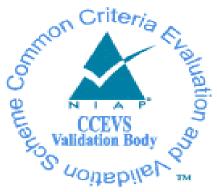
# National Information Assurance Partnership Common Criteria Evaluation and Validation Scheme



# Validation Report

# Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv

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National Institute of Standards and Technology Information Technology Laboratory 100 Bureau Drive Gaithersburg, MD 20899 Department of Defense ATTN: NIAP, Suite 6982 9800 Savage Road Fort Meade, MD 20755-6982

#### ACKNOWLEDGEMENTS

#### **Validation Team**

Sheldon Durrant Randy Heimann Lisa Mitchell Linda Morrison Lori Sarem Chris Thorpe The MITRE Corporation

#### **Common Criteria Testing Laboratory**

Douglas Kalmus Linh Le Gossamer Security Solutions, Inc. Columbia, MD

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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 FTD 7.4 on Firepower 2100 Series with FMC and FMCv solution provided by Cisco Systems, Inc. It presents the evaluation results, their justifications, and the conformance results. This Validation Report (VR) 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 February 2025. 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 the *PP-Configuration for Network Devices, Intrusion Prevention Systems, Stateful Traffic Filter Firewalls, and Virtual Private Network Gateways*, Version 1.2, 18 August 2023 (CFG\_NDcPP-IPS-FW-VPNGW\_v1.2) which includes the Base PP: *collaborative Protection Profile for Network Devices, Version 2.2e*, 23 March 2020 (NDcPP22e) with the *PP-Module for Intrusion Prevention Systems (IPS)*, 1.0, 11 May 2021 (IPS10), the *PP-Module for Stateful Traffic Filter Firewalls*, Version 1.4 + Errata 20200627, 25 June 2020 (STFFW14e), and the *PP-Module for VPN Gateways*, Version 1.3, 25 August 2023 (VPNGW13).

The Target of Evaluation (TOE) is the Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv.

The Target of Evaluation (TOE) identified in this VR 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 VR 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 the functional requirements and assurance requirements stated in the Security Target (ST). 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 FTD v7.4 on Firepower 2100 Series with FMC/FMCv Security Target*, version 1.0, January 30, 2025 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.

Item	Identifier
<b>Evaluation Scheme</b>	United States NIAP Common Criteria Evaluation and Validation Scheme
TOE	Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv (Specific models identified in Section 8)
Protection Profile	<i>PP-Configuration for Network Devices, Intrusion Prevention Systems, Stateful Traffic Filter Firewalls, and Virtual Private Network Gateways,</i> Version 1.2, 18 August 2023 (CFG_NDcPP-IPS-FW-VPNGW_v1.2) which includes the Base PP: <i>collaborative Protection Profile for Network Devices,</i> Version 2.2e, 23 March 2020 (NDcPP22e) with the <i>PP-Module for Intrusion Prevention Systems (IPS),</i> 1.0, 11 May 2021 (IPS10), the <i>PP-Module for Stateful Traffic Filter Firewalls,</i> Version 1.4 + Errata 20200627, 25 June 2020 (STFFW14e), and the <i>PP-Module for VPN Gateways,</i> Version 1.3, 25 August 2023 (VPNGW13)
ST	<i>Cisco FTD v7.4 on Firepower 2100 Series with FMC/FMCv Security Target,</i> version 1.0, January 30, 2025
Evaluation Technical Report	Evaluation Technical Report for Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv, version 0.3, February 24, 2025
CC Version	Common Criteria for Information Technology Security Evaluation, Version 3.1, rev 5
<b>Conformance Result</b>	CC Part 2 extended, CC Part 3 conformant

#### Table 1: Evaluation Identifiers

Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv

Item	Identifier
Sponsor	Cisco Systems, Inc.
Developer	Cisco Systems, Inc.
Common Criteria Testing Lab (CCTL)	Gossamer Security Solutions, Inc. Columbia, MD
<b>CCEVS Validators</b>	The MITRE Corporation

## **3** Architectural Information

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

The Cisco Firepower 2100 Series Appliances are purpose-built, firewall platforms with VPN capabilities and Intrusion Prevention capabilities provided by Firepower Threat Defense (FTD) software. The Firewall Management Center (FMC) physical and virtual appliances provide a centralized management console and event database for the FTD, and aggregates and correlates intrusion, discovery, and connection data from the FTD. In this deployment, the FTD provides VPN, firewall filtering, network analysis, intrusion detection and access control functionalities. The TOE includes one or more Firepower 2100 Series appliances running FTD that are centrally managed by a Firewall Management Center (FMC) appliance, and together they form the TOE (Distributed TOE Use Case 3).

