

Mapping Between

PP-Module for Voice/Video over IP (VVoIP) Endpoints, Version 1.0, 2020-10-28

and

NIST SP 800-53 Revision 5

Important Caveats

- **Product vs. System.** The Common Criteria is designed for the evaluation of products; the Risk Management Framework (NIST SP 800-37 Revision 2, DOD 8510.01) and associated control/control interpretations (NIST SP 800-53 Revision 5, CNSSI № 1253) are used for the assessment and authorization of mission systems. **Products cannot satisfy controls outside of the system context.** Products may support a system satisfying particular controls, but typically satisfaction also requires the implementation of operational procedures; further, given that systems are typically the product of integration of multiple products configured to meet mission requirements, an overall system assessment is required to determine if the control is satisfied in the overall system context.
- **SA-4(7).** Perhaps it is needless to say, but satisfaction of any NIAP PP or PP-Configuration supports system satisfaction of SA-4(7), which is the implementation of CNSSP № 11.
- **TSF vs TOE platform.** Several SFRs in this PP-Module permit the TOE to rely on platform-provided mechanisms rather than its own capabilities to implement some functions. In particular, a software VVoIP application may rely on its underlying OS platform to support the generation and external storage of audit events rather than implementing those functions within the application itself. In this case, it must be assumed that the underlying OS platform is the component responsible for satisfying the underlying security controls for the relevant SFR claims. SFRs that this applies to are marked with an asterisk (*).
- **System context of supported controls.** For a conformant TOE to support these controls in the context of an information system, the selections and assignments completed in the TOE's Security Target must be congruent with those made for the supported controls. For example, the TOE's ability to generate audit records only supports AU-2 to the extent that the TOE's audit records are included in the set of "organization-defined auditable events" assigned by that control. The security control assessor must compare the TOE's functional claims to the behavior required for the system to determine the extent to which the applicable controls are supported.
- **PP-Module.** A TOE that conforms to this PP-Module will also conform to either the collaborative Protection Profile for Network Devices (NDcPP) or the Protection Profile for Application Software (App PP) by definition. Therefore, the TOE will satisfy additional security controls not referenced here through its conformance to either of these PPs. This PP-Module refines some of the NDcPP or App PP requirements (depending on which is claimed) to ensure consistency between the PPs and the PP-Module, but this does not affect the security controls that satisfying those requirements is intended to address.

Common Criteria Version 3.x SFR		NIST SP 800-53 Revision 5 Control Supports		Comments and Observations
TOE Security Functional Requirements				
FCO_VOC_EXT.1	<u>Fixed-Rate Vocoder</u>	SC-8	Transmission Confidentiality and Integrity	A conformant TOE supports this control by implementing a fixed rate vocoder, which reduces the risk that encrypted transmission data can be compromised over a side channel.
FDP_IFC.1	<u>Subset Information Flow Control</u>	AC-4	Information Flow Enforcement	A conformant TOE supports this control by implementing a flow control policy that determines when the TOE will and will not transmit data.
FDP_IFF.1	<u>Simple Security Attributes</u>	AC-4	Information Flow Enforcement	This SFR identifies the specific flow control rules the TOE must follow to determine when it should transmit data, in support of this control.
FMT_SMF.1/VVoIP	<u>Specification of Management Functions (VVoIP Communications)</u>	CM-6	Configuration Settings	In general, a conformant TOE will satisfy this control to the extent that the TOE provides a method to configure its behavior in accordance with organizational requirements. Specific additional controls may be supported depending on the functionality claimed by the TOE.
FTA_SSL.3/Media	<u>TSF-Initiated Termination (Media Channel)</u>	AC-12	Session Termination	A conformant TOE supports this control by automatically terminating idle sessions.
FTP_ITC.1/Control	<u>Inter-TSF Trusted Channel (Signaling Channel)</u>	IA-3(1)	Device Identification and Authentication: Cryptographic Bidirectional Authentication	A conformant TOE supports this control by implementing mutually-authenticated TLS as part of securing signaling channel communications.
		SC-8	Transmission Confidentiality and Integrity	A conformant TOE has the ability to ensure the confidentiality and integrity of information transmitted

