

## BASH Bug (a.k.a. 'Shellshock Bug') Vulnerability Tested on Linear eMerge e3-Series

The Bash Bug / Shellshock Bug is a vulnerability that potentially affects most versions of the Linux® and Unix® operating systems and can have an adverse effect on some versions of Linux and UNIX that utilize the Bash programming component.

Linear's e3-Series eMerge system, which utilizes an embedded Linux operating system for its access control system and modules, has been tested for vulnerability and has been determined that it is **not at risk** to the Bash Bug / Shellshock Bug, for the following reasons:

- The e3-Series eMerge runs an embedded version of Linux that **does not** use Bash, but instead uses BusyBox. Devices running BusyBox have been cleared as not vulnerable to the Bash Bug / Shellshock Bug.
- Additionally, Linear has performed tests on its e3-Series eMerge to check for vulnerability to the Bash Bug / Shellshock Bug using a script designed specifically for this purpose by Red Hat® and the test validated that the e3-Series is not susceptible to this bug. (Red Hat is the developer of the Linux open source operating system.)

### Additional Technical Information

Following is a link to script for evaluating Bash Bug / Shellshock Bug vulnerability from Red Hat:

<https://access.redhat.com/articles/1200223>

Additional Information about the Bash Bug / Shellshock bug can be found on Symantec's website. Below are a few excerpts that pertain to the Bash Bug / Shellshock Bug and the Linear E3-Series eMerge Access Control system:

- "The vulnerability affects Bash, a common component known as a shell that appears in many versions of Linux and UNIX. Bash acts as a command language interpreter. In other words, it allows the user to type commands into a simple text-based window, which the operating system will then run."
- "For a successful attack to occur, an attacker needs to force an application to send a malicious environment variable to Bash."
- "...many newer devices run a set of tools called BusyBox which offers an alternative to Bash. Devices running BusyBox are not vulnerable to the Bash Bug."

Reference:

<http://www.symantec.com/connect/blogs/shellshock-all-you-need-know-about-bash-bug-vulnerability>



e3-Series eMerge Access Controller



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