## **3.1 TOE Description**

The TOE is comprised of both software and hardware. The TOE appliances are comprised of the following: Firepower 2100 Series (2110, 2120, 2130, 2140) and Firewall Management Center (FMC) (FMC1600, FMC2600, FMC4600, FMC1700, FMC2700, FMC4700 and FMCv). The software is comprised of the FTD software image Release 7.4 and FMC (or FMCv) version 7.4.

## **3.2 TOE Evaluated Platforms**

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

#### **3.3 TOE Architecture**

The TOE consists of hardware and software that provide connectivity and security services onto multiple secure devices.

For firewall service, the TOE provides application-aware stateful packet filtering firewalls. A stateful packet filtering firewall controls the flow of IP traffic by matching information contained in the headers of connection-oriented or connection-less IP packets against a set of rules specified by the authorized administrator for firewalls. This header information includes source and destination host (IP) addresses, source and destination port numbers, and the transport service application protocol (TSAP) held within the data field of the IP packet. Depending upon the rule and the results of the match, the firewall either passes or drops the packet. The stateful firewall remembers the state of the connection from information gleaned from prior packets flowing on the connection and uses it to regulate current packets. The packet will be denied if the security policy is violated.

In addition to IP header information, the TOE mediates information flows on the basis of other information, such as the direction (incoming or outgoing) of the packet on any given firewall network interface. For connection-oriented transport services, the firewall either permits connections and subsequent packets for the connection or denies the connection and subsequent packets associated with the connection.

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The application-inspection capabilities automate the network to treat traffic according to detailed policies based not only on port, state, and addressing information, but also on application information buried deep within the packet header. By comparing this deep-packet inspection information with corporate policies, the firewall will allow or block certain traffic. For example, it will automatically drop application traffic attempting to gain entry to the network through an open port-even if it appears to be legitimate at the user and connection levels-if a business's corporate policy prohibits that application type from being on the network.

The TOE provides intrusion prevention system (IPS) capabilities by combining the security of a Next Generation IPS (NGIPS) with the power of access control, malware protection, and URL/IP filtering (Block List/Do Not Block List) known as Security Intelligence. The TOE monitors incoming and outgoing network traffic and performs real-time traffic analysis and logging using the industry-leading Snort® engine. All packets on the monitored network are scanned, decoded, preprocessed and compared against a set of rules to determine whether inappropriate traffic, such as system attacks, is being sent over the network. The system generates alerts or blocks the traffic when deviations of the expected network behavior are detected or when there is a match to a known attack pattern.

The TOE also provides IPsec connection capabilities. All references within this ST to "VPN" connectivity refer to the use of IPsec tunnels to secure connectivity to and/or from the TOE, for example, gateway-to-gateway1 VPN or remote access VPN.

## **3.4 Physical Boundaries**

The TOE is a hardware and software solution comprised of the components described in Section 8 below.

<sup>&</sup>lt;sup>1</sup> This is also known as site-to-site or peer-to-peer VPN.

## 4 Security Policy

This section summarizes the security functionality of the TOE:

- 1. Security audit
- 2. Communication
- 3. Cryptographic support
- 4. User data protection
- 5. Identification and authentication
- 6. Security management
- 7. Protection of the TSF
- 8. TOE access
- 9. Trusted path/channels
- 10. Filtering
- 11. Intrusion prevention system

## 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. The administrator configures auditable events, performs back-up operations, and manages audit data storage. The TOE provides the administrator with a circular audit trail where the TOE overwrites the oldest audit record with the newest audit record when space is full. Audit logs are backed up over an encrypted channel to an external audit server.

