMNIC.

Known Issues

None

OMNIC 9.12 Hotfix 3

- **Build number:** 9.12.3.990
- **Release date:** April 2021
- **Supported operating systems**
 - Windows 10 64-bit

New Features

None

Resolved Issues

Fix laser calibrate special case

When starting laser calibrate with save interferograms turned off an error message will be shown.

Known Issues

None

OMNIC 9.12 Hotfix 2

- **Build number:** 9.12.2.985
- **Release date:** March 2021
- **Supported operating systems**

- Windows 10 64-bit

New Features

None

Resolved Issues

Changes for this release

The changes made for OMNIC are reflected in other release notes.

Known Issues

None

OMNIC 9.12 Hotfix 1

- **Build number:** 9.12.1.968
- **Release date:** February 2021
- **Supported operating systems**
 - Windows 10 64-bit

New Features

None

Resolved Issues

Unable to run series on a system with VCSEL laser

High speed (5 Hz) series data collection requires that the experiment be run with sample spacing equal to 2 (SSP=2). This was not supported for the VCSEL laser. Therefore could not run the series experiment on a system with the VCSEL laser. This is now supported.

Instrument status reported that a test failed when none appear to have failed on the iS20

The failure was caused when reporting a test that wasn't actually performed. In that case the failure was caused by limit checks that were too restrictive. Set to pass if the maximum limit and the minimum limit are both zero. Also set to true if the reading equals either the maximum limit or the minimum limit.

Memory leak uncovered in the DDE Run command

Fix a possible memory leak in the Run command when used with the -wait argument.

Instrument errors are not shown in the toolbar

Fix bug where errors reported by the instrument were overridden by the SPV status. So if the instrument reported an error, but there was no SPV error, no error was shown to the user.

Known Issues

None

OMNIC 9.12

- **Build number:** 9.12.0.928
- **Release date:** October 2020
- **Supported operating systems**
 - Windows 10 64-bit

New Features

Change the laser frequency in the current VCSEL single beam spectrum

Open a single beam spectrum and reset the laser frequency directly using `[SpCorrectReferenceLaser <laser_freq>]`.

Implement mailbox to pass TQ Analyst results to an external application

If requested, write TQ answers to a text file to be picked up by an external program. Update the normal Quantify DDE command with new commands called `QUANTIFYTOMAILBOX` and `QUANTIFYTOTQMAIL`. Add option to write answers during a series data collect.

Restrict data collect to not allow data collect from Summit instruments

Restrict data collect in OMNIC for Summit instruments by reading entitlements.

Command to shift a spectrum by a multiplicative value

Add DDE command `AdjustLimitsByFactor` to adjust a spectrum by the multiplicative factor that is the argument to the command.

Build a chemical map remotely

Recreate DDE commands that can be used to build a chemical map remotely.

Resolved Issues

Laser Calibration / Verification fails with spectrum collected at ssp=2

Allow ssp=2 reference spectrum or calibration spectrum to be used to calibrate the system (VCSEL) laser.

Problem extracting the instrument serial number from the spectrum comment to JCAMP-DX

The string that was the instrument serial number from JCAMP-DX had extra characters when extracted into the spectrum comment.

Background correction is not correct for split bidirectional series collect

Put the backgrounds in the correct order to match up with the single scan split bidirectional collected spectra.

Spectrum save fails when you use an environment value to set the path of the file

Allow an environment variable in the path of the spectrum file name for the **save spectrum** DDE command.

A background interferogram may be attached to a single beam spectrum

Do not attach a background interferogram to a single beam spectrum, an emittance spectrum or an interferogram.

Problem extracting the instrument serial number from the spectrum comment

The string that was the instrument serial number had extra characters tacked onto the end.

Did not recognize the security password

There could be an unprintable first character in the security password and that caused it not to be recognized. Make sure that the first character is NOT unprintable.

Split bidirectional series spectrum extracted and pressure and temperature are not correct

Fixed an error where the pressure and temperature information was only attached to every other spectrum extracted from a split bidirectional series file.

Series tab / Gas cell button. The Pathlength setting not honored

The pathlength set from the "Gas cell" button on the Series tab was not used in the series run. Instead of using pathlength=1, now use this pathlength value.

Compare settings test fails for numeric values

No longer do a string comparison of numeric values. Instead convert to number. This allow the comparison to work across different decimal separators.

Integrating sphere ValPro fails in French regional settings

The **SelectSource** DDE command did not work and this breaks all of the ValPro methods when running in non-English languages that translated the source setting values. For example "White Light" became "Lumiere Blanc" which failed the comparison. It turns out that the setting worked, but comparison test to see if it worked failed.

Changing laser frequency from the OMNIC gas commad didn't change the laser frequency

The logic to save a new laser frequency was incorrect and the new laser frequency was not saved. The logic was corrected and the new laser value will be saved. However this command requires that OMNIC_gs.dll be installed with OMNIC.

Known Issues

None

OMNIC 9.11 Hotfix 7

- **Build number:** 9.11.7.751
- **Release date:** August 2020
- **Supported operating systems**
 - Windows 10 64-bit

New Features

Need new drivers to support core card changes

This releases drivers to support iS10 and iS20 instruments with the new Core Card.

Resolved Issues

None

Known Issues

None

OMNIC 9.11 Hotfix 6

- **Build number:** 9.11.6.745
- **Release date:** April 2020
- **Supported operating systems**
 - Windows 10 64-bit

New Features

None

Resolved Issues

History for multiply records bad multiplier

When OMNIC is run with none English systems, the history for the multiply spectrum by a value operation records an incorrect multiplier for the spectrum.

Reprocess a spectrum from 4 cm⁻¹ to 8 cm⁻¹ on a VCSEL spectrum does not work

The relationship between points after the interferogram peak and resolution was not handled correctly for a spectrum collected with a VCSEL (non-HeNe) laser.

Known Issues

None

OMNIC 9.11 Hotfix 5

- **Build number:** 9.11.5.734
- **Release date:** February 2020
- **Supported operating systems**
 - Windows 10 64-bit

New Features

None

Resolved Issues

None

Known Issues

None

OMNIC 9.11 Hotfix 4

- **Build number:** 9.11.4.727
- **Release date:** November 2019
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit

- Windows 10 64-bit

New Features

None

Resolved Issues

The pathlength, temperature and pressure are not properly getting passed to MultiStdCLS quant methods

Had to make all instances where Quant was referenced in OMNIC also included MultiStdCLS. By doing this the pathlength, temperature and pressure must be handled the same way as in QuantPad. That includes passing the information to the MultiStdCLS prediction routine.

Known Issues

None

OMNIC 9.11 Hotfix 3

- **Build number:** 9.11.3.721
- **Release date:** October 2019
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

The GetMethodAbbrComponents DDE command did not work with MultiStdCLS quant methods

The **GetMethodAbbrComponents** DDE command did not return the component names for a MultiStdCLS quantitative method. This was caused because a MultiStdCLS method is not a section file. Now this is handled as a special case.

MultiStdCLS quant methods need a general Composite Component text file

Use a MultiStdCLS_all.txt file to hold the composite components information for any MultiStdCLS quantitative method that doesn't use a specific txt file to hold composite component information. The QuantPad_all.txt file may also be used if the new MultiStdCLS_all.txt file is not present.

MultiStdCLS uses the pathlength, temperature and pressure from OMNICSettings.ini

MultiStdCLS uses the pathlength, temperature and pressure from OMNICSettings.ini rather than from where expected. This was handled to make is similar to how these values are handled for a QuantPad method. MultiStdCLS methods are meant to replace QuantPad methods, so this is a good replacement.

Known Issues

None

OMNIC 9.11 Hotfix 2

- **Build number:** 9.11.2.709
- **Release date:** October 2019
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

Auto tune on iS50 did not complete correctly

Running auto tune on an iS50 with OMNIC 9.11 Hotfix 1 would not complete correctly. It has been fixed in the NicUsb.dll so only this DLL changed from the previous version.

Known Issues

None

OMNIC 9.11 Hotfix 1

- **Build number:** 9.11.1.706
- **Release date:** September 2019
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

Smart accessory on iS50 did not load properly

When inserting some smart accessories on the iS50, OMNIC did not recognize that the smart accessory was inserted and would prompt to insert it.

Known Issues

None

OMNIC 9.11

- **Build number:** 9.11.0.697
- **Release date:** August 2019
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

Possible ways to cancel a data collect

Some ways to cancel a collect was discovered. This has been prevented.

No Thermo IQ information for cloud connector service

Thermo IQ will now correctly report the cloud connector service information

System suitability does not handle background overwrite policy correctly

System suitability has been changed to handle the background file correctly.

IGS high speed collect not available

The IGS specialized high speed collect option was not available in the series collect types.

Autotune variations can affect quant results

For specialized cases the autotune can produce different quant results when executed via the user interface for the DDE command.

Thermo Software IQ fails iS10 bench driver

This has been fixed.

Macros Pro - DDE command GetSpecNum does not return value in old format

When using the DDE command `GetSpecNum` it returned an empty string not the string it returned in earlier versions of OMNIC.

Laser calibration problems for iS5 and iS20 instruments

Laser calibrate has been improved to handle several special cases that had failed the calibration.

Thermo IQ reports wrong library size

When SEA470 library is installed, the size of the file was incorrect. This size is reported correctly now.

Unable to write large files to disk

When collecting a spectrum at 0.5cm^{-1} , sample spacing 1, zero fill 2 and save range set to 400 to 6500 cm^{-1} the save spectrum operation would fail and not write the file.

Add macro home command for wafer control

The command WaferHome has been added to allow control of when the wafer is homed.

Quant text did not save composite name correctly

The composite name is now written with tabs to the quant text output file correctly.

If background has units of volts, reprocess does not use it

When saving an archived interferogram as JCAMP-DX format, loading it and setting the Y axis to volts the reprocess command cannot use it.

Splash screen and about box updated

A new splash screen has been added. The both about box and splash screen will report correct copy right years.

Series collect in rapid scan bidirectional mode

The rapid scan bidirectional mode would not run.

Known Issues

None

OMNIC 9.9 Hotfix 3

- **Build number:** 9.9.3.339
- **Release date:** April 2019
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

Add new policy for DS Customers

Added policy "Prevent user from signing data multiple times". When selected the same user account is not allowed to sign the same file again.

Hardware Home DDE command added for OMNIC Wafer

There was no way to move the wafer stage to its hardware home position in OMNIC Wafer software. This was added as DDE command **WaferHome**.

Resolved Issues

Allow System Suitability to be used in a DS environment with secure folders

Collecting the reference background used for System Suitability could not be stored into the signed Experiment file along with the System Suitability configuration. This has been resolved.

Show correct ValPro status when used in a DS environment with secure folders

If you set the system status icon to monitor ValPro methods and you set ValPro to put its results into a secure folder the status does not show the last ValPro result in the new secure folder. This has been resolved.

Laser verification failed in a secured environment

Laser verification reference files and quant files could not be found when secured folders were present. If the laser verification files aren't found in the secured data directory, then also look in the OMNICDATA directory. This only occurred on upgraded installations, new installations had the new reference files needed.

Known Issues

None

OMNIC 9.9 Hotfix 2

- **Build number:** 9.9.2.535
- **Release date:** February 2019
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

Save map files in secure location

Collecting maps in a secure environment was failing.

Known Issues

None

OMNIC 9.9 Hotfix 1

- **Build number:** 9.9.1.509
- **Release date:** November 2018
- **Supported operating systems**

- Windows 7 32-bit
- Windows 7 64-bit
- Windows 8.1 64-bit
- Windows 10 64-bit

New Features

Support for the iS20

With this release, OMNIC now supports the new iS20 instrument

Resolved Issues

Put Videology drivers back onto distribution media

With the OMNIC 9.9 release the Videology drivers were completely removed from all OMNIC distributions. With this release the Videology drivers are restored for the Raman accessory only

Performance Verification did not perform laser verify before PV on iS5

With the OMNIC 9.8 release the iS5 stopped performing an auto tune and laser verify before the Performance Verification tests. This release now performs those operations before PV.

Error when opening an Excel file exported from using TQ method

When a TQ method created an Excel file, it was only compatible with excel 2003. When read into Excel 2013 the user had to approve a format conversion. This manual intervention prevented an end user from using this in a fully automated process. With this release, the created file is now compatible with Excel 2013.

Known Issues

Series is not waiting for Chromeleon to start a collection

In certain circumstances, OMNIC series will not wait for the trigger from the Chromeleon software to start a series collect. This occurs with Chromeleon 7.2.7 and 7.2.8, Chromeleon.

When security is installed, Series does not save data to the secure location

Series cannot write to secure folders because the file shuffler is not implemented for the series file save. It continues to write to the default location C:\My Documents\OMNIC\series

OMNIC 9.9

- **Build number:** 9.9.0.473
- **Release date:** September 2018
- **Supported operating systems**

- Windows 7 32-bit
- Windows 7 64-bit
- Windows 8.1 64-bit
- Windows 10 64-bit

New Features

Link library spectra to SPG file

It is now possible to link library spectra to spectral groups or to save them for easy access later for a search result. A link defining the library spectrum is saved in the group, not the actual spectrum. When opening the spectral group file, the library must exist on the system or the linked spectrum will not be displayed.

Save path length, temperature and pressure to JCAMP-DX spectrum

If the SPA file contains path length, temperature and pressure, exporting to JCAMP-DX files will include this information

Wafer Analysis did not have 12 custom profiles

The custom profiles have been added into this release

Add more data curves to TGA reader

Added ability to read in more data fields from TGA type files.

Resolved Issues - OMNIC

Date format for signatures could be confusing for international users

The date associated with signatures is now always displayed in an unambiguous format for all languages and regional operating system settings.

OMNIC was not honoring "Use Last Directory" setting when using Save As command

When software was setup to use the "Use Last Directory" setting and Save As command is used, the software was defaulting to the directory from which each spectral file was opened, and not the last one that was used.

With Security Suite installed, OMNIC failed to prevent user access to DDE command in OMNIC menu

If Use DDE commands in the OMNIC menu or toolbar was unchecked in Security Suite, OMNIC did not respect this setting.

Some Bruker files are not converting in OMNIC 9.8

The problematic Bruker files can now be read into OMNIC.

Help → Getting Started → Getting Started with OMNIC was disabled

Access to Help → Getting Started → Getting Started with OMNIC is now enabled.

Digital signature information could be lost from Collect & Process screen when printing

For some SPA files, an attempt to print Collection & Processing information would clear the signatures from Collection and processing.

iS5 instrument laser verification not always working properly

The iS5 laser verification process has been improved to handle laser upgrades when replacing the laser diode.

Driver version displayed in Help-About is inconsistent with Thermo IQ driver version

The OMNIC display only displayed two fields (e.g., 9.8) and Thermo IQ displayed three fields (e.g., 9.8.37). Both places now display three fields.

Atmospheric Suppression on iS5 did not work at resolution 0.8

Atmospheric Suppression now works correctly for all iS5 resolutions.

iS10 instrument panel could cancel data collection even when security setting says no

Even when the security policy Prevent canceling a data collection was checked, the user was allowed to cancel a measurement by pushing the cancel button on the instrument panel. This is no longer allowed.

Run Profile from Wafer Menu in OMNIC Causes Software to terminate

This no longer causes the software to terminate

Report template edit with security allowed file overwrite

When editing a report template and the Thermo Admin application policy "overwriting of existing files" is disabled, a file can be overwritten by using the Close button on the report editor and clicking yes to overwrite the file. This is no longer allowed

Unable to save spectrum with embedded date/time

Unable to save a spectrum from Macros Basic when the date/time are appended to the file name. An error is returned from OMNIC that states that the file cannot be saved. It appears that there are invalid characters in the file name (the colon from the time stamp).

Atmospheric suppression changes the unique spectrum title to date and time

When reprocessing a spectrum the title of the spectrum may be changed.

Interferogram disappeared when atmospheric suppression was performed using Other corrections

When performing Process>Other corrections on a spectrum containing interferograms the resultant spectrum now retains the interferogram

Resolved Issues - OMNIC Series

Split series creates files with no extension

Split series did not add the proper extension (.SPA) to the files when the series file was split.

Unable to create a Series File from spectra

The browse button for the create series file dialog was disabled so the files to use in the series file create could not be selected.

Series profile "cnc" file only has 2 sig figures for quant results

Quant results from a series collect were always saved with 2 significant digits. It has now been changed to use the magnitude of the value to determine how many significant digits to use.

Known Issues

Series is not waiting for Chromeleon to start a collection

In certain circumstances, OMNIC series will not wait for the trigger from the Chromeleon software to start a series collect. This occurs with Chromeleon 7.2.7 and 7.2.8, Chromeleon.

When security is installed, Series does not save data to the secure location

Series cannot write to secure folders because the file shuffler is not implemented for the series file save. It continues to write to the default location C:\My Documents\OMNIC\series

OMNIC 9.8 Hotfix 2

- **Build number:** 9.9.2.389
- **Release date:** April 2018
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

In the Wafer menu / Epitaxial Settings dialog change how the reference spectrum is saved

In the Epitaxial Settings dialog, the reference spectrum is now saved into a spectrum library. The description of where the reference is found is changed to reflect this modification.

In the Wafer menu / Profile Settings, additional custom profiles are added

In Profile Settings, Custom Profile 4 thru Custom Profile 12 are added as options. This gives a user more custom profiles to use.

Add ability to set Wafer options by DDE

Parameter groups "WaferEPIIfg", "WaferEPICepstrum" and "WaferCO" have been added with parameters to

set the parameters shown in the Epitaxial Settings dialog and the Carbon/Oxygen Settings dialog.

Resolved Issues

In the Wafer menu / Wafer Options, set default COMM serial port

If you select "Serial" communication in the Wafer menu / Wafer Options command, a valid default serial port will be selected. In the past there was no guarantee that the port selected existed.

OMNIC with security unexpectedly closes if blank username password used

During digital signature, if both the username and password were left blank and the OK button is pressed, the program unexpectedly closed.

Known Issues

None

OMNIC 9.8 Hotfix 1

- **Build number:** 9.8.1.372
- **Release date:** October 2017
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

Atmospheric suppression does not work on some iS5 systems

The atmospheric suppression has been improved to fix the problem.

A profile cannot be cleared from a series window

When there is more than one profile in a series window, it cannot be cleared.

When not using Data Security the browse button was disabled for split series

A change in 9.8 introduced a problem that disabled the browse button in the split series dialog when not using

data security. The browse button is now disabled only when that option is selected in a security environment.

Error in advanced diagnostics

An error occurs during the collection in advanced diagnostics.

Library install with data security

A library installed after a system has been setup with data security does not show the newly installed library.

System suitability does not start test with data security

System suitability does not run when data security is installed and the "Prevent overwriting files" was turned on.

Error message using Save As to a secure network folder with data security

When using a secure network folder that is read-only to the current user and you perform a "Save As" after the initial autosave you get an error message "Save failed - file is read-only" occasionally. Additionally, this error only occurs on Window7 with a network folder, on Windows 10 the save operation works properly both to a local folder or a network folder.

Improve change to directory permissions with data security

Previously when software applications started they altered the folder permissions on the secure folder every time the program started. Now they only alter the permissions the first time when the folder is created or filled with files. This allows IT departments to alter the configuration from the recommended default permissions.

Changes to test secure folder permissions

Now that folder permissions can be altered, the software tests writing to the secure folder using the current account and the specified secure file service account. If the current account is allowed to write to the secure folder a warning message appears stating this is not expected. Also if the secure file service account cannot write to the secure folder an error message occurs as well.

Reporting of spectral resolution in OMNIC using new laser diode on iS5

The spectral resolution was set to 2.0 in collect tab, but the information of collected spectrum is 1.906. With this release this value is now reported as 2.000 cm⁻¹

Known Issues

None

OMNIC 9.8

- **Build number:** 9.8.0.286
- **Release date:** May 2017
- **Supported operating systems**
 - Windows 7 32-bit

- Windows 7 64-bit
- Windows 8.1 64-bit
- Windows 10 64-bit

New Features

New policies added for OMNIC Data Security

1. Add policy to prevent cancel of data collection
2. Add policy to prevent cancel of signature dialogs
3. Add policy to prevent changing annotation
4. Add policy to set the filename of a collected spectrum being auto saved to use the spectrum title
5. Add audit event for start of a collection. This includes the main sample collect, series, SST, Array Automation and mapping.
6. Add audit event when cancel login to application
7. The signature dialog will not close after three failed signatures
8. At start of the application, the status of the security suite will be checked and report any issues
9. File folders defined in the Security Administration program will be created if they do not already exist
10. Add policy to control access to the extract background single beam spectrum from a spectrum

More information types available in Report

Software version can now be added to a report

Extract background from spectrum menu item

A new menu item has been added to the process menu to extract a background single beam spectrum from the selected spectrum. If the spectrum does not contain a background, the operator is notified.

