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Varian MS Workstation Version 6.6 Release/Update Notes

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Overview

These Release Notes are organized into two broad categories:

- Items of Interest to All Users of the Varian MS Workstation Version 6.6
- Items of Interest to Users Upgrading from MS Workstation Version 6.5

All Varian MS Workstation operators should read the section "Items of Interest to All Users of the Varian MS Workstation Version 6.6."

Customers upgrading from an earlier version should read the other section, as well as Release Notes documents from previous releases as appropriate.

Items of Interest to All Users of the Varian MS Workstation Version 6.6

General Operational Considerations

SYSTEM REQUIREMENTS

Ensure that your computer meets the Minimum Computer Requirements listed below. System performance may be poor if minimum requirements are not met:

- Operating System: Windows 2000 or XP Professional. Windows 98 and Windows NT are no longer supported.
- Pentium III (or higher) processor, at least 1 GHz, or greater.
- Video screen supporting 1280 x 1024 x 256 resolution or greater. 16-bit color is recommended.
- At least 1GB RAM
- CD-ROM drive, 16X or faster

ANTI-VIRUS SOFTWARE

System performance in general and Quantitation in particular, can be seriously degraded if anti-virus software is enabled or other software running that competes for system resources. While your system will run with these limitations, you will not obtain the optimum performance.

Ideally, anti-virus scanning would only be done at computer boot-up or during low-usage times. If it must be run during regular operation, either disable On-Access Scanning (if corporate policies allow and your network is secure) or, at the very least, only include potentially dangerous file types (such as .EXE, .DLL) in, and exclude the MS Workstation File Type extensions (.XMS, .SMS, .MS, .RUN, .SMP, .RCL, .MTH, .SWT, and especially .TMP.) from, automated scanning by your anti-virus software. Consider also excluding the VarianWS root directory.

Note that if you run McAfee Enterprise 8.0i, there are serious problems running the MS Workstation (and other software as well), unless "Patch 9" from McAfee is installed. Search for *kb38881* at knowledgemap.nai.com for more information.

WINDOWS POWER SCHEMES AND COMMUNICATION FAILURES

Some of the Power Scheme options that can be selected in Windows may disable the communications devices used to control MS Workstation instruments. Under Start | Control Panel | Power Options, on the Power Schemes tab, please ensure that both *System standby* and *System hibernates* are set to *Never*. If the system goes into standby or if the system hibernates, communications failures may occur and, if an acquisition is occurring, data may be lost.

USE OF MS ACCESS-BASED TEMPLATES

The Application-specific and Custom Reporting elements are implemented using template files (.MDBs) based on Microsoft Access.

These templates are qualified to work with a run time version of Access 2000, which is installed automatically by the MS Workstation installation program.

If a version of retail Microsoft Office is installed on the target computer, the following conditions apply:

Custom Report templates are only compatible with Retail Access 2000, and not with any other version of Microsoft Access.

If Retail Access 2000 is present, it must have been updated to Service Release 1 (SR-1) or later and have been updated with Service Pack 5 for Jet 4.

If a Retail version of Microsoft Office XP is installed on the target computer after the MS Workstation is installed, it will install Access XP, which is incompatible with these templates. No versions of Access other than the Retail version of Access 2000 described above should be installed after the MS Workstation is installed.

Installing the MS Workstation

BEFORE INSTALLING THE MSWS SOFTWARE

It is advisable to perform common disk maintenance tasks such as defragmentation and deleting old .TMP files in your tmp or temp directories before getting started with this or any other software installation.

In order to install the software and be in a position to efficiently operate the software, you should start with at least 1 Gigabyte of free space on your hard disk prior to the installation. Operating too close to full disk capacity generally leads to performance problems.

If you plan to install the NIST Library Option, please do so before installing the MS Workstation. Otherwise, the MS Workstation installation will install the demonstration version of the NIST library and MS Search Program.

INSTALLING THE SOFTWARE

Since the MSWS Workstation installs device drivers on your computer, you must be logged into an account with Administrator privilege before attempting to install the software on Windows 2000 or XP systems. (In particular, do not use the *Install Program as Other User* feature. First log out of the non-privileged account and into a privileged account before completing the installation.)

Insert the distribution disk in a CD drive on your computer. An installation program should start automatically (allow a few seconds); if the program does not start automatically, please execute INSTALL.EXE from the root directory of the CD.

Select 'Install', then one or more of the following options as appropriate:

Install PCI GPIB Driver: Choose this option if you need to install one or more GPIB cards for the Saturn 2000 module, or the ProStar 230/240/310/330 Modules. This should be done before installing the rest of the MSWS Software.

Upgrade Ver 5.x to Ver 6.6 MSWS: Choose this option if MSWS 5.x is currently installed. You will need to provide an upgrade serial number from the S/N card included in your upgrade kit and serial numbers for the options you need to install. While the serial numbers for most 5.x options (EnviroPro, ToxPro, etc...) can be used with MSWS 6.6, serial numbers from pre-6.5 versions of the core MS Workstation software will not work with 6.6. You must purchase an upgrade to use the MSWS 6.5 (or later) software.

Update Ver 6.x to Ver 6.6 MSWS: Choose this option if a previous version of MSWS 6.x is installed. The serial numbers will be automatically re-entered. However, while the serial numbers for most 5.x options (EnviroPro, ToxPro, etc...) can be used with MSWS 6.6, serial numbers from pre-6.5 versions of the core MS Workstation software will not work with 6.6. You must purchase an upgrade to use the MSWS 6.5 (or later) software.

Install MSWS Software: Choose this option if no MSWS version is installed. You will need to provide a serial number for the MSWS and any of the options you purchased.

Please review the terms of the licensing agreement. If you reject the agreement, the installation program will exit.

If the installer cannot locate the NIST MS Search program, it will ask you to provide the location of the NIST program. You can use 'Cancel' to indicate that the NIST software is not installed, in which case a demo version will be installed. This demo version includes the search engine, which will allow you to create and search NIST User Libraries from within the MS WS software.

At the end of the installation, turn off the computer and install any interface cards required for your hardware (Kodiak interface, GPIB boards, etc.) before restarting your computer.

OPTIONS/SERIAL NUMBERS

The Windows based installer includes the ability to install the optional MS Workstation application programs as part of the core installation; one may simply keep entering product serial numbers into the single installation program to install multiple products rather than launch multiple installers separately.

Upgrades of existing MS Workstation (or Saturn GC/MS Workstation) installations will require that you enter the new serial number that came with your upgrade kit for the core MS Workstation 6.6 software. Optional software such as ToxProPlus and EnviroPro will not require new serial numbers for upgrades.

MICROSOFT ACCESS

The Access 2000 Runtime is installed automatically as part of the core installation.

NIST MS SEARCH AND AMDIS PROGRAMS

The NISTDEMO Library and MS Search Program are installed automatically if a full version of the NIST Library and MS Search Program is not already installed. If a 1.7 version of the MS Search Program is already installed, it will be upgraded to Version 2.0a.

If an older version of the NISTDEMO is installed, it will be replaced with the latest demo version. This latest version includes version 2.64 of AMDIS which now supports the Varian XMS file types. Note that AMDIS only supports data files with a single Scan Descriptor (aka Scan Channel) per Method Segment. Multi-Channel data files cannot be analyzed.

If an older version of the full NIST Library and MS Search Program is installed, the core Workstation installation will proceed after displaying a message about later updates being available. Please see your Varian representative if you wish to upgrade to the latest full NIST MS Search Program, AMDIS and Libraries.

MS Workstation Operational Considerations

MULTIPLE USERS OF MS WORKSTATION

Note that a file created by a user in a location that is private to this user will – as it should – not be generally accessible to other users. It is therfore recommended that files only be created in a location that is "below" the Workstation folder (c:\varianws by default), or in an area that has been set up to be accesible by all Wokstation users by the System Administrator.

Note that the same thing applies to the directories in which NIST and AMDIS are installed. If a particular user is not given write access rights to the files, the software will not work properly.

CONCURRENT USE OF METHOD FILES

A method should not be modified in another application while the results that were generated by it are displayed in the Results View in MS Data Review. Since the modified method may no longer be consistent with the results, a message will be displayed stating that the method has changed and that the Results View must be updated. The Results View display will be cleared when the dialog is OK'd. You should go to the Process View to reprocess the file with the newly-modified method, and then return to the Results View to view the updated results.