#### 4.2 Communication

The TOE allows authorized administrators to control which FTD device is managed by the FMC. This is performed through a registration process over TLS. The administrator can also de-register a FTD device if he or she wish to no longer manage it through the FMC.

## 4.3 Cryptographic support

The TOE provides cryptography in support of other TOE security functionality. The TOE provides cryptography in support of secure connections using IPsec and TLS, and remote administrative management via SSHv2 and TLS/HTTPS. The cryptographic random bit generators (RBGs) are seeded by an entropy noise source.

## 4.4 User Data Protection

The TOE ensures that all information flows from the TOE do not contain residual information from previous traffic. Packets are padded with zeros. Residual data is never transmitted from the TOE.

## 4.5 Identification and authentication

The TOE performs two types of authentications: device-level authentication of the remote device (VPN peers) and user authentication for the authorized administrator of the TOE or for IPsec VPN clients. 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 X509v3 certificate-based authentication while user-level authentication from IPsec VPN clients uses certificate-based authentication (all IPsec VPN sessions are terminated at the FTD, not the FMC/FMCv).

The TOE provides authentication services for administrative users wishing to connect to the TOEs secure CLI and GUI administrator interfaces. 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 between 1 and 127 characters for FTD and 8 and 127 characters for FMC as well as mandatory password complexity rules. The TOE also implements a lockout mechanism when the number of unsuccessful authentication attempts exceeds the configured threshold.

The TOE provides administrator authentication against a local user database. Password-based authentication can be performed on the serial console or SSH and HTTPS interfaces. The SSHv2 interface also supports authentication using SSH keys.

#### 4.6 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 or TLS/HTTPS session, or via a local console connection. Optionally, the FTD component also supports tunneling the SSH connections in IPsec VPN tunnels (peer-to-peer, or remote VPN client). Management of all security functions can be performed via the FMC/FMCv component of the TOE, while a subset of management functions can be performed on the FTD component. The TOE provides the ability to securely manage all TOE administrative users; all identification and authentication; all audit functionality of the TOE; all TOE cryptographic functionality; the timestamps maintained by the TOE; and the information flows for VPNs. The TOE supports an "authorized administrator" role, which equates to any account authenticated to an administrative interface (CLI or GUI, but not VPN), and possessing sufficient privileges to perform security-relevant administrative actions.

When an administrative session is initially established, the TOE displays an administratorconfigurable warning banner. This is used to provide any information deemed necessary by the administrator. After a configurable period of inactivity, administrative sessions will be terminated, requiring administrators to re-authenticate.

## 4.7 Protection of the TSF

The TOE protects against interference and tampering by untrusted subjects by implementing identification, authentication, and administrator roles to limit configuration to authorized administrators. The TOE prevents reading of cryptographic keys and passwords.

Additionally, the TOE is not a general-purpose operating system and access to the TOE memory space is restricted to only TOE 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 via FMC. Additionally, the TOE performs testing to verify correct operation of the appliance itself and that of the cryptographic module. Whenever any system failures occur within the TOE the TOE will cease operation.

The TOE provides the ability to manually upgrade firmware/software for security administrators. Administrators can query the current executing version of the TOE's firmware/software and the most recently installed version via the FMC Web UI.

## 4.8 TOE access

When an administrative session is initially established, the TOE displays an administratorconfigurable warning banner. This is used to provide any information deemed necessary by the administrator. After a configurable period of inactivity, administrator and VPN client sessions will be terminated, requiring re-authentication. The TOE also supports direct connections from VPN clients, and protects against threats related to those client connections. The TOE disconnects sessions that have been idle too long, and can be configured to deny sessions based on IP, time, and day, and to NAT external IPs of connecting VPN clients to internal network addresses.