Improve report viewing of System Suitability and Performance Verification

For both System Suitability and Performance Verification the reports were always overwritten. This has been changed to keep a history and allow viewing of results from earlier tests.

Deleted libraries moved to Windows Recycle Bin

To help prevent accidental deletion of libraries by the user in OMNIC, they are moved to the Windows Recycle Bin instead of permanently deleting them.

Support for iN5 microscope

The iN5 microscope is supported for the iS10 and iS50 instruments.

Resolved Issues

Quantify of a spectrum did not reset signature state

When quantify is performed on a spectrum, it puts new results in the spectrum so the signature will be invalidated

Automatic full scale mode not working when boxing in a peak

With Full Scale and Auto Full Scale mode checked, boxing in a peak does not scale the spectrum all the way to the full possible range. This has been changed to go to the full range when there are no annotations on the spectrum. If annotations are present, there will be a gap at the top of the spectrum in full scale.

Font too small when multiple quant results

The font was too small when multiple quant results were being reported as the program was attempting to put them all on one page. This has been corrected to use multiple pages.

Accessing experiment setup through Touch Point Setup crashes

Using the experiment setup access in the Touch point setup caused a crash. It now shows the experiment setup without a crash.

ValPro needs to be run message

On some systems, starting OMNIC will always show the ValPro needs to be run message even if it has just been run.

In Thermo IQ there are multiple references to some items

After updating with a service pack, there were multiple references to several components.

iS50 GC-IR temperature controller

The software allowed illegal temperature values to be input. This has been modified to limit the temperature to the legal range for the controllers. The values will be checked and limited after the apply button is clicked.

Annotations not tracked by OMNIC audit trail

Annotation changes were not put in the OMNIC audit trail. They are now being included.

OMNIC does not print stacked spectra with different display limits

When displaying stacked spectra and displaying them with custom Y display limits, the limits would be changed when the spectrum was printed. This has been changed to keep the custom display limits.

OMNIC Data Security temporary files not removed

OMNIC Data Security uses temporary files to test access and the files were left behind. They are now being deleted.

Change peak location using annotation tool

A new DS policy will protect against changes to annotations.

iS5 Bench Diagnostics Report

The diagnostic used the correct ranges for the test, but the report did not show the correct range. The report now shows the correct range from the test.

Change in OMNIC wafer analysis

It was found that if the quant method for a wafer analysis was changed that the reference file name was lost. This has been changed to not lose the reference file name when the method is changed.

Cannot view documentation from user account

When using a non-administrator login account, some documentation was not visible.

Crash when using Series with a QuantPad method with more than 28 components

When using a QuantPad method with more than 28 components in series and the quant results are being archived, there can be a crash of the software.

OMNIC wafer shows error after quantify for epi

OMNIC wafer epi analysis has error when doing the quantify using an iG50.

When using a non-standard install path, atmospheric file not installed correctly

If installing to a non-standard path, the atmospheric correction files were not installed to the new directory but into the standard path location.

DS policy "Include original data format when saving" did not always work

The policy "Include original data format when saving" was overridden by the experiment file setting for saving interferograms. It will now be controlled by the DS policy for all cases.

Issue when accessing secure folders

It was found that after data collection with auto save that opening a file from another folder would change the save folder for the next file save.

Reprocess with atmospheric suppression will change the spectrum title

Fix Reprocess so that the only change to the spectrum title is that one or more * character is appended to the spectrum title to indicate changes to the spectrum.

Known Issues

None

OMNIC 9.7 Hotfix 3



The OMNIC executable did not change from preceding release

All changes were in other components shipped with OMNIC

- **Build number:** 9.7.3.47
- **Release date:** February 2017
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

- Windows 10 64-bit

New Features

None

Resolved Issues

Provided Service Pack Updates for clean Windows 8.1 or Windows 10 computers

The Service Pack installation requires installation of an earlier OMNIC 9 version of software (OMNIC 9.0-OMNIC 9.6). When moving to a new Windows 8.1 (64-bit) or Windows 10 (64-bit) computer the older media may be unable to install on the new operating system resulting in the inability for the user to update their software easily to the latest OMNIC 9 version using the Service Pack.

Alignment of Security Administration product across OMNIC and UV-Vis

Security Administration software is now consistent across both the OMNIC and UV-Vis product lines.

Known Issues

None

OMNIC 9.7 Hotfix 2

- **Build number:** 9.7.2.46
- **Release date:** December 2016
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

Problem with incorrect limit for noise test in iS50 fiber probe advanced diagnostic test

The limit for the iS50 fiber probe advanced diagnostic test is increased from 0.1 to 0.5. This is consistent with

the expected performance of the fiber probe on the iS50. This is corrected in iS50Diag.exe.

OMNIC locks up at the splash screen on Windows 10 Pro

OMNIC 9.7 was installed on a Windows 10 Pro Computer. When OMNIC starts, the splash screen appears, but it never progresses past that point. After a while the splash screen goes away, but OMNIC32.exe is still listed in task manager.

Known Issues

None

OMNIC 9.7 build 43 Hotfix 1

- **Build number:** 9.7.1.43
- **Release date:** October 2016
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

None

Resolved Issues

Unable to open files with Japanese characters in filename with double-click or drag-and-drop

Files with names that used some Japanese characters would not open in OMNIC using drag-and-drop or double-click from Windows Explorer. The failure cases were different depending on if the system was running English Windows with the locale set to Japanese or Japanese Windows. Other languages such as Korean and Chinese may also be affected.

Resolution list in Experiment Settings for an iS5 is incorrect

The resolution list in Experiment Settings for an iS5 includes an entry for 0.25. This is not a valid resolution value for this instrument.

Resolution list in Experiment Settings for an iS50 is incorrect

The resolution list in Experiment Settings for an iS50 does not include the entry for 0.125. This is a valid resolution for this instrument.

Known Issues

None

OMNIC 9.7

- **Build number:** 9.7.0.39
- **Release date:** September 2016
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit
 - Windows 10 64-bit

New Features

Support complete for Win 10 compliance: Macros Basic and a new version of ToolBook

OMNIC 9.7 is now fully Win 10 compliant. A new version of ToolBook (v11.5) is being used with OMNIC and the method of communicating between ToolBook and OMNIC is improved.

Resolved Issues

Wafer analysis experiment files for the iS50 are not correct

The wafer analysis experiment files set the incorrect detector and the aperture is set to zero.

Atmospheric suppression from the Reprocess command does not work

The incorrect atmospheric suppression method was identified from the Reprocess command, so the fix was not done.

Atmospheric suppression during data collect on the iS5 was not done

The incorrect atmospheric suppression method was identified during data collect on the iS5 and this caused the correction to be ignored.

The atmospheric suppression corrected spectrum has a diagonal line at the end of the spectral range

The correction at the end of the spectral range is incorrect. It appears that the correction goes to zero at the end of the spectrum.

The incorrect detector is shown in the Spectrum information in spectra collected since OMNIC 9.6

The correction made in OMNIC 9.7 build 7 was improved to be able to recognize and correct spectra written in OMNIC 9.6 SP1. In most cases OMNIC 9.7 can correctly read the detector and beam splitter values if the spectrum was saved in OMNIC 9.6 SP1 and SP2.

The accessory information in the spectral header has changed and needs to be restored

The accessory information that is shown in the spectral header since OMNIC 9.4 is changed. The old format and information should be maintained even if new information is shown. The previous changes were removed in OMNIC 9.7. The old, traditional behavior is returned.

Remove fix for error when creating a new window when the OMNIC window is minimized

The change made in OMNIC 9.7 build 7 was removed. It didn't appear to provide any benefit for the problem.

System Suitability did not move validation wheel correctly on iZ10 attached to iN10

When System Suitability was run when configured to use the iZ10 sample compartment attached to iN10 systems, the validation wheel would not move to the correct position.

Known Issues

Files with the extension ".tmp" remain after signing a spectrum file

When DS is installed with OMNIC and the user signs a file, Thermo Client writes a *.tmp file to the target folder. The tmp file is not deleted (removed) when the signature process is complete.

The list of allowed resolutions in Experiment Setup is not correct

When you display the Resolution options in Experiment Setup for an iS5 instrument, the first value listed is 0.25. This resolution is incorrect and not allowed with an iS5 family instrument. Do not make this selection.

When you display the Resolution options in Experiment Setup for an iS50 instrument, the list starts with 0.25. It does not include 0.125.

This behavior was first seen in OMNIC 9.7 (build 39) and is not found in previous versions.

OMNIC 9.7 build 7

- **Release date:** August 2016
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

- Windows 10 64-bit

New Features

Select the maximum peak when the interferogram is nearly anti-symmetric

Frequently our interferograms are anti-symmetric (that positive lobe and the negative lobe have the same absolute magnitude). This can cause visual problems in processing to a spectrum. Fix this so that the maximum peak is always selected if the peak magnitudes are within 10% of each other.

Resolved Issues

Wafer analysis experiment files for the iS50 are not correct

The wafer analysis experiment files set the incorrect detector and the aperture is set to zero.

Atmospheric suppression from the Reprocess command does not work

The incorrect atmospheric suppression method was identified from the Reprocess command, so the fix was not done.

Atmospheric suppression during data collect on the iS5 was not done

The incorrect atmospheric suppression method was identified during data collect on the iS5 and this caused the correction to be ignored.

The atmospheric suppression corrected spectrum has a diagonal line at the end of the spectral range

The correction at the end of the spectral range is incorrect. Appears that the correction goes to zero at the end of the spectrum.

The incorrect detector is shown in the Spectrum information in spectra collected since OMNIC 9.6

The definition of the detector and perhaps the beam splitter is saved incorrectly to .spa and .spg files since OMNIC 9.6. Because of this, files saved in 9.6 will display incorrect names for the detector and beam splitter when viewed with other versions of OMNIC.

The detector and beam splitter information in old spectra are corrupted

The detector and beam splitter values are read incorrectly and likely displayed wrong in old spectra when in OMNIC 9.6.

Norris first derivative with a gap of zero is calculated incorrectly

If a Norris first derivative is calculated with a gap of zero, the result is confused with a gap set equal to the segment value. This produced an incorrect Norris first derivative in that situation.

Error when creating a new window when the OMNIC window is minimized

Creating and closing a new window when the OMNIC window is minimized has caused some macros to crash.

Automatic PV dialog comes up for iS10 and iS50

The automatic PV dialog should only come up with an iS5 and iS5N, however in OMNIC 9.6 it is also found with the iS10 and iS50.

Bidirectional background is not saved properly

For a bidirectional data collect, only one background spectrum is saved. Thus if the saved background option is used for a data collect, the ratio step will fail. Make sure that both the forward and reverse interferograms are saved.

Known Issues

Files with the extension ".tmp" remain after signing a spectrum file

When DS is installed with OMNIC and the user signs a file, Thermo Client writes a *.tmp file to the target folder. The tmp file is not deleted (removed) when the signature process is complete.

The software insert for the OMNIC software states the OMNIC version as 9.6 Hotfix 2

The insert for the OMNIC software DVD states that the OMNIC 9 version is 9.6 Hotfix 2 and the About box in the software claims version 9.7.7. The insert is incorrect for this version. The version of software is 9.7.

OMNIC 9.6 Hotfix 2

- **Release date:** June 2016
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

None

Resolved Issues

Failure in iS50 ValPro test

Fixed an error in the update to the **DeLay** DDE command. The problem caused the error "The number of arguments is invalid for this command."

Known Issues

None

OMNIC 9.6 Hotfix 1

- **Release date:** June 2016
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

None

Resolved Issues

Failed Polystyrene Wavelength Accuracy test for Raman Validation

The location being reported for the $\sim 1000\text{ cm}^{-1}$ peak has shifted from previous versions. Corrected how the Raman interpolation is being done to conform to previous versions.

In OMNIC Report for Find Peak, the annotation y axis value does not match the Find Peak location

Update how the annotation is getting the location of the peaks. Directly use the values from Find Peak.

High speed data collect at 5 Hz can't keep up

Remove the need to save Accessory information in the spectrum as part of data collect when doing high speed, bidirectional data collect. Also do not save the Gram Schmidt data when doing a bidirectional collect and not requesting the Gram-Schmidt transform.

Laser value not being saved during laser frequency calibration

The laser save routine was fixed to save a new system laser frequency permanently to the instrument. Also added the LASERSPECTRUM composite component to support reporting the laser change.

Modal or modeless dialogs are hidden in use

The OMNIC modal or modeless dialogs can be hidden behind the OMNIC window hiding the need to respond from the user. Modify the dialog commands so that they will always be set to the "TopMost" item in the display z-order.

Issue with OMNIC's login capability and blue buttons

OMNIC did not use the experiment file set up in the login dialog and used the blue button experiment file instead. That is correct behavior, so now do not request an experiment file when using the OMNIC login on an iS50. For other instruments, honor the experiment file selected in the OMNIC login setup.

Known Issues

None

OMNIC 9.6

- **Release date:** May 2016
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

Support for the iS5N instrument

Complete support for the iS5N near-infrared instrument has been added

Access instrument diagnostic values from Macros Pro

A DDE command to access the BDiag diagnostic values is now available from OMNIC. The DDE command syntax is: `[InstrumentDiagnostic <DiagnosticType>]`

The steps needed to use this command are:

1. Run OMNIC with an active instrument attached to the computer where OMNIC is being run.
2. Run the DDE command `[ReportInstrumentDiagnostics]` to read the instrument values.
3. Run the DDE command e.g. `[InstrumentDiagnostic BoardTemp]` to get the board temperature
4. Access the value from `[Result Current]`

Support Photoacoustic Saturation Correction

The solution is in a new DDE command called `PASSaturationCorrection`

Resolved Issues

International decimal separators are not honored properly

The current setting of the decimal separator is now honored across the OMNIC product. Previously much of OMNIC expected the English setting.

Peak pick labels do not appear on a printed template report

The peak peaks labels appeared in the preview, but not in the report. This was caused by scaling of the label text.

Cannot set SPC as the default "Save As" format

If you go to "Edit → Options" and set SPC in "Use selected file type", it still doesn't set SPC as the default in Save As. Other formats do work.

QCheck error with the report template

When you perform a 2nd QCheck prediction into a report template, the 2nd correlation value and the Reference Title are incorrect. It retained information from the first measurement.

QCheck report does not show the date and time always

Remove the date and time from the QCheck report.

The QC Compare answers are not shown on the report

In the QC Compare template, the compare answer is not shown on the report.

The QC Compare command is hidden in the default OMNIC Analyze menu

Enable the QC Compare command.

Library search list not updated after second search

In a template report, the library compound list is not updated when the 2nd search is done.

The detector setting in the spectrum file header is not always reported correctly

Using the iS50 integrated ATR a spectrum was collected and the detector was properly reported as DTGS. However when the spectrum was saved and then retrieved, the detector was reported as Unknown. There were certain detector settings that were reported incorrectly and the lists that defined the detector value were harmonized.

The accessory information is not in the spectrum file header

The accessory information in the spectrum file header is often incomplete. Sometimes there is a coded accessory serial number and other times an accessory id. Add information in the file header to save the accessory description, the full serial number and the manufacturer.

Bar code reader information to support the Chromeleon to Series interface not saved

The bar code information from the Chromeleon audit trail did not appear in any of the OMNIC spectrum file fields (file name, file header, title).

Bar code reader information does not appear in the Spectrum

The bar code information did not appear in any of the OMNIC spectrum file fields (file name, file header, title).

Wrong title on spectrum when info read from bar code reader

If any of the vials on a system has a bar code reader fail, then all spectra following use the incorrect bar code value.

Problem opening TA TGA files in OMNIC

TA made a change to the TGA file format and OMNIC no longer could open their files. The simple change was made in the Thermo parser to recognize this change.

Cannot copy a spectrum into a report

This issue was seen when running in either Japanese or Chinese. Make a report and move the report to the clipboard. This would crash OMNIC.

Split series does not honor the path

When the path is specified in DDE, the split series command does not honor the output path for the resulting spectra.

Access error when opening a spectrum from a desktop shortcut

Fixed in this version.

Operator name missing in SPV results pages (HTML)

Corrected feature and returned result to the report. This was lost when OMNIC 9.4 was released.

Print button not active with QCheck result and TSA

Button is only grayed when TSA is installed.

Incorrect results when collecting a 6.0 cm⁻¹ spectrum

Problems were found when collecting a spectrum at 6.0 cm⁻¹ resolution. There were incorrect results including a failure to do atmospheric suppression. This non-standard feature was not needed in our applications and we removed the 6.0 cm⁻¹ resolution feature from OMNIC.

Unable to read Bruker spectral files

Bruker spectral files can no longer be read from OMNIC. This could be done prior to the release of OMNIC 9.4.

Unable to read Grams spectral files

Galactic Grams spectral files can no longer be read from OMNIC. This could be done prior to the release of OMNIC 9.4.

Unable to autotune on an iS10 with an MCT detector

The filter wheel is moved to the empty position when you try to autotune on an iS10 with an MCT detector. The signal saturates in the empty position. The fix is to move to the C screen for autotuning.

Unable to autotune on an iS10 with an MCT detector

The filter wheel is moved to the empty position when you try to autotune on an iS10 with an MCT detector. The signal saturates in the empty position. The fix is to move to the C screen for autotuning.

The iS50 performance test for the NIR module fails

The validation wheel moves to the open position for the performance test and that causes the detector to be saturated. The wheel now moves to the C screen position to support the performance test.

Quant method uncalibrated in iS50 post-calculation

On occasion when a TQ Analyst method was attached to an iS50 post-calculation, the method would immediately be identified as not calibrated. This was caused by an invalid spectrum calculated to test the method.

iS50 - Microscope Configuration dialog hidden

Starting iS50 appeared to lock up because the microscope configuration dialog is hidden behind the splash screen.

iS50 - Raman ValPro accessory does not turn on the laser

This is fixed in this version.

NIR Updrift accessory is not identified correctly

The updrift accessory was given the same ID as the OMNIC sampler. This caused it to be reported incorrectly. The duplicate ID code was resolved.

Matches not found with QC Compare using a Raman library

This was found and fixed for this release.

Autosave is overwriting spectrum files

If the root name for autosave is blank, then the files will overwrite. This hole was plugged and now the files will be detected correctly and not overwritten.

OMNIC Wafer - Negative y-intercepts are not allowed

The software was fixed to allow negative y-intercepts for the linear correction of carbon and oxygen measurements.

OMNIC Wafer - Not able to save the path to the reference spectrum

In the epitaxial thickness application the path to the reference spectrum could not be saved. This problem was solved by saving the reference spectrum into the method library. This means that it is attached to the actual measurement method.

iG50 - auto-align doesn't work

The C screen must be in place if trying to align an iG50 with an MCT detector. An open beam is correct for an iG50 with a DTGS detector.

iG50 - must support 0.125, 0.25 and 0.50 resolution settings**PV does not notify user if quantification fails**

If a quant method fails during a PV run, the error is swallowed and the run stops without notice. Added a new message when a quantification fails and this allows the PV to run to completion.

"&" in the file name with system suitability

Add "&" to the list of characters not allowed in a system suitability experiment.

3 term Blackman-Harris apodization reported incorrectly

Name ambiguity in the two Blackman-Harris apodizations is resolved.

Additional information

Cannot save a spectrum taken from a spectral group (spg file)

If you open a spectral group (an spg file) and you wish to save an individual spectrum from the group, you must

make sure that the file(s) that you want to save are "ungrouped". With the spectra selected, go to the Edit menu and select the "Ungroup Selected Spectra" command. Then you will be able to save the individual spectra.

Library search parameters not saved with the experiment file

Most of the library search parameters are part of the experiment file. However certain of the values are global and saved into the Options file. These include the Maximum Number of Components in the List and the Minimum Match Value which are saved in the options.

Known issues

Macros Basic does not launch correctly

Win10 issue: The first time that you run Macros Basic after a computer reboot, the splash screen loads and the spinning cursor is visible. If you let the cursor time out, then Macros Basic will launch. This has been timed at between 8 and 24 minutes. Once you have successfully run Macros Basic, this problem no longer exists until you reboot your computer. This appears to be a feature of ToolBook.

OMNIC 9.5

- **Release date:** November 2015
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

Support for the IG50 instrument.

Resolved Issues

Add to Library DDE Command could truncate text

The **Add to Library** DDE command could have a problem when using 10 additional information fields where the string was truncated.

Series bidirectional y axis reversed in some cases

When using the series bidirectional scanning at 5 Hz the intensity of the y axis was inverted on the reverse scans.

