

# Product Release Note

Document Number: AQ000088



<b>Name</b>	Adventiq ARQ3 System Software – servswitch DXS	
<b>Release Date</b>	23 <sup>rd</sup> June 2008	
<b>Release Version</b>	2.50 SVN 6890	
<b>Replaces Version</b>	2.50b2	
<b>Compatibility</b>	BlackBox Servswitch DXS	
<b>Overview</b>	This release provides fixes to issues outlined below, and incorporates new features as described here	
<b>Files associated with this release</b>	flash_init_servswitchdxs_2.50.bin	factory installation image
	upgrade_servswitchdxs_2.50_stage1.bin upgrade_servswitchdxs_2.50_stage2.bin	upgrade image

## SUMMARY OF FEATURES IN THIS RELEASE

Hosts Menu	This version introduces an 8-host 'host control' menu.
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## Performing a field upgrade with this release:

When performing an upgrade to this release, it is necessary to load the upgrade in two stages, each stage using a different one of the two field upgrade images: "upgrade\_<product>\_<version>\_stage1.bin" and "upgrade\_<product>\_<version>\_stage2.bin".

In order to perform a field upgrade to this version of software, it is necessary to perform the upgrade in two stages.

1. Follow the instructions for field upgrade, using the image "upgrade\_<product>\_<version>\_stage1.bin" as the upgrade image. Upgrade should NOT be performed by switching service switch 2 on the side of the unit. The unit should be powered up with the switch in the "off" position. Upgrade should then be performed rather by selecting "Upgrade Firmware" from "Configure->Unit Configuration->Advanced Unit Configuration" from the viewer toolbar.
2. After successfully performing stage 1 upgrade, restart the unit (by power-cycling) and follow the instructions for field upgrade using the image "upgrade\_<product>\_<version>\_stage2.bin" as the image. Upgrade should NOT be performed by switching service switch 2 on the side of the unit. The unit should be powered up with the switch in the "off" position. Upgrade should then be performed rather by selecting "Upgrade Firmware" from "Configure->Unit Configuration->Advanced Unit Configuration" from the viewer toolbar.
3. After successfully performing stage 2 upgrade, restart the unit (by power-cycling).

## Issues Resolved in this Release

Id	Summary	Details	Note
62	Changing video mode produces incorrect VNC screen	<p>Changed host video mode from: almost any mode to: 1152x864 (1152 aspect looks to be the issue) The system display is very much messed up. Screen possibly half width. Tried same on eval board. The system crashes with segmentation violation. Log shows that mode is not identified. Mode closest are 640*480*95Hz.....</p>	<p>This issue is believed to have been resolved as of this release.</p>
73	<p>servswitchdxs should gracefully report failure when attempting Virtual Media connection whilst in PS/2 mode</p>	<p>The servswitchdxs can be connected by PS/2 or USB, and of course VM will only work when connected via USB. However, when attempting to attach a VM drive to an servswitchdxs that is connected via PS/2 no errors are reported - it just doesn't work. Could be confusing. I propose that the servswitchdxs (or any ARQ3 based device) should be able to declare its capabilities to a viewer, including whether it supports VM or not (does this happen already ?)</p>	<p>Reports a USB connection error and suggests that there may be no connection</p>
166	<p>VNCViewer Vista Issue: Folders cannot be selected correctly; Viewer crash when file opened, V4.3.se4</p>	<p>It is not possible to select a folder in the VNCViewer on windows vista. Works fine on XP. It is possible to select a file. Then the file system can</p>	<p>Use new vista viewer 4.4</p>

