National Information Assurance Partnership
Common Criteria Evaluation and Validation Scheme

Validation Report
Cisco Embedded Services 9300 & 3300 Series Switches (ESS9300 & ESS3300)

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1 Executive Summary

This report documents the assessment of the National Information Assurance Partnership (NIAP) validation team of the evaluation of Cisco Embedded Services 9300 & 3300 Series Switches solution provided by Cisco Systems, Inc. It presents the evaluation results, their justifications, and the conformance results. This Validation Report is not an endorsement of the Target of Evaluation by any agency of the U.S. government, and no warranty is either expressed or implied.

The evaluation was performed by the Gossamer Security Solutions (Gossamer) Common Criteria Testing Laboratory (CCTL) in Columbia, MD, United States of America, and was completed in September 2023. The information in this report is largely derived from the Evaluation Technical Report (ETR) and associated test reports, all written by Gossamer Security Solutions. The evaluation determined that the product is both Common Criteria Part 2 Extended and Part 3 Conformant, and meets the assurance requirements of:

- Collaborative Protection Profile for Network Devices, version 2.2e, 23 March 2020 (NDcPP22e)
    - Extended Package MACsec Ethernet Encryption, Version 1.2, 10 May 2016 (MACsecEP12).

The Target of Evaluation (TOE) is the Cisco Embedded Services 9300 & 3300 Series Switches.

The Target of Evaluation (TOE) identified in this Validation Report has been evaluated at a NIAP approved Common Criteria Testing Laboratory using the Common Methodology for IT Security Evaluation (Version 3.1, Rev 5) for conformance to the Common Criteria for IT Security Evaluation (Version 3.1, Rev 5). This Validation Report applies only to the specific version of the TOE as evaluated. The evaluation has been conducted in accordance with the provisions of the NIAP Common Criteria Evaluation and Validation Scheme and the conclusions of the testing laboratory in the evaluation technical report are consistent with the evidence provided.

The validation team monitored the activities of the evaluation team, provided guidance on technical issues and evaluation processes, and reviewed the individual work units and successive versions of the ETR. The validation team found that the evaluation showed that the product satisfies all of the functional requirements and assurance requirements stated in the Security Target (ST). Therefore the validation team concludes that the testing laboratory's findings are accurate, the conclusions justified, and the conformance results are correct. The conclusions of the testing laboratory in the evaluation technical report are consistent with the evidence produced.

The technical information included in this report was obtained from the Cisco Embedded Services 9300 & 3300 Series Switches (ESS9300 & ESS3300) Security Target, Version 0.7, September 29, 2023 and analysis performed by the Validation Team.

2 Identification

The CCEVS is a joint National Security Agency (NSA) and National Institute of Standards and Technology (NIST) effort to establish commercial facilities to perform trusted product evaluations. Under this program, security evaluations are conducted by commercial testing laboratories called Common Criteria Testing Laboratories (CCTLs) using the Common Evaluation Methodology (CEM) in accordance with National Voluntary Laboratory Assessment Program (NVLAP) accreditation.

The NIAP Validation Body assigns Validators to monitor the CCTLs to ensure quality and consistency across evaluations. Developers of information technology products desiring a security evaluation contract with a CCTL and pay a fee for their product's evaluation. Upon successful completion of the evaluation, the product is added to NIAP's Validated Products List.

Table 1 provides information needed to completely identify the product, including:

- The Target of Evaluation (TOE): the fully qualified identifier of the product as evaluated.
- The Security Target (ST), describing the security features, claims, and assurances of the product.
- The conformance result of the evaluation.
- The Protection Profile to which the product is conformant.
- The organizations and individuals participating in the evaluation.

Table 1: Evaluation Identifiers

Item	Identifier
Evaluation Scheme	United States NIAP Common Criteria Evaluation and Validation Scheme
TOE	Cisco Embedded Services 9300 & 3300 Series Switches (Specific models identified in Section 8)
Protection Profile	Collaborative Protection Profile for Network Devices, version 2.2e, 23 March 2020 (NDcPP22e) with the Extended Package MACsec Ethernet Encryption, Version 1.2, 10 May 2016 (MACsecEP12)
ST	Cisco Embedded Services 9300 & 3300 Series Switches (ESS9300 & ESS3300) Security Target, Version 0.7, September 29, 2023
Evaluation Technical Report	Evaluation Technical Report for Cisco Embedded Services 9300 & 3300 Series Switches, version 0.3, September 29, 2023
CC Version	Common Criteria for Information Technology Security Evaluation, Version 3.1, rev 5
Conformance Result	CC Part 2 extended, CC Part 3 conformant
Sponsor	Cisco Systems, Inc.
Developer	Cisco Systems, Inc.
Common Criteria Testing Lab (CCTL)	Gossamer Security Solutions, Inc. Columbia, MD
CCEVS Validators	Jerome Myers, Meredith Martinez, Deron Graves

3 Architectural Information

Note: The following architectural description is based on the description presented in the Security Target.

