

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

Reference Document : Secure Controls Framework (SCF) version 2025.1

STRM Guidance: <https://securecontrolsframework.com/set-theory-relationship-mapping-strm/>

Focal Document:

NIST SP 800-171A R3Focal Document URL: <https://csrc.nist.gov/pubs/sp/800/171/a/r3/final>Published STRM URL: <https://securecontrolsframework.com/content/strm/scf-strm-general-nist-800-171a-r3.pdf>

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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.01.ODP[01]	Account Management	the time period for account inactivity before disabling is defined.	Functional	subset of	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	10	
A.03.01.01.ODP[01]	Account Management	the time period for account inactivity before disabling is defined.	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	
A.03.01.01.ODP[02]	Account Management	the time period within which to notify account managers and designated personnel or roles when accounts are no longer required is defined.	Functional	subset of	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	10	
A.03.01.01.ODP[03]	Account Management	the time period within which to notify account managers and designated personnel or roles when users are terminated or transferred is defined.	Functional	subset of	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	10	
A.03.01.01.ODP[04]	Account Management	the time period within which to notify account managers and designated personnel or roles when system usage or the need-to-know changes for an individual is defined.	Functional	subset of	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	10	
A.03.01.01.ODP[05]	Account Management	the time period of expected inactivity requiring users to log out of the system is defined.	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.	5	
A.03.01.01.ODP[06]	Account Management	circumstances requiring users to log out of the system are defined.	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.	5	
A.03.01.01.a[01]	Account Management	system account types allowed are defined.	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	
A.03.01.01.a[01]	Account Management	system account types allowed are defined.	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	
A.03.01.01.a[02]	Account Management	system account types prohibited are defined.	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	
A.03.01.01.a[02]	Account Management	system account types prohibited are defined.	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	
A.03.01.01.b[01]	Account Management	system accounts are created in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[01]	Account Management	system accounts are created in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[02]	Account Management	system accounts are enabled in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[02]	Account Management	system accounts are enabled in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[03]	Account Management	system accounts are modified in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[03]	Account Management	system accounts are modified in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[04]	Account Management	system accounts are disabled in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[04]	Account Management	system accounts are disabled in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[05]	Account Management	system accounts are removed in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.b[05]	Account Management	system accounts are removed in accordance with organizational policy, procedures, prerequisites, and criteria.	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	
A.03.01.01.c.01	Account Management	authorized users of the system are specified.	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	
A.03.01.01.c.01	Account Management	authorized users of the system are specified.	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	
A.03.01.01.c.02	Account Management	group and role memberships are specified.	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	
A.03.01.01.c.03	Account Management	access authorizations (i.e., privileges) for each account are specified.	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	
A.03.01.01.d.01	Account Management	access to the system is authorized based on a valid access authorization.	Functional	intersects with	Authenticate, Authorize and Audit (AAA)	IAC-01.2	Mechanisms exist to strictly govern the use of Authenticate, Authorize and Audit (AAA) solutions, both on-premises and those hosted by an External Service Provider (ESP).	5	
A.03.01.01.d.02	Account Management	access to the system is authorized based on intended system usage.	Functional	intersects with	Authenticate, Authorize and Audit (AAA)	IAC-01.2	Mechanisms exist to strictly govern the use of Authenticate, Authorize and Audit (AAA) solutions, both on-premises and those hosted by an External Service Provider (ESP).	5	
A.03.01.01.e	Account Management	the use of system accounts is monitored.	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	
A.03.01.01.f.01	Account Management	system accounts are disabled when 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	
A.03.01.01.f.02	Account Management	system accounts are disabled when the accounts have been inactive for <A.03.01.01.ODP[01]: time period>.	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	
A.03.01.01.f.02	Account Management	system accounts are disabled when the accounts have been inactive for <A.03.01.01.ODP[01]: 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	
A.03.01.01.f.03	Account Management	system accounts are disabled when the accounts are no longer associated with a user or individual.	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	
A.03.01.01.f.04	Account Management	system accounts are disabled when the accounts violate organizational policy.	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	
A.03.01.01.f.05	Account Management	system accounts are disabled when significant risks associated with individuals are discovered.	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	
A.03.01.01.g.01	Account Management	account managers and designated personnel or roles are notified within <A.03.01.01.ODP[02]: time period> when accounts are no longer 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	
A.03.01.01.g.02	Account Management	account managers and designated personnel or roles are notified within <A.03.01.01.ODP[03]: time period> when users are terminated or transferred.	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	
