# A Better Solution for Remote DC Power Control

In any application that includes electronic devices located in remote, off-site equipment cabinets, DC power is usually the obvious solution for powering network elements and other devices at the remote site. The reason for this is simple; in cases where an AC power source is not readily available, you're basically left with the choice of either paying big bucks to run an AC power line all the way out to your remote equipment location or relying on economical, battery-sourced DC power.
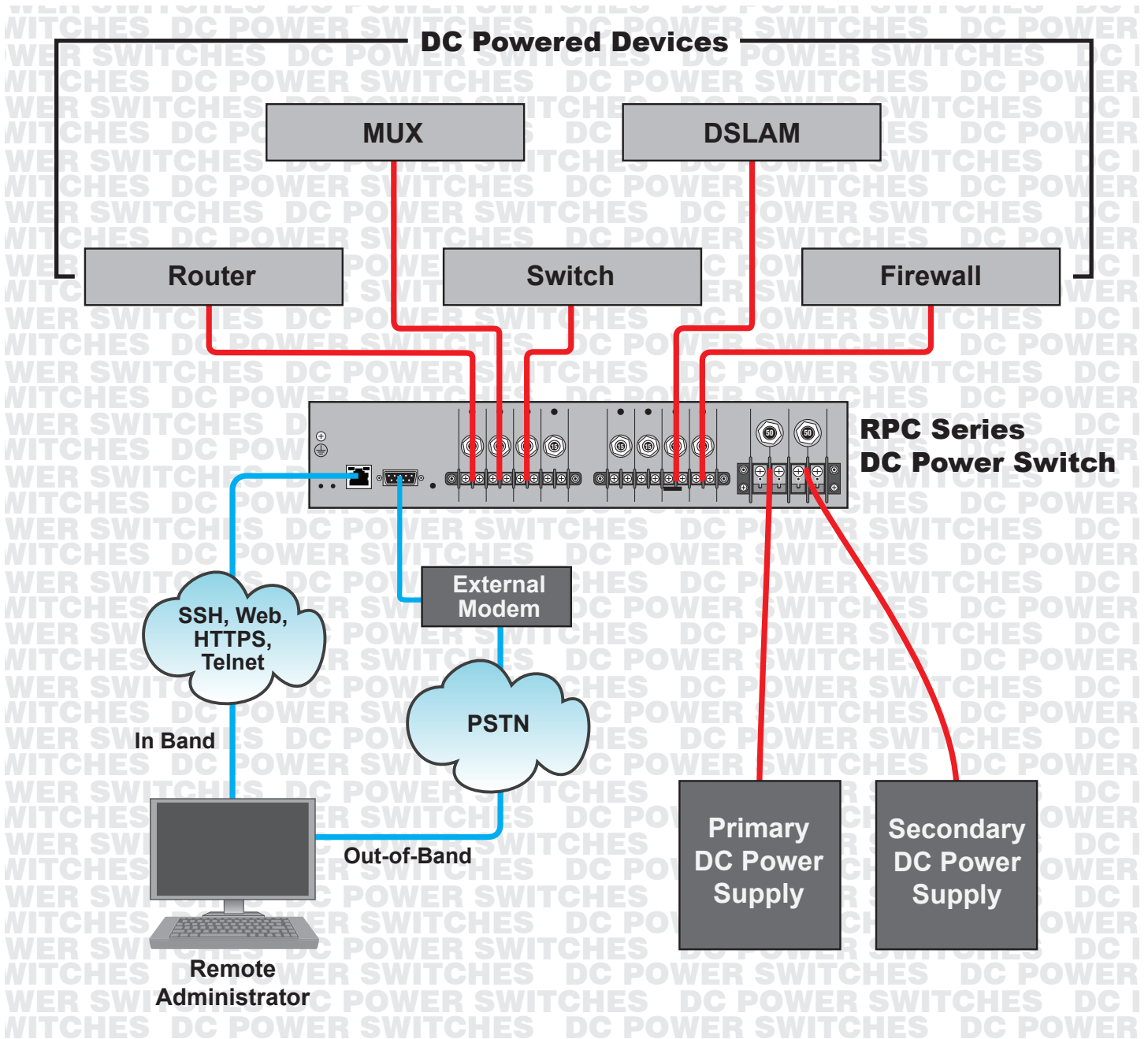
Although DC provides a workable solution for powering network elements and other devices at remote equipment sites, you're still left with the challenge of controlling power switching and reboot functions at the remote site, and the need for constant service calls and road trips every time a device in a distant equipment cabinet needs to be rebooted, taken offline or powered up. When a DC powered electronic device located at a distant network equipment rack or other facility suddenly locks up and refuses to respond, the last thing that network administrators want to do is to take a long drive out to the middle of nowhere, simply to flip a power switch off and on in order to reboot the unresponsive unit. Not only is this type of service call expensive and time consuming, but your entire network is often left hanging, while users wait for tech support personnel to travel to the remote site and initiate a power reboot.

In cases like this, WTI's RPC Series DC Power Switches can provide an ideal solution for controlling reboot and switching functions at remote sites without the need for expensive, time-consuming service calls or a constant human presence at the remote equipment site. When an RPC Series DC Power Switch is installed at the remote site, administrators can easily control reboot and power switching functions remotely via web, SSH or dial-up connection, eliminating the need for constant trips to the remote site in order to perform simple reboot and power switching operations.

In addition to providing remote reboot and power control, RPC DC Power Switches also include a comprehensive assortment of powerful monitoring and alarm features which help administrators to keep track of rack temperatures, communication problems, unresponsive devices, excessive invalid access attempts and other critical factors at the remote site. When the RPC DC Power Switch detects that rack temperatures, invalid access attempts, communication issues or any other monitored factor exceeds user-defined threshold values, the unit can provide notification via SNMP trap, email or SYSLOG message, and also automatically switch user selected DC terminals on or off according to user-defined specifications.