TQ Analyst had login problem when updated with 9.4 service pack

TQ Analyst had a problem in the 9.4 release with security login when installing the OMNIC 9.4 service pack to update the software. This has been resolved.

OMNIC 9.4

- **Release date:** October 2015
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

Added support for Windows 8.1

OMNIC defaults to Auto Full Scale on

A request was made to set Auto Full Scale on as the default in new software installations. This has been done.

OMNIC defaults to overlaid titles on

A request was made to set the overlaid titles on in new software installations. This has been done.

Resolved Issues

Performance test for Continuum on Nicolet iS50 fails

Test was reporting 0 during the background collect and later steps would fail.

Advanced diagnostic on Nicolet iS50 needs delay in collect

During the Advanced Diagnostic test, there needs to be a delay between the aperture change and the collect with the DTGS-Poly detector.

Problem on Nicolet iS50 with source rest mode

When using the Source rest function there were problems the required the instrument to be restarted. This feature is disabled for this instrument.

ID7 smart accessory name not shown in header for Nicolet iS5

When collecting using the ID7 smart accessory, the serial number does not appear in the spectrum header.

ID7 smart accessory name not shown in header for Nicolet iS5

When collecting using the ID7 smart accessory, the serial number does not appear in the spectrum header.

Annotate DDE command shows annotation but does not save to file

When using the **annotate** DDE command, the annotation appears on the spectrum in the display but does not get written to the disk file when saved.

Interferograms not always retrievable from spectra collected in Result software

When a spectrum is collected in Result software and then opened in OMNIC, the interferograms are sometimes not retrievable for display.

iS5 installation wizard sometimes shows fail when actually succeeds

When running the installation wizard on an iS5, the results will occasionally show a failure when the tests successfully completed.

Wafer analysis does not perform EPI Cepstrum

An error was reported when performing EPI Cepstrum on wafer analysis. The peak type was incorrect.

Smart accessory on iZ10 does not show pop up window

When inserting a smart accessory into an iZ10, a pop-up window appeared and quickly disappeared immediately.

OMNIC Series for Antaris IGS Temperature and pressure reads correctly

There were problems reading the temperature and pressure using the Antaris IGS.

PV support added for Nicolet iS50 right AEM

Right side AEM will now run PV tests.



The blue button must be pressed for the sample compartment to be tested.

Subtraction file title improved

The filename of the subtraction file is now included in the title of the result to support traceability of the result.

Auto align during ValPro caused problems in non-English setting

This has been fixed for all languages.

Changed multi-line text in DDE output messages

The multi-line outputs for some DDE commands could not be handled by the testers. The strings reported in **[Result Current]** were simplified to one line for Signal-to-noise, MinMax, Average, FWHH, LocateMinMax and Analyze (peak-to-peak) commands.

Known Issues

None

OMNIC 9.3 Hotfix 1

- **Release date:** May 2015
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

None

Resolved Issues

Mercury TGA and GC problems

OMNIC 9.3 had problems in hanging up during the component analysis.

Known Issues

None

OMNIC 9.3

- **Release date:** October 2014
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

None

Resolved Issues - OMNIC Picta

Support for OMNIC Picta 1.5

Resolved Issues - OMNIC Atlys 9.3

Changes for OMNIC Atlys are in the OMNIC Atlys release notes

Known Issues

None

OMNIC 9.2 Hotfix 4

- **Release date:** February 2014
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

Added support for the Smart iTX Accessory

Smart accessory recognition and experiment file support was added for the Smart iTX ATR Accessory to be used with the Nicolet iS50/iS50R, Nicolet iS50 AEM, Nicolet iS10, Nicolet iZ10, Nicolet 4700/5700/6700/8700 and Nicolet 380 instruments.

Resolved Issues

Autosave sequence number error could cause file overwrites

The autosave sequence number could sometimes be calculated incorrectly when an experiment file was loaded. This could result in autosave overwriting files. The bug was fixed so the sequence number is calculated correctly. In addition, the autosave code was changed to check for a file using the expected sequence number and calculate a new number to prevent overwrites if necessary. The user is given a warning message if a new sequence number is needed to prevent overwrite.

Known Issues

None

OMNIC 9.2 Hotfix 3

- **Release date:** November 2013
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

None

Resolved Issues

Support of the new iD7 Smart Accessory for iS5

The changes involve adding 4 EXP files and one Registry entry. No executable or any other files are altered since the last release.

Improve iS50's auto-alignment for Solid Substrate Beam splitter (SSBS)

The change involves isolated 8 lines of code change in one source file for Driver DLL (NicUsb.dll.) No executable or any other files are altered since last release. Decision was made to rebuild the DLL using the latest source code, instead of code from archive DVD. The risk of doing so is much less as the DLL has no source code change since 9.2HF1.

Known Issues

None

OMNIC 9.2 Hotfix 1

- **Release date:** February 2013
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

None

Resolved Issues

Smart accessory recognition problems

OMNIC 9.2 was not correctly recognizing smart accessories on most systems. This would result in the smart accessory notification dialog popping up for a moment and then going away.

Prompted twice to select experiment file

On systems that correctly recognized smart accessories, there were cases where the user would be asked to select an experiment file for the accessory twice. This would happen if a smart accessory was inserted into a sample location that was not active and then the user switched to that sample location. OMNIC now only prompts once in this case.

Known Issues

None

OMNIC 9.2

- **Release date:** December 2012
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

Support for iS50 AEM

OMNIC 9.2 adds support for the new iS50 AEM module including smart accessory functions in the AEM.

Support for upgraded parallel port instruments

OMNIC 9.2 adds support for Avatar System 370u, Avatar System 370Nu, Avatar System 370CSlu, Avatar System 370MCTu and Avatar System 330u. These are systems that have had the electronics upgraded to replace the parallel port interface with a USB interface.

Resolved Issues

Motorized purge shutters and sample shuttle interaction on iS50

Some mistakes in the behavior of the motorized purge shutters when used with the sample shuttle have been fixed.

Fractional match values in search not shown when comma used for decimal point

The match values shown in the search results were always shown as whole numbers on systems setup to use a comma for a decimal point. The problem was introduced in OMNIC 9.

Smart Accessory change not recognized

If a smart accessory was inserted while OMNIC was displaying a dialog for smart accessory removal, OMNIC did not respond to the new accessory insertion.

Known Issues

None

OMNIC 9.1 Hotfix 2

New Features

None

Resolved Issues

OMNIC Data Security: Problems signing files after administrator reset of password

When OMNIC was run with the DS option on Windows 7, and a user had to have their password reset by an administrator, that user would no longer be able to sign files. This problem has been resolved.

Dates shown for Signatures in ValPro were wrong

When DS was used with ValPro, the dates for digital signatures were incorrect. The year was shown as 2148; the month and day were also incorrect but not as obvious. This problem has been resolved.

Known Issues

None

OMNIC 9.1 Hotfix 1

- **Release date:** September 2012
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

None

Resolved Issues

Resolved problems running Performance Verification on the iS5

Fixed problem where OMNIC did not recognize the arm that inserts a polystyrene sample into the beam on the iS5. The problem prevented correct operation of Performance Verification.

Resolved problems with saving the Time Regions information in the Mercury GC Setup

Fixed problem where OMNIC did not recognize when the Time Regions were defined.

Resolved problems with merging large libraries

Libraries with existing date/time fields merged without keeping the date and time intact. This problem prevented large libraries to be merged.

Resolved problems saving library directory information in the experiment file

Fixed problem where OMNIC did not recognize the directory had changed in the Library Directories tab of Library Setup.

Known Issues

None

OMNIC 9.1

- **Release date:** August 2012
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features - OMNIC

Support for iS50 optional hardware

OMNIC 9.1 adds support for the new iS50 Raman module, the iS50 GC interface and the Continuum microscope.

Support for additional instrument types

OMNIC 9.1 adds support for Nicolet 380, iS5, iS10, iN10, 6700 and 8700 instruments.

New Features - OMNIC Series

Integration with GC auto-sampler software

OMNIC Series can now integrate with Chromeleon GC software to automate GC-IR measurements using auto-samplers supported by Chromeleon.

Resolved Issues

Default settings for System Suitability corrected

The System Suitability settings in the default experiment files for several sample locations were corrected to use more appropriate ranges for the tests.

Known Issues

None

OMNIC 9.0

- **Release date:** June 2012
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features - OMNIC

Support for iS50 products

OMNIC 9 adds support for the new iS50 instrument types. This includes support for Touch Points which allow separate experiment settings to be assigned to each sample location and task driven sampling that can be configured to automatically perform analysis of a sample and generate reports as part of a measurement.

Analysis results saved with spectra

The results generated from search, quant, QCheck, or Find Peaks are now attached to the input spectrum and saved in .spa or .spg files. Because the analysis results are now considered part of the sample data, they are included in the calculation when a .spa or .spg file is digitally signed with the optional OMNIC Data Security package. If a new analysis operation is performed on a signed spectrum, it is considered a change to the sample data and the digital signature will be reported as invalid due to the modification. In previous versions of OMNIC, analysis results were not considered part of the sample data, so analysis operations did not invalidate digital signatures.

Automatically generated reports

OMNIC can now automatically generate reports that include all analysis results associated with a spectrum. These reports can be saved to existing report notebooks.

Enhanced spectral group operations

The grouping of spectra saved in .spg files is now preserved within OMNIC. The spectra in a group can all be included in a single automatically generated report. In previous versions of OMNIC, the grouping of spectra only existed in the .spg file and the spectra were treated individually when they were read into OMNIC.

Images can be attached to spectra

Images from a microscope stage or Raman stage can now be attached to a spectrum and saved in .spa or .spg files. The images will also be included in auto reports.

New Features - OMNIC Series

Mercury TGA provides automated analysis of TGA data

TGA Identify can be used to quickly identify the primary components of a TGA sample measured using any Thermo Scientific TGA-IR module or interface. The unknown may be a mixture of components; the software looks for a mathematical combination of reference spectra that best describes it.

Mercury GC provides automated analysis of GC data

GC Identify can be used to quickly identify all the unknown material in a GC sample measured using any Thermo Scientific GC-IR module or interface. GC Identify compares the spectrum at each retention time of a series Gram-Schmidt profile that shows a maximum spectral response against all the selected spectral libraries and finds the library spectrum that most closely matches the unknown. The result is a list of best matches, one for each response peak in the Gram-Schmidt profile.

Improved control of GC transfer line heaters

There is now a window that can be displayed to monitor the heating of the GC transfer line during a GC series run.

Basis vectors can be used for background

The basis vectors collected for a Gram-Schmidt profile can now be used as the series background, so a separate background does not need to be collected. Use the Edit button in the profile section of the Series tab of Experiment setup to activate this feature.

Resolved Issues

Screen wheel and filter wheel positions correctly stored in experiment files

The positions of the screen wheel and filter wheel are not correctly stored in experiment files and restored when the file is opened. Since the wheels are optional, the positions will only be stored on instruments that have the optional hardware.

Less confusion switching between Raman and FT-IR modes

In previous versions, users on some systems were allowed to select the Raman sample compartment from the Bench tab of experiment setup when in FT-IR mode. This would change the instrument to the Raman beam path, but not switch the software into Raman mode. OMNIC 9 does not allow the selection of the Raman sample compartment when in FT-IR mode. The user must select "Use Raman accessory" from the Raman menu, which correctly changes to the Raman beam path and switches the software to Raman mode.

The software will automatically switch correctly when the new iS50 Raman module is inserted or activated. The "Use Raman accessory" menu item is not available on those systems.

Known Issues

Windows Vista support dropped

Although OMNIC 8.3 was supported on systems with Windows Vista, OMNIC 9 is not supported on those systems.

OMNIC 8.3

- **Release date:** November 2011
- **Supported operating systems**
 - Windows 7 32-bit
 - Windows 7 64-bit
 - Windows 8.1 64-bit

New Features

Windows 7, 64-bit support

OMNIC 8.3 is now supported on systems with Windows 7 Professional edition, 64-bit version.

Resolved Issues

IR200, Corrected problems with background handling

Beginning with OMNIC 8.2, the data spacing adjustment for the instrument's diode laser was not applied correctly when the background was measured resulting in invalid background errors.

iS5, Corrected occasional iD5 accessory test errors

Occasionally the automated accessory test, which runs when the iD5 accessory was attached, would initially indicate a failure but always succeed when re-tried.

iS10, Corrected error in the iTR experiment file affecting spectral interpretation

An incorrect value in the iTR experiment file for iS10 prevented the Spectral Interpretation operation from producing the expected result.

Revised installation process to eliminate compatibility problems with McAfee Update Agent

On some systems with McAfee, the McAfee Update Agent would no longer run properly after installation of the OMNIC software.

Known Issues

ACD Structures optional software is no longer available

This package is incompatible with Windows 7 64-bit and has been removed.

OMNIC 8.2

- **Release date:** August 2010
- **Supported operating systems** **Windows XP SP3 32-bit
 - Windows Vista 32-bit
 - Windows 7 32-Bit

New Features

System Performance Verification (SPV)

The SPV feature has been enhanced to support the new Nicolet iS5 instrument. A check box has been added to the System Suitability test to do an auto tune at the start of the test.

Nicolet iS5

Added support for the Nicolet iS5 spectrometer. This includes the laser calibration, warm up time when the instrument is first started and a prompt to run PV when the instrument is first used.

Antaris IGS II

Added support for the IGS II spectrometer and data collection in series at high speed.

How to use 5 Hz, 0.5cm⁻¹ series collect:

- Set the following parameters in Experiment setup
 - On Collect tab set
 - No. of scans = 4
 - Resolution = 0.5
 - Turn off automatic atmospheric suppression
 - On Bench tab set
 - Optical velocity = 8.2277
 - On Advanced tab set
 - Zero filling = *none*
 - Sample spacing = 2
 - On Series tab set
 - Data collection type = *High speed real time*. This collects full spectra using the bidirectional collect.
 - Profiles - If using quant method, do not select *Use quant method from file* as this will prevent creation of the CNC file. Use the main quant setup under Analyze menu.

- Select *Gas Cell* and setup the parameters to use default values or read from the gas parameters if hardware available.
- A quant method for the reverse scan can be selected by checking the *Use reverse quant* and selecting *Setup Reverse Quant* to choose a quant method developed for the reverse stroke of the bidirectional scan. This is used to enhance the performance of the series collect.
- Select the OK button on Experiment setup.
- Select Collect Series and run it as described in the documentation.
- Setting up a Reverse quant method.
 - This quant method is used when *Use reverse quant* is selected in Series setup.
 - Collect background by using the *Collect Background (bidirectional)*... command. This will create a forward and reverse background set which can be saved to disk as an SPG file.
 - Collect a standard by using the *Collect Sample (bidirectional)*... command. This will collect two spectra, forward and reverse.
 - Create the TQ quant method as described in the documentation.
 - Create a second TQ method by copying the completed first method to a new file. Change the standards in this method to be the reverse spectra collected earlier. So that one method is using forward spectra and the other method has the reverse spectra.

Windows 7 support

OMNIC 8.2 is compatible with Windows 7 Professional edition. 64-bit versions of Windows are not supported.

JCAMP Multifile read and write

Add support for JCAMP MultiFile read and write.

Spectra signatures in Reports

A report field has been added to show the signature of a spectrum in a report.

SST - Support for new GaGe card

Support for new GaGe Razor 1422 card for TRS

Windows 7 - Setting up an automated performance verification

The steps for setting up an automated performance verification have changed for the Windows 7 operating system. The user documentation should read as follows:

If Performance Verification is available on your system, you can have a verification run automatically at a scheduled time using the internal validation wheel. You use the Task Scheduler wizard in Windows to set up the software for verification.

1. Open Task Scheduler
 - a. Open **Control Panel**
 - b. If **View by:** is set to *Category*, click **System and Security** → **Administrative Tools** → **Task Scheduler**.
 - c. If **View by:** is set to *Large icons* or *Small icons*, click **Administrative Tools** → **Task Scheduler**.
2. In the *Actions* panel of the Task Scheduler, click **Create Basic Task**.

3. Enter a task name and optional description and configure the trigger information as desired.
4. When prompted for what action you want the task to perform, select **Start a program**.
5. Use the **Browse** button to locate omnic32.exe. This is typically located in C:\Program Files\OMNIC or C:\Program Files (x86)\OMNIC; the specific location depends on where you installed OMNIC.
6. In the *Add Arguments* text box enter the following: `-C\PerfVerifyTest; Select All; DeleteSelectedSpectra; Exit`
7. Check the *Open the Properties Dialog For This Task When I Click Finish* checkbox on the final page and click **Finish**.
8. The properties dialog for the task will appear. Select **Run only when user is logged on** on the General tab.



Selecting the option to "Run when user is not logged on" on the General tab will not work as expected for launching a PV test.

9. Set the parameters on the other tabs as desired.
10. Click OK

Resolved Issues - OMNIC

Print button is disabled in search result window when using OMNIC Data Security

If the system policy "prevent printing, cutting or copying of unsaved data" is activated the customer is unable to print from the search result window.

Added two types to Options parameter XAxisMode

The types "NanometerXAxis" and "ElectronVoltXAxis" were added to the DDE parameter for the XaxisMode. The settings were available from the Options dialog in OMNIC but not from the DDE parameter.

Combining Large Spectral Groups in OMNIC 8 Fails

Unable to combine two large spectral groups into one file on disk.

iS10 filter wheel remains in beam path after ValPro run

The filter wheel did not switch to the open position after the ValPro test was run.

Collect sample error on 4th scan

During a background collection the software crashed when the collect reached the 4th scan.

Nexus benches with new sources show Source Current

After source replacement the sources work but they fail the source current low limit test.

Software crash when multiple spectra are opened

When using OMNIC Data Security 8.0 and opening multiple spectra OMNIC displays an unexpected error Caution box.

Cannot change X axis scale to nanometers via DDE command

OMNIC returns an error when the DDE command is used to set the X axis scale to nanometers.

Resolved Issues - Search

Search Libraries and Groups error

When making a library list a group, the following error message would appear "The library or path in the group was not found". The error message is confusing.

Resolved Issues - OMNIC Series

No Prompt for Temperature or Pressure when required by quant method

When the TQ quant method required a prompt for temperature or pressure, the series collect would not prompt.

Unable to import TGA data with negative values

Negative values are occasionally used in the TGA data. This prevented importing of the data into the series run.

Cannot create correlation map profile on reprocessed rapid scan data

Rapid scan data set collected and reprocessed to absorbance. When profile run error message "Cannot recalculate reconstructions with interferograms or single beam spectra. Please change the final format"

TQ Gas Quant method corruption leads to erroneous Series CNC file

Using a TQ quant method that reports errors results in a CNC file with zeros for all the quant values and times of zero when a profile is run.

Resolved Issues - OMNIC Macros Basic

Macros Basic delay does not keep accurate time

When using a macros basic delay task, it does not keep accurate time.

Macros Basic cannot open more than one file

Macro is setup to open several files, when executed with several files there was an error.

Resolved Issues - OMNIC Data Security

Remove Run OMNIC Only

The system policy "Run OMNIC only" cannot be supported in Windows VISTA or Windows 7.

Digital signature not shown on reports

The spectrum digital signature was not shown on the spectrum in a report.

Known Issues

None

OMNIC 8.1 SP1

- **Release date:** June 2009
- **Supported operating systems** **Windows XP SP3 32-bit
 - Windows Vista 32-bit
 - Windows 7 32-Bit

New Features

None

Resolved Issues

Experiment files were saved with the Validation Wheel set to the NG11 position after a ValPro run.

In previous versions of the software sometimes experiment files were saved with the Validation Wheel set to the NG11 position after a ValPro software run which would then leave the wheel in a position other than home which was not acceptable. The only workaround was to restart the OMNIC application following a ValPro run. Now the experiment file settings are set properly so that the correct position is stored following a ValPro run. All experiment files that were saved previously will be adjusted at runtime to correct the issue also.

Sample collection crashes when monitoring ValPro methods is using 21 CFR part 11

Seen on both the main FTIR instrument and one or more accessories using SPV, the collect background before sample option is selected in Experiment Setup and you are using the 21CRF11 option. The software generates an unhandled exception on the 4th scan of the sample collection following a successful background collection when certain ValPro methods are monitored in SPV and TSA is being used. When all of these conditions are met a buffer overflow exception was thrown because of a long description being generated. This issue has been addressed and will no longer occur.

Known Issues

None

OMNIC 8.1

- **Release date:** March 2009
- **Supported operating systems** **Windows XP SP3 32-bit
 - Windows Vista 32-bit
 - Windows 7 32-Bit

New Features

QCheck printout now indicates High Sensitivity option

The result window now displays text indicating the High Sensitivity setting used during the processing.

