# Release Notes NetBotz® 4.x BotzWare

990-3526Z Release date: October 2022

Release Notes for: NBRK0450 NBWL0355/NBWL0355A NBWL0456/NBWL0456A

NBRK0550 NBWL0356/NBWL0356A NBRK0570 NBWL0455/NBWL0455A

# **Affected Revision Levels**

Component	Version	Details
Advanced View	4.7.2	User Interface Application
BotzWare	4.7.2	BotzWare Application
Wireless: NBWC100U NBWS100T/H NBPD0180	1.1.1 1.1.2 1.1.4	Firmware for the wireless sensor network

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# **Supported Browsers and Platforms**

#### **Browsers**

The Web Client supports the following Web browsers. Other browsers may work but have not been tested.

- Google® Chrome®
- Mozilla<sup>®</sup> Firefox<sup>®</sup>
- Safari<sup>®</sup>

#### **Platforms**

Advanced View is supported on the following Operating System platforms. Advanced View is not supported on mobile devices.

- Red Hat Enterprise Linux (version 7)
- Fedora Linux (version 24)
- Windows<sup>®</sup> 10
- Windows 8
- Windows Server 2012 and 2016

New Features Top 1

#### Advanced View v4.7.2 and BotzWare v4.7.2

This release addresses the following security vulnerabilities:

- CVE-2022-43376 Reflected cross-site scripting
- CVE-2022-43377 No rate limiting
- CVE-2022-43378 Clickjacking

Per industry standard, the generated self-signed certificate now has a lifespan of 398 days, and the Subject Alternative Name (SAN) field has been added. When the certificate expires, a new one can be generated by temporarily changing the hostname and then changing it back.

# Wireless (NBWC100U v1.1.1, NBWS100T/H v1.1.2, NBPD0180 v1.1.4)

None - same as the previous release

Fixed Issues Top 1

# **Advanced View 4.7.2**

None

#### BotzWare 4.7.2

None

# Wireless (NBWC100U v1.1.1, NBWS100T/H v1.1.2, NBPD0180 v1.1.4)

None - same as the previous release

Known Issues

1. Sensor values for Power - Bank 1 and Power - Bank 2 do not appear in Advanced View for some Rack PDUs, however, the values do appear in Data Center Expert.