If the results in a Recalc List are being displayed in the Results View at the same time that they are being generated in System Control, the "Method has changed..." message will be displayed each time that processing on a file is completed and the Results View display will be cleared when the dialog is closed. In most cases, the simplest solution is to go to the Results View to view the results after all processing has been completed. If you must view the results while they are being generated, first make a copy of the method, reprocess the recalc list in the Process View with the copy, and then go to the Results View to view the results. The "Method has changed..." message won't be displayed because a "different" method (that is, a copy) is being used.

1200 MS DRIVER

The 1200 MS driver is installed if selected during the installation program. An Icon will appear in the Available Modules area in the configuration screen of System Control whether a 1200 is present or not. If you do not plan to connect a 1200 MS, you can make the icon disappear by disabling the module driver. This can be done by selecting *Enable/Disable Instrument Modules...* in the right-click menu of the Workstation ToolBar. System Control must be restarted for this to take effect.

SATURN 2000 AND 330 PDA

If both the Saturn 2000 and PolyView 2000 are selected for installation, then the Saturn 2000 will be installed with data handling capability only. As the Saturn 2000 and 330 PDA (installed with PolyView 2000) both use the same GPIB interface, their use is mutually exclusive.

MS DATA REVIEW

MS Data Review implements an "Explorer-like" interface that allows you to browse Workstation files. The directory tree in the Data Files pane is updated every few seconds to reflect changes to the tree, such as adding, moving, or deleting data files or Recalc List files, or adding or removing memory sticks. When a directory containing large numbers of files is displayed, this updating can cause the response to user actions to be delayed for several seconds. Therefore, automatic updating of directories that contain more than 500 data files is only done about every 30 minutes. These large directories can be updated manually at any time by selecting the "Update All Drivers and Directories" option in the application View menu or by pressing the F5 key.

Accessing directories in the Plots View Data Files pane that contain large numbers of data files can affect the performance of MS Data Review. For optimum performance, directories should not contain more than 1.000 data files.

Attempting to select some types of corrupt MS data files can cause the MS Data Review application to close. If the Application Start Up Preferences dialog specifies that the Last Recalc File or Last Data File should be auto loaded when the application is started, and if the data file that it tries to load is corrupt, the application will close immediately after starting. If this happens, the simplest way to start MS Data Review is to double-click on a valid file in Windows Explorer.

Items of Interest to Users Upgrading from MS Workstation 6.5

What's New

The primary purpose of the MS Workstation 6.6 release is to support a new LC/MS Ion Trap Module, the 500-MS. However, a number of improvements have been made in other areas of the software in this release as well. The most significant of these are continuing improvements to the MS Data Review and MS Data Handling areas of the software, which build on the major changes made in MS Workstation 6.5. See the sections below for more detail on the specific changes made in the different areas of the software for this release.

500-MS LC/MS Ion Trap Module

New in this release is support for the 500-MS LC/MS Ion Trap. The 500-MS supports Electrospray and APCI Ionization Modes and several Scan Types (Full, AMD, MS/MS, MRM, and MSn). It scans a mass range up to 2000 m/z and provides two different Scan Speeds (5000 Da/sec and 15,000 Da/sec).

The 500-MS Module Driver features specification of the Scanning and API parameters under Method Control, including temperature gradients for the Drying and Vaporizer Gases, and automated features to find the optimal capillary, needle, and RF loading conditions for methods development. For more information on the 500-MS, see the Marketing literature and User Documentation (Manuals and On-Line Help).

1200 MS Issues Resolved

ld: 2870	Title: Area:	Datafiles with fast scan time MSDataRev - MultiChro Display
	Description:	When using a method with a fast scan rate,. i.e., a method that has scan time =0.004, and you view those files that are created from that method in MS Data Review, an error message appears saying "File has point(s) out of the time order, OK." After you click OK, it displays the datafile.
ld: 3392	Title:	Configuration Dialog Doesn't Like Single Quad Instruments
	Area:	ModWin - General
	Description:	A system was configured with a single quad. When System Control and the 1200 Module Driver are started, the Configuration Dialog complained about the mismatch (red X). However, when the user tried to change the system to a Single Quad, the change did not appear to "stick." The red X was replaced by a check mark, but it did not trigger the software to restart, and when System Control was closed and reopened, the Red X was back. This problem appears to be unique to Single Q systems.
ld: 3529	Title:	Messages for the tune to target ratios dialog
	Area:	Other
	Description:	In the tune to target ratio dialog, after step 3, calculation is done, two of the target ion ratios (or some times more than two) have more than 50% reduction. Since the adjustment is only applied to all the ions or none of them, if we can only pop one message for all the ions which are more than 50% reduction, instead of one message for each ion, it will avoid confusion.

ld: 3610	Title:	Cancel button does not work properly.
	Area: Description:	ModWin - General From Autotune dialog, click Edit standard compound. In Edit Standard compound dialog, click New to create a user defined compound, enter a name or not enter anything, then click Cancel, a warning message always pops up saying you must choose a name for the new compound.
ld: 3642	Title:	Centroid list display shows base peak only
	Area:	System Control - General
	Description:	In centroid panel, when list display is chosen it only shows base peak but nothing else. As an improvement, user should be able set a threshold for both peak label and list entry.
ld: 3892	Title:	API tests Failed when it should Pass
	Area:	ModWin - General
	Description:	All individual API tests passed but at the end the diagnostics returned API tests FAILED. This appears to be an intermittent problem. The inlet passed subsequent tests with no problem.
ld: 3967	Title:	User Trace added to files when it should not
	Area:	ModWin - Acquisition
	Description:	After collecting a data file with a User Trace, the In Use box in the User Trace dialog was unchecked. However, this did not stop the User Trace channels from being added to subsequent files even after I APPLIED the change several times and even restarted the software. These phantom channels do not contain any data.
ld: 3968	Title:	User trace display in Chro
	Area:	ModWin - Acquisition
	Description:	Analog Inputs on the 1200 can be used to incorporate, e.g., a UV trace as a separate channel into the XMS files. The trace can also be displayed in Chro as a User Trace, however, during automation this trace is displayed during the first run only then it will not be shown in Chro but will be added to the files. If a user trace is defined in the software then Chro should display the trace automatically just like the scanned MS traces.
ld: 3973,	Title:	Wiped out tune parameters on MSWS 6.42
4539	Area:	ModWin - Auto Tune
	Description:	After upgrading or just loading the software all the ESI tune parameters (masses tables etc.) are wiped out (.REF files).
ld: 4061	Title:	Limit filament current for 20eV ionization
	Area:	System Control - General
	Description:	Limit the filament current to 100uA when the electron energy is 20eV.

ld: 4074,	Title:	Ctrl Method from 6.3 fails to download on 6.5
4235	Area:	System Control - General
	Description:	After upgrading from MSWS 6.3 to MSWS 6.5, when activating a pre-existing method from 6.3, the following error message is returned:
		method "mymethod" activated
		module 1200.42 can not send module file
		module 1200.42 unable to download the file
		After the messages all automations are aborted.
		If you save the old method under a new name, the method can be activated and downloaded. Also you can create a new method without problems.
ld: 4167	Title:	Ion Lens Problems
	Area:	ModWin - General
	Description:	The following problems have been corrected as described:
		1: The Lens 1 pulse dose not wrap around at voltages > +130V
		2: Lens 1 pulse turns on and off correctly for different ionization modes.
		3: The source temperature is now read in between scans, so we have no interference from the lens 1 pulse.
		4: Readback of lens 1 is now corrected for with and without pulses.
		5: The source temperature PID stabilization is much improved (Less overshot and within 1C after stabilization).
ld: 4184	Title:	Changing lens1 voltage after system restart
	Area:	System Control - General
	Description:	Whenever the system restarts, the Lens 1 values is set to the Lens 2 value. Once the user restores a valid tune file (or retunes), everything is fine again.
ld: 4185	Title:	Autodetection of lens 1 pulsing faulty
	Area:	System Control - General
	Description:	The autodetection of the lens 1 pulsing capability (GCMS - EI) may fail without giving any message. As a result, the user may run with a lens 1 configuration set wrong, without any warning message.
ld: 4188	Title:	Lens 1 pulse on readback message not accurate
	Area:	System Control - General
	Description:	Lens 1 readback, when in EI mode, should specify "pulse on" or off. What it actually does is it specifies what the hardware supports and not if the pulse is actually on or off.
ld: 4190	Title:	Lens 1 pulses wrap around at extreme voltages
	Area:	System Control - General
	Description:	In GCMS, EI mode, for the systems that have lens 1 pulsing enabled, the lens 1 voltage could wrap around if the lens 1 voltage is too large positive.
ld: 4191	Title:	Cross talk between L1 pulse and source temp
	Area:	System Control - General
	Description:	When the lens 1 is pulsing (GCMS, EI mode only), there can be a cross talk that may cause the source temperature regulation to oscillate slowly around the set point or even to read a value that is away from the set point.
ld: 4390,	Title:	System Control Crashes when MSMS Breakdown is selected.
4515	Area:	System Control - General
	Description:	(i) Open System control with the 1200 configured.
		(ii)Go to the Tools menu & select the 'MS-MS Breakdown'.
		(iii)Select the 'Include the parent in the break down curve' check box.