Resolved Issues

OMNIC version 5.1a quant methods now quantify correctly using OMNIC 8.0 SP1

Quant methods created with OMNIC version 5.1a now quantify correctly with OMNIC 8.0 SP1 software. They caused an error to occur when used with OMNIC 8.0.

Validation wheel positioning

Prior to auto-aligning, the validation wheel is reset to the home position.

Macros Pro programs

Macros Pro programs will not execute without requiring installation of Macros Pro on the system.

Translation Updates:

The translation files have been updated.

Known Issues

None

OMNIC 8.0

- **Release date:** March 2008
- **Supported operating systems** **Windows XP SP3 32-bit
 - Windows Vista 32-bit
 - Windows 7 32-Bit

New Features

QCheck

The new QCheck feature allows a user to compare a spectrum to an individual reference spectrum or to a set of reference spectra. The analysis is configured with the QCheck Setup command found in the Analyze menu and the analysis is performed using the QCheck command found in the same menu.

System Performance Verification (SPV)

The SPV feature provides an integrated monitor to verify instrument performance, perform "fit for purpose" tests, and inform the user when tests or maintenance have failed or need to be performed. It consists of the Instrument Status monitor, Scheduled Maintenance monitor, System Suitability monitor, Performance Verification monitor, and ValPro monitor (if installed). If any of those items being monitored need to be performed or have failed, the System Status indicator changes from green to yellow or red as appropriate.

OMNIC Spectra

Added support for sending the selected spectrum in OMNIC to OMNIC Spectra for further analysis. This is accomplished using the Send to OMNIC Spectra command in the Analyze menu.

Nicolet iS10

Added support for the Nicolet iS10 spectrometer.

Thermo IQ

The Thermo IQ utility is now included with OMNIC; previously it was included with OMNIC Data Security. This utility allows you to verify that the files on your computer match the files specified by the installer.

Windows Vista support

OMNIC 8 is compatible with Windows Vista Business edition. However, there are two features of OMNIC Data Security that are not supported in Vista. See the known issues for a description of these limitations.

Resolved Issues - OMNIC

Correction Settings in Experiment Setup are offset

If you select ATR, H2O or CO2 Correction in Experiment Setup, the software actually performs the correction listed one below your selection.

Apodization & Phase Correction Settings in Spectral header of imported JCAMP files may be incorrect

The JCAMP file format does not define the apodization function or phase correction settings of a spectrum. In previous versions, OMNIC set these values to OMNIC's normal defaults. In OMNIC 8 these values are set to unknown.

Saving spectra with blank regions to CSV loses X value information.

If you saved a spectrum with a blanked region to a CSV file, the X-axis information was incorrect for the region above the blanked area.

Bruker^^ files in %Transmittance scaled incorrectly

Files in the Bruker format with data in percent transmittance (%T) were incorrectly scaled from zero to one

instead of zero to 100.

OMNIC32.ini file in Windows directory no longer used

Users without Administrator privileges are restricted from writing updates to the Windows\OMNIC32.ini file in most Windows environments. OMNIC has changed to writing shared state information to the file OMNICSettings.ini in the OMNIC data directory (usually C:\My Documents\OMNIC). This change was necessary to make OMNIC function under Windows Vista but was also a problem for some Windows XP environments.

Report notebooks become corrupted when too many reports are added

Report notebooks with a very large number of reports were getting corrupted and the reports could not be read/displayed. The number of reports that caused this problem varied depending on how many items were in each report. The incidences of corrupt notebooks that were reported held over 10,000 reports before they were corrupted. The reporting code has been changed to detect when an attempt it made to add a report to a notebook that is near the limit and display an error message. The user must then create a new notebook to save the report.

OMNIC no longer allows spectra from commercial libraries to be saved

Some previous versions of OMNIC were allowing spectra extracted from commercial libraries to be saved as individual spectral data files (as .spa files, for example). The old restriction that prevents this saving has been reinstated.

Resolved Issues - OMNIC Series

Crash when reopening Rapid Scan series files

If a Rapid Scan series file was reopened after the initial collection, the X-axis could be reversed and any manipulation of the data could cause OMNIC to crash.

Sampling Information data and time incorrect for Series data

When the option to display the Sampling Information collect time field was turned on, the date and time displayed for Series data was not valid.

Known Issues - OMNIC

Tabbing in Options and Experiment Setup does not move between controls.

Pressing the tab key does not move the keyboard focus from one control to the next in the Options and Experiment Setup dialog boxes.



Use the mouse to move keyboard focus to a control.

960 spectrometer help is not provided.

The 960 spectrometer help is no longer included with OMNIC software.

Uninstalling ValPro causes new SPV features of OMNIC to display errors.

If you have OMNIC 8 and ValPro installed and then uninstall ValPro, subsequent use of the System Suitability and Performance Verification features of SPV will display error messages indicating the output files have been

tampered with. This is caused by the ValPro uninstaller unregistering the component needed to apply and verify digital signatures.



Open a command prompt (in Vista be sure to use a command prompt with Administrator rights) and use the command: `regasm "C:\Program Files\OMNIC\Thermo_OMNIC_XML.dll"` which will re-register the component needed for digital signatures.



The path to this file may need to be adjusted depending on where the software was installed.

Known Issues - OMNIC Macros Pro

Macro Panel is no longer included with Macros\Pro

Macro Panel is no longer included with Macros\Pro. Macros can be added to the OMNIC toolbar with the Edit Toolbar command.

Known Issues - OMNIC Series

TA Instruments TGA file not being read using OMNIC Open TGA Data File command

In newer versions of TA Universal Analysis software the file format of the TGA data files was modified so they are not read by OMNIC using the instructions provided. In order for the file to be read by OMNIC it must be saved using the Export utility from the TA software selecting the ANSI character set instead of Unicode.

Series 3-D display only shows in black and white

With the Radeon x300 or x1300 Pro graphics card, the Series 3D display will not show colors. The workaround to get the image to display in color is to adjust the hardware acceleration setting for the video card. See the Technical Bulletin TBN IR3140 for detailed instructions on how to do this. This problem can also appear in the OMNIC Atlas mapping software.

TA Instruments TGA file not being read using OMNIC Open TGA Data File command

In newer versions of TA Universal Analysis software the file format of the TGA data files was modified so they are not read by OMNIC using the instructions provided. In order for the file to be read by OMNIC, it must be saved using the Export utility from the TA software selecting the ANSI character set instead of Unicode.

Known Issues - OMNIC Data Security

"Run only OMNIC" feature not supported in Windows Vista

The security policy named "When user logs on, run only OMNIC" that can be used to prevent selected user groups from having access to the Windows desktop is not supported in Windows Vista.

Screen Saver setting from Thermo Security Administrator not supported in Windows Vista

The security policy named "Automatically start screen saver after (minutes)" that can be used standardize a screen saver time for user groups is not supported in Windows Vista.

OMNIC 7.4.1

- **Release date:** November 2007
- **Supported operating systems**
 - Windows 2000 SP4
 - Windows XP SP2

New Features

None

Resolved Issues

International (Non-English) Installation

Some international versions of the Windows operating system have translated Administrator strings that cause a failure when trying to install the OMNIC 7.4 software.

Known Issues

None

OMNIC 7.4

- **Release date:** October 2007
- **Supported operating systems**
 - Windows 2000 SP4
 - Windows XP SP2

New Features

Branding changes

Changes have been made to the about box, splash screen, program icons and folder names to reflect the company brand name change to Thermo Scientific. The about box has changed to show the versions from the Windows Installer information rather than the version resources of the actual DLL/EXE files.

Help Format Change

The entire OMNIC help system has been changed to use the "Compiled HTML" help now provided with Windows. There have been some minor changes to the help functionality with this change. For example, right clicking in a spectral window no longer brings up a help window. This change also eliminates problems with .GID files used by the old help system. The old help system tried to update these .GID files as the help file was

navigated, but would sometimes display error messages if the user did not have sufficient privileges to update them. If the .GID files did get updated, the modification dates would no longer match what was expected by the IQ tool. These issues are resolved with the new help system.

Experiment Filename added to list of experiments

The dropdown list of experiments has been enhanced to include the filename of the experiment. This helps eliminate confusion when there is more than one experiment with the same title.

Automatic Atmospheric Suppression improvements

Additions were made the Atmospheric Correction feature to improve its performance. This included algorithm changes and an expanded calibration model.

Limit on zero fill options with high resolution data

A limit on the levels of zero fill the Reprocess feature allowed on high resolution data has been removed. This limit was only needed in 16-bit Windows, but it was left in when the transition to 32 bit Windows was made. Two levels of zero fill are now supported.

Additional Jasco file types now recognized

Jasco files with a newer binary file type indicator are now read by OMNIC.

Resolved Issues

Report Notebook spectra all shown in red

Reports added to notebooks with versions earlier than OMNIC 7.3 would have spectra all displayed as red when viewed with OMNIC 7.3. This has been changed so only the selected spectrum is displayed in red.

Autosave Base Names

In the Collect tab of Experiment Setup, the drop-down list for the Base name in the File Handling box has failed to show the Auto save base names previously used.

Incorrect error message when saving to full disk

OMNIC was giving an error message that indicated the target file was write protected if a save was attempted to a disk drive that did not have sufficient free space for the save to succeed.

Interferograms now attached to reprocessed spectra

When some spectra with saved interferograms were reprocessed, the saved interferograms were not attached to the new result spectrum.

Saving data using filenames that include Kanji characters fail

OMNIC was not correctly handling filenames that contained some Kanji characters.

Derivative command fails from macro if system is language is Japanese

The derivative command could fail from a macro if the system was running in Japanese.

QC Compare results not available in Macros Basic

The results of a QC Compare operation were not made available in Macros Basic.

Library Converter now allows output to be put in same directory as input

The Library converter program would generate errors if the output library was written to the same directory as the input file. This restriction has been removed.

Data from some GRAMS format libraries scaled incorrectly by Library Converter

The data from some GRAMS format libraries was being scaled from 0 to 256 instead of from 0 to 1.0.

Data that cross zero on X Axis may crash Find Peaks

Spectra with data that spanned zero on the X Axis could cause Find Peaks to crash.

Paste operation fails on newly created window

When a paste was done into a newly created window, the focus was on the disabled title control rather than on the spectral display, so the paste operation failed.

Autosave sequence number does not always increment from a macro

Collects done in a macro would sometimes overwrite previous collects because the autosave sequence number was not incremented.

Message displayed indicating intermediate collect results would not be displayed

Collects of high-resolution data (0.125 cm^{-1}) would display a message indicating the result would not be displayed until the entire collect was complete, but the intermediate results would in fact get displayed. This message has been removed.

Bench and Diagnostic Tabs of Experiment Setup don't center peak

When changes were made in Experiment Setup that caused the collect used to populate the interferogram display to change sample spacing, the region of the interferogram displayed was not adjusted to focus on the same features. This would usually cause the peak to be outside of the display region. This has been changed so the displayed region is adjusted for sample spacing changes.

File Open dialog locks up opening some Mattson files

OMNIC would lockup when trying to read some files in the Mattson WinFirst format. This happened on files that had text annotations.

Pasting Search results into Log file gives garbled RTF

If a copy was done from an OMNIC window that produced tabular results and then the table was pasted into OMNIC's log file, the table header would be garbled.

Floating-Point overflow when expanding interferogram display in Experiment Setup

A floating-point overflow would sometimes occur when expanding the interferogram display on the Bench tab of Experiment Setup, causing an error message to appear that forced the user to close OMNIC.

Raman menu shown twice

If OMNIC had trouble communicating with the instrument at startup, but then was able to establish good communications, the Raman menu would end of being added to the top-level menu twice. Some of the items in the two menus would then be enabled/disabled at the wrong times.

Collect Sample with region selected stops update

In the data collect window, if the region tool was used to define a region, the remainder of the collect would be discarded and the spectrum on display at the time the region was defined would be used as the final result. This was true even if the region was defined while the background single beam was being collected.

Known Issues - OMNIC

Uninstalling OMNIC 7.x on a system that was upgraded from OMNIC 6.1a

If you install OMNIC 7.x over OMNIC 6.1a installation and then try to uninstall OMNIC 7.x using either the Uninstaller on the OMNIC 7.x CD or from Add/Remove programs, the OMNIC EXEs and DLLs are not removed. The reason is that OMNIC 6.1a was not uninstalled before OMNIC 7.x was installed. To uninstall 6.1a, run the uninstaller in the /uninstall folder.

Tabbing in Options and Experiment Setup does not move between controls.

Pressing the tab key does not move the keyboard focus from one control to the next in the Options and Experiment Setup dialogs.



Use the mouse to move keyboard focus to a control.

Known Issues - OMNIC Macros Pro

Macro Panel is no longer included with Macros\Pro

Macro Panel is no longer included with Macros\Pro. Macros can be added to the OMNIC toolbar with the Edit Toolbar command.

Known Issues - OMNIC Series

TA Instruments TGA file not being read using OMNIC Open TGA Data File command

In newer versions of TA Universal Analysis software the file format of the TGA data files was modified so they are not read by OMNIC using the instructions provided. In order for the file to be read by OMNIC it must be saved using the Export utility from the TA software selecting the ANSI character set instead of Unicode.

Series 3D display only shows in black and white

With the Radeon x300 or x1300 Pro graphics card, the Series 3D display will not show colors. The workaround to get the image to display in color is to adjust the hardware acceleration setting for the video card. See the Technical Bulletin TBN IR3140 for detailed instructions on how to do this. This problem can also appear in the OMNIC Atlas mapping software.

OMNIC 7.3 Service Pack 1

- **Release date:** October 2006

- **Supported operating systems**

- Windows 2000 SP4
- Windows XP SP2

New Features

Change to version numbers shown in About box

A change to the approach used to deliver maintenance software releases for OMNIC related products resulted in a change to the information shown in the About OMNIC box in the Help menu. Maintenance releases for OMNIC related products are being issued as Service Packs that bundle files for all products that have been changed. Only the specific files that have changed are updated by the new service pack installation process. There will no longer be maintenance releases of individual components, such as OMNIC Search. Because of this, the third component of the version number (such as the "a" in 7.2a) is no longer used. Instead, the latest service pack (which applies to all components) is shown near the top of the About box.

It should be noted that the Service Pack installation requires OMNIC 7.3 to be installed on the computer.

Support of the Nicolet 8700 (USB version)

Support has been added for the USB version of the Nicolet 8700 spectrometer. This includes the extension of the PM modulation amplitude to 4.5 lambdas and three enhancements of step-scan time-resolved data collection: The optional use of an additional input (Sync), a shorter (1 microsecond) minimum sampling interval when using the spectrometer digitizer, and the ability to use multiple triggers per step when using the spectrometer digitizer.

New correlation options avoid shifting first scan of collect

Two new correlation options were added that are available only by setting the DDE parameter "Collect Correlation" to "NoPeakShift" or "NoShiftSimple". These settings cause OMNIC to assume the instrument positioned the peak at the exact location requested for the first scan and do not shift the scan. All previously existing correlation options shift the first scan so the largest peak (in absolute value) is located at the requested position. The "NoPeakShift" option does not do any correlation on subsequent scans, while the "NoShiftSimple" option still does simple correlation on subsequent scans.

This was done to provide a workaround for unusual collect conditions where the ZPD location cannot be inferred from the largest peak.

Resolved Issues - OMNIC

Smart Accessories not recognized in some circumstances on Nicolet 380 and x700

OMNIC was not responding to insertion and removal of Smart Accessories if the instrument had not been used to collect data for more than 40 minutes. A change was made so the instrument always responds to smart accessory changes if OMNIC is running. If OMNIC is not running, the instrument will still go into a "rest mode," but starting OMNIC will automatically take the instrument out of "rest mode."

Nicolet 6700 with Dual Channel option does not collect correctly

OMNIC 7.3 has reversed the A and B channels on Nicolet 6700 Dual Channel systems. Channel B on these systems is supposed to be the BNC mounted in the baseplate to the right of the sample compartment. When OMNIC 7.3 is loaded, this becomes Channel A. Then when a Dual Channel PEM collect is made the spectral

data that is automatically ratioed will be upside down.

Spectral Header information not correctly extracted from user libraries

If a spectrum is added to a user library created with OMNIC 6.0 or newer, the header information is preserved in the library and can be viewed if the spectrum is extracted from the library. However, a bug in extracting the spectrum from the library was causing this header information to be lost. Because of this, using a spectrum extracted from a user library as input to the "Match Spectrum Settings" command on the Collect menu would not result in the settings being set to match those used to collect the library spectrum.

Check Desiccant button not available for Nicolet 380 systems

The Check Desiccant button on that is supposed to appear on the Diagnostic tab of Experiment setup was not present on Nicolet 380 systems. This has been changed so the button appears and functions.

Align results in flat line interferogram on 460 and ECO 1000

On some 460 and ECO 1000 systems, using the Align feature on the Diagnostic tab of Experiment Setup would appear to work correctly, but at the very end of the Align, the interferogram would change to a flat line. A Reset of the bench would restore correct scanning operation. A driver change was made to add a small delay (10 milliseconds) to the end of the Align operation to avoid this problem.

Polarizer wheel does not move to zero on a Nicolet 8700

A bug was found in the Nicolet 8700 PCI driver which prevented the polarizer wheel from moving to zero if the attenuation wheel was at zero.

Company Logo change on EZ OMNIC Splash Screen

The company logo on the EZ OMNIC splash screen was changed from the Thermo Nicolet logo to the Thermo Electron logo. This change was missed when the OMNIC splash screen changes for version 7.0.

Find Peaks locks up if spectrum X Axis crosses zero

The Find Peaks operation on the Analyze menu may cause OMNIC to lock up if the X Axis covers a range of both positive and negative values. A workaround that avoids this lock up is to manually add a piece of annotation using the text tool prior to doing the Find Peaks.

Resolve Issues - OMNIC Macros Basic

Macros Basic problems with comma for decimal point

Macros Basic was not handling floating point numbers correctly if the system was set to use the comma as a decimal point character.

Some Macros saved in Chinese cannot be reopened

Some Macros Basic macros saved on systems using Chinese as the system language could not be reopened.

Resolved Issues - OMNIC Series

Incorrect date/time shown for Rapid Scan data.

Data collected with Rapid Scan show incorrect date/time in the Series Information window. This is for the "collected" date in the second line and also for the "data processing" section in the history. The year shows up

as 2036 and the month/date appear are arbitrary.

Rapid Scan for 380 uses wrong Settle time

The settle time used for Rapid Scan runs on a 380 was too short causing poor quality data to be collected. The settle time was changed from 2 milliseconds to 200 milliseconds for the 380.

Using more than three Quant components in a Series run causes problems

If more than three quant components were selected for profiles using a selected quant method when collecting Series data, the Y Axis labels of the profiles could be displayed incorrectly and crashes could occur.

Series window can now be closed from DDE without prompt to save data

The `CloseWindow` DDE command can be issued with the argument `Yes` to save changes to data automatically without prompting the user (that is, `CloseWindow Yes`). The Series window now recognizes this argument and will close without a prompt if it is present. This allows a Series run to be stopped before it completes by using the two commands `StopCollect` and `CloseWindow Yes`.

GC temperatures not sent to instrument when changed in Experiment Setup

Changes made to the GC flow cell and transfer line temperatures were not being sent to the instrument when they were changed in Experiment Setup.

Rapid Scan on 8700 PCI misses scans

Rapid Scan data collected on an 8700 PCI would have gaps where scans were missed if Smart Accessory polling was not manually turned off during the run. This was fixed by automatically turning off polling of Smart Accessories during a Rapid Scan run for 8700 PCI instruments and restoring the previous polling state at the end of the run.

Timing of Series collect with external trigger starts before trigger

The duration of a Series collect started with an external trigger could be shorter than expected because the collect timer was being started before the trigger occurred.

Generation of CNC file for profiles created post analysis

The concentration output text file (CNC) would not get generated when creating a profile on an existing Series data file.

Known Issues - OMNIC

Uninstalling OMNIC 7.x on a system that was upgraded from OMNIC 6.1a

If you install OMNIC 7.x over OMNIC 6.1a installation and then try to uninstall OMNIC 7.x using either the Uninstaller on the OMNIC 7.x CD or from Add/Remove programs, the OMNIC EXEs and DLLs are not removed. The reason is that OMNIC 6.1a was not uninstalled before OMNIC 7.x was installed. To uninstall 6.1a, run the uninstaller in the /uninstall folder.

Tabbing in Options and Experiment Setup does not move between controls.

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Known Issues - OMNIC Series

TA Instruments TGA file not being read using OMNIC Open TGA Data File command

In newer versions of TA Universal Analysis software the file format of the TGA data files was modified so they are not read by OMNIC using the instructions provided. In order for the file to be read by OMNIC it must be saved using the Export utility from the TA software selecting the ANSI character set instead of Unicode.

