Set Theory Relationship Mapping (STRM)

Reference Document : **Secure Controls Framework (SCF) version 2024.2**
Focal Document: **NIST SP 800-171 R3**
Focal Document URL: **https://csrc.nist.gov/pubs/sp/800/171/r3/final**
STRM URL: **https://content.securecontrolsframework.com/strm/scf-2024-2-nist-800-171-r3.pdf**

Set Theory Relationship Mapping (STRM) is well-suited for mapping between sets of elements that exist in two distinct concepts that are mostly the same as each other (e.g., cybersecurity & data privacy requirements). STRM also allows the strength of the mapping to be captured.

STRM relies on a justification for the relationship claim. There are three (3) options for the rationale, which is a high-level context within which the two concepts are related:

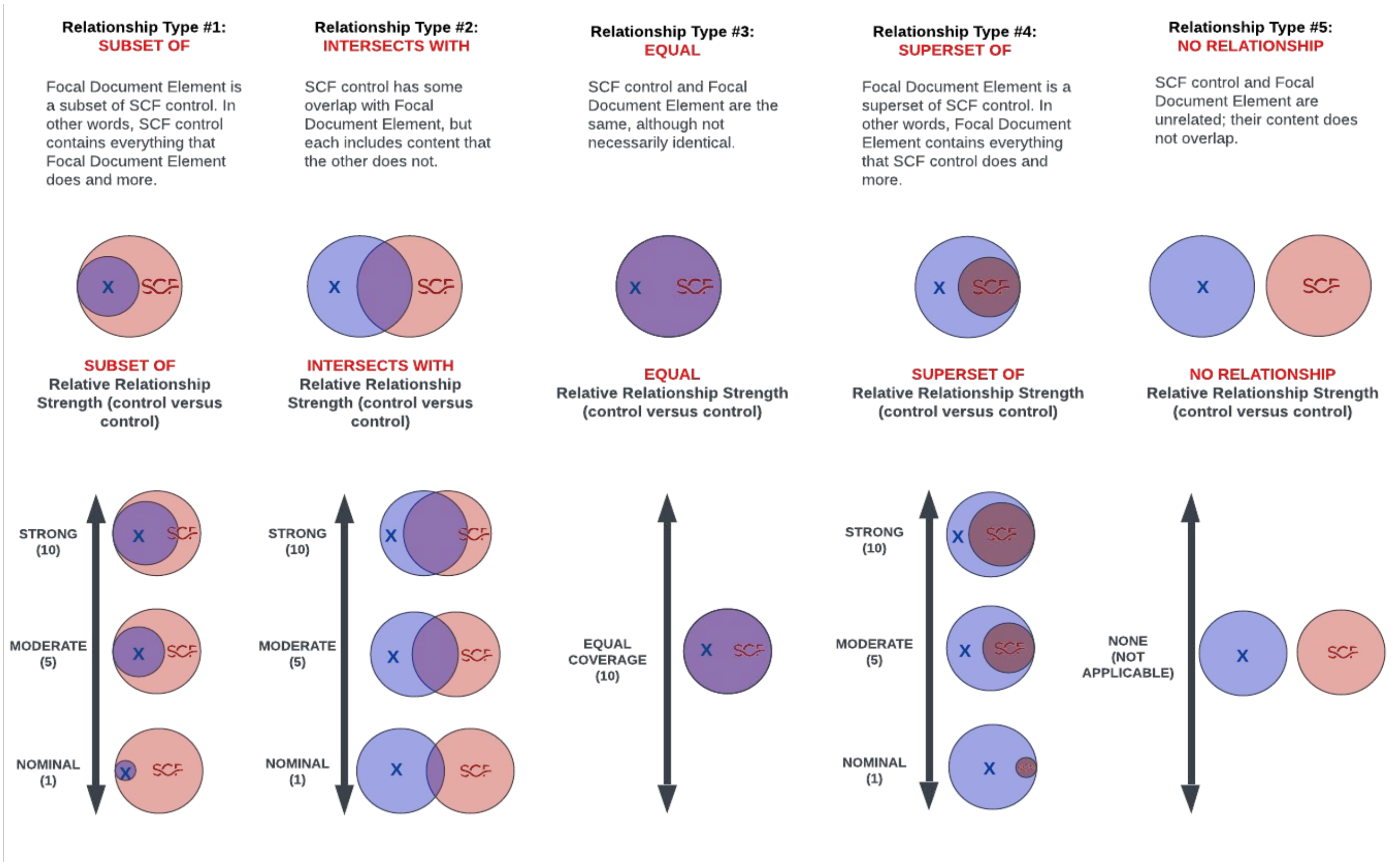
1. **Syntactic**: How similar is the wording that expresses the two concepts? This is a word-for-word analysis of the relationship, not an interpretation of the language.
2. **Semantic**: How similar are the meanings of the two concepts? This involves some interpretation of each concept's language.
3. **Functional**: How similar are the results of executing the two concepts? This involves understanding what will happen if the two concepts are implemented, performed, or otherwise executed.

Based on NIST IR 8477, STRM supports five (5) five relationship types to describe the logical similarity between two distinct concepts:

1. **Subset Of**
2. **Intersects With**
3. **Equal**
4. **Superset Of**
5. **No Relationship**

SCF **Reference Document**

Law, Regulation or Framework **Focal Document**



Relationship Type #1: **SUBSET OF**

Focal Document Element is a subset of SCF control. In other words, SCF control contains everything that Focal Document Element does and more.

SUBSET OF **Relative Relationship Strength (control versus control)**

Relationship Type #2: **INTERSECTS WITH**

SCF control has some overlap with Focal Document Element, but each includes content that the other does not.

INTERSECTS WITH **Relative Relationship Strength (control versus control)**

Relationship Type #3: **EQUAL**

SCF control and Focal Document Element are the same, although not necessarily identical.

EQUAL **Relative Relationship Strength (control versus control)**

Relationship Type #4: **SUPERSET OF**

Focal Document Element is a superset of SCF control. In other words, Focal Document Element contains everything that SCF control does and more.

SUPERSET OF **Relative Relationship Strength (control versus control)**

Relationship Type #5: **NO RELATIONSHIP**

SCF control and Focal Document Element are unrelated; their content does not overlap.

NO RELATIONSHIP **Relative Relationship Strength (control versus 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 (optional)	Notes (optional)
03.01.01	Account Management	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.01.a	Account Management	Define the types of system accounts allowed and prohibited.	Functional	subset of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
03.01.01.b	Account Management	Create, enable, modify, disable, and remove system accounts in accordance with policy, procedures, prerequisites, and criteria.	Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Management Approval For New or Changed Accounts	IAC-28.1	Mechanisms exist to ensure management approvals are required for new accounts or changes in permissions to existing accounts.	5	
03.01.01.c	Account Management	Specify:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.01.c.01	Account Management	Authorized users of the system,	Functional	intersects with	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	5	
			Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Restrictions on Shared Groups / Accounts	IAC-15.5	Mechanisms exist to authorize the use of shared/group accounts only under certain organization-defined conditions.	5	
03.01.01.c.02	Account Management	Group and role membership, and	Functional	intersects with	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	5	
			Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
03.01.01.c.03	Account Management	Access authorizations (i.e., privileges) for each account.	Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	intersects with	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	5	
			Functional	intersects with	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
03.01.01.d	Account Management	Authorize access to the system based on:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.01.d.01	Account Management	A valid access authorization and	Functional	intersects with	Data Protection	DCH-01	Mechanisms exist to facilitate the implementation of data protection controls.	5	
			Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	5	
			Functional	intersects with	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
03.01.01.d.02	Account Management	Intended system usage.	Functional	intersects with	Data Protection	DCH-01	Mechanisms exist to facilitate the implementation of data protection controls.	5	
			Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	5	
			Functional	intersects with	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
03.01.01.e	Account Management	Monitor the use of system accounts.	Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	System Account Reviews	IAC-15.7	Mechanisms exist to review all system accounts and disable any account that cannot be associated with a business process and owner.	5	
			Functional	intersects with	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities.	5	
03.01.01.f	Account Management	Disable system accounts when:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.01.f.01	Account Management	The accounts have expired,	Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
03.01.01.f.02	Account Management	The accounts have been inactive for [Assignment: organization-defined time period],	Functional	intersects with	Disable Inactive Accounts	IAC-15.3	Automated mechanisms exist to disable inactive accounts after an organization-defined time period.	5	
03.01.01.f.03	Account Management	The accounts are no longer associated with a user or individual,	Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
03.01.01.f.04	Account Management	The accounts are in violation of organizational policy, or	Functional	intersects with	Personnel Sanctions	HRS-07	Mechanisms exist to sanction personnel failing to comply with established security policies, standards and procedures.	5	
			Functional	intersects with	Workplace Investigations	HRS-07.1	Mechanisms exist to conduct employee misconduct investigations when there is reasonable assurance that a policy has been violated.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Account Disabling for High Risk Individuals	IAC-15.6	Mechanisms exist to disable accounts immediately upon notification for users posing a significant risk to the organization.	5	
03.01.01.f.05	Account Management	Significant risks associated with individuals are discovered.	Functional	intersects with	Personnel Sanctions	HRS-07	Mechanisms exist to sanction personnel failing to comply with established security policies, standards and procedures.	5	
			Functional	intersects with	Workplace Investigations	HRS-07.1	Mechanisms exist to conduct employee misconduct investigations when there is reasonable assurance that a policy has been violated.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Account Disabling for High Risk Individuals	IAC-15.6	Mechanisms exist to disable accounts immediately upon notification for users posing a significant risk to the organization.	5	
03.01.01.g	Account Management	Notify account managers and designated personnel or roles within:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.01.g.01	Account Management	[Assignment: organization-defined time period] when accounts are no longer required	Functional	intersects with	User Provisioning & De-Provisioning	IAC-07	Mechanisms exist to utilize a formal user registration and de-registration process that governs the assignment of access rights.	8	
			Functional	intersects with	Change of Roles & Duties	IAC-07.1	Mechanisms exist to revoke user access rights following changes in personnel roles and duties, if no longer necessary or permitted.	5	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
		required.	Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
03.01.01.g.02	Account Management	[Assignment: organization-defined time period] when users are terminated or transferred.	Functional	intersects with	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	5	
			Functional	intersects with	Personnel Transfer	HRS-08	Mechanisms exist to adjust logical and physical access authorizations to systems and facilities upon personnel reassignment or transfer, in a timely manner.	3	
			Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	3	
			Functional	intersects with	Automated Employment Status Notifications	HRS-09.4	Automated mechanisms exist to notify Identity and Access Management (IAM) personnel or roles upon termination of an individual employment or contract.	5	
			Functional	intersects with	User Provisioning & De-Provisioning	IAC-07	Mechanisms exist to utilize a formal user registration and de-registration process that governs the assignment of access rights.	8	
			Functional	intersects with	Change of Roles & Duties	IAC-07.1	Mechanisms exist to revoke user access rights following changes in personnel roles and duties, if no longer necessary or permitted.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
03.01.01.g.03	Account Management	[Assignment: organization-defined time period] when system usage or the need-to-know changes for an individual.	Functional	intersects with	User Provisioning & De-Provisioning	IAC-07	Mechanisms exist to utilize a formal user registration and de-registration process that governs the assignment of access rights.	8	
			Functional	intersects with	Change of Roles & Duties	IAC-07.1	Mechanisms exist to revoke user access rights following changes in personnel roles and duties, if no longer necessary or permitted.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Periodic Review of Account Privileges	IAC-17	Mechanisms exist to periodically-review the privileges assigned to individuals and service accounts to validate the need for such privileges and reassign or remove unnecessary privileges, as necessary.	5	
03.01.01.h	Account Management	Require that users log out of the system after [Assignment: organization-defined time period] of expected inactivity or when [Assignment: organization-defined circumstances].	Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			Functional	intersects with	Terms of Employment	HRS-05	Mechanisms exist to require all employees and contractors to apply cybersecurity & data privacy principles in their daily work.	5	
			Functional	intersects with	Use of Communications Technology	HRS-05.3	Mechanisms exist to establish usage restrictions and implementation guidance for communications technologies based on the potential to cause damage to systems, if used maliciously.	5	
03.01.02	Access Enforcement	Enforce approved authorizations for logical access to CUI and system resources in accordance with applicable access control policies.	Functional	intersects with	Sensitive / Regulated Data Access Enforcement	CFG-08	Mechanisms exist to configure systems, applications and processes to restrict access to sensitive/regulated data.	5	
			Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	5	
			Functional	intersects with	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	5	
			Functional	intersects with	Users With Elevated Privileges	HRS-02.1	Mechanisms exist to ensure that every user accessing a system that processes, stores, or transmits sensitive information is cleared and regularly trained to handle the information in question.	5	
			Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	subset of	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	10	
			Functional	intersects with	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	5	
03.01.03	Information Flow Enforcement	Enforce approved authorizations for controlling the flow of CUI within the system and between connected systems.	Functional	intersects with	Asset Governance	AST-01	Mechanisms exist to facilitate an IT Asset Management (ITAM) program to implement and manage asset management controls.	3	
			Functional	intersects with	Asset-Service Dependencies	AST-01.1	Mechanisms exist to identify and assess the security of technology assets that support more than one critical business function.	8	
			Functional	intersects with	Network Diagrams & Data Flow Diagrams (DFDs)	AST-04	Mechanisms exist to maintain network architecture diagrams that: ▪ Contain sufficient detail to assess the security of the network's architecture; ▪ Reflect the current architecture of the network environment; and ▪ Document all sensitive/regulated data flows.	8	
			Functional	intersects with	Compliance-Specific Asset Identification	AST-04.3	Mechanisms exist to create and maintain a current inventory of systems, applications and services that are in scope for statutory, regulatory and/or contractual compliance obligations that provides sufficient detail to determine control applicability, based on asset scope categorization.	8	
			Functional	intersects with	Asset Categorization	AST-31	Mechanisms exist to categorize technology assets.	8	
			Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	8	
			Functional	intersects with	Media Access	DCH-03	Mechanisms exist to control and restrict access to digital and non-digital media to authorized individuals.	5	
			Functional	intersects with	Data Access Mapping	DCH-14.3	Mechanisms exist to leverages a data-specific Access Control List (ACL) or Interconnection Security Agreements (ISAs) to generate a logical map of the parties with whom sensitive/regulated data is shared.	5	
			Functional	subset of	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	10	
			Functional	subset of	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	10	
			Functional	intersects with	Data Flow Enforcement – Access Control Lists (ACLs)	NET-04	Mechanisms exist to design, implement and review firewall and router configurations to restrict connections between untrusted networks and internal systems.	5	
			Functional	intersects with	System Interconnections	NET-05	Mechanisms exist to authorize connections from systems to other systems using Interconnection Security Agreements (ISAs), or similar methods, that document, for each interconnection, the interface characteristics, cybersecurity & data privacy requirements and the nature of the information communicated.	5	
			Functional	intersects with	Internal System Connections	NET-05.2	Mechanisms exist to control internal system connections through authorizing internal connections of systems and documenting, for each internal connection, the interface characteristics, security requirements and the nature of the information communicated.	5	
03.01.04	Separation of Duties	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.04.a	Separation of Duties	Identify the duties of individuals requiring separation.	Functional	intersects with	Separation of Duties (SoD)	HRS-11	Mechanisms exist to implement and maintain Separation of Duties (SoD) to prevent potential inappropriate activity without collusion.	8	
			Functional	intersects with	Incompatible Roles	HRS-12	Mechanisms exist to avoid incompatible development-specific roles through limiting and reviewing developer privileges to change hardware, software and firmware components within a production/operational environment.	8	
03.01.04.b	Separation of Duties	Define system access authorizations to support separation of duties.	Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	8	
			Functional	intersects with	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	5	
			Functional	intersects with	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
03.01.05	Least Privilege	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
			Functional	subset of	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	10	