		(iv)Click on 'Cancel'to the dialog box.
		System control hangs for a long time and then crashes.
ld: 4412	Title:	"Dipping" quads utility does not work
	Area:	System Control - General
	Description:	The "dipping" quad utility under troubleshooting menu does not work.
ld: 4431	Title:	Support new rev of the API Board
	Area:	ModWin - General
	Description:	Change the API board configuration to identify and support the new revision of the API board.
ld: 4464	Title:	Widen needle voltage tolerance specification during diagnostic test
	Area:	ModWin - Diagnostics
	Description:	During API board diagnostic testing the needle voltage would sometimes fail because the tolerance window is not wide enough.
ld: 4465	Title:	Capillary, shield and needle voltage readings lag during diagnostic test.
	Area:	ModWin - Diagnostics
	Description:	Capillary, shield and needle voltage readings lag behind during diagnostic test. Instead of reading their instantaneous voltage reading, it would average it and cause a false failure.
ld: 4467	Title:	Readback for APCI torch temperature can read in red with ESI attached.
	Area:	ModWin - Diagnostics
	Description:	When a 1200 system has an API housing (electrospray) attached, the torch temperature readback reads 0 deg C since the torch is not connected for this option (torch is only used with APCI). The problem occurs when the readback for the torch temperature falls below 0 deg C due to noise. This causes that readback to turn red indicating a problem.
ld: 4524	Title:	Relax Switching Times to reduce stress on API Board
	Area:	ModWin - General
	Description:	Adjust the turn-on and turn-off delays and the set point ramp rates of the needle and shield to get the lowest possible rate of change of the DC-DC converter outputs while maintaining a polarity switching time of 300 msec. Adjust the data acquisition delay time to allow for the slower needle and shield polarity switching.
ld: 4528	Title:	System Control crashes when a bad combination of SIM mass & SIM width is entered
	Area:	DAMeth - General
	Description:	When the method is set to do SIM at the lowest possible mass range '1', if the SIM width is set to '2.01' the system crashes, and the the 1200 gets disconnected automatically. This happens since the value goes to negative range and this is not acceptable by the instrument.

ld: 4625	Title:	Source Regulation Problems
	Area:	ModWin - Temperatures
	Description:	The following problems were discovered with Source Heater regulation
		 The Source heater regulation readback is ignored during certain time periods while autotune is running. This throws off the regulation and causes a step in temperature when the reading resumes.
		When the filament is on, it adds additional heat into the source block, bringing the source out of temperature regulation.
ld: 4703	Title:	MS/MS breakdown can cause a hard crash
	Area:	ModWin - General
	Description:	In MSMS Breakdown select the API Capillary type, and in the opened dialog click on Start or Apply button. The System will crash very hard. The dialog for Q2 breakdown works fine.
ld: 4743	Title:	Autotune hangs
	Area:	System Control - General
	Description:	Found on systems with new detectors while Autotuning in EI mode. When it gets to a large peak, while tuning a lens, it hangs. EDR is on. All it does is switch back and forth between two EDR levels but does not move further.

2000 MS Issues Resolved

ld: 4446	Title:	Saturn Hardware Manual has incorrect SilChrom electrode bake out temperature
	Area:	Other
	Description:	Saturn Hardware Manual (03-914978-00) page 109 or Adobe page 142 of the 2000 says "Note:bake out the ion trap electrodes overnight at 250°C". This is in the MS Maintenance/Clean SilChrom Ion Trap Electrodes section. 250 exceeds the recommended temp max of 220. Please change 250 to 220.

4000 MS Issues Resolved

ld: PD	Title: Area: Description:	Editing Method Segments in Manual Control ModWin - ManCtrl It is now possible to edit the chromatographic time segments of a method directly in System Control without using the Method Builder application. In the Manual Control mode, there is a new tab, Method, which can be used to add or remove chromatographic time segments. If the currently executing segment is deleted and the Active Changes button pressed, Manual Control will begin running segment 1.
ld: PD	Title: Area: Description:	Method File Format Change Method - General In version 6.6 of the MS Workstation software there is a new method file format for the 4000 MS. When a method created with version 6.5 or earlier of the MS Workstation software is loaded into an MS Workstation application an inmemory upgrade is performed. The method file is not updated with the new format until it is manually saved to the file in the Method Builder or System Control applications. To save an upgraded method in Method Builder, open the file and then select File Save As. In System Control, when a method with the previous format is activated, click on the Upload MS Method button in Manual Control, or select File->Upload Active Method from Modules and save the method. The only drawback of using methods that have not been upgraded is some data processing in MSDR may be slower.

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ld: 4740	Title:	Need to Change Maximum Getter Temperature
	Area:	ModWin - ManCtrl
	Description:	Production is seeing occasional getters that exceed the 450 degree maximum
		temperature allowed by the software in normal operation. The vendor has
		indicated that 475 degrees is an acceptable maximum temperature so we
		should change the maximum to that value in the controller software.
ld: 4756	Title:	Active method not active when changes are not saved
	Area:	ModWin - Manual Control
		Description: When a method has been modified in manual control, but has not
		been saved to the active method, and the user leaves manual control, the modified method continues to run on the MS after the user has clicked on "No"
		when asked if they want to save their changes.
		which across it they want to cave their changes.
		If the user clicks on "Start" in the Acquisition mode, the modified method from
		manual control, not the system control active method, will run.
		When the uper dials on no to equing the method changes, the gustom control
		When the user clicks on no to saving the method changes, the system control active method should be downloaded to the MS.
		active method should be downloaded to the Mo.
		If the user had selected inject single sampe, started a sample list, or started a
		sequence, the correct method would be activated. This only occurred when
		clicking the start button on the 4000's module window.
ld: 4757	Title:	Module Attributes not saved if method has changed
	Area:	ModWin - Manual Control
	Description:	If the user activates the changes of a method and then changes the module
		attributes, when leaving manual control, they will be asked if they want to save their method changes, but the module attribute changes will be discarded
		without asking the user.
ld: 4032	Title:	MSMS method refers to MRM in acquisition scan description
iu. 4032	Area:	ModWin - Acquisition
	Description:	Download a MSMS method to a 4000MS. In the acquisition mode, the scan
	Description.	description refers to MRM instead of MSMS.
ld: 4151	Title:	Electron Multiplier change in Module Attributes Does not Work
	Area:	System Control - General
	Description:	Change the EM volts to 0 V and activated the change. No change to spectra
	·	display. Left the Manual Control to Temperature section, return to manual
		control and THEN the EM voltage seemed to be activated.
ld: 4486	Title:	Display more detailed Data Communications error information
	Area:	ModWin - General
		Description: Communications errors are being reported on the 4000-MS. The
		Controller board returns error codes which are not reported in the error
		message displayed to the user.
		In order to better isolate the problem additional error information should be
		displayed.
		A number of files are now generated when there is a loss of communications.
		They can be found in the VarianWS directory and can be returned to Varian, Inc. to help identify the cause of the problem.
		PSTSPKT.TXT - Contains last packet received. This file is generated when it
		detects an error reading the data channel or when it detects a timeout of
		receiving selective status packets.