- 2. In some versions of Firefox, the Camera view in the web UI flickers.
- 3. **To upgrade the Advanced View user interface on Windows 10, you must be an administrator**. Right-click the Advanced View icon and select **Run as Administrator**, then perform the upgrade normally. If you download the executable file directly from <a href="https://www.apc.com">www.apc.com</a>, right-click install.exe and select **Run as Administrator**, then perform the upgrade normally.
- 4. **Timeout logged for shutdown alert actions:** A timeout is logged when rPDU shutdown and PCNS shutdown alert actions are executed. This response is valid because the equipment that is shut down by these alert actions cannot send a response to the NetBotz appliance.
- 5. **Primary Stream settings for the Pelco Sarix IJP camera:** Primary and secondary stream settings configured in NetBotz Advanced View and StruxureWare Data Center Expert® for the Pelco Sarix IJP camera are not automatically configured on the camera itself. You configure the primary and secondary stream settings on the camera in **Settings > A/V Streams**; select **Custom** and set the **Primary** and **Secondary** streams to match NetBotz Advanced View. **NOTE:** You must set the resolution to 640 x 480.
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- 6. **Motion Masking for the Pelco Sarix JP camera:** Motion masking settings configured on the Pelco Sarix IJP camera are not set correctly in the NetBotz Advanced View. Configure motion masking settings for the Pelco Sarix IJP camera in the Advanced View, not on the camera itself.
- 7. **Motion making for the Pelco Sarix IL10 camera:** Motion masking settings are available in NetBotz Advanced View and StruxureWare Data Center Expert for the Pelco Sarix IL10 camera but are ineffective. Motion masking is not supported for the Pelco Sarix IL10 camera. For masking to work, the settings for both the primary and secondary streams on the Pelco camera must be set to the same value. The values for the video streams on the Pelco Sarix IL10 camera are preset and cannot be changed in the camera's user interface.
- 8. There is no time stamp on images from the Pelco Sarix IL10 camera in Advanced View. The text overlay is off by default on the Pelco Sarix IL10 camera. Configure the Date/Time Overlay and/or Camera Name Overlay settings on the System tab of the camera's user interface.
- 9. **Polling Slave IDs:** Polling more than 4 slave IDs on the same NetBotz appliance at the same time via Modbus TCP causes read errors on the 4th and 5th slave IDs being polled. Poll the slave IDs in a serial loop instead of in parallel.
- 10. **Device Definition Files (DDFs) that exceed 150K are not uploaded to the NetBotz appliance**. Some sensors may not be displayed in the NetBotz Advanced View and web client.
- 11. Pelco Sarix Pro cameras are not supported in any version of BotzWare or Advanced View.
- 12. **Context sensitive help is no longer available in the Advanced View.** You can search the help content installed with the application for a specific topic or go to dcimsupport.apc.com.
- 13. **The Wireless Sensor Pod 180 firmware v1.0.1 cannot be updated via Advanced View 4.5.x or 4.6.x.** If you have updated your appliance and the Advanced View to v4.5.x or 4.6.x, and you have a Wireless Sensor Pod 180 v1.0.1 on your network, call technical support for instructions on updating the sensor firmware to v1.0.5 or higher.
  - NOTE: Later Wireless Sensor Pod 180 firmware can be updated via Advanced View as expected.
- 14. **Pending wireless firmware reported as ff:ff:ff:** The pending firmware version in the Wireless Sensor Setup display can be reported as ff:ff:ff when a wireless device is receiving a firmware update, and the data is interrupted before the transfer completes, or when the device cannot store an update image properly in its flash memory. Reboot the appliance to resolve this issue.
- 15. Wireless SMS message fails to send if the message body contains no text or macros.
- 16. **Wireless coordinator not restarting:** The Coordinator on the wireless sensor network does not restart if any change is made to the commission list while a firmware download from the NetBotz appliance to the Coordinator is in progress. You must reboot the NetBotz appliance to restore communication on the wireless sensor network.

- 17. **Sensor Pod 180s may not rejoin the network after a network restart:** Once the wireless sensor network restarts, Wireless Sensor Pod 180 devices in Router or End Device mode may not rejoin the wireless network if the Received Signal Strength Indicator (RSSI) falls below 20%. Move the affected End Devices and the Router closer together.
- 18. **Remove Sensor Pod 180 coordinators using wireless sensor setup task.** When the Wireless Sensor Pod 180 Coordinator is disconnected from the host NetBotz appliance, the data for the Coordinator is lost, and all the sensors in the wireless network display as offline. To preserve the sensor history for the Routers and End Devices in the wireless network, you must remove the Coordinator using the Wireless Sensor Setup task. See the *Wireless Sensor Pod 180 Installation Guide* on <a href="https://www.apc.com">www.apc.com</a> for more information.
- 19. The Advanced View sensor list does not automatically update when the mode of a Wireless Sensor Pod 180 is changed from End Device to Router, or from Router to End Device. Users must restart the Advanced View or delete the grayed out entry for sensor pods in their original modes.
- 20. **Pelco camera configuration via HTTP on port 80 only:** Pelco camera configuration can only be performed via HTTP on port 80. Camera configuration settings performed on Pelco cameras discovered via HTTPS will not be applied.
- 21. Advanced View can be slow to respond to Pelco camera updates when both surveillance and alert clip capture are in use. It is recommended that users do not use both surveillance and alert clip capture when monitoring the maximum number of cameras.
- 22. **Humidity and Dew Point sensors show as "N/A" on appliance start.**If the humidity is extremely low when the monitoring appliance is started, any attached humidity or dew point sensors will report a value of "N/A". Once the humidity rises to an acceptable value (more than 14 or 15%), the sensors will report normally.
- 23. **Multiple lock/unlock commands within one second can be delayed.**If you issue a lock or unlock command to two locks on the same Rack Access Pod within one second, some commands will be delayed by one minute. To avoid this issue, wait 1-2 seconds between lock or unlock commands to locks on the same Rack Access Pod.
- 24. USB devices not available after reboot: If connected USB devices are not available in Advanced View or Basic View after a restart, power cycle the appliance.
  NOTE: The internal cameras in the NetBotz Room Monitor 455 and the NetBotz Room Monitor 355 are considered to be USB devices.
- 25. **Slave Device Failure error on a pod monitored via Modbus:** This is most commonly due to a sensor with a reading of NA. If this sensor perpetually reports an NA value, it should not be monitored and the register for this sensor should be removed.
  - **NOTE:** The most common occurrence of this is when monitoring Camera Pod 160 devices and a door switch sensor is not connected. By default, all sensors are mapped to a register value as they are discovered. The pod may then be monitored when a slave ID is assigned.
- 26. Motion Mask must match primary stream resolution for Pelco cameras:
  - a. In the AV/Streams tab, select video configuration.
  - b. Go to the primary stream area and select the resolution that matches the resolution shown in the Advanced View camera view.
  - c. Go to the bottom of the Av/Streams page and press save.
- 27. **Non-metric sensor readings could cause inconsistent alert triggering behavior due to rounding.**All sensor readings are processed and stored on the NetBotz appliance in metric units. If you configure your device to report sensor readings in imperial units, some readings are converted from metric units. Rounding occurs during the conversion process and can cause inconsistent alert triggering behavior.