Common Criteria Version 3.x SFR		NIST SP 800-53 Revision 5 Control Supports		Comments and Observations
				between the TOE and another trusted IT product.
		SC-8(1)	Transmission Confidentiality and Integrity: Cryptographic Protection	The TOE supports a cryptographic method of protecting data in transit.
FTP_ITC.1/Media	<u>Inter-TSF Trusted Channel (Media Channel)</u>	IA-3(1)	Device Identification and Authentication: Cryptographic Bidirectional Authentication	A conformant TOE supports this control by implementing mutually-authenticated TLS as part of securing media channel communications.
		SC-8	Transmission Confidentiality and Integrity	A conformant TOE has the ability to ensure the confidentiality and integrity of information transmitted between the TOE and another trusted IT product.
		SC-8(1)	Transmission Confidentiality and Integrity: Cryptographic Protection	The TOE supports a cryptographic method of protecting data in transit.
Optional Requirements				
Strictly Optional Requirements				
FAU_GEN.1/CS-Admin*	<u>Audit Data Generation (Client-Server Admin Events)</u>	AU-2	Event Logging	A conformant TOE has the ability to generate audit records for various events. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-3	Content of Audit Records	A conformant TOE will ensure that audit records include date, type, outcome, and subject identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's

Common Criteria Version 3.x SFR		NIST SP 800-53 Revision 5 Control Supports		Comments and Observations
				audit log is part of the overall system's auditing.
		AU-3(1)	Content of Audit Records: Additional Audit Information	A conformant TOE will ensure that audit records include date, type, outcome, and subject identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-12	Audit Record Generation	A conformant TOE has the ability to generate audit logs. The TOE supports the enforcement of parts (a) and (c) of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing. Part (b) is not satisfied by a conformant TOE because the PP-Module does not define functionality to suppress/enable the generation of specific audit records (which would typically be expressed in CC as FAU_SEL.1).
FAU_GEN.1/CS-VVoIP*	<u>Audit Data Generation (Client-Server VVoIP Events)</u>	AU-2	Event Logging	A conformant TOE has the ability to generate audit records for various events. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-3	Content of Audit Records	A conformant TOE will ensure that audit records include date, type, outcome, and subject

Common Criteria Version 3.x SFR		NIST SP 800-53 Revision 5 Control Supports		Comments and Observations
				identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-3(1)	Content of Audit Records: Additional Audit Information	A conformant TOE will ensure that audit records include date, type, outcome, and subject identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-12	Audit Record Generation	A conformant TOE has the ability to generate audit logs. The TOE supports the enforcement of parts (a) and (c) of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing. Part (b) is not satisfied by a conformant TOE because the PP-Module does not define functionality to suppress or enable the generation of specific audit records (which would typically be expressed in CC as FAU_SEL.1).
Implementation-Dependent Requirements				
FAU_STG_EXT.1*	<u>Protected Audit Event Storage</u>	AU-4	Audit Log Storage Capacity	A conformant TOE allocates some amount of local storage for audit data. It can be used to support the enforcement of this control if the amount of storage is consistent with the

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				assignment chosen for the control.
		AU-4(1)	Audit Log Storage Capacity: Transfer to Alternate Storage	A conformant TOE has the ability to logically transmit audit data to a location in its Operational Environment. While this SFR requires the TSF to store generated audit data on the TOE, a minimum storage size or retention period is not specified. Therefore, a TOE may support the enforcement of this control if the local storage of audit data is limited or transitory.
		AU-5	Response to Audit Logging Process Failures	A conformant TOE has the ability to react in a specific manner when the allocated audit storage space is full. Depending on the actions taken by the TOE when this occurs and on the assignments chosen for this control, the TOE can be used to support the enforcement of either or both parts of the control.
		AU-5(2)	Response to Audit Logging Process Failures: Real-Time Alerts	A conformant TOE has the ability to react in a specific manner when the allocated audit storage space is full. A conformant TOE may support the enforcement of this control, depending on the behavior specified in the ST and the assignments chosen for this control.
		AU-5(4)	Response to Audit Logging Process Failures: Shutdown on Failure	A conformant TOE has the ability to react in a specific manner when the allocated audit storage space is full. A conformant TOE may support the enforcement of this control by shutting down if audit records cannot be generated, depending on the behavior specified in the ST and the