<p>be mounted. It is also possible to type in the path to the folder and see that the folder is mounted cleanly. When the file is opened (double-click), the viewer crashes. This does not happen with XP.</p>	<p>The VNCViewer is run on a linux remote host. On pressing F8 and bringing up the menu, two options are available for virtual media: "share files" and "virtual media". The "share files" option works fine. "Virtual media" option requires one to specify media type (disk or cd). Block size of the media is also a field. I tried with a default block size, and the mount failed with "Invalid media type". The two options can be a bit confusing and it may be better to have just one. I do not know what the "virtual media" menu option is supposed to do.</p>	<p>Fixed in 2.50b2 (requires two-stage build)</p>
<p><b>167</b> Linux: "Share files" works but "virtual media" does not.. VNCViewer 4.3.se4</p>	<p>SERVSWITCHDXS-DA was initially programmed with a static ip (10.0.0.160). Then, using the local console, DHCP was enabled. The unit registered its name (Attila) and acquired an IP (10.0.0.154). Connection was refused when tried to connect using the new IP. Connection was successful when 10.0.0.160 was used.</p>	<p>Unable to reproduce. DHCP configuration worked fine. DHCP release command is not sent. This was observed using Wireshark. This was also checked by adding "debug" to the dhclient (the dhcp client) code. DHCP release is not required to be sent according to the dhcp specifications.</p>
<p><b>176</b> VNC led does not flash 5 times to indicate that the servswitchdxs unit has reset completely</p>	<p>DHCP configuration using local console not working on SERVSWITCHDXS-DA</p>	<p>Fixed in 2.50b2 (requires two-stage build)</p>
<p><b>177</b> DHCP configuration using local console not working on SERVSWITCHDXS-DA</p>	<p>SERVSWITCHDXS-DA was initially programmed with a static ip (10.0.0.160). Then, using the local console, DHCP was enabled. The unit registered its name (Attila) and acquired an IP (10.0.0.154). Connection was refused when tried to connect using the new IP. Connection was successful when 10.0.0.160 was used.</p>	<p>Unable to reproduce. DHCP configuration worked fine. DHCP release command is not sent. This was observed using Wireshark. This was also checked by adding "debug" to the dhclient (the dhcp client) code. DHCP release is not required to be sent according to the dhcp specifications.</p>

	<p>Configuring DHCP using a vncviewer worked fine. When the IP is made static, no DHCP release command is sent as observed by windows network monitor. Windows network monitor was used to check that the unit acquired and ACKed the new IP when DHCP was enabled. Image obtained from Customer.</p>	
<p><b>178</b> Saving config.txt file in case of "Virtual OSD" / "Local USB Configuration tool" fails</p>	<p>Bug report entered after Customer tested this release. UseDHCP set to 1 and then config.txt file saved. Does not reflect when reopened (UseDHCP is still set to 0) A disconnect and reconnect to the computer results in UseDHCP=1</p>	<p>Fixed in 2.50b2</p>
<p><b>179</b> DHCP configuration using "Local USB configuration" fails</p>	<p>When DHCP enabled, ip acquired and ACKed but not used. The unit falls back to the static IP previously obtained. Connects over the vncviewer using the previous static IP.</p>	<p>Now fixed</p>
<p><b>185</b> When large folders / entire CD is added to VM, USB drive created: mouse synchronization lost</p>	<p>SERVSWITCHDXS 2.10 When large amount of data (a large folder or an entire CD) is added to the VM drive and the USB drive is created most of the time the mouse requires a re-synchronization.</p>	<p>Now fixed</p>
<p><b>186</b> When HDD of remote computer enters powersave mode (screensaver on), USB kbd and mouse control lost</p>	<p>SERVSWITCHDXS 2.10 Screensaver on the remote computer sent the computer to "powersave mode". USB kbd and mouse control lost. vncviewer shows the screensaver but there is no</p>	<p>The host (remote) computer may have features that power down the HDD as a power saving feature. These modes are typically used when local intervention is possible (pressing the power switch) to wake</p>

