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Technical Reference 51-SZ

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Performing Maintenance Module Operations

Applies to:	SmartZone PViQ Panel Manager Interface Unit
Objective:	The purpose of this TR is to provide instructions for using a PViQ™ Panel Manager's Interface Unit to perform Maintenance Mode operations.

Description

Maintenance Mode is used for initializing and resetting the PViQ Patch Panel. This mode provides the capabilities to perform panel reconfigurations, firmware updates, system level technical functions, and troubleshooting without generating extraneous SNMP traps and patch cord status changes to the SmartZone Software Server from other connected PViQ™ devices in the connectivity zone.

Performing the Procedure

1. Press and hold both buttons on the Panel Manager (PM) Interface Unit for about 5 seconds.
   a. The panel will beep once when the buttons are initially pushed and again after 2 seconds.
   b. After 5 seconds, the Mode LED will blink green, indicating that the panel has recognized the request to enter Maintenance Mode.

NOTE: If the Mode LED does not blink green after 5 seconds:

a) Double check that the Interface Unit is for a PM and not an Expansion Module (EM)
b) Double check that the unit is getting power
c) Double check that the PM module is fully inserted into the PViQ™ Patch Panel

2. Release both buttons simultaneously.

a. The Mode LED will continue to flash for a maximum of another 5 seconds, during which the user can confirm or cancel the Maintenance Mode.

3. To confirm: press and release the left **Confirm** (✓) button, and a beep will follow.
   To cancel: press and release the right **Cancel** (▷) button or avoid pushing any buttons and let the panel simply time out after 5 seconds (the time out will be acknowledged by 3 short beeps).

After confirmation of Maintenance Mode, the PM and all connected EM Interface Unit Mode LEDs will turn off, and the MAC and TRC (Trace) LEDs will turn on. Additionally, all Port LEDs will turn red.

The Maintenance Mode has a default 30-minute time limit before it will attempt to exit. Five minutes before this time limit is reached, the panel will begin producing 2 short beeps every 5 seconds, serving as a pre-timeout warning. At any point after these warnings begin, the Maintenance Mode time can be extended for an additional 30 minutes by pressing and releasing the left (✓) button, acknowledged by a beep to confirm the request.

NOTE: While in Maintenance Mode, the panel may produce a short beep every 15 seconds.
By default, the PM and all connected EM Interface Unit MAC, Trace, and Sys LEDs will turn green while all port LEDs will turn red.

Performing Maintenance Mode Reset Levels:

Eight levels of initialization and resets that can be performed when the PM is in Maintenance Mode:

Level 1 – Reset the PViQ™ Panel host processor (or exit maintenance mode)

Level 2 – Reset all non-host processors

Level 3 – Performs Level 1 and Level 2 resets together

Level 4 – Set IP configuration to DHCP (factory default)

Level 5 – Clear SNMP community string to the factory default

Level 6* – Clear the internal PViQ™ database to the factory default, followed by a Level 3 reset

Level 7* – Reformat the file system and, as a result, the database, followed by a Level 3 reset

Level 8* – Reset firmware image to factory default, followed by a Level 7 reset

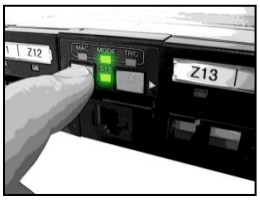
*WARNING: Only qualified technicians should perform these resets. Level 6, 7, and 8 resets will cause the PViQ™ database to be cleared, losing all current configuration, provisioning and patch field connectivity data. A Level 8 reset will clear all data and reset the PViQ™ Panel to the factory image and default database settings. In this scenario, the SmartZone Software will still be able to connect to

the PM using SNMP and/or Telnet. However, firmware updates (in addition to re-provisioning) may be required to regenerate panel data.

1. Press and hold both buttons on the PM Interface Unit for approximately 5 to 40 seconds (depending on desired reset level).
   a. The panel will move through each level of the resets at approximately 5 second intervals. At the end of the initial 5 seconds, the panel will produce a Level 1 reset indication.
   b. If you continue to hold the buttons down for another 5 seconds, a Level 2 reset will be indicated. This sequence can continue until a Level 8 reset is reached, if desired.

Reset Level Indications: As you hold down the buttons on the PM interface unit, each interval will illuminate many green LEDs on each side of the panel, green LED blinks on the Mode LED, and consecutive audio beeps that all correspond to the number of the reset level. For instance, when you reach the Level 1 reset, 1 green LED will light up on each side of the panel (e.g., port 1 and port 24), the Mode LED will provide 1 green blink, and the panel will provide 1 beep. When you reach the Level 2 reset, 2 green LEDs will light up, followed by 2 beeps, etc.

Visual example of a Level 2 Reset – Notice the 2 green LEDs on each side of the panel. This level reset would also be accompanied by 2 Mode LED blinks and 2 beeps.



2. When the desired reset level is reached, release both buttons simultaneously.
   a. The elected reset level indications will continue for approximately 5 additional seconds, during which the user can confirm or cancel the selected reset.
3. **To confirm**: press and release the left **Confirm** (✓) button and a beep will follow.
   To cancel: press and release the right **Cancel** (▷) button **or** avoid pushing any buttons and let the panel simply time out after 5 seconds (the time out will be acknowledged by three short beeps).

After the confirmation, reset level indications will turn off and the system will perform the requested reset. When the requested reset is complete, the panel will automatically exit the Maintenance Mode.

NOTE: Front panel MAC, Trace, and port LEDs will be restored to their original states (off) when the system exits the Maintenance Mode. Port LEDs may flash red should secure violations be present.

End State

You have performed the Maintenance Mode in the PVIQ Panel Manager Interface Unit.