
ascent[®] 2009_{R2}

Ascent[®] 2009 R2 Software Release Notes

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General Notes

The 2009 R2 release of Ascent software incorporates a number of enhancements that significantly improve performance.

This document encompasses the following products:

- Ascent (9.40.137)
- OnlineManager (9.40.137)
- AscentWatcher (9.40.137)
- Ascent OPC (9.40.137)
- vbX firmware (3.2.63)
- vbOnline firmware (5.87.17)

Compatibility Issues

Microsoft® Windows® 2000 Support

Microsoft Windows 2000 does not fully support the Ascent 2009 R2 release. This legacy operating system is no longer supported by Commtest Instruments, and users of this software are advised to upgrade to Windows XP, Microsoft Vista or Windows Server 2003/2008.

Windows 2000 users unable to upgrade their operating system should continue using Ascent 2009 (9.10.164).

vbX Operating System Upgrade

vbX operating system version 1.7.2, previously released as an optional upgrade, is now mandatory for all vbX portable instruments. Owners of vb5™, vb6™, vb7™, vb8™, vbBalancer™ and vbBalancer+™ instruments with serial numbers below 40800 who have not done so already **must** upgrade their instrument operating system **AFTER** proflashing to firmware version 3.2.63. [Operating system upgrade instructions](#) are available for download from the Commtest Instruments website.

Before You Proceed

If you are upgrading to Ascent 2009 R2 from a previous Ascent version, please take a moment to read the notes below about this new software release and your recommended upgrade approach.

Back Up!

The structure of Ascent databases has been changed for the Ascent 2009 R2 software release. A database upgrade is required before older databases can be opened in the new software. We recommend backing up your databases using your existing copy of Ascent before uninstalling your current Ascent software version and installing the new 2009 R2 release.

We also recommended that you receive all data from your vbX instrument before proceeding, especially if you intend to upgrade your instrument firmware. Upgrading the instrument firmware will delete all folders and data stored in flash memory.

New in Ascent 2009 R2 Software

The Ascent 2009 R2 software is a 'feature release' with a number of new features in addition to performance and compatibility improvements. New Ascent features include OPC Importing to allow the recording, trending and alarming of OPC data; and Template Machines.

This document is intended as an overview only. To learn how to use any of the new software functions, please refer to the Help files within Ascent (available from the **Help** menu). Alternatively, download the latest *Ascent Software Reference Guide* from our website: <http://www.commtest.com>.

Internationalization

This language release of Ascent 2009 R2 includes English, Chinese, Russian and Spanish software interfaces. Additional languages will be added in future as they become available. If you require a specific language please contact Commtest Instruments Ltd. Available languages are license controlled and vary by purchase region.

OPC Import

Ascent's OPC Import function allows process parameters from OPC-compatible devices to be recorded in the Ascent database. For example, wind turbines or refrigeration units with internal RPM or temperature sensors and an OPC-compatible output value can be added to the OnlineManager software's schedule of measurements, alongside vibration measurements taken from a standard vbOnline device.

This ability allows Ascent to trend, alarm and trigger events using values from existing data sources, and customers to use any compatible measurement device, including those from manufacturers other than Commtest Instruments.

Template Machines

The Template Machines system allows an administrative user to create Machine Templates in the Ascent software; then deploy these Templates to any number of Child machines. This function is useful if your site includes many instances of common hardware components (such as drive motors, fans or turbines).

Once a Template has been created, it may be assigned to any Machine. This action turns the assigned Machine into a 'Child' of the Template. This ability greatly simplifies the setup and maintenance time required for larger site installations. Each master Template may also be altered, and any changes then propagated to all associated Child machines.

Miscellaneous Updates

In addition to the previously discussed improvements, the following general changes have also been made in the Ascent 2009 R2 software release.

OPC import and export improvements

Together with the new OPC import functions, OPC export of Alarm Band values has been added. This feature allows spectrum overalls to be monitored when a Band Alarm covers the full frequency range of interest. Improvements to OPC RPM support have also been implemented, together with faster OPC polling speed.

Bulk Proflash

Ascent is now able to Proflash many vbOnline devices simultaneously.

Initial criteria validation

Initial criteria are now validated both before and after recordings have been taken. Previously criteria were validated only once, before recording.

New waveform display

Long Time Waveform measurements from vbX instruments are now compiled and displayed as complete waveforms in the Ascent software rather than individual measurement blocks. The default view for Waveform measurements is now a split Waveform/FFT view.

General usability and stability enhancements

Various software bugs and compatibility issues identified in previous releases of the Ascent software have been resolved.

Additional documentation and help material added

The Ascent Software Reference Guide has been updated to reflect revised procedures and new functions.