Known Issues - OMNIC Data Security

Require Signature When Saving Spectrum and OMNIC for Almega

If OMNIC Data Security is installed on your system, the **Require Signature When Saving Spectrum** policy should be disabled during instrument calibration and when smart background data are due to be collected so that the collections will not be interrupted by requests for **digital** signatures. Smart background data are collected during the first ~40 hours of instrument inactivity after **OMNIC for Almega 7.3** is installed and periodically after that based on the setting of the Maximum smart background age control in the Calibrate Instrument dialog.

OMNIC 7.3

- **Release date:** April 2006
- **Supported operating systems**
 - Windows 2000 SP4
 - Windows XP SP2

New Features - OMNIC

Added capability to read Bruker and Jasco spectral files

OMNIC can now open and display Bruker [.0-9]* and Jasco [*.JWS] spectral data files.

Conversion of PerkinElmer, Bruker, GRAMS/Spectral ID & Sadtler SearchMaster libraries

A new application titled "Library Converter" has been developed to convert PerkinElmer^{^^} Spectrum, Bruker OPUS^{^^}, GRAMS/Spectral ID and Sadtler SearchMaster user libraries to OMNIC format. The converted libraries can then be used in OMNIC for library searching and with the Library Manager feature.

New interactive Kramers-Kronig correction

A new processing function has been added which allows the user to convert specular reflectance data with a Kramers-Kronig correction and either normalize the result to 1 (one) Absorbance unit or 1 (one) micrometer. The user can also choose to have the N-index and/or the K-index spectrum appear with the result.

Ability to set the parameters for automatic baseline

The polynomial order and number of iterations for the automatic baseline function can be set in the Edit/Options/Process Tab.

Added the ability to apply a linearization method to photoacoustic data

A new processing function titled "PAS Linearize" has been added that will apply the linearization method of R.O. Carter III, Applied Spectroscopy, 46, 219, 1992) to the data. This enhances the infrared signal at the sample surface and improves quantitative linearity.

Titles of the spectra in the search list are now displayed in overlay mode

In previous versions, titles for the spectra in the search list were only displayed if the spectra were stacked. Titles are now also displayed if the spectra are in overlay mode.

Added the ability to include the name of a notebook in a report

Previously, a field did not exist to add the name of a notebook to a report. This field has now been added.

Clipboard button added to Search Results window

A clipboard button was added to the Search Results window that copies the hit list as a text table as well as the graphical display of the search results. Users can use "Paste Special" in most programs, such as MS Word, to select the format of data they want to paste.

Tabular data written to Clipboard as RTF

Many places in OMNIC that write tabular data to the clipboard were changed to write the data as an RTF table as well as the previously supported unformatted text. Users can use "Paste Special" in most programs, such as MS Word, to select the format of data they want to paste. Pasting RTF tables can simplify formatting of the information in external documents. RTF tables are now produced for Find Peaks, Peak Resolve, Search Results, and Annotations,

OMNIC can control Antaris model spectrometers

OMNIC can now be used to control the Antaris and Antaris IGS spectrometers.

New Features - OMNIC Series

Series data collect has been updated

Setting up a series data collection is no longer done through the Series menu; it has been fully integrated into OMNIC's Experiment Setup dialog. If Series is installed on your system, a new tab titled "Series" will appear in the Experiment Setup dialog. The previous capabilities of configuring a series data collection are still available. Additionally, new functionality has been added to setting up a series data collection including the ability to set collect data for a specific period of time, delay (or suspend) collect data during a specific time period, collect data until a specified intensity value is attained, or delay (or suspend) data collection until a specific intensity value is reached. The user can also set the Y-axis range for the series data collection.

Series supports FT-Raman and dispersive Raman spectrometers

Series data collection can now be used with FT-Raman and Almega spectrometers.

Opening and saving series data files has been updated

Opening and saving series files is now done through the OMNIC File menu Open, Save, and Save As items.

Series 3D display features has been enhanced and updated

Displaying a series file with the "Show Series 3D window" menu item has been completely redone. A new interactive 3D display is available that allows the user to change the viewing angle of the image with the mouse. An enhanced 2-D contour plot has been added. A color bar has been added to allow the user to change the color palette used in the 2D and 3D images to better differentiate differences in the series data file. Additionally, the user can view the spectra and/or profiles on the same screen. The four panes are interconnected so that selecting a point or spectrum on one pane, updates the other panes correspondingly. Right-click pop-up menus are connected to each pane for quick access to common features of that pane.

Enhanced display options for series data profiles

Users have the option to set up to 10 profiles with each series data collect. Previously, the limit was 3 (three). Profiles can be displayed in either overlay or stack mode. Through the right-mouse pop-up menu, users can choose to copy individual or all profiles to an OMNIC spectral window. A similar copy and paste functionality has been added for spectra.

Processing of Series files is integrated into OMNIC menus

Users can now use the Process menu to apply relevant processing functions (absorbance, transmittance, other conversions, reprocessing (with saved interferograms), automatic baseline correct, other corrections, blank, straight line, subtract, automatic region subtract, smoothing, derivative and multiply). In previous releases, these functions were applied through the Apply Function menu item in the Series menu.

Searching of a spectrum from a series data collect

Users can search the selected spectrum in the series window. There is no longer a need to first copy the spectrum to an OMNIC spectral window.

Saving of intermediate data during a series collect

During a series data collect, data is always saved to disk after every collect cycle in order to prevent data loss in case of an error or power failure.

Ability to use basis vectors from a saved file

Users have the option to use basis vectors from a specified file versus collecting them at the start of a series collection. Also, the basis vectors can be used as the background rather than collecting a separate background. This can speed up the time of the series data collection.

Interferograms can be saved during a series collection

Users have the option to save the interferograms along with the data in a series collection. Interferograms must be saved if the user desires to reprocess the series data set.

Split series supports long file names

Users use up to 64 characters for the names of the individual files created when splitting a series file. In previous versions, the limit was 4 characters.

Series features supported by Thermo Security Administration

Access to the Series features and policies for series spectral data files can now be controlled with the Thermo Security Administration application if needed by the user to comply with FDA regulations such as 21 CFR Part 11.

New Features - EZ OMNIC

Automatic Atmospheric Suppression now supported in EZ OMNIC

Atmospheric suppression can now be used in EZ OMNIC to automatically remove water vapor and CO₂ interferences during spectral data collection.

Advanced ATR now available

Users can now apply the Advanced ATR Correction processing feature.

EZ OMNIC now supported by DS and Thermo Security Administration

The ability to digitally sign spectral data files in EZ OMNIC and control EZ OMNIC through Thermo Security Administration has been added.



It cannot be used to sign library files in EZ OMNIC.

Print/Preview Report is available

Users now have the ability to print and preview reports with EZ OMNIC. A variety of templates are provided for including the spectral data, search results, peak tables, and data collection information together in a single document which can then be printed.

New Features - Thermo Software IQ

New application provided with OMNIC Data Security to verify software installation

A new application is available with OMNIC Data Security to verify that the correct versions of files are installed and that the files are installed in the correct folders. A report in HTML format is generated that lists all of the installed files and notes any discrepancies from the expected result. This replaces the written checklist of files previously provided for OMNIC and OMNIC Data Security Software IQ.

Resolved Issues - OMNIC

Selected spectra not retained when added to a notebook

If multiple spectra existed in a spectral window when the data was added to a notebook, which spectrum was the selected spectrum was not retained in the notebook itself. This has been changed so that the selected spectrum from the spectral window appears as the selected spectrum when the report is viewed in the notebook.

Title of a newly created notebook was incorrect when the notebook was viewed

Create a new notebook. Use the View Notebook command and choose a different notebook to view. From viewing notebook window, choose the newly created notebook. The title displayed when the new notebook appeared was that of the previously viewed notebook. This has been changed to show the title of the currently selected notebook.

Displayed data collection information is not added to the report in a notebook

If the data collection date and time were displayed in the OMNIC spectral window and the data was added to a notebook, the collection date and time did not appear in the spectral window in the notebook report. This had been changed so that the displayed collection information is displayed in the report notebook if it appears in the spectral window.

The base file name for autosave has been expanded to 32 characters

In previous versions of OMNIC, the length of the base file name for autosave was limited to 4 characters. This has been increased to support up to 32 characters.

The down arrow control for viewing the list of spectra disappeared after hiding a spectrum

On some systems, the down arrow next to the list for the spectra in the OMNIC window disappeared after hiding a spectrum. This prevented the user from "unhiding" the hidden spectra.

Cannot not label peaks or pick peaks if spectra are in wavelength

Peaks could not be annotated correctly if the x-axis was in wavelength.

Could not print out entire list of QC Compare libraries if greater than one page

Printing out a listing of all QC Compare libraries would stop after the first page.

Auto file naming spectra in a macro could give odd file names

If the base file name for autosaving spectra in a macro ended in a number, the names would not sequence correctly.

Selecting a new initial library directory in Options was not seen in Library Setup

If a different Initial User Library directory was set in the Edit/Options/File dialog, the directory didn't appear in the Library Directories box in Library Setup. To see it, one had to delete one or more of the listed directories from the box.

Y-axis annotations are fixed at 3 decimal points

The number of decimal points use for Y-axis annotations is now controlled by the number of decimal points option in the Options dialog.

If region search is used, the regions are not displayed in the Search Result window

Search regions were not displayed on the Search Result window if they were enabled. OMNIC has been changed to display the search regions on the results window.

Copying and pasting an OMNIC window with a selected area does not display the region correctly in MS Word

If a spectral window showing a shaded area is copied and pasted into Microsoft Word, the shaded area extends past the bottom of the y-axis. This has been changed to only show the shaded area with the boundaries of the graph.

The options in the bench tab of experiment setup are not properly updated if a Smart Accessory is changed

If a Smart Accessory change is made when the Bench Tab of Experiment Setup is open, the dialog settings

are not updated. The Smart Accessory change will cause a new experiment file to be loaded, but the new settings are not shown in the Bench tab. Also, the live display does not properly show the interferogram. This has been changed to properly update the Bench tab settings with the information from the newly loaded experiment file.

If match settings are used in Library Manager to collect a spectrum, it does not follow the options set for number of background scans

Spectra collected by selecting match settings in Library Manager always collected the same number of background scans as sample scans. It ignored whether a different number of background scans had been enabled in the Collect tab of Experiment. This has been changed to follow the settings in the Collect tab.

Autoblanking regions can cause Advanced Diagnostics tests to fail

If autoblanking regions were enabled in the Advanced Tab of Experiment Setup, the regions were used during the advanced diagnostics tests. If the region between 2000 and 100 was blanked, the tests would fail. This has been changed so that advanced diagnostics ignores the autoblack regions.

Spectral range for the diamond Smart Orbit gives improper out-of-range warnings

The diamond window material range and useful range for the Smart Orbit differ and a warning is displayed if the range is set to go below the recommended range of 525 cm^{-1} for diamond. This has been changed to allow for the full range of the diamond optics.

Default report template not set at install

A default report template was not set up when the software was installed. This has been changed to load a default template.

When the information produced with the region tool is removed after the region is drawn

While the region tool is used to draw an area, it displays information about the selected region. The information disappears as soon as the drawing is complete although the shaded region remains. This has been changed to show the information with the shaded region.

Messages of inappropriate parameters in the experiment file do not indicate which parameter was incorrect

If an experiment file is opened and a parameter from the experiment is not appropriate for the current system configuration, a generic error message would appear saying an inappropriate parameter was found and not loaded. This has been changed to identify which parameter was not appropriate.

OMNIC may crash when reprocessing libraries created with OMNIC 6

If a version 6 OMNIC library was reprocessed through DDE, OMNIC may crash.

Resolved Issues - EZ OMNIC

Selecting an *.spa file in Windows Explorer and double-clicking does not launch EZ OMNIC

On systems with only EZ OMNIC installed, the application would not launch if a spectral data file was double-clicked in Windows Explorer.

A default experiment file is not selected during the installation

A default experiment file is not set when EZ OMNIC is installed. This has been changed to load default.exp when EZ OMNIC is first installed.

Val-Q autotester will not run with EZ OMNIC

The auto tester program for algorithm verification would not run on EZ OMNIC only systems.

Resolved Issues - Peak Resolve

Wrong peak may be highlighted when editing peak table

After a fit operation, the peak table can be viewed in the Peaks... dialog. It was possible for the wrong peak to be highlighted in the graphical window behind the dialog. This has been changed so the correct peak is highlighted.

Resolved Issues - Thermo Security Administration

Access to adding a library spectrum to a window is not totally controlled with Thermo Security Administration

If Thermo Security Administration was used to disable access to the library manager "Add to window" button, it only turns it off on the Library tab. The same button on the Spectra tab is still enabled. This has been changed so that if access to the Add to Window functionality is disabled, it is disabled on both tabs of Library Manager.

Report templates could be overwritten when prevent overwriting files was enabled in Thermo Security Administration

Even with the policy set to prevent overwriting on files, report templates could be overwritten as Save As was enabled with the Edit template feature. This has been changed to disable the Save As functionality if prevent overwrite files is enabled.

Thermo Security Administration allows any valid user to log in

When the Thermo Security Administration program starts, it prompts for a user name and password. However, it accepts any valid username and password rather than just the person for the currently logged on user. This has been changed so that only the person currently logged on to the computer can log into Thermo Security Administration.

Thermo Security Administration fails to add domain user to policy groups

Under some conditions, after a local user account has been added to a policy group, all attempts to add domain user accounts will fail.

Unable to sign files a second time if prevent overwriting is enabled

If the Thermo Security Administration program has "Prevent overwriting of files" enabled, the user who collected the spectrum or another user will not be able to sign the file again. The user will receive the error: "Write denied. The file is read only." This has been changed to allow the user to sign the files more than once.

Additional Analyze menus items are being disabled

If access is denied to everyone for the last entries of the Analyze menu (Quantify, Quant Setup, and View Library), "Add to Library" command is also disabled. In addition if the permission to access "Add to Library" is

removed the "QC compare" function is disabled as well. This has been changed to only disable the selected features.

OMNIC 7.2a

- **Release date:** Not recorded
- **Supported operating systems**
 - Windows 2000 SP4
 - Windows XP SP2

Resolved Issues - OMNIC

Font used for axis on printed reports very small or very large

An intermittent problem with the size of the font used for printing axis in reports was fixed. Reports now print with the correct axis font.

Bitmaps that overlap other fields of report fail to print

On some printers, bitmap fields of reports will not print out if they overlap other fields. A warning message is now displayed when a report template is saved and there is an overlapped bitmap field that may not print on some printers. Users can choose to save the template anyway since the report will print correctly on most printers.

Printing to non-Default printer may use incorrect font size

Any printout in OMNIC that was sent to a printer other than the default printer would use the wrong size fonts if the selected printer was set for a different DPI than the default printer. This is similar to the report printing bug mentioned above but could affect any printed text in OMNIC and was not intermittent on systems configured as described.

Username provided to ValPro not correct

If OMNIC was not configured for logins (either with OMNIC Data Security or OMNIC custom logins), the username OMNIC provides to ValPro was the name entered when OMNIC was installed rather than the name of the current user. This results in the ValPro report displaying the incorrect username.

Access Violation when collecting data from a Macros\Basic macro

An occasional Access Violation would occur when repeatedly running a Macros\Basic macro that collected data and the macro was set to "Reset OMNIC parameters when macro ends". This same problem would sometimes cause the spectra to draw with a "filled" appearance.

Y Axis label incorrect when importing some Perkin-Elmer files

Perkin-Elmer files that used a Y-Axis identifier of "Abs" rather than "A" were displayed in OMNIC with a Y-Axis label of "Arbitrary Units". OMNIC now recognizes these files as absorbance and displays the correct Y-Axis label.

Access Violation when setting up Atmospheric Correction

An access violation would occur when using Experiment Setup to create an experiment file that used Atmospheric Correction and a set of collect options not covered by the supplied correction standards. The violation occurred when OMNIC tried to generate the new standards needed for unusual collect conditions, such as triangular apodization. Most of these unusual collect conditions are controlled on the advanced tab of Experiment Setup.

Atmospheric Correction controls disabled in EzOMNIC

Atmospheric Correction is not included in EzOMNIC, but some of the controls in Options and Experiment Setup that are used to control this feature are still enabled. This has been changed so the controls are disabled in EzOMNIC.

Resolved Issues - OMNIC Data Security

Save Group (.SPG) does not generate an event log record

The Save Group operation in OMNIC that writes .SPG files was not generating an event in the Thermo portion of the Windows Event Log.

OMNIC 7.2

- **Release date:** May 2005
- **Supported operating systems**
 - Windows 2000 SP4
 - Windows XP SP2

New Features - OMNIC

ValPro compatibility

Features have been added to OMNIC to support the new ValPro validation package.

New Features - OMNIC Data Security

Individual control of ancillary OMNIC programs launched from OMNIC

Access to all of the ancillary programs that can be launched from the OMNIC menus can now be controlled individually from the Thermo Security Administration (TSA) program. This allows administrators to restrict a given user to launching some ancillary programs but not others. For example, a user may be allowed to launch Advanced Diagnostics, but not allowed to launch ValPro. In previous versions, the ability to launch all ancillary programs, as well as independent programs assigned to toolbars or menu items through Edit Toolbar or Edit Menu were controlled by a single access control item in TSA (called "Run programs from menu or toolbar" in the "Custom toolbar and menu items" group).

To gain access to these new settings in TSA, the administrator must load the new OMNIC.XML file through the "Add Application..." menu item in the File menu of TSA. The OMNIC.XML file is located on the root of the

OMNIC installation CD in uncompressed format. Loading the new version will only add new entries to the TSA database; it will not change any existing settings. The new entries are located in the Access Control group that corresponds to the OMNIC menu they appear in. For example, Advanced Diagnostics is in the Collect group and InterpretIR+ is in the Analyze group.

The "Run programs from menu or toolbar" access control item mentioned above is still available for controlling access to all independent programs added to the menu or toolbar.

If you are upgrading to version 7.2 of OMNIC Data Security and do not reload the OMNIC.XML file into TSA, all of the ancillary programs will be controlled by the "Deny access to menu items not in security database" System Policy since OMNIC now sees each of these as an individual command rather than a run command.

New Features - OMNIC Macros Pro

Environment variables can be used in arguments

OMNIC now expands all environment variables in DDE arguments before executing the commands. This also occurs when the commands are passed through the OMNIC COM interface.

New "Locked" mode available for the OMNICMode command

The OMNIC Macros Pro DDE command **OMNICMode** now accepts the **Locked** keyword to put OMNIC in a mode similar to the **Simple** mode with no menus or toolbars, but with the additional constraint that user input is ignored on the active window. This prevents the user from changing the active window or boxing within the active window or any other similar interactions. However, dialogs that are presented by OMNIC do accept user input. This new mode can be used when OMNIC is being driven by an external program or macro to prevent users from making unwanted changes to the context OMNIC is using. To switch back to the normal mode, use the command **OMNICMode Normal**.

New "Overscale" command for scaling and aligning spectra

A new scaling command has been added that makes it easier to compare spectra on a common scale when they have different baselines. The command is called "Overscale" and it is similar to doing "FullScale" followed by "CommonScale" and then manually dragging the spectra so their baselines coincide. The command can also be used to align peaks or midpoints. OverScale takes one argument that indicates what part of the spectra should be aligned as shown below.

```
"OverScale Baseline | Peak | Midpoint"
```

This command was added for the user interface of a new TQ Analyst version and is available as an OMNIC command because of a common codebase. It is not available through the OMNIC user interface yet.

Resolved Issues - OMNIC

Correct diagnostic information displayed in OMNIC for a Nicolet 380 instrument

The power supply diagnostics dialog available within OMNIC from the Diagnostic tab of Experiment setup now shows the correct list of voltages for a Nicolet 380 instrument. These voltages are for +5, +12, -12, +1.2, +2.5, +3.3 and -5 volts. In previous releases, only the +5, +12, -12 voltages were displayed. Also, the laser voltage readout has been removed from the Laser Diagnostics dialog when used with a 380 since the 380 does not provide this information. The laser voltage readout displayed for 380 instruments in previous releases was not

accurate.

Automatic atmospheric suppression available with Nicolet 380 instrument

The checkbox for turning on automatic atmospheric suppression on the Collect tab of Experiment setup is now enabled when using a Nicolet 380 instrument. This allows users to perform automatic atmospheric suppression during data collect with a 380 instrument.

Single-sided interferogram available with Nicolet 380 instrument

The check box for specifying single-sided interferograms on the Advanced tab of Experiment setup is now enabled when using a Nicolet 380 instrument.

