

ASSURANCE CONTINUITY MAINTENANCE REPORT FOR Boeing Secure Network Server (SNS-3010/3110/3210)

Maintenance Report Number: CCEVS-VR-VID10292-2011

Date of Activity:	31 December 2011
References:	Common Criteria Evaluation and Validation Scheme Publication #6 "Assurance Continuity: Guidance for Maintenance and Re-evaluation", 8 September 2008;
	SNS EAL5+ Assurance Continuity Impact Analysis Report (IAR), Boeing Document D950-11204-1, October 6, 2011 (Export Controlled)

Documentation Updated: (List all documentation updated)

Assurance Family	Title	Version	Date
ASE	Boeing Secure Network Server (SNS-3010, SNS-3110, and SNS-3210) Security Target	v2.5, Rev F	1/25/2012
ATE_COV.3	Boeing SNS-3x10 Test Plan and Test Descriptions, SNS – 3010/3110/3210, D658-10977-1	v75	9/18/2011
ATE_DPT.3	Boeing SNS Test Procedures, SNS - 3010/3110/3210, D658-10978-1	Rev C	8/11/2011
ATE_FUN.2	Boeing SNS-3x10 Test Report, SNS – 3010/3110/3210, D658-10979-1_A, B, C (10f3, 20f3, 30f3), Actual Test Results ("AS_RUN")	Rev C	9/29/2011

The table above was completed to reflect the Assurance Family artifacts represented by the document titles shown, by version number and date of creation. These documents provide the evidence of testing and analysis done by the vendor that updated the Apr 18, 2011 EAL 5+ certification awarded for the SNS product. This update was required to bring evaluated SNS component hardware approaching obsolescence and/or curtailed availability to a state where they could be updated to incorporate new parts for longer service life availability to the PoR customer.

These hardware changes/updates reflect updated manufacturing diagrams, which follow vendor Engineering Control Drawings (ECD) configuration control documentation practices, and electrical/electronic Parts Lists for replacement and substitute interchangeability. All parts so incorporated and tested define the authorized for use by certification continuity. These serve to limit the hardware sustainment substitutions that can be done during the operational lifecycle without impacting the EAL 5+ award.

All software changes were done to assure the new parts are able to function as required by the extant SNS Specifications and the entire SNS documentation set delivered for initial evaluation. For this reason there was no change that necessitated core SNS documentation changes for this update. The configuration control processes and records reveal the full scope of software changes made followed the commercial practice introduced during the initial evaluation and identified four changes, two of which addressed the hardware differences that required modification within the SNS applications layer, and one which was an implementation flaw that was discovered and corrected in the initialization code. The last was a change necessitated by the configuration version control

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number update from 3.10.7 to 3.10.8. These software changes followed documented vendor practices and reviews in place and used during the initial evaluation.

Testing addressed the functional interfaces to the new hardware for correct operation, control, and integrity of service continuity for execution conditions and anomaly logging differences. The SNS Test Plan, Test Procedures, and Test Report comprise the core documents that reflect the scope of product documents that required change. No other SNS evaluation documents required change, or were changed. Existing SNS documents referencing version 3.10.7 are unaffected by version 3.10.8 changes.

Approximately 16000 files establish the test configuration environment, execution log files, script files, and performance iteration executions conducted, substantiate the extensive test and analysis done to assure complete and correct results for each of the areas of change.

Assurance Continuity Maintenance Report:

Boeing Corporation, the vendor of the Boeing Secure Network Server, submitted an Impact Analysis Report (IAR) to CCEVS for approval in October 2011. The IAR is intended to satisfy requirements outlined in Common Criteria Evaluation and Validation Scheme Publication #6 "Assurance Continuity: Guidance for Maintenance and Re-evaluation", 8 September 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.

Changes to TOE:

The evaluated SNS version 3.10.7 software has been updated in SNS version 3.10.8 to operate replacement COTS hardware components, while remaining interoperable with backward hardware components in the field. These changes were required to supplement obsolete/soon to be no longer available COTS hardware components; to provide support for dates beyond CY2039; to correct an implementation bug; and to increment the SNS version number. No other changes in hardware or software were made. All changes for software/firmware were deemed to fall outside the scope of security kernel design and formal model purview, and were non-critical by their nature, as well as an opportunity to influence or interact with security code that preserves known and verifiable security states. No developer changes to the development environment have been made. Only automated and semi-automated test script files have been made to improve the end-to-end performance and repeatability of the functional and assurance tests originally conducted on the evaluated TOE prior to certification award on April 18, 2011. The results of the testing on the maintained product have been provided to CCEVS.

Conclusion:

CCEVS reviewed the description of the changes and the analysis of the impact upon security and found the changes to be minor and the changes in this category result in no adverse affect to the assurance baseline. Therefore, CCEVS agrees that the original assurance is maintained for the above-cited version of the product.