		<p>kbd or mouse control. This did not happen all the time but on some occasions only.</p>	<p>up the computer. If putting the host computer to a particular mode causes it to ignore keyboard and mouse activity and require local intervention to wake up, then such a mode is not suitable.</p>
<b>187</b>	<p>Mouse Control (under Controls) does not work when Mouse is in USB absolute mode</p>	<p>Not known if this is the expected behaviour. Vista Viewer-&gt;servswitchdxs_da with USB mouse-&gt;winxp</p>	<p>Fixed by disabling all the mouse movement buttons when the USB mouse is in absolute mode.</p>
<b>188</b>	<p>Ambiguous error reported when in absolute mode</p>	<p>When in Absolute Mouse mode the mouse calibration feature is disabled, greyed out (by design), only the video can be calibrated. Using the Mouse control menu (still in Absolute Mode) it is still possible to click the Calibrate button (it is not greyed out) but the calibration fails with the error below(image). The error is misleading, it should say that with absolute mode calibration is not available or we shouldn't even make it possible to calibrate when in Absolute Mouse mode.</p>	<p>Fixed in 2.50b2</p>
<b>191</b>	<p>Absolute mouse mode on RH Linux remote and servswitchdxs "unusable"</p>	<p>Absolute mode was unusable, the local and remote cursor did not "meet". Vista viewer-&gt;servswitchdxs_da usb connection -&gt; RH Lin 5</p>	<p>On linux systems the screen size reported by the operating system goes beyond the boundaries of the physical screen. The result of this is that 'absolute' mouse mode cannot work efficiently. Because of this Adventiq does not support absolute mouse mode on Linux systems of this kind. This incorrect mouse behaviour when using absolute mouse mode is expected. Absolute mouse</p>

	<p>mode does not work well with Linux. Relative mouse mode should be preferred and the mouse may need to be calibrated(when changing into relative mouse mode). Relative mouse mode was tested and works fine.</p>		
<p><b>193</b> SERVSWITCHDXS: USB configuration IP address not updated when changed from static to DHCP</p>	<p>Bug Report got from testing of SERVSWITCHDXS Adventiq tests conducted for repeatability and bug confirmed. The default configuration is static IP. This was changed by setting useDHCP to 1. The file was saved. Reopening the file confirmed that it was saved. The servswitchdxs was connected to the network and it acquired a DHCP address. When it was connected back to a computer using USB, noted that the variable IpAddress="old static ip".</p>	<p>Comments added to denote this is the static ip address. New comment added that provides the current ip address in use.</p>	
<p><b>197</b> SERVSWITCHDXS: Provision to set the host name using USB configuration</p>	<p>The hostname of the unit cannot be set using USB configuration. There is no parameter. The user has to set "UseDHCP" to 1, obtain the address, then VNC into the unit to set the hostname.</p>	<p>Host name can be set. Fixed in 2.50b2</p>	
<p><b>206</b> Login screen on the OSD appears skewed.</p>	<p>The login screen on the OSD appears skewed. The screen rolls. The keyboard works fine. After login, on pressing the hot key, the OSD screen is no longer skewed and slanted. Selecting "back" on any of the screens also causes this problem, once logged</p>	<p>Fixed in 2.50b2.</p>	

	in. This appears to be a sync problem. Check with Graham.		
<b>208</b>	Mouse synchronization drifting when remote end is 1152x864, PS2 connections	Viewer: Vista 4.4 Host: Win XP PS2 mouse and Kbd. When the host is setup for 1152x864, 32 bit colour the mouse synchronization drifts as the mouse cursor moves horizontally across the screen. As the mouse is moved horizontally, the gap between the remote mouse and the mouse cursor (dot and the arrow cursor) grows larger. When the mouse is brought back to the left edge of the screen the gap disappears. After moving the mouse quite a bit the synchronization drifts along vertical. The gap is not huge and the mouse is still perfectly usable. Calibration is successful for both video and mouse. Detects win XP mouse.	Arkapp was incorrectly identifying the mode as "evil 1152x864 @ 60 on win98 box" rather than the GTF mode actually being generated. Fixed by adding an explicit table entry for the GTF mode. Changed file: hw/VideoModes.cxx (svn 6660)
<b>209</b>	servswitchdxs and all servswitchdxs variants should have a "hosts menu" capability with maximum of 8 hosts	This is required for V2.50	Fixed in 2.50b2
<b>211</b>	Local Keyboard doesn't work when in upgrade mode		Fixed in 2.50b2
<b>216</b>	Host menu key sequences are not sent through	The key sequences that are used to switch host are not sent through. The same sequences, when entered in the keyboard control menu, work fine. Customer tried the following sequences: 1 "+-ctrl+-ctrl+-1+enter" 2 "+-ctrl+-ctrl+enter" 3 "+-scrolllock+-	Missing code added appropriately. Fixed in 2.50b2