	1	
		PSTSPS.TXT - Contains previous status errors (if any.) The previous status header and data is dumped to this file. This file is always generated on boot of the workstation. This file is generated when previous status is obtained. Therefore, the system must be restarted for this file to be generated. PSTSTO.TXT - Contains current time, time on last selective status packet, last packet type received, last selective status packet header, last scan counts packet header, last endrun packet identifier received. If we are able to close and open the device, this file will contain the CP version and SP version numbers. This file is generated when it detects an error reading the data channel or when it detects a timeout of receiving selective status packets. PSTSCP0, 1, 2, 3.bin, PSTSDP0, 1, 2, 3.bin, PSTSDR0.bin, PSTSSP0, 1, 2,
		3.bin - Contain memory dumps. Generated when previous status is obtained. These files only generated if a previous status error is detected or if the system has previously timed out or if a registry entry DumpPreviousStatus exists.
ld: 4382	Title:	Turn On Cal Gas in Service Method
	Area:	DAMeth - General
	Description:	Configure the Setpoints/Calibrant On? check box selected so the cal gas is on for VarianWS/4000Service/4000 MS Ext Service.mth in segments 3 (cal gas) and 4 (131). Configure the Setpoints/Calibrant On? check box selected so the cal gas is ON for VarianWS/4000Service/4000 MS Ext Service.mth in segments 3 (cal gas) and 4 (131).
ld: 4383	Title:	Turn on cal gas in Int service method
	Area:	DAMeth - General
	Description:	Configure the Setpoints/Calibrant On? check box selected so the cal gas is ON for VarianWS/4000Service/4000 MS Int Service.mth in segments 3 (cal gas) and 4 (131).
ld: 4385	Title: Area:	Turn on cal gas in Int SIS Service method DAMeth - General
	Description:	Configure the Setpoints/Calibrant On? check box selected so the cal gas is ON for VarianWS/4000Service/4000 MS Int SIS.mth in segments 1 (Cal Gas) and 2 (SIS 100 264 414).
ld: 4172	Title:	Over temp problem immediately after reaching 100% vacuum
	Area:	ModWin - Shutdown
	Description:	When starting the 4000 vacuum system (startup) the pump reaches 100% and the 4000 has a warning "over temperature warning" because the power is not less than 500mA so the temperatures are not set (all set to 0C). However, 5 seconds later the pump gets to 500mA and the temperatures are correct and no warning occurs.
ld: 2349	Title:	Repainting problem with MSMS parameters in System Control
	Area:	ModWin - Manual Control
	Description:	When you change from one of the tabs at the top of system control to Manual Control, the MSMS parameters display is not properly drawn. To see all of the headings, etc. you must go to one of the other Manual Contol tabs and return to MSMS.

ld: 3424	Title:	Changing method parameters in Manual Control can produce many messages.
	Area:	ModWin - Manual Control
	Description:	Every time a method parameter is changed in Manual Control, and the change is activated, a warning box appears along with the message log. The warning box has to be cleared and the message log has to be minimized or Manual Control has to be made the active window.
ld: 3534	Title:	Heater Over-temp Conditions
	Area:	ModWin - General
	Description:	Relax the Over-temperature indication if:
		[Internal Systems]
		The pump is not at speed AND the transfer line temperature is < 370 AND the entrance endcap temperature is <270 AND the exit endcap temperature is < 270 AND the manifold temperature is <130.
		[External/Hybrid Systems]
		All of the above AND the source temperature is <320.
ld: 3751	Title:	Trap Frequency autotune = 1 hour
	Area:	ModWin - Auto Tune
	Description:	There are times when the trap frequency autotune can take a very long time.
ld: 3879	Title:	Lack of Robustness of Electron Multiplier Gain MS4000
	Area:	ModWin - Auto Tune
	Description:	The Electron Multiplier Autotune has occassionally failed in final test because the gain was greater than 14 at the "low voltage" of 1100V.
ld: 4518	Title:	Wrong info in CI setup page
	Area:	ModWin - Manual Control
	Description:	When setting up Methanol CI on a 4000 GC/MS in internal mode, the description that came up for setting the ion ratios was not that of Methanol (possibly methane, but ammonia perhaps - based on the ions mentioned).
ld: 4585	Title:	Plot Descriptors not displayed for some segments
	Area:	DAMeth - General
	Description:	The plot descriptors as returned from the method editor do not show for all segments.
ld: 4612	Title:	Data files don't display any points for Full and SIS scan types
	Area:	MSDataRev - General
	Description:	A method with multiple segments was used on a 4000 MS. The data file shows all points when TIC is displayed, but no points for the segments with Full and SIS scan types. Also the Full Scan Descriptor list shows funny characters for these scan types.

MS Data Handling Issues Resolved

ld: 3668	Title:	MSDR: Closed chromatograms remain selected in Data Files pane
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	When chromatograms are closed in the Chromatogram pane, the specifications in the Data Files and Plot Descriptors panes now remain selected until the last chromatogram that uses them is closed.

ld: 3759, 3949	Title:	MSDR: Old "Missing" files still in recalc list display in Data Files Pane
ia. 0700, 0040	Component:	MS Workstation Platform
	Area:	MSDataRev - Chromat. Selection
	Description:	Updating of the Data Files pane display after creating, deleting, or editing recalc files or using the Find Files wizard to find missing files has been improved.
ld: 4569	Title:	Data Files pane doesn't update if directory node not displayed
	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro
	Description:	Previously if files were added, deleted, or renamed by another application, the Data Files Pane display did not update automatically if the changed directory was expanded and the directory node was not visible in the display. Also, pressing the F5 key now immediately updates all expanded drives and directories displayed in the pane.
ld: 3859	Title:	Can't select an "All" chromatogram in Plot Descriptors Pane
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	If the selected data file contains multi-channel data, "All Scan Descriptors" now is listed in the Plot Descriptors Pane below the TIC selection. A TIC chromatogram Merges all of the scans in a Scan Function Cycle into a single point. An All Scan Descriptors chromatogram ignores the Scan Function Cycles and contains a separate point for each scan.
ld: 4034	Title:	Scan Descriptors only show mass specification
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	In addition to the mass specification, Scan Descriptors now also display the Polarity if it is negative (-) and the Voltage if there is a transition [27.1V].
ld: 4651	Title:	MSDR: Able to view all Long Descriptors in Plot Descriptors pane
	Component:	MS Workstation Platform
	Area:	MSDataRev - Chromat. Selection
	Description:	Users now can view a complete table of the short and long descriptors for the current data file by Selecting the "View Full Descriptor Table" option in the Plot Descriptors pane right-click menu. The table is organized by data file segment and physical channels in each segment, and can be printed.
ld: 3972, 4250	Title:	Problems selecting scan function chromatograms in Select Files dialog
	Component:	MS Workstation Platform
	Area:	MSDataRev - Chromat. Selection
	Description:	The following problems have been fixed that occurred when specific scan functions were previouly selected for chromatograms in the Select Files dialog:
		 If previously selected scan function specifications were changed to Merged or All, the changes were discarded when the dialog was closed and the chromtatograms were re-displayed.
		Typing an ion specification or making another selection in the Data field changed the Scans field selection to Merged, or added the new Data field specification to the text string in the Scans field.
ld: 4287, 4596	Title:	Files from Select Files dialog are ignored by other Views
	Component:	MS Workstation Platform
	Area:	MSDataRev - Chromat. Selection
	Description:	The selection of chromatograms in the Select Files dialog has been improved to make it easier to select extracted ion chromatograms for multiple data files and to rearrange chromatograms in the desired order. Once the

