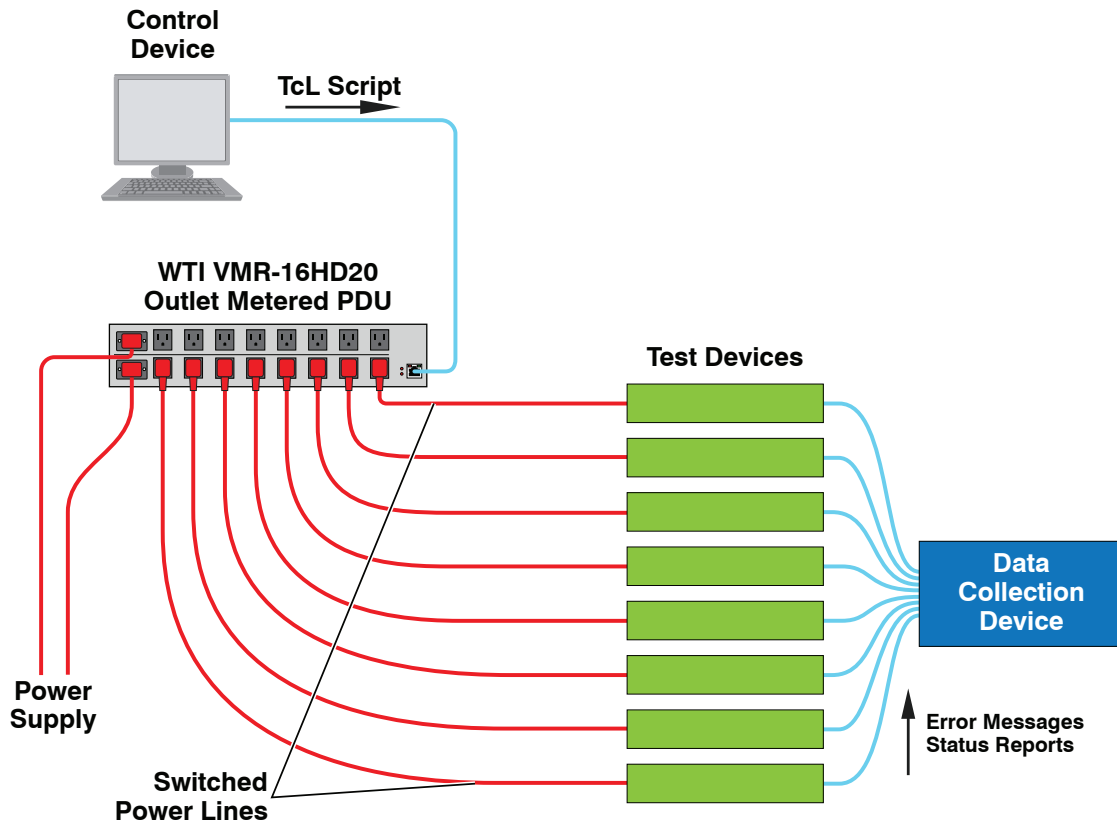




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Repetitive Power On-Off Testing via Tcl Scripts

In addition to providing on-demand power reboot and switching functions, WTI Switched PDU products such as the [VMR-16HD20 Outlet Metered PDU](#) are often used in conjunction with Tcl (Tool Command Language) scripts to automate repetitive power reboot testing procedures. Support for Tcl scripting allows WTI Switched PDU products to serve as an extremely useful tool in test lab applications, particularly in repetitive reboot testing.



Tcl (pronounced “tickle,”) is a scripting language originally intended for embedded development applications, which can also be used to automate simple tasks such as repetitive power reboot testing. When network equipment manufacturers are in the process of developing new products, repetitive reboot testing is performed to both test longevity of power components, and check for device abnormalities that might occur in response to power cycling.

In a typical repetitive reboot testing application, a Tcl script is used to trigger a WTI Switched PDU in order to invoke multiple power reboot cycles. In some cases, a device being tested might be subjected to hundreds of thousands of power reboot cycles during several months of testing. As each power reboot cycle is completed, any error messages and status reports generated by the devices being tested are collected and stored. Later, this data can be reviewed in order to make certain that the device gracefully recovers from each reboot. This allows system developers to perform regression testing on updated or redesigned products and can also be used to both verify durability of power components and check for any problems that might occur during the reboot process.

One obvious benefit to using Tcl scripting in conjunction with a WTI switched PDU, is that it provides a simple, reliable means to invoke repeated reboot cycles without the need for constant operator involvement; the Tcl script drives the WTI Switched PDU to automatically power cycle the test device while error messages and status reports are collected. The advantage of using a Tcl script to drive a WTI Switched PDU during repetitive reboot testing becomes even more obvious when you consider the number of power cycles involved and the duration of most repetitive reboot tests.