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03.01.05.a	Least Privilege	Allow only authorized system access for users (or processes acting on behalf of users) that is necessary to accomplish assigned organizational tasks.	Functional	subset of	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	10	
			Functional	equal	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	10	
03.01.05.b	Least Privilege	Authorize access to [Assignment: organization-defined security functions] and [Assignment: organization-defined security-relevant information].	Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	5	
			Functional	equal	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	10	
03.01.05.c	Least Privilege	Review the privileges assigned to roles or classes of users [Assignment: organization-defined frequency] to validate the need for such privileges.	Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	System Account Reviews	IAC-15.7	Mechanisms exist to review all system accounts and disable any account that cannot be associated with a business process and owner.	5	
			Functional	intersects with	Periodic Review of Account Privileges	IAC-17	Mechanisms exist to periodically-review the privileges assigned to individuals and service accounts to validate the need for such privileges and reassign or remove unnecessary privileges, as necessary.	5	
03.01.05.d	Least Privilege	Reassign or remove privileges, as necessary.	Functional	intersects with	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts.	5	
			Functional	intersects with	Periodic Review of Account Privileges	IAC-17	Mechanisms exist to periodically-review the privileges assigned to individuals and service accounts to validate the need for such privileges and reassign or remove unnecessary privileges, as necessary.	5	
03.01.06	Least Privilege – Privileged Accounts	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.06.a	Least Privilege – Privileged Accounts	Restrict privileged accounts on the system to [Assignment: organization-defined personnel or roles]..	Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	intersects with	Privileged Account Management (PAM)	IAC-16	Mechanisms exist to restrict and control privileged access rights for users and services.	5	
			Functional	intersects with	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
			Functional	intersects with	Privileged Accounts	IAC-21.3	Mechanisms exist to restrict the assignment of privileged accounts to organization-defined personnel or roles without management approval.	5	
03.01.06.b	Least Privilege – Privileged Accounts	Require that users (or roles) with privileged accounts use non-privileged accounts when accessing non-security functions or non-security information.	Functional	intersects with	Non-Privileged Access for Non-Security Functions	IAC-21.2	Mechanisms exist to prohibit privileged users from using privileged accounts, while performing non-security functions.	5	
03.01.07	Least Privilege – Privileged Functions	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.07.a	Least Privilege – Privileged Functions	Prevent non-privileged users from executing privileged functions.	Functional	intersects with	Privileged Account Management (PAM)	IAC-16	Mechanisms exist to restrict and control privileged access rights for users and services.	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
			Functional	intersects with	Privileged Accounts	IAC-21.3	Mechanisms exist to restrict the assignment of privileged accounts to organization-defined personnel or roles without management approval.	5	
			Functional	equal	Prohibit Non-Privileged Users from Executing Privileged Functions	IAC-21.5	Mechanisms exist to prevent non-privileged users from executing privileged functions to include disabling, circumventing or altering implemented security safeguards / countermeasures.	10	
03.01.07.b	Least Privilege – Privileged Functions	Log the execution of privileged functions.	Functional	intersects with	Privileged Account Identifiers	IAC-09.5	Mechanisms exist to uniquely manage privileged accounts to identify the account as a privileged user or service.	5	
			Functional	intersects with	Privileged Account Management (PAM)	IAC-16	Mechanisms exist to restrict and control privileged access rights for users and services.	5	
			Functional	intersects with	Auditing Use of Privileged Functions	IAC-21.4	Mechanisms exist to audit the execution of privileged functions.	5	
			Functional	intersects with	Privileged User Oversight	MON-01.15	Mechanisms exist to implement enhanced activity monitoring for privileged users.	5	
			Functional	intersects with	Privileged Functions Logging	MON-03.3	Mechanisms exist to log and review the actions of users and/or services with elevated privileges.	5	
03.01.08	Unsuccessful Logon Attempts	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.08.a	Unsuccessful Logon Attempts	Enforce a limit of [Assignment: organization-defined number] consecutive invalid logon attempts by a user during a [Assignment: organization-defined time period].	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	intersects with	Account Lockout	IAC-22	Mechanisms exist to enforce a limit for consecutive invalid login attempts by a user during an organization-defined time period and automatically locks the account when the maximum number of unsuccessful attempts is exceeded.	5	
03.01.08.b	Unsuccessful Logon Attempts	Automatically [Selection (one or more): lock the account or node for an [Assignment: organization-defined time period]; lock the account or node until released by an administrator; delay next logon prompt; notify system administrator; take other action] when the maximum number of unsuccessful attempts is exceeded.	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	intersects with	Account Lockout	IAC-22	Mechanisms exist to enforce a limit for consecutive invalid login attempts by a user during an organization-defined time period and automatically locks the account when the maximum number of unsuccessful attempts is exceeded.	5	
03.01.09	System Use Notification	Display a system use notification message with privacy and security notices consistent with applicable CUI rules before granting access to the system.	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	subset of	System Use Notification (Logon Banner)	SEA-18	Mechanisms exist to utilize system use notification / logon banners that display an approved system use notification message or banner before granting access to the system that provides cybersecurity & data privacy notices.	10	
			Functional	intersects with	Standardized Microsoft Windows Banner	SEA-18.1	Mechanisms exist to configure Microsoft Windows-based systems to display an approved logon banner before granting access to the system that provides cybersecurity & data privacy notices.	8	
			Functional	intersects with	Truncated Banner	SEA-18.2	Mechanisms exist to utilize a truncated system use notification / logon banner on systems not capable of displaying a logon banner from a centralized source, such as Active Directory.	8	
03.01.10	Device Lock	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.10.a	Device Lock	Prevent access to the system by [Selection (one or more): initiating a device lock after [Assignment: organization-defined time period] of inactivity; requiring the user to initiate a device lock before leaving the system unattended].	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	subset of	Session Lock	IAC-24	Mechanisms exist to initiate a session lock after an organization-defined time period of inactivity, or upon receiving a request from a user and retain the session lock until the user reestablishes access using established identification and authentication methods.	10	
03.01.10.b	Device Lock	Retain the device lock until the user reestablishes access using established identification and authentication procedures.	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	subset of	Session Lock	IAC-24	Mechanisms exist to initiate a session lock after an organization-defined time period of inactivity, or upon receiving a request from a user and retain the session lock until the user reestablishes access using established identification and authentication methods.	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 (optional)	Notes (optional)
03.01.10.c	Device Lock	Conceal, via the device lock, information previously visible on the display with a publicly viewable image.	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	equal	Pattern-Hiding Displays	IAC-24.1	Mechanisms exist to implement pattern-hiding displays to conceal information previously visible on the display during the session lock.	10	
03.01.11	Session Termination	Terminate a user session automatically after [Assignment: organization-defined conditions or trigger events requiring session disconnect].	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	equal	Session Termination	IAC-25	Automated mechanisms exist to log out users, both locally on the network and for remote sessions, at the end of the session or after an organization-defined period of inactivity.	10	
03.01.12	Remote Access	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.12.a	Remote Access	Establish usage restrictions, configuration requirements, and connection requirements for each type of allowable remote system access.	Functional	intersects with	Jump Server	AST-27	Mechanisms exist to conduct remote system administrative functions via a "jump box" or "jump server" that is located in a separate network zone to user workstations.	5	
			Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			Functional	intersects with	Rules of Behavior	HRS-05.1	Mechanisms exist to define acceptable and unacceptable rules of behavior for the use of technologies, including consequences for unacceptable behavior.	5	
			Functional	intersects with	Use of Communications Technology	HRS-05.3	Mechanisms exist to establish usage restrictions and implementation guidance for communications technologies based on the potential to cause damage to systems, if used maliciously.	5	
			Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	subset of	Network Security Controls (NSC)	NET-01	Mechanisms exist to develop, govern & update procedures to facilitate the implementation of Network Security Controls (NSC).	10	
			Functional	intersects with	Boundary Protection	NET-03	Mechanisms exist to monitor and control communications at the external network boundary and at key internal boundaries within the network.	5	
			Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
			Functional	intersects with	Protection of Confidentiality / Integrity Using Encryption	NET-14.2	Cryptographic mechanisms exist to protect the confidentiality and integrity of remote access sessions (e.g., VPN).	5	
			Functional	intersects with	Work From Anywhere (WFA) - Telecommuting Security	NET-14.5	Mechanisms exist to define secure telecommuting practices and govern remote access to systems and data for remote workers.	5	
			Functional	subset of	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	10	
			Functional	intersects with	Alignment With Enterprise Architecture	SEA-02	Mechanisms exist to develop an enterprise architecture, aligned with industry-recognized leading practices, with consideration for cybersecurity & data privacy principles that addresses risk to organizational operations, assets, individuals, other organizations.	5	
03.01.12.b	Remote Access	Authorize each type of remote system access prior to establishing such connections.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
			Functional	intersects with	Automated Monitoring & Control	NET-14.1	Automated mechanisms exist to monitor and control remote access sessions.	5	
			Functional	intersects with	Managed Access Control Points	NET-14.3	Mechanisms exist to route all remote accesses through managed network access control points (e.g., VPN concentrator).	5	
03.01.12.c	Remote Access	Route remote access to the system through authorized and managed access control points.	Functional	intersects with	Jump Server	AST-27	Mechanisms exist to conduct remote system administrative functions via a "jump box" or "jump server" that is located in a separate network zone to user workstations.	5	
			Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
			Functional	intersects with	Managed Access Control Points	NET-14.3	Mechanisms exist to route all remote accesses through managed network access control points (e.g., VPN concentrator).	5	
			Functional	intersects with	Work From Anywhere (WFA) - Telecommuting Security	NET-14.5	Mechanisms exist to define secure telecommuting practices and govern remote access to systems and data for remote workers.	5	
03.01.12.d	Remote Access	Authorize the remote execution of privileged commands and remote access to security-relevant information.	Functional	intersects with	Remote Maintenance	MNT-05	Mechanisms exist to authorize, monitor and control remote, non-local maintenance and diagnostic activities.	5	
			Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
			Functional	intersects with	Remote Privileged Commands & Sensitive Data Access	NET-14.4	Mechanisms exist to restrict the execution of privileged commands and access to security-relevant information via remote access only for compelling operational needs.	5	
03.01.13	Withdrawn	Addressed by 03.13.08.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.14	Withdrawn	Incorporated into 03.01.12.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.15	Withdrawn	Incorporated into 03.01.12.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.16	Wireless Access	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.16.a	Wireless Access	Establish usage restrictions, configuration requirements, and connection requirements for each type of wireless access to the system.	Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			Functional	intersects with	Wireless Access Authentication & Encryption	CRY-07	Mechanisms exist to protect wireless access via secure authentication and encryption.	5	
			Functional	subset of	Network Security Controls (NSC)	NET-01	Mechanisms exist to develop, govern & update procedures to facilitate the implementation of Network Security Controls (NSC).	10	
			Functional	intersects with	Wireless Networking	NET-15	Mechanisms exist to control authorized wireless usage and monitor for unauthorized wireless access.	5	
			Functional	intersects with	Authentication & Encryption	NET-15.1	Mechanisms exist to protect wireless access through authentication and strong encryption.	5	
			Functional	intersects with	Restrict Configuration By Users	NET-15.3	Mechanisms exist to identify and explicitly authorize users who are allowed to independently configure wireless networking capabilities.	5	
			Functional	subset of	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	10	
			Functional	intersects with	Alignment With Enterprise Architecture	SEA-02	Mechanisms exist to develop an enterprise architecture, aligned with industry-recognized leading practices, with consideration for cybersecurity & data privacy principles that addresses risk to organizational operations, assets, individuals, other organizations.	5	
03.01.16.b	Wireless Access	Authorize each type of wireless access to the system prior to establishing such connections.	Functional	subset of	Network Security Controls (NSC)	NET-01	Mechanisms exist to develop, govern & update procedures to facilitate the implementation of Network Security Controls (NSC).	10	
			Functional	intersects with	Wireless Networking	NET-15	Mechanisms exist to control authorized wireless usage and monitor for unauthorized wireless access.	5	
			Functional	intersects with	Authentication & Encryption	NET-15.1	Mechanisms exist to protect wireless access through authentication and strong encryption.	5	
			Functional	subset of	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	10	
03.01.16.c	Wireless Access	Disable, when not intended for use, wireless networking capabilities prior to issuance and deployment.	Functional	intersects with	Disable Wireless Networking	NET-15.2	Mechanisms exist to disable unnecessary wireless networking capabilities that are internally embedded within system components prior to issuance to end users.	5	
			Functional	intersects with	Restrict Configuration By Users	NET-15.3	Mechanisms exist to identify and explicitly authorize users who are allowed to independently configure wireless networking capabilities.	5	
			Functional	subset of	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	10	
03.01.16.d	Wireless Access	Protect wireless access to the system using authentication and encryption.	Functional	equal	Authentication & Encryption	NET-15.1	Mechanisms exist to protect wireless access through authentication and strong encryption.	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 (optional)	Notes (optional)
03.01.17	Withdrawn	Incorporated into 03.01.16.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.18	Access Control for Mobile Devices	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.18.a	Access Control for Mobile Devices	Establish usage restrictions, configuration requirements, and connection requirements for mobile devices.	Functional	intersects with	Asset Governance	AST-01	Mechanisms exist to facilitate an IT Asset Management (ITAM) program to implement and manage asset management controls.	5	
			Functional	intersects with	Use of Personal Devices	AST-12	Mechanisms exist to restrict the possession and usage of personally-owned technology devices within organization-controlled facilities.	5	
			Functional	intersects with	Use of Third-Party Devices	AST-13	Mechanisms exist to reduce the risk associated with third-party assets that are attached to the network from harming organizational assets or exfiltrating organizational data.	5	
			Functional	intersects with	Usage Parameters	AST-14	Mechanisms exist to monitor and enforce usage parameters that limit the potential damage caused from the unauthorized or unintentional alteration of system parameters.	5	
			Functional	intersects with	Bring Your Own Device (BYOD) Usage	AST-16	Mechanisms exist to implement and govern a Bring Your Own Device (BYOD) program to reduce risk associated with personally-owned devices in the workplace.	5	
			Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			Functional	intersects with	Rules of Behavior	HRS-05.1	Mechanisms exist to define acceptable and unacceptable rules of behavior for the use of technologies, including consequences for unacceptable behavior.	5	
			Functional	intersects with	Use of Communications Technology	HRS-05.3	Mechanisms exist to establish usage restrictions and implementation guidance for communications technologies based on the potential to cause damage to systems, if used maliciously.	5	
			Functional	intersects with	Use of Mobile Devices	HRS-05.5	Mechanisms exist to manage business risks associated with permitting mobile device access to organizational resources.	5	
			Functional	intersects with	Access Agreements	HRS-06	Mechanisms exist to require internal and third-party users to sign appropriate access agreements prior to being granted access.	5	
			Functional	subset of	Centralized Management Of Mobile Devices	MDM-01	Mechanisms exist to implement and govern Mobile Device Management (MDM) controls.	10	
			Functional	intersects with	Access Control For Mobile Devices	MDM-02	Mechanisms exist to enforce access control requirements for the connection of mobile devices to organizational systems.	5	
			Functional	intersects with	Personally-Owned Mobile Devices	MDM-06	Mechanisms exist to restrict the connection of personally-owned, mobile devices to organizational systems and networks.	5	
			Functional	intersects with	Organization-Owned Mobile Devices	MDM-07	Mechanisms exist to prohibit the installation of non-approved applications or approved applications not obtained through the organization-approved application store.	5	
			Functional	intersects with	Network Security Controls (NSC)	NET-01	Mechanisms exist to develop, govern & update procedures to facilitate the implementation of Network Security Controls (NSC).	5	
			Functional	intersects with	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	5	
			Functional	intersects with	Alignment With Enterprise Architecture	SEA-02	Mechanisms exist to develop an enterprise architecture, aligned with industry-recognized leading practices, with consideration for cybersecurity & data privacy principles that addresses risk to organizational operations, assets, individuals, other organizations.	5	
03.01.18.b	Access Control for Mobile Devices	Authorize the connection of mobile devices to the system.	Functional	subset of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
			Functional	intersects with	Identification & Authentication for Devices	IAC-04	Mechanisms exist to uniquely identify and centrally Authenticate, Authorize and Audit (AAA) devices before establishing a connection using bidirectional authentication that is cryptographically- based and replay resistant.	5	
			Functional	intersects with	Access Control For Mobile Devices	MDM-02	Mechanisms exist to enforce access control requirements for the connection of mobile devices to organizational systems.	5	
			Functional	intersects with	Personally-Owned Mobile Devices	MDM-06	Mechanisms exist to restrict the connection of personally-owned, mobile devices to organizational systems and networks.	5	
			Functional	intersects with	Organization-Owned Mobile Devices	MDM-07	Mechanisms exist to prohibit the installation of non-approved applications or approved applications not obtained through the organization-approved application store.	5	
			Functional	intersects with	Restricting Access To Authorized Devices	MDM-11	Mechanisms exist to restrict the connectivity of unauthorized mobile devices from communicating with systems, applications and services.	5	
03.01.18.c	Access Control for Mobile Devices	Implement full-device or container-based encryption to protect the confidentiality of CUI on mobile devices.	Functional	intersects with	Full Device & Container-Based Encryption	MDM-03	Cryptographic mechanisms exist to protect the confidentiality and integrity of information on mobile devices through full-device or container encryption.	5	
03.01.19	Withdrawn	Incorporated into 03.01.18.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.20	Use of External Systems	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.20.a	Use of External Systems	Prohibit the use of external systems unless the systems are specifically authorized.	Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Use of External Information Systems	DCH-13	Mechanisms exist to govern how external parties, systems and services are used to securely store, process and transmit data.	8	
			Functional	intersects with	Limits of Authorized Use	DCH-13.1	Mechanisms exist to prohibit external parties, systems and services from storing, processing and transmitting data unless authorized individuals first: ▪ Verifying the implementation of required security controls; or ▪ Retaining a processing agreement with the entity hosting the external systems or service.	5	
			Functional	intersects with	Portable Storage Devices	DCH-13.2	Mechanisms exist to restrict or prohibit the use of portable storage devices by users on external systems.	5	
			Functional	intersects with	Non-Organizationally Owned Systems / Components / Devices	DCH-13.4	Mechanisms exist to restrict the use of non-organizationally owned information systems, system components or devices to process, store or transmit organizational information.	5	
			Functional	intersects with	Ad-Hoc Transfers	DCH-17	Mechanisms exist to secure ad-hoc exchanges of large digital files with internal or external parties.	5	
			Functional	subset of	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	10	
			Functional	intersects with	Third-Party Attestation	TPM-05.8	Mechanisms exist to obtain an attestation from an independent Third-Party Assessment Organization (3PAO) that provides assurance of conformity with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to contractors and subcontractors.	8	
03.01.20.b	Use of External Systems	Establish the following security requirements to be satisfied on external systems prior to allowing use of or access to those systems by authorized individuals: [Assignment: organization-defined security requirements].	Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Use of External Information Systems	DCH-13	Mechanisms exist to govern how external parties, systems and services are used to securely store, process and transmit data.	5	
			Functional	intersects with	Limits of Authorized Use	DCH-13.1	Mechanisms exist to prohibit external parties, systems and services from storing, processing and transmitting data unless authorized individuals first: ▪ Verifying the implementation of required security controls; or ▪ Retaining a processing agreement with the entity hosting the external systems or service.	5	
			Functional	intersects with	Protecting Sensitive Data on External Systems	DCH-13.3	Mechanisms exist to ensure that the requirements for the protection of sensitive information processed, stored or transmitted on external systems, are implemented in accordance with applicable statutory, regulatory and contractual obligations.	5	
			Functional	intersects with	Transfer Authorizations	DCH-14.2	Mechanisms exist to verify that individuals or systems transferring data between interconnecting systems have the requisite authorizations (e.g., write permissions or privileges) prior to transferring said data.	5	
			Functional	subset of	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	10	
			Functional	subset of	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	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 (optional)	Notes (optional)
			Functional	intersects with	Third-Party Attestation	TPM-05.8	Mechanisms exist to obtain an attestation from an independent Third-Party Assessment Organization (3PAO) that provides assurance of conformity with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to contractors and subcontractors.	8	
03.01.20.c	Use of External Systems	Permit authorized individuals to use external systems to access the organizational system or to process, store, or transmit CUI only after:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.20.c.01	Use of External Systems	Verifying that the security requirements on the external systems as specified in the organization's system security plans have been satisfied and	Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Use of External Information Systems	DCH-13	Mechanisms exist to govern how external parties, systems and services are used to securely store, process and transmit data.	5	
			Functional	intersects with	Limits of Authorized Use	DCH-13.1	Mechanisms exist to prohibit external parties, systems and services from storing, processing and transmitting data unless authorized individuals first: ▪ Verifying the implementation of required security controls; or ▪ Retaining a processing agreement with the entity hosting the external systems or service.	5	
			Functional	intersects with	Protecting Sensitive Data on External Systems	DCH-13.3	Mechanisms exist to ensure that the requirements for the protection of sensitive information processed, stored or transmitted on external systems, are implemented in accordance with applicable statutory, regulatory and contractual obligations.	5	
			Functional	intersects with	Non-Organizationally Owned Systems / Components / Devices	DCH-13.4	Mechanisms exist to restrict the use of non-organizationally owned information systems, system components or devices to process, store or transmit organizational information.	5	
			Functional	subset of	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	10	
			Functional	intersects with	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	8	
			Functional	intersects with	First-Party Declaration (1PD)	TPM-05.6	Mechanisms exist to obtain a First-Party Declaration (1PD) from applicable External Service Providers (ESPs) that provides assurance of compliance with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to subcontractors.	8	
			Functional	intersects with	Third-Party Attestation	TPM-05.8	Mechanisms exist to obtain an attestation from a Third-Party Assessment Organization (3PAO) that provides assurance of compliance with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to subcontractors.	8	
03.01.20.c.02	Use of External Systems	Retaining approved system connection or processing agreements with the organizational entities hosting the external systems.	Functional	intersects with	Use of External Information Systems	DCH-13	Mechanisms exist to govern how external parties, systems and services are used to securely store, process and transmit data.	5	
			Functional	intersects with	Limits of Authorized Use	DCH-13.1	Mechanisms exist to prohibit external parties, systems and services from storing, processing and transmitting data unless authorized individuals first: ▪ Verifying the implementation of required security controls; or ▪ Retaining a processing agreement with the entity hosting the external systems or service.	5	
			Functional	intersects with	Transfer Authorizations	DCH-14.2	Mechanisms exist to verify that individuals or systems transferring data between interconnecting systems have the requisite authorizations (e.g., write permissions or privileges) prior to transferring said data.	5	
			Functional	intersects with	Data Access Mapping	DCH-14.3	Mechanisms exist to leverages a data-specific Access Control List (ACL) or Interconnection Security Agreements (ISAs) to generate a logical map of the parties with whom sensitive/regulated data is shared.	5	
			Functional	intersects with	Media & Data Retention	DCH-18	Mechanisms exist to retain media and data in accordance with applicable statutory, regulatory and contractual obligations.	5	
			Functional	intersects with	System Interconnections	NET-05	Mechanisms exist to authorize connections from systems to other systems using Interconnection Security Agreements (ISAs), or similar methods, that document, for each interconnection, the interface characteristics, cybersecurity & data privacy requirements and the nature of the information communicated.	8	
			Functional	subset of	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	10	
03.01.20.d	Use of External Systems	Restrict the use of organization-controlled portable storage devices by authorized individuals on external systems.	Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Use of External Information Systems	DCH-13	Mechanisms exist to govern how external parties, systems and services are used to securely store, process and transmit data.	5	
			Functional	intersects with	Limits of Authorized Use	DCH-13.1	Mechanisms exist to prohibit external parties, systems and services from storing, processing and transmitting data unless authorized individuals first: ▪ Verifying the implementation of required security controls; or ▪ Retaining a processing agreement with the entity hosting the external systems or service.	5	
			Functional	intersects with	Portable Storage Devices	DCH-13.2	Mechanisms exist to restrict or prohibit the use of portable storage devices by users on external systems.	5	
			Functional	intersects with	Non-Organizationally Owned Systems / Components / Devices	DCH-13.4	Mechanisms exist to restrict the use of non-organizationally owned information systems, system components or devices to process, store or transmit organizational information.	5	
			Functional	subset of	Centralized Management Of Mobile Devices	MDM-01	Mechanisms exist to implement and govern Mobile Device Management (MDM) controls.	10	
			Functional	intersects with	Organization-Owned Mobile Devices	MDM-07	Mechanisms exist to prohibit the installation of non-approved applications or approved applications not obtained through the organization-approved application store.	8	
03.01.21	Withdrawn	Incorporated into 03.01.20.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.22	Publicly Accessible Content	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.22.a	Publicly Accessible Content	Train authorized individuals to ensure that publicly accessible information does not contain CUI.	Functional	intersects with	Disclosure of Information	DCH-03.1	Mechanisms exist to restrict the disclosure of sensitive / regulated data to authorized parties with a need to know.	5	
			Functional	intersects with	Publicly Accessible Content	DCH-15	Mechanisms exist to control publicly-accessible content.	5	
			Functional	intersects with	Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity responsibilities for all personnel.	5	
			Functional	intersects with	User Awareness	HRS-03.1	Mechanisms exist to communicate with users about their roles and responsibilities to maintain a safe and secure working environment.	5	
			Functional	intersects with	Roles With Special Protection Measures	HRS-04.1	Mechanisms exist to ensure that individuals accessing a system that stores, transmits or processes information requiring special protection satisfy organization-defined personnel screening criteria.	5	
			Functional	intersects with	Formal Indoctrination	HRS-04.2	Mechanisms exist to verify that individuals accessing a system processing, storing, or transmitting sensitive information are formally indoctrinated for all the relevant types of information to which they have access on the system.	5	
			Functional	intersects with	Terms of Employment	HRS-05	Mechanisms exist to require all employees and contractors to apply cybersecurity & data privacy principles in their daily work.	5	
			Functional	intersects with	Rules of Behavior	HRS-05.1	Mechanisms exist to define acceptable and unacceptable rules of behavior for the use of technologies, including consequences for unacceptable behavior.	5	
			Functional	intersects with	Cybersecurity & Data Privacy Awareness Training	SAT-02	Mechanisms exist to provide all employees and contractors appropriate awareness education and training that is relevant for their job function.	5	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	
			Functional	intersects with	Sensitive Information Storage, Handling & Processing	SAT-03.3	Mechanisms exist to ensure that every user accessing a system processing, storing or transmitting sensitive information is formally trained in data handling requirements.	5	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
			Functional	intersects with	Web Security	WEB-01	Mechanisms exist to facilitate the implementation of an enterprise-wide web management policy, as well as associated standards, controls and procedures.		
03.01.22.b	Publicly Accessible Content	Review the content on publicly accessible systems for CUI and remove such information, if discovered.	Functional	intersects with	Publicly Accessible Content	DCH-15	Mechanisms exist to control publicly-accessible content.	5	
			Functional	intersects with	Monitoring For Information Disclosure	MON-11	Mechanisms exist to monitor for evidence of unauthorized exfiltration or disclosure of non-public information.	5	
			Functional	intersects with	Publicly Accessible Content Reviews	WEB-14	Mechanisms exist to routinely review the content on publicly accessible systems for sensitive/regulated data and remove such information, if discovered.	5	
03.02.01	Literacy Training and Awareness	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.02.01.a	Literacy Training and Awareness	Provide security literacy training to system users:	Functional	subset of	Cybersecurity & Data Privacy-Minded Workforce	SAT-01	Mechanisms exist to facilitate the implementation of security workforce development and awareness controls.	10	
03.02.01.a.01	Literacy Training and Awareness	As part of initial training for new users and [Assignment: organization-defined frequency] thereafter,	Functional	intersects with	Cybersecurity & Data Privacy Awareness Training	SAT-02	Mechanisms exist to provide all employees and contractors appropriate awareness education and training that is relevant for their job function.	5	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	
			Functional	intersects with	Sensitive Information Storage, Handling & Processing	SAT-03.3	Mechanisms exist to ensure that every user accessing a system processing, storing or transmitting sensitive information is formally trained in data handling requirements.	5	
			Functional	intersects with	Privileged Users	SAT-03.5	Mechanisms exist to provide specific training for privileged users to ensure privileged users understand their unique roles and responsibilities	5	
			Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