		chromatograms are displayed, deleting one of them no longer also deletes the others, and the currently selected data file is no longer ignored when switching to the Process or Results Views.
		[Note: In general, chromatograms should not be added via the Selection panes to chromatograms that already have been specified via the Select Files dialog. The Select Files dialog specifies specific chromatograms. Selections in the Data Files and Plot Descriptors panes create a chromatogram for every combination of the selected files and plot descriptors.]
ld: 4637	Title:	MSDR: Problems moving chromatograms in Select Files dialog
	Component:	MS Workstation Platform
	Area:	MSDataRev - Chromat. Selection
	Description:	In the Select Files dialog, users can move individual chromatograms to any desired position relative to the other chromatograms. However, if multiple chromatograms were specified for the file that the moved chromatogram was from, and if the Plots View Preferences dialog specified to Sort Chromatgrams by Files rather than by Descriptors, all of the other chromatograms from that file also were moved when the chromatograms were displayed. Now, selecting files in the dialog sets the chromatogram sorting to By Descriptors.
ld: 3693	Title:	Extracted/Combined ctgm specification only saved to 1 data file
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	Extracted or Combined chromatograms now can be saved as User Descriptors to all of the files in the current directory or Recalc List file.
ld: 3783	Title:	Extract Chromatogram problem when some ctgms deleted
	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro Display
	Description:	When multiple chromatograms were displayed and the lons field was used to extract a chromatogram after some of the chromatograms had been deleted, a second copy of one of the existing chromatograms could be displayed instead of the desired chromatogram. Now extracted chromatograms always are appended at the bottom of the display. Clicking on the Sort By Files (F) button at the bottom of the Chromatogram pane will group the extracted chromatograms with the chromatograms that they have been extracted from.
ld: 3897	Title:	MSDR: "Combine Chromatograms" should combine quan ions too
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	Combining descriptors into a single chromatogram via <alt> + Click in the Plot Descriptors pane now also combines the Quan Ion specifications.</alt>
ld: 4636	Title:	MSDR: extracting same ctgm makes hidden duplicate ctgms
	Component:	MS Workstation Platform
	Area:	MSDataRev - Chromat. Selection
	Description:	Previously, extracting the same chromatogram multiple times in the Chromatogram pane lons field created hidden multiple copies. The copies were displayed if the first extracted chromatogram was deleted.
ld: 2018	Title:	Add "start and end time" to the menu for chromatogram scaling
	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro Display
	Description:	The chromatogram time range now can be explicitly specified via the "Edit Time Range" application Chromatogram menu option.
ld: 3159	Title:	DH peak annotations sometimes missing from MSDR chromatograms

	Area:	MSDataRev - MultiChro Display
	Description:	Previously DH annotations were only displayed on a chromatogram in the Plots View if the Quan Ion specification exactly matched what was used for quantitation. Now they are displayed if the specification is within +/- 0.5 Da. of the quantitation specification.
ld: 3403, 3793, 3943, 4283	Title: Component: Area: Description:	Chromatogram Scaling improvements MS Workstation Platform MSDataRev - MultiChro Display When chromatograms are displayed as Normalized, normalization now is based on the displayed time range and filtering specifications rather than the entire chromatogram. When multiple chromatograms are displayed as Overlaid, the Maximize button now maximizes all of them. Auto-scaling now works correctly when changing between Full-Chromatogram and Single-Segment display mode. Real-time chromatogram displays in MS Data Review now auto-scale correctly.
ld: 3917	Title: Component: Area: Description:	Vertical scaling of multiple Chromatogram Plots MS Workstation Platform MSDataRev - MultiChro Display When multiple chromatograms are displayed as Stacked, holding down the "U" hot-key while double-clicking to the left of the plots now resets all of the plots to full-scale while leaving the time range zoomed. Previously, the Y scale of each chromatogram had to be rescaled one at a time.
ld: 4181	Title: Component: Area: Description:	Increase Font Size when Printing graphics from Plots View MS Workstation Platform MSDataRev - MultiChro Display The font sizes for ions, axes labelling, plot titles, etc. were too small when chromatograms and spectra were printed from the Plots View. A font size Scaling Factor parameter has been added to the Make Reports dialog. It is applied to what's specified in the Reports Preferences dialog
ld: 3001, 4534	Title: Component: Area: Description:	Changing acquisition End Time doesn't update R-T ctgm in MSDR MS Workstation Platform System Control - General When a 4000 or 500-MS real-time chromatogram is displayed in MS Data Review and the End Time is changed during Acquisition in System Control, now it is also updated in MSDR, provided the change is made more than 0.2 minutes before the end. This constraint is required to ensure that all end-of- acquisition actions are completed successfully. [Note: Automatic End Time update in MSDR is not supported for 1200 or 2000 acquisition.]
ld: 4533	Title: Component: Area: Description:	Can't export successive real-time plots to MSDR MS Workstation Platform MSDataRev - MultiChro Display Real-time chromatograms from successive acquisitions now can be added to the same existing instance of MS Data Review.
ld: 4618	Title: Component: Area: Description:	MSDR: Can't add label to real-time chromatogram MS Workstation Platform MSDataRev - MultiChro Display Many post-run chromatogram capabilities now also can be done on real-time chromatograms in MSDR, such as adding Labels, interactive noise calculation, click-and-drag integration, and library searching.

ld: 4702	Title:	Multiple exports of same 1200 real-time ctgm to MSDR clears display
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	Previously if a 1200 real-time chromatogram was being displayed in MSDR and the MSDR icon in System Control was clicked on again while the chromatogram was still being acquired, the display in the MSDR Chromatogram Pane would disappear.
ld: 3941, 4040	Title:	Make more clear what parameters are used in Quick Integration dialog
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	The parameter values that were used are shown when the dialog is expanded, and the labels for selecting the source to get the parameter specifications from have been changed to "Data File" and "Local."
ld: 4659	Title:	MSDR: Quick Integration always reports RMS noise values
	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro Display
	Description:	Previously, the Quick Integration Results dialog always reported RMS noise values. Now, the Noise Type used is what was used to quantitate the file if "Data File Parameters" integration is done, or what the Chro Plot Preferences dialog specifies if "Local Parameters" integration is done.
ld: 3562	Title:	4000: Background correction points in Fastest mode are inappropriate
	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro Display
	Description:	Previously, fast data rates could cause background correction points to be placed up on the peaks. Automatic background correction now takes the data rate into account.
ld: 4120	Title:	Exporting chromatogram to MSDR sometimes opens new instance
	Component:	MS Workstation Platform
	Area:	ModWin - Acquisition
	Description:	When a file or chromatogram is exported to MSDR and one or more instances of MSDR are already running, it will be added to the instance that the user used last. [Note: this is only true when using Windows XP. Which instance is selected when using other Windows operating systems is undefined.] Previously, a new instance of MSDR was started instead if the input file specification was not valid or if no chromatograms were already displayed in the existing MSDR.
ld: 4585,4628	Title:	Multi-function multi-segment log file is confusing.
	Component:	MS Workstation Platform
	Area:	MSDataRev – Chromatogram LogInfo
	Description:	The scan descriptors and log information for AMD and MRM 4000 data files that were generated with software prior to 6.5 were displayed incorrectly, and much of the scan function information was missing. Attempts to quantitate them could cause quantitation to crash. Now the files are displayed and processed correctly.
ld: 2019	Title:	Enhance selecting successive spectra from chromatograms
	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro Display
	Description:	When the <ctrl> key is held down while selecting spectra by clicking on a chromatogram, each selected spectra will automatically be added to a new</ctrl>

ld: 2992	Title:	Add Plot Titles tab to Spectra Plot Preferences dialog
Id. 2332	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro Annots
	Description:	A user-specifiable Plot Titles tab has been added to the Spectra Plots
		Preferences dialog in MS Data Review. Real-time spectra in System Control
		still display the same Plot Titles as in the 6.5 software.
ld: 4616	Title:	MSDR crashes while selecting plot descriptors with no spectral intensities
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	Previously if a spectrum was displayed from a chromatogram and a descriptor in the Plot Descriptors Pane was clicked on for which the spectrum marker position in the updated chromatogram did not have any intensities, MSDR could crash.
ld: 3741	Title:	MSDR: Can't edit user library entries
	Component:	MS Workstation Platform
	Area:	MSDataRev - LibManager, NIST
	Description:	User library entries can be edited and saved to any user library. If the library
		contains the original un-edited entry, users now are given the option of deleting it.
ld: 4442	Title:	Chromatograms not exported to AMDIS for some data files
	Component:	MS Workstation Platform
	Area:	MSDataRev - LibSearch, NIST
	Description:	Chromatograms from data files whose names contained spaces or were more
		than 100 characters were not exported to AMDIS, although the application was openned. [Note: The problem with spaces in the file names has been corrected
		in an update to the NIST 05 software.]
ld: 4443	Title:	NIST problem when spectra are exported to it from MSDR
	Component:	MS Workstation Platform
	Area:	MSDataRev - LibSearch, NIST
	Description:	If McAfee version 8.0 Anti-virus software is running and a spectrum is exported to NIST from MSDR, a "Problems have been encountered" dialog will be
		displayed for nistms\$.exe. The NIST application will run correctly after the
		dialog has been Ok'd. The problem can be eliminated by downloading the
		Buffer Overrun Protection patch from McAfee.
ld: 4529	Title:	Can't export .xms files to NIST or AMDIS
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	Chromatograms from .XMS files now can be exported to AMDIS. [Note: This has been implemented in an update to the NIST 05 software.]
ld: 4166	Title:	Right-Click Search Difference Spectrum removed in 6.5 software
	Component:	MS Workstation Platform
	Area:	MSDataRev - MultiChro Display
	Description:	Four options that were removed from the Difference Spectrum right-click menu in 6.5 have been added back: Library Search, Target List Search, Export to ASCII File, and Hide Spectrum.

