



## Firmware Revision Information

**Product Code(s):** *ACR2005A*

**Product Name(s):** *ServSwitch Wizard IP Plus*

**Date Modified:** *August 7, 2011*

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**Important note:** *If you are upgrading from version 0.3, 0.4 or 0.5 then you must apply version 1.0 upgrade before applying later upgrades.*

### Version 0.3

- Original shipping release.

### Version 0.4

- File transfer changes. General changes to how the mass storage device is handled.
- Various other minor user interface changes.

### Version 0.5

- New DHCP client. This version includes a new DHCP client which resolves a problem with system lock-outs when using dynamically allocated IP addresses (i.e. not fixed IP addresses).
- Various other minor user interface changes.

### Version 1.0

Version 1.0 contains some major structural changes to the code and so requires a two stage upgrade process. Once upgraded to version 1.0, it will not be possible to downgrade to previous code versions. The upgrade is applied as follows:

1. **(STAGE 1)** Load the **wizardipplus-upgrade-1.0** upgrade in the normal way as instructed in the Wizard IP Plus manual.
2. When you reboot back into normal mode, the unit will present a web page at the unit's IP address prompting you to provide a Maintenance Mode upgrade file (**wizardipplus-mm-upgrade-1.0.bin**).

3. (STAGE 2) Apply the Maintenance Mode (**wizardipplus-mm-upgrade-1.0**) in a similar way to the way that you applied the original **wizardipplus-upgrade-1.0** upgrade.
4. After rebooting back into normal mode, the unit will be upgraded to version 1.0.

#### **Changes are as follows:**

- New menu hide/show option with configurable activation hotkey.
- Paste clipboard dialog item added to Keyboard Control menu.
- Bug fixes to video and mouse calibration code.
- New magic security numbers for upgrade images.
- Removed serial output on boot up.
- USB keyboard now supported in maintenance mode.

#### **Version 1.1**

- Additional check box added on the Configure > Unit Configuration menu to set the default state of the menu bar upon connection (i.e. displayed or not). This state will not affect any currently connected viewer, only subsequent (re-)connections.
- Added checks for viewer resizing support before resizing due to menu bar toggling.
- If no hotkey is defined for menu bar toggle the menu bar will be shown and the default check box will be disabled.
- Bug fix to copy code should prevent some rare corruption issues - removed forced full screen update on resolution changes.

#### **Version 1.2**

- Bug associated with operation of local USB keyboard fixed.

#### **Version 1.3**

- Sound now supported through sound enabled viewers.
- Moved digital/analog switch to Controls/Video Settings, added new Auto mode.
- Fixed close viewer whilst calibrating bug.
- Fixed display activity percentage miscalculation issue.
- Fixed file system event log problem.

## Version 1.4

- Fixed USB composite device incompatibility.
- Fixed some "calibration required" indicator issues.
- Rationalized local-only auto calibration and settings loading.

## Version 1.5

- Support for combined USB devices added to local console connection.

## Version 1.6

This upgrade is recommended for all installations as it includes a security enhancement.

- Security blacklist system enhanced.
- Fixed mouse/keyboard timeout under high activity problems.

## Version 1.7

- Improved sound support when used in conjunction with new windows viewer (4.3se3). The viewer now no longer freezes audio playback immediately on interruption, but continues to play its remaining buffer. This technique enables the system to be more tolerant to interruptions. The viewer also now includes an option in the Misc menu: "Only play sound when window active", which will stop playback from a given viewer when it is not the active window. The new viewer (4.3se3) is compatible with older firmware and vice versa.
- Supports new \apc and \sin power commands for easier control of APC and Sinetica RS232 controllable power switches. These commands are for large system deployments. Please contact Technical Support for more details if you require using APC or Sinetica RS232 controllable power rails in large system deployments.
- Sound options bug fixed (see detailed explanation below).

### **vncviewer4.3se2.exe sound issue**

#### ***Problem description:***

*When the VNC viewer Option defaults are saved the sound becomes unacceptably poor on subsequent viewer sessions. The problem is associated with two parameters set in the Windows registry when the defaults are saved, PlayoutCutoff and PlayoutLen, both incorrectly being set to a value of 1. The values tell the viewer at what buffer size to start playing and at what size overflow data occurs, if they are both the same or both very low the result is either no sound or corrupted sound.*

#### ***Problem implications:***

*The values are not editable through the viewer interface so once set the values will remain in their erroneous state in subsequent viewer sessions even when the newer 4.3se3 viewer is used. Please note that the 4.3se3 viewer in itself handles saving of default values correctly, however, since it will load the erroneous defaults saved by the 4.3se2 version during start-up the problem can be carried forward.*

**Problem workaround:**

*Use the 4.3se3 viewer version with immediate effect. If version 4.3se2 has been used previously the 4.3se3 version will only work correctly for sound provided the defaults haven't been set at any point in time. If the defaults have been set the registry on the viewing machine must be updated as follows:*

**(Windows PC)**

- *Run regedit (take great care when running this program as a mistake may cause your operating system to become unstable)*
- *In the left hand pane locate \HKEY\_CURRENT\_USER\Software\RealVNC\VNCViewer4*
- *In the right hand pane locate PlayoutCutoff and double click to change the value to hexadecimal 7d0 (decimal 2000).*
- *In the right hand pane locate PlayoutLen and double click to change the value to hexadecimal 1f4 (decimal 500).*
- *Close regedit and start the 4.3se3 viewer, sound should now work correctly.*

## Version 1.8

- Separate modem reset string added to support US Robotics 5631 and similar modems.
- Japanese keyboard layout support added.