	scrolllock+enter" Bug was found to be repeatable.		
<b>219</b>	Mouse sticks after restoring menu bar or "return to host"	After restoring the menu bar (by pressing the menu bar hotkey twice) or pressing "Return to Host" from the Configure GUI, the mouse pointer sticks until a mouse button is pressed.	Fixed in 2.50b2
<b>221</b>	Eventlog not updating	Event log is not being updated correctly. Noted that the syslog daemon is not running on servswitchdxs, builds.	rc.sysinit was not updated correctly for all the product variants. Code that started the syslogd service was missing. SVN 6742
<b>226</b>	Ctrl-Alt sticks even after exiting from OSD	Servswitchdxs-DA, USB connections Ctrl-Alt-c was configured as the hot key. Entered the OSD and exited without setting anything. The ctrl-alt remained "stuck". Ctrl-alt had to be pressed again to release it and allow normal operation of the keyboard and mouse.	SVN 6770 - introduce sendPICReleaseEvents in the Keyboard class - these hot key release events are 'spoofed' by the PIC, but the PIC can't get them through to a USB Keyboard, so we must 'spooF' them in the Keyboard class, in the same way that we do when using the PS2 class for local keyboard control.
<b>227</b>	The VNC LED does not flash 5 times to confirm a reset (though the unit performs a complete reset)	The customers used a upgrade image.	2 stage upgrade required. 2 stage upgrade tested on SERVSWITCHDXS (from 2.10).
<b>228</b>	After adding a new user account the Control//ALT+CTRL+DEL/Calibrate/Resynch buttons disappear (even for the admin user).	Reported on the servswitchdxs. There is no way to get them back. Only a factory reset will get it back.	This is due to only partial integration of the ARKFEATURE_MENUEEDIT feature. It causes a (null) reference in the config file. The bug is in UserConfigDialog.cxx around line 270 where uij[i].guiConfig is not being initialised before the config file is written. For now we will disable the ARKFEATURE_MENUEEDIT SVN 6763
<b>229</b>	SERVSWITCHDXS: USB configuration has	Flash initted the 2.50b image, USB	The customers do not have a upgraded

stopped working	configuration no longer works.	backup image. This is where upgradetool runs from. They will need a 2 stage upgrade.
<b>230</b> Customer servswitchdxs product name is incorrect	Should be CustomerLink servswitchdxs	Fixed - svn 6764 6765 [ Customer svn 217 ]
<b>232</b> On the Dual Access unit, the maintenance mode screen greys out options that should not be	If you go into the Maintenance mode of the dual access unit by switching switch 2 to on during power up, you are supposed to be able to access the menu items "Configure Network, Reset Configuration and Return to normal mode". These are greyed out incorrectly. [ reported as Customer Mantis # 212 ]	SVN 6767 Corrected the operation of the switches and the menus
<b>233</b> Servswitchdxs - 1600x1200 with USB k/m connection, video cal fails if Video plus Mouse selected	But it doesn't seem to fail if the video cal and mouse cal are selected separately Seems to be a bit intermittent. [ reported as Customer mantis # 211]	Mostly fixed in svn 6800 (hw/VideoCapture.cxx). The problem is that even with carefully chosen fifo partitioning the VCMD memory fifos can overflow in the 1600x1200x16bpp screen mode. This will be partially dependent on memory usage by the processor, but the critical moments are during the bottom line of each row of tiles (when pixels and signatures are both being written out). The partial solution is to increase the tile width to 32 for wide screen modes, thus reducing the number of signatures written.
<b>240</b> SERVSUITCHDXS: If DHCP is enabled USB configuration takes a long time	If DHCP is enabled on the unit then USB configuration takes a long time. This can happen if there is no network cable plugged in or if there is no DHCP server.	This issue has now been solved. The user should be instructed to remove the network cable before configuration. The configuration process will work even if the network cable is plugged in. The time taken to insert the Virtual media will vary if there is