ld: 4567	Title:	Library Search Difference Spectrum doesn't work for fractional masses
	Component:	MS Workstation Platform
	Area:	MSDataRev - LibSearch
	Description:	Library Searching the Difference Spectrum now works correctly when the spectrum that was originally searched contains fractional masses.
ld: 4087	Title: Component:	Interactive printing for multi-method recalc lists can use wrong method MS Workstation Platform
	Area:	MSDataRev - Quan Recalc Lists
	Description:	If 1 or more lines in the Recalc List are selected, look "up" from the first selected line to see what method to use. If no lines are selected, use the 1st method starting from the top (the "Method File" field always is "first"). For multifile reports, apply it to files until an Activate Method line is found.
ld: 4314	Title:	Can't process recalc list with Missing files in MSDR
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan Recalc Lists
	Description:	"Missing" text now is added to the beginning of data file lines in a Recalc List file that aren't in the specified location. Users can optionally process a Recalc List file in MS Data Review that specifies one or more missing files, just as they can in System Control.
ld: 4327	Title:	Find Files Wizard doesn't update Activate Method paths
	Component:	MS Workstation Platform
	Area:	Chrom Applications
	Description:	The Find Files Wizard now also looks for methods that are specified by Activate Method lines in Recalc List files.
ld: 4589	Title:	Quantitation of short segments can cause crash
	Component:	MS Workstation Platform
	Area:	MSDataRev - General
	Description:	If Unknown Peaks were quantitated in a chromatogram that contained data file segments with fewer than 5 points, the noise calculations done for peak detection could cause a crash.
ld: 4626, 4627	Title:	Some scan function-based ctgms slow 4000 & 500 cmpd quantitation
	Component:	MS Workstation Platform
	Area:	Quan MS - Cmpd Quantitation
	Description:	Previously if the Integration Window specification for a Target Compound crossed data file segment boundaries, quantitation and display updates of chromatograms and spectra could be slowed significantly.
ld: 4288, 4521	Title:	Hard to load some recalc lists into Results View
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
		Description:A "Select Method" dialog is displayed when a data file or recalc file is loaded into the Results view and the method is missing or it differs from the results in any parameters other than those Target Compound parameters which can be updated automatically when calibration files are processed: calibration data, Expected Retention Time, Target Ion Ratios, Reference Spectra, and Time Events. When the dialog is displayed, users can reprocess the files with the existing method, select a different method, or extract a method from one of the data files. The results cannot be loaded and viewed as long as the method and results are inconsistent. This can be difficult if a Recalc List contains multiple methods or some of the files have been reprocessed as single data files.

		Also previously, adding or deleting Target Compound Time Events in the method without reprocessing was incorrectly flagged as an inconsistency and caused the Select Method dialog to be displayed.
		Icons have been added to the file lines in the dialog to make the status of each file clearer, and a "Use method for all compatible files" checkbox has been added. When it is checked, the selected method will be used for all files in the recalc list that use the same method as the current data file, provided that there aren't any differences that invalidate calibration data. Examples of differences that invalidate calibration data are Measurement Type, Calibration Type, Internal Standard to Use, and Quan Ion.
ld: 4735	Title:	Left-click in Results View with no results closes MSDR
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Previously, if files were loaded into the Results View that did not contain any results and the Sort arrow in a Results List Pane column headers was clicked on, MSDR would close.
ld: 4284	Title:	Making a compound Not Active in Results View causes problems
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Reprocessing in the Results View no longer attempts to process Inactive compounds.
ld: 4477	Title:	Manual Integration fails if module address not default on .SMS files
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Previously, .SMS file results could not be reprocessed in the Results View if the Module Address was not the Default.
ld: 4069	Title:	MSDR: Cali Curve Reports from Results View sometimes incomplete
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Previously when Calibration Curve reports were displayed and printed in the Results View after manual integration, the reports did not display calibration data from files after the file that was changed. Now all of the calibration data in the method is included.
ld: 4053	Title:	Cali pt manual integration doesn't always update all Analysis files
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Cmpd Results
	Description:	All Analysis and Verification results now are recalculated when calibration data is modified, regardless of whether the modification is due to manual integration or changes to the calibration curve parameters. Previously, when a calibration result was manually changed in the Results View (e.g., drag Peak Events or Click&Drag integration), only the Analysis & Verification results AFTER the modified calibration point in the recalc list were recalculated.
ld: 4071	Title:	Method Compound Time Events not displayed in Results View TE Bar
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Displaying, adding, deleting, and changing Target Compound Time Events via the graphical Time Events bar in the Integration pane now works correctly, and changes are saved to the permanent method correctly. Also, if a Forced Peak time event is specified, the "Group Peak" bar is no longer shown above the plot after it's been re-processed.

ld: 4161	Title:	Wrong file selected in calibration plot	
	Component:	MS Workstation Platform	
	Area:	MSDataRev - Quan, Review Results	
	Description:	The Calibration Pane could select the wrong replicate at a calibration level if	
		one or more of the replicate results were Missing. It no longer attempts to show a "Missing" replicate.	
ld: 4328	Title:	Analysis Result on Cali Curve ignores Multiplier & Divisor	
	Component:	MS Workstation Platform	
	Area:	MSDataRev - Quan, Review Results	
	Description:	The Calibration Curve pane now adjusts displayed Analysis results for Multiplier and Divisor specifications in the recalc list.	
ld: 4675	Title:	Calibration Points exclusion not showing up for multiple points	
	Component:	MS Workstation Platform	
	Area:	DHMeth MS - Results Treatment	
	Description:	Changes to multiple points in a calibration curve now are accumulated and displayed correctly for a given compound until the Process or Cancel button is pressed:	
		 Right-click changes to exclude or include multiple points in the curve. 	
		Including or excluding multiple points in the Point Info dialog. When the dialog is displayed, changes in the dialog update the curve display, and vice versa.	
		3. A different data file is selected in the Study Pane or the Results List Pane.	
ld: 4741	Title:	MSDR crash in Point Info dialog if Results List display is Single Data File	
	Component:	MS Workstation Platform	
	Area:	MSDataRev - Quan, Review Results	
	Description:	Previously, selecting another point in the Calibration Curve Point Info dialog when the Results View display mode is "Single Data File" crashed MSDR. [Note: This action still closes the dialog.]	

Custom Reports Issues Resolved

ld: 3911	Title: Component: Area: Description:		d into EnviroPro, a blank record was always . This blank record record no longer appears.
ld: 3912	·		to Envirpro, all samples were imported as ds had to be manually edited to set the correct
		Workstation Sample Type Analysis Calibration Baseline Verification	Enviropro Sample Type Analysis Quality Control Blank CCC (Continuing Calibration Check)

ld: 4570	Title:	Custom report templates created by users with Administrator priveleges could not be accessed by users with Power User priveleges.
	Component:	CustMSRpts
	Area:	MS Report Application
	Description:	If a user with Power User account priveleges tried to open a custom report template created by a user with Administrator priveleges, the error message 'Can't find database file' would be displayed. Custom report templates can now be used from a Power User account even if the template was created from an Administrator account.