## 4.9 Trusted path/channels

The TOE supports establishing trusted paths between itself and remote administrators using SSHv2 for CLI access on the FTD and FMC and TLS/HTTPS for web UI access on the FMC. The TOE supports use of TLS and/or IPsec for connections with remote syslog servers. The TOE can establish trusted paths of peer-to-peer VPN tunnels using IPsec, and VPN client tunnels using IPsec. Note that the VPN client is in the operational environment.

## 4.10 Filtering

The TOE provides stateful traffic firewall functionality including IP address-based filtering (for IPv4 and IPv6) to address the issues associated with unauthorized disclosure of information, inappropriate access to services, misuse of services, disruption or denial of services, and network-based reconnaissance. Address filtering can be configured to restrict the flow of network traffic between protected networks and other attached networks based on source and/or destination IP addresses. Port filtering can be configured to restrict the flow of network traffic between protected networks and other attached networks based on the originating (source)

and/or receiving (destination) port (service). Stateful packet inspection is used to aid in the performance of packet flow through the TOE and to ensure that only packets are only forwarded when they're part of a properly established session. The TOE supports protocols that can spawn additional sessions in accordance with the protocol RFCs where a new connection will be implicitly permitted when properly initiated by an explicitly permitted session. The File Transfer Protocol is an example of such a protocol, where a data connection is created as needed in response to an explicitly allowed command connection. System monitoring functionality includes the ability to generate audit messages for any explicitly defined (permitted or denied) traffic flow. TOE administrators have the ability to configure permitted and denied traffic flows, including adjusting the sequence in which flow control rules will be applied, and to apply rules to any network interface of the TOE.

The TOE also provides packet filtering and secure IPsec tunneling. The tunnels can be established between two trusted VPN peers as well as between remote VPN clients and the TOE. More accurately, these tunnels are sets of security associations (SAs). The SAs define the protocols and algorithms to be applied to sensitive packets and specify the keying material to be used. SAs are unidirectional and are established per the ESP security protocol. An authorized administrator can define the traffic that needs to be protected via IPsec by configuring access lists (permit, deny, log) and applying these access lists to interfaces using VPN policies.

## **4.11 Intrusion preventions system**

The TOE provides intrusion policies consisting of rules and configurations invoked by the access control policy. The intrusion policies are the last line of defense before the traffic is allowed to its destination. All traffic permitted by the access control policy is then inspected by the designated intrusion policy. Using intrusion rules and other preprocessor settings, these policies inspect traffic for security violations and, in inline deployments, can block or alter malicious traffic.

If the vendor-provided intrusion policies do not fully address the security needs of the organization, custom policies can improve the performance of the system in the environment and can provide a focused view of the malicious traffic and policy violations occurring on the network. By creating and tuning custom policies, the administrators can configure, at a very granular level, how the system processes and inspects the traffic on the network for intrusions.

Using Security Intelligence, the administrators can blocklist—deny traffic to and from—specific IP addresses, URLs, and DNS domain names, before the traffic is subjected to analysis by the access control rules. Optionally, the administrators can use a "monitor-only" setting for Security Intelligence filtering.

## 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)
- *PP-Module for Intrusion Prevention Systems (IPS)*, 1.0, 11 May 2021 (IPS10)
- *PP-Module for Stateful Traffic Filter Firewalls*, Version 1.4 + Errata 20200627, 25 June 2020 (STFFW14e)
- *PP-Module for VPN Gateways*, Version 1.3, 25 August 2023 (VPNGW13)

That information has not been reproduced here and the NDcPP22e/IPS10/STFFW14e/ VPNGW13 should be consulted if there is interest in that material.

#### Clarification of scope

The scope of this evaluation was limited to the functionality and assurances covered in the NDcPP22e/IPS10/STFFW14e/VPNGW13 as described for this TOE in the ST. 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.

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 with the Firewalls and VPN Gateways Modules 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 Firewall, VPN Gateway, Router models was not included in the scope of the evaluation and 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/STFFW14e/VPNGW13 and applicable Technical Decisions. Any additional security related functional capabilities of the TOE were not covered by this evaluation.