#### 28. Configuring custom analog sensors with small sensor increment values.

A custom analog sensor that uses small sensor value increments may become less accurate due to small fluctuations in the analog readings that are typical for these types of sensors. These fluctuations can cause the following side effects:

- The smaller the sensor increment value, the greater the sensor readings fluctuate. This creates more data points that are stored on the appliance, which consumes more storage space. If you have a custom analog sensor with a small sensor increment value that fluctuates often AND you must capture this data, use an Extended Storage System with the appliance to avoid any performance issues that might occur due to the amount of storage used for the data.
- If your custom sensor fluctuates frequently during normal use, be sure to take those fluctuations into account when configuring thresholds for the sensor. Failure to do so can result in the sensor transitioning in and out of an alert state, triggering many alert notifications and overloading the appliance. When creating alert thresholds for custom analog sensors with small sensor increment values, use the Above Value for Time and Below Value for Time threshold types to prevent the sensor readings from frequently triggering alerts.
- 29. External storage with NAS and unstable network connections: Appliance Restart Behavior.

  Appliances that use NAS and that are connected to unstable or unreliable networks may be prone to restarting more often than appliances that do not use NAS. External Storage with NAS is dependent on network connectivity. An appliance using NAS for External Storage automatically restarts when the network connection is lost. After restarting, the appliance tries to re-establish network connectivity. If it cannot re-establish network connectivity, it uses the storage that is integrated with the appliance and generates an alert indicating an External Storage connectivity error. The appliance continues to try to re-establish the NAS connection at five-minute intervals. Once the NAS connection is available, the appliance automatically restarts again and re-
- 30. External storage with NAS and unstable network connections: Data and Alerts Stored When NAS is Unavailable. If NAS is unavailable, data is stored in the data storage integrated with the appliance. When NAS becomes available, the appliance automatically transfers to the NAS all data stored during the period in which the NAS was unavailable. If the data generated by the appliance during this period exceeds the amount of storage available on the appliance, only the data stored on the appliance at the time the NAS becomes available is saved to the NAS.
- 31. External storage with NAS over a wireless network connection:

initializes the NAS drive once the appliance finishes restarting.

Appliances connected to the network using a wireless network adapter can use External Storage with an NAS successfully. If the appliance begins generating large amounts of data, it is possible to overwhelm the network connection and overload it.