Combi PAL Driver Issues Resolved

ld: 4606	Title: Component: Area: Description:	CPAL: Cleanup only uses wash1 AutoSampler Module Other The cleanup button only executed the number of washes specified in the method for pre and post-injection for Solvent 1. It now properly executes the washes for Solvent 1 and Solvent 2
ld: 3997	Title: Component: Area: Description:	CPAL: Support Sandwich Injections and Internal Standard AutoSampler Module Other The GC Sandwich mode was added to the Combi PAL driver. This mode supports the use of upper and lower solvent plugs and the addition of internal standards. All parameters except the sample volume are specified in the method.
ld: 4067, 4068	Title: Component: Area: Description:	CPAL: Missing vial detection is broken AutoSampler Module Other A problem was introduced in MSWS 6.42 in which the driver could ignore errors reported with by the firmware. This could affect the detection of missing vials, of mis-positioned injectors, and of a variety of other errors. This issue was corrected in MSWS 6.6.
ld: 4375	Title: Component: Area: Description:	CPAL: Fatal Hardware Error 134 AutoSampler Module ModWin - General Corrected a problem which occasionally caused a communication error 134 when issuing the command to close drawers in tray stacks.
ld: 4065	Title: Component: Area: Description:	CPAL: Improper rounding of floating point method fields AutoSampler Module Other An Error was corrected in which floating point fields were improperly rounded – e.g., 1.020 was captured as 1.019. Most floating point fields were subject to this problem.
ld: 4146	Title: Component: Area: Description:	CPAL: Issue with sample list validation while connecting AutoSampler Module Other The sample list validation code was changed so that the tray information is not validated while the Combi PAL is reading the Hardware Configuration.

ld: 4147	Title:	CPAL: Agitator Temp reported with no agitator
	Component:	AutoSampler Module
	Area:	Other
	Description:	The driver status screen in System Control no longer reports an Agitator temperature when no agitator is present.

Core Workstation Issue Resolved

ld: 4297	Title:	Add browse to new recalc list
	Component:	Core Workstation Platform
	Area:	System Control - Automation
	Description:	The "RecalcList Generation" dialog box used in Sample Lists was modified to include a Browse button allowing the create of a new file in the desired location. Additionally, the dialog was made wider so that the full file name and path can generally be viewed all at once.
ld: 4255	Title:	DHMETHED: Coefficients dialog confused by dual monitors
	Component:	Core Workstation Platform
	Area:	Chrom Data Handling Method
	Description:	Changes were made to support the use of dual monitors. Certain dialogs, like 'Edit/Lock Coefficients' in data hadling sections were displayed with an excessive width, or on the wrong monitor
ld: 4366	Title:	Change Star Toolbar to Workstation Toolbar
	Component:	Core Workstation Platform
	Area:	Installation/Configuration
	Description:	The Star Toolbar was renamed Workstation Toolbar, and menus and documentation were modified to reflect the new name.
ld: 4393	Title:	Missing extension in 'create new recalc list' can cause a crash
	Component:	Core Workstation Platform
	Area:	System Control - Automation
	Description:	Corrected a problem in which the lack of a file extension in the name of the recalc list to be created cause a System Control crash after completion of the first file in the automation.
ld: 4153	Title:	System Control crashing frequently
	Component:	Core Workstation Platform
	Area:	System Control - General
	Description:	A problem was corrected in the ProStar 310 driver which could cause a crash on exit if System Control was closed while the driver was monitoring.
ld: 3736	Title:	Install: there is no way to add instrument "control" without reinstalling
	Component:	Core Workstation Platform
	Area:	Installation/Configuration
	Description:	A new option to "Update MSWS" was added to the top level of the installer. This option supports the addition of control software and application. The current enabled/disabled state of modules and applications is preserved when appropriate.
ld: 4024	Title:	Improper Amount Formatting in the Cal Block Report
	Component:	Core Workstation Platform
	Area:	Chrom Standard Reports
	Description:	The formatting of peak amounts in the Calibration Blcok Report was corrected to avoid rounding issues (e.g., displaying as 6272.299 when the specified value is 6272.3).
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ld: 4025	Title:	Allow '/' in sample names
Id. 4020	Component:	Core Workstation Platform
	Area:	System Control - Automation
	Description:	The '/' and '*' characters are now allowed in sample names in the sample list.
	Description.	Since these characters are invalid in a file name, they will be replaced by '_' in
		files names derived from the sample name (if that option is used).
ld: 3748	Title:	Install: If an open application needs to be closed, use the installer
	Component:	Core Workstation Platform
	Area:	Installation/Configuration
	Description:	Instead of reporting that WS applications are running, the Installer will automatically close the Toolbar, the AC/AT Status Monitor, System Control, Method Builder, MS Data Review.
ld: 3981	Title:	Multi Monitor Tweaks to System Control
	Component:	Core Workstation Platform
	Area:	System Control - General
	Description:	The Inject Single Sample dialog is now properly displayed on systems using
		multiple monitors. The code centering dialogs on the screen was modified as well so that dialogs are centered on the proper screen.
ld: 3994	Title:	Wrong position restored in REPORT
	Component:	Core Workstation Platform
	Area:	Chrom Standard Reports
	Description:	The screen size and position of the Standard Chromatography Report
		Application is now properly remmbered from session to session.
ld: 4462	Title:	Audit trail shows 'Error 12' while saving changes.
	Component:	Core Workstation Platform
	Area:	WS Security Admin (21CFR11)
	Description:	Added code to detect and report that the current Windows account has insufficient rights to edit the method. Previously in this situation, an error message came up saying "There was an error 12 writing the Audit Trail".
ld: 4591	Title:	Method Activation in Sample List not recorded in Recalc List
	Component:	Core Workstation Platform
	Area:	System Control - Automation
	Description:	The method activation lines in a Sample List are now replicated in the resulting Recalc List(s).
ld: 4457	Title:	Unable to download method after installing Access Control Software.
	Component:	Core Workstation Platform
	Area:	Installation/Configuration
	Description:	The installer is now giving "Everyone" full control rights to the WS folder and its subfolders. This eliminates a variety of problems observed when the WS is run from different Windows accounts – for example the inability to download a
		method.
		If tighter security is required, a windows administrator could remove the full control rights for "everyone", give full control right to the "Power Users" group, and require that the WS be run from Power user or Admin account.

GC Module Driver Issues Resolved

Id: 4622

Title: 3900: Missing fault code in driver
Component: GC Module
Area: System Control – Automation
Description: The 3900 driver was not aware of fault codes recently added to the GC firmware, which lead to displaying cryptic error messages instead of a more specific error. Now the message,

Module 3900.44: unknown response: 27924
Will now be reported as

Module 3900.44: RUN NOT STARTED AFTER INJECTION.

LC Module Driver Issues Resolved

ld: 4447	Title:	PS 325: Stuck in Monitoring during automation
	Component:	LC Module
	Area:	ModWin – General
	Description:	The 325 driver was modified to prevent a problem in which the driver could not get out of the monitor state.

Other Workstation Component Issues Resolved

ld: 4706	Title:	Automation Editor mangles the rights of edited files
	Component:	Other Component
	Area:	Other
	Description:	A problem was corrected in the Automation editor, in which editing a file affected the access rights of other users. In essence, previously Public files became Private after editing. This has been corrected.
ld: 4653	Title:	Description not set for a password change
	Component:	Other Component
	Area:	WS Security Admin (21CFR11)
	Description:	Corrected a problem in which the password change entry in the Audit Viewer contained gibbegrish.
ld: 4303	Title:	800 MIB: Private INI file should move out of Windows directory
	Component:	Other Component
	Area:	Installation/Configuration
	Description:	The WS0800.INI, which contains the configuration for the Star 800 MIB was moved from the Windows directory to the System subfolder of the WS directory. This prevents a problem in which the module cannot be configured if the current account does not hace Windows Administrator privileges.
ld: 4392	Title:	Non-admin windows User cannot archive a security log from wsauditview
	Component:	Other Component
	Area:	WS Security Admin (21CFR11)
	Description:	The Audit Viewer was modified so that a non-admin Windows user can archive the security log in wsauditview – as long as the AC/AT account has the necessary rights.

ld: 4200	Title: Component:	AC/AT: Automation Files Editor can corrupt the method Other Component
	Area:	WS Security Admin (21CFR11)
ld: 4262	Title:	Advanced Application Excel macros don't run
	Component:	Other Module
	Area:	Chrom Applications
	Description:	Corrected a problem in which the Advanced Applications Excel macros sometimes fail with a message saying the Star Directory could not be found.
ld: 4377	Title:	PolyView PS Time Program mth section issue on dual monitors
	Component:	PolyView
	Area:	Other
	Description:	Corrected problems observed on dual monitor systems:
		1) The upper part of the PeakSense Time Program dialog, which displays/edits the option parameter for the selected line is missing.
		The dialog selecting the type of report to add appears on screen 1 even though the Method Editor is on screen 2.
ld: 4485	Title:	Aurora messes up RUN Quicklink button
	Component:	PolyView
	Area:	Other
	Description:	Under some conditions, after running the Aurora 3D application on PDA files, the RUN quicklink showed an improper set of commands. The Aurora application was corrected to avoid this issue.

