
RELEASE NOTES

DRIVERS AND DLLS KIT (DDK)

WINDOWS® EDITION

REVISION 3.1.366

SENSORS SUPPORTED

This release of the Drivers and DLLs Kit (DDK) for Microsoft Windows® supports the following Validity Sensors models:

- All VFS300 Family
- VFS201

SOFTWARE

This release is compatible with the 32-bit and 64-bit versions of Windows 7®, Windows Vista®, and Windows® XP.

The Validity Sensors Add/Remove Programs (ARP) version is 3.1.366

The Validity Sensors software build version is **3.1.3.66**.

FIRMWARE

The firmware version is hardware dependent.

VFS300 FAMILY

For sensors with 4.00 firmware the current (boot) patch level is 02. A VFS300 or VFS301 with 4.00 firmware reports '04.00.02.0050 Falcon ROM [VSI 09A Hitachi USB]'.
The following configurations are supported for USB sensors:

Swipe speed: 10 or 15 cm/sec
SO frequency: 18 or 24 MHz
Flex ID: 14

VFS201

The firmware revision for VFS201 sensors is **3.72**. The firmware patch level is **H**.

For example, a VFS201 ROM sensor with no SPI flash reports 'VFS201 ver 3.72H vc3.sys.r[0MB]'

DEVICE DRIVER

The device driver is the WHQL-certified WinUSB driver from Microsoft, WinUSB.sys, and is version **2.1.0.2** and is dated **05/04/2009**.

This device driver replaces the previous device drivers, including version 2.0.1.1 dated 11/24/2008, version 2.0.0.1 dated 4/15/2008 and version 1.3.1.183 dated 2/6/2008

WINDOWS_DDK_3_1_366

See Enhancements and Errata History below for cumulative changes.

ENHANCEMENTS

1. Fixed Memory leak issues.

ERRATA

This release of the Validity DDK has the following limitations. These limitations will be addressed in a subsequent release.

1. VFS421 driver is not supported in this release.

ENHANCEMENTS AND ERRATA HISTORY

WINDOWS_DDK_3_1_365

ENHANCEMENTS

1. Fixed Memory leak issues.

ERRATA

This release of the Validity DDK has the following limitations. These limitations will be addressed in a subsequent release.

1. VFS421 driver is not supported in this release.

WINDOWS_DDK_3_1_363

ENHANCEMENTS

1. IR improvements to better handle flex variations.
2. Enabled selective suspend by default.

ERRATA

This release of the Validity DDK has the following limitations. These limitations will be addressed in a subsequent release.

1. VFS421 driver is not supported in this release.

WINDOWS_DDK_3_1_358

ENHANCEMENTS

1. updated firmware (boot patch 02) patch for 4.00 & 4.21 firmware to fix reset issue
2. Fix for issue – “sensor does not take prints after resuming from sleep”

ERRATA

This release of the Validity DDK has the following limitations. These limitations will be addressed in a subsequent release.

1. VFS421 driver is not supported in this release.
2. Windows 7--Upgrade from previous version to current version displaying error "program might not have installed successfully" at the end of installation. To work around this issue, uninstall the previous version before installing the current version.

WINDOWS_DDK_3_1_355

ENHANCEMENTS

1. Added support for VFS421 sensor.
2. Included the Windows 7 WHQL-approved device driver version 2.1.0.2, for VFS300 family and VFS201 sensors, and is dated 05/04/2009.

ERRATA

This release of the Validity DDK has the following limitations. These limitations will be addressed in a subsequent release.

1. When resuming from Sleep or Hibernate, the sensor be non-responsive or the VFS101 VCS API library may stop working when using a VFS421 sensor. To work around this issue, restart the system.
2. VFS421 driver is not WHQL certified.

WINDOWS_DDK_3_1_312

ENHANCEMENTS

1. A fix for an issue where the sensor would occasionally trigger without a finger swipe.
2. Support for WinBio installer was added.
3. FSS2 enabled.
4. Downgrade now requires the user to uninstall a newer version before attempting to install an older version.
5. Fix for rare vcsFPSERVICE crashes.
6. Fix for the Release folder of vcsSimpleEnrollMatch.
7. Fix for a cosmetic issue where sample applications display misleading messages when unplugging the sensor after start of the application and then exiting.