03.02.01.a.02	Literacy Training and Awareness	When required by system changes or following [Assignment: organization-defined events], and	Functional	intersects with	Cybersecurity & Data Privacy Awareness Training	SAT-02	Mechanisms exist to provide all employees and contractors appropriate awareness education and training that is relevant for their job function.	5	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	
			Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
			Functional	intersects with	External Threat Intelligence Feeds	THR-03	Mechanisms exist to maintain situational awareness of evolving threats by leveraging the knowledge of attacker tactics, techniques and procedures to facilitate the implementation of preventative and compensating controls.	5	
03.02.01.a.03	Literacy Training and Awareness	On recognizing and reporting indicators of insider threat, social engineering, and social mining.	Functional	intersects with	Cybersecurity & Data Privacy Awareness Training	SAT-02	Mechanisms exist to provide all employees and contractors appropriate awareness education and training that is relevant for their job function.	5	
			Functional	intersects with	Social Engineering & Mining	SAT-02.2	Mechanisms exist to include awareness training on recognizing and reporting potential and actual instances of social engineering and social mining.	5	
			Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
			Functional	intersects with	External Threat Intelligence Feeds	THR-03	Mechanisms exist to maintain situational awareness of evolving threats by leveraging the knowledge of attacker tactics, techniques and procedures to facilitate the implementation of preventative and compensating controls.	5	
			Functional	intersects with	Insider Threat Awareness	THR-05	Mechanisms exist to utilize security awareness training on recognizing and reporting potential indicators of insider threat.	5	
03.02.01.b	Literacy Training and Awareness	Update security literacy training content [Assignment: organization-defined frequency] and following [Assignment: organization-defined events].	Functional	intersects with	Cybersecurity & Data Privacy Awareness Training	SAT-02	Mechanisms exist to provide all employees and contractors appropriate awareness education and training that is relevant for their job function.	5	
			Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
			Functional	intersects with	External Threat Intelligence Feeds	THR-03	Mechanisms exist to maintain situational awareness of evolving threats by leveraging the knowledge of attacker tactics, techniques and procedures to facilitate the implementation of preventative and compensating controls.	5	
03.02.02	Role-Based Training	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.02.02.a	Role-Based Training	Provide role-based security training to organizational personnel:	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	
03.02.02.a.01	Role-Based Training	Before authorizing access to the system or CUI, before performing assigned duties, and [Assignment: organization-defined frequency] thereafter	Functional	intersects with	Roles With Special Protection Measures	HRS-04.1	Mechanisms exist to ensure that individuals accessing a system that stores, transmits or processes information requiring special protection satisfy organization-defined personnel screening criteria.	5	
			Functional	intersects with	Formal Indoctrination	HRS-04.2	Mechanisms exist to verify that individuals accessing a system processing, storing, or transmitting sensitive information are formally indoctrinated for all the relevant types of information to which they have access on the system.	5	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	
			Functional	intersects with	Sensitive Information Storage, Handling & Processing	SAT-03.3	Mechanisms exist to ensure that every user accessing a system processing, storing or transmitting sensitive information is formally trained in data handling requirements.	5	
			Functional	intersects with	Privileged Users	SAT-03.5	Mechanisms exist to provide specific training for privileged users to ensure privileged users understand their unique roles and responsibilities	5	
			Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
03.02.02.a.02	Role-Based Training	When required by system changes or following [Assignment: organization-defined events].	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	
			Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.02.02.b	Role-Based Training	Update role-based training content [Assignment: organization-defined frequency] and following [Assignment: organization-defined events].	Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
			Functional	intersects with	External Threat Intelligence Feeds	THR-03	Mechanisms exist to maintain situational awareness of evolving threats by leveraging the knowledge of attacker tactics, techniques and procedures to facilitate the implementation of preventative and compensating controls.	5	
03.02.03	Withdrawn	Incorporated into 03.02.01.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.01	Event Logging	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.01.a	Event Logging	Specify the following event types selected for logging within the system: [Assignment: organization-defined event types].	Functional	subset of	Continuous Monitoring	MON-01	Mechanisms exist to facilitate the implementation of enterprise-wide monitoring controls.	10	
			Functional	intersects with	System Generated Alerts	MON-01.4	Mechanisms exist to generate, monitor, correlate and respond to alerts from physical, cybersecurity, data privacy and supply chain activities to achieve integrated situational awareness.	5	
			Functional	intersects with	System-Wide / Time-Correlated Audit Trail	MON-02.7	Automated mechanisms exist to compile audit records into an organization-wide audit trail that is time-correlated.	5	
			Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
			Functional	intersects with	Audit Trails	MON-03.2	Mechanisms exist to link system access to individual users or service accounts.	5	
03.03.01.b	Event Logging	Review and update the event types selected for logging [Assignment: organization-defined frequency].	Functional	subset of	Reviews & Updates	MON-01.8	Mechanisms exist to review event logs on an ongoing basis and escalate incidents in accordance with established timelines and procedures.	10	
			Functional	intersects with	Central Review & Analysis	MON-02.2	Automated mechanisms exist to centrally collect, review and analyze audit records from multiple sources.	5	
03.03.02	Audit Record Content	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.02.a	Audit Record Content	Include the following content in audit records:	Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
03.03.02.a.01	Audit Record Content	What type of event occurred	Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
03.03.02.a.02	Audit Record Content	When the event occurred	Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
			Functional	intersects with	Time Stamps	MON-07	Mechanisms exist to configure systems to use an authoritative time source to generate time stamps for event logs.	5	
03.03.02.a.03	Audit Record Content	Where the event occurred	Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
03.03.02.a.04	Audit Record Content	Source of the event	Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
03.03.02.a.05	Audit Record Content	Outcome of the event	Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
03.03.02.a.06	Audit Record Content	Identity of the individuals, subjects, objects, or entities associated with the event	Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
03.03.02.b	Audit Record Content	Provide additional information for audit records as needed.	Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	5	
			Functional	intersects with	Content of Event Logs	MON-03	Mechanisms exist to configure systems to produce event logs that contain sufficient information to, at a minimum: ▪ Establish what type of event occurred; ▪ When (date and time) the event occurred; ▪ Where the event occurred; ▪ The source of the event; ▪ The outcome (success or failure) of the event; and ▪ The identity of any user/subject associated with the event.	5	
03.03.03	Audit Record Generation	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.03.a	Audit Record Generation	Generate audit records for the selected event types and audit record content specified in 03.03.01 and 03.03.02.	Functional	subset of	System Generated Alerts	MON-01.4	Mechanisms exist to generate, monitor, correlate and respond to alerts from physical, cybersecurity, data privacy and supply chain activities to achieve integrated situational awareness.	10	
03.03.03.b	Audit Record Generation	Retain audit records for a time period consistent with the records retention policy.	Functional	intersects with	Protection of Event Logs	MON-08	Mechanisms exist to protect event logs and audit tools from unauthorized access, modification and deletion.	5	
			Functional	subset of	Event Log Retention	MON-10	Mechanisms exist to retain event logs for a time period consistent with records retention requirements to provide support for after-the-fact investigations of security incidents and to meet statutory, regulatory and contractual retention requirements.	10	
03.03.04	Response to Audit Logging Process Failures	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.04.a	Response to Audit Logging Process Failures	Alert organizational personnel or roles within [Assignment: organization-defined time period] in the event of an audit logging process failure.	Functional	intersects with	Automated Alerts	MON-01.12	Mechanisms exist to automatically alert incident response personnel to inappropriate or anomalous activities that have potential security incident implications.	5	
03.03.04.b	Response to Audit Logging Process Failures	Take the following additional actions: [Assignment: organization-defined additional actions]	Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover the preparation, automated detection or intake of incident reporting, analysis, containment, eradication and recovery.	5	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
	Process Failures	additional actions].	Functional	intersects with	Response To Event Log Processing Failures	MON-05	Mechanisms exist to alert appropriate personnel in the event of a log processing failure and take actions to remedy the disruption.	5	
03.03.05	Audit Record Review, Analysis, and Reporting	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.05.a	Audit Record Review, Analysis, and Reporting	Review and analyze system audit records [Assignment: organization-defined frequency] for indications and the potential impact of inappropriate or unusual activity.	Functional	subset of	Reviews & Updates	MON-01.8	Mechanisms exist to review event logs on an ongoing basis and escalate incidents in accordance with established timelines and procedures.	10	
			Functional	intersects with	Centralized Collection of Security Event Logs	MON-02	Mechanisms exist to utilize a Security Incident Event Manager (SIEM) or similar automated tool, to support the centralized collection of security-related event logs.	3	
			Functional	intersects with	Correlate Monitoring Information	MON-02.1	Automated mechanisms exist to correlate both technical and non-technical information from across the enterprise by a Security Incident Event Manager (SIEM) or similar automated tool, to enhance organization-wide situational awareness.	5	
			Functional	intersects with	Central Review & Analysis	MON-02.2	Automated mechanisms exist to centrally collect, review and analyze audit records from multiple sources.	3	
			Functional	intersects with	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities.	8	
03.03.05.b	Audit Record Review, Analysis, and Reporting	Report findings to organizational personnel or roles.	Functional	intersects with	Automated Alerts	MON-01.12	Mechanisms exist to automatically alert incident response personnel to inappropriate or anomalous activities that have potential security incident implications.	8	
			Functional	intersects with	Monitoring Reporting	MON-06	Mechanisms exist to provide an event log report generation capability to aid in detecting and assessing anomalous activities.	8	
03.03.05.c	Audit Record Review, Analysis, and Reporting	Analyze and correlate audit records across different repositories to gain organization-wide situational awareness.	Functional	intersects with	Centralized Collection of Security Event Logs	MON-02	Mechanisms exist to utilize a Security Incident Event Manager (SIEM) or similar automated tool, to support the centralized collection of security-related event logs.	8	
			Functional	intersects with	Correlate Monitoring Information	MON-02.1	Automated mechanisms exist to correlate both technical and non-technical information from across the enterprise by a Security Incident Event Manager (SIEM) or similar automated tool, to enhance organization-wide situational awareness.	8	
			Functional	intersects with	Central Review & Analysis	MON-02.2	Automated mechanisms exist to centrally collect, review and analyze audit records from multiple sources.	5	
			Functional	intersects with	Integration of Scanning & Other Monitoring Information	MON-02.3	Automated mechanisms exist to integrate the analysis of audit records with analysis of vulnerability scanners, network performance, system monitoring and other sources to further enhance the ability to identify inappropriate or unusual activity.	5	
03.03.06	Audit Record Reduction and Report Generation	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.06.a	Audit Record Reduction and Report Generation	Implement an audit record reduction and report generation capability that supports audit record review, analysis, reporting requirements, and after-the-fact investigations of incidents.	Functional	intersects with	Monitoring Reporting	MON-06	Mechanisms exist to provide an event log report generation capability to aid in detecting and assessing anomalous activities.	5	
03.03.06.b	Audit Record Reduction and Report Generation	Preserve the original content and time ordering of audit records.	Functional	equal	Protection of Event Logs	MON-08	Mechanisms exist to protect event logs and audit tools from unauthorized access, modification and deletion.	10	
03.03.07	Time Stamps	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.07.a	Time Stamps	Use internal system clocks to generate time stamps for audit records.	Functional	subset of	Time Stamps	MON-07	Mechanisms exist to configure systems to use an authoritative time source to generate time stamps for event logs.	10	
03.03.07.b	Time Stamps	Record time stamps for audit records that meet [Assignment: organization-defined granularity of time measurement] and that use Coordinated Universal Time (UTC), have a fixed local time offset from UTC, or include the local time offset as part of the time stamp.	Functional	subset of	Synchronization With Authoritative Time Source	MON-07.1	Mechanisms exist to synchronize internal system clocks with an authoritative time source.	10	
03.03.08	Protection of Audit Information	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.08.a	Protection of Audit Information	Protect audit information and audit logging tools from unauthorized access, modification, and deletion.	Functional	intersects with	Protection of Event Logs	MON-08	Mechanisms exist to protect event logs and audit tools from unauthorized access, modification and deletion.	5	
			Functional	intersects with	Event Log Backup on Separate Physical Systems / Components	MON-08.1	Mechanisms exist to back up event logs onto a physically different system or system component than the Security Incident Event Manager (SIEM) or similar automated tool.	5	
			Functional	intersects with	Access by Subset of Privileged Users	MON-08.2	Mechanisms exist to restrict access to the management of event logs to privileged users with a specific business need.	5	
			Functional	intersects with	Cryptographic Protection of Event Log Information	MON-08.3	Cryptographic mechanisms exist to protect the integrity of event logs and audit tools.	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
03.03.08.b	Protection of Audit Information	Authorize access to management of audit logging functionality to only a subset of privileged users or roles.	Functional	equal	Access by Subset of Privileged Users	MON-08.2	Mechanisms exist to restrict access to the management of event logs to privileged users with a specific business need.	10	
			Functional	subset of	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	10	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	8	
03.03.09	Withdrawn	Incorporated into 03.03.08.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.01	Baseline Configuration	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.01.a	Baseline Configuration	Develop and maintain under configuration control, a current baseline configuration of the system.	Functional	subset of	Configuration Management Program	CFG-01	Mechanisms exist to facilitate the implementation of configuration management controls.	10	
			Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			Functional	intersects with	Configure Systems, Components or Services for High-Risk Areas	CFG-02.5	Mechanisms exist to configure systems utilized in high-risk areas with more restrictive baseline configurations.	5	
			Functional	intersects with	Approved Configuration Deviations	CFG-02.7	Mechanisms exist to document, assess risk and approve or deny deviations to standardized configurations.	5	
			Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	5	
03.04.01.b	Baseline Configuration	Review and update the baseline configuration of the system [Assignment: organization-defined frequency] and when system components are installed or modified.	Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: ▪ At least annually; ▪ When required due to so; or ▪ As part of system component installations and upgrades.	5	
03.04.02	Configuration Settings	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.02.a	Configuration Settings	Establish, document, and implement the following configuration settings for the system that reflect the most restrictive mode consistent with operational requirements: [Assignment: organization-defined configuration settings].	Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			Functional	intersects with	Configure Systems, Components or Services for High-Risk Areas	CFG-02.5	Mechanisms exist to configure systems utilized in high-risk areas with more restrictive baseline configurations.	5	
			Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	5	
			Functional	intersects with	Least Functionality	CFG-03	Mechanisms exist to configure systems to provide only essential capabilities by specifically prohibiting or restricting the use of ports, protocols, and/or services.	5	
			Functional	intersects with	Configuration Enforcement	CFG-06	Automated mechanisms exist to monitor, enforce and report on configurations for endpoint devices.	5	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.04.02.b	Configuration Settings	Identify, document, and approve any deviations from established configuration settings.	Functional	intersects with	Approved Baseline Deviations	AST-02.4	Mechanisms exist to document and govern instances of approved deviations from established baseline configurations.	5	
			Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: ▪ At least annually; ▪ When required due to so; or ▪ As part of system component installations and upgrades.	5	
			Functional	intersects with	Automated Central Management & Verification	CFG-02.2	Automated mechanisms exist to govern and report on baseline configurations of systems through Continuous Diagnostics and Mitigation (CDM), or similar technologies.	3	
			Functional	intersects with	Approved Configuration Deviations	CFG-02.7	Mechanisms exist to document, assess risk and approve or deny deviations to standardized configurations.	5	
			Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	5	
			Functional	intersects with	Configuration Enforcement	CFG-06	Automated mechanisms exist to monitor, enforce and report on configurations for endpoint devices.	3	
			Functional	subset of	Change Management Program	CHG-01	Mechanisms exist to facilitate the implementation of a change management program.	10	
			Functional	intersects with	Configuration Change Control	CHG-02	Mechanisms exist to govern the technical configuration change control processes.	5	
			Functional	intersects with	Prohibition Of Changes	CHG-02.1	Mechanisms exist to prohibit unauthorized changes, unless organization-approved change requests are received.	5	
			Functional	intersects with	Access Restriction For Change	CHG-04	Mechanisms exist to enforce configuration restrictions in an effort to restrict the ability of users to conduct unauthorized changes.	5	
03.04.03	Configuration Change Control	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.03.a	Configuration Change Control	Define the types of changes to the system that are configuration-controlled.	Functional	intersects with	Configuration Enforcement	CFG-06	Automated mechanisms exist to monitor, enforce and report on configurations for endpoint devices.	5	
			Functional	subset of	Change Management Program	CHG-01	Mechanisms exist to facilitate the implementation of a change management program.	10	
			Functional	intersects with	Configuration Change Control	CHG-02	Mechanisms exist to govern the technical configuration change control processes.	5	
			Functional	intersects with	Prohibition Of Changes	CHG-02.1	Mechanisms exist to prohibit unauthorized changes, unless organization-approved change requests are received.	5	
03.04.03.b	Configuration Change Control	Review proposed configuration-controlled changes to the system, and approve or disapprove such changes with explicit consideration for security impacts.	Functional	intersects with	Configuration Change Control	CHG-02	Mechanisms exist to govern the technical configuration change control processes.	5	
			Functional	intersects with	Test, Validate & Document Changes	CHG-02.2	Mechanisms exist to appropriately test and document proposed changes in a non-production environment before changes are implemented in a production environment.	5	
			Functional	intersects with	Security Impact Analysis for Changes	CHG-03	Mechanisms exist to analyze proposed changes for potential security impacts, prior to the implementation of the change.	5	
03.04.03.c	Configuration Change Control	Implement and document approved configuration-controlled changes to the system.	Functional	intersects with	Test, Validate & Document Changes	CHG-02.2	Mechanisms exist to appropriately test and document proposed changes in a non-production environment before changes are implemented in a production environment.	5	
			Functional	intersects with	Configuration Change Control	CHG-02	Mechanisms exist to govern the technical configuration change control processes.	5	
			Functional	intersects with	Maintenance Operations	MNT-01	Mechanisms exist to develop, disseminate, review & update procedures to facilitate the implementation of maintenance controls across the enterprise.	3	
			Functional	intersects with	Controlled Maintenance	MNT-02	Mechanisms exist to conduct controlled maintenance activities throughout the lifecycle of the system, application or service.	3	
03.04.03.d	Configuration Change Control	Monitor and review activities associated with configuration-controlled changes to the system.	Functional	subset of	Automated Central Management & Verification	CFG-02.2	Automated mechanisms exist to govern and report on baseline configurations of systems through Continuous Diagnostics and Mitigation (CDM), or similar technologies.	10	
03.04.04	Impact Analyses	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.04.a	Impact Analyses	Analyze changes to the system to determine potential security impacts prior to change implementation.	Functional	intersects with	Test, Validate & Document Changes	CHG-02.2	Mechanisms exist to appropriately test and document proposed changes in a non-production environment before changes are implemented in a production environment.	3	
			Functional	intersects with	Cybersecurity & Data Privacy Representative for Asset Lifecycle Changes	CHG-02.3	Mechanisms exist to include a cybersecurity and/or data privacy representative in the configuration change control review process.	8	
			Functional	intersects with	Security Impact Analysis for Changes	CHG-03	Mechanisms exist to analyze proposed changes for potential security impacts, prior to the implementation of the change.	8	
03.04.04.b	Impact Analyses	Verify that the security requirements for the system continue to be satisfied after the system changes have been implemented.	Functional	subset of	Control Functionality Verification	CHG-06	Mechanisms exist to verify the functionality of cybersecurity and/or data privacy controls following implemented changes to ensure applicable controls operate as designed.	10	
03.04.05	Access Restrictions for Change	Define, document, approve, and enforce physical and logical access restrictions associated with changes to the system.	Functional	intersects with	Access Restriction For Change	CHG-04	Mechanisms exist to enforce configuration restrictions in an effort to restrict the ability of users to conduct unauthorized changes.	5	
			Functional	intersects with	Permissions To Implement Changes	CHG-04.4	Mechanisms exist to limit operational privileges for implementing changes.	5	
			Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	intersects with	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
03.04.06	Least Functionality	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.06.a	Least Functionality	Configure the system to provide only mission-essential capabilities.	Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	8	
			Functional	intersects with	Approved Baseline Deviations	AST-02.4	Mechanisms exist to document and govern instances of approved deviations from established baseline configurations.	3	
			Functional	intersects with	Configure Systems, Components or Services for High-Risk Areas	CFG-02.5	Mechanisms exist to configure systems utilized in high-risk areas with more restrictive baseline configurations.	8	
			Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	3	
			Functional	equal	Least Functionality	CFG-03	Mechanisms exist to configure systems to provide only essential capabilities by specifically prohibiting or restricting the use of ports, protocols, and/or services.	10	
03.04.06.b	Least Functionality	Prohibit or restrict use of the following functions, ports, protocols, connections, and services: [Assignment: organization-defined functions, ports, protocols, connections, and services].	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	subset of	Configure Systems, Components or Services for High-Risk Areas	CFG-02.5	Mechanisms exist to configure systems utilized in high-risk areas with more restrictive baseline configurations.	10	
			Functional	equal	Least Functionality	CFG-03	Mechanisms exist to configure systems to provide only essential capabilities by specifically prohibiting or restricting the use of ports, protocols, and/or services.	10	
03.04.06.c	Least Functionality	Review the system [Assignment: organization-defined frequency] to identify unnecessary or nonsecure functions, ports, protocols, connections, and services.	Functional	equal	Periodic Review	CFG-03.1	Mechanisms exist to periodically review system configurations to identify and disable unnecessary and/or non-secure functions, ports, protocols and services.	10	
03.04.06.d	Least Functionality	Disable or remove functions, ports, protocols, connections, and services that are unnecessary or nonsecure.	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	subset of	Configure Systems, Components or Services for High-Risk Areas	CFG-02.5	Mechanisms exist to configure systems utilized in high-risk areas with more restrictive baseline configurations.	10	
			Functional	equal	Least Functionality	CFG-03	Mechanisms exist to configure systems to provide only essential capabilities by specifically prohibiting or restricting the use of ports, protocols, and/or services.	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 (optional)	Notes (optional)
03.04.07	Withdrawn	Incorporated into 03.04.06 and 03.04.08.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.08	Authorized Software – Allow by Exception	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.08.a	Authorized Software – Allow by Exception	Identify software programs authorized to execute on the system.	Functional	subset of	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: ▪ Accurately reflects the current systems, applications and services in use; ▪ Identifies authorized software products, including business justification details; ▪ Is at the level of granularity deemed necessary for tracking and reporting; ▪ Includes organization-defined information deemed necessary to achieve effective property accountability; and ▪ Is available for review and audit by designated organizational personnel.	10	
			Functional	intersects with	Configuration Management Database (CMDB)	AST-02.9	Mechanisms exist to implement and manage a Configuration Management Database (CMDB), or similar technology, to monitor and govern technology asset-specific information.	5	
			Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	8	
			Functional	intersects with	Least Functionality	CFG-03	Mechanisms exist to configure systems to provide only essential capabilities by specifically prohibiting or restricting the use of ports, protocols, and/or services.	8	
			Functional	intersects with	Explicitly Allow / Deny Applications	CFG-03.3	Mechanisms exist to explicitly allow (allowlist / whitelist) or block (denylist / blacklist) applications to control software that is authorized to execute on systems.	5	
03.04.08.b	Authorized Software – Allow by Exception	Implement a deny-all, allow-by-exception policy for the execution of authorized software programs on the system.	Functional	intersects with	Prevent Unauthorized Software Execution	CFG-03.2	Mechanisms exist to configure systems to prevent the execution of unauthorized software programs.	5	
			Functional	intersects with	Explicitly Allow / Deny Applications	CFG-03.3	Mechanisms exist to explicitly allow (allowlist / whitelist) or block (denylist / blacklist) applications to control software that is authorized to execute on systems.	5	
03.04.08.c	Authorized Software – Allow by Exception	Review and update the list of authorized software programs [Assignment: organization-defined frequency].	Functional	intersects with	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: ▪ Accurately reflects the current systems, applications and services in use; ▪ Identifies authorized software products, including business justification details; ▪ Is at the level of granularity deemed necessary for tracking and reporting; ▪ Includes organization-defined information deemed necessary to achieve effective property accountability; and ▪ Is available for review and audit by designated organizational personnel.	5	
			Functional	intersects with	Periodic Review	CFG-03.1	Mechanisms exist to periodically review system configurations to identify and disable unnecessary and/or non-secure functions, ports, protocols and services.	8	
			Functional	intersects with	Functional Review Of Cybersecurity & Data Protection Controls	CPL-03.2	Mechanisms exist to regularly review technology assets for adherence to the organization's cybersecurity & data protection policies and standards.	8	
03.04.09	Withdrawn	Addressed by 03.01.05, 03.01.06, 03.01.07, 03.04.08, and 03.12.03.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.10	System Component Inventory	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.10.a	System Component Inventory	Develop and document an inventory of system components.	Functional	subset of	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: ▪ Accurately reflects the current systems, applications and services in use; ▪ Identifies authorized software products, including business justification details; ▪ Is at the level of granularity deemed necessary for tracking and reporting; ▪ Includes organization-defined information deemed necessary to achieve effective property accountability; and ▪ Is available for review and audit by designated organizational personnel.	10	
			Functional	intersects with	Updates During Installations / Removals	AST-02.1	Mechanisms exist to update asset inventories as part of component installations, removals and asset upgrades.	8	
			Functional	intersects with	Configuration Management Database (CMDB)	AST-02.9	Mechanisms exist to implement and manage a Configuration Management Database (CMDB), or similar technology, to monitor and govern technology asset-specific information.	3	
03.04.10.b	System Component Inventory	Review and update the system component inventory [Assignment: organization-defined frequency].	Functional	subset of	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: ▪ Accurately reflects the current systems, applications and services in use; ▪ Identifies authorized software products, including business justification details; ▪ Is at the level of granularity deemed necessary for tracking and reporting; ▪ Includes organization-defined information deemed necessary to achieve effective property accountability; and ▪ Is available for review and audit by designated organizational personnel.	10	
			Functional	intersects with	Updates During Installations / Removals	AST-02.1	Mechanisms exist to update asset inventories as part of component installations, removals and asset upgrades.	8	
			Functional	intersects with	Configuration Management Database (CMDB)	AST-02.9	Mechanisms exist to implement and manage a Configuration Management Database (CMDB), or similar technology, to monitor and govern technology asset-specific information.	3	
03.04.10.c	System Component Inventory	Update the system component inventory as part of installations, removals, and system updates.	Functional	equal	Updates During Installations / Removals	AST-02.1	Mechanisms exist to update asset inventories as part of component installations, removals and asset upgrades.	10	
			Functional	intersects with	Configuration Management Database (CMDB)	AST-02.9	Mechanisms exist to implement and manage a Configuration Management Database (CMDB), or similar technology, to monitor and govern technology asset-specific information.	8	
03.04.11	Information Location	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.11.a	Information Location	Identify and document the location of CUI and the system components on which the information is processed and stored.	Functional	subset of	Asset Governance	AST-01	Mechanisms exist to facilitate an IT Asset Management (ITAM) program to implement and manage asset management controls.	10	
			Functional	intersects with	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: ▪ Accurately reflects the current systems, applications and services in use; ▪ Identifies authorized software products, including business justification details; ▪ Is at the level of granularity deemed necessary for tracking and reporting; ▪ Includes organization-defined information deemed necessary to achieve effective property accountability; and ▪ Is available for review and audit by designated organizational personnel.	8	
			Functional	intersects with	Data Action Mapping	AST-02.8	Mechanisms exist to create and maintain a map of technology assets where sensitive/regulated data is stored, transmitted or processed.	8	
			Functional	intersects with	Network Diagrams & Data Flow Diagrams (DFDs)	AST-04	Mechanisms exist to maintain network architecture diagrams that: ▪ Contain sufficient detail to assess the security of the network's architecture; ▪ Reflect the current architecture of the network environment; and ▪ Document all sensitive/regulated data flows.	8	
			Functional	intersects with	Asset Scope Classification	AST-04.1	Mechanisms exist to determine cybersecurity & data privacy control applicability by identifying, assigning and documenting the appropriate asset scope categorization for all systems, applications, services and personnel (internal and third-parties).	5	
			Functional	intersects with	Control Applicability Boundary Graphical Representation	AST-04.2	Mechanisms exist to ensure control applicability is appropriately-determined for systems, applications, services and third parties by graphically representing applicable boundaries.	5	
			Functional	intersects with	Statutory, Regulatory & Contractual Compliance	CPL-01	Mechanisms exist to facilitate the identification and implementation of relevant statutory, regulatory and contractual controls.	3	