Verify smart accessory available with Nicolet 380 instrument

The button for verifying the Smart Accessory on the Diagnostic tab of Experiment Setup is now enabled when using a Nicolet 380 instrument.

Saving spectra from Search results window

Several menu items, including Save As, that were disabled when the Search result window was active are now enabled. This allows the Search Result window to be saved as a .WMF file.

Search and QC Compare from Macros Basic do not require user action to proceed

OMNIC now correctly supports the Macros\Basic feature that allows Search and QC compare operations to complete and leave their result window open while the macro continues with no user interaction. In 7.0 and 7.1, the macro would not continue until the user manually closed the Search or QC Compare window.

Report fields not displayed when editing templates fixed

In some situations, report fields were not being displayed when a template was edited. This would only happen if report fields were added and deleted in a specific order.

Autosave filename in title dropping last character fixed

When the feature that allows the title of collected spectra to include the autosave filename was used (see the Collect tab of the Options dialog), the last character of the autosave prefix was dropped from the title. So if the autosave prefix was set to "abcd" and the sequence of collects results in a file being autosaved as "abcd0123.spa", the title would include "abc0123.spa" rather than "abcd0123.spa".

Spectra not scaled properly when read from GRAMS multfiles

When the ability to read GRAMS multfiles was added, the first scale factor in the file was used to scale all spectra. This has been changed to the individual scale factors.

Save Range changed when it should not have in Experiment Setup

On the Bench tab of Experiment Setup, if one of the properties lists that affect the recommended save range, such as Source or Window Material, is dropped down and then collapsed without making a change, the save range would be reset to the recommended range. This has been changed so the save range is only reset to the recommended range if one of the properties is changed.

Recommended Save Range not including Window Material when Bench tab first displayed

When the Bench tab of Experiment Setup is first displayed, the Window Material was not included in the calculation of the recommended save range. If any of the properties affecting save range was changed, the

recommended range was calculated properly in earlier versions.

Find Peaks deletes peak labels outside of the region it is applied to

The Find Peaks command is supposed to delete all peak labels in the region it is applied to before it adds the new labels. In 7.0, this was enhanced to leave annotation that was created using the peak height and peak area tools even if they are in the Find Peaks region. This change introduced a bug where some peak labels outside of the Find Peaks region were deleted by mistake.

Preview Collect controls appear in collect window after a resize or change focus

When the preview collect feature is used and the collect has progressed past the preview, the Start Collection button used to finish preview mode reappears by mistake in place of the save controls whenever a resize or focus change occurs on the collect window.

DDE Initiate messages no longer destroy global atoms

OMNIC no longer destroys the global atoms used during processing of DDE initiate messages. Although destroying these atoms is the correct protocol, some Visual Basic programs that process the same DDE initiate messages crash if OMNIC does this. This may only be a problem on some versions of Windows.

Correct Velocities now displayed for Nicolet 380

In some circumstances, the wrong list of available velocities would be shown in Experiment Setup when used with the Nicolet 380. Several of the slow velocities would be missing.

Nicolet 380 does not work with the Centaurus microscope

The Nicolet 380 would not collect data from a Centaurus microscope.

Cannot set Low pass filter on Nicolet 8700

The Low pass filter on the advanced tab of Experiment Setup was never enabled when used with a Nicolet 8700.

External trigger with a Nicolet Series instrument only works the first time

The external trigger option in Series software would only work the first time.

Resolved Issues - OMNIC Macros Pro

Export command displays save dialog when it should not

When OMNIC Data Security is installed and "Prevent Overwriting of files" and "Prevent changing directories when saving files" policies are turned off in Thermo Security Admin tool, the DDE Export command displays the "Save As" dialog even when the destination file does not yet exist.

OMNIC 7.1a

- **Release date:** December 2004
- **Supported operating systems**

- Windows 2000 SP4
- Windows XP SP2

Resolved Issues - OMNIC

OMNIC unstable after leaving Bench tab of Experiment Setup

In some cases, if the keyboard focus is on the Sample Compartment row of the property grid on the Bench tab of Experiment Setup when a switch to another tab is done (or the dialog is closed) OMNIC will become unstable and communications with the instrument may be unreliable. One symptom of this is a completely blank tab displayed in Experiment Setup. A workaround for this problem is to always change the keyboard focus to some row other than the Sample Compartment before leaving the Bench tab.

Detector changes when Sample Compartment list is viewed

In some cases, when the Sample Compartment list is dropped down and then collapsed without making a change, OMNIC will change the selected detector. The change in detector may also cause other fields to change such as the velocity and save range.

OMNIC 7.1

- **Release date:** August 2004
- **Supported operating systems**
 - Windows 2000 SP4
 - Windows XP SP2

New Features - OMNIC

Peak Resolve.

A new Peak Resolve menu item is available in the Analyze menu. Peak Resolve models or fits a number of pure peaks to a complex set of overlapping peaks in a sample spectrum. A table of the pure peaks is produced that can be printed or copied to the clipboard.

Faster Control of Nicolet Series Instruments.

When controlling a Nicolet Series instrument, OMNIC is no longer required to wait for each motor movement to complete before initiating the next operation. OMNIC does still wait for all movements to complete before initiating data acquisition. This change results in faster startup and more responsive changes in Experiment setup.

New default configuration file.

The default configuration file for OMNIC has been changed. If you have changed your default.con file, the OMNIC 7.1 installer will not overwrite the modified file. The changes include putting the toolbar across the top, using a smaller font size for annotation and prompting for the sample title at the end of sample collects rather than the beginning.

Support added to Nicolet Series and Nexus drivers for Continuum XL.

The Nicolet Series and Nexus bench drivers have been enhanced to support collecting data from the array detector of the Continuum XL.

Environment variables now allowed in Menu and Toolbar paths.

Paths to executables and macros assigned to toolbar items or menu items can now contain environment variables. The variables will be expanded at the time the item is selected by the user. This allows configuration files to be created on one machine and run on another where the target files are in a different location, as long as an environment variable exists that specifies the location.

JCAMP-DX Enhancements.

Raman spectra saved to JCAMP are now labeled with the DATATYPE string of RAMAN SPECTRUM instead of INFRARED SPECTRUM as stated in the JCAMP specification. Also, the XUNITS field for Raman spectra is now set to 1/CM instead of being left blank. The X and Y-axis units can now be set properly when Raman spectra saved with these enhancements are read back in.

As a separate issue, JCAMP files with YUNITS of TRANSFLECTANCE are now recognized and treated as Transmission spectra.

More pre-peak data points used for Raman collect above 4 cm⁻¹ resolution.

Previous versions used an interferogram peak position of 1024 when Raman collects were done at resolution of 2 cm⁻¹ and higher. This has been changed to use the maximum number of pre-peak data points (usually 8192) at these higher resolutions. Testing has shown this improves the actual achieved resolution of some Raman collects.

New Features - Array Automation

Added ability to skip wells.

In the Array Collect window, if preview mode has been selected for the collection, a button labeled "Skip well" will be displayed during the preview collects. If it is selected, the preview collects will stop and the data collection in the current well will be skipped. I.e., it will be as if the well had never been selected in the Wells tab.

Improvements to the Array: Open Data Set window.

There are several new capabilities in the Array: Open Data Set window related to the display of more than one spectrum in the window at the bottom.

- If the shift key is held down while a well (or section of an expanded well) is left clicked, the spectrum will be added to the window at the bottom instead of replacing the one that is there.
- If a row letter or column number is left clicked, all of the spectra from all of the wells in the row or column will be added to the window.
- Multiple spectra can be selected or deselected in the window by clicking on the spectra with the Ctrl key held down (as in an OMNIC window).
- The Select All and Clear items in the Edit menu are active as are the corresponding <Ctrl/W> and <Ctrl/Delete> accelerators.
- The Full Scale, Common Scale, Offset Scale, and Display Limits items in the View menu are active, and operate on the spectra in the Array: Open Data Set window.

- All selected spectra are copied to the selected OMNIC window by the Add button.

Change well selection using arrow keys.

In the Array: Open Data Set window (and the Collect Array window when the display is not in the "Live" mode), a well may be selected (for display) adjacent to the currently selected/displayed well by using the arrow keys to move to the well that is to the left or right of or above or below the current well.

Quant report allows All choice.

In the Reprocess controls in the Array: Open Data Set window, if a quant method is selected as the metric and the Result has more than one Type defined in the quant method (e.g., several components in a CLS quant method), the Type dropdown list box will contain an additional choice: "All". If "All" is selected, when the Report button is selected, the spectra in the data set will be reanalyzed and the resulting *.csv report file will contain separate columns for each of the components in the method.

Region controls provided for specifying correlation region.

The Correlation option in the Reprocess controls in the Array: Open Data Set window has been modified as follows. If Correlation is selected as the metric, the **Region** edit controls are displayed allowing specification of a region of the spectrum that is to be used for the correlation operation. (Previously the entire spectrum was used.) The region tool is active to select the region graphically from the displayed spectrum.

Peak height ratio and Peak area ratio metrics available in reprocess.

The Metrics available in the Reprocess controls in the Array: Open Data Set window now include "Peak height ratio" and "Peak area ratio". If either of these is selected, two radio buttons labeled "Numerator" and "Denominator" are displayed. When the former is selected, the peak or region and baseline edit controls are used to specify the frequencies of the peak or region and baseline to be used for the numerator of the ratio. The latter radio button allows specification of these frequencies for the denominator of the ratio.

Kinetics.

A Kinetics Setup button has been added to the Methods tab of Array Setup that, if selected, displays a Kinetics Setup dialog. This dialog allows the user to specify how frequently the entire plate is to be measured and how many times it is to be measured.

New Array menu items.

The Array menu has been expanded to include several new items that are active when an Array: Open Data Set window is displayed.

- If the Show Array Information item is selected, a Collection and Processing Information window is displayed containing these data for the data set.
- If the Change Title item is selected, the current title of the data set is displayed in a dialog and a new title can be entered.
- If the Save Array As item is selected, a Save As dialog is displayed, allowing specification of a new file name into which a copy of the current data set will be saved. (This is useful if the Apply Function operation is to be done on a data set, and the original data need to be retained.)
- If the Apply Function item is selected, a dialog is displayed allowing selection of a function to be applied to the spectra in the data set. Depending on the function selected, one or more other controls may appear in the window to specify the parameters for the function. E.g., if Smooth is selected, the number of smooth points must be entered.

- If the Split Array item is selected, a dialog is displayed allowing selection of a range of wells whose spectra will be extracted from the current data set and stored in separately named .spa files.

New Features - OMNIC Macros Pro

Replaceable collect prompts.

Two new strings have been added that control the text displayed in the prepare for sample and prepare for background dialogs that appear during data collects. The new DDE parameters are "Custom SamplePrompt" and "Custom BackgroundPrompt". The same settings are used for Raman and IR. Set the strings to the empty string to revert to the default prompts.

Interferogram peak level readable from Nicolet Series instruments.

The new DDE parameter "BenchStatus InterferogramLevel" can be used to read the current interferogram level of a Nicolet Series instrument. This is available when data collect is active or inactive. The data is returned in the format <lfgMaxVal>,<lfgMinVal>,<lfgMaxPosition>,<lfgMinPosition>. For example, the string "5.3, -2.4, 8231, 8256" indicates the maximum is 5.3, the minimum is -2.4, the max occurs at data point 8231 and the min occurs at data point 8256.

Environment variables supported in run commands

The DDE commands **Run**, **RunMacro**, and **RunMacroAndWait** now allow Environment variables to be used to specify the location of the target. For example, the command **[RunMacro "%OMNICDATA%\macro\SimpleTrans.mac"]** will launch the SimpleTrans.mac macro from the macro subdirectory of the location set in the OMNICDATA environment variable.



That OMNICDATA is set by the OMNIC installer and is normally set to C:\My Documents\OMNIC unless the user chooses to install to a different location. Other environment variables can be used as well as long as they have been initialized prior to the DDE command.

New Features - OMNIC Data Security

Administrator program requires username and password at startup.

The Thermo Administration program now requires user authentication when the program starts to verify the user identity matches the user that is logged on to Windows.

Administrator program handles large networks better.

The Thermo Administration program will switch to initiating the accounts on the local PC, rather than the accounts on the login domain if the enumeration takes a long time. An edit control has been added that allows user names to be entered manually so enumeration can be avoided. Accounts are not re-enumerated when switching from the access control portion of the tree to the policy portion.

Administrator program more easily adds or removes access control entries for all access control functions.

The Thermo Administration program has two new menu items. The "Add to All Access Control Items..." will add an Allow or Deny entry for the specified user to every function in the Access Control section of the application. The "Add to All Access Control Items..." will add an Allow or Deny entry for the specified user to every function in the Access Control section of the current application. The "Remove From All Access Control

Items..." will remove the entry for a specified user or group from all functions in the Access Control section of the current application.

Support for signing Libraries.

Spectral libraries can now be signed using the new Sign button in Library Manager. The signature status of the selected library is shown at the bottom of the Library Manager Window.

Support for signing spectral group files (.spg).

Spectral group files can now be signed and verified using the Sign File and Verify File items in the File menu.

Sign multiple files with a single authentication prompt

The Sign File item in the File menu now allows multiple files to be selected for signing. The authentication prompt used to enter the password and signature reason is only displayed once and the same reason for signing is applied to all files.

Sign the selected spectra without using a file navigation dialog.

A new item in the File menu called Sign Spectra will sign the selected spectra. If the spectra already have a filename associated with them, the file navigation dialog does not need to be displayed.

New Features - OMNIC Atlus 7.1

The OMNIC Atlus product has been completely revised. See the product documentation for information on changes to OMNIC Atlus.

Support for Nicolet Series Bench

The Nicolet Series Bench drivers now support the Continuum XL.

Resolved Issues - OMNIC

Company Name change

The company name has been changed from "Thermo Nicolet" to "Thermo Electron" in many places, such as copyright notices of help files and readme files.

Current Tool changed after running a Macros Basic macro

The selected tool may be changed incorrectly after running a Macros Basic macro.

Spectrum title corrupted by Automatic Baseline Correct.

A bug that caused the spectrum title to be corrupted when Automatic Baseline Correct was done has been fixed. This only happened if the title was at maximum length when the function was applied.

Asterisk appended to spectrum filename

When spectra were saved using the Save As dialog and the "Save as type" was set to show all files, an asterisk would be appended to the filename entered by the user.

X Axis not drawn at start of data collect

At the start of Collect Sample or Collect Raman, the X Axis would sometimes be left blank until a spectrum was

added to the window.

X Axis always in decreasing order in Collect Window

The X Axis in the Collect Window was always displayed in decreasing order. This has been changed to display the axis in the same order that the default limits are specified in the Window tab of the Options dialog.

X Axis limits changed at end of Raman collect

When a Raman collect completed and the collected spectrum was added to a window, the X Axis of the window was reset to the zoomed out limits of the collected spectrum (always in decreasing order) and the default X Axis limits for new windows in the options were changed to these same values. All of this behavior has been removed so that adding spectra to a window at the end of a Raman collect behaves the same as all other methods of adding a spectrum to a window.

Multiple copies of Spectral Group files sent with Mail Spectra

If more than one spectrum from the same .spg file were sent in the same email using the Mail Spectra menu item, multiple copies of the .spg file were included in the email.

Collection and Processing Window garbled after closing spectral window

If a Collection and Processing Information (CPI) window was left open after the spectral window it originated from was closed, some of the fields of the CPI window would become garbled.

Interferogram peak not in display window of Experiment Setup

In the bench tab of Experiment setup, if the save range was changed such that sample spacing had to change, the limits of the interferogram window were not adjusted correctly so the new peak position was within the displayed window.

Overlay feature of Search results does not work when decimal point is a comma

When Windows is set to use a comma as the decimal point, which is the default for some locales such as German, the overlay feature in the search results window did not work.

Use Fixed Scale during data collect not applied to interferogram collects

The "Use fix Y-Axis limits in collect window" feature did not work when the final format of the collect was set to interferogram. This has been fixed, but the feature still does not apply to single beam collects so that background collects are not displayed using the limits intended for samples. Also, an error message is now displayed if the upper and lower values are set to the same value.

Buttons at bottom of Experiment Setup and Options cutoff when large fonts are used

The buttons at the bottom of the Experiment Setup and Options dialog were cutoff when large fonts were used for the dialog caption. Selecting one of the Appearance Schemes from the Windows Display Properties dialog can set this large font.

Dialog font intermittently incorrect

When the OMNIC dialog font was changed using the Options dialog, some dialogs would intermittently use the system font instead.

Extended Search text fields too short

The text fields on the Extended Search tab of Library Setup were incorrectly limited to around twelve characters (depending on font size). The dialog now allows scrolling and uses the first 60 characters entered into these fields.

Green check appears before bench communications established

With Nexus and Magna instruments, the green check indicating good bench status may appear before bench communications had been established. In this case, the green check appears, but the items in the collect menu remain disabled.

Loading an old (pre-7.0) experiment file does not reset new fields

If an experiment file created with a version of OMNIC prior to 7.0 is loaded, the new fields added in 7.0 are not reset to their default values. These fields include the auto-blank regions, the separate number of background scans and the Y-axis limits used during data collect. This has been changed so the fields added for 7.0 are reset to their default values so the older experiment files give the same behavior they did when they were created.

Problems with beam splitter recognition on Nicolet Series instruments

Problems on Nicolet Series instruments with the wrong beam splitter being recognized as installed after an experiment file has been loaded have been fixed.

Resolved Issues - OMNIC Data Security

Editing annotation in the Annotation Information dialog corrupts signature status display.

When annotation from a signed spectrum is editing using the Annotation Information dialog (available from the Collection and Processing Information window), the displayed signature status of the spectrum will change to the string "Text".

Known Issues

Tabbing in Options and Experiment Setup does not move between controls.

Pressing the tab key does not move the keyboard focus from one control to the next in the Options and Experiment Setup dialogs.



Use the mouse to move keyboard focus to a control.

Inserting a smart accessory during a data collect.

On a Nicolet series instrument, if a smart accessory is installed while a data collect is active, the experiment file will be changed in the middle of the collect, possibly resulting in bad scans. Other instrument types suppress the change if a data collect is active. However, if an accessory is inserted while the collect is active, the IR beam will almost certainly be disrupted resulting in bad scans anyway.



Accessories should not be changed during data collect.

OMNIC 7.0

- **Release date:** April 2004
- **Supported operating systems**
 - Not recorded

New Features - OMNIC

Anti-collision for annotations in Find Peaks.

The Find Peaks operation in OMNIC now adjusts the location of peak labels to avoid overlapping labels as much as possible.

Support for Nicolet Series instruments.

Support for the Nicolet Series line of instruments is now included. This includes providing control for filter wheels, screen wheel, polarizer, turbo source, and function buttons on the front of the instrument.

Grid of controls used on Bench tab of Experiment Setup.

The controls on the bench tab of the Experiment Setup dialog have been consolidated into a grid to reduce clutter, make better use of space and handle dynamic bench configurations better. This required a few other small changes to the layout of the Bench tab.

Freeze button on Bench and Diagnostic tabs of Experiment Setup.

A "Freeze" button has been added to the bench and diagnostic tabs of Experiment setup that will snapshot the currently displayed interferogram or single beam and leave is displayed in the window so it can be compared to subsequent scans.

New Configure tab of Experiment Setup.

A Configure tab has been added to the Experiment Setup dialog. This tab has the "Configure Bench" button that was on the Diagnostics tab, along with controls for providing names for the positions of the filter wheels and screen wheels (if they are present) and setting up the IR Source rest mode for instruments that support this feature. Items set up this tab are not saved in experiment files.

X Limits of live display persist in Experiment Setup.

The X limits of the live display are not saved when the dialog is closed and reused when you redisplay the dialog. The limits are also saved when you switch to between the Bench and Diagnostics tabs. They are not saved when you exit OMNIC.

Background scans optionally set separate from Sample scans.

The Collect tab of experiment setup now provides an option to specify a different number of scans for the background than the sample.

Option to set Y-Limits for use during collect.

The Collect tab of Experiment Setup now provides an option to specify a Y limits to be used in the collect window during the collect operation. This can be used to avoid autoscaling on large peaks that are not of interest.

Auto-blank regions during data collect.

The Advanced tab of Experiment Setup now provides a grid for entering up to four spectral regions that are to be blanked during data collection. The regions can be turned on and off individually. This new auto-blanking feature can be used when collecting with accessories that have totally absorbing regions to prevent auto-scaling to these large peaks.

Marco assigned to front panel button on instrument.

The Advanced tab of Experiment Setup now provides a place to identify a macro that will be executed when the "Macro" button on the front panel of the Nicolet Series instrument is pressed.

Improved peak annotations.

The annotations created with the peak height and area tools now use lines or shading to highlight the measured peak.