The Target of Evaluation is the Cisco Embedded Services 9300 and 3300 Series Switches. The TOE are purpose-built, switching platforms that also support MACsec and IPsec encryption.

The TOE is comprised of both software and hardware. The hardware is comprised of an industry standard small form factor cards which provide a compact, module, and customizable solution. The hardware model included in the evaluation is: ESS-3300-NCP, ESS-3300-CON, ESS-3300-24T-NCP, ESS-3300-24T-CON and ESS-9300-10X-E. The software is comprised of the Cisco IOS-XE 17.9.

Cisco IOS-XE software is a Cisco-developed highly configurable proprietary operating system that provides for efficient and effective switching and routing. Although IOS-XE performs many networking functions, this Security Target only addresses the functions that provide for the security of the TOE itself.

3.1 TOE Evaluated Platforms

Detail regarding the evaluated configuration is provided in Section 8 below.

3.2 TOE Architecture

The TOE supports the following hardware, software, and firmware in its environment when the TOE is configured in its evaluated configuration:

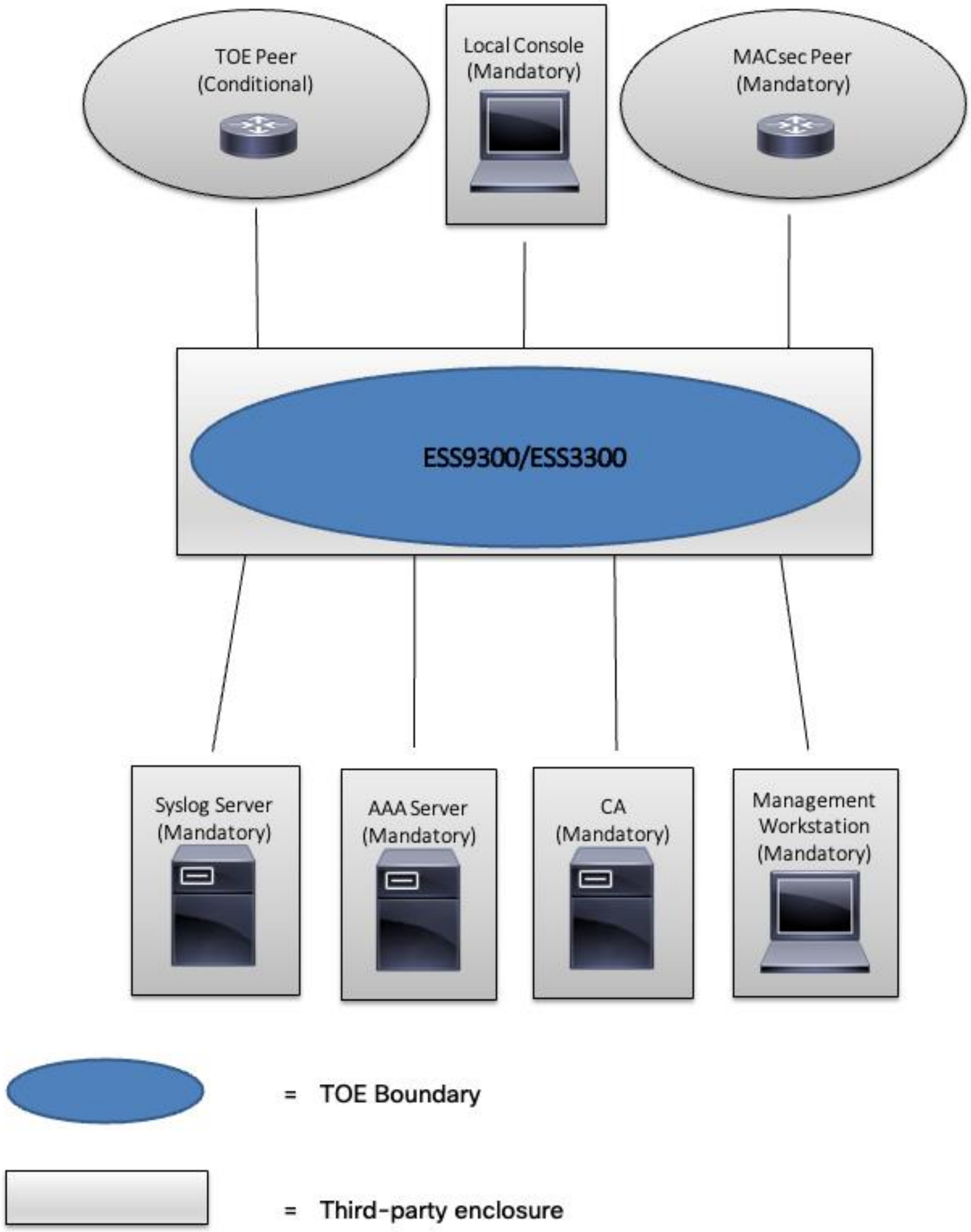
Component	Required	Usage/Purpose Description for TOE performance
RADIUS AAA Server	Yes	This includes any IT environment RADIUS AAA server that provides authentication services to TOE Administrators over a secure IPsec trusted channel either directly or connected to a TOE Peer that also supports a secure IPsec trusted channel.
Management Workstation with SSH Client	Yes	This includes any IT Environment Management workstation with a SSH client installed that is used by the TOE administrator to support TOE administration through SSH protected channels. Any SSH client that supports SSHv2 may be used.
Local Console	Yes	This includes any IT Environment Console that is directly connected to the TOE via the Serial Console Port and is used by the TOE administrator to support TOE administration.