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			Functional	intersects with	Compliance Scope	CPL-01.2	Mechanisms exist to document and validate the scope of cybersecurity & data privacy controls that are determined to meet statutory, regulatory and/or contractual compliance obligations.	8	
			Functional	intersects with	Data & Asset Classification	DCH-02	Mechanisms exist to ensure data and assets are categorized in accordance with applicable statutory, regulatory and contractual requirements.	8	
			Functional	intersects with	Sensitive Data Inventories	DCH-06.2	Mechanisms exist to maintain inventory logs of all sensitive media and conduct sensitive media inventories at least annually.	8	
			Functional	intersects with	Geographic Location of Data	DCH-19	Mechanisms exist to inventory, document and maintain data flows for data that is resident (permanently or temporarily) within a service's geographically distributed applications (physical and virtual), infrastructure, systems components and/or shared with other third-parties.	8	
03.04.11.b	Information Location	Document changes to the system or system component location where CUI is processed and stored.	Functional	intersects with	Data Action Mapping	AST-02.8	Mechanisms exist to create and maintain a map of technology assets where sensitive/regulated data is stored, transmitted or processed.	5	
			Functional	intersects with	Network Diagrams & Data Flow Diagrams (DFDs)	AST-04	Mechanisms exist to maintain network architecture diagrams that: ▪ Contain sufficient detail to assess the security of the network's architecture; ▪ Reflect the current architecture of the network environment; and ▪ Document all sensitive/regulated data flows.	3	
			Functional	intersects with	Asset Scope Classification	AST-04.1	Mechanisms exist to determine cybersecurity & data privacy control applicability by identifying, assigning and documenting the appropriate asset scope categorization for all systems, applications, services and personnel (internal and third-parties).	3	
			Functional	intersects with	Control Applicability Boundary Graphical Representation	AST-04.2	Mechanisms exist to ensure control applicability is appropriately-determined for systems, applications, services and third parties by graphically representing applicable boundaries.	3	
			Functional	intersects with	Test, Validate & Document Changes	CHG-02.2	Mechanisms exist to appropriately test and document proposed changes in a non-production environment before changes are implemented in a production environment.	3	
			Functional	intersects with	Security Impact Analysis for Changes	CHG-03	Mechanisms exist to analyze proposed changes for potential security impacts, prior to the implementation of the change.	5	
			Functional	intersects with	Stakeholder Notification of Changes	CHG-05	Mechanisms exist to ensure stakeholders are made aware of and understand the impact of proposed changes.	8	
			Functional	intersects with	Sensitive Data Inventories	DCH-06.2	Mechanisms exist to maintain inventory logs of all sensitive media and conduct sensitive media inventories at least annually.	3	
			Functional	intersects with	Geographic Location of Data	DCH-19	Mechanisms exist to inventory, document and maintain data flows for data that is resident (permanently or temporarily) within a service's geographically distributed applications (physical and virtual), infrastructure, systems components and/or shared with other third-parties.	3	
			Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
			Functional	intersects with	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	5	
03.04.12	System and Component Configuration for High-Risk Areas	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.12.a	System and Component Configuration for High-Risk Areas	Issue systems or system components with the following configurations to individuals traveling to high-risk locations: [Assignment: organization-defined system configurations].	Functional	subset of	Travel-Only Devices	AST-24	Mechanisms exist to issue personnel travelling overseas with temporary, loaner or "travel-only" end user technology (e.g., laptops and mobile devices) when travelling to authoritarian countries with a higher-than average risk for Intellectual Property (IP) theft or espionage against individuals and private companies.	10	
			Functional	intersects with	Configure Systems, Components or Services for High-Risk Areas	CFG-02.5	Mechanisms exist to configure systems utilized in high-risk areas with more restrictive baseline configurations.	8	
			Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	8	
03.04.12.b	System and Component Configuration for High-Risk Areas	Apply the following security requirements to the systems or components when the individuals return from travel: [Assignment: organization-defined security requirements].	Functional	intersects with	Travel-Only Devices	AST-24	Mechanisms exist to issue personnel travelling overseas with temporary, loaner or "travel-only" end user technology (e.g., laptops and mobile devices) when travelling to authoritarian countries with a higher-than average risk for Intellectual Property (IP) theft or espionage against individuals and private companies.	8	
			Functional	intersects with	Re-Imaging Devices After Travel	AST-25	Mechanisms exist to re-image end user technology (e.g., laptops and mobile devices) when returning from overseas travel to an authoritarian country with a higher-than average risk for Intellectual Property (IP) theft or espionage against individuals and private companies.	8	
			Functional	intersects with	Mobile Device Tampering	MDM-04	Mechanisms exist to protect mobile devices from tampering through inspecting devices returning from locations that the organization deems to be of significant risk, prior to the device being connected to the organization's network.	8	
03.05.01	User Identification and Authentication	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.01.a	User Identification and Authentication	Uniquely identify and authenticate system users, and associate that unique identification with processes acting on behalf of those users.	Functional	subset of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
			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).	8	
			Functional	intersects with	Identification & Authentication for Organizational Users	IAC-02	Mechanisms exist to uniquely identify and centrally Authenticate, Authorize and Audit (AAA) organizational users and processes acting on behalf of organizational users.	8	
			Functional	intersects with	Identification & Authentication for Non-Organizational Users	IAC-03	Mechanisms exist to uniquely identify and centrally Authenticate, Authorize and Audit (AAA) third-party users and processes that provide services to the organization.	8	
			Functional	intersects with	Identification & Authentication for Third Party Systems & Services	IAC-05	Mechanisms exist to identify and authenticate third-party systems and services.	3	
03.05.01.b	User Identification and Authentication	Re-authenticate users when [Assignment: organization-defined circumstances or situations requiring re-authentication].	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	
03.05.02	Device Identification and Authentication	Uniquely identify and authenticate [Assignment: organization-defined devices or types of devices] before establishing a system connection.	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).	8	
			Functional	intersects with	Identification & Authentication for Devices	IAC-04	Mechanisms exist to uniquely identify and centrally Authenticate, Authorize and Audit (AAA) devices before establishing a connection using bidirectional authentication that is cryptographically- based and replay resistant.	5	
			Functional	intersects with	Identification & Authentication for Third Party Systems & Services	IAC-05	Mechanisms exist to identify and authenticate third-party systems and services.	5	
03.05.03	Multi-Factor Authentication	Implement multi-factor authentication for access to privileged and non-privileged accounts.	Functional	subset of	Multi-Factor Authentication (MFA)	IAC-06	Automated mechanisms exist to enforce Multi-Factor Authentication (MFA) for: ▪ Remote network access; ▪ Third-party systems, applications and/or services; and/ or ▪ Non-console access to critical systems or systems that store, transmit and/or process sensitive/regulated data.	10	
			Functional	intersects with	Network Access to Privileged Accounts	IAC-06.1	Mechanisms exist to utilize Multi-Factor Authentication (MFA) to authenticate network access for privileged accounts.	3	
			Functional	intersects with	Network Access to Non-Privileged Accounts	IAC-06.2	Mechanisms exist to utilize Multi-Factor Authentication (MFA) to authenticate network access for non-privileged accounts.	3	
			Functional	intersects with	Local Access to Privileged Accounts	IAC-06.3	Mechanisms exist to utilize Multi-Factor Authentication (MFA) to authenticate local access for privileged accounts.	3	
03.05.04	Replay-Resistant Authentication	Implement replay-resistant authentication mechanisms for access to privileged and non-privileged accounts.	Functional	equal	Replay-Resistant Authentication	IAC-02.2	Automated mechanisms exist to employ replay-resistant authentication.	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 (optional)	Notes (optional)
03.05.05	Identifier Management	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.05.a	Identifier Management	Receive authorization from organizational personnel or roles to assign an individual, group, role, service, or device identifier.	Functional	subset of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
			Functional	intersects with	User Provisioning & De-Provisioning	IAC-07	Mechanisms exist to utilize a formal user registration and de-registration process that governs the assignment of access rights.	8	
			Functional	intersects with	Change of Roles & Duties	IAC-07.1	Mechanisms exist to revoke user access rights following changes in personnel roles and duties, if no longer necessary or permitted.	8	
			Functional	subset of	Management Approval For New or Changed Accounts	IAC-28.1	Mechanisms exist to ensure management approvals are required for new accounts or changes in permissions to existing accounts.	10	
03.05.05.b	Identifier Management	Select and assign an identifier that identifies an individual, group, role, service, or device.	Functional	intersects with	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	5	
			Functional	subset of	User Identity (ID) Management	IAC-09.1	Mechanisms exist to ensure proper user identification management for non-consumer users and administrators.	10	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	3	
03.05.05.c	Identifier Management	Prevent the reuse of identifiers for [Assignment: organization-defined time period].	Functional	intersects with	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	8	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	5	
03.05.05.d	Identifier Management	Manage individual identifiers by uniquely identifying each individual as [Assignment: organization-defined characteristic identifying individual status].	Functional	subset of	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).	10	
			Functional	intersects with	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	3	
			Functional	intersects with	Identity User Status	IAC-09.2	Mechanisms exist to identify contractors and other third-party users through unique username characteristics.	8	
			Functional	intersects with	Privileged Account Identifiers	IAC-09.5	Mechanisms exist to uniquely manage privileged accounts to identify the account as a privileged user or service.	8	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	5	
03.05.06	Identifier Management	Consistency with SP 800-53.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.07	Password Management	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.07.a	Password Management	Maintain a list of commonly-used, expected, or compromised passwords, and update the list [Assignment: organization-defined frequency] and when organizational passwords are suspected to have been compromised.	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).	3	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	3	
			Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	8	
			Functional	intersects with	Automated Support For Password Strength	IAC-10.4	Automated mechanisms exist to determine if password authenticators are sufficiently strong enough to satisfy organization-defined password length and complexity requirements.	8	
03.05.07.b	Password Management	Verify that passwords are not found on the list of commonly used, expected, or compromised passwords when users create or update passwords.	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).	3	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	3	
			Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	8	
			Functional	intersects with	Automated Support For Password Strength	IAC-10.4	Automated mechanisms exist to determine if password authenticators are sufficiently strong enough to satisfy organization-defined password length and complexity requirements.	8	
03.05.07.c	Password Management	Transmit passwords only over cryptographically protected channels.	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).	3	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	3	
			Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	3	
			Functional	subset of	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.	10	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	8	
03.05.07.d	Password Management	Store passwords in a cryptographically protected form.	Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			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).	8	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
			Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	8	
			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	
			Functional	intersects with	No Embedded Unencrypted Static Authenticators	IAC-10.6	Mechanisms exist to ensure that unencrypted, static authenticators are not embedded in applications, scripts or stored on function keys.	8	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	8	
03.05.07.e	Password Management	Select a new password upon first use after account recovery.	Functional	intersects with	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	8	
			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).	8	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	8	
			Functional	subset of	Password-Based Authentication	IAC-10.1	Mechanisms exist to enforce complexity, length and lifespan considerations to ensure strong criteria for password-based authentication.	10	
			Functional	intersects with	Vendor-Supplied Defaults	IAC-10.8	Mechanisms exist to ensure vendor-supplied defaults are changed as part of the installation process.	3	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	5	
03.05.07.f	Password Management	Enforce the following composition and complexity rules for passwords: [Assignment: organization-defined composition and complexity rules].	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	8	
			Functional	intersects with	Password-Based Authentication	IAC-10.1	Mechanisms exist to enforce complexity, length and lifespan considerations to ensure strong criteria for password-based authentication.	8	
			Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	8	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	8	
03.05.08	Password Management	Consistency with SP 800-53.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.09	Password Management	Consistency with SP 800-53.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.10	Withdrawn	Incorporated into 03.05.07.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.11	Authentication Feedback	Obscure feedback of authentication information during the authentication process.	Functional	equal	Authenticator Feedback	IAC-11	Mechanisms exist to obscure the feedback of authentication information during the authentication process to protect the information from possible exploitation/use by unauthorized individuals.	10	
03.05.12	Authenticator Management	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.12.a	Authenticator Management	Verify the identity of the individual, group, role, service, or device receiving the authenticator as part of the initial authenticator distribution.	Functional	subset of	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	10	
			Functional	intersects with	In-Person or Trusted Third-Party Registration	IAC-10.3	Mechanisms exist to conduct in-person or trusted third-party identify verification before user accounts for third-parties are created.	8	
			Functional	intersects with	Identity Proofing (Identity Verification)	IAC-28	Mechanisms exist to verify the identity of a user before issuing authenticators or modifying access permissions.	8	
03.05.12.b	Authenticator Management	Establish initial authenticator content for any authenticators issued by the organization.	Functional	subset of	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	10	
			Functional	intersects with	Password-Based Authentication	IAC-10.1	Mechanisms exist to enforce complexity, length and lifespan considerations to ensure strong criteria for password-based authentication.	5	
03.05.12.c	Authenticator Management	Establish and implement administrative procedures for initial authenticator distribution; for lost, compromised, or damaged authenticators; and for revoking authenticators.	Functional	subset of	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	10	
			Functional	intersects with	Password-Based Authentication	IAC-10.1	Mechanisms exist to enforce complexity, length and lifespan considerations to ensure strong criteria for password-based authentication.	5	
			Functional	intersects with	Identity Proofing (Identity Verification)	IAC-28	Mechanisms exist to verify the identity of a user before issuing authenticators or modifying access permissions.	5	
03.05.12.d	Authenticator Management	Change default authenticators at first use.	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			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).	8	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	8	
			Functional	intersects with	Password-Based Authentication	IAC-10.1	Mechanisms exist to enforce complexity, length and lifespan considerations to ensure strong criteria for password-based authentication.	8	
			Functional	intersects with	Vendor-Supplied Defaults	IAC-10.8	Mechanisms exist to ensure vendor-supplied defaults are changed as part of the installation process.	8	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	8	
03.05.12.e	Authenticator Management	Change or refresh authenticators [Assignment: organization-defined frequency] or when the following events occur: [Assignment: organization-defined events].	Functional	subset of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	8	
			Functional	intersects with	Password-Based Authentication	IAC-10.1	Mechanisms exist to enforce complexity, length and lifespan considerations to ensure strong criteria for password-based authentication.	5	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	5	
03.05.12.f	Authenticator Management	Protect authenticator content from unauthorized disclosure and modification.	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).	3	
			Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
			Functional	intersects with	Password-Based Authentication	IAC-10.1	Mechanisms exist to enforce complexity, length and lifespan considerations to ensure strong criteria for password-based authentication.	3	
			Functional	subset of	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.	10	
			Functional	intersects with	Automated System Account Management (Directory Services)	IAC-15.1	Automated mechanisms exist to support the management of system accounts (e.g., directory services).	3	
03.06.01	Incident Handling	Implement an incident-handling capability that is consistent with the incident response plan and includes preparation, detection and analysis, containment, eradication, and recovery.	Functional	subset of	Incident Response Operations	IRO-01	Mechanisms exist to implement and govern processes and documentation to facilitate an organization-wide response capability for cybersecurity & data privacy-related incidents.	10	
			Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover the preparation, automated detection or intake of incident reporting, analysis, containment, eradication and recovery.	8	
			Functional	intersects with	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	8	
			Functional	intersects with	Information Spillage Response	IRO-12	Mechanisms exist to respond to sensitive information spills.	3	
03.06.02	Incident Monitoring, Reporting, and Response Assistance	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.06.02.a	Incident Monitoring, Reporting, and Response Assistance	Track and document system security incidents.	Functional	subset of	Incident Handling	IRO-02	Mechanisms exist to cover the preparation, automated detection or intake of incident reporting, analysis, containment, eradication and recovery.	10	
			Functional	intersects with	Situational Awareness For Incidents	IRO-09	Mechanisms exist to document, monitor and report the status of cybersecurity & data privacy incidents to internal stakeholders all the way through the resolution of the incident.	8	
03.06.02.b	Incident Monitoring, Reporting, and Response Assistance	Report suspected incidents to the organizational incident response capability within [Assignment: organization-defined time period].	Functional	subset of	Incident Handling	IRO-02	Mechanisms exist to cover the preparation, automated detection or intake of incident reporting, analysis, containment, eradication and recovery.	10	
			Functional	intersects with	Situational Awareness For Incidents	IRO-09	Mechanisms exist to document, monitor and report the status of cybersecurity & data privacy incidents to internal stakeholders all the way through the resolution of the incident.	5	
			Functional	intersects with	Incident Stakeholder Reporting	IRO-10	Mechanisms exist to timely-report incidents to applicable: ▪ Internal stakeholders; ▪ Affected clients & third-parties; and ▪ Regulatory authorities.	5	
			Functional	intersects with	Cyber Incident Reporting for Sensitive Data	IRO-10.2	Mechanisms exist to report sensitive/regulated data incidents in a timely manner.	5	
03.06.02.c	Incident Monitoring, Reporting, and Response Assistance	Report incident information to [Assignment: organization-defined authorities].	Functional	subset of	Incident Handling	IRO-02	Mechanisms exist to cover the preparation, automated detection or intake of incident reporting, analysis, containment, eradication and recovery.	10	
			Functional	intersects with	Incident Stakeholder Reporting	IRO-10	Mechanisms exist to timely-report incidents to applicable: ▪ Internal stakeholders; ▪ Affected clients & third-parties; and ▪ Regulatory authorities.	5	
			Functional	intersects with	Cyber Incident Reporting for Sensitive Data	IRO-10.2	Mechanisms exist to report sensitive/regulated data incidents in a timely manner.	5	
			Functional	intersects with	Regulatory & Law Enforcement Contacts	IRO-14	Mechanisms exist to maintain incident response contacts with applicable regulatory and law enforcement agencies.	8	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.06.02.d	Incident Monitoring, Reporting, and Response Assistance	Provide an incident response support resource that offers advice and assistance to system users on handling and reporting incidents.	Functional	subset of	Incident Handling	IRO-02	Mechanisms exist to cover the preparation, automated detection or intake of incident reporting, analysis, containment, eradication and recovery.	10	
			Functional	subset of	Incident Reporting Assistance	IRO-11	Mechanisms exist to provide incident response advice and assistance to users of systems for the handling and reporting of actual and potential cybersecurity & data privacy incidents.	10	
03.06.03	Incident Response Testing	Test the effectiveness of the incident response capability [Assignment: organization-defined frequency].	Functional	subset of	Incident Response Testing	IRO-06	Mechanisms exist to formally test incident response capabilities through realistic exercises to determine the operational effectiveness of those capabilities.	10	
03.06.04	Incident Response Training	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.06.04.a	Incident Response Training	Provide incident response training to system users consistent with assigned roles and responsibilities:	Functional	intersects with	Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity responsibilities for all personnel.	8	
			Functional	intersects with	Formal Indoctrination	HRS-04.2	Mechanisms exist to verify that individuals accessing a system processing, storing, or transmitting sensitive information are formally indoctrinated for all the relevant types of information to which they have access on the system.	8	
			Functional	subset of	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	10	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	8	
03.06.04.a.01	Incident Response Training	Within [Assignment: organization-defined time period] of assuming an incident response role or responsibility or acquiring system access,	Functional	intersects with	Formal Indoctrination	HRS-04.2	Mechanisms exist to verify that individuals accessing a system processing, storing, or transmitting sensitive information are formally indoctrinated for all the relevant types of information to which they have access on the system.	3	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	8	
03.06.04.a.02	Incident Response Training	When required by system changes, and	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	5	
			Functional	intersects with	Cyber Threat Environment	SAT-03.6	Mechanisms exist to provide role-based cybersecurity & data privacy awareness training that is current and relevant to the cyber threats that the user might encounter the user's specific day-to-day business operations	5	
03.06.04.a.03	Incident Response Training	[Assignment: organization-defined frequency] thereafter.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
			Functional	intersects with	Cybersecurity & Data Privacy Awareness Training	SAT-02	Mechanisms exist to provide all employees and contractors appropriate awareness education and training that is relevant for their job function.	5	
03.06.04.b	Incident Response Training	Review and update incident response training content [Assignment: organization-defined frequency] and following [Assignment: organization-defined events].	Functional	intersects with	IRP Update	IRO-04.2	Mechanisms exist to regularly review and modify incident response practices to incorporate lessons learned, business process changes and industry developments, as necessary.	8	
			Functional	intersects with	Continuous Incident Response Improvements	IRO-04.3	Mechanisms exist to use qualitative and quantitative data from incident response testing to: ▪Determine the effectiveness of incident response processes; ▪Continuously improve incident response processes; and ▪Provide incident response measures and metrics that are accurate, consistent, and in a reproducible format.	8	
			Functional	intersects with	Root Cause Analysis (RCA) & Lessons Learned	IRO-13	Mechanisms exist to incorporate lessons learned from analyzing and resolving cybersecurity & data privacy incidents to reduce the likelihood or impact of future incidents.	8	
			Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: ▪ Before authorizing access to the system or performing assigned duties; ▪ When required by system changes; and ▪ Annually thereafter.	3	
			Functional	intersects with	Continuing Professional Education (CPE) - Cybersecurity & Data Privacy Personnel	SAT-03.7	Mechanisms exist to ensure cybersecurity & data privacy personnel receive Continuing Professional Education (CPE) training to maintain currency and proficiency with industry-recognized secure practices that are pertinent to their assigned roles and responsibilities.	3	
03.06.05	Incident Response Plan	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.06.05.a	Incident Response Plan	Develop an incident response plan that:	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.a.01	Incident Response Plan	Provides the organization with a roadmap for implementing its incident response capability,	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.a.02	Incident Response Plan	Describes the structure and organization of the incident response capability,	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.a.03	Incident Response Plan	Provides a high-level approach for how the incident response capability fits into the overall organization,	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.a.04	Incident Response Plan	Defines reportable incidents,	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.a.05	Incident Response Plan	Addresses the sharing of incident information, and	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.a.06	Incident Response Plan	Designates responsibilities to organizational entities, personnel, or roles.	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.b	Incident Response Plan	Distribute copies of the incident response plan to designated incident response personnel (identified by name and/or by role) and organizational elements.	Functional	subset of	Incident Response Plan (IRP)	IRO-04	Mechanisms exist to maintain and make available a current and viable Incident Response Plan (IRP) to all stakeholders.	10	
03.06.05.c	Incident Response Plan	Update the incident response plan to address system and organizational changes or problems encountered during plan implementation, execution, or testing.	Functional	intersects with	IRP Update	IRO-04.2	Mechanisms exist to regularly review and modify incident response practices to incorporate lessons learned, business process changes and industry developments, as necessary.	5	
03.06.05.d	Incident Response Plan	Protect the incident response plan from unauthorized disclosure.	Functional	subset of	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	10	
			Functional	intersects with	Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity responsibilities for all personnel.	8	
			Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	8	
			Functional	intersects with	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	8	
03.07.01	Withdrawn	Recategorized as NCO.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.02	Withdrawn	Incorporated into 03.07.04 and 03.07.06.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.03	Withdrawn	Incorporated into 03.08.03.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.04	Maintenance Tools	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.04.a	Maintenance Tools	Approve, control, and monitor the use of system maintenance tools.	Functional	intersects with	Asset Governance	AST-01	Mechanisms exist to facilitate an IT Asset Management (ITAM) program to implement and manage asset management controls.	5	
			Functional	intersects with	Security of Assets & Media	AST-05	Mechanisms exist to maintain strict control over the internal or external distribution of any kind of sensitive/regulated media.	3	
			Functional	subset of	Maintenance Operations	MNT-01	Mechanisms exist to develop, disseminate, review & update procedures to facilitate the implementation of maintenance controls across the enterprise.	10	
			Functional	intersects with	Controlled Maintenance	MNT-02	Mechanisms exist to conduct controlled maintenance activities throughout the lifecycle of the system, application or service.	8	
			Functional	intersects with	Timely Maintenance	MNT-03	Mechanisms exist to obtain maintenance support and/or spare parts for systems within a defined Recovery Time Objective (RTO).	8	
			Functional	intersects with	Preventative Maintenance	MNT-03.1	Mechanisms exist to perform preventive maintenance on critical systems, applications and services.	8	
			Functional	intersects with	Maintenance Tools	MNT-04	Mechanisms exist to control and monitor the use of system maintenance tools.	8	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
			Functional	intersects with	Off-Site Maintenance	MNT-09	Mechanisms exist to ensure off-site maintenance activities are conducted securely and the asset(s) undergoing maintenance actions are secured during physical transfer and storage while off-site.	3	
03.07.04.b	Maintenance Tools	Check media with diagnostic and test programs for malicious code before it is used in the system.	Functional	subset of	Inspect Tools	MNT-04.1	Mechanisms exist to inspect maintenance tools carried into a facility by maintenance personnel for improper or unauthorized modifications.	10	
03.07.04.c	Maintenance Tools	Prevent the removal of system maintenance equipment containing CUI by verifying that there is no CUI on the equipment, sanitizing or destroying the equipment, or retaining the equipment within the facility.	Functional	intersects with	Secure Disposal, Destruction or Re-Use of Equipment	AST-09	Mechanisms exist to securely dispose of, destroy or repurpose system components using organization-defined techniques and methods to prevent information being recovered from these components.	5	
			Functional	intersects with	System Media Sanitization	DCH-09	Mechanisms exist to sanitize system media with the strength and integrity commensurate with the classification or sensitivity of the information prior to disposal, release out of organizational control or release for reuse.	8	
			Functional	intersects with	Prevent Unauthorized Removal	MNT-04.3	Mechanisms exist to prevent or control the removal of equipment undergoing maintenance that containing organizational information.	8	
03.07.05	Nonlocal Maintenance	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.05.a	Nonlocal Maintenance	Approve and monitor nonlocal maintenance and diagnostic activities.	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).	8	
			Functional	intersects with	Privileged Access by Non-Organizational Users	IAC-05.2	Mechanisms exist to prohibit privileged access by non-organizational users.	3	
			Functional	intersects with	Controlled Maintenance	MNT-02	Mechanisms exist to conduct controlled maintenance activities throughout the lifecycle of the system, application or service.	8	
			Functional	intersects with	Remote Maintenance	MNT-05	Mechanisms exist to authorize, monitor and control remote, non-local maintenance and diagnostic activities.	8	
			Functional	intersects with	Auditing Remote Maintenance	MNT-05.1	Mechanisms exist to audit remote, non-local maintenance and diagnostic sessions, as well as review the maintenance action performed during remote maintenance sessions.	3	
			Functional	intersects with	Remote Maintenance Pre-Approval	MNT-05.5	Mechanisms exist to require maintenance personnel to obtain pre-approval and scheduling for remote, non-local maintenance sessions.	8	
03.07.05.b	Nonlocal Maintenance	Implement multi-factor authentication and replay resistance in the establishment of nonlocal maintenance and diagnostic sessions.	Functional	intersects with	Replay-Resistant Authentication	IAC-02.2	Automated mechanisms exist to employ replay-resistant authentication.	8	
			Functional	intersects with	Multi-Factor Authentication (MFA)	IAC-06	Automated mechanisms exist to enforce Multi-Factor Authentication (MFA) for: ▪ Remote network access; ▪ Third-party systems, applications and/or services; and/ or ▪ Non-console access to critical systems or systems that store, transmit and/or process sensitive/regulated data.	8	
			Functional	intersects with	Remote Maintenance	MNT-05	Mechanisms exist to authorize, monitor and control remote, non-local maintenance and diagnostic activities.	5	
			Functional	intersects with	Remote Maintenance Cryptographic Protection	MNT-05.3	Cryptographic mechanisms exist to protect the integrity and confidentiality of remote, non-local maintenance and diagnostic communications.	3	
03.07.05.c	Nonlocal Maintenance	Terminate session and network connections when nonlocal maintenance is completed.	Functional	intersects with	Session Termination	IAC-25	Automated mechanisms exist to log out users, both locally on the network and for remote sessions, at the end of the session or after an organization-defined period of inactivity.	3	
			Functional	intersects with	Remote Maintenance	MNT-05	Mechanisms exist to authorize, monitor and control remote, non-local maintenance and diagnostic activities.	5	
			Functional	intersects with	Remote Maintenance Disconnect Verification	MNT-05.4	Mechanisms exist to provide remote disconnect verification to ensure remote, non-local maintenance and diagnostic sessions are properly terminated.	8	
03.07.06	Maintenance Personnel	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.06.a	Maintenance Personnel	Establish a process for maintenance personnel authorization.	Functional	intersects with	Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity responsibilities for all personnel.	5	
			Functional	intersects with	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
			Functional	subset of	Maintenance Operations	MNT-01	Mechanisms exist to develop, disseminate, review & update procedures to facilitate the implementation of maintenance controls across the enterprise.	10	
			Functional	intersects with	Authorized Maintenance Personnel	MNT-06	Mechanisms exist to maintain a current list of authorized maintenance organizations or personnel.	5	
			Functional	intersects with	Maintenance Personnel Without Appropriate Access	MNT-06.1	Mechanisms exist to ensure the risks associated with maintenance personnel who do not have appropriate access authorizations, clearances or formal access approvals are appropriately mitigated.	5	
			Functional	intersects with	Non-System Related Maintenance	MNT-06.2	Mechanisms exist to ensure that non-escorted personnel performing non-IT maintenance activities in the physical proximity of IT systems have required access authorizations.	5	
			Functional	intersects with	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	5	
			Functional	intersects with	Third-Party Inventories	TPM-01.1	Mechanisms exist to maintain a current, accurate and complete list of External Service Providers (ESPs) that can potentially impact the Confidentiality, Integrity, Availability and/or Safety (CIAS) of the organization's systems, applications, services and data.	5	
			Functional	intersects with	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	5	
			Functional	intersects with	Responsible, Accountable, Supportive, Consulted & Informed (RASCI) Matrix	TPM-05.4	Mechanisms exist to document and maintain a Responsible, Accountable, Supportive, Consulted & Informed (RASCI) matrix, or similar documentation, to delineate assignment for cybersecurity & data privacy controls between internal stakeholders and External Service Providers (ESPs).	3	
03.07.06.b	Maintenance Personnel	Maintain a list of authorized maintenance organizations or personnel.	Functional	equal	Authorized Maintenance Personnel	MNT-06	Mechanisms exist to maintain a current list of authorized maintenance organizations or personnel.	10	
03.07.06.c	Maintenance Personnel	Verify that non-escorted personnel who perform maintenance on the system possess the required access authorizations.	Functional	intersects with	Authorized Maintenance Personnel	MNT-06	Mechanisms exist to maintain a current list of authorized maintenance organizations or personnel.	5	
			Functional	subset of	Maintenance Personnel Without Appropriate Access	MNT-06.1	Mechanisms exist to ensure the risks associated with maintenance personnel who do not have appropriate access authorizations, clearances or formal access approvals are appropriately mitigated.	10	
			Functional	intersects with	Non-System Related Maintenance	MNT-06.2	Mechanisms exist to ensure that non-escorted personnel performing non-IT maintenance activities in the physical proximity of IT systems have required access authorizations.	5	
03.07.06.d	Maintenance Personnel	Designate organizational personnel with required access authorizations and technical competence to supervise the maintenance activities of personnel who do not possess the required access authorizations.	Functional	intersects with	Competency Requirements for Security-Related Positions	HRS-03.2	Mechanisms exist to ensure that all security-related positions are staffed by qualified individuals who have the necessary skill set.	8	
			Functional	intersects with	Authorized Maintenance Personnel	MNT-06	Mechanisms exist to maintain a current list of authorized maintenance organizations or personnel.	8	
			Functional	intersects with	Maintenance Personnel Without Appropriate Access	MNT-06.1	Mechanisms exist to ensure the risks associated with maintenance personnel who do not have appropriate access authorizations, clearances or formal access approvals are appropriately mitigated.	8	
			Functional	subset of	Data Protection	DCH-01	Mechanisms exist to facilitate the implementation of data protection controls.	10	
			Functional	intersects with	Data Stewardship	DCH-01.1	Mechanisms exist to ensure data stewardship is assigned, documented and communicated.	5	
			Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	5	
			Functional	intersects with	Data & Asset Classification	DCH-02	Mechanisms exist to ensure data and assets are categorized in accordance with applicable statutory, regulatory and contractual requirements.	5	
			Functional	intersects with	Media Access	DCH-03	Mechanisms exist to control and restrict access to digital and non-digital media to authorized individuals.	5	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.08.01	Media Storage	Physically control and securely store system media that contain CUI.	Functional	intersects with	Media Storage	DCH-06	Mechanisms exist to: • Physically control and securely store digital and non-digital media within controlled areas using organization-defined security measures; and • Protect system media until the media are destroyed or sanitized using approved equipment, techniques and procedures.	5	
			Functional	intersects with	Physically Secure All Media	DCH-06.1	Mechanisms exist to physically secure all media that contains sensitive information.	5	
			Functional	intersects with	Making Sensitive Data Unreadable In Storage	DCH-06.4	Mechanisms exist to ensure sensitive/regulated data is rendered human unreadable anywhere sensitive/regulated data is stored.	5	
			Functional	intersects with	Physical & Environmental Protections	PES-01	Mechanisms exist to facilitate the operation of physical and environmental protection controls.	3	
			Functional	intersects with	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	3	
			Functional	intersects with	Role-Based Physical Access	PES-02.1	Physical access control mechanisms exist to authorize physical access to facilities based on the position or role of the individual.	3	
			Functional	intersects with	Physical Security of Offices, Rooms & Facilities	PES-04	Mechanisms exist to identify systems, equipment and respective operating environments that require limited physical access so that appropriate physical access controls are designed and implemented for offices, rooms and facilities.	8	
			Functional	intersects with	Working in Secure Areas	PES-04.1	Physical security mechanisms exist to allow only authorized personnel access to secure areas.	8	
03.08.02	Media Access	Restrict access to CUI on system media to authorized personnel or roles.	Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	5	
			Functional	subset of	Media Access	DCH-03	Mechanisms exist to control and restrict access to digital and non-digital media to authorized individuals.	10	
			Functional	intersects with	Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity responsibilities for all personnel.	3	
			Functional	intersects with	Physical & Environmental Protections	PES-01	Mechanisms exist to facilitate the operation of physical and environmental protection controls.	3	
			Functional	intersects with	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	3	
			Functional	intersects with	Role-Based Physical Access	PES-02.1	Physical access control mechanisms exist to authorize physical access to facilities based on the position or role of the individual.	3	
			Functional	intersects with	Physical Security of Offices, Rooms & Facilities	PES-04	Mechanisms exist to identify systems, equipment and respective operating environments that require limited physical access so that appropriate physical access controls are designed and implemented for offices, rooms and facilities.	3	
			Functional	intersects with	Working in Secure Areas	PES-04.1	Physical security mechanisms exist to allow only authorized personnel access to secure areas.	3	
03.08.03	Media Sanitization	Sanitize system media that contain CUI prior to disposal, release out of organizational control, or release for reuse.	Functional	intersects with	Secure Disposal, Destruction or Re-Use of Equipment	AST-09	Mechanisms exist to securely dispose of, destroy or repurpose system components using organization-defined techniques and methods to prevent information being recovered from these components.	8	
			Functional	intersects with	Physical Media Disposal	DCH-08	Mechanisms exist to securely dispose of media when it is no longer required, using formal procedures.	8	
			Functional	intersects with	System Media Sanitization	DCH-09	Mechanisms exist to sanitize system media with the strength and integrity commensurate with the classification or sensitivity of the information prior to disposal, release out of organizational control or release for reuse.	8	
			Functional	intersects with	Information Disposal	DCH-21	Mechanisms exist to securely dispose of, destroy or erase information.	8	
03.08.04	Media Marking	Mark system media that contain CUI to indicate distribution limitations, handling caveats, and applicable CUI markings.	Functional	intersects with	Data & Asset Classification	DCH-02	Mechanisms exist to ensure data and assets are categorized in accordance with applicable statutory, regulatory and contractual requirements.	8	
			Functional	intersects with	Media Marking	DCH-04	Mechanisms exist to mark media in accordance with data protection requirements so that personnel are alerted to distribution limitations, handling caveats and applicable security requirements.	8	
03.08.05	Media Transport	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.08.05.a	Media Transport	Protect and control system media that contain CUI during transport outside of controlled areas.	Functional	intersects with	Data Stewardship	DCH-01.1	Mechanisms exist to ensure data stewardship is assigned, documented and communicated.	5	
			Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			Functional	intersects with	Media Transportation	DCH-07	Mechanisms exist to protect and control digital and non-digital media during transport outside of controlled areas using appropriate security measures.	8	
			Functional	intersects with	Custodians	DCH-07.1	Mechanisms exist to identify custodians throughout the transport of digital or non-digital media.	8	
			Functional	intersects with	Encrypting Data In Storage Media	DCH-07.2	Cryptographic mechanisms exist to protect the confidentiality and integrity of information stored on digital media during transport outside of controlled areas.	5	
03.08.05.b	Media Transport	Maintain accountability of system media that contain CUI during transport outside of controlled areas.	Functional	intersects with	Media Transportation	DCH-07	Mechanisms exist to protect and control digital and non-digital media during transport outside of controlled areas using appropriate security measures.	5	
			Functional	intersects with	Custodians	DCH-07.1	Mechanisms exist to identify custodians throughout the transport of digital or non-digital media.	5	
03.08.05.c	Media Transport	Document activities associated with the transport of system media that contain CUI.	Functional	intersects with	Sensitive / Regulated Media Records	DCH-01.3	Mechanisms exist to ensure media records for sensitive/regulated data contain sufficient information to determine the potential impact in the event of a data loss incident.	8	
03.08.06	Withdrawn	Incorporated into 03.13.08.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.08.07	Media Use	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.08.07.a	Media Use	Restrict or prohibit the use of [Assignment: organization-defined types of system media].	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
			Functional	subset of	Media Use	DCH-10	Mechanisms exist to restrict the use of types of digital media on systems or system components.	10	
			Functional	intersects with	Removable Media Security	DCH-12	Mechanisms exist to restrict removable media in accordance with data handling and acceptable usage parameters.	3	
03.08.07.b	Media Use	Prohibit the use of removable system media without an identifiable owner.	Functional	equal	Prohibit Use Without Owner	DCH-10.2	Mechanisms exist to prohibit the use of portable storage devices in organizational information systems when such devices have no identifiable owner.	10	
03.08.08	Withdrawn	Incorporated into 03.08.07.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.08.09	System Backup – Cryptographic Protection	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.08.09.a	System Backup – Cryptographic Protection	Protect the confidentiality of backup information.	Functional	intersects with	Data Backups	BCD-11	Mechanisms exist to create recurring backups of data, software and/or system images, as well as verify the integrity of these backups, to ensure the availability of the data to satisfying Recovery Time Objectives (RTOs) and Recovery Point Objectives (RPOs).	3	
			Functional	intersects with	Cryptographic Protection	BCD-11.4	Cryptographic mechanisms exist to prevent the unauthorized disclosure and/or modification of backup information.	8	
03.08.09.b	System Backup – Cryptographic Protection	Implement cryptographic mechanisms to prevent the unauthorized disclosure of CUI at backup storage locations.	Functional	equal	Cryptographic Protection	BCD-11.4	Cryptographic mechanisms exist to prevent the unauthorized disclosure and/or modification of backup information.	10	
03.09.01	Personnel Screening	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.09.01.a	Personnel Screening	Screen individuals prior to authorizing access to the system.	Functional	intersects with	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	8	
			Functional	subset of	Personnel Screening	HRS-04	Mechanisms exist to manage personnel security risk by screening individuals prior to authorizing access.	10	
			Functional	intersects with	Roles With Special Protection Measures	HRS-04.1	Mechanisms exist to ensure that individuals accessing a system that stores, transmits or processes information requiring special protection satisfy organization-defined personnel screening criteria.	8	

