



This letter is being written to provide backup documentation for a Technical Feasibility Exception filing with regard to the RuggedCom products installed in utility substations. This includes the RX1100 and the RX1000 with the ROX (Rugged Operating System on Linux) operating system and the Ethernet Switches and Serial Servers that utilize the ROS (Rugged Operating System) operating system.

The RX1100 and the RX1000 is a substation hardened layer three router that operates using a hardened embedded Debian Linux operating system. This product has advanced security features including IPSEC VPN, stateful firewall, and intrusion detection, but does NOT have anti-virus or malware capabilities.

The switches and serial servers operate using ROS which is an embedded, proprietary operating system. The product has many advanced security features such as RADIUS and TACACS+ authentication, SSL, SSH, IEEE 802.1x port based authentication, MAC address learning, and enabling and disabling ports. The products operating on the ROS operating system as most layer two products do NOT have any anti-virus or malware capabilities.

With the ROX and ROS operating systems being both embedded and "closed source" we do not believe these products are able to be infected with any current viruses or malware and to date no infections have ever been reported.

Daren Hickman

A handwritten signature in black ink that reads 'Daren Hickman'. The signature is fluid and cursive, with the first name 'Daren' being more prominent than the last name 'Hickman'.

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