Varian MS Workstation 6.6 Service Pack #1

The software contained in this kit is an update to the Varian MS Workstation 6.6 software (part number 03-914982-01) that was released previously. The Update corrects a number of problems identified since the release.

Installing the MS Workstation 6.6 Service Pack #1 Software

Verify that Version 6.6 of the MS Workstation is installed on your computer. You can do this by selecting "About..." under Help in the menu bar of any of the MS Workstation applications and checking the version number, or right-click on an open area of the MS Workstation Toolbar, select "About Star Toolbar" and check the displayed version number. If the displayed version number is not Version 6.6, you must install MS Workstation Version 6.6 before you can install this Update.

If the CD from which you originally installed MS Workstation Version 6.6 contained Service Pack #1, then it was automatically installed during the MSWS 6.6 installation. You can verify this by going to the Help...About menu in any MSWS application.

However, if you received Service Pack #1 at a later date, then you may install the Update by launching the setup.exe application in the Update directory on a Varian MS Workstation 6.6 CD that contains it or by launching the update from the Product Support Website (www.varianinc.com).

Operational Considerations

System performance in general, and Quantitation in particular, can be seriously degraded if the PC has a slow CPU (<1 GHz), less than 1 GB RAM, anti-virus software is enabled, or other software that may compete for system resources. While your system will run with these limitations, you will not obtain the optimum performance.

Ideally, anti-virus scanning would only be done at computer boot-up or during low-usage times. If it must be run during regular operation, either disable On-Access Scanning (if corporate policies allow and your network is secure) or, at the very least, only include potentially dangerous file types (such as .EXE, .DLL) in, and exclude the MS Workstation File Type extensions (.XMS, .SMS, .MS, .RUN, .SMP, .RCL, .MTH, .SWT, and especially .TMP.) from, automated scanning by your anti-virus software. Consider also excluding the VarianWS root directory.

The minimum supported screen resolution for the Workstation software is 1280 by 1024. In recent releases, some of the dialogs have been enlarged and the layouts have been enhanced to take advantage of this greater minimum resolution.

Changes/Corrections Since Version 6.6

4000/500-MS

ld: 4910	Title:	Intermittent lost communications
	Component:	4000/500-MS
	Area:	ModWin - General
	Description:	Periodically, the 4000 MS will give a "lost communications" error message.
	Resolution:	While there are many potential sources (either PC or instrument hardware or software) of this particular error message, one of them dealing with internal software interrupts has been corrected.
ld: 4911	Title:	PurgeB Methods in 4000Service Directory
10. 1011	Component:	4000
	Area:	Installation
	Description:	The following methods were added to the 4000Service Directory:
		4000MS Internal PurgeB.mth
		4000MS External PurgeB.mth.
		The PurgeB mix is a preferred mix for demonstrating library searching.

MS DATA HANDLING

ld: 4848	Title:	Target List search a Chromatogram causes a crash	
	Component:	MS Workstation Platform	
	Area:	MSDataRev – LibSearch, Chrom	
	Description:	Previously, selecting Target List Search a Chromatogram from the application Search Menu could cause a crash, most commonly if the search was repeated.	
ld: 4856	Title:	Cali File Manual Integration clears Manual Integration from Analysis files	
14. 1555	Component:	MS Workstation Platform	
	Area:	MSDataRev – Quan, Review Results	
	Description:	When compound results in Analysis and Verification files are recalculated in the Results View because the calibration curve was modified by changes in the Calibration Curves pane or by manual integration changes in a calibration file, any pre-existing manual integration changes in the Analysis and Verification files now remain.	
ld: 4865	Title:	Saving Cali Curve changes in Results View overwrites first compound in method	
	Component:	MS Workstation Platform	
	Area:	MSDataRev - Quan, Review Results	
	Description:	Previously, when a change was made in the Calibration Curve pane and the changes were saved back to the permanent files after reprocessing, the contents of the first compound in the method Compound Table were overwritten.	
ld: 4886	Title:	Some cmpd results lost if big cmpd table & process Unknowns	
	Component:	MS Workstation Platform	
	Area:	MSDataRev - Quan, Cmpd Results	
	Description:	Previously, when the Compound Table contained many compounds and both Target Compounds and Unknown Peaks were processed at the same time, the	

		results for some of the compounds were not reported.
ld: 4770	Title:	Quan in System Control clears MSDR Results View
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Previously, using a method to process data files in System Control at the same time that results previously generated by the method were being displayed in the MSDR Results View caused a conflict. A "Method has changed. Results must be updated." message was displayed in MSDR each time a data file was processed, and the contents of the Results View were deleted.
ld: 4818	Title:	Long Formula field in spec entry crashes MSDR & LbrToNIST
	Component:	MS Workstation Platform
	Area:	MSDataRev - Spectrum Edit
	Description:	Previously, exporting a spectrum to a NIST user library that contained a Formula longer than 24 characters caused a crash. This could happen when using the LbrToNist utility to convert INCOS-format user libraries to NIST-format, or when a formula longer than 24 characters was entered in the library manager. Long formulas now are truncated to 24 characters.
ld: 4832	Title:	Right click in empty cmpd table ctgm pane crashes method editor
10. 1002	Component:	MS Workstation Platform
	Area:	DHMeth MS - Compound Table
	Description:	Previously, right-clicking in the Chromatogram pane in any of the data handling method editor Compound Table tabs could cause a crash if no chromatogram was displayed. No chromatogram is displayed if no data file has been selected for the method.
ld: 4898	Title:	Can't convert 5.5.2 msdh methods to 6.6
id. 4000	Component:	MS Workstation Platform
	Area:	DHMeth MS - General
	Description:	When a pre 6.0-format ms data handling method was opened in the method editor in the initial version of 6.6, an "Old format; will be converted" message was displayed but the conversion failed and the method editor would hang. This conversion does work correctly in 6.5.
ld: 4920	Title:	Calibration Curve line thickness too narrow
	Component:	MS Workstation Platform
	Area:	MSDataRev – Reports, View & Print
	Description:	The width of the curve lines in Calibration Curve reports has been increased to make them more distinct.

LC/GC/AUTOSAMPLER MODULES

ld: 4814	Title:	325 End of Run hang with methods specifying no Run file
	Component:	LC Module
	Area:	Other
	Description:	If a 325 method, which specifies no run file, is run on a unit that is using 2.x firmware, then at the end of the run the module/System Control will not return to the Ready state.

Data Handling SCRs Fixed in 6.6 but not documented in 6.6 Release Notes

ld: 4775	Title:	Can't display chromatograms on CD in Data Files Pane
	Component:	MS Workstation Platform
	Area:	MSDataRev – Chromatogram Selection
	Description:	Chromatograms now can be selected from either the Data Files pane or the Select Files dialog and are displayed correctly. Previously, when a data file on a CD was selected in the Data Files pane nothing was displayed in the Plot Descriptors pane, and no chromatogram was displayed. The chromatogram was displayed when selected from the Select Files dialog, but a "The parameter is incorrect." message was displayed.
ld: 4780	Title:	Clicking on Analyte in Results View when ISTD Missing hangs MSDR
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Previously, MSDR would hang when an Analyte result was selected in the Results View if its Internal Standard was Missing and it tried to draw the location of the Analyte result in the Calibration Curves pane.
ld: 4783	Title:	Method change for Istd compound in Results View clears calibration curves for compounds after Istd in Cmpd Table
	Component:	MS Workstation Platform
	Area:	MSDataRev - Quan, Review Results
	Description:	Previously, the calibration curves for Analytes that used an Internal Standard and came after it in the method Compound Table were deleted when the method was modified in the Results View for the Internal Standard.
ld: 4791	Title:	Can't process recalc files in MSDR that contain .RUN files
	Component:	MS Workstation Platform
	Area:	MSDataRev – Quan Recalc Lists
	Description:	.RUN file lines in recalc list files now are skipped when the recalc list is processed in MSDR. Previously, the recalc list could not be processed.
ld: 4795	Title:	Old .MS files crash MSDR
	Component:	MS Workstation Platform
	Area:	MSDataRev – Chromatogram Selection
	Description:	Previously, selecting old-format .MS files for display in MSDR caused a crash.