

# Agilent ChemStation

## Technical Aspects of Upgrading from Earlier 16-bit Versions to the Latest 32-bit Version

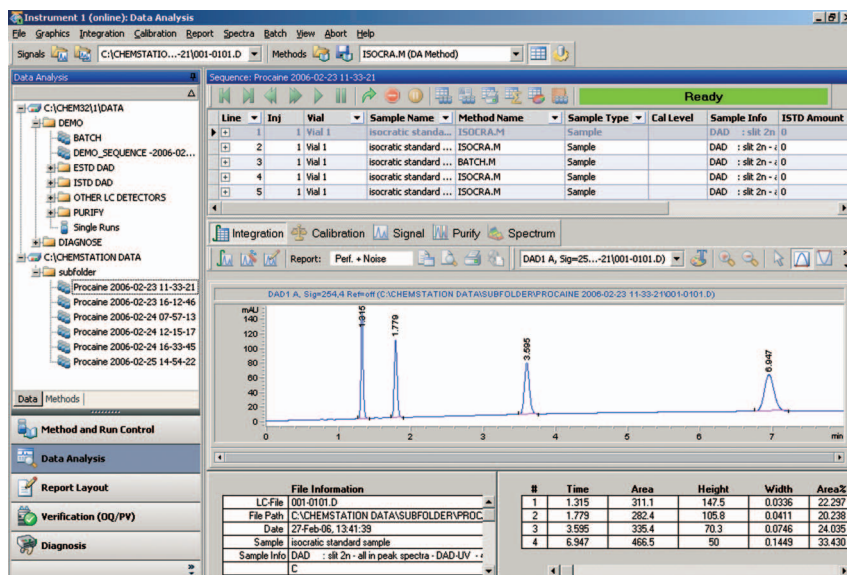
### Technical details of upgrading Agilent ChemStation software

This Data Sheet describes the technical aspects of upgrading Agilent ChemStation software from earlier 16-bit versions (revision A.0x.0x) to the latest 32-bit version (revision B.02.01 SR1). A separate Data Sheet is available that provides an overview of the new features in revision B.02.01 SR1 (Agilent publication number 5989-5036EN).

Since introduction of the first 32-bit version of the software in 2004, the Agilent ChemStation has established itself as the premier analytical workstation for control of Agilent instrumentation for GC, LC, LC/MS, CE and CE/MS techniques. Improved functionalities such as the new Chem32 integrator, which provides better integration accuracy and offers new integration events, helps users to work more effectively. The 32-bit ChemStation is much more robust and more flexible to use than its 16-bit predecessor. This industry-standard chromatography software is now available in its second revision, B.02.01 SR1, with even more functionality.

### Advantages of B.02.01 SR1

- Improved user interface for faster review of multiple samples
- Improved interfacing with ChemStore database
- Seamless integration with the Agilent Enterprise Content Manager (ECM)



The latest revision of ChemStation provides extensive capabilities for the analysis of large amounts of high-precision data.

- Full support of the new Agilent 1200 Series LC systems and modules, including the 1200 Series Rapid Resolution LC system
- Run buffering for 1200 Series DAD SL and MWD SL that facilitates data recovery after power or network failure
- Full support of the Agilent 1200 Series and 1100 Series Chip Cube (Chip-LC/MS systems using ion trap MS)
- Support of third-party detectors such as ELSD (requires separate driver from third-party vendor)
- Native 32-bit Windows support (long file names, increased application performance and stability, and so on)
- Improved data integrity and security with new sequence-based data management concept
- Improved integrator with new manual events
- Productivity and usability enhancements for CE and CE/MS users
- Quality fixes



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## Integration

The new Chem32 integrator contains numerous enhancements such as improved peak detection as well as additional integration events such as skimming and baseline correction. These enhancements make integration with ChemStation even more flexible than before.

## Methods

All methods created using 16-bit versions of ChemStation can be loaded in B.02.01 SR1. When a file is opened, an alert reminds the user that saving the method under the same name will overwrite the 16-bit method with the B.02.01 SR1 method. Saving the method under a new name preserves the 16-bit method.

The improved accuracy of peak start and stop times can result in small changes in integration results, for example, area, height or peak width. For large peaks this can be ignored, but for small, sharp or narrow peaks, the impact of this change needs to be assessed. The following procedure can be used to determine whether revalidation is necessary.

1. Select a typical set of data acquired using the 16-bit version, for example, a three-level calibration with ESTD report.
2. Re-calibrate all levels by loading the three data files and using the replace-option in the calibration table.
3. Re-analyze the runs and print a report.
4. Compare the amount and area with the results from the 16-bit version.

If deviations are significant, new calibrations must be run using B.02.01 SR1. More details and example chromatograms are available in the *Upgrade Preparation Guide*, Agilent order number G2170-90226.

### Minimum PC requirements

<b>Processor</b>	Pentium IV, 1.5 GHz
<b>Screen resolution</b>	Super VGA (1280×1024)
<b>Mass storage</b>	40 GB Hard-Disk and CD-ROM
<b>Minimum memory for single instrument 2D/3D</b>	512 MB of RAM
<b>Minimum memory for multiple instruments</b>	512 MB of RAM
<b>Single instrument configuration with Agilent ChemStore C/S database module (B.03.03)</b>	512 MB of RAM

## Data files

No changes are made to data files when uploading in Rev. B.02.01 SR1. The data file can be integrated and used within B.02.01 SR1, and remains backwards-compatible.

## Validation

Version B.02.01 SR1 is a major revision of the ChemStation software. For complete change control documentation and update of system validation documentation, refer to the documentation of changes in functionality in the *Upgrade Preparation Guide*, Agilent order number: G2170-90226.

If deployed in a regulated environment, Agilent recommends that the system is validated by an Agilent-certified engineer. Contact an Agilent sales representative for details of validation services.

## Add-on solutions

The following ChemStation add-on solutions are supported.

- ChemStore B.03.03
- Security Pack B.03.03
- Purify B.01.01
- GPC-SEC B.01.01
- Retention Time Locking for GC B.01.02
- GC Companion (with new GC ChemStation)
- Integrated Headspace Software for GC A.01.04
- Active Splitter A.01.02.16
- Multi-Signal Output Accessory A.01.01
- Analyst 1.4
- Easy Access A.04.01
- Data Browser A.03.01
- CE/MS B.02.01

ChemAccess and Method Validation Pack (MVP) are no longer compatible with this latest revision of ChemStation. Contact an Agilent sales representative for an alternative software solution.

