



## CCEVS Approved Assurance Continuity Maintenance Report

Product: Hewlett-Packard Company Network Family with Comware version 5.2 PP

Conformance: Network Device Protection Profile Version 1.1, 8 June 2012

Date of Activity: 11 February 2014

References: Common Criteria Evaluation and Validation Scheme - Assurance Continuity: Guidance for Maintenance and Re-evaluation, Version 2.0, September 8, 2008

Hewlett-Packard Company Network Switches Impact Analysis Report, Revision 3.0, January 24, 2014

Hewlett-Packard Company A-Series Switches Security Target, Version 1.0, April 5, 2013 (*Original*)

Hewlett-Packard Company Network Switches Security Target, Version 1.02, August 16, 2013 (*Updated*)

### I. Introduction

Hewlett-Packard has submitted an Impact Analysis Report (IAR) for Hewlett-Packard Company A-Series Switches to CCEVS for approval. Each of the Network Switch products is a stand-alone Gigabit Ethernet switch appliance designed to implement a wide range of network layers 2 and 3 switching, service and routing operations. The IAR is intended to satisfy requirements outlined in Common Criteria Evaluation and Validation Scheme - Assurance Continuity: Guidance for Maintenance and Re-evaluation, Version 2.0, September 8, 2008. In accordance with those requirements, the IAR describes the changes made to the certified TOE, the evidence updated as a result of the changes, and the security impact of the changes.

### II. Changes to the TOE

Hewlett-Packard has added support for 10 new appliance models and has made a minor revision to the Comware v5.2 software to update the entropy implementation to satisfy NDPP requirements.

1. Added support for the following 10 appliance models:
  - The HP 5500 HI Series Gigabit Ethernet switches
    - HP 5500-24G-4SFP HI Switch with 2 Interface Slots
    - HP 5500-48G-4SFP HI Switch with 2 Interface Slots
    - HP 5500-48G-PoE+-4SFP HI Switch with 2 interface Slots
    - HP 5500-24G-PoE+-4SFP HI Switch with 2 Interface Slots
    - HP 5500-24G-SFP HI Switch with 2 Interface Slots
  - HP 5800AF-48G Switch (added to the existing HP 5800 Series Flex Chassis Switches)
  - HP 5820AF-24XG Switch (added to the existing HP 5820 Series 10-Gigabit Switches)
  - HP 12504 Switch Chassis (added to the existing HP 12500 Series Data Center Switches)
  - HP 12508 Switch Chassis with memory expansion (added to the existing HP 12500 Series Data Center Switches)
  - HP 12518 Switch Chassis with memory expansion (added to the existing HP 12500 Series Data Center Switches)
  
2. The functionality of the new models remains the same with prior models. The code base is common across all product series and the new models use processors in the same families and with the same software images. The primary differences with the added models relate to capacity, speed and performance and are not security relevant in the context of this evaluation. A summary of these differences is provided below.
  - The HP 5500 HI Series Gigabit Ethernet switches are added and while they are a separate series, they are considered to be an upgrade to the previously evaluated HP 5500 EI series. Appendix A provides the comparison between the HP 5500 HI and the HP 5500 EI. The primary difference is that the HP 5500 HI series offers greater speed and capacity.
  - The HP 5800AF-48G Switch is added to the existing HP 5800 Series Flex Chassis Switches with the primary difference being that the HP 5800AF-48G switch offers greater switching capacity.
  - The HP 5820AF-24XG Switch is added to the existing HP 5820 Series 10-Gigabit Switches with the primary difference being that the HP 5820AF-24XG offers greater speed and switching capacity.
  - The HP 12504 Switch Chassis with memory expansion is added to the existing HP 12500 Series Data Center Switches with the primary difference being that the MPU in the HP 12504 switch is updated with more memory.

- The HP 12508 Switch Chassis with memory expansion is added to the existing HP 12500 Series Data Center Switches. This switch is an upgraded version of the previously evaluated HP 12508 switch with the only difference being that the MPU is updated with more memory.
  - The HP 12518 Switch Chassis with memory expansion is added to the existing HP 12500 Series Data Center Switches. This switch is an upgraded version of the previously evaluated HP 12518 switch with the only difference being that the MPU is updated with more memory.
3. Comware 5.2 has been updated at the minor revision level to revise the entropy implementation to meet the NDPP v1.1 requirements. This minor revision does not change the major software version which remains as Comware version 5.2. The entire Comware version number is 5.2.xxx, with 5.2 being the major version number and xxx being the minor number. Each HP product is developed based on one Comware minor version and will use the same minor version code branch unless there are major features added. The minor revision number is not visible to customers who purchase the TOE. The latest version of Comware 5.2 will include all minor version changes to date including any bug fixes reported by customers and HP engineers. Each product has its own 4-digit release number. Every product release is issued together with a 'release note' document. This document will describe the bugs fixed in this release. Customers can read the release notes and contact the HP support team for help with updating the product release. Customers are notified if there are significant or security relevant bug fixes available.
  4. Comware 5.2, including the updated entropy implementation, has been FIPS validated and the new CAVP certificate numbers are included in the updated Security Target.

Hewlett Packard has changed their naming convention by dropping the "A" from their product names. The "HP A-Series switches" are now the "HP Network switches". The Security Target is updated with the new naming convention and the "A" has been removed from all switch model numbers included in this assurance continuity. HP websites and product literature are also being updated.

The ST has changed to reflect the additional models. No change in the operational guidance was required, although references to guidance for the additional models were included in the ST.

### III. Analysis and Testing

The change consists of adding support for 10 new hardware appliance models which do not introduce any security relevant changes, making a minor revision to the entropy implementation in the software, and changing the naming convention. The entropy implementation has been approved by IAD and the software has been further subject to FIPS re-validation. New CAVP certificate numbers are issued which cover

the NDPP testing activity associated with the FCS\_RBG\_EXT.1 requirement, as well as tests associated with the other cryptographic requirements in the ST. Otherwise, HP performed a full regression test of all features of the product including the FIPS and CC relevant features. The evaluation evidence deliverables were primarily updated simply to reflect the addition of the ten models and the new CAVP certificate numbers. Finally, a search was performed in the public domain for any new potential vulnerabilities that may have been identified since the evaluation completed. No potential vulnerabilities were found that might affect any of the security claims.

While the CCTL performed no additional testing on the models, the hardware differences between the added models and the previously-evaluated models was shown to be sufficiently equivalent from a security functionality perspective.

#### IV. Conclusion

Overall, the models added to the evaluated configuration through this IAR are equivalent from a security perspective to those in the original evaluation. There are differences in some of the processors used in the new models; those differences can be obtained on request from Hewlett-Packard Corporation.

The changes to the previously evaluated version of this product are minor, and were determined to be acceptable.