Component	Required	Usage/Purpose Description for TOE performance
Certification Authority (CA)	Yes	This includes any IT Environment Certification Authority on the TOE network. This can be used to provide the TOE with a valid certificate during certificate enrollment.
MACsec Peer	Yes	This includes any MACsec peer with which the TOE participates in MACsec communications. MACsec Peer may be any device that supports MACsec communications.
Audit (syslog) Server	Yes	This includes any syslog server to which the TOE transmits syslog messages over a secure Internet Protocol security (IPsec) trusted channel either directly or connected to a TOE Peer that also supports a secure IPsec trusted channel.
TOE Peer	Conditional	The TOE Peer is required if the remote syslog server and/or the remote authentication server is attached to the TOE Peer and used by the TOE If the remote syslog server and/or the remote authentication server is directly connected to the TOE for the TOE's use, then the TOE Peer is not required.
ESS9300 & ESS3300 Enclosure	Yes	The end user can opt to use an enclosure that accommodates the TOE's size (ESS3300: 3.0 x 3.775 in., ESS9300: 4.3x3.3 in.) and provides no compute capabilities. The TOE functionality is implemented inside the ESS 3300 and 9300 physical chassis, as the chassis includes the underlying board (with or without a cooling plate) and all electronic components attached to it; therefore, no computational capabilities outside of the TOE boundary are required to secure the TOE. During testing, the TOE was enclosed within a Cisco developed hardened enclosure. It is a specially designed enclosure used for Cisco internal testing purposes only. It has no compute capabilities and is not a commercially available product. The enclosure passes network connections directly to the TOE interfaces and does not change or modify TSF functionality. In the evaluated configuration, the enclosures used for testing contain the ESS boards including the integrated multi-pin BTB interface connector with pins dedicated for power input, ethernet ports, and console ports (two combo Gigabit Ethernet WAN ports, four Gigabit Ethernet LAN ports, and one UART RS232 RJ-45 console port). Refer to Section 1.7 for hardware technical guidance on the ESS boards layout and dimensions and Multi-pin BTB Interface Connector description that includes pinout

Component	Required	Usage/Purpose Description for TOE performance
		mapping descriptions for network interfaces and power inputs.

3.3 Physical Boundaries

The image below identifies the TOE boundary in a TOE example deployment.



4 Security Policy

This section summaries the security functionality of the TOE:

1. Security audit
2. Cryptographic support
3. Identification and authentication
4. Security management
5. Protection of the TSF
6. TOE access
7. Trusted path/channels

4.1 Security audit

The TOE provides extensive auditing capabilities. The TOE can audit events related to cryptographic functionality, identification and authentication, and administrative actions. The TOE generates an audit record for each auditable event. Each security relevant audit event has the date, timestamp, event description, and subject identity. The administrator configures auditable events, performs back-up operations, and manages audit data storage. The TOE provides the administrator with a circular audit trail. The TOE is configured to transmit its audit messages to an external syslog server over an encrypted channel.