New in vbX Firmware 3.2.63

The latest firmware release for Commtest's vbX instruments is a 'performance improvement release' offering a small number of new features in addition to numerous refinements to existing instrument functionality.

vbX (vb5™, vb6™, vb7™ and vb8™; vbBalancer™ and vbBalancer+™) instrument owners – excluding owners of Chinese-language models – are encouraged to upgrade their instruments with this firmware to improve product stability and to access new features.

NOTE: This firmware upgrade is not compatible with Chinese-language instruments.

This document is intended as an overview only. To learn how to use any of the new instrument functionality, please refer to the Help files within Ascent (available from the **Help** menu).

Alternatively, download the latest vbSeries/vbBalancer Instrument Reference Guide from our website at <http://www.commtest.com>.

USB PnP

vbX Firmware 3.2.63 incorporates a new USB Universal Plug and Play (PnP) driver for instrument communications with Ascent.

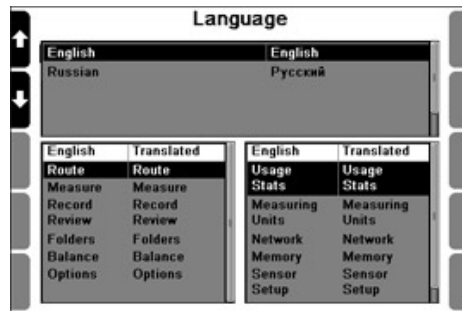
Communication between the PC and instrument has, until now, been via TCP/IP over USB and subject to failure due to varying network, firewall and antivirus conditions. The Ascent 2009 software introduces a WHQL (Windows Hardware Quality Labs) signed USB Plug and Play driver. This driver allows vbX instruments to be used as peripheral rather than networked devices, improving stability and compatibility between the Ascent software and Commtest's range of portable instruments.

Various communications and compatibility issues identified in previous releases of the vbX firmware have also been resolved.

Extended Language Support

Commtest's new vbSeries and vbBalancer instruments now include extended Spanish, Chinese and Russian language interfaces (Chinese and Russian applicable only to Chinese and Russian region models).

Simply select a language from the **Options>Languages** screen.



Instrument language selection interface

NOTE: language changes may require a 'return to base' upgrade for instruments with serial numbers below 40700. Language sets supported within each region are limited. Chinese and Russian interfaces are restricted to their respective territories only.

LED Fault Indications

The instrument's front LEDs are now used to indicate sensor bias voltages outside the expected range. This feature allows the instrument to immediately warn operators of errors or fault conditions such as short-circuits, faulty sensors or open-circuits.



Front Panel LED Indicators

Memory Card Reformatting

The vbX instrument now provides the ability to reformat its 1 GB internal flash memory card. Like conventional hard drives, data stored on flash memory cards can become fragmented over time, gradually slowing data write/read speed. Reformatting the memory card will return it to its factory state, and detect and quarantine any bad data sectors that may have developed since the card's manufacture. Data corruption that can not be removed by deleting individual files will also be corrected by the formatting process. The instrument's flash memory card should be reformatted every 12 months, or whenever data corruption is detected by the instrument.

Operating System Reimaging Capability

Early instruments, with serial numbers below 40800, used an older operating system version. This version of the operating system prevents normal registry changes on some instruments. These changes are required when switching to the new USB PnP communications mode or when changing some Ethernet communications settings.

The ability to re-image the instrument's operating system allows this problem to be resolved as well as providing for future vbX instrument operating system updates should they be necessary.

For instructions detailing the use of this capability, refer to the document "vbX Operating System (1.7.2) Upgrade Guide". (http://commtest.com/media/downloads/vbXOS_172_UpgradeGuide_.pdf).

Miscellaneous Improvements

In addition to the previously discussed improvements, the following general changes have been made in the latest vbSeries instrument firmware release:

USB data transfer UI improvements

The USB data transfer user interface for instruments equipped with USB host sockets has been improved. Users can now view all Folders present in an attached USB memory device before sending or receiving data.

Route access improvements

Collection issues that resulted in Route measurement locations being bypassed if a recording had already been taken at that location have been corrected. The instrument no longer automatically jumps to the first unrecorded location in a Route.

General usability and stability enhancements

Various software bugs and compatibility issues identified in previous releases of the Ascent software have been resolved.

Additional documentation and help material added

The instrument's onscreen interactive help system has been updated to reflect revised layouts and new functions.

Balancing screen updates

vb7, vb8, vbBalancer and vbBalancer+ balancing screens have been improved, making balancing operations more intuitive for instrument operators.