Although the RPC is typically used in a network environment, it also lends itself well to other applications as well, and can often be found providing remote DC power control for public safety equipment, Telco equipment and various radio communication elements.

In order to ensure that access to power switching and reboot functions is well protected from unauthorized access, RPC series DC Power Switches include a formidable array of security features, including IP address filtering, password protection and callback security (for modem communication) as well as support for popular authentication protocols such as LDAP, Kerberos, RADIUS and TACACS+.

Some RPC models include power fallback/redundancy capabilities, allowing the RPC to automatically switch over to a secondary DC power source in the event that the primary DC power source fails or becomes unstable, ensuring constant power for mission critical DC powered equipment. RPC series DC Power Switches are also available in 12V, 24V and 48V DC configurations, and in both 2U and 1U rack mount versions.

Enterprise Management Software Simplifies DC Power Control Operations

Although the task of managing a single DC power switch is fairly simple, it's a much more complex challenge to manage DC power switching in applications that include multiple DC power switches spread throughout a large network infrastructure. In order to simplify the task of finding the desired DC Power Switch in larger scale network applications, all WTI RPC Series DC Power Switches include convenient Enterprise Management Software which provides administrators with a single, centralized interface that can be used to locate and control multiple RPC Power Switches throughout your network.
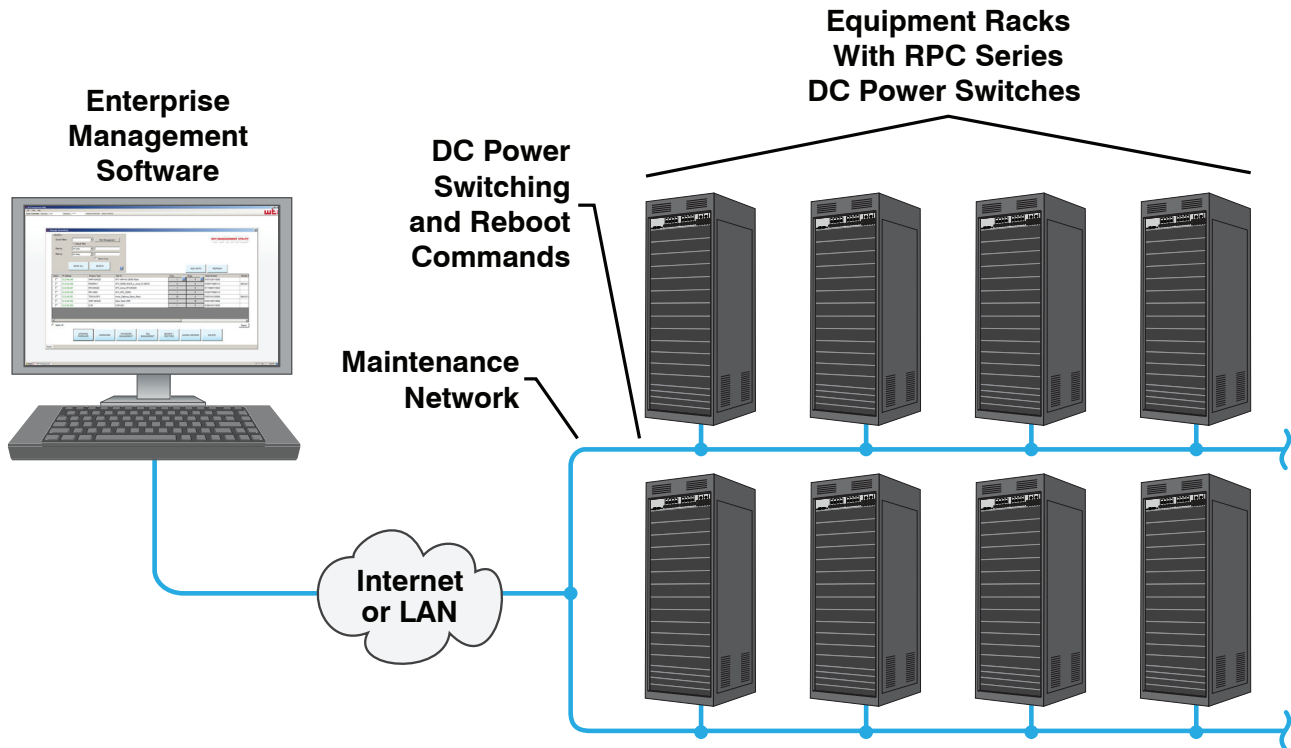
The WMU Enterprise Management Software can search a user-defined IP address range on your network and discover all compatible WTI devices within the range. Discovered devices are then added to the Enterprise Management Software's inventory, allowing administrators to assign a descriptive tag to each DC Power Switch, noting the location or function of each device. In addition to providing a centralized interface for invoking DC power reboot and switching functions, the Enterprise Management Software can also be used to control firmware updates for WTI products and edit and manage user accounts at individual or multiple WTI devices.

Dealing with remote DC powered electronic devices can be both a challenging and time consuming task. When network equipment and other DC powered devices are located at distant, inaccessible locations, even simple tasks, such as initiating a reboot or switching DC power to a device On or Off can result in unexpected expenses and delays, and in some cases, cause your entire operation to grind to a halt while harried tech support personnel are travelling to the remote site in order to correct with the problem. WTI's RPC series DC Power Switches are specifically designed to make life easier for network administrators and tech support personnel by providing a reliable, secure means to control power switching and reboot functions at far-off equipment sites … without the road trips, without the delays and without the extra hassle and expense.