4.2 Cryptographic support

The TOE provides cryptography in support of other TOE security functionality. All the algorithms claimed have CAVP certificates (Operational Environment – ARM A53). The TOE leverages the IOS Common Cryptographic Module (IC2M) Rel5a. In addition, the ESS3300 supports MACsec using the Broadcom BCM54194 processor and the ESS9300 supports MACsec using the embedded MACsec controller in the ASICs.

The TOE provides cryptographic support for remote administrative management via SSHv2 and IPsec to secure the transmission of audit records to the remote syslog server. In addition, IPsec is used to secure the session between the TOE and the authentication servers.

The TOE authenticates and encrypts packets between itself and a MACsec peer. The MACsec Key Agreement (MKA) Protocol provides the required session keys and manages the required encryption keys to protect data exchanged by the peers.

4.3 Identification and authentication

The TOE performs two types of authentication: device-level authentication of the remote device (TOE peers) and user authentication for the Authorized Administrator of the TOE. Device-level authentication allows the TOE to establish a secure channel with a trusted peer. The secure channel is established only after each device authenticates the other. Device-level authentication is performed via IKE/IPsec mutual authentication. The IKE phase authentication for the IPsec communication channel between the TOE and authentication server and between the TOE and syslog server is considered part of the Identification and Authentication security functionality of the TOE.

The TOE provides authentication services for administrative users to connect to the TOE's secure CLI administrator interface. The TOE requires Authorized Administrators to authenticate prior to being granted access to any of the management functionality. The TOE can be configured to require a minimum password length of 8 characters. The TOE provides administrator authentication against a local user database. Password-based authentication can be performed on the serial console or SSH interfaces. The SSHv2 interface also supports authentication using SSH keys. The TOE supports the use of a RADIUS AAA server (part of the IT Environment) for authentication of administrative users attempting to connect to the TOE's CLI.

The TOE provides an automatic lockout when a user attempts to authenticate and enters invalid information. After a defined number of authentication attempts exceeding the configured allowable attempts, the user is locked out until an authorized administrator can enable the user account.

The TOE uses X.509v3 certificates as defined by RFC 5280 to support authentication for IPsec connections.

4.4 Security management

The TOE provides secure administrative services for management of general TOE configuration and the security functionality provided by the TOE. All TOE administration occurs either through a secure SSHv2 session or via a local console connection. The TOE provides the ability to securely manage:

- Administration of the TOE locally and remotely;
- Configuration of warning and consent access banners;
- Configuration of authentication failures;
- Generate, install, and manage Pre-Shared Key (PSK);
- Manage the Key Server, Connectivity Association Key (CAK) and MKA participants;
- All identification and authentication;
- All audit functionality of the TOE;
- Configuration of the cryptographic functionality of the TOE;
- Configure lockout time interval for excessive authentication failures;
- Update to the TOE and verification of the updates;
- Configuration of IPsec functionality.

The TOE supports two separate administrator roles: non-privileged administrator and privileged administrator. Only the privileged administrator can perform the above security relevant management functions. Management of the TSF data is restricted to Security Administrators. The ability to enable, disable, determine and modify the behavior of all of the security functions of the TOE is restricted to authorized administrators.

Administrators can create configurable login banners to be displayed at time of login, and can also define an inactivity timeout for each admin interface to terminate sessions after a set period of inactivity.

4.5 Protection of the TSF

The TOE protects against interference and tampering by untrusted subjects by implementing identification, authentication, and access controls to limit configuration to Authorized Administrators. The TOE prevents reading of cryptographic keys and passwords. Additionally, Cisco IOS-XE is not a general-purpose operating system and access to Cisco IOS-XE memory space is restricted to only Cisco IOS-XE functions.

The TOE internally maintains the date and time. This date and time is used as the timestamp that is applied to audit records generated by the TOE. Administrators can update the TOE's clock manually. Finally, the TOE performs testing to verify correct operation of the switch itself and that of the cryptographic module.

The TOE is able to verify any software updates prior to the software updates being installed on the TOE to avoid the installation of unauthorized software.