WINDOWS_DDK_3_1_303

ENHANCEMENTS

Fixes false triggering on tap/RFI interference by discarding partial print buffers

1. WinBio driver package listing (Windows 7 BioMetrics Framework Sensor Driver)
2. Bug fixes for WaveSys
 1. BTS ID 13146 - An error message "An error occurred during fingerprint enrollment. Please try to re-enroll this fingerprint" is displaying during fingerprint enrollment
3. Other bug fixes
 1. BTS ID 20577 - firmwareTest: Impossible to start the application, despite providing correct arguments it always shows the usage
 2. BTS ID 20775 - vcsSimpleDataBase.exe crashes while launching application when the sensor is unplugged from the system
 3. BTS ID 20941 - vcsFPSERVICE:Service crashed when enable/disable navigation mode in vcsNavDemo application

WINDOWS_DDK_3_1_214

ENHANCEMENTS

1. The Firmware patch for 4.00 sensors is updated to Patch Level 10.
2. MS-OEM test related bug fixes:

1. Make sure Validity software will not install on Win7/8 or higher
2. Fill in InstallLocation in registry
3. Fixes for crashes in vcsFPSservice, including BTS ID 17378
4. Fix for a deadlock in vcsFPSservice
5. Fix for BTS ID 18066 – installation failure on Vista-64 bit
6. Fixes for installation failures on some machines is applied.
7. A fix for a problem with very fast swipes is included.
8. A fix for false triggering of the sensor is included.
9. The event VCS_EVT_FINGER_DETECTED is now sent to the client event callback
10. Navigation updates
 1. Navigation applications are updated
 2. A fix for 100% CPU usage if when using navigation
 3. A fix for a crash during navigation
11. ASP & software culling is turned on by default.

WINDOWS_DDK_3_1_119

1. Removed the Power Management tab in Device Manager/Properties for all sensors
2. MS-OEM test related bug fixes:
 1. Make sure Validity software will not install on Win7/8 or higher
 2. Fill in InstallLocation in registry

INSTALLING AT THE COMMAND PROMPT

Rather than launching the update programs through hyperlinks in this web page, the Setup.exe can be run from the Windows command prompt. Command prompt installation allows options, such as silent install or log file creation, to be selected. To install the drivers and DLLs from the command prompt, first ensure you are running as an administrator or the command prompt window has administrator rights. A command window can then be open. In Windows XP, use Start > Run.

```
"ValiditySensorsSetup.exe /s" will install in silent mode.
```

If this is a clean install, you can run the EXE and create a log file.

```
"ValiditySensorsSetup.exe /l* c:\validity_install.log"
```

You can uninstall the software and create a log file using the EXE:

```
"ValiditySensorsSetup.exe /l* c:\validity_uninstall.log /x"
```

Command line switches:

- /s silent mode - no prompts
- /l* log MSI actions to the specified file
- /x uninstall the software
- /p SWIPEDIRECTION=*value* (can be 0,1 or 2)
- /p PPENABLE=*value* (can be 0 or 1)
- /p PPTYPEAC=*value* (can be 0 or 1)
- /p PPTYPEDC=*value* (can be 0 or 1)

For Installation using MSI's:

For installing using MSI command line switches, we should use the following:
`Msiexec /i ValiditySensors_x86.msi SWIPEDIRECTION=value PPENABLE=value
PPTYPEAC=value
PPTYPEDC=value`

For un-installation:

```
Msiexec /x ValiditySensors_x86.msi
```

For silent installation:

```
Msiexec /i ValiditySensors_x86.msi /q
```

Command line switches:

- /q silent mode - no prompts
- /l* log MSI actions to the specified file
- /x uninstall the software
- SWIPEDIRECTION=value (can be 0,1 or 2)
- PPENABLE=value (can be 0 or 1)
- PPTYPEAC=value (can be 0 or 1)
- PPTYPEDC=value (can be 0 or 1)

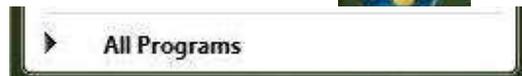
USING "RUN AS ADMINISTRATOR" IN WINDOWS VISTA

When updating Validity drivers in windows Vista Command Prompt window, the "Run as administrator" option must be chosen. To do this:

1) Left Click on the Windows logo on the lower left of the screen:



2) Left Click on 'All Programs':



3) Left Click on 'Accessories':



4) Right Click on 'Command Prompt' and select 'Run as Administrator':



5) Change to the folder with the ValiditySensorsSetup.exe or ValiditySensors_x86.msi and then run the commands as shown above:

Example: `"ValiditySensorsSetup.exe /s /p SWIPEDIRECTION=value /p PPENABLE=value /l* c:\validity_install.log"`

Or

Example: `Msiexec /i ValiditySensors_x86.msi SWIPEDIRECTION=value PPENABLE=value PPTYPEAC=value
PPTYPEDC=value`



CONTACT VALIDITY SUPPORT

Email: support@validityinc.com
Phone: 877-733-8833
Web: www.validityinc.com