A.03.01.01.g.03	Account Management	account managers and designated personnel or roles are notified within <A.03.01.01.ODP[04]: time period> when system usage or the need-to-know changes for an individual.	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	

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)
A.03.01.01.h	Account Management	users are required to log out of the system after <A.03.01.01.ODP[05]: time period> of expected inactivity or when the following circumstances occur: <A.03.01.01.ODP[06]: circumstances>.	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.	5	
03.01.02	Access Enforcement	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.02[01]	Access Enforcement	approved authorizations for logical access to CUI are enforced 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	
A.03.01.02[02]	Access Enforcement	approved authorizations for logical access to system resources are enforced in accordance with applicable access control policies.	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	
03.01.03	Information Flow Enforcement	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.03[01]	Information Flow Enforcement	approved authorizations are enforced for controlling the flow of CUI within 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	
A.03.01.03[01]	Information Flow Enforcement	approved authorizations are enforced for controlling the flow of CUI within the system.	Functional	subset of	Endpoint Security	END-01	Mechanisms exist to facilitate the implementation of endpoint security controls.	10	
A.03.01.03[02]	Information Flow Enforcement	approved authorizations are enforced for controlling the flow of CUI between connected systems.	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	
A.03.01.03[02]	Information Flow Enforcement	approved authorizations are enforced for controlling the flow of CUI between connected systems.	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	
03.01.04	Separation of Duties	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.04.a	Separation of Duties	duties of individuals requiring separation are identified.	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.	5	
03.01.05	Least Privilege	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.05.ODP[01]	Least Privilege	security functions for authorized access are defined.	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	
A.03.01.05.ODP[02]	Least Privilege	security-relevant information for authorized access is defined.	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	
A.03.01.05.ODP[03]	Least Privilege	the frequency at which to review the privileges assigned to roles or classes of users is defined.	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	
A.03.01.05.a	Least Privilege	system access for users (or processes acting on behalf of users) is authorized only when necessary to accomplish assigned organizational tasks.	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	
A.03.01.05.b[01]	Least Privilege	access to <A.03.01.05.ODP[01]: security functions> is authorized.	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	
A.03.01.05.b[01]	Least Privilege	access to <A.03.01.05.ODP[01]: security functions> is authorized.	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	
A.03.01.05.b[02]	Least Privilege	access to <A.03.01.05.ODP[02]: security-relevant information> is authorized.	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	
A.03.01.05.b[02]	Least Privilege	access to <A.03.01.05.ODP[02]: security-relevant information> is authorized.	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	
A.03.01.05.c	Least Privilege	the privileges assigned to roles or classes of users are reviewed <A.03.01.05.ODP[03]: frequency> to validate the need for such privileges.	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	
A.03.01.05.d	Least Privilege	privileges are reassigned or removed, as necessary.	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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.06.ODP[01]	Least Privilege - Privileged Accounts	personnel or roles to which privileged accounts on the system are to be restricted are defined.	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	
A.03.01.06.a	Least Privilege - Privileged Accounts	privileged accounts on the system are restricted to <A.03.01.06.ODP[01]: personnel or roles>.	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	
A.03.01.06.b	Least Privilege - Privileged Accounts	users (or roles) with privileged accounts are required to 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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.07.a	Least Privilege - Privileged Functions	non-privileged users are prevented from executing privileged functions.	Functional	intersects with	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.	5	
A.03.01.07.b	Least Privilege - Privileged Functions	the execution of privileged functions is logged.	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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.08.ODP[01]	Unsuccessful Logon Attempts	the number of consecutive invalid logon attempts by a user allowed during a time period is defined.	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	
A.03.01.08.ODP[02]	Unsuccessful Logon Attempts	the time period to which the number of consecutive invalid logon attempts by a user is limited is defined.	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	
A.03.01.08.ODP[03]	Unsuccessful Logon Attempts	one or more of the following PARAMETER VALUES are selected: (the account or node is locked automatically for <A.03.01.08.ODP[04]: time period>; the account or node is locked automatically until released by an administrator; the next logon prompt is delayed automatically; the system administrator is notified automatically; other action is taken automatically).	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	
A.03.01.08.ODP[04]	Unsuccessful Logon Attempts	the time period for an account or node to be locked is defined (if selected).	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	
A.03.01.08.a	Unsuccessful Logon Attempts	a limit of <A.03.01.08.ODP[01]: number> consecutive invalid logon attempts by a user during <A.03.01.08.ODP[02]: time period> is enforced.	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	
A.03.01.08.b	Unsuccessful Logon Attempts	<A.03.01.08.ODP[03]: SELECTED PARAMETER VALUES> when the maximum number of unsuccessful attempts is exceeded.	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	

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)
03.01.09	System Use Notification	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.09	System Use Notification	a system use notification message with privacy and security notices consistent with applicable CUI rules is displayed before granting access to the system.	Functional	intersects with	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.	5	