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03.09.01.b	Personnel Screening	Rescreen individuals in accordance with [Assignment: organization-defined conditions requiring rescreening].	Functional	intersects with	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	8	
			Functional	intersects with	Roles With Special Protection Measures	HRS-04.1	Mechanisms exist to ensure that individuals accessing a system that stores, transmits or processes information requiring special protection satisfy organization-defined personnel screening criteria.	8	
03.09.02	Personnel Termination and Transfer	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.09.02.a	Personnel Termination and Transfer	When individual employment is terminated:	Functional	subset of	Personnel Transfer	HRS-08	Mechanisms exist to adjust logical and physical access authorizations to systems and facilities upon personnel reassignment or transfer, in a timely manner.	10	
			Functional	subset of	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	10	
03.09.02.a.01	Personnel Termination and Transfer	Disable system access within [Assignment: organization-defined time period],	Functional	intersects with	High-Risk Terminations	HRS-09.2	Mechanisms exist to expedite the process of removing "high risk" individual's access to systems and applications upon termination, as determined by management.	5	
			Functional	intersects with	Automated Employment Status Notifications	HRS-09.4	Automated mechanisms exist to notify Identity and Access Management (IAM) personnel or roles upon termination of an individual employment or contract.	3	
			Functional	intersects with	User Provisioning & De-Provisioning	IAC-07	Mechanisms exist to utilize a formal user registration and de-registration process that governs the assignment of access rights.	5	
			Functional	equal	Termination of Employment	IAC-07.2	Mechanisms exist to revoke user access rights in a timely manner, upon termination of employment or contract.	10	
03.09.02.a.02	Personnel Termination and Transfer	Terminate or revoke authenticators and credentials associated with the individual, and	Functional	intersects with	High-Risk Terminations	HRS-09.2	Mechanisms exist to expedite the process of removing "high risk" individual's access to systems and applications upon termination, as determined by management.	5	
			Functional	intersects with	Automated Employment Status Notifications	HRS-09.4	Automated mechanisms exist to notify Identity and Access Management (IAM) personnel or roles upon termination of an individual employment or contract.	3	
			Functional	intersects with	User Provisioning & De-Provisioning	IAC-07	Mechanisms exist to utilize a formal user registration and de-registration process that governs the assignment of access rights.	5	
			Functional	intersects with	Termination of Employment	IAC-07.2	Mechanisms exist to revoke user access rights in a timely manner, upon termination of employment or contract.	5	
03.09.02.a.03	Personnel Termination and Transfer	Retrieve security-related system property.	Functional	intersects with	Asset Ownership Assignment	AST-03	Mechanisms exist to ensure asset ownership responsibilities are assigned, tracked and managed at a team, individual, or responsible organization level to establish a common understanding of requirements for asset protection.	5	
			Functional	intersects with	Accountability Information	AST-03.1	Mechanisms exist to include capturing the name, position and/or role of individuals responsible/accountable for administering assets as part of the technology asset inventory process.	5	
			Functional	subset of	Return of Assets	AST-10	Mechanisms exist to ensure that employees and third-party users return all organizational assets in their possession upon termination of employment, contract or agreement.	10	
			Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
			Functional	intersects with	Asset Collection	HRS-09.1	Mechanisms exist to retrieve organization-owned assets upon termination of an individual's employment.	5	
03.09.02.b	Personnel Termination and Transfer	When individuals are reassigned or transferred to other positions in the organization:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.09.02.b.01	Personnel Termination and Transfer	Review and confirm the ongoing operational need for current logical and physical access authorizations to the system and facility, and	Functional	intersects with	Personnel Transfer	HRS-08	Mechanisms exist to adjust logical and physical access authorizations to systems and facilities upon personnel reassignment or transfer, in a timely manner.	5	
			Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
			Functional	intersects with	High-Risk Terminations	HRS-09.2	Mechanisms exist to expedite the process of removing "high risk" individual's access to systems and applications upon termination, as determined by management.	3	
03.09.02.b.02	Personnel Termination and Transfer	Modify access authorization to correspond with any changes in operational need.	Functional	intersects with	Change of Roles & Duties	IAC-07.1	Mechanisms exist to revoke user access rights following changes in personnel roles and duties, if no longer necessary or permitted.	5	Was 3.9.2.b.3
			Functional	intersects with	Access Enforcement	IAC-20	Mechanisms exist to enforce Logical Access Control (LAC) permissions that conform to the principle of "least privilege."	5	
03.10.01	Physical Access Authorizations	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.01.a	Physical Access Authorizations	Develop, approve, and maintain a list of individuals with authorized access to the facility where the system resides.	Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	8	
			Functional	intersects with	Access To Sensitive / Regulated Data	IAC-20.1	Mechanisms exist to limit access to sensitive/regulated data to only those individuals whose job requires such access.	8	
			Functional	intersects with	Physical & Environmental Protections	PES-01	Mechanisms exist to facilitate the operation of physical and environmental protection controls.	3	
			Functional	intersects with	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	5	
03.10.01.b	Physical Access Authorizations	Issue authorization credentials for facility access.	Functional	intersects with	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	5	
			Functional	intersects with	Role-Based Physical Access	PES-02.1	Physical access control mechanisms exist to authorize physical access to facilities based on the position or role of the individual.	5	
03.10.01.c	Physical Access Authorizations	Review the facility access list [Assignment: organization-defined frequency].	Functional	intersects with	Periodic Review of Account Privileges	IAC-17	Mechanisms exist to periodically-review the privileges assigned to individuals and service accounts to validate the need for such privileges and reassign or remove unnecessary privileges, as necessary.	3	
			Functional	intersects with	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	5	
03.10.01.d	Physical Access Authorizations	Remove individuals from the facility access list when access is no longer required.	Functional	intersects with	Periodic Review of Account Privileges	IAC-17	Mechanisms exist to periodically-review the privileges assigned to individuals and service accounts to validate the need for such privileges and reassign or remove unnecessary privileges, as necessary.	3	
			Functional	intersects with	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	8	
			Functional	intersects with	Role-Based Physical Access	PES-02.1	Physical access control mechanisms exist to authorize physical access to facilities based on the position or role of the individual.	3	
03.10.02	Monitoring Physical Access	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.02.a	Monitoring Physical Access	Monitor physical access to the facility where the system resides to detect and respond to physical security incidents.	Functional	intersects with	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	8	
			Functional	intersects with	Controlled Ingress & Egress Points	PES-03.1	Physical access control mechanisms exist to limit and monitor physical access through controlled ingress and egress points.	5	
			Functional	intersects with	Physical Access Logs	PES-03.3	Physical access control mechanisms generate a log entry for each access attempt through controlled ingress and egress points.	8	
			Functional	subset of	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	10	
			Functional	intersects with	Intrusion Alarms / Surveillance Equipment	PES-05.1	Physical access control mechanisms exist to monitor physical intrusion alarms and surveillance equipment.	5	
			Functional	intersects with	Monitoring Physical Access To Information Systems	PES-05.2	Facility security mechanisms exist to monitor physical access to critical information systems or sensitive/regulated data, in addition to the physical access monitoring of the facility.	3	
03.10.02.b	Monitoring Physical Access	Review physical access logs [Assignment: organization-defined frequency] and upon occurrence of [Assignment: organization-defined events or potential indicators of events].	Functional	subset of	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	10	
			Functional	intersects with	Intrusion Alarms / Surveillance Equipment	PES-05.1	Physical access control mechanisms exist to monitor physical intrusion alarms and surveillance equipment.	5	
			Functional	intersects with	Monitoring Physical Access To Information Systems	PES-05.2	Facility security mechanisms exist to monitor physical access to critical information systems or sensitive/regulated data, in addition to the physical access monitoring of the facility.	5	
			Functional	intersects with	Visitor Control	PES-06	Physical access control mechanisms exist to identify, authorize and monitor visitors before allowing access to the facility (other than areas designated as publicly accessible).	5	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.10.03	Withdrawn	Incorporated into 03.10.07.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.04	Withdrawn	Incorporated into 03.10.07.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.05	Withdrawn	Incorporated into 03.10.07.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.06	Alternate Work Site	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.06.a	Alternate Work Site	Determine alternate work sites allowed for use by employees.	Functional	intersects with	Work From Anywhere (WFA) - Telecommuting Security	NET-14.5	Mechanisms exist to define secure telecommuting practices and govern remote access to systems and data for remote workers.	8	
			Functional	equal	Alternate Work Site	PES-11	Physical security mechanisms exist to utilize appropriate management, operational and technical controls at alternate work sites.	10	
03.10.06.b	Alternate Work Site	Employ the following security requirements at alternate work sites: [Assignment: organization-defined security requirements].	Functional	intersects with	Work From Anywhere (WFA) - Telecommuting Security	NET-14.5	Mechanisms exist to define secure telecommuting practices and govern remote access to systems and data for remote workers.	8	
			Functional	intersects with	Alternate Work Site	PES-11	Physical security mechanisms exist to utilize appropriate management, operational and technical controls at alternate work sites.	8	
03.10.07	Physical Access Control	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.07.a	Physical Access Control	Enforce physical access authorizations at entry and exit points to the facility where the system resides by:	Functional	subset of	Physical & Environmental Protections	PES-01	Mechanisms exist to facilitate the operation of physical and environmental protection controls.	10	
			Functional	intersects with	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	5	
			Functional	intersects with	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	5	
			Functional	intersects with	Controlled Ingress & Egress Points	PES-03.1	Physical access control mechanisms exist to limit and monitor physical access through controlled ingress and egress points.	8	
03.10.07.a.01	Physical Access Control	Verifying individual physical access authorizations before granting access to the facility and	Functional	intersects with	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	5	
			Functional	intersects with	Access To Information Systems	PES-03.4	Physical access control mechanisms exist to enforce physical access to critical information systems or sensitive/regulated data, in addition to the physical access controls for the facility.	3	
			Functional	intersects with	Physical Security of Offices, Rooms & Facilities	PES-04	Mechanisms exist to identify systems, equipment and respective operating environments that require limited physical access so that appropriate physical access controls are designed and implemented for offices, rooms and facilities.	3	
			Functional	intersects with	Working in Secure Areas	PES-04.1	Physical security mechanisms exist to allow only authorized personnel access to secure areas.	3	
03.10.07.a.02	Physical Access Control	Controlling ingress and egress with physical access control systems, devices, or guards.	Functional	subset of	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	10	
			Functional	intersects with	Controlled Ingress & Egress Points	PES-03.1	Physical access control mechanisms exist to limit and monitor physical access through controlled ingress and egress points.	8	
			Functional	intersects with	Access To Information Systems	PES-03.4	Physical access control mechanisms exist to enforce physical access to critical information systems or sensitive/regulated data, in addition to the physical access controls for the facility.	3	
			Functional	intersects with	Physical Security of Offices, Rooms & Facilities	PES-04	Mechanisms exist to identify systems, equipment and respective operating environments that require limited physical access so that appropriate physical access controls are designed and implemented for offices, rooms and facilities.	3	
			Functional	intersects with	Working in Secure Areas	PES-04.1	Physical security mechanisms exist to allow only authorized personnel access to secure areas.	3	
03.10.07.b	Physical Access Control	Maintain physical access audit logs for entry or exit points.	Functional	equal	Physical Access Logs	PES-03.3	Physical access control mechanisms generate a log entry for each access attempt through controlled ingress and egress points.	10	
03.10.07.c	Physical Access Control	Escort visitors, and control visitor activity.	Functional	subset of	Visitor Control	PES-06	Physical access control mechanisms exist to identify, authorize and monitor visitors before allowing access to the facility (other than areas designated as publicly accessible).	10	
			Functional	intersects with	Identification Requirement	PES-06.2	Physical access control mechanisms exist to requires at least one (1) form of government-issued or organization-issued photo identification to authenticate individuals before they can gain access to the facility.	5	
			Functional	intersects with	Restrict Unescorted Access	PES-06.3	Physical access control mechanisms exist to restrict unescorted access to facilities to personnel with required security clearances, formal access authorizations and validate the need for access.	8	
			Functional	intersects with	Visitor Access Revocation	PES-06.6	Mechanisms exist to ensure visitor badges, or other issued identification, are surrendered before visitors leave the facility or are deactivated at a pre-determined time/date of expiration.	5	
03.10.07.d	Physical Access Control	Secure keys, combinations, and other physical access devices.	Functional	subset of	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	10	
			Functional	intersects with	Physical Security of Offices, Rooms & Facilities	PES-04	Mechanisms exist to identify systems, equipment and respective operating environments that require limited physical access so that appropriate physical access controls are designed and implemented for offices, rooms and facilities.	3	
			Functional	intersects with	Working in Secure Areas	PES-04.1	Physical security mechanisms exist to allow only authorized personnel access to secure areas.	3	
03.10.07.e	Physical Access Control	Control physical access to output devices to prevent unauthorized individuals from obtaining access to CUI.	Functional	intersects with	Equipment Siting & Protection	PES-12	Physical security mechanisms exist to locate system components within the facility to minimize potential damage from physical and environmental hazards and to minimize the opportunity for unauthorized access.	5	
			Functional	intersects with	Access Control for Output Devices	PES-12.2	Physical security mechanisms exist to restrict access to printers and other system output devices to prevent unauthorized individuals from obtaining the output.	5	
03.10.08	Access Control for Transmission	Control physical access to system distribution and transmission lines within organizational facilities.	Functional	intersects with	Supporting Utilities	PES-07	Facility security mechanisms exist to protect power equipment and power cabling for the system from damage and destruction.	5	
			Functional	intersects with	Equipment Siting & Protection	PES-12	Physical security mechanisms exist to locate system components within the facility to minimize potential damage from physical and environmental hazards and to minimize the opportunity for unauthorized access.	5	
			Functional	intersects with	Transmission Medium Security	PES-12.1	Physical security mechanisms exist to protect power and telecommunications cabling carrying data or supporting information services from interception, interference or damage.	5	
03.11.01	Risk Assessment	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
			Functional	intersects with	Prohibited Equipment & Services	AST-17	Mechanisms exist to govern Supply Chain Risk Management (SCRM) sanctions that require the removal and prohibition of certain technology services and/or equipment that are designated as supply chain threats by a statutory or regulatory body.	3	
			Functional	subset of	Risk Management Program	RSK-01	Mechanisms exist to facilitate the implementation of strategic, operational and tactical risk management controls.	10	
			Functional	intersects with	Risk Framing	RSK-01.1	Mechanisms exist to identify: ▪ Assumptions affecting risk assessments, risk response and risk monitoring; ▪ Constraints affecting risk assessments, risk response and risk monitoring; ▪ The organizational risk tolerance; and ▪ Priorities, benefits and trade-offs considered by the organization for managing risk.	8	
			Functional	intersects with	Risk-Based Security Categorization	RSK-02	Mechanisms exist to categorize systems and data in accordance with applicable local, state and Federal laws that: ▪ Document the security categorization results (including supporting rationale) in the security plan for systems; and ▪ Ensure the security categorization decision is reviewed and approved by the asset owner.	5	
			Functional	intersects with	Impact-Level Prioritization	RSK-02.1	Mechanisms exist to prioritize the impact level for systems, applications and/or services to prevent potential disruptions.	3	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.11.01.a	Risk Assessment	Assess the risk (including supply chain risk) of unauthorized disclosure resulting from the processing, storage, or transmission of CUI.	Functional	intersects with	Risk Identification	RSK-03	Mechanisms exist to identify and document risks, both internal and external.	5	
			Functional	intersects with	Risk Assessment	RSK-04	Mechanisms exist to conduct recurring assessments of risk that includes the likelihood and magnitude of harm, from unauthorized access, use, disclosure, disruption, modification or destruction of the organization's systems and data.	8	
			Functional	intersects with	Risk Ranking	RSK-05	Mechanisms exist to identify and assign a risk ranking to newly discovered security vulnerabilities that is based on industry-recognized practices.	5	
			Functional	intersects with	Supply Chain Risk Management (SCRM) Plan	RSK-09	Mechanisms exist to develop a plan for Supply Chain Risk Management (SCRM) associated with the development, acquisition, maintenance and disposal of systems, system components and services, including documenting selected mitigating actions and monitoring performance against those plans.	5	
			Functional	intersects with	Supply Chain Risk Assessment	RSK-09.1	Mechanisms exist to periodically assess supply chain risks associated with systems, system components and services.	8	
			Functional	intersects with	Third-Party Criticality Assessments	TPM-02	Mechanisms exist to identify, prioritize and assess suppliers and partners of critical systems, components and services using a supply chain risk assessment process relative to their importance in supporting the delivery of high-value services.	3	
			Functional	intersects with	Supply Chain Protection	TPM-03	Mechanisms exist to evaluate security risks associated with the services and product supply chain.	3	
			Functional	intersects with	Third-Party Risk Assessments & Approvals	TPM-04.1	Mechanisms exist to conduct a risk assessment prior to the acquisition or outsourcing of technology-related services.	8	
03.11.01.b	Risk Assessment	Update risk assessments [Assignment: organization-defined frequency].	Functional	equal	Risk Assessment Update	RSK-07	Mechanisms exist to routinely update risk assessments and react accordingly upon identifying new security vulnerabilities, including using outside sources for security vulnerability information.	10	
			Functional	intersects with	Supply Chain Risk Assessment	RSK-09.1	Mechanisms exist to periodically assess supply chain risks associated with systems, system components and services.	5	
03.11.02	Vulnerability Monitoring and Scanning	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.11.02.a	Vulnerability Monitoring and Scanning	Monitor and scan the system for vulnerabilities [Assignment: organization-defined frequency] and when new vulnerabilities affecting the system are identified.	Functional	intersects with	Threat Intelligence Program	THR-01	Mechanisms exist to implement a threat intelligence program that includes a cross-organization information-sharing capability that can influence the development of the system and security architectures, selection of security solutions, monitoring, threat hunting, response and recovery activities.	3	
			Functional	intersects with	External Threat Intelligence Feeds	THR-03	Mechanisms exist to maintain situational awareness of evolving threats by leveraging the knowledge of attacker tactics, techniques and procedures to facilitate the implementation of preventative and compensating controls.	8	
			Functional	subset of	Vulnerability & Patch Management Program (VPMP)	VPM-01	Mechanisms exist to facilitate the implementation and monitoring of vulnerability management controls.	10	
			Functional	intersects with	Attack Surface Scope	VPM-01.1	Mechanisms exist to define and manage the scope for its attack surface management activities.	5	
			Functional	intersects with	Vulnerability Ranking	VPM-03	Mechanisms exist to identify and assign a risk ranking to newly discovered security vulnerabilities using reputable outside sources for security vulnerability information.	8	
			Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
03.11.02.b	Vulnerability Monitoring and Scanning	Remediate system vulnerabilities within [Assignment: organization-defined response times].	Functional	intersects with	Risk Remediation	RSK-06	Mechanisms exist to remediate risks to an acceptable level.	8	
			Functional	intersects with	Risk Response	RSK-06.1	Mechanisms exist to respond to findings from cybersecurity & data privacy assessments, incidents and audits to ensure proper remediation has been performed.	8	
			Functional	intersects with	Compensating Countermeasures	RSK-06.2	Mechanisms exist to identify and implement compensating countermeasures to reduce risk and exposure to threats.	3	
			Functional	subset of	Vulnerability Remediation Process	VPM-02	Mechanisms exist to ensure that vulnerabilities are properly identified, tracked and remediated.	10	
			Functional	intersects with	Continuous Vulnerability Remediation Activities	VPM-04	Mechanisms exist to address new threats and vulnerabilities on an ongoing basis and ensure assets are protected against known attacks.	8	
			Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	8	
03.11.02.c	Vulnerability Monitoring and Scanning	Update system vulnerabilities to be scanned [Assignment: organization-defined frequency] and when new vulnerabilities are identified and reported.	Functional	equal	Update Tool Capability	VPM-06.1	Mechanisms exist to update vulnerability scanning tools.	10	
03.11.03	Withdrawn	Incorporated into 03.11.02.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.11.04	Risk Response	Respond to findings from security assessments, monitoring, and audits.	Functional	subset of	Risk Response	RSK-06.1	Mechanisms exist to respond to findings from cybersecurity & data privacy assessments, incidents and audits to ensure proper remediation has been performed.	10	
03.12.01	Security Assessment	Assess the security requirements for the system and its environment of operation [Assignment: organization-defined frequency] to determine if the requirements have been satisfied.	Functional	subset of	Statutory, Regulatory & Contractual Compliance	CPL-01	Mechanisms exist to facilitate the identification and implementation of relevant statutory, regulatory and contractual controls.	10	
			Functional	intersects with	Cybersecurity & Data Protection Controls Oversight	CPL-02	Mechanisms exist to provide a cybersecurity & data protection controls oversight function that reports to the organization's executive leadership.	8	
			Functional	intersects with	Internal Audit Function	CPL-02.1	Mechanisms exist to implement an internal audit function that is capable of providing senior organization management with insights into the appropriateness of the organization's technology and information governance processes.	3	
			Functional	intersects with	Cybersecurity & Data Protection Assessments	CPL-03	Mechanisms exist to ensure managers regularly review the processes and documented procedures within their area of responsibility to adhere to appropriate cybersecurity & data protection policies, standards and other applicable requirements.	8	
			Functional	subset of	Information Assurance (IA) Operations	IAO-01	Mechanisms exist to facilitate the implementation of cybersecurity & data privacy assessment and authorization controls.	10	
			Functional	intersects with	Assessments	IAO-02	Mechanisms exist to formally assess the cybersecurity & data privacy controls in systems, applications and services through Information Assurance Program (IAP) activities to determine the extent to which the controls are implemented correctly, operating as intended and producing the desired outcome with respect to meeting expected requirements.	8	
			Functional	intersects with	Technology Development & Acquisition	TDA-01	Mechanisms exist to facilitate the implementation of tailored development and acquisition strategies, contract tools and procurement methods to meet unique business needs.	8	
			Functional	intersects with	Cybersecurity & Data Privacy Testing Throughout Development	TDA-09	Mechanisms exist to require system developers/integrators consult with cybersecurity & data privacy personnel to: ▪ Create and implement a Security Test and Evaluation (ST&E) plan; ▪ Implement a verifiable flaw remediation process to correct weaknesses and deficiencies identified during the security testing and evaluation process; and ▪ Document the results of the security testing/evaluation and flaw remediation processes.	8	
03.12.02	Plan of Action and Milestones	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.12.02.a	Plan of Action and Milestones	Develop a plan of action and milestones for the system:	Functional	subset of	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	10	
03.12.02.a.01	Plan of Action and Milestones	To document the planned remediation actions to correct weaknesses or deficiencies noted during security assessments and	Functional	intersects with	Non-Compliance Oversight	CPL-01.1	Mechanisms exist to document and review instances of non-compliance with statutory, regulatory and/or contractual obligations to develop appropriate risk mitigation actions.	3	
			Functional	subset of	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	10	
			Functional	intersects with	Risk Register	RSK-04.1	Mechanisms exist to maintain a risk register that facilitates monitoring and reporting of risks.	3	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.12.02.a.02	Plan of Action and Milestones	To reduce or eliminate known system vulnerabilities.	Functional	subset of	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	10	
			Functional	intersects with	Risk Register	RSK-04.1	Mechanisms exist to maintain a risk register that facilitates monitoring and reporting of risks.	3	
			Functional	intersects with	Risk Remediation	RSK-06	Mechanisms exist to remediate risks to an acceptable level.	5	
			Functional	subset of	Vulnerability Remediation Process	VPM-02	Mechanisms exist to ensure that vulnerabilities are properly identified, tracked and remediated.	10	
			Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	3	
03.12.02.b	Plan of Action and Milestones	Update the existing plan of action and milestones based on the findings from:	Functional	subset of	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	10	
03.12.02.b.01	Plan of Action and Milestones	Security assessments,	Functional	subset of	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	10	
03.12.02.b.02	Plan of Action and Milestones	Audits or reviews, and	Functional	subset of	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	10	
03.12.02.b.03	Plan of Action and Milestones	Continuous monitoring activities.	Functional	subset of	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	10	
03.12.03	Continuous Monitoring	Develop and implement a system-level continuous monitoring strategy that includes ongoing monitoring and security assessments.	Functional	intersects with	Cybersecurity & Data Protection Controls Oversight	CPL-02	Mechanisms exist to provide a cybersecurity & data protection controls oversight function that reports to the organization's executive leadership.	5	
			Functional	intersects with	Cybersecurity & Data Protection Assessments	CPL-03	Mechanisms exist to ensure managers regularly review the processes and documented procedures within their area of responsibility to adhere to appropriate cybersecurity & data protection policies, standards and other applicable requirements.	5	
			Functional	intersects with	Functional Review Of Cybersecurity & Data Protection Controls	CPL-03.2	Mechanisms exist to regularly review technology assets for adherence to the organization's cybersecurity & data protection policies and standards.	5	
			Functional	intersects with	Steering Committee & Program Oversight	GOV-01.1	Mechanisms exist to coordinate cybersecurity, data protection and business alignment through a steering committee or advisory board, comprised of key cybersecurity, data privacy and business executives, which meets formally and on a regular basis.	5	
			Functional	intersects with	Status Reporting To Governing Body	GOV-01.2	Mechanisms exist to provide governance oversight reporting and recommendations to those entrusted to make executive decisions about matters considered material to the organization's cybersecurity & data protection program.	5	
			Functional	intersects with	Measures of Performance	GOV-05	Mechanisms exist to develop, report and monitor cybersecurity & data privacy program measures of performance.	5	
			Functional	intersects with	Continuous Monitoring	MON-01	Mechanisms exist to facilitate the implementation of enterprise-wide monitoring controls.	5	
			Functional	intersects with	Technology Development & Acquisition	TDA-01	Mechanisms exist to facilitate the implementation of tailored development and acquisition strategies, contract tools and procurement methods to meet unique business needs.	5	
			Functional	intersects with	Product Management	TDA-01.1	Mechanisms exist to design and implement product management processes to update products, including systems, software and services, to improve functionality and correct security deficiencies.	3	
			Functional	intersects with	Cybersecurity & Data Privacy Testing Throughout Development	TDA-09	Mechanisms exist to require system developers/integrators consult with cybersecurity & data privacy personnel to: • Create and implement a Security Test and Evaluation (ST&E) plan; • Implement a verifiable flaw remediation process to correct weaknesses and deficiencies identified during the security testing and evaluation process; and • Document the results of the security testing/evaluation and flaw remediation processes.	5	
			Functional	intersects with	Continuous Monitoring Plan	TDA-09.1	Mechanisms exist to require the developers of systems, system components or services to produce a plan for the continuous monitoring of cybersecurity & data privacy control effectiveness.	5	
03.12.04	Withdrawn	Incorporated into 03.15.02.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.12.05	Information Exchange	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.12.05.a	Information Exchange	Approve and manage the exchange of CUI between the system and other systems using [Selection (one or more): interconnection security agreements; information exchange security agreements; memoranda of understanding or agreement; service-level agreements; user agreements; non-disclosure agreements; other types of agreements].	Functional	intersects with	Transfer Authorizations	DCH-14.2	Mechanisms exist to verify that individuals or systems transferring data between interconnecting systems have the requisite authorizations (e.g., write permissions or privileges) prior to transferring said data.	8	
			Functional	intersects with	Data Access Mapping	DCH-14.3	Mechanisms exist to leverages a data-specific Access Control List (ACL) or Interconnection Security Agreements (ISAs) to generate a logical map of the parties with whom sensitive/regulated data is shared.	8	
			Functional	intersects with	Access Agreements	HRS-06	Mechanisms exist to require internal and third-party users to sign appropriate access agreements prior to being granted access.	8	
			Functional	intersects with	Confidentiality Agreements	HRS-06.1	Mechanisms exist to require Non-Disclosure Agreements (NDAs) or similar confidentiality agreements that reflect the needs to protect data and operational details, or both employees and third-parties.	3	
			Functional	intersects with	System Interconnections	NET-05	Mechanisms exist to authorize connections from systems to other systems using Interconnection Security Agreements (ISAs), or similar methods, that document, for each interconnection, the interface characteristics, cybersecurity & data privacy requirements and the nature of the information communicated.	8	
			Functional	intersects with	Internal System Connections	NET-05.2	Mechanisms exist to control internal system connections through authorizing internal connections of systems and documenting, for each internal connection, the interface characteristics, security requirements and the nature of the information communicated.	3	
03.12.05.b	Information Exchange	Document interface characteristics, security requirements, and responsibilities for each system as part of the exchange agreements.	Functional	intersects with	System Interconnections	NET-05	Mechanisms exist to authorize connections from systems to other systems using Interconnection Security Agreements (ISAs), or similar methods, that document, for each interconnection, the interface characteristics, cybersecurity & data privacy requirements and the nature of the information communicated.	8	
			Functional	intersects with	Internal System Connections	NET-05.2	Mechanisms exist to control internal system connections through authorizing internal connections of systems and documenting, for each internal connection, the interface characteristics, security requirements and the nature of the information communicated.	8	
03.12.05.c	Information Exchange	Review and update the exchange agreements [Assignment: organization-defined frequency].	Functional	subset of	Internal System Connections	NET-05.2	Mechanisms exist to control internal system connections through authorizing internal connections of systems and documenting, for each internal connection, the interface characteristics, security requirements and the nature of the information communicated.	10	
03.13.01	Boundary Protection	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
			Functional	intersects with	Intrusion Detection & Prevention Systems (IDS & IPS)	MON-01.1	Mechanisms exist to implement Intrusion Detection / Prevention Systems (IDS / IPS) technologies on critical systems, key network segments and network choke points.	8	
			Functional	intersects with	Inbound & Outbound Communications Traffic	MON-01.3	Mechanisms exist to continuously monitor inbound and outbound communications traffic for unusual or unauthorized activities or conditions.	8	
			Functional	subset of	Network Security Controls (NSC)	NET-01	Mechanisms exist to develop, govern & update procedures to facilitate the implementation of Network Security Controls (NSC).	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 (optional)	Notes (optional)
03.13.01.a	Boundary Protection	Monitor and control communications at external managed interfaces to the system and key internal managed interfaces within the system.	Functional	intersects with	Boundary Protection	NET-03	Mechanisms exist to monitor and control communications at the external network boundary and at key internal boundaries within the network.	8	
			Functional	intersects with	Data Flow Enforcement – Access Control Lists (ACLs)	NET-04	Mechanisms exist to design, implement and review firewall and router configurations to restrict connections between untrusted networks and internal systems.	8	
			Functional	intersects with	Deny Traffic by Default & Allow Traffic by Exception	NET-04.1	Mechanisms exist to configure firewall and router configurations to deny network traffic by default and allow network traffic by exception (e.g., deny all, permit by exception).	8	
			Functional	intersects with	Network Intrusion Detection / Prevention Systems (NIDS / NIPS)	NET-08	Mechanisms exist to employ Network Intrusion Detection / Prevention Systems (NIDS/NIPS) to detect and/or prevent intrusions into the network.	8	
03.13.01.b	Boundary Protection	Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.	Functional	subset of	Layered Network Defenses	NET-02	Mechanisms exist to implement security functions as a layered structure that minimizes interactions between layers of the design and avoids any dependence by lower layers on the functionality or correctness of higher layers.	10	
			Functional	intersects with	Boundary Protection	NET-03	Mechanisms exist to monitor and control communications at the external network boundary and at key internal boundaries within the network.	5	
			Functional	intersects with	Separate Subnet for Connecting to Different Security Domains	NET-03.8	Mechanisms exist to implement separate network addresses (e.g., different subnets) to connect to systems in different security domains.	3	
			Functional	subset of	Network Segmentation (macrosegementation) (macrosegementation)	NET-06	Mechanisms exist to ensure network architecture utilizes network segmentation to isolate systems, applications and services that protections from other network resources.	10	
			Functional	intersects with	Sensitive / Regulated Data Enclave (Secure Zone)	NET-06.3	Mechanisms exist to implement segmentation controls to restrict inbound and outbound connectivity for sensitive / regulated data enclaves (secure zones).	8	
			Functional	intersects with	DMZ Networks	NET-08.1	Mechanisms exist to monitor De-Militarized Zone (DMZ) network segments to separate untrusted networks from trusted networks.	8	
03.13.01.c	Boundary Protection	Connect to external systems only through managed interfaces that consist of boundary protection devices arranged in accordance with an organizational security architecture.	Functional	intersects with	Boundary Protection	NET-03	Mechanisms exist to monitor and control communications at the external network boundary and at key internal boundaries within the network.	5	
			Functional	intersects with	Data Flow Enforcement – Access Control Lists (ACLs)	NET-04	Mechanisms exist to design, implement and review firewall and router configurations to restrict connections between untrusted networks and internal systems.	5	
			Functional	intersects with	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	3	
			Functional	intersects with	Alignment With Enterprise Architecture	SEA-02	Mechanisms exist to develop an enterprise architecture, aligned with industry-recognized leading practices, with consideration for cybersecurity & data privacy principles that addresses risk to organizational operations, assets, individuals, other organizations.	8	
03.13.02	Boundary Protection	Recategorized as NCO.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.03	Withdrawn	Addressed by 03.01.01, 03.01.02, 03.01.03, 03.01.04, 03.01.05, 03.01.06, and 03.01.07.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.04	Information in Shared System Resources	Prevent unauthorized and unintended information transfer via shared system resources.	Functional	equal	Information In Shared Resources	SEA-05	Mechanisms exist to prevent unauthorized and unintended information transfer via shared system resources.	10	
03.13.05	Withdrawn	Incorporated into 03.13.01.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.06	Network Communications – Deny by Default – Allow by Exception	Deny network communications traffic by default, and allow network communications traffic by exception.	Functional	equal	Deny Traffic by Default & Allow Traffic by Exception	NET-04.1	Mechanisms exist to configure firewall and router configurations to deny network traffic by default and allow network traffic by exception (e.g., deny all, permit by exception).	10	
03.13.07	Withdrawn	Addressed by 03.01.12, 03.04.02 and 03.04.06.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.08	Transmission and Storage Confidentiality	Implement cryptographic mechanisms to prevent the unauthorized disclosure of CUI during transmission and while in storage.	Functional	subset of	Use of Cryptographic Controls	CRY-01	Mechanisms exist to facilitate the implementation of cryptographic protections controls using known public standards and trusted cryptographic technologies.	10	
			Functional	intersects with	Alternate Physical Protection	CRY-01.1	Cryptographic mechanisms exist to prevent unauthorized disclosure of information as an alternative to physical safeguards.	5	
			Functional	intersects with	Transmission Confidentiality	CRY-03	Cryptographic mechanisms exist to protect the confidentiality of data being transmitted.	5	
			Functional	intersects with	Encrypting Data At Rest	CRY-05	Cryptographic mechanisms exist to prevent unauthorized disclosure of data at rest.	5	
			Functional	intersects with	Storage Media	CRY-05.1	Cryptographic mechanisms exist to protect the confidentiality and integrity of sensitive/regulated data residing on storage media.	5	
03.13.09	Network Disconnect	Terminate the network connection associated with a communications session at the end of the session or after [Assignment: organization-defined time period] of inactivity.	Functional	equal	Network Connection Termination	NET-07	Mechanisms exist to terminate network connections at the end of a session or after an organization-defined time period of inactivity.	10	
03.13.10	Cryptographic Key Establishment and Management	Establish and manage cryptographic keys in the system in accordance with the following key management requirements: [Assignment: organization-defined requirements for key generation, distribution, storage, access, and destruction].	Functional	intersects with	Public Key Infrastructure (PKI)	CRY-08	Mechanisms exist to securely implement an internal Public Key Infrastructure (PKI) infrastructure or obtain PKI services from a reputable PKI service provider.	8	
			Functional	subset of	Cryptographic Key Management	CRY-09	Mechanisms exist to facilitate cryptographic key management controls to protect the confidentiality, integrity and availability of keys.	10	
			Functional	intersects with	Cryptographic Key Loss or Change	CRY-09.3	Mechanisms exist to ensure the availability of information in the event of the loss of cryptographic keys by individual users.	8	
			Functional	intersects with	Control & Distribution of Cryptographic Keys	CRY-09.4	Mechanisms exist to facilitate the secure distribution of symmetric and asymmetric cryptographic keys using industry recognized key management technology and processes.	8	
03.13.11	Cryptographic Protection	Implement the following types of cryptography to protect the confidentiality of CUI: [Assignment: organization-defined types of cryptography].	Functional	intersects with	Baseline Tailoring	CFG-02.9	Mechanisms exist to allow baseline controls to be specialized or customized by applying a defined set of tailoring actions that are specific to: ▪ Mission / business functions; ▪ Operational environment; ▪ Specific threats or vulnerabilities; or ▪ Other conditions or situations that could affect mission / business success.	3	
			Functional	subset of	Use of Cryptographic Controls	CRY-01	Mechanisms exist to facilitate the implementation of cryptographic protections controls using known public standards and trusted cryptographic technologies.	10	
			Functional	intersects with	Cryptographic Cipher Suites and Protocols Inventory	CRY-01.5	Mechanisms exist to identify, document and review deployed cryptographic cipher suites and protocols to proactively respond to industry trends regarding the continued viability of utilized cryptographic cipher suites and protocols.	5	
03.13.12	Collaborative Computing Devices and Applications	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.12.a	Collaborative Computing Devices and Applications	Prohibit the remote activation of collaborative computing devices and applications with the following exceptions: [Assignment: organization-defined exceptions where remote activation is to be allowed].	Functional	subset of	Collaborative Computing Devices	END-14	Mechanisms exist to unplug or prohibit the remote activation of collaborative computing devices with the following exceptions: ▪ Networked whiteboards; ▪ Video teleconference cameras; and ▪ Teleconference microphones.	10	
03.13.12.b	Collaborative Computing Devices and Applications	Provide an explicit indication of use to users physically present at the devices.	Functional	subset of	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	10	
				equal	Explicitly Indication Of Use	END-14.6	Mechanisms exist to configure collaborative computing devices to provide physically-present individuals with an explicit indication of use.	10	
03.13.13	Mobile Code	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.13.a	Mobile Code	Define acceptable mobile code and mobile code technologies.	Functional	intersects with	Explicitly Allow / Deny Applications	CFG-03.3	Mechanisms exist to explicitly allow (allowlist / whitelist) or block (denylist / blacklist) applications to control software that is authorized to execute on systems.	8	
			Functional	subset of	Mobile Code	END-10	Mechanisms exist to address mobile code / operating system-independent applications.	10	
03.13.13.b	Mobile Code	Authorize, monitor, and control the use of mobile code.	Functional	subset of	Explicitly Allow / Deny Applications	CFG-03.3	Mechanisms exist to explicitly allow (allowlist / whitelist) or block (denylist / blacklist) applications to control software that is authorized to execute on systems.	10	
			Functional	intersects with	Software Usage Restrictions	CFG-04	Mechanisms exist to enforce software usage restrictions to comply with applicable contract agreements and copyright laws.	3	
			Functional	intersects with	Open Source Software	CFG-04.1	Mechanisms exist to establish parameters for the secure use of open source software.	3	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
			Functional	intersects with	User-Installed Software	CFG-05	Mechanisms exist to restrict the ability of non-privileged users to install unauthorized software.	3	
			Functional	subset of	Mobile Code	END-10	Mechanisms exist to address mobile code / operating system-independent applications.	10	
03.13.14	Withdrawn	Technology-specific.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.15	Session Authenticity	Protect the authenticity of communications sessions.	Functional	subset of	Session Integrity	NET-09	Mechanisms exist to protect the authenticity and integrity of communications sessions.	10	
03.13.16	Withdrawn	Incorporated into 03.13.08.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.01	Flaw Remediation	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.01.a	Flaw Remediation	Identify, report, and correct system flaws.	Functional	intersects with	Plan of Action & Milestones (POA&M)	IAO-05	Mechanisms exist to generate a Plan of Action and Milestones (POA&M), or similar risk register, to document planned remedial actions to correct weaknesses or deficiencies noted during the assessment of the security controls and to reduce or eliminate known vulnerabilities.	5	
			Functional	intersects with	Technology Development & Acquisition	TDA-01	Mechanisms exist to facilitate the implementation of tailored development and acquisition strategies, contract tools and procurement methods to meet unique business needs.	8	
			Functional	intersects with	Cybersecurity & Data Privacy Testing Throughout Development	TDA-09	Mechanisms exist to require system developers/integrators consult with cybersecurity & data privacy personnel to: ▪ Create and implement a Security Test and Evaluation (ST&E) plan; ▪ Implement a verifiable flaw remediation process to correct weaknesses and deficiencies identified during the security testing and evaluation process; and ▪ Document the results of the security testing/evaluation and flaw remediation processes.	8	
			Functional	subset of	Vulnerability & Patch Management Program (VPMP)	VPM-01	Mechanisms exist to facilitate the implementation and monitoring of vulnerability management controls.	10	
			Functional	intersects with	Attack Surface Scope	VPM-01.1	Mechanisms exist to define and manage the scope for its attack surface management activities.	5	
			Functional	intersects with	Vulnerability Remediation Process	VPM-02	Mechanisms exist to ensure that vulnerabilities are properly identified, tracked and remediated.	8	
			Functional	intersects with	Continuous Vulnerability Remediation Activities	VPM-04	Mechanisms exist to address new threats and vulnerabilities on an ongoing basis and ensure assets are protected against known attacks.	8	
			Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	8	
03.14.01.b	Flaw Remediation	Install security-relevant software and firmware updates within [Assignment: organization-defined time period] of the release of the updates.	Functional	intersects with	Continuous Vulnerability Remediation Activities	VPM-04	Mechanisms exist to address new threats and vulnerabilities on an ongoing basis and ensure assets are protected against known attacks.	8	
			Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
03.14.02	Malicious Code Protection	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.02.a	Malicious Code Protection	Implement malicious code protection mechanisms at system entry and exit points to detect and eradicate malicious code.	Functional	subset of	Endpoint Security	END-01	Mechanisms exist to facilitate the implementation of endpoint security controls.	10	
			Functional	subset of	Centralized Management of Antimalware Technologies	END-04.3	Mechanisms exist to centrally-manage antimalware technologies.	10	
			Functional	intersects with	Always On Protection	END-04.7	Mechanisms exist to ensure that anti-malware technologies are continuously running in real-time and cannot be disabled or altered by non-privileged users, unless specifically authorized by management on a case-by-case basis for a limited time period.	5	
03.14.02.b	Malicious Code Protection	Update malicious code protection mechanisms as new releases are available in accordance with configuration management policies and procedures.	Functional	equal	Automatic Antimalware Signature Updates	END-04.1	Mechanisms exist to automatically update antimalware technologies, including signature definitions.	10	
03.14.02.c	Malicious Code Protection	Configure malicious code protection mechanisms to:	Functional	intersects with	Malicious Code Protection (Anti-Malware)	END-04	Mechanisms exist to utilize antimalware technologies to detect and eradicate malicious code.	5	
03.14.02.c.01	Malicious Code Protection	Perform scans of the system [Assignment: organization-defined frequency] and real-time scans of files from external sources at endpoints or system entry and exit points as the files are downloaded, opened, or executed; and	Functional	intersects with	Malicious Code Protection (Anti-Malware)	END-04	Mechanisms exist to utilize antimalware technologies to detect and eradicate malicious code.	8	
			Functional	intersects with	Always On Protection	END-04.7	Mechanisms exist to ensure that anti-malware technologies are continuously running in real-time and cannot be disabled or altered by non-privileged users, unless specifically authorized by management on a case-by-case basis for a limited time period.	8	
03.14.02.c.02	Malicious Code Protection	Block malicious code, quarantine malicious code, or take other mitigation actions in response to malicious code detection.	Functional	intersects with	Malicious Code Protection (Anti-Malware)	END-04	Mechanisms exist to utilize antimalware technologies to detect and eradicate malicious code.	8	
			Functional	intersects with	Always On Protection	END-04.7	Mechanisms exist to ensure that anti-malware technologies are continuously running in real-time and cannot be disabled or altered by non-privileged users, unless specifically authorized by management on a case-by-case basis for a limited time period.	8	
03.14.03	Security Alerts, Advisories, and Directives	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.03.a	Security Alerts, Advisories, and Directives	Receive system security alerts, advisories, and directives from external organizations on an ongoing basis.	Functional	subset of	Threat Intelligence Program	THR-01	Mechanisms exist to implement a threat intelligence program that includes a cross-organization information-sharing capability that can influence the development of the system and security architectures, selection of security solutions, monitoring, threat hunting, response and recovery activities.	10	
			Functional	intersects with	External Threat Intelligence Feeds	THR-03	Mechanisms exist to maintain situational awareness of evolving threats by leveraging the knowledge of attacker tactics, techniques and procedures to facilitate the implementation of preventative and compensating controls.	5	
03.14.03.b	Security Alerts, Advisories, and Directives	Generate and disseminate internal system security alerts, advisories, and directives, as necessary.	Functional	intersects with	Threat Analysis	THR-10	Mechanisms exist to identify, assess, prioritize and document the potential impact(s) and likelihood(s) of applicable internal and external threats.	5	
			Functional	intersects with	Impact-Level Prioritization	RSK-02.1	Mechanisms exist to prioritize the impact level for systems, applications and/or services to prevent potential disruptions.	5	
			Functional	equal	Internal Threat Intelligence Feeds	THR-03.1	Mechanisms exist to utilize external threat intelligence feeds to generate and disseminate organization-specific security alerts, advisories and/or directives.	10	
03.14.04	Withdrawn	Incorporated into 03.14.02.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.05	Withdrawn	Addressed by 03.14.02.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.06	System Monitoring	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.06.a	System Monitoring	Monitor the system to detect:	Functional	subset of	Continuous Monitoring	MON-01	Mechanisms exist to facilitate the implementation of enterprise-wide monitoring controls.	10	
03.14.06.a.01	System Monitoring	Attacks and indicators of potential attacks and	Functional	intersects with	Host Intrusion Detection and Prevention Systems (HIDS / HIPS)	END-07	Mechanisms exist to utilize Host-based Intrusion Detection / Prevention Systems (HIDS / HIPS), or similar technologies, to monitor for and protect against anomalous host activity, including lateral movement across the network	8	
			Functional	intersects with	System Generated Alerts	MON-01.4	Mechanisms exist to generate, monitor, correlate and respond to alerts from physical, cybersecurity, data privacy and supply chain activities to achieve integrated situational awareness.	8	
			Functional	intersects with	Monitoring for Indicators of Compromise (IOC)	MON-11.3	Automated mechanisms exist to identify and alert on Indicators of Compromise (IoC).	8	
			Functional	intersects with	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities.	8	
03.14.06.a.02	System Monitoring	Unauthorized connections.	Functional	intersects with	Host Intrusion Detection and Prevention Systems (HIDS / HIPS)	END-07	Mechanisms exist to utilize Host-based Intrusion Detection / Prevention Systems (HIDS / HIPS), or similar technologies, to monitor for and protect against anomalous host activity, including lateral movement across the network	8	
			Functional	intersects with	Monitoring for Indicators of Compromise (IOC)	MON-11.3	Automated mechanisms exist to identify and alert on Indicators of Compromise (IoC).	8	
			Functional	intersects with	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities.	8	

