

NIST IR 8477-Based Set Theory Relationship Mapping (STRM)

Reference document: Secure Controls Framework (SCF) version 2026.1
STRM Guidance: <https://securecontrolsframework.com/start-here/set-theory-relationship-mapping-strm/>

Focal Document:
Focal Document URL:
Published STRM URL:

UL 2900-2-2 (2016)
<https://webstore.ansi.org/standards/ul/2900e2016-1660595>
<https://content.securecontrolsframework.com/strm/scf-strm-general-ul-2900-2-2-2016.pdf>

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Security Controls Framework (SCF) Control Description	Strength of Relationship	Notes
1	Scope	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
2	Normative References	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
3	Glossary	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
4	Product Documentation	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
4.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
5	Product Design Documentation	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
5.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
6	Documentation for Product Use	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
6.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
7	General	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
7.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
8	Access Control, User Authentication and User Authorization	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
8.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
8.2	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
8.3	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Operating Environment Certification	EMB-14	Mechanisms exist to determine if embedded technologies are certified for secure use in the proposed operating environment.	5	
8.3	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Safety Assessment	EMB-15	Mechanisms exist to evaluate the safety aspects of embedded technologies via a fault tree analysis, or similar method, to determine possible consequences of misuse, misconfiguration and/or failure.	5	
8.3	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
8.4	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
8.5	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
8.6	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Authenticate, Authorize and Audit (AAA)	IAC-01.2	Mechanisms exist to strictly govern the use of Authenticate, Authorize and Audit (AAA) solutions, both on-premises and those hosted by an External Service Provider (ESP).	5	
8.7	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	5	
8.8	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Re-Authentication	IAC-14	Mechanisms exist to force users and devices to re-authenticate according to organization-defined circumstances that necessitate re-authentication.	8	
8.9	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Authenticator Management	IAC-10	Mechanisms exist to:(1) Securely manage authenticators for users and devices; and(2) Ensure the strength of authentication is appropriate to the classification of the data being accessed.	10	
8.10	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Protection of Authenticators	IAC-10.5	Mechanisms exist to protect authenticators commensurate with the sensitivity of the information to which use of the authenticator permits access.	8	
8.10(a)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
8.10(b)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Trusted Path	END-09	Mechanisms exist to establish a trusted communications path between the user and the security functions of the operating system.	5	
8.11	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Protection of Authenticators	IAC-10.5	Mechanisms exist to protect authenticators commensurate with the sensitivity of the information to which use of the authenticator permits access.	5	
9	Remote Communication	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
9.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
9.2	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Operating Environment Certification	EMB-14	Mechanisms exist to determine if embedded technologies are certified for secure use in the proposed operating environment.	5	
9.2	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Intersects With	Safety Assessment	EMB-15	Mechanisms exist to evaluate the safety aspects of embedded technologies via a fault tree analysis, or similar method, to determine possible consequences of misuse, misconfiguration and/or failure.	5	
9.3	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
9.4	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/2900e2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship	Notes
9.5	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
9.6	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Fail Safe	SEA-07.3	Mechanisms exist to implement fail-safe procedures when failure conditions occur.	5	
10	Cryptography	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
10.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
10.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Use of Cryptographic Controls	CRY-01	Mechanisms exist to facilitate the implementation of cryptographic protections controls using known public standards and trusted cryptographic technologies.	8	
11	Product Management	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
11.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
11.2	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
11.3	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.3(a)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.3(b)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.3(c)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.3(d)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.4	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Software Patch Integrity	VPM-05.8	Mechanisms exist to ensure software and/or firmware patches are:(1) Obtained from trusted sources; and(2) Checked for integrity.	5	
11.4(a)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
11.4(b)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
11.4(c)	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
11.5	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.6	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.7	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
11.8	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Secure Software Development Practices (SSDP)	TDA-06	Mechanisms exist to develop applications based on Secure Software Development Practices (SSDP).	10	
12	Vendor Product Risk Management Process	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
12.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
13	Known Vulnerability Testing	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
13.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
13.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Security, Compliance & Resilience Testing Throughout Development	TDA-09	Mechanisms exist to require system developers/integrators consult with security, compliance and/or resilience personnel to:(1) Create and implement a Security Testing and Evaluation (ST&E) plan, or similar capability;(2) Implement a verifiable flaw remediation process to correct weaknesses and deficiencies identified during the control testing and evaluation process; and(3) Document the results.	8	
14	Malware Testing	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
14.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
14.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malware Testing Prior to Release	TDA-01.3	Mechanisms exist to utilize at least one(1) malware detection tool to identify if any known malware exists in the final binaries of the product or security update.	8	
15	Malformed Input Testing	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
15.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship	Notes
15.1.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
15.1.2	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
15.2	Malformed input test I	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
15.2.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.2.2	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.2.3	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.2.4	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.2.5	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.2.6	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.3	Malformed input test II	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
15.3.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.3.2	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.3.3	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
15.3.4	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Malformed Input Testing	TDA-09.4	Mechanisms exist to utilize testing methods to ensure Technology Assets, Applications and/or Services (TAAS) continue to operate as intended when subject to invalid or unexpected inputs on its interfaces.	5	
16	Structured Penetration Testing	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
16.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
16.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Application Penetration Testing	TDA-09.5	Mechanisms exist to perform application-level penetration testing of customer Technology Assets, Applications and/or Services (TAAS).	5	
16.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Penetration Testing	VPM-07	Mechanisms exist to conduct penetration testing on Technology Assets, Applications and/or Services (TAAS).	5	
17	Software Weakness Analysis	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
17.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
17.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Security, Compliance & Resilience Testing Throughout Development	TDA-09	Mechanisms exist to require system developers/integrators consult with security, compliance and/or resilience personnel to:(1) Create and implement a Security Testing and Evaluation (ST&E) plan, or similar capability;(2) Implement a verifiable flaw remediation process to correct weaknesses and deficiencies identified during the control testing and evaluation process; and(3) Document the results.	8	
18	Static Code Analysis	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
18.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
18.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Static Code Analysis	TDA-09.2	Mechanisms exist to require the developers of Technology Assets, Applications and/or Services (TAAS) to employ static code analysis tools to identify and remediate common flaws and document the results of the analysis.	8	
19	Static Binary and Byte Code Analysis	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	No Relationship	N/A	N/A	N/A	0	No applicable SCF control
19.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Subset Of	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to proactively govern the design, development and production of Technology Assets, Applications and/or Services (TAAS) across the System Development Life Cycle (SDLC) to:(1) Improve functionality;(2) Enhance security and resiliency capabilities;(3) Correct security deficiencies; and(4) Conform with applicable statutory, regulatory and/or contractual obligations.	10	
19.1	N/A	For specific requirement details, buy a licensed copy of the Focal Document at: https://webstore.ansi.org/standards/ul/ul2900ed2016-1660595	Functional	Intersects With	Static Code Analysis	TDA-09.2	Mechanisms exist to require the developers of Technology Assets, Applications and/or Services (TAAS) to employ static code analysis tools to identify and remediate common flaws and document the results of the analysis.	8	