## 6 **Documentation**

The following documents were available with the TOE for evaluation:

- Cisco FTD v7.4 with FMC/FMCv Common Criteria Supplement User Guide, Version 1.0, January 22, 2025
- Cisco FTD v7.4 with FMC/FMCv Common Criteria Supplemental User Guide & VPN Functionality, Version 0.4, November 22, 2024

Any additional customer documentation provided with the product, or that is available online, was not included in the scope of the evaluation and should not 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 FTD 7.4 on Firepower 2100 Series with FMC and FMCv, Version 0.3, February 24, 2025 (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/STFFW14e/VPNGW13 including the tests associated with optional requirements. The Independent Testing activity is documented in the AAR, which is publicly available, and is not duplicated here.

## 8 **TOE Evaluated Configuration**

#### **8.1** Evaluated Configuration

The TOE consists of at least one Cisco Firepower device (Firepower 2100 series) running the FTD software and one or more physical FMC devices running the FMC software or virtual devices running FMCv software. The TOE includes the following models:

Model	Software Version
2110	FTD v7.4
2120	
2130	

Model	Software Version
2140	
FMC1600	FMC v7.4
FMC1700	
FMC2600	
FMC2700	
FMC4600	
FMC4700	
FMCv running on ESXi 7.0 on	FMCv v7.4
the Unified Computing System	
(UCS) UCSC-C220-M5,	
UCSC-C240-M5, UCSC-	
C480-M5, UCSC-C220-M6,	
UCSC-C225-M6, UCSC-	
C240-M6, UCSC-C220-M7,	
UCSC-C240-M7and UCS-	
E1100D-M6	

## 8.2 Excluded Functionality

The following functionality is excluded from the evaluation.

Excluded Functionality	Exclusion Rationale
Telnet for management purposes	Telnet passes authentication credentials in clear text and is disabled by default.
Firepower Device Manager (FDM)	Firepower Device Manager is a web-based local manager. Use of FDM is beyond the scope of this Common Criteria evaluation.
Filtering of non-IP traffic provided by the EtherType option when configuring information flow policies is excluded from the evaluated configuration	Use of non-IP traffic filtering is beyond the scope of this Common Criteria evaluation.
Smart Call Home. The Smart Call Home feature provides personalized, e-mail-based and web- based notification to customers about critical events involving their individual systems.	Use of Smart Call Home is beyond the scope of this Common Criteria evaluation.
Root Shell Access	The root shell access is only allowed for pre- operational installation, configuration, and post- operational maintenance and troubling shooting.
Timeout Exemption Option	The use of the "Exempt from Browser Session Timeout" setting is not permitted. This allows a

	user to be exempted from the inactivity timeout feature.
REST API	This feature is not evaluated as part of the evaluation. REST API relies on HTTPS as the underlying communication protocol and can be used to build a management interface. This feature is not tested and is out of scope.
Clustering	This feature is not tested and is out of scope.

The services in the table above are disabled in the evaluated configuration. Any functionality of the TOE that has not been discussed in Section 6 of this document is not included in the evaluation. The exclusion of this functionality does not affect compliance to *collaborative Protection Profile for Network Devices* (cpp\_nd\_v2.2e), *PP-Module for Stateful Traffic Filter Firewalls* (mod\_cpp\_fw\_v1.4e), *PP-Module for Virtual Private Network (VPN) Gateways* (mod\_vpngw\_v1.3) and *PP-Module for Intrusion Protection Systems (IPS)* (MOD\_IPS\_V1.0).

## 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 FTD 7.4 on Firepower 2100 Series with FMC and FMCv TOE to be Part 2 extended, and to meet the SARs contained in the NDcPP22e/IPS10/STFFW14e/VPNGW13.

## **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 FTD 7.4 on Firepower 2100 Series with FMC and FMCv products that are consistent with the Common Criteria, and product security function descriptions that support the requirements.

The validation team 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 ST and Guidance documents. Additionally the evaluator performed the assurance activities specified in the NDcPP22e/STFFW14e/VPNGW13 related to the examination of the information contained in the TSS.