Whenever a failure occurs within the TOE that results in the TOE ceasing operation, the TOE securely disables its interfaces to prevent the unintentional flow of any information to or from the TOE and reloads.

4.6 TOE access

The TOE can terminate inactive sessions after an Authorized Administrator configurable time-period. Once a session has been terminated the TOE requires the user to re-authenticate to establish a new session. Sessions can also be terminated if an Authorized Administrator enters the “exit” command.

The TOE can also display a Security Administrator specified banner on the CLI management interface prior to allowing any administrative access to the TOE.

4.7 Trusted path/channels

The TOE allows trusted paths to be established to itself from remote administrators over SSHv2, and initiates outbound IPsec tunnels to transmit audit messages to remote syslog servers. In addition, IPsec is used to secure the session between the TOE and the authentication servers. The TOE can also establish trusted paths of peer-to-peer IPsec sessions. The peer-to-peer IPsec sessions can be used for securing the communications between the TOE and authentication server/syslog server, as well as to protect communications with a CA or remote administrative console. The TOE also supports MACsec secured trusted channels between itself and MACsec peers.

5 Assumptions & Clarification of Scope

Assumptions

The Security Problem Definition, including the assumptions, may be found in the following documents:

- collaborative Protection Profile for Network Devices, version 2.2e, 23 March 2020 (NDcPP22e)
- Extended Package MACsec Ethernet Encryption, Version 1.2, 10 May 2016 (MACsecEP12)

That information has not been reproduced here and the NDcPP22e/MACsecEP12 should be consulted if there is interest in that material.

The scope of this evaluation was limited to the functionality and assurances covered in the NDcPP22e/MACsecEP12 as described for this TOE in the Security Target. Other functionality included in the product was not assessed as part of this evaluation. All other functionality provided by the devices needs to be assessed separately, and no further conclusions can be drawn about their effectiveness.

Clarification of scope

All evaluations (and all products) have limitations, as well as potential misconceptions that need clarification. This text covers some of the more important limitations and clarifications of this evaluation. Note that:

- As with any evaluation, this evaluation only shows that the evaluated configuration meets the security claims made with a certain level of assurance (the assurance activities specified in the collaborative Protection Profile for Network Devices and the MACsec Extended Package and performed by the evaluation team).
- This evaluation covers only the specific device models and software as identified in this document, and not any earlier or later versions released or in process.
- Apart from the Admin Guide, additional customer documentation for the specific MACsec Ethernet Encryption models was not included in the scope of the evaluation and therefore should not to be relied upon when configuring or operating the device as evaluated.
- This evaluation did not specifically search for, nor attempt to exploit, vulnerabilities that were not “obvious” or vulnerabilities to objectives not claimed in the ST. The CEM defines an “obvious” vulnerability as one that is easily exploited with a minimum of understanding of the TOE, technical sophistication and resources.
- The functionality evaluated is scoped exclusively to the security functional requirements specified in the NDcPP22e/MACsecEP12 and applicable Technical Decisions. Any additional security related functional capabilities of the TOE were not covered by this evaluation. In particular, the functionality mentioned in Section 8.2 of this document is explicitly excluded from the scope of the evaluation.

6 Documentation

The following documents were available with the TOE for evaluation:

- Cisco Embedded Services 3300 Series and 9300 Series Switches (ESS3300 & ESS9300) CC Configuration Guide, Version 0.7, September 29, 2023

Any additional customer documentation provided with the product, or that is available online was not included in the scope of the evaluation and therefore should not to be relied upon when configuring or operating the device as evaluated.

To use the product in the evaluated configuration, the product must be configured as specified in the Guidance Documentation listed above. Consumers are encouraged to download the configuration guides from the NIAP website to ensure the device is configured as evaluated.

7 IT Product Testing

This section describes the testing efforts of the developer and the Evaluation Team. It is derived from information contained in the proprietary Detailed Test Report for Cisco Embedded Services 9300 & 3300 Series Switches, Version 0.3, September 29, 2023 (DTR), as summarized in the evaluation Assurance Activity Report (AAR).

7.1 Developer Testing

No evidence of developer testing is required in the assurance activities for this product.

7.2 Evaluation Team Independent Testing

The evaluation team verified the product according to a Common Criteria Certification document and ran the tests specified in the NDcPP22e/MACsecEP12 including the tests associated with optional requirements. The AAR, in sections 1.1 lists the tested devices, provides a list of test tools, and has diagrams of the test environment.