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				assignments chosen for this control.
		AU-9	Protection of Audit Information	A conformant TOE has the ability to prevent unauthorized modification and deletion of audit records by exporting copies of these records to an external server.
		AU-9(2)	Protection of Audit Information: Store on Separate Physical Systems or Components	A conformant TOE must be able to transmit audit data to a logically remote location. It can be used to support the enforcement of this control if the recipient of the audit data is physically remote from the TOE.
Objective Requirements				
This PP-Module has no objective requirements.				
Selection-Based Requirements				
FAU_GEN.1/P2P-Admin*	<u>Audit Data Generation (Peer-to-Peer Admin Events)</u>	AU-2	Event Logging	A conformant TOE has the ability to generate audit records for various events. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-3	Content of Audit Records	A conformant TOE will ensure that audit records include date, type, outcome, and subject identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-3(1)	Content of Audit Records: Additional Audit Information	A conformant TOE will ensure that audit records include date, type, outcome, and subject

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				identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-12	Audit Record Generation	A conformant TOE has the ability to generate audit logs. The TOE supports the enforcement of parts (a) and (c) of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing. Part (b) is not satisfied by a conformant TOE because the PP-Module does not define functionality to suppress or enable the generation of specific audit records (which would typically be expressed in CC as FAU_SEL.1).
FAU_GEN.1/P2P-VVoIP*	<u>Audit Data Generation (Peer-to-Peer VVoIP Events)</u>	AU-2	Event Logging	A conformant TOE has the ability to generate audit records for various events. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-3	Content of Audit Records	A conformant TOE will ensure that audit records include date, type, outcome, and subject identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the

Common Criteria Version 3.x SFR		NIST SP 800-53 Revision 5 Control Supports		Comments and Observations
				control and if the TOE's audit log is part of the overall system's auditing.
		AU-3(1)	Content of Audit Records: Additional Audit Information	A conformant TOE will ensure that audit records include date, type, outcome, and subject identity data. The TOE supports the enforcement of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing.
		AU-12	Audit Record Generation	A conformant TOE has the ability to generate audit logs. The TOE supports the enforcement of parts (a) and (c) of the control if its auditable events are consistent with the assignments chosen for the control and if the TOE's audit log is part of the overall system's auditing. Part (b) is not satisfied by a conformant TOE because the PP-Module does not define functionality to suppress or enable the generation of specific audit records (which would typically be expressed in CC as FAU_SEL.1).
FCS_COP.1/SRTP	<u>Cryptographic Operation (Encryption/Decryption for SRTP)</u>	SC-13	Cryptographic Protection	A conformant TOE has the ability to perform symmetric encryption and decryption using NSA-approved and FIPS-validated algorithms.
FCS_SRTP_EXT.1	<u>Secure Real-Time Transport Protocol</u>	SC-8	Transmission Confidentiality and Integrity	A conformant TOE supports this control by implementing SRTP as a mechanism to protect data in transit.
		SC-8(1)	Transmission Confidentiality and Integrity:	A conformant TOE supports this control because SRTP uses cryptographic

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			Cryptographic Protection	mechanisms to protect data in transit.
FDP_IFC.1/CallControl	<u>Subset Information Flow Control (for Call Control)</u>	AC-4	Information Flow Enforcement	A conformant TOE supports this control by implementing a flow control policy that determines when the TOE will and will not transmit data.
FDP_IFF.1/CallControl	<u>Simple Security Attributes (for Call Control)</u>	AC-4	Information Flow Enforcement	This SFR identifies the specific flow control rules the TOE must follow to determine when it should transmit data, in support of this control.
FPT_STM_EXT.1/VVoIP	<u>Reliable Time Stamps (VVoIP Communications)</u>	AU-8	Time Stamps	A conformant TOE can use time stamps to address the actions defined in this control.
		SC-45(1)	System Time Synchronization: Synchronization with Authoritative Time Source	A conformant TOE synchronizes with an NTP server in its operational environment, satisfying this control.