Annotations viewable as a table.

The annotations associated with a spectrum can now be viewed as a table by clicking the new "Annotations" button in the Collection and Processing Information window. The text portion of the annotation can be editing in this window, but the location and baseline information cannot. The table can be copied to the clipboard.

Mail Spectra.

A new Mail Spectra item in the File menu provides support for sending the currently selected spectra as attachments to an email message. The email is sent using the default account for the logged-on user.

Additional Y Scaling buttons.

Two additional buttons are now provided in the View Finder control to improve scaling in the Y dimension.

List of spectral titles auto-sizes.

The drop-down list of spectra at the top of the main spectral window is now sized so that empty rows are eliminated and do not obscure the spectra display.

Additional techniques supported for Derivative.

The Derivative operation on the process menu has been enhanced to three choices of techniques: 1) First different (the only technique supported in previous versions), 2) Savitzky-Golay and 3) Norris.

Overlay spectra in Search Results window.

The spectral display in the Search results window now can be switched between stack and overlay mode. This allows the unknown to be overlaid with one or more of the search hits.

Multifile .SPC file read.

OMNIC now read all of the spectra in GRAMS .SPC files that contain more than one spectrum.

New look for tabbed dialogs.

Some cosmetic changes were made to the look of the tabbed containers used for the Options dialog and Experiment Setup dialog.

Saving spectra from Spectral Group files now defaults to saving as individual files.

In earlier versions of OMNIC, when you read in spectra from a spectral group file (.spg) and then did a save

with one of the spectra from the .spg file selected, the group file would be overwritten with a new group of just that one selected spectra. To avoid that problem, save operations on spectra that were loaded from .spg files default to saving as individual spectra in .spa files.

Floating-point exceptions now handled more gracefully.

Floating point exceptions that occur in OMNIC are now caught and acknowledged so that the application does not exit. For example, in earlier versions of OMNIC, you could enter very large numbers in the Spectral Math window and generate a floating-point exception that would cause OMNIC to exit. This error is now caught and handled properly.

New Features - OMNIC Data Security

Administrator program translated.

The Thermo Administration program is now translated into several languages.

Warning at OMNIC start for invalid directory policies.

OMNIC now gives a warning at startup if any of the initial directory policies set in the Thermo Administration program are not valid. This is done at OMNIC startup rather than in the Thermo Administration program to handle cases where directories are deleted after the policies are set.

New Features - OMNIC SST and TRS

Synch Hold Addition to SST

A new option has been added to AM, PM, and TRSS step-scan collects. This is the ability to specify that the stepping be triggered externally rather than occurring automatically after the data collection. This external trigger should be connected to the bench via the SYNCH BNC. If this feature is enabled, and the logic level on this input is high after the data collection, the stepping to the next mirror position will be delayed until the level goes low. This option is available only if the firmware is version 7.16 or later

Resolved Issues - OMNIC

Collect time-out when set to ssp1 @ .125 cm⁻¹ resolution with PCI card

When data is collected about 7879 cm⁻¹ at .125 resolution, data collect timeouts could occur. Only occurred on Magna or Nexus instruments that used a PCI interface card.

Problems showing data in increasing X order fixed.

If the X-Limits were set so the left limit was less than the right limit (increasing order), a bug caused OMNIC to switch the order back to decreasing when the View Finder control was touched. This appeared in the Bench tab of Experiment setup and could also occur in the main spectral window if the limits were manually set.

File types recorded separately for Open and Delete file dialogs.

The Open and Delete file dialogs use to share a setting to record the last file type the user selected so that type could be selected again the next time the dialog was shown. This gave unexpected results because the list of file types in the two dialogs is not the same. There are now two separate settings to record the last file type so the open and delete dialogs each remember the last selection correctly.

Filename now shows when bitmap pasted into external program.

If the filename field of Sampling information is turned on when a copy is done of the spectral window and pasted into an external program such as Microsoft Word, the filename was not shown in the pasted image.

Mpanel32.exe no longer installed.

The Mpanel32.exe program provided a way to launch Macros Basic macros in the original versions of OMNIC that did not have a toolbar (versions 1 and 2). Since macros can now be assigned to the toolbar, this program is no longer needed so it has been removed from the install.

Collection and Bench parameters saved in new user libraries for each spectrum.

A limitation of user libraries has been eliminated for new libraries created with OMNIC 7. When a spectrum is extracted from a user library, the true collection and bench parameters of that were used to collect the spectrum are now retrieved from the library rather than the ones from the first spectrum in the library. If the spectrum was deresolved or hyper-resolved as it was added to the library, looking at the sample spacing vs. the resolution can identify it. A warning will be displayed if a spectrum needs to be hyper-resolved when added to a library.

Spectrum filename can be displayed in Search window.

The filename of the unknown spectrum now displays properly in the Search window when the display setup has this feature turned on.

Improved parsing of OMNIC command line.

Improvements were made to the parsing of the OMNIC command line so that double clicking on files in Explorer with filenames that included dashes is now handled correctly.

Changes made to spectra extracted from report do not affect report display.

A bug that caused the display of reports to be modified when changes were made to spectra extracted from the report has been fixed. The changes shown on the report display were never written to the report, but the display was mistakenly being modified.

Resolved Issues - OMNIC Data Security

Saving data to protected directories works as installed.

The feature of DS that allows users to save data into directories they would normally not have write permission on no longer requires administrators to manually change the permissions on each user's temp directory. This bug has been fixed so that the feature works with the permissions set at install.

Problems signing files after password change on Windows XP fixed.

A security feature of Windows XP invalidates the default PKI keys under some circumstances when a password change occurs. When XP service pack 1 is installed, this only occurs if the administrator forces a password change. Without service pack 1 installed, this can occur even when the user changes the password. After the default keys are invalidated, OMNIC will no longer be able to sign or verify files for that account. A change has been made in 7.0 so that OMNIC does not use the default keys and is therefore not affected by password changes.

Print feature of Search window now uses printing policy correctly.

The print feature of the Search results window is now disabled if the unknown spectrum has not been saved

and the security policy is set to prevent printing of unsaved data.

Spectra extracted from library can now be printed regardless of printing policy.

The policy that controls printing of unsaved data was preventing spectra extracted from a user library from being printed. These spectra are now correctly marked as saved so they can be printed regardless of the policy setting.

Windows key no long gives access to explorer features in open/save dialogs.

The policy that prevents users from having access to the Explorer features such as delete and rename could be defeated in 6.2 by pressing the Windows key.

Event log entries now made for file deletions for GAML files.

File delete entries were not being made when GAML files were deleted. These entries are now made, but the filename recorded for all delete operations is the 8.3 version, so they show up as deletions of .GAM files.

OMNIC 6.2

- **Release date:** July 2003
- **Supported operating systems**
 - Not recorded

New Features - OMNIC

Read/Write GAML files.

Added ability to read and write spectra in GAML format.

New Advanced ATR correction.

Added New Advanced ATR correction.

Insertion and deletion date now available for library spectra.

With libraries created in OMNIC 6.2, the insertion and deletion dates of each spectrum is tracked. The dates are visible in the Library Spectra tab of library manager. This information is not available for libraries created prior to 6.2, even when new spectra are added to these libraries.

Spectra deleted from user libraries remain visible until the library is compressed.

A new column has been added to the Library names tab of Library Manager with the heading "Del". A red X in this column indicates that the spectrum has been deleted from the library. Compressing a library permanently removes the deleted spectrum from the library. After compression no red X's are displayed in the "Del" column.

Display help files in three-pane mode.

Additional files are being installed so that help files will be displayed in the more modern three-pane mode.

Resizing Open/Save dialogs.

Several open/save dialogs were changed so they can be sized by the user. Also, small improvements were made in the spacing/alignment of controls on open/save dialogs.

Remember size of Spectrum information window

If the Spectrum information window is enlarged beyond its default size, the new size is saved and used as the initial size for the window the next time it is opened.

Record old data spacing for Change Data Spacing

The history entry made in the spectrum header when a Change Data Spacing operation is performed now includes the old data spacing as well as the new data spacing.

Raman operations generate history records.

The Raman operations Shift, Un-shift and Instrument correct now generate records in the spectrum history.

Change Data Spacing history now includes old data spacing.

The history record generated when a change data spacing operation is done now includes both the old and the new data spacing. Previous versions only record the new data spacing.

New Features - OMNIC Data Security

Admin program for configuring user authorization.

Authorization to use any OMNIC function now controlled by separate Administration program.

Reasons for Digital Signatures controlled by Admin program.

Access to reasons for signatures now controlled in the Admin app.

Event Log for significant events.

Significant events such as saving data and signing files are recorded in an isolated section of the NT Event log. Modifications, deletions and renaming of important file types generate log events, even when they are made outside of OMNIC.

Saving data to directories with restricted access.

Added ability to save files to directory that has very restricted access so lab manager be assured files will not be renamed or deleted. Even with this restricted access, OMNIC is able to apply digital signatures to the files.

Sign file gives three chances to enter correct password.

The sign file dialog now gives the user three chances to enter the correct password.

New Features - OMNIC SST and TRS

New Sample Spacing choices

Increased range of allowed sample spacings for step scan experiments from 8 to >100. (Requires bench firmware v. 7.14)

Improved multiple-trigger mode

Improved multiple-trigger mode operation in TRSS collects by allowing shorter trigger intervals. (Requires Gage driver v. 3.60 or later)

Resolution selection for step-scan time-resolve

Made resolution selection more flexible for step-scan time-resolved collects.

Y-axis added to TRSS real-time display

Y-axis added to TRSS real-time display.

Step-Scan Settling time now set with edit control

The Settling time control in the Step-Scan Time-Resolved setup dialog has been changed from a list box to an edit control to allow more flexible setting of this parameter. The minimum value is 1 msec or larger if more time is required for data transfer during multiple-trigger collection.

Resolved Issues - OMNIC

Change the default setting for the Bench and Collect checkboxes to off in the Quant Setup dialog.

Change in default behavior.

Change how the spectral limits in a new Raman library will be created.

Correct a problem with frequency normalization with Raman shifted data. This is now the correct behavior, but there will be a difference between old Raman libraries and new Raman libraries with respect to how the spectral limits are normalized.

Change to not display an error when a user chooses not to overwrite a signed file.

Eliminate an erroneous error message that was displayed when the user chooses not to overwrite a signed file.

Fixed a bug that occurred when OMNIC was installed in a path that used multi-byte Japanese characters.

Fixed a bug that occurred when OMNIC was installed in a path that used multi-byte Japanese characters.

On a clean install, the default for peak picks will be sorted on Position, not intensity.

On a clean install, the default for peak picks will be sorted on Position not intensity.

Setting access rights to temporary directory.

A change was made to set the user's temporary directory to have wide-open access each time OMNIC starts. This allows ancillary OMNIC tools to write to this directory.

Turn off display of signature information in reports.

Changed the report printing to turn off display of signature information for spectra because spectra in reports are never signed. Only the notebook can be signed.

Spectra from signed .spa files appear modified when loaded.

Fixed a bug where spectra loaded from signed .spa files were considered modified as soon as they were read. This bug caused a prompt to resave the spectra when the window was closed, even though the spectra had not actually been modified.

Change to allow up to 10000 series files in sequence rather than 100.

The automatically generated filenames for series files now have enough digits to allow 10000 files in the same directory rather than 100.

Cleanup drawing flaws in skinned dialogs.

Some small improvements to the skinned drawing of dialogs were made, such as providing a background color to list boxes and using a solid brush color if pattern bitmaps are not available.

Fixed a bug that would disable the spectrometer tour by mistake in some cases.

Fixed a bug that would disable the spectrometer tour by mistake in some cases.

MRU list saved on a per-user basis.

The MRU list of spectra at the end of the File menu is now stored in the registry on a per-user basis rather than in OMNIC32.ini. The main reason for this change is that some user sites prefer to set all files in the Windows directory (including OMNIC32.ini) as read-only for standard users. When this is done, OMNIC's MRU list would not work.

OMNIC sub-installers have been changed to use Microsoft Installer.

Many of the OMNIC sub-installers have been changed to use the new Microsoft Installer technology. This was done for improved maintainability since the old InstallShield installer is no longer supported.

Spikes in files converted from Perkin Elmer format fixed.

Fixed the Perkin Elmer spectral conversion code so that it does not produce spikes when data values are near zero.

Undo Scale must be done twice.

A bug that required Undo Scale Change to be done twice to undo changes made with the zoom buttons of the view finder was fixed.

Raman Instrument correct works with a reference file.

A bug that prevented using a reference file for Raman Instrument Correct was fixed.

Options changes recognized in Find Peaks window.

Find Peaks windows now recognize changes to options such as annotation orientation and number of digits. Earlier versions required the Find Peaks window to be closed and reopened for the change to take effect.

Drawing shaded regions on 32-bit depth ATI cards changed.

A different technique is now used to draw shaded regions. The old technique did not work on some ATI cards when the bit depth was set to 32 bits.

Additional message generated if file signing canceled.

If a user is required to sign a file as part of the save operation, but cancels the signature dialog or enters an

invalid password 3 times, an error message is now displayed indicating the file has been saved, but not signed.

References to Thermo web site changed.

The references to the Thermo Electron web site have been changed to www.thermo.com/Spectroscopy.

Crash when invalid gain read from a file.

A bug that caused a crash when an invalid gain was read from a spectrum file was fixed.

More scans button on collect window disabled for Mattson.

A problem adding additional scans after a data collect was initiated on Mattson benches was fixed by disabling the feature when OMNIC is running with one of these benches.

Failure to overwrite read-only configuration files now reported.

Attempting to save over the top of a read-only configuration file now generates an error message indicating the save failed. In prior versions, the save failed with no indication.

Failure of Change data spacing now reported.

When the Change data spacing command fails, an error message is displayed. Attempting to change the data spacing of an interferogram is an example of how the command can fail.

Hourglass cursor now shown during Other Conversions.

The hour glass cursor is now displayed during the other conversions command since some of these conversions can be time consuming.

Digital Signature status not shown properly for Almega spectra

A bug that prevented the digital signature status from being displayed for Almega spectra was fixed.

Text drawing bug in collect status window fixed

A bug that caused several text strings to be drawn on top of one another in the collect status window was fixed. This occurred if the experiment description and title were blank.

Spectra filename lost after an undo operation fixed

If an operation is performed on a spectrum that had been saved to a file and then the operation undone, the spectrum would appear as if it had never been saved to a file and the user would have to re-assign a filename.

Crash when adding very long annotation fixed

If a piece of annotation was added with a very long text string (2000 characters), a crash could occur.

Remove DC offset from interferograms read from Mattson files.

A correction is now done to remove the DC offset from interferograms read from Mattson files before the data is displayed or processed.

Normalize Scale command failed when performed twice.

A problem was fixed with the Normalize Scale command. If the command was performed twice on the same spectrum the results were invalid. On some PC's a floating-point exception was generated and OMNIC would exit.

Change to the default value in Quant setup.

In the Quant Setup dialog, the default setting for the Bench and Collect check boxes was changed from on to off.

Raman data added to library had poorly registered X-axis values.

When a Raman spectrum was added to a library the x-axis values were not properly registered to the laser frequency.

Initial directory for Configuration files is now the same as parameter files

The initial directory for configuration files was changed to be the same as the initial directory for parameter files instead of options.

GC-FTIR External trigger feature fixed

A problem where a Series GC collect waiting for an external trigger from the GC device would start before the trigger signal was issued was fixed.

Resolved Issues - OMNIC SST and TRS**Display of Channel B/A ratio in PEM setup dialog**

Fixed bug in display of Channel B/A ratio in PEM setup dialog.

Collect time-out problem in step-scan dialogs.

Fixed collect time-out problem in step-scan setup dialogs when averaging time is large (> 3 sec).

Phase Analysis dialog.

Modified Phase Analysis dialog so that IP spectrum must be in upper window.

SST menu item names.

Changed SST menu item names and labels for several controls in setup dialogs.

OMNIC 6.1a

- **Release date:** August 2002
- **Supported operating systems**
 - Not recorded

Resolved Issues - OMNIC

The new GMT time zone information in the Data Display Information section of the Spectral History is displayed improperly when on the positive side of the grand meridian.

The title contains the correct time stamp (Mon Jul 29 14:39:05 2002 (GMT+02:00)), but DS date and time in

the spectral header says " 29-07-2002 15:40:36 (GMT-11330037:44)".

Changed the Spectrometer Tour routine to not check the CDROM drive for the tour.

This fixes a message (abort, ignore, retry) that pops up on some computers and OS combinations when a CDROM is not in the drive.

Rapid scan collects stalled on Windows NT 4.0 systems.

Rapid scan was not functioning properly on Windows NT[^] 4.0 systems.

Intermittent driver problem could result in a system lockup during data collect.

This issue was discovered during internal testing. Rapid scan was not functioning properly on Windows NT 4.0 systems.

Resolved Issues - InterpretIR+

InterpretIR+ did not install from the Update CD.

InterpretIR+ did not update the previous version since the name of the executable had changed.

Resolved Issues - Val-Q

Some Autotest results report failures when run under some foreign languages.

The references used in the comparison were created on a system where decimals are used as the numerical separator. Changed software testing module in Val-Q to recognize commas in place of decimals as valid separators.

Autotest report four failures when run on a system that does not have the DS option installed.

Autotest was reporting failures because it cannot read the digital signature portion of a data file without having the DS option installed. Autotest changed to perform the correct comparison with and without the DS option.

Resolved Issues - View Stage

Cannot view data during data collection.

Changed FT Raman software to not turn off the Raman View Stage lamp when collecting data since the lamp LED does not affect Raman data. This allows you to view data while collecting.

Resolved Issues - Almega

Photobleaching not operating properly.

Correction to PolySNR test which caused photobleaching to be done twice.

Slit selection changing when switching tabs.

The 10 um slit option did not remain selected when changing tabs.

Display limits when viewing data in nanometers.

Display limits for preview data collect were incorrect when final format is in nanometers.

Updating previous Almega installations with the Update CD.

The Almega driver did not update when installed from the Update CD. Does not affect new installations.

Resolved Issues - OMNIC SST and TRS

PM setup dialog and multiple frequency selection.

Changes and bug fix in PM Setup dialog related to multiple frequency selection and use.

Autogain limits and trigger intervals.

Changed the lower limit from 4.5 to 4.0 volts in autogain checking. Also upped the minimum trigger interval from 0.01 sec to 0.04 sec.

OMNIC 6.1

- **Release date:** June 2002
- **Supported operating systems**
 - Windows XP 32-bit

New Features

Added EZ OMNIC support for IR100 and IR200 spectrometers.

Add diode laser capabilities and verification for the IR100 and IR200 spectrometer to EZ OMNIC. The IR100 and IR200 Series FT-IR spectrometers were designed to meet the needs for fundamental infrared analysis, teaching and basic sampling needs. The IR100 and IR200 spectrometers also operate with the Encompass software. EZ OMNIC support is now provided for those customers that prefer the flexibility of a personal computer with more functionality.

Added support for ECO 3000 FT-IR spectrometer.

The ECO 3000 is a 300 mm, high-performance, tool used for measuring dopant levels in dielectric films (BPSG, PSG, FSG), Hydrogen in SiN/SiON films, epitaxial film thickness, MEMS device thickness, and Carbon and Oxygen in Silicon wafers. The ECO 3000 supports the SEMI standards for 300mm automated wafer handling.

Added support for Avatar 330 and 370 spectrometers.

The Avatar 330 and 370 spectrometers are routine analysis FT-IR spectrometers that offer packaged solutions for your entire FT-IR process, from data collection to reporting the results.

Added support for Windows XP Professional and Home Editions.

Support for Windows XP version is available in this release. Windows XP Professional is required with the Digital Signature (DS) option.

Added the ability to change the font in all dialog boxes in the Edit/Options/View tab.

This improves the legibility in the dialogs when fonts for a specific region such as in Czechoslovakia or a bolder font is used.

Added a (GMT-6:00) string to display time zone in the date/time strings used for digital signatures.

The FDA recently released a guidance document regarding time stamp requirements for Part 11 of Title 21 of the Code of Federal Regulations. To aid in a clear understanding of the time zone in which an event occurred, a reference to GMT is appended to each record of the time written into the Collection and Processing Information.

Added the capability to digitally sign Macros\Basic (.MAC) file in OMNIC.

Macros files play a key role in a system that is subject to the FDA's 21 CFR Part 11 regulations as they can be used to enforce permitted sequencing of steps and events. By using the Sign File command in the OMNIC File menu, users can sign these files and later verify that a macro has a valid digital signature with the Verify File command in the File menu.

Removed the checkbox for signing group files in the Edit/Options/Security tab. Also, spectral groups are not listed as a file type in the Sign File dialog.