New in vbOnline Firmware 5.87.17

This release does not add any new features to the vbOnline device. It contains several fixes to issues identified since the previous (Ascent 2009) release. vbOnline device owners are encouraged to upgrade firmware in order to improve general product stability.

Resolved Software and Firmware Issues

The following software and firmware issues have been resolved, and new features added, since the previous Ascent (2009, 2009 R2 9.10.107) software release.

Ascent 2009 R2 Software

Upgrades Since 9.40.107 Release

(12134) Firebird runs out of memory when templating large number of machines

(12328) Localisation: Ascent 2009 R2: Installer

(12343) Ascent: vbX Comms Stalling Problem

(12304) 'Post validation' and 'Use as a source of machine RPM' settings are not templated

(12325) Make newly localised apps (OnlineManager, AscentOPC, AscentWatcher) follow Ascent language

(12289) Some Demod Wfm measurements have incorrect Duration / Equiv. Fmax

(12392) Advanced Reporting: Access Violation if click OK in configuration with no database

(12385) Request to increase the number of measurements that may be manually imported

(12330) Odd behaviour when moving multiple entries within a route

General Database Issues

(10510) Upgraded databases may contain orphan measurements - stopping structure from being deleted

(9605) Need ability to edit database when no instruments are present

(10738) Primary Key Violation during alarm checking after receiving folder from vbX

(9330) Unable to export large sets of recording to CSV

(12238) Ascent crashes on startup if Update User trying to open database they don't have access to

(12258) connecting to a DB with a user that doesn't have the correct credentials leaves Ascent in an unstable state

User Interface

(11337) Duplicate schedule entries when importing a vbz3 with 'Freq' in the paramset description + workaround

(11496) If no DC coupled sensors defined, average value measurement sensor list is blank

(6502) Request to update the Help > Shortcuts menu

(10223) CSV export giving inconsistent exports, and not responding to Navigator selection

(10719) Slider doesn't work on the Navigator/Tree panel in Ascent

(10857) Access Violation while editing sensor bias voltages

(10169) Request for shaft-multiplier for Fault Frequencies

(11511) DC -20...0V Sensor taking an Average Value recording in Offline Mode results in unexpected values

(10818) Average Value SE, max duration and decimal places change after re-editing the SE

- (11000) Can't edit description for Attached File Schedule Entry
- (10654) Attached File SE and Attached File Measurement Icon are the same
- (11492) OPC Core Components installation
- (11543) Dual channel recordings with same name in different folders are not handled
- (10760) Request to force verification of license validity when upgrading software
- (6884) Can set fractional values for orders-based FMax

Charting/Reporting

- (11672) Show vbX LTWfm recordings as per their vbX000 equivalents
- (10606) Request to add RPM to header of the vbX balance report

Instrument Related

vbX

- (9137) Problems when receiving measurements for more than one user-defined unit
- (10368) Ascent not updating baselines

vbOnline

- (9901) OnlineManager to cope with 0x07 4-20mA over current error
- (10693) Hourglass is displayed when moving the cursor over menu items in the Ascent Watcher window (Ascent Watcher)
- (10791) Enter an invalid netmask for a vbOnline device and receive an exception
- (9105) Add ability to change vbOnline used without having to re-do the setup from scratch
- (12301) OPC measurements taken with Online Manager remain static
- (12280) TEMPLATE: When you re-apply a template, child machine's vbOnline Tach pulses per Rev and Key Phasor Mode gets overwritten.

Appendix

Changing vbX USB Communications Mode

The vbX instrument supports two modes of USB communications. In 3.2.63 firmware, the default mode is USB Plug 'n' Play. However, some legacy operating system users will not be able to use this mode as the drivers are not supported.

In this case it will be necessary to change to the older "TCP/IP (or Ethernet) over USB" mode. This can be achieved through the following steps.

1. From the vbX main menu, select the **Options** screen by pressing button **[0]**

2. From the vbX Options screen, select the **Network** screen by pressing button **[3]**
If your instrument is currently using USB Plug'n'Play mode then this will be shown on the screen next to button [2]
3. You can change **USB** mode by pressing button **[2]**. This will allow you to select either "Plug'n'Play" or "Ethernet over USB" by pressing the **[Tick/Check]** or **[Alt]** buttons respectively.
4. To change to "Ethernet over USB" mode press **[Alt]**, you will then be prompted to enter the IP address details for this adapter. We suggest accepting the defaults as Ascent is configured to use the automatically.
5. After changing the mode, it is necessary to reset the instrument by pressing **[Alt]+[5]** before the new settings take effect.
6. The procedure for changing back to "Plug'n'Play" mode is the same except that at step 4 you should press the **[Tick/Check]** button. Again, a reset is required after changing modes.