8 Evaluated Configuration

The evaluated configuration consists of the following models when configured in accordance with the documentation identified in Section 6 of this document:

- ESS-3300-NCP
- ESS-3300-CON
- ESS-3300-24T-NCP
- ESS-3300-24T-CON
- ESS-9300-10X-E

8.2 Excluded Functionality

The following functionality is excluded from the evaluation:

Excluded Functionality	Exclusion Rationale
Non-FIPS 140-2 mode of operation	This mode of operation includes non-FIPS allowed operations.

USB console access	USB console access was not tested. The RS-232 RJ45 console port was used during testing.
USB Host interface for USB Flash Memory Device	USB Host interface for USB Flash Memory Device was not tested and is not required.
Transport Layer Security (TLS)	TLS is not associated with Security Functional Requirements claimed in [NDcPP]. Use tunnelling through IPsec.

These services will be disabled by configuration settings as described in the Guidance documents (AGD). The exclusion of this functionality does not affect compliance to the NDcPP v2.2e and MACsec EP v1.2

9 Results of the Evaluation

The results of the assurance requirements are generally described in this section and are presented in detail in the proprietary ETR. The reader of this document can assume that all assurance activities and work units received a passing verdict.

A verdict for an assurance component is determined by the resulting verdicts assigned to the corresponding evaluator action elements. The evaluation was conducted based upon CC version 3.1 rev 5 and CEM version 3.1 rev 5. The evaluation determined the Cisco Embedded Services 9300 & 3300 Series Switches TOE to be Part 2 extended, and to meet the SARs contained in the NDcPP22e/MACsecEP12.

9.1 Evaluation of the Security Target (ASE)

The evaluation team applied each ASE CEM work unit. The ST evaluation ensured the ST contains a description of the environment in terms of policies and assumptions, a statement of security requirements claimed to be met by the Cisco Embedded Services 9300 & 3300 Series Switches products that are consistent with the Common Criteria, and product security function descriptions that support the requirements.

The validator reviewed the work of the evaluation team, and found that sufficient evidence and justification was provided by the evaluation team to confirm that the evaluation was conducted in accordance with the requirements of the CEM, and that the conclusion reached by the evaluation team was justified.

9.2 Evaluation of the Development (ADV)

The evaluation team applied each ADV CEM work unit. The evaluation team assessed the design documentation and found it adequate to aid in understanding how the TSF provides the security functions. The design documentation consists of a functional specification contained in the Security Target and Guidance documents. Additionally the evaluator performed the assurance activities specified in the NDcPP22e/MACsecEP12 related to the examination of the information contained in the TSS.

The validator reviewed the work of the evaluation team, and found that sufficient evidence and justification was provided by the evaluation team to confirm that the evaluation was conducted in accordance with the requirements of the CEM, and that the conclusion reached by the evaluation team was justified.

9.3 Evaluation of the Guidance Documents (AGD)

The evaluation team applied each AGD CEM work unit. The evaluation team ensured the adequacy of the user guidance in describing how to use the operational TOE. Additionally, the evaluation team ensured the adequacy of the administrator guidance in describing how to securely administer the TOE. All of the guides were assessed during the design and testing phases of the evaluation to ensure they were complete.

The validator reviewed the work of the evaluation team, and found that sufficient evidence and justification was provided by the evaluation team to confirm that the evaluation was conducted in accordance with the requirements of the CEM, and that the conclusion reached by the evaluation team was justified.

9.4 Evaluation of the Life Cycle Support Activities (ALC)

The evaluation team applied each ALC CEM work unit. The evaluation team found that the TOE was identified.

The validator reviewed the work of the evaluation team, and found that sufficient evidence and justification was provided by the evaluation team to confirm that the evaluation was conducted in accordance with the requirements of the CEM, and that the conclusion reached by the evaluation team was justified.

9.5 Evaluation of the Test Documentation and the Test Activity (ATE)

The evaluation team applied each ATE CEM work unit. The evaluation team ran the set of tests specified by the assurance activities in the NDcPP22e/MACsecEP12 and recorded the results in a Test Report, summarized in the AAR.

The validator reviewed the work of the evaluation team, and found that sufficient evidence and justification was provided by the evaluation team to confirm that the evaluation was conducted in accordance with the requirements of the CEM, and that the conclusion reached by the evaluation team was justified.