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03.14.06.b	System Monitoring	Identify unauthorized use of the system.	Functional	intersects with	Host Intrusion Detection and Prevention Systems (HIDS / HIPS)	END-07	Mechanisms exist to utilize Host-based Intrusion Detection / Prevention Systems (HIDS / HIPS), or similar technologies, to monitor for and protect against anomalous host activity, including lateral movement across the network	8	
			Functional	intersects with	System Generated Alerts	MON-01.4	Mechanisms exist to generate, monitor, correlate and respond to alerts from physical, cybersecurity, data privacy and supply chain activities to achieve integrated situational awareness.	8	
			Functional	intersects with	Monitoring for Indicators of Compromise (IOC)	MON-11.3	Automated mechanisms exist to identify and alert on Indicators of Compromise (IoC).	8	
			Functional	intersects with	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities.	8	
03.14.06.c	System Monitoring	Monitor inbound and outbound communications traffic to detect unusual or unauthorized activities or conditions.	Functional	intersects with	Host Intrusion Detection and Prevention Systems (HIDS / HIPS)	END-07	Mechanisms exist to utilize Host-based Intrusion Detection / Prevention Systems (HIDS / HIPS), or similar technologies, to monitor for and protect against anomalous host activity, including lateral movement across the network	8	
			Functional	intersects with	Inbound & Outbound Communications Traffic	MON-01.3	Mechanisms exist to continuously monitor inbound and outbound communications traffic for unusual or unauthorized activities or conditions.	8	
			Functional	intersects with	System Generated Alerts	MON-01.4	Mechanisms exist to generate, monitor, correlate and respond to alerts from physical, cybersecurity, data privacy and supply chain activities to achieve integrated situational awareness.	8	
			Functional	intersects with	Monitoring for Indicators of Compromise (IOC)	MON-11.3	Automated mechanisms exist to identify and alert on Indicators of Compromise (IoC).	8	
			Functional	intersects with	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities.	8	
			Functional	intersects with	Network Intrusion Detection / Prevention Systems (NIDS / NIPS)	NET-08	Mechanisms exist to employ Network Intrusion Detection / Prevention Systems (NIDS/NIPS) to detect and/or prevent intrusions into the network.	8	
			Functional	intersects with	DNS & Content Filtering	NET-18	Mechanisms exist to force Internet-bound network traffic through a proxy device (e.g., Policy Enforcement Point (PEP)) for URL content filtering and DNS filtering to limit a user's ability to connect to dangerous or prohibited Internet sites.	8	
03.14.07	Withdrawn	Incorporated into 03.14.06.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.08	Information Management and Retention	Manage and retain CUI within the system and CUI output from the system in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.	Functional	subset of	Media & Data Retention	DCH-18	Mechanisms exist to retain media and data in accordance with applicable statutory, regulatory and contractual obligations.	10	
03.15.01	Policy and Procedures	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.15.01.a	Policy and Procedures	Develop, document, and disseminate to organizational personnel or roles the policies and procedures needed to satisfy the security requirements for the protection of CUI.	Functional	subset of	Cybersecurity & Data Protection Governance Program	GOV-01	Mechanisms exist to facilitate the implementation of cybersecurity & data protection governance controls.	10	
			Functional	equal	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
			Functional	intersects with	Operationalizing Cybersecurity & Data Protection Practices	GOV-15	Mechanisms exist to compel data and/or process owners to operationalize cybersecurity & data privacy practices for each system, application and/or service under their control.	8	
			Functional	intersects with	Select Controls	GOV-15.1	Mechanisms exist to compel data and/or process owners to select required cybersecurity & data privacy controls for each system, application and/or service under their control.	8	
			Functional	intersects with	Implement Controls	GOV-15.2	Mechanisms exist to compel data and/or process owners to implement required cybersecurity & data privacy controls for each system, application and/or service under their control.	8	
			Functional	intersects with	Assess Controls	GOV-15.3	Mechanisms exist to compel data and/or process owners to assess if required cybersecurity & data privacy controls for each system, application and/or service under their control are implemented correctly and are operating as intended.	8	
			Functional	intersects with	Authorize Systems, Applications & Services	GOV-15.4	Mechanisms exist to compel data and/or process owners to obtain authorization for the production use of each system, application and/or service under their control.	8	
			Functional	intersects with	Monitor Controls	GOV-15.5	Mechanisms exist to compel data and/or process owners to monitor systems, applications and/or services under their control on an ongoing basis for applicable threats and risks, as well as to ensure cybersecurity & data privacy controls are operating as intended.	8	
			Functional	intersects with	Operations Security	OPS-01	Mechanisms exist to facilitate the implementation of operational security controls.	8	
			Functional	intersects with	Standardized Operating Procedures (SOP)	OPS-01.1	Mechanisms exist to identify and document Standardized Operating Procedures (SOP), or similar documentation, to enable the proper execution of day-to-day / assigned tasks.	8	
03.15.01.b	Policy and Procedures	Review and update policies and procedures [Assignment: organization-defined frequency].	Functional	subset of	Periodic Review & Update of Cybersecurity & Data Protection Program	GOV-03	Mechanisms exist to review the cybersecurity & data privacy program, including policies, standards and procedures, at planned intervals or if significant changes occur to ensure their continuing suitability, adequacy and effectiveness.	10	
			Functional	intersects with	Operations Security	OPS-01	Mechanisms exist to facilitate the implementation of operational security controls.	3	
			Functional	intersects with	Service Delivery (Business Process Support)	OPS-03	Mechanisms exist to define supporting business processes and implement appropriate governance and service management to ensure appropriate planning, delivery and support of the organization's technology capabilities supporting business functions, workforce, and/or customers based on industry-recognized standards to achieve the specific goals of the process area.	3	
03.15.02	System Security Plan	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.15.02.a	System Security Plan	Develop a system security plan that:	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	changes
03.15.02.a.01	System Security Plan	Defines the constituent system components;	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.a.02	System Security Plan	Identifies the information types processed, stored, and transmitted by the system;	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.a.03	System Security Plan	Describes specific threats to the system that are of concern to the organization;	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
			Functional	intersects with	Risk Catalog	RSK-03.1	Mechanisms exist to develop and keep current a catalog of applicable risks associated with the organization's business operations and technologies in use.	3	
			Functional	intersects with	Threat Catalog	THR-09	Mechanisms exist to develop and keep current a catalog of applicable internal and external threats to the organization, both natural and manmade.	8	
03.15.02.a.04	System Security Plan	Describes the operational environment for the system and any dependencies on	Functional	intersects with	Control Applicability Boundary Graphical Representation	AST-04.2	Mechanisms exist to ensure control applicability is appropriately-determined for systems, applications, services and third parties by graphically representing applicable boundaries.	8	
			Functional	intersects with	Compliance Scope	CPL-01.2	Mechanisms exist to document and validate the scope of cybersecurity & data privacy controls that are determined to meet statutory, regulatory and/or contractual compliance obligations.	8	