The validation team 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 validation team 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 validation team 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/STFFW14e/VPNGW13 and recorded the results in a Test Report, summarized in the AAR.

The validation team 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 evaluation team searched the following sources:

- National Vulnerability Database (https://web.nvd.nist.gov/view/vuln/search)
- Vulnerability Notes Database (http://www.kb.cert.org/vuls/)
- Rapid7 Vulnerability Database (https://www.rapid7.com/db/vulnerabilities)
- Tipping Point Zero Day Initiative (http://www.zerodayinitiative.com/advisories )
- cve.org CVE Database (https://www.cve.org/),
- Tenable Network Security (http://nessus.org/plugins/index.php?view=search)
- Offensive Security Exploit Database (https://www.exploit-db.com/)

The searches were performed on February 06, 2025 with the following search terms: "ftd 7.4", "FXOS 2.14", "Firepower threat defense", "Firepower management center", "cisco ssl fom", "Virtual fmc fom", "Cisco Security Crypto", "Openssh", "CiscoSSH", "CiscoSSL",

"Snort", "ESXi 7.0", "Intel Xeon Bronze", "Intel Xeon Silver", "Intel Xeon Gold", "Intel Xeon Platinum", "Intel Xeon D", "AMD EPYC", and "Firepower 2100".

The validation team 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 validation team notes that the evaluated configuration is dependent upon the TOE being configured per the evaluated configuration instructions in the *Cisco FTD v7.4 with FMC/FMCv Common Criteria Supplement User Guide*, Version 1.0, January 22, 2025 and the *Cisco FTD v7.4 with FMC/FMCv Common Criteria Supplemental User Guide & VPN Functionality*, Version 0.4, November 22, 2024. As stated in the Clarification of Scope, the evaluated functionality is scoped exclusively to the security functional requirements specified in the ST, and the only evaluated functionality was that which was described by the SFRs claimed in the ST. All other functionality provided by the TOE needs to be assessed separately and no further conclusions can be drawn about its effectiveness.

Consumers employing the TOE must follow the configuration instructions provided in the Configuration Guidance documentation listed in Section 6 to ensure the evaluated configuration is established and maintained. It is important to note the excluded functionality listed in Section 8.2 and follow the configuration instructions to ensure that this functionality is disabled.

Evaluation activities are strictly bound by the assurance activities described in the NDcPP22e/IPS10/STFFW14e/VPNGW13 and accompanying Supporting Documents. Consumers and integrators of this TOE are advised to understand the inherent limitations of these activities and take additional measures as needed to ensure proper TOE behavior when integrated into an operational environment.

## 11 Annexes

Not applicable

# 12 Security Target

The Security Target is identified as: Cisco FTD v7.4 on Firepower 2100 Series with FMC/FMCv Security Target, Version 1.0, January 30, 2025.

## 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 VR:

- [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] *PP-Module for Intrusion Prevention Systems (IPS)*, 1.0, 11 May 2021 (IPS10).
- [6] *PP-Module for Stateful Traffic Filter Firewalls*, Version 1.4 + Errata 20200627, 25 June 2020 (STFFW14e).
- [7] *PP-Module for VPN Gateways*, Version 1.3, 25 August 2023 (VPNGW13).
- [8] *Cisco FTD v7.4 on Firepower 2100 Series with FMC/FMCv Security Target*, Version 1.0, January 30, 2025 (ST).
- [9] Assurance Activity Report for Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv, Version 0.2, February 6, 2025 (AAR).
- [10] Detailed Test Report for Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv, Version 0.3, February 24, 2025 (DTR).
- [11] Evaluation Technical Report for Cisco FTD 7.4 on Firepower 2100 Series with FMC and FMCv, Version 0.3, February 24, 2025 (ETR).
- [12] *Cisco FTD v7.4 with FMC/FMCv Common Criteria Supplement User Guide*, Version 1.0, January 22, 2025 (AGD1).
- [13] Cisco FTD v7.4 with FMC/FMCv Common Criteria Supplemental User Guide & VPN Functionality, Version 0.4, November 22, 2024 (AGD2).

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