9.6 Vulnerability Assessment Activity (VAN)

The evaluation team applied each AVA CEM work unit. The vulnerability analysis is in the Detailed Test Report (DTR) prepared by the evaluator. The vulnerability analysis includes a public search for vulnerabilities. The public search for vulnerabilities did not uncover any residual vulnerability.

The evaluator searched the National Vulnerability Database (https://web.nvd.nist.gov/view/vuln/search) and Vulnerability Notes Database (http://www.kb.cert.org/vuls/) on 9/20/2023 with the following search terms: "Cisco IOS XE", "Cisco Embedded Services", "ESS-3300-NCP", "ESS-3300-CON", "ESS-3300-24T-NCP", "ESS-3300-24T-CON", "ESS-9300-10X-E", "Xilinx ZU3EG", "Broadcom BCM54194", "CrayCore", "MSC MACsec", "IOS Common Cryptographic Module", "IC2M".

The validator reviewed the work of the evaluation team, and found that sufficient evidence and justification was provided by the evaluation team to confirm that the evaluation was conducted in accordance with the requirements of the CEM, and that the conclusion reached by the evaluation team was justified.

9.7 Summary of Evaluation Results

The evaluation team's assessment of the evaluation evidence demonstrates that the claims in the ST are met. Additionally, the evaluation team's testing also demonstrated the accuracy of the claims in the ST.

The validation team's assessment of the evidence provided by the evaluation team is that it demonstrates that the evaluation team followed the procedures defined in the CEM, and correctly verified that the product meets the claims in the ST.

10 Validator Comments/Recommendations

The validators have no additional comments. All of the validator concerns are covered elsewhere in this document.

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11 Annexes

Not applicable

12 Security Target

The Security Target is identified as: *Cisco Embedded Services 9300 & 3300 Series Switches (ESS9300 & ESS3300) Security Target, Version 0.7, September 29, 2023*.

13 Glossary

The following definitions are used throughout this document:

- **Common Criteria Testing Laboratory (CCTL)**. An IT security evaluation facility accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) and approved by the CCEVS Validation Body to conduct Common Criteria-based evaluations.
- **Conformance**. The ability to demonstrate in an unambiguous way that a given implementation is correct with respect to the formal model.

- **Evaluation**. The assessment of an IT product against the Common Criteria using the Common Criteria Evaluation Methodology to determine whether or not the claims made are justified; or the assessment of a protection profile against the Common Criteria using the Common Evaluation Methodology to determine if the Profile is complete, consistent, technically sound and hence suitable for use as a statement of requirements for one or more TOEs that may be evaluated.
- **Evaluation Evidence**. Any tangible resource (information) required from the sponsor or developer by the evaluator to perform one or more evaluation activities.
- **Feature.** Part of a product that is either included with the product or can be ordered separately.
- **Target of Evaluation (TOE)**. A group of IT products configured as an IT system, or an IT product, and associated documentation that is the subject of a security evaluation under the CC.
- **Validation**. The process carried out by the CCEVS Validation Body leading to the issue of a Common Criteria certificate.
- **Validation Body**. A governmental organization responsible for carrying out validation and for overseeing the day-to-day operation of the NIAP Common Criteria Evaluation and Validation Scheme.

14 Bibliography

The Validation Team used the following documents to produce this Validation Report:

[1] Common Criteria for Information Technology Security Evaluation: Part 1: Introduction and General Model, Version 3.1, Revision 5, April 2017.

[2] Common Criteria for Information Technology Security Evaluation Part 2: Security functional components, Version 3.1, Revision 5, April 2017.

[3] Common Criteria for Information Technology Security Evaluation Part 3: Security assurance components, Version 3.1 Revision 5, April 2017.

[4] collaborative Protection Profile for Network Devices, version 2.2e, 23 March 2020 (NDcPP22e).

[5] Extended Package MACsec Ethernet Encryption, Version 1.2, 10 May 2016 (MACsecEP12).

[6] Cisco Embedded Services 9300 & 3300 Series Switches (ESS9300 & ESS3300) Security Target, Version 0.7, September 29, 2023 (ST).

[7] Assurance Activity Report for Cisco Embedded Services 9300 & 3300 Series Switches, Version 0.3, September 29, 2023 (AAR).

[8] Detailed Test Report for Cisco Embedded Services 9300 & 3300 Series Switches, Version 0.3, September 29, 2023 (DTR).

[9] Evaluation Technical Report for Cisco Embedded Services 9300 & 3300 Series Switches, Version 0.3, September 29, 2023 (ETR)