## Version 1.9

Version 1.9 contains some major structural changes to the code and so requires a two stage upgrade process. Once upgraded to version 1.9, it will not be possible to downgrade to previous code versions. The upgrade is applied as follows:

1. **(STAGE 1)** Load the **wizardipplus-mm-upgrade-1.9** upgrade in the normal way as instructed in the Wizard IP Plus manual.
2. When you reboot back into normal mode, the unit will present a web page at the unit's IP address prompting you to provide a Maintenance Mode upgrade file (**wizardipplus--mm-upgrade-1.9.bin**).

3. (STAGE 2) Apply the Maintenance Mode (**wizardipplus--mm-upgrade-1.9**) in a similar way to the way that you applied the original **wizardipplus--upgrade-1.9** upgrade.
4. After rebooting back into normal mode, the unit will be upgraded to version 1.9

#### Changes are as follows:

- Fixed USB bug when used with Windows pre-installation Environment 1.x.
- New IPv6 support - NTP, syslog, telnet all support IPv6 connections.
- New IPv6 support - UI (local OSD and remote) now supports IPv6 entry for relevant IP addresses.
- New IPv6 support - New additional dhcpv6 client.
- UI changes - Improved local OSD text entry field functionality.
- UI changes - Video Settings/Custom Video Settings rationalization.
- UI changes - Removed extra bevel outline from remote UI.

### Version 2.0

Version 2.0 contains some major structural changes to the code and so requires a two stage upgrade process. Once upgraded to version 2.0, it will not be possible to downgrade to previous code versions. The upgrade is applied as follows:

1. (STAGE 1) Load the **wizardipplus-mm-upgrade-2.0** upgrade in the normal way as instructed in the Wizard IP Plus manual.
2. When you reboot back into normal mode, the unit will present a web page at the unit's IP address prompting you to provide a Maintenance Mode upgrade file (**wizardipplus-mm-upgrade-2.0.bin**).
3. (STAGE 2) Apply the Maintenance Mode (**wizardipplus-mm-upgrade-2.0**) in a similar way to the way that you applied the original **wizardipplus-upgrade-2.0** upgrade.
4. After rebooting back into normal mode, the unit will be upgraded to version 2.0

#### Changes are as follows:

- USB gadget alterations to account for an IXP processor stepping change (ABD suffix).

### Versions 2.1 to 2.4

- Specialist releases.

## Version 2.5

- New KVM-Management security type added, for better integration with Wizard.net.
- Support for SSHA password hashing. This is known as “S3” and can be enabled in the Wizard.net software using the Tools > Configure Wizard.net > Use S3 = Yes option. S3 is advantageous because it enables connections to be made without any reliance upon a concept of time.
- Virtual keyboard added.
- Updated mouse control with advanced options including support for Mac OSX relative mouse mode.
- Sun Keyboard mapping added to allow special keys to be sent.
- USB absolute mouse mode saved on a per host basis.
- Keyboard language can be set on a per host basis.
- New VNC viewer added, the 4.4.3se4 viewer is now included to download from the WizardIP Plus
- Improved local console support to include the Mac Mighty mouse and wireless keyboards and mice using a 12byte protocol.
- Number of keyboard macros increased to 32, four of which can be on the menu bar.
- Improved HTTP interface with more information.

## Version 2.6

- Made password hashing optional

## Version 2.7

- DVI output could break up when the unit got hot above 40°C.

### Firmware Contents:

The Zip archive contains four files, wizardipplus-upgrade-2.7.bin, wizardipplus-mm-upgrade-2.7.bin, wizardipplus-2.7.sfd and these upgrade notes.

### Upgrade Instructions (if you use Wizard.net)

If you are a Wizard.net user, you will need to place all the contents of the zip archive into the firmware directory of Wizard.net. (e.g. \\program files\wizard.net\firmware).

### Upgrade Instructions (if you upgrade manually)

Please note that the .sfd file is a signed firmware definition file that is used only by Wizard.net. As you are upgrading manually you do not need to use this file.

The upgrade is a two stage process applied in the following way;

1. **(STAGE 1)** Load the **wizardipplus-upgrade-2.7** upgrade in the normal way as instructed in the WizardIP Plus manual.
2. When you reboot back into normal mode, the unit will present a web page at the unit's IP address prompting you to provide a Maintenance Mode upgrade file ( **wizardipplus -mm-upgrade-2.7.bin**).
3. **(STAGE 2)** Apply the Maintenance Mode (**wizardipplus -mm-upgrade-2.7**) in a similar way to the way that you applied the original **wizardipplus-upgrade-2.7** upgrade.
4. After rebooting back into normal mode, the unit will be upgraded to version 2.6