The ability to sign group files was confusing to some users. A group file consisted of a group of spectra, stored together in a single file. Users were confused as to the meaning of the signature on the file and how it related to the individual spectra in the group file.

When copying a report to the clipboard, the report is placed in the clipboard as a bitmap as well as a metafile.

Users now have the option to copy and then paste reports from a report notebook into another application as either a bitmap or a Windows metafile.

Added new "GetBenchName" DDE routine. It gets the bench name and puts it into result current.

Users can query the spectrometer for its model name. The complete command line for this option is described in the Macros on-line help file.

Added new Delay DDE command. It can be used in a macro to delay for a specified number of seconds.

If a user created a macro where one event must wait for another to complete, the user can add a delay into their macro for a specified number of seconds. The complete command line for this option is described in the Macros on-line help file.

Enabled the "Other Conversions" menu command in the Process menu of EZ OMNIC.

The Other Conversions command that previously was available only in OMNIC, now appears in the EZ OMNIC menu. Other conversions allow the user to convert a spectrum into Kubelka-Munk, Photoacoustic, %Reflectance, Log (1/R), wavenumber, micrometers or nanometers.

New Features - OMNIC SST and TRS

Added multiple scan capability to all of the Step Scan menus.

New Feature.

Added multiple trigger for Time Resolved Step Scan (TRS).

New Feature.

Provide TRS drivers for Gage acquisition boards on the Thermo Nicolet installation CD

New Feature.

Reduced the minimum trigger interval required for TRS experiments.

New Feature.

Advanced diagnostic test parameters for TRS for the Gage 8500 board were not optimal. The number of samples is being set to zero.

The 8500 board is a faster board. Parameters have been updated.

New Features - Almega

Added Photobleach time to collect tab; removed estimated resolution as it is on the Bench tab.

New Feature.

Added partial wavelength calibration feature.

New Feature. This lets the user select a subset of spectral ranges to calibrate if they don't want to take the time to calibrate all ranges.

Changed the alignment procedure to start at the center and spiral out rather than raster a rectangle.

New Feature.

Improved Issues

Substantially decreased the amount of time to start OMNIC for Nexus and Avatar series spectrometers.

When OMNIC is started, the user can now access the OMNIC menus more quickly without having to wait until the spectrometer setup has been completed.



That the OMNIC data collection menu items and the bench status indicator will not be enabled until the spectrometer setup is complete.

Substantially decreased the amount of time to start OMNIC when using the Digital Signature (DS) option on a computer that is not physically connected to a network.

When OMNIC is started, the user can now access the OMNIC menus more quickly without having to wait until the spectrometer setup has been completed.



That the OMNIC data collection menu items and the bench status indicator will not be enabled until the spectrometer setup is complete.

Added capability to capture the user name with every modification that is recorded in Collection and Processing Information.

If the Digital Signature option is installed, OMNIC users are required to enter their Windows NT, Windows 2000 or Windows XP username and password to start OMNIC. The full user name along with the date-time is recorded in the Collection and Processing Information whenever data is collected, modified or signed. Similarly, if a user does not have the DS option but has enabled the OMNIC login feature, the OMNIC username and the date-time is recorded in the Collection and Processing Information whenever data is collected or modified.

If a digitally signed spectrum is modified but not saved, the display of that spectrum would change to "Spectrum not signed". This is not correct as the file saved on disk still has a valid signature.

Now OMNIC automatically detects when spectrum in memory does not match file on disk and updates the display of the digital signature as needed for in all OMNIC windows. The message "Unable to verify digital signature. The data has been changed" will be displayed when a saved spectrum with a digital signature is modified in OMNIC.

Record the signing of a spectral file in the Collection and Processing Information.

When a spectral file is signed, the username, date-time, and the reason for the signature are recorded in the Data Processing History section of the Collection and Processing Information.

Added ability to have an NTFS folder with RWX permission (no delete) and allow spectral file saves.

In previous versions, users need RWX and delete permission to save files to a NTFS folder. FDA requirements for electronic records require additional controls on which users can delete files. A change was made in OMNIC to allow file saving in a NTFS folder without requiring users to have delete privileges.

Changed atmospheric suppression feature so that during data collection, the suppression is only performed if the result is improved when compared to the result from the unsuppressed spectra.

If automatic atmospheric suppression is enabled on the Collect Tab in Experiment Setup, the software removes water and carbon dioxide bands from the background and sample single beam spectra. When the Absorbance spectrum is calculated, OMNIC will perform the processing with and without the suppression applied to the single beams. The displayed result will be the resultant Absorbance spectrum with the best baseline characteristics.

Enhanced axis routines to improve annotation capabilities when spectra are displayed in wavelength.

Peaks labels were not being displayed correctly when spectra in wavelength were annotated.



That if a spectrum in wavelength is annotated (for example, peak location) and then the spectrum is converted to wavenumbers, the text for the annotation does not change. Annotations are static text strings.

Add in capability to call DDE annotate command with only 2 arguments, if no text is specified use the x or x&y position for the annotation text.

Simplifies the entering if annotations for the most common use of the DDE annotate command.

Add capability to display information from Almega data files such as laser wavelength and grating in the Collection and Processing Information when viewed in workstation OMNIC.

Previously, if the Collection and Processing Information of a Raman spectra acquired with an Almega spectrometer was viewed in workstation OMNIC, the Almega spectrometer information was incomplete. OMNIC has been enhanced to show the Almega spectrometer information in the Collection and Processing Information.

Changed resource text "The spectra have different Y-axis units." to "The spectra have different axis units." This text was used to refer to different X and different Y-axis units.

The error message a user would see if for example, they tried to add two spectra of different x-axis units, is now clearer.

Added cue card help for various tool palettes within OMNIC.

Right-clicking on the tool palettes icons will bring up context sensitive help for that icon.

Improved COM interface to DDE commands to insert [characters if needed and to properly wait for command completion before returning from the command for asynchronous commands.

Enhanced OMNIC's COM interface to perform its own checking for proper command syntax and to wait until a previous command has completed before issuing the next DDE command.

Added support to add COM objects to OMNIC functionality at run time.

Enhanced the functionality of OMNIC's COM interface.

Resolved Issues - OMNIC

Request to store the name and path of the background file in the Collection and Processing Information.

If the background file comes from the disk, the name and path for the file is captured in the Collection and Processing Information.

In the Collection and Processing Information, the data collection error information is displayed on screen but not printed.

OMNIC enhanced to print out all information in the Collection and Processing Information.

If a spectrum was extracted from a notebook, the collection time that appeared in the Collection and Processing Information was that of the last spectra from the lab notebook.

The collection time that appears in the Collection and Processing Information is now that of the extracted spectrum.

Changed text from "Signature could not be verified" to "Signature could not be verified because the necessary software or operating system is not present." This occurs on Win98 or when DS not purchased.

A user can open a digitally signed file on an operating system that does not support the encryption tools. Without these tools, OMNIC knows a signature is there but cannot decrypt the signature.

OMNIC sign read-only files. Put in test for read-only files before attempting to sign them. Now puts up an error message when they are read-only

If a file is read-only, an error message will be displayed to the user indicating that the reason the file cannot be signed is that it is read-only.

Performing a search of a digitally signed spectrum changed the status in the display of that spectrum to "Spectrum not signed."

Change made to not change the status of the signature due to a search. Searching does not modify the data.

Unable to configure a custom detector on the right-hand side of the spectrometer.

Change made in Bench Configuration application to correctly configure right-hand custom detectors.

Spectral range for XT-KBr beam splitter and DTGS TE cooled is not correct.

With OMNIC 6.0a, the default range for all sources was 4000 - 400 cm^{-1} . A new default range of 11,000 - 375 cm^{-1} has been set for the XT-KBr beam splitter and DTGS TE cooled systems.

Changed to allow reset bench at start of Raman data collection.

On the Advanced tab of Experiment Setup, the option to "reset bench at start of collection" has been enabled for Raman data collections.

The sample compartment validation wheel for the Avatar does not work with OMNIC 6.

The Avatar driver has been modified to control a sample compartment validation wheel.

If a Mattson spectrometer had a communication failure when in Experiment Setup, the user had to close and then re-open the Experiment Setup dialog to resume communications.

Change to OMNIC so that if a communication failure occurs while the user has the Experiment Setup dialog open, the user can restart communications without exiting Experiment Setup or changing tabs.

Changed OMNIC to not require a default.cfg file on startup. It creates one if needed now.

Default.cfg is installed during the OMNIC installation. If the file is not found on startup, OMNIC will now create the file.

Fixed tiny memory leak when a new background is collected. Only a problem for repeated background collects over days.

Small sections of memory were not being freed after a background collection. Over time, this can affect system performance as less memory is available.

Modify Reprocess to account for the fact that an atmospheric suppression might be done on a spectrum with SSP equal to one

Reprocess will now account for atmospheric suppression if the Sample Spacing Parameter is set to one.

The Save Group command does not let the user save to a network folder with an UNC path.

OMNIC changed to allow UNC paths as the destination folder when saving groups.

OMNIC .SPA files are not associated with the OMNIC application.

OMNIC .SPA files will be associated to OMNIC if there is no other association for .SPA files in the registry.

OMNIC could not read in some older PC-IR data files.

Fixed a crash that occurred on some systems when OMNIC tried to read in .SPA files created with PC-IR DOS Software.

If you save a spectrum as a CSV file, the entire spectrum is being saved to the file instead of only the displayed region.

OMNIC changed so that only the displayed region is saved to the CSV file.

Mattson files other than .abs are not saved properly.

Prompting for before overwriting a Mattson file is only done for .ABS files. No prompting if a .RAS, .IFG, or .DRT file is being saved.

Modified JCAMP-DX to always write out LONGDATE for Y2K compliancy. Additionally, a small change to continue writing out JCAMP-DX the old way for dates less than 2000. That is 10/04/97 and write out dates new 4-digit way when greater than 1999.

Long dates were added into the 5.01 JCAMP specification. This has been implemented in OMNIC to assist users with Y2K issues.

If the spectra were being displayed in wavelength, the only option allowed in for an X-axis format in the Display Options was Normal.

OMNIC has been changed to allow any of the wavenumber displays when the current x-axis format is in wavelength.

If the Sampling Information, enabled through the Display Setup dialog in the View menu, did not fit on a single line, the text would not print.

Need to correctly determine width of printable area for text wrapping. Fixed issues where if text enabled through Display Options wraps, it would not print.

Changes made to correctly determine the width of the printable area. Printing, wrapping text if necessary, fixed for the Sampling Information.

Under Display Setup, choosing overlaid titles and displaying sampling information caused the text to overlap.

Issue has been resolved by moving the sampling information below the overlaid titles.

Under Display Setup, choosing overlaid titles and displaying multiple spectra with the Digital Signature option installed caused the titles to overlap the signature information on the display.

Issue has been resolved by moving the digital signature information below the overlaid titles.

The spectral title will not print if an annotation's starting point was near 2500 cm⁻¹. Also, long spectral titles will not print if the title cannot fit on a single line.

OMNIC modified to display the spectral title independent of the placement of other annotations. Also, corrected error in printing routine to correctly wrap titles that are longer than a single line.

If one copies and pastes an OMNIC window into a program such as MS Word or PowerPoint, it is copied with the New Window axis limits instead of the displayed values.

Change to OMNIC so that if an OMNIC window is copied and then pasted into another application, it appears with the current display limits of the OMNIC window, not the values from the Edit/Options/New Window dialog.

The Getting Started tutorial would intermittently stop running at the 24th screen on Windows 2000 systems.

There is a documented problem with ToolBook^^ II applications and Windows 2000. The issue is supposed to be addressed with Windows 2000 SP3. A workaround has been implemented in OMNIC to eliminate the error.

Enabled cue-card help for Copy and Sign buttons in the report feature.

Context sensitive help for the Copy and Sign buttons in View Notebook has been added. The help can be accessed by right clicking on the buttons.

If the Roll & Zoom command is chosen, pressing F1 for help brings up the help topic for saving configurations.

If Roll & Zoom is highlighted in the View menu, the Roll & Zoom help will appear if the user presses the F1 key.

Added new cue-card ID definitions for spectrum information dialog

Context sensitive help was added to the Collection and Processing Information. The help is accessed by right clicking on the background area of the dialog.

Help menu items are not be displayed according to the Edit Menu configuration.

A change was made in Edit Menu to not let the user disable or hide menu items that are submenu headings such as "Learning OMNIC" and "Sampling Techniques". Other items in the help menu can now be disabled or hidden as determined by the configuration constructed with Edit Menu.

If "Text Only" is selected for the OMNIC Toolbar, the toolbar button separator and the button frame do not appear.

Changed OMNIC to show the separators and the button frames if "Text Only" is selected as the toolbar type.

The Command Text label in the Add Item Dialog in Edit Menu is not changing consistently with the Item Type.

Depending upon the Item Type, the title for the Command Text box changes. Scenarios existed where the text string did not match the Item type.

The colon after "Experiment" for the experiment drop down control on the main OMNIC window is hidden.

The Text string was repositioned on the main OMNIC to show the colon.

Fixed issue when if the computer's display mode was set to 256 or less colors, the subtract auto Y check box could not be checked.

In the Subtract window, the auto Y check box can be selected for all video display modes on the computer.

Update look of "Change data spacing" dialog to match new OMNIC 6 blue textured look.

OMNIC 6 enabled the user to choose the OMNIC Window Style in the Edit/Options/View dialog. The style was not applied to the Change Data Spacing dialog in the previous OMNIC version.

Resolved Issues - OMNIC Macros\Basic and Macros Pro

Some macros would crash intermittently when run from the OMNIC toolbar.

Change made to Macros\Basic.

Modified variance command to put result(s) in current window instead of a new window if the command is not invoked from DDE.

Change was made in OMNIC so that Variance command functioned the same as it had with OMNIC 5.0. By invoking the command: ExecuteOMNIC "Variance 1", the average is calculated and added to current window.

Modified "Statistical Spectra" to not show New Window prompt if command invoked from DDE

Change was made in OMNIC so that Statistical Spectra functioned the same as it had with OMNIC 5.0. By invoking Statistical Spectra though DDE, the result will be added to the current OMNIC window.

Resolved Issues - InterpretIR+

InterpretIR+ does not automatically import the active spectrum from OMNIC when launched.

InterpretIR+ has been changed to automatically import the active spectra when InterpretIR+ is launched from the OMNIC Analyze menu.

Resolved Issues - OMNIC Atlpμs, μView (Microview) and View Stage

Expanded support to allow OMNIC Atlus maps to contain up to 50,000 spectra.

Previous versions of OMNIC Atlus allowed users to collect just less than 16K spectra in a map. The limit has been increased to 50,000.

Request to save the image size when OMNIC Atlus (or Microview) is closed so that the program automatically recalls the values for the user.

The last used video size is now saved when OMNIC Atlus (or Microview) is closed. The saved value is loaded and used when OMNIC Atlus (or Microview) is started.

Request to set the number of background and sample scans to different values in Map Setup within OMNIC Atlus.

The user can specify a different number of scans for a background versus a sample scan in OMNIC Atlus.

OMNIC Atlus does not autofocus for each video frame when collecting a mosaic with a map

Changed OMNIC Atlus so that if "autofocus at each point" is selected/enabled, the Mosaic will also autofocus at each point.

Microview opens in a small window after installation.

The size of the Microview application has been increased to allow the user to more easily view the controls.

The ruler in the navigation pane of OMNIC Atlus cannot be moved with the mouse.

Change made so that if a ruler is drawn in the navigation pane, the arrow tool can be used to position the ruler.

Clicking on focus control in OMNIC Atlus or Microview causes the stage focus to run-on unexpectedly

The stepping increment for the Z-axis control was changed to a finer granularity. The stage moves one increment with each mouse click.

With the View Stage, the Experiment Setup interferogram display freezes after toggling the lamp on and then off.

View Stage controls in Experiment Setup can now be toggled/changed without freezing the interferogram display.

View Stage users cannot access OMNIC Atlus or μ View (Microview) correctly. Provide a calibration file for the View Stage so that users can then use OMNIC Atlus or μ View.

A View Stage calibration file is needed. The file "ramanvs.cal" has been included in the factory folder.

Resolved Issues - Val-Q

Spectral group collected in Val-Q could not be saved to a network drive.

User now has the choice as to where the spectral data is saved. Can be to any mapped local or network drive.

OMNIC experiment parameters are not being restored to previous settings when Val-Q closes.

Val-Q modified to store current OMNIC settings when Val-Q starts and restore them when Val-Q closes.

Resolved Issues - OMNIC Series

Fixed bug that prevented import of TGA files into series.

A change occurred in OMNIC version 6.0a that prevented TGA files from being imported into OMNIC.

Series and OMNIC Atlus progress bar now painted with new OMNIC 6 blue textured dialog style colors

OMNIC 6 enabled the user to choose the OMNIC Window Style in the Edit/Options/View dialog. The style was not applied to the Series or OMNIC Atlus progress bars in the previous OMNIC version.

Fixed series setup dialog to only allow values to be entered that create valid series files.

Prevents attempt to create multi-gigabyte files that caused the display of the size to be a negative number or when the number of spectra exceeded 60000. Modified the routine that calculates OMNIC Atlus map file size to return 0 if resultant file would be larger than is supported. Also file creation to return 0 if too many spectra in potential file (more than supported). Some combinations of series collect parameters would cause the Estimated File size in the Series Setup dialog to display a negative number as it overflowed the variable. Limits and error checking have been added to ensure that a valid estimated file size is displayed.

When profiling Series or OMNIC Atlus data, ignore the data spacing test for a measure only method

The data spacing is not checked when a measure only method is applied to Series or OMNIC Atlus data.

Series collect window does not always update if very data is acquired rapidly.

Enhance Series collect so that the current spectrum always updates the display even when the time increment is less than one expected increment.

Using split bi-directional rapid scan often resulted in dropped scans when going faster than about 60 scans per second

The time stamp increment for rapid scan was changed to a finer resolution so that all scans would have a unique time stamp.

If one uses the same peak and baseline values for the numerator and denominator in Profile setup for "Peak height ratio of two peaks", the Y readout was displayed as "1.QQ".

Readout now displays the correct value.

Resolved Issues - Almega

Coarse adjustment needs a finer scale.

Coarse adjustment increment reduced. Allows for smoother operation and less overshoot.

If the focus button is clicked rapidly with a 50x objective, the focus motors may not be able to bring the object back in focus. Manual refocusing required.

Coarse adjustment increment reduced. Allows for smoother operation and less overshoot.

The signal is not changing during autoalign if option 3, align laser to pinhole, is selected.

No description

Wavelength calibration. Improved algorithms to make calibration more robust.

Added code to adjust spectrograph focal length for best fit. Added neon lines (neonhigh.txt and neonlow.txt files) to do a better job covering the spectral range for each grating position. Removed some chronically mismatched neon lines. Results are saved in a single file, calibrate.txt, rather than individual peak.txt files.

Laser calibration improvements.

Changed peak location algorithm to use center-of-gravity. Modified procedure so that second laser is calibrated even if first laser fails. Fixed bug that caused some single laser configurations to hang up. Fixed bug so that a combined bin range is calculated for single laser systems.

Almega Installation Issues.

Removed code which caused default.con and default.exp files to be write protected. Fixed issue which installed the WinNT 4.0 driver under Windows 2000 in addition to the Windows 2000 driver.

Do laser accordion before Set_fold_limits to get desired range.

No description

Require a laser normalize for atypical laser type spectrometers.

No description

Add methods to calculate the resolution information for atypical lasers.

No description

Changed startup code to detect when bench power is off and prevent showing multiple camera errors.

No description

Added initialization code so that the correct grating is selected when entering the Bench or Align tab.

This also fixes bug, which caused occasional blank spectral range text boxes when selecting 532 Low Res grating.

Automatic data spacing option on Advanced tab not always selected by default.

Changed so it is initialized to checked.

Turn both lasers On/Off option on Advanced tab does not stay selected.

Disable this option if only one laser installed.

Fixed bug that occasionally introduced a blank data point in spliced spectra.

No description

Added code to bin-in-memory collects to check for CCD traps.

No description

Modified DDE commands so that calibrations can be run from macro (no finish dialog) and un-invoked collects finish correctly.

No description

Spectrograph alignment tab changed so that if LED is at high intensity during pinhole align, Max contains "(H)", if at low intensity it contains "(L)".

No description

Known Issues

IR Spectral Interpretation will not display the functional group information (accessed by clicking on the eyeglasses) if Library Manager is open.

IR Spectral Interpretation will not display the functional group information (accessed by clicking on the eyeglasses) if Library Manager is open



The Library Manager window must be closed to view the functional group information and structures.

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