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03.15.02.a.04	System Security Plan	or connections to other systems or system components;	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.a.05	System Security Plan	Provides an overview of the security requirements for the system;	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.a.06	System Security Plan	Describes the safeguards in place or planned for meeting the security requirements;	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.a.07	System Security Plan	Identifies individuals that fulfill system roles and responsibilities; and	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.a.08	System Security Plan	Includes other relevant information necessary for the protection of CUI.	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.b	System Security Plan	Review and update the system security plan [Assignment: organization-defined frequency].	Functional	subset of	System Security & Privacy Plan (SSPP)	IAO-03	Mechanisms exist to generate System Security & Privacy Plans (SSPPs), or similar document repositories, to identify and maintain key architectural information on each critical system, application or service, as well as influence inputs, entities, systems, applications and processes, providing a historical record of the data and its origins.	10	
03.15.02.c	System Security Plan	Protect the system security plan from unauthorized disclosure.	Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	8	
			Functional	intersects with	Disclosure of Information	DCH-03.1	Mechanisms exist to restrict the disclosure of sensitive / regulated data to authorized parties with a need to know.	8	
03.15.03	Rules of Behavior	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.15.03.a	Rules of Behavior	Establish rules that describe the responsibilities and expected behavior for system usage and protecting CUI.	Functional	subset of	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	10	
			Functional	intersects with	Terms of Employment	HRS-05	Mechanisms exist to require all employees and contractors to apply cybersecurity & data privacy principles in their daily work.	8	
			Functional	subset of	Rules of Behavior	HRS-05.1	Mechanisms exist to define acceptable and unacceptable rules of behavior for the use of technologies, including consequences for unacceptable behavior.	10	
			Functional	intersects with	Social Media & Social Networking Restrictions	HRS-05.2	Mechanisms exist to define rules of behavior that contain explicit restrictions on the use of social media and networking sites, posting information on commercial websites and sharing account information.	8	
			Functional	intersects with	Use of Communications Technology	HRS-05.3	Mechanisms exist to establish usage restrictions and implementation guidance for communications technologies based on the potential to cause damage to systems, if used maliciously.	8	
			Functional	intersects with	Use of Critical Technologies	HRS-05.4	Mechanisms exist to govern usage policies for critical technologies.	8	
			Functional	intersects with	Use of Mobile Devices	HRS-05.5	Mechanisms exist to manage business risks associated with permitting mobile device access to organizational resources.	8	
03.15.03.b	Rules of Behavior	Provide rules to individuals who require access to the system.	Functional	intersects with	Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity responsibilities for all personnel.	8	
			Functional	intersects with	User Awareness	HRS-03.1	Mechanisms exist to communicate with users about their roles and responsibilities to maintain a safe and secure working environment.	8	
			Functional	intersects with	Formal Indoctrination	HRS-04.2	Mechanisms exist to verify that individuals accessing a system processing, storing, or transmitting sensitive information are formally indoctrinated for all the relevant types of information to which they have access on the system.	8	
			Functional	intersects with	Policy Familiarization & Acknowledgement	HRS-05.7	Mechanisms exist to ensure personnel receive recurring familiarization with the organization’s cybersecurity & data privacy policies and provide acknowledgement.	8	
			Functional	intersects with	Access Agreements	HRS-06	Mechanisms exist to require internal and third-party users to sign appropriate access agreements prior to being granted access.	8	
03.15.03.c	Rules of Behavior	Receive a documented acknowledgement from individuals indicating that they have read, understand, and agree to abide by the rules of behavior before authorizing access to CUI and the system.	Functional	intersects with	Policy Familiarization & Acknowledgement	HRS-05.7	Mechanisms exist to ensure personnel receive recurring familiarization with the organization’s cybersecurity & data privacy policies and provide acknowledgement.	8	
			Functional	intersects with	Access Agreements	HRS-06	Mechanisms exist to require internal and third-party users to sign appropriate access agreements prior to being granted access.	8	
			Functional	intersects with	Confidentiality Agreements	HRS-06.1	Mechanisms exist to require Non-Disclosure Agreements (NDAs) or similar confidentiality agreements that reflect the needs to protect data and operational details, or both employees and third-parties.	3	
03.15.03.d	Rules of Behavior	Review and update the rules of behavior [Assignment: organization-defined frequency].	Functional	intersects with	Periodic Review & Update of Cybersecurity & Data Protection Program	GOV-03	Mechanisms exist to review the cybersecurity & data privacy program, including policies, standards and procedures, at planned intervals or if significant changes occur to ensure their continuing suitability, adequacy and effectiveness.	8	
			Functional	subset of	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	10	
			Functional	intersects with	Policy Familiarization & Acknowledgement	HRS-05.7	Mechanisms exist to ensure personnel receive recurring familiarization with the organization’s cybersecurity & data privacy policies and provide acknowledgement.	8	
03.16.01	Security Engineering Principles	Apply the following systems security engineering principles to the development or modification of the system and system components: [Assignment: organization-defined systems security engineering principles].	Functional	intersects with	Prohibited Equipment & Services	AST-17	Mechanisms exist to govern Supply Chain Risk Management (SCRM) sanctions that require the removal and prohibition of certain technology services and/or equipment that are designated as supply chain threats by a statutory or regulatory body.	3	
			Functional	intersects with	Cybersecurity & Data Privacy Portfolio Management	PRM-01	Mechanisms exist to facilitate the implementation of cybersecurity & data privacy-related resource planning controls that define a viable plan for achieving cybersecurity & data privacy objectives.	3	
			Functional	intersects with	Cybersecurity & Data Privacy Requirements Definition	PRM-05	Mechanisms exist to identify critical system components and functions by performing a criticality analysis for critical systems, system components or services at pre-defined decision points in the Secure Development Life Cycle (SDLC).	8	
			Functional	subset of	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	10	
			Functional	intersects with	Alignment With Enterprise Architecture	SEA-02	Mechanisms exist to develop an enterprise architecture, aligned with industry-recognized leading practices, with consideration for cybersecurity & data privacy principles that addresses risk to organizational operations, assets, individuals, other organizations.	8	
			Functional	intersects with	Technology Development & Acquisition	TDA-01	Mechanisms exist to facilitate the implementation of tailored development and acquisition strategies, contract tools and procurement methods to meet unique business needs.	8	
			Functional	intersects with	Development Methods, Techniques & Processes	TDA-02.3	Mechanisms exist to require software developers to ensure that their software development processes employ industry-recognized secure practices for secure programming, engineering methods, quality control processes and validation techniques to minimize flawed and/or malformed software.	8	
			Functional	intersects with	Pre-Established Secure Configurations	TDA-02.4	Mechanisms exist to ensure vendors / manufacturers: ▪ Deliver the system, component, or service with a pre-established, secure configuration implemented; and ▪ Use the pre-established, secure configuration as the default for any subsequent system, component, or service reinstallation or upgrade.	3	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
			Functional	intersects with	Commercial Off-The-Shelf (COTS) Security Solutions	TDA-03	Mechanisms exist to utilize only Commercial Off-the-Shelf (COTS) security products.	3	
			Functional	intersects with	Developer Architecture & Design	TDA-05	Mechanisms exist to require the developers of systems, system components or services to produce a design specification and security architecture that: ▪ Is consistent with and supportive of the organization's security architecture which is established within and is an integrated part of the organization's enterprise architecture; ▪ Accurately and completely describes the required security functionality and the allocation of security controls among physical and logical components; and ▪ Expresses how individual security functions, mechanisms and services work together to provide required security capabilities and a unified approach to protection.	5	
			Functional	intersects with	Secure Coding	TDA-06	Mechanisms exist to develop applications based on secure coding principles.	8	
			Functional	intersects with	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	8	
			Functional	intersects with	Managing Changes To Third-Party Services	TPM-10	Mechanisms exist to control changes to services by suppliers, taking into account the criticality of business information, systems and processes that are in scope by the third-party.	8	
03.16.02	Unsupported System Components	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.16.02.a	Unsupported System Components	Replace system components when support for the components is no longer available from the developer, vendor, or manufacturer.	Functional	subset of	Technology Lifecycle Management	SEA-07.1	Mechanisms exist to manage the usable lifecycles of technology assets.	10	
			Functional	equal	Unsupported Systems	TDA-17	Mechanisms exist to prevent unsupported systems by: ▪ Replacing systems when support for the components is no longer available from the developer, vendor or manufacturer; and ▪ Requiring justification and documented approval for the continued use of unsupported system components required to satisfy mission/business needs.	10	
03.16.02.b	Unsupported System Components	Provide options for risk mitigation or alternative sources for continued support for unsupported components that cannot be replaced.	Functional	intersects with	Predictable Failure Analysis	SEA-07	Mechanisms exist to determine the Mean Time to Failure (MTTF) for system components in specific environments of operation.	3	
			Functional	intersects with	Technology Lifecycle Management	SEA-07.1	Mechanisms exist to manage the usable lifecycles of technology assets.	8	
			Functional	equal	Alternate Sources for Continued Support	TDA-17.1	Mechanisms exist to provide in-house support or contract external providers for support with unsupported system components.	10	
03.16.03	External System Services	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.16.03.a	External System Services	Require the providers of external system services used for the processing, storage, or transmission of CUI to comply with the following security requirements: [Assignment: organization-defined security requirements].	Functional	subset of	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	10	
			Functional	intersects with	Third-Party Services	TPM-04	Mechanisms exist to mitigate the risks associated with third-party access to the organization's systems and data.	8	
			Functional	intersects with	Third-Party Processing, Storage and Service Locations	TPM-04.4	Mechanisms exist to restrict the location of information processing/storage based on business requirements.	8	
			Functional	intersects with	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	8	
			Functional	intersects with	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	8	
			Functional	equal	Third-Party Attestation	TPM-05.8	Mechanisms exist to obtain an attestation from an independent Third-Party Assessment Organization (3PAO) that provides assurance of compliance with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to subcontractors.	10	
03.16.03.b	External System Services	Define and document user roles and responsibilities with regard to external system services, including shared responsibilities with external service providers.	Functional	intersects with	Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity responsibilities for all personnel.	8	
			Functional	intersects with	Third-Party Personnel Security	HRS-10	Mechanisms exist to govern third-party personnel by reviewing and monitoring third-party cybersecurity & data privacy roles and responsibilities.	8	
			Functional	intersects with	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	5	
			Functional	intersects with	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	5	
			Functional	equal	Responsible, Accountable, Supportive, Consulted & Informed (RASCI) Matrix	TPM-05.4	Mechanisms exist to document and maintain a Responsible, Accountable, Supportive, Consulted & Informed (RASCI) matrix, or similar documentation, to delineate assignment for cybersecurity & data privacy controls between internal stakeholders and External Service Providers (ESPs).	10	
03.16.03.c	External System Services	Implement processes, methods, and techniques to monitor security requirement compliance by external service providers on an ongoing basis.	Functional	intersects with	Third-Party Services	TPM-04	Mechanisms exist to mitigate the risks associated with third-party access to the organization's systems and data.	5	
			Functional	intersects with	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	5	
			Functional	intersects with	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	5	
			Functional	intersects with	Third-Party Scope Review	TPM-05.5	Mechanisms exist to perform recurring validation of the Responsible, Accountable, Supportive, Consulted & Informed (RASCI) matrix, or similar documentation, to ensure cybersecurity & data privacy control assignments accurately reflect current business practices, compliance obligations, technologies and stakeholders.	8	
			Functional	intersects with	First-Party Declaration (1PD)	TPM-05.6	Mechanisms exist to obtain a First-Party Declaration (1PD) from applicable External Service Providers (ESPs) that provides assurance of compliance with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to subcontractors.	5	
			Functional	intersects with	Third-Party Attestation	TPM-05.8	Mechanisms exist to obtain an attestation from an independent Third-Party Assessment Organization (3PAO) that provides assurance of conformity with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to contractors and subcontractors.	8	
			Functional	subset of	Review of Third-Party Services	TPM-08	Mechanisms exist to monitor, regularly review and audit External Service Providers (ESPs) for compliance with established contractual requirements for cybersecurity & data privacy controls.	10	
03.17.01	Supply Chain Risk Management Plan	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
			Functional	intersects with	Operationalizing Cybersecurity & Data Protection Practices	GOV-15	Mechanisms exist to compel data and/or process owners to operationalize cybersecurity & data privacy practices for each system, application and/or service under their control.	3	
			Functional	intersects with	Select Controls	GOV-15.1	Mechanisms exist to compel data and/or process owners to select required cybersecurity & data privacy controls for each system, application and/or service under their control.	3	

FDE #	FDE Name	Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF #	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
03.17.01.a	Supply Chain Risk Management Plan	Develop a plan for managing supply chain risks associated with the research and development, design, manufacturing, acquisition, delivery, integration, operations, maintenance, and disposal of the system, system components, or system services.	Functional	intersects with	Implement Controls	GOV-15.2	Mechanisms exist to compel data and/or process owners to implement required cybersecurity & data privacy controls for each system, application and/or service under their control.	3	
			Functional	intersects with	Assess Controls	GOV-15.3	Mechanisms exist to compel data and/or process owners to assess if required cybersecurity & data privacy controls for each system, application and/or service under their control are implemented correctly and are operating as intended.	3	
			Functional	intersects with	Authorize Systems, Applications & Services	GOV-15.4	Mechanisms exist to compel data and/or process owners to obtain authorization for the production use of each system, application and/or service under their control.	3	
			Functional	intersects with	Monitor Controls	GOV-15.5	Mechanisms exist to compel data and/or process owners to monitor systems, applications and/or services under their control on an ongoing basis for applicable threats and risks, as well as to ensure cybersecurity & data privacy controls are operating as intended.	3	
			Functional	subset of	Risk Management Program	RSK-01	Mechanisms exist to facilitate the implementation of strategic, operational and tactical risk management controls.	10	
			Functional	equal	Supply Chain Risk Management (SCRM) Plan	RSK-09	Mechanisms exist to develop a plan for Supply Chain Risk Management (SCRM) associated with the development, acquisition, maintenance and disposal of systems, system components and services, including documenting selected mitigating actions and monitoring performance against those plans.	10	
			Functional	intersects with	Supply Chain Protection	TPM-03	Mechanisms exist to evaluate security risks associated with the services and product supply chain.	8	
			Functional	intersects with	Acquisition Strategies, Tools & Methods	TPM-03.1	Mechanisms exist to utilize tailored acquisition strategies, contract tools and procurement methods for the purchase of unique systems, system components or services.	5	
			Functional	intersects with	Break Clauses	TPM-05.7	Mechanisms exist to include "break clauses" within contracts for failure to meet contract criteria for cybersecurity and/or data privacy controls.	3	
03.17.01.b	Supply Chain Risk Management Plan	Review and update the supply chain risk management plan [Assignment: organization-defined frequency].	Functional	subset of	Supply Chain Risk Management (SCRM) Plan	RSK-09	Mechanisms exist to develop a plan for Supply Chain Risk Management (SCRM) associated with the development, acquisition, maintenance and disposal of systems, system components and services, including documenting selected mitigating actions and monitoring performance against those plans.	10	
03.17.01.c	Supply Chain Risk Management Plan	Protect the supply chain risk management plan from unauthorized disclosure.	Functional	intersects with	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	8	
			Functional	intersects with	Defining Access Authorizations for Sensitive/Regulated Data	DCH-01.4	Mechanisms exist to explicitly define authorizations for specific individuals and/or roles for logical and /or physical access to sensitive/regulated data.	8	
			Functional	intersects with	Disclosure of Information	DCH-03.1	Mechanisms exist to restrict the disclosure of sensitive / regulated data to authorized parties with a need to know.	8	
03.17.02	Acquisition Strategies, Tools, and Methods	Develop and implement acquisition strategies, contract tools, and procurement methods to identify, protect against, and mitigate supply chain risks.	Functional	subset of	Technology Development & Acquisition	TDA-01	Mechanisms exist to facilitate the implementation of tailored development and acquisition strategies, contract tools and procurement methods to meet unique business needs.	10	
			Functional	equal	Acquisition Strategies, Tools & Methods	TPM-03.1	Mechanisms exist to utilize tailored acquisition strategies, contract tools and procurement methods for the purchase of unique systems, system components or services.	10	
			Functional	intersects with	Third-Party Services	TPM-04	Mechanisms exist to mitigate the risks associated with third-party access to the organization’s systems and data.	5	
			Functional	intersects with	Third-Party Risk Assessments & Approvals	TPM-04.1	Mechanisms exist to conduct a risk assessment prior to the acquisition or outsourcing of technology-related services.	8	
			Functional	intersects with	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization’s needs to protect its systems, processes and data.	8	
			Functional	intersects with	Security Compromise Notification Agreements	TPM-05.1	Mechanisms exist to compel External Service Providers (ESPs) to provide notification of actual or potential compromises in the supply chain that can potentially affect or have adversely affected systems, applications and/or services that the organization utilizes.	3	
			Functional	intersects with	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	8	
			Functional	intersects with	Third-Party Scope Review	TPM-05.5	Mechanisms exist to perform recurring validation of the Responsible, Accountable, Supportive, Consulted & Informed (RASCI) matrix, or similar documentation, to ensure cybersecurity & data privacy control assignments accurately reflect current business practices, compliance obligations, technologies and stakeholders.	5	
			Functional	intersects with	Break Clauses	TPM-05.7	Mechanisms exist to include "break clauses" within contracts for failure to meet contract criteria for cybersecurity and/or data privacy controls.	5	
			Functional	intersects with	Review of Third-Party Services	TPM-08	Mechanisms exist to monitor, regularly review and audit External Service Providers (ESPs) for compliance with established contractual requirements for cybersecurity & data privacy controls.	5	
			Functional	intersects with	Third-Party Deficiency Remediation	TPM-09	Mechanisms exist to address weaknesses or deficiencies in supply chain elements identified during independent or organizational assessments of such elements.	5	
			Functional	intersects with	Managing Changes To Third-Party Services	TPM-10	Mechanisms exist to control changes to services by suppliers, taking into account the criticality of business information, systems and processes that are in scope by the third-party.	5	
03.17.03	Supply Chain Requirements and Processes	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.17.03.a	Supply Chain Requirements and Processes	Establish a process for identifying and addressing weaknesses or deficiencies in the supply chain elements and processes.	Functional	subset of	Supply Chain Risk Management (SCRM) Plan	RSK-09	Mechanisms exist to develop a plan for Supply Chain Risk Management (SCRM) associated with the development, acquisition, maintenance and disposal of systems, system components and services, including documenting selected mitigating actions and monitoring performance against those plans.	10	
			Functional	intersects with	Supply Chain Risk Assessment	RSK-09.1	Mechanisms exist to periodically assess supply chain risks associated with systems, system components and services.	8	
			Functional	intersects with	Third-Party Criticality Assessments	TPM-02	Mechanisms exist to identify, prioritize and assess suppliers and partners of critical systems, components and services using a supply chain risk assessment process relative to their importance in supporting the delivery of high-value services.	8	
			Functional	intersects with	Supply Chain Protection	TPM-03	Mechanisms exist to evaluate security risks associated with the services and product supply chain.	8	
			Functional	intersects with	Acquisition Strategies, Tools & Methods	TPM-03.1	Mechanisms exist to utilize tailored acquisition strategies, contract tools and procurement methods for the purchase of unique systems, system components or services.	3	
			Functional	intersects with	Limit Potential Harm	TPM-03.2	Mechanisms exist to utilize security safeguards to limit harm from potential adversaries who identify and target the organization's supply chain.	3	
			Functional	intersects with	Processes To Address Weaknesses or Deficiencies	TPM-03.3	Mechanisms exist to address identified weaknesses or deficiencies in the security of the supply chain	5	
			Functional	intersects with	Third-Party Services	TPM-04	Mechanisms exist to mitigate the risks associated with third-party access to the organization’s systems and data.	5	
			Functional	intersects with	Third-Party Risk Assessments & Approvals	TPM-04.1	Mechanisms exist to conduct a risk assessment prior to the acquisition or outsourcing of technology-related services.	5	
			Functional	intersects with	Third-Party Scope Review	TPM-05.5	Mechanisms exist to perform recurring validation of the Responsible, Accountable, Supportive, Consulted & Informed (RASCI) matrix, or similar documentation, to ensure cybersecurity & data privacy control assignments accurately reflect current business practices, compliance obligations, technologies and stakeholders.	5	
			Functional	subset of	Supply Chain Risk Management (SCRM) Plan	RSK-09	Mechanisms exist to develop a plan for Supply Chain Risk Management (SCRM) associated with the development, acquisition, maintenance and disposal of systems, system components and services, including documenting selected mitigating actions and monitoring performance against those plans.	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 (optional)	Notes (optional)
03.17.03.b	Supply Chain Requirements and Processes	Enforce the following security requirements to protect against supply chain risks to the system, system components, or system services and to limit the harm or consequences from supply chain-related events: [Assignment: organization-defined security requirements].	Functional	intersects with	Supply Chain Protection	TPM-03	Mechanisms exist to evaluate security risks associated with the services and product supply chain.	5	
			Functional	intersects with	Acquisition Strategies, Tools & Methods	TPM-03.1	Mechanisms exist to utilize tailored acquisition strategies, contract tools and procurement methods for the purchase of unique systems, system components or services.	5	
			Functional	intersects with	Limit Potential Harm	TPM-03.2	Mechanisms exist to utilize security safeguards to limit harm from potential adversaries who identify and target the organization's supply chain.	5	
			Functional	intersects with	Processes To Address Weaknesses or Deficiencies	TPM-03.3	Mechanisms exist to address identified weaknesses or deficiencies in the security of the supply chain	5	
			Functional	intersects with	Third-Party Services	TPM-04	Mechanisms exist to mitigate the risks associated with third-party access to the organization's systems and data.	5	
			Functional	intersects with	Third-Party Risk Assessments & Approvals	TPM-04.1	Mechanisms exist to conduct a risk assessment prior to the acquisition or outsourcing of technology-related services.	5	
			Functional	subset of	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	10	
			Functional	intersects with	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	5	
			Functional	intersects with	Third-Party Scope Review	TPM-05.5	Mechanisms exist to perform recurring validation of the Responsible, Accountable, Supportive, Consulted & Informed (RASCI) matrix, or similar documentation, to ensure cybersecurity & data privacy control assignments accurately reflect current business practices, compliance obligations, technologies and stakeholders.	5	
			Functional	intersects with	Break Clauses	TPM-05.7	Mechanisms exist to include "break clauses" within contracts for failure to meet contract criteria for cybersecurity and/or data privacy controls.	5	