



WGN Restart/Reboot Procedures

This note presents ways to restart or reboot the NV5128, the NV8256, MCPMs, FFCPs, and NV9000 systems.

NV5128

There is no software on the NV5128 that needs to be restarted or rebooted at any regular interval. The NV5128 includes two active *Unicon* controllers. The Unicon devices run in a completely redundant configuration. If an error is detected in the primary controller, the system automatically switches to the secondary controller. Upon a system power cycle, the Unicon card in the primary slot automatically acquires control of the system. During a controller failover, the system retains all crosspoint status, and does not alter the routes in any way.

NV8256

The NV8256 chassis has a controller configuration identical to that of the NV5128. There is no software that needs to be restated or rebooted on a regular interval. Here also, the internal system communication system uses Unicon controllers.

MCPM

Although an MCPM has a layer of software running in it, it is an embedded system and does not require regular system restarts or reboots. If the known sync problem occurs, there are multiple ways to restart the MCPM.

The first method requires the use of an Miranda-approved system reboot tool (a paper clip) that can be inserted in the reset button on the front of the MCPM. That reboot is considered a hard reboot, which while resetting the software layer on the MCPM also forces the MCPM to reload FPGA code and resets numerous other registers and programmable devices.

The second method uses *MasterDiag* software. From within MasterDiag, select the 'Advanced' tab at the top of the window. From there, go to "Reset" and choose either hard or soft reset. A soft reset only restarts the software application on the MCPM.

The third method should only be used as last resort. Physically take the MCPM out of the NV5128 chassis and reinsert it. Because the MCPM is fully hot-swappable, you can do this with the system powered on, but repeated insertions could lead to connector wear and other physical degradation.

During a reboot, the MCPM will start and remain in emergency bypass mode for approximately 30 seconds. It is highly recommended that you switch your programming from the backup switchers during the process. The logo that is stored in position 1 will be retained through a hard reboot, but all other logos must be copied back to the MCPM using the *MasterLogo* application.

FFCP

The FFCP (control panel) runs an embedded operating system that is very reliable, and does not require regular system restarts. If a reboot is deemed necessary, there is two ways to reboot the panel.

The first method: on the panel touchscreen, press the 'Panel' button. From there, press 'Panel Status', then press 'Panel Reboot'. The panel will go down for the reboot.

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The second method: do a full panel shutdown and remove power from the unit. To do this, press the 'Panel' button of the touchscreen, then press 'Panel Status' and then 'Panel Shutdown'. After the panel indicates that it is shut down, you are free to remove and then reapply power.

Rebooting the panel does not affect the status of the MCPM and it does not change how automation controls the system. All current video sources will be preserved. Automation control is preserved. It takes at least 2 minutes for the panel to reboot.

NV9000

The NV9000 uses a custom build of Microsoft Windows XP and is a very stable system. That being said, it is still a Microsoft product and periodic reboot is occasionally needed. You have a redundant NV9000 control system which drastically reduces the impact of a NV9000 reboot. If one NV9000 controller fails, the other controller automatically brings itself online. The main noticeable effect of a system controller failover is that all router control panels will go offline for a few seconds, and then come back up.

Because crosspoint status is preserved during a failover, no routes will change because of the failover. Some stations have taken a proactive stance on NV9000 reboots by rebooting one of the controllers every week. For example, on Monday, they reboot the active primary controller thus forcing a failover, with the secondary controller becoming the active controller. The next Monday, they reboot the secondary controller forcing a failover back to the primary. That method guarantees that every controller gets rebooted every two weeks. Most facilities would find that approach a bit extreme owing to the stability of the system, but I thought it prudent to relay that information to you.

As for doing manual reboots and restarts, it is first good to know the difference between a controller reboot and a restart. A reboot is a full windows shutdown and power-up and takes around 60 seconds. A restart simply restarts the NV9000 control services on the computer, but does not restart the OS. All reset and reboot control is found in the NV9000-SE Utilities program under the 'System Management' side bar. Upon a full system reboot, the NV9000 control services start automatically and require no operator intervention.

If you choose to log into the controller, the username is "envy" and the password is "software."