A.03.01.09	System Use Notification	a system use notification message with privacy and security notices consistent with applicable CUI rules is displayed before granting access to the system.	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.	5	
A.03.01.09	System Use Notification	a system use notification message with privacy and security notices consistent with applicable CUI rules is displayed before granting access to the system.	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.	5	
03.01.10	Device Lock	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.10.ODP[01]	Device Lock	one or more of the following PARAMETER VALUES are selected: (a device lock is initiated after <A.03.01.10.ODP[02]: time period> of inactivity; the user is required to initiate a device lock before leaving the system unattended).	Functional	intersects with	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.	5	
A.03.01.10.ODP[02]	Device Lock	the time period of inactivity after which a device lock is initiated is defined (if selected).	Functional	intersects with	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.	5	
A.03.01.10.a	Device Lock	access to the system is prevented by <A.03.01.10.ODP[01]: SELECTED PARAMETER VALUES>.	Functional	intersects with	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.	5	
A.03.01.10.b	Device Lock	the device lock is retained until the user reestablishes access using established identification and authentication procedures.	Functional	intersects with	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.	5	
A.03.01.10.c	Device Lock	information previously visible on the display is concealed via device lock with a publicly viewable image.	Functional	intersects with	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.	5	
03.01.11	Session Termination	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.11.ODP[01]	Session Termination	conditions or trigger events that require session disconnect are defined.	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.	5	
A.03.01.11	Session Termination	a user session is terminated automatically after <A.03.01.11.ODP[01]: conditions or trigger events>.	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.	5	
03.01.12	Remote Access	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.12.a[01]	Remote Access	types of allowable remote system access are defined.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.a[02]	Remote Access	usage restrictions are established for each type of allowable remote system access.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.a[03]	Remote Access	configuration requirements are established for each type of allowable remote system access.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.a[04]	Remote Access	connection requirements are established for each type of allowable remote system access.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.b	Remote Access	each type of remote system access is authorized 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	
A.03.01.12.c[01]	Remote Access	remote access to the system is routed through authorized access control points.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.c[02]	Remote Access	remote access to the system is routed through managed access control points.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.d[1]	Remote Access	remote execution of privileged commands is authorized.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.d[1]	Remote Access	remote execution of privileged commands is authorized.	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	
A.03.01.12.d[2]	Remote Access	remote access to security-relevant information is authorized.	Functional	intersects with	Remote Access	NET-14	Mechanisms exist to define, control and review organization-approved, secure remote access methods.	5	
A.03.01.12.d[2]	Remote Access	remote access to security-relevant information is authorized.	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	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.14	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.15	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.16	Wireless Access	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.16.a[01]	Wireless Access	each type of wireless access to the system is defined.	Functional	intersects with	Guest Networks	NET-02.2	Mechanisms exist to implement and manage a secure guest network.	5	
A.03.01.16.a[01]	Wireless Access	each type of wireless access to the system is defined.	Functional	intersects with	Wireless Networking	NET-15	Mechanisms exist to control authorized wireless usage and monitor for unauthorized wireless access.	5	
A.03.01.16.a[02]	Wireless Access	usage restrictions are established for each type of wireless access to the system.	Functional	intersects with	Guest Networks	NET-02.2	Mechanisms exist to implement and manage a secure guest network.	5	
A.03.01.16.a[02]	Wireless Access	usage restrictions are established for each type of wireless access to the system.	Functional	intersects with	Wireless Networking	NET-15	Mechanisms exist to control authorized wireless usage and monitor for unauthorized wireless access.	5	
A.03.01.16.a[03]	Wireless Access	configuration requirements are established 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	
A.03.01.16.a[04]	Wireless Access	connection requirements are established for each type of wireless access to the system.	Functional	intersects with	Guest Networks	NET-02.2	Mechanisms exist to implement and manage a secure guest network.	5	
A.03.01.16.a[04]	Wireless Access	connection requirements are established for each type of wireless access to the system.	Functional	intersects with	Wireless Networking	NET-15	Mechanisms exist to control authorized wireless usage and monitor for unauthorized wireless access.	5	
A.03.01.16.b	Wireless Access	each type of wireless access to the system is authorized prior to establishing such connections.	Functional	intersects with	Authenticate, Authorize and Audit (AAA)	IAC-01.2	Mechanisms exist to strictly govern the use of Authenticate, Authorize and Audit (AAA) solutions, both on-premises and those hosted by an External Service Provider (ESP).	5	
A.03.01.16.b	Wireless Access	each type of wireless access to the system is authorized prior to establishing such connections.	Functional	intersects with	Guest Networks	NET-02.2	Mechanisms exist to implement and manage a secure guest network.	5	
A.03.01.16.c	Wireless Access	wireless networking capabilities not intended for use are disabled prior to issuance and deployment.	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	
