



ENGINEER CHANGE ORDER (ECO) ANALYSIS FORM

Manufacturer: Election Systems & Software (ES&S)

System: EVS Windows 10 and Server 2016

ECO Number: 1141

ECO Description: Windows 10 and Server 2016 PowerShell Script updates

Overview:

This ECO documents the application of Windows 10 and Server 2016 updates to the Election Management Systems (EMS) that consist of running the following two PowerShell Scripts: Windows_Updates.ps1 and Update-AntiVirus-Definitions.ps1. The reason for the updates is to address the Critical Vulnerability CVE-2021-34527, also known as PrintNightmare, in the Windows Operating System and to ensure EVS systems are running the most up-to-date antivirus definitions.

Systems Affected:

Federal: EVS 6.2.0.0, EVS 6.0.6.0

State: EVS 6.0.7.0, EVS 5.2.4.2, EVS 5.5.0.3

Supporting Documentation:

- ECO 1141 ORIGINAL.docx (*ES&S ECO*)
- ECO1141_EVS5242_Security Update Procedures.pdf (*ES&S Security Update Procedure*)
- ECO1141_EVS5503_Security Update Procedures.pdf (*ES&S Security Update Procedure*)
- ECO1141_EVS6060_Security Update Procedures.pdf (*ES&S Security Update Procedure*)
- ECO1141_EVS6070_Security Update Procedures.pdf (*ES&S Security Update Procedure*)
- ECO1141_EVS6200_Security Update Procedures.pdf (*ES&S Security Update Procedure*)

Supporting Tools:

- ECO-1141.zip (PowerShell script files)

Engineering Recommendation:

Technical documentation review and onsite functional regression/verification performed at ES&S facility by Pro V&V to approve change. Functional regression testing consisted of installing the updates on all of the affected systems and executing/running two System Integration elections; one General and one Primary. The elections were executed on all precinct tabulators, central tabulators, and Universal Voting System devices. Each election's results were brought back into the EMS for reporting verification. Pro V&V determined the updates did not adversely impact system reliability, functionality, capability, or operation. No additional testing required.

Engineering Analysis: De Minimis

Reviewer:

Wendy Owens

Printed Name

Wendy Owens

Signature

05/31/2022

Date

Approver:

Michael Walker

Printed Name

Michael Walker

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05/31/2022

Date