- 32. External storage with NFS NAS: Changing the UID value.
  - When specifying a UID, choose one that will not likely need changing. If you configure External Storage to use an NFS mount and specify a UID and later attempt to change the UID, depending on the permissions of the files written with the first UID configured, the appliance may not be able to access the files written using the first UID.
- 33. External Storage with NFS NAS: DNS problems can cause long timeouts.
  - If your appliance is configured to use an NFS mount and has trouble contacting the DNS server, the timeouts between mount attempts can be five minutes or more per retry. The appliance attempts to mount the NFS mount twice before automatically restarting, causing the appliance restart to take 10 15 minutes or more.
- 34. A long initial device scanner scan cau cause the appliance to become sluggish until complete. You can purchase a license that enables you to use the Device Scanners task to scan up to five devices. The initial scan of each device discovers all variables on the device and writes them to persistent storage on your appliance. This initial scan can take significantly longer than any subsequent scan of a device. The more MIB2 network interfaces and advanced device data obtained from DDFs that each device has, the longer the initial scan takes. If you add many SNMP targets simultaneously, the initial scan of each new device can cause the appliance to become sluggish or temporarily unresponsive. Once the initial scan of these targets is complete, the sluggish performance should cease.
- 35. Advanced View preferences are saved only on clean exit.

If you change any Advanced View preferences or if you Add or Remove appliances from Advanced View, the new settings are not saved unless you exit the application by selecting Exit from the File menu, or by clicking the X in the corner of the window. If the application closes due to an unexpected error or if it is closed automatically as part of an Advanced View upgrade, changes are not saved.

- 36. Problems using the upgrade task to install Advanced View upgrades:
  - In rare cases, Advanced View upgrades that are downloaded to your system using the Upgrade task in Advanced View may fail to launch after download. If this occurs, use the NetBotz Web-based Advanced View upgrade applet to upgrade your Advanced View.
    - a. Go to http://www.apc.com/tools/download/index.cfm, select the appropriate software upgrade and operating system, and click the Submit button.
    - b. Download the appropriate version of Advanced View from the list.
- 37. **Unplugged external temperature sensors and amp detectors report low value threshold alerts.**If you configured your appliance to use a TS100 External Temperature Sensor or an Amp Detector and have the threshold enabled, unplugging the sensor causes the appliance to report the following alerts until the sensor is plugged back in:
  - Low temperature alert
  - Sensor unplugged alert
- 38. Unplugging and reconnecting a USB hub with multiple Output Relay Pod 120s too quickly can cause the appliance to restart. If you have a USB hub connected to your appliance that has four Output Relay Pod 120s connected to the hub and if you disconnect the hub from your appliance, wait at least 30-40 seconds before reconnecting the hub to the appliance. Reconnecting a hub with this many Output Relay Pod 120s can result in an initialization error, causing the appliance to lock up and then restart automatically. The appliance functions normally and properly initializes once it completes the restart process.
- 39. Advanced Scheduling of Periodic Reports: Interval Value Resets at the end of disabled periods. You can define an Advanced Schedule for a periodic report, specifying periods of time during which periodic reports are not sent, overriding your Report Interval settings. The Interval value you specified resets to the time at which the Disabled period in the Advanced Schedule ends. Depending on your Advanced Schedule and Periodic Report Interval settings, this can cause periodic reports to be delivered at unexpected times. For example, you configured your appliance to deliver a Periodic E-mail Report once every 6 hours, an Interval of 360 minutes. You configured this report at 12:00 PM, so you receive a report at 6:00 PM, 12:00 AM, 6:00 AM, etc. Later, you configure an Advanced Schedule that disables delivery of this Periodic Report between the hours of 9:00 AM and 5:00 PM. The Interval timer now begins counting out the 360-minute interval at 5:00 PM, the time at which the Periodic Report becomes enabled again. Your next report would be received at 11:00 PM, and then another at 5:00 AM.
- 40. Streaming audio from a busy appliance may result in audio gaps or an error. If you are streaming audio from an appliance that is busy, the audio stream playback might stop and start momentarily. In some cases, you might receive a pop-up error saying that communication with the Camera Pod was interrupted, even though the Camera Pod is responding. If you receive the pop-up notification, click OK to continue. An appliance can become busy when it generates multiple alert notifications that include a lot of images and audio, or it is accessed by multiple Advanced View clients who are streaming audio or viewing images at a high frame rate. The audio stream should become constant once the appliance is less busy.
- 41. **Problems obtaining or maintaining PPP connections:** If you have trouble obtaining or maintaining PPP connectivity for more than about two minutes, you may need to disable lcp echo requests. To determine if this is necessary, look at the syslog. If your syslog includes entries similar to either of the following messages, you should disable lcp echo requests:
  - local2.warn pppd: appear to have received our own echo-reply!
  - local2.info pppd: No response to 4 echo-requests
- 42. **SMS** interrupt during dial-out immediately PPP session fails: If your appliance has a PPP connection established as a result of clicking Dial-Out Immediately, and an alert condition occurs which requires that an SMS alert be sent, the SMS send fails even if you checked Interrupt PPP when an SMS alert occurs. If the PPP connection was established by any means other than clicking Dial-Out Immediately, the connection is interrupted and the SMS send proceeds normally.

- 43. **Output Control: False alarms after restart or disconnecting and then reconnecting a pod.** Depending on your output control configuration, it is possible to generate false alert conditions after restarting your appliance or disconnecting and reconnecting a Power Control Pod or Output Relay Pod 120. If the Switch Initial State of a device connected to a port is the opposite of the default state in which the device automatically starts, the appliance automatically sets the device to the specified Switch Initial State.

  NOTE: There is a brief period where the device is not in the expected state. If you have specified thresholds that generate alerts when the state that is not the expected Switch Initial State is detected, alerts may be
- 44. **Unable to communicate with the appliance using the USB console port**: In the event that you are unable to access the Control Console, you may need to install a serial-to-USB driver. The USB vendor is FTDI. The type of driver is VCP. Please access their website for driver downloads.

generated before the appliance has changed the state of the device to the Switch Initial State.

- 45. **Serial Configuration Utility may discover serial ports which do not physically exist.** When connecting Bluetooth devices to a Microsoft Windows system, virtual serial ports may be created to communicate with these devices. Occasionally, when the devices are disconnected or removed, Windows may not clear the associated registry entries cleanly. As a result, some serial communications applications may still continue to detect these virtual serial ports. The Serial Configuration Utility may also discover these ports and display them in the serial port list. When these ports are scanned for connected NetBotz appliances, they will be skipped and will not cause any problems in communicating with any NetBotz appliances.
- 46. When a user changes any of the SNMPv3 communications parameters on the appliance, attempts to communicate with SNMPv3 under the new parameters are rejected. When making changes to the Authentication Protocol or the Encryption Algorithm settings for the appliance, those changes are recorded but not propagated to the SNMP operating environment until the appliance is rebooted.
- 47. Slowly disconnecting a NBES0301 Fluid Detector (Spot Leak) sensor from a sensor port may result in the removal of the sensor from the system without notification.
- 48. The Web Help does not appear in Firefox.

# Wireless (NBWC100U v1.1.1, NBWS100T/H v1.1.2, NBPD0180 v1.1.4)

None – same as the previous release

# **Miscellaneous**

#### **Recover from a Lost Password**

- 1. Locate the reset switch on the rear of the appliance, to the right of the AC Line Inlet port. Use a thin wire such as a paper clip to press the reset switch for 10 seconds. This causes the system to restart.
- 2. Once the system restarts, log in within two minutes using the default user ID and password.
  - a. For Advanced View, both the user ID and password are apc.
  - b. For the console, the user ID is **root** and the password is **apc**.
  - c. You can view the Web UI without a user name or password, or configure the user name and password for various user accounts through Advanced View. See the *User Guide* on www.apc.com for more information.
- 3. After you log on, change the default password to increase security.

# **Update the Appliance**

You can update the BotzWare on your appliance by using the Upgrade task in the Advanced View. The following software packs can be added to your appliance:

- Advanced Software Pack, which includes the following features:
  - Block out masking for camera images
  - Digitally signed clips
  - Enhanced audio features
  - o Detailed appliance location information
  - o Increased number of definable users and user capabilities

NOTE: These features are standard on the Rack Monitor 570 and 550.

5 Node Scanner/IPMI Pack, which provide IPMI and SNMP scanner integration

When you upgrade your appliance, the connected pods are automatically updated. If your network includes more than one appliance, you must perform the upgrade on all appliances. Valid data is not available during the upgrade.

# **Update the Wireless Sensor Network**

See the *User Guide* on www.apc.com for instructions to upgrade the wireless sensor network.

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