A.03.01.16.d[01]	Wireless Access	wireless access to the system is protected using authentication.	Functional	intersects with	Authentication & Encryption	NET-15.1	Mechanisms exist to secure Wi-Fi (e.g., IEEE 802.11) and prevent unauthorized access by: (1) Authenticating devices trying to connect; and (2) Encrypting transmitted data.	5	
A.03.01.16.d[02]	Wireless Access	wireless access to the system is protected using encryption.	Functional	intersects with	Authentication & Encryption	NET-15.1	Mechanisms exist to secure Wi-Fi (e.g., IEEE 802.11) and prevent unauthorized access by: (1) Authenticating devices trying to connect; and (2) Encrypting transmitted data.	5	
03.01.17	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.18	Access Control for Mobile Devices	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.18.a[01]	Access Control for Mobile Devices	usage restrictions are established for mobile devices.	Functional	subset of	Centralized Management Of Mobile Devices	MDM-01	Mechanisms exist to implement and govern Mobile Device Management (MDM) controls.	10	
A.03.01.18.a[02]	Access Control for Mobile Devices	configuration requirements are established for mobile devices.	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	
A.03.01.18.a[03]	Access Control for Mobile Devices	connection requirements are established for mobile devices.	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	

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)
A.03.01.18.b	Access Control for Mobile Devices	the connection of mobile devices to the system is authorized.	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	
A.03.01.18.c	Access Control for Mobile Devices	full-device or container-based encryption is implemented 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	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.20	Use of External Systems	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.20.ODP[01]	Use of External Systems	security requirements to be satisfied on external systems prior to allowing the use of or access to those systems by authorized individuals are defined.	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	
A.03.01.20.a	Use of External Systems	the use of external systems is prohibited unless the systems are specifically authorized.	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	
A.03.01.20.b	Use of External Systems	the following security requirements to be satisfied on external systems prior to allowing the use of or access to those systems by authorized individuals are established: <A.03.01.20.ODP[01]: security requirements>.	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	
A.03.01.20.c.01	Use of External Systems	authorized individuals are permitted to use external systems to access the organizational system or to process, store, or transmit CUI only after verifying that the security requirements on the external systems as specified in the organization's system security plans have been satisfied.	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	
A.03.01.20.c.02	Use of External Systems	authorized individuals are permitted to use external systems to access the organizational system or to process, store, or transmit CUI only after retaining approved system connection or processing agreements with the organizational entity 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	
A.03.01.20.d	Use of External Systems	the use of organization-controlled portable storage devices by authorized individuals on external systems is restricted.	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	
03.01.21	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.01.22	Publicly Accessible Content	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.01.22.a	Publicly Accessible Content	authorized individuals are trained to ensure that publicly accessible information does not contain CUI.	Functional	intersects with	Publicly Accessible Content	DCH-15	Mechanisms exist to control publicly-accessible content.	5	
A.03.01.22.b[01]	Publicly Accessible Content	the content on publicly accessible systems is reviewed for CUI.	Functional	intersects with	Publicly Accessible Content	DCH-15	Mechanisms exist to control publicly-accessible content.	5	
A.03.01.22.b[02]	Publicly Accessible Content	CUI is removed from publicly accessible systems, if discovered.	Functional	intersects with	Publicly Accessible Content	DCH-15	Mechanisms exist to control publicly-accessible content.	5	
A.03.01.22.b[02]	Publicly Accessible Content	CUI is removed from publicly accessible systems, if discovered.	Functional	intersects with	Information Spillage Response	IRO-12	Mechanisms exist to respond to sensitive information spills.	5	
03.02.01	Literacy Training and Awareness	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.02.01.ODP[01]	Literacy Training and Awareness	the frequency at which to provide security literacy training to system users after initial training is defined.	Functional	subset of	Cybersecurity & Data Privacy-Minded Workforce	SAT-01	Mechanisms exist to facilitate the implementation of security workforce development and awareness controls.	10	
A.03.02.01.ODP[02]	Literacy Training and Awareness	events that require security literacy training for system users are defined.	Functional	subset of	Cybersecurity & Data Privacy-Minded Workforce	SAT-01	Mechanisms exist to facilitate the implementation of security workforce development and awareness controls.	10	
A.03.02.01.ODP[03]	Literacy Training and Awareness	the frequency at which to update security literacy training content is defined.	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	
A.03.02.01.ODP[04]	Literacy Training and Awareness	events that require security literacy training content updates are defined.	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	
A.03.02.01.a.01[01]	Literacy Training and Awareness	security literacy training is provided to system users as part of initial training for new 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	
A.03.02.01.a.01[02]	Literacy Training and Awareness	security literacy training is provided to system users <A.03.02.01.ODP[01]: frequency> after initial training.	Functional	subset of	Cybersecurity & Data Privacy-Minded Workforce	SAT-01	Mechanisms exist to facilitate the implementation of security workforce development and awareness controls.	10	
A.03.02.01.a.02	Literacy Training and Awareness	security literacy training is provided to system users when required by system changes or following <A.03.02.01.ODP[02]: 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	
A.03.02.01.a.03[01]	Literacy Training and Awareness	security literacy training is provided to system users on recognizing indicators of insider threat.	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	
A.03.02.01.a.03[02]	Literacy Training and Awareness	security literacy training is provided to system users on reporting indicators of insider threat.	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	
A.03.02.01.a.03[03]	Literacy Training and Awareness	security literacy training is provided to system users on recognizing indicators of social engineering.	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	
A.03.02.01.a.03[04]	Literacy Training and Awareness	security literacy training is provided to system users on reporting indicators of social engineering.	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	
A.03.02.01.a.03[05]	Literacy Training and Awareness	security literacy training is provided to system users on recognizing indicators of social mining.	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	
A.03.02.01.a.03[06]	Literacy Training and Awareness	security literacy training is provided to system users on reporting indicators of social mining.	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	
A.03.02.01.b[01]	Literacy Training and Awareness	security literacy training content is updated <A.03.02.01.ODP[03]: frequency>.	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	
A.03.02.01.b[02]	Literacy Training and Awareness	security literacy training content is updated following <A.03.02.01.ODP[04]: 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	
03.02.02	Role-Based Training	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.02.02.ODP[01]	Role-Based Training	the frequency at which to provide role-based security training to assigned personnel after initial training is defined.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.ODP[02]	Role-Based Training	events that require role-based security training are defined.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.ODP[03]	Role-Based Training	the frequency at which to update role-based security training content is defined.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.ODP[04]	Role-Based Training	events that require role-based security training content updates are defined.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) 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)
A.03.02.02.a.01[01]	Role-Based Training	role-based security training is provided to organizational personnel before authorizing access to the system or CUI.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.a.01[02]	Role-Based Training	role-based security training is provided to organizational personnel before performing assigned duties.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.a.01[03]	Role-Based Training	role-based security training is provided to organizational personnel <A.03.02.02.ODP[01]: frequency> after initial training.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.a.02	Role-Based Training	role-based security training is provided to organizational personnel when required by system changes or following <A.03.02.02.ODP[02]: events>.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.b[01]	Role-Based Training	role-based security training content is updated <A.03.02.02.ODP[03]: frequency>.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.02.02.b[02]	Role-Based Training	role-based security training content is updated following <A.03.02.02.ODP[04]: events>.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
03.02.03	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.03.01	Event Logging	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.01.ODP[01]	Event Logging	event types selected for logging within the system are defined.	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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
A.03.03.01.ODP[02]	Event Logging	the frequency of event types selected for logging are reviewed and updated.	Functional	intersects with	Security Event Monitoring	MON-01.8	Mechanisms exist to review event logs on an ongoing basis and escalate incidents in accordance with established timelines and procedures.	5	
A.03.03.01.a	Event Logging	the following event types are specified for logging within the system: <A.03.03.01.ODP[01]: event types>.	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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
A.03.03.01.b[01]	Event Logging	the event types selected for logging are reviewed <A.03.03.01.ODP[02]: frequency>.	Functional	intersects with	Security Event Monitoring	MON-01.8	Mechanisms exist to review event logs on an ongoing basis and escalate incidents in accordance with established timelines and procedures.	5	
A.03.03.01.b[02]	Event Logging	the event types selected for logging are updated <A.03.03.01.ODP[02]: frequency>.	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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
03.03.02	Audit Record Content	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.02.a.01	Audit Record Content	audit records contain information that establishes what type of event occurred.	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	
A.03.03.02.a.02	Audit Record Content	audit records contain information that establishes 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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
A.03.03.02.a.03	Audit Record Content	audit records contain information that establishes 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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
A.03.03.02.a.04	Audit Record Content	audit records contain information that establishes the 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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
A.03.03.02.a.05	Audit Record Content	audit records contain information that establishes the 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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
A.03.03.02.a.06	Audit Record Content	audit records contain information that establishes the 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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	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)
A.03.03.02.b	Audit Record Content	additional information for audit records is provided, as needed.	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: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
A.03.03.02.b	Audit Record Content	additional information for audit records is provided, 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: (1) Mission / business functions; (2) Operational environment; (3) Specific threats or vulnerabilities; or (4) Other conditions or situations that could affect mission / business success.	5	
03.03.03	Audit Record Generation	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.03.a	Audit Record Generation	audit records for the selected event types and audit record content specified in 03.03.01 and 03.03.02 are generated.	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	
A.03.03.03.b	Audit Record Generation	audit records are retained 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	
A.03.03.03.b	Audit Record Generation	audit records are retained for a time period consistent with the records retention policy.	Functional	intersects with	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.	5	
03.03.04	Response to Audit Logging Process Failures	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.04.ODP[01]	Response to Audit Logging Process Failures	the time period for organizational personnel or roles receiving audit logging process failure alerts is defined.	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	
A.03.03.04.ODP[02]	Response to Audit Logging Process Failures	additional actions to be taken in the event of an audit logging process failure are defined.	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	
A.03.03.04.a	Response to Audit Logging Process Failures	organizational personnel or roles are alerted in the event of an audit logging process failure within <A.03.03.04.ODP[01]: time period>.	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	
A.03.03.04.b	Response to Audit Logging Process Failures	the following additional actions are taken: <A.03.03.04.ODP[02]: 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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.05.ODP[01]	Audit Record Review, Analysis, and Reporting	the frequency at which system audit records are reviewed and analyzed is defined.	Functional	intersects with	Security Event Monitoring	MON-01.8	Mechanisms exist to review event logs on an ongoing basis and escalate incidents in accordance with established timelines and procedures.	5	
A.03.03.05.ODP[01]	Audit Record Review, Analysis, and Reporting	the frequency at which system audit records are reviewed and analyzed is defined.	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.	5	
A.03.03.05.a	Audit Record Review, Analysis, and Reporting	system audit records are reviewed and analyzed <A.03.03.05.ODP[01]: frequency> for indications and the potential impact of inappropriate or unusual activity.	Functional	intersects with	Security Event Monitoring	MON-01.8	Mechanisms exist to review event logs on an ongoing basis and escalate incidents in accordance with established timelines and procedures.	5	
A.03.03.05.a	Audit Record Review, Analysis, and Reporting	system audit records are reviewed and analyzed <A.03.03.05.ODP[01]: frequency> for indications and the potential impact of inappropriate or unusual activity.	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.	5	
A.03.03.05.b	Audit Record Review, Analysis, and Reporting	findings are reported 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.	5	
A.03.03.05.b	Audit Record Review, Analysis, and Reporting	findings are reported to organizational personnel or roles.	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	
A.03.03.05.c[01]	Audit Record Review, Analysis, and Reporting	audit records across different repositories are analyzed 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.	5	
A.03.03.05.c[02]	Audit Record Review, Analysis, and Reporting	audit records across different repositories are correlated to gain organization-wide situational awareness.	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	
03.03.06	Audit Record Reduction and Report Generation	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.06.a[01]	Audit Record Reduction and Report Generation	an audit record reduction and report generation capability that supports audit record review is implemented.	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	
A.03.03.06.a[02]	Audit Record Reduction and Report Generation	an audit record reduction and report generation capability that supports audit record analysis is implemented.	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	
A.03.03.06.a[03]	Audit Record Reduction and Report Generation	an audit record reduction and report generation capability that supports audit record reporting requirements is implemented.	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	
A.03.03.06.a[04]	Audit Record Reduction and Report Generation	an audit record reduction and report generation capability that supports after-the-fact investigations of incidents is implemented.	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	
A.03.03.06.b[01]	Audit Record Reduction and Report Generation	the original content of audit records is preserved.	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	
A.03.03.06.b[02]	Audit Record Reduction and Report Generation	the original time ordering of audit records is preserved.	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	
03.03.07	Time Stamps	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.07.ODP[01]	Time Stamps	granularity of time measurement for audit record time stamps is defined.	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	
A.03.03.07.a	Time Stamps	internal system clocks are used to generate time stamps for audit records.	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	
A.03.03.07.b[01]	Time Stamps	time stamps are recorded for audit records that meet <A.03.03.07.ODP[01]: granularity of time measurement>.	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	
A.03.03.07.b[02]	Time Stamps	time stamps are recorded for audit records 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	intersects with	Synchronization With Authoritative Time Source	MON-07.1	Mechanisms exist to synchronize internal system clocks with an authoritative time source.	5	
03.03.08	Protection of Audit Information	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.03.08.a[01]	Protection of Audit Information	audit information is protected 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	
A.03.03.08.a[02]	Protection of Audit Information	audit logging tools are protected from unauthorized access, modification, and deletion.	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	
A.03.03.08.b	Protection of Audit Information	access to management of audit logging functionality is authorized to only a subset of privileged users or roles.	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	
A.03.03.08.b	Protection of Audit Information	access to management of audit logging functionality is authorized to only a subset of privileged users or roles.	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	
03.03.09	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.01	Baseline Configuration	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.

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)
A.03.04.01.ODP[01]	Baseline Configuration	the frequency of baseline configuration review and update is defined.	Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: (1) At least annually; (2) When required due to so; or (3) As part of system component installations and upgrades.	5	
A.03.04.01.a[01]	Baseline Configuration	a current baseline configuration of the system is developed.	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	
A.03.04.01.a[02]	Baseline Configuration	a current baseline configuration of the system is maintained under configuration control.	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	
A.03.04.01.b[01]	Baseline Configuration	the baseline configuration of the system is reviewed <A.03.04.01.ODP[01]: frequency>.	Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: (1) At least annually; (2) When required due to so; or (3) As part of system component installations and upgrades.	5	
A.03.04.01.b[02]	Baseline Configuration	the baseline configuration of the system is updated <A.03.04.01.ODP[01]: frequency>.	Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: (1) At least annually; (2) When required due to so; or (3) As part of system component installations and upgrades.	5	
A.03.04.01.b[03]	Baseline Configuration	the baseline configuration of the system is reviewed when system components are installed or modified.	Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: (1) At least annually; (2) When required due to so; or (3) As part of system component installations and upgrades.	5	
A.03.04.01.b[04]	Baseline Configuration	the baseline configuration of the system is updated when system components are installed or modified.	Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: (1) At least annually; (2) When required due to so; or (3) As part of system component installations and upgrades.	5	
03.04.02	Configuration Settings	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.02.ODP[01]	Configuration Settings	configuration settings for the system that reflect the most restrictive mode consistent with operational requirements are defined.	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	
A.03.04.02.a[01]	Configuration Settings	the following configuration settings for the system that reflect the most restrictive mode consistent with operational requirements are established and documented: <A.03.04.02.ODP[01]: 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	
A.03.04.02.a[02]	Configuration Settings	the following configuration settings for the system are implemented: <A.03.04.02.ODP[01]: 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	
A.03.04.02.b[01]	Configuration Settings	any deviations from established configuration settings are identified and documented.	Functional	intersects with	Approved Configuration Deviations	CFG-02.7	Mechanisms exist to document, assess risk and approve or deny deviations to standardized configurations.	5	
A.03.04.02.b[02]	Configuration Settings	any deviations from established configuration settings are approved.	Functional	intersects with	Approved Configuration Deviations	CFG-02.7	Mechanisms exist to document, assess risk and approve or deny deviations to standardized configurations.	5	
03.04.03	Configuration Change Control	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.03.a	Configuration Change Control	the types of changes to the system that are configuration-controlled are defined.	Functional	subset of	Configuration Management Program	CFG-01	Mechanisms exist to facilitate the implementation of configuration management controls.	10	
A.03.04.03.a	Configuration Change Control	the types of changes to the system that are configuration-controlled are defined.	Functional	intersects with	Configuration Change Control	CHG-02	Mechanisms exist to govern the technical configuration change control processes.	5	
A.03.04.03.b[01]	Configuration Change Control	proposed configuration-controlled changes to the system are reviewed with explicit consideration for security impacts.	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	
A.03.04.03.b[02]	Configuration Change Control	proposed configuration-controlled changes to the system are approved or disapproved with explicit consideration for security impacts.	Functional	intersects with	Prohibition Of Changes	CHG-02.1	Mechanisms exist to prohibit unauthorized changes, unless organization-approved change requests are received.	5	
A.03.04.03.c[01]	Configuration Change Control	approved configuration-controlled changes to the system are implemented.	Functional	intersects with	Configuration Change Control	CHG-02	Mechanisms exist to govern the technical configuration change control processes.	5	
A.03.04.03.c[01]	Configuration Change Control	approved configuration-controlled changes to the system are implemented.	Functional	intersects with	Controlled Maintenance	MNT-02	Mechanisms exist to conduct controlled maintenance activities throughout the lifecycle of the system, application or service.	5	
A.03.04.03.c[02]	Configuration Change Control	approved configuration-controlled changes to the system are documented.	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	
A.03.04.03.d[01]	Configuration Change Control	activities associated with configuration-controlled changes to the system are monitored.	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.	5	
A.03.04.03.d[01]	Configuration Change Control	activities associated with configuration-controlled changes to the system are monitored.	Functional	subset of	Change Management Program	CHG-01	Mechanisms exist to facilitate the implementation of a change management program.	10	
A.03.04.03.d[02]	Configuration Change Control	activities associated with configuration-controlled changes to the system are reviewed.	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.	5	
A.03.04.03.d[02]	Configuration Change Control	activities associated with configuration-controlled changes to the system are reviewed.	Functional	subset of	Change Management Program	CHG-01	Mechanisms exist to facilitate the implementation of a change management program.	10	
03.04.04	Impact Analyses	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.04.a	Impact Analyses	changes to the system are analyzed to determine potential security impacts prior to change implementation.	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	
A.03.04.04.b	Impact Analyses	the security requirements for the system continue to be satisfied after the system changes have been implemented.	Functional	intersects with	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.	5	
03.04.05	Access Restrictions for Change	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.05[01]	Access Restrictions for Change	physical access restrictions associated with changes to the system are defined and documented.	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	
A.03.04.05[02]	Access Restrictions for Change	physical access restrictions associated with changes to the system are approved.	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	
A.03.04.05[03]	Access Restrictions for Change	physical access restrictions associated with changes to the system are enforced.	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	
A.03.04.05[04]	Access Restrictions for Change	logical access restrictions associated with changes to the system are defined and documented.	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	
A.03.04.05[05]	Access Restrictions for Change	logical access restrictions associated with changes to the system are approved.	Functional	intersects with	Prohibition Of Changes	CHG-02.1	Mechanisms exist to prohibit unauthorized changes, unless organization-approved change requests are received.	5	
A.03.04.05[06]	Access Restrictions for Change	logical access restrictions associated with changes to the system are enforced.	Functional	intersects with	Permissions To Implement Changes	CHG-04.4	Mechanisms exist to limit operational privileges for implementing changes.	5	
03.04.06	Least Functionality	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.06.ODP[01]	Least Functionality	functions to be prohibited or restricted are defined.	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	

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)
A.03.04.06.ODP[02]	Least Functionality	ports to be prohibited or restricted are defined.	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	
A.03.04.06.ODP[03]	Least Functionality	protocols to be prohibited or restricted are defined.	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	
A.03.04.06.ODP[04]	Least Functionality	connections to be prohibited or restricted are defined.	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	
A.03.04.06.ODP[05]	Least Functionality	services to be prohibited or restricted are defined.	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	
A.03.04.06.ODP[06]	Least Functionality	the frequency at which to review the system to identify unnecessary or nonsecure functions, ports, protocols, connections, or services is defined.	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.	5	
A.03.04.06.b[01]	Least Functionality	the use of the following functions is prohibited or restricted: <A.03.04.06.ODP[01]: functions>.	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	
A.03.04.06.b[02]	Least Functionality	the use of the following ports is prohibited or restricted: <A.03.04.06.ODP[02]: ports>.	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	
A.03.04.06.b[03]	Least Functionality	the use of the following protocols is prohibited or restricted: <A.03.04.06.ODP[03]: protocols>.	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	
A.03.04.06.b[04]	Least Functionality	the use of the following connections is prohibited or restricted: <A.03.04.06.ODP[04]: connections>.	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	
A.03.04.06.b[05]	Least Functionality	the use of the following services is prohibited or restricted: <A.03.04.06.ODP[05]: services>.	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	
A.03.04.06.c	Least Functionality	the system is reviewed <A.03.04.06.ODP[06]: frequency> to identify unnecessary or nonsecure functions, ports, protocols, connections, and services.	Functional	intersects with	Reviews & Updates	CFG-02.1	Mechanisms exist to review and update baseline configurations: (1) At least annually; (2) When required due to so; or (3) As part of system component installations and upgrades.	5	
A.03.04.06.d	Least Functionality	unnecessary or nonsecure functions, ports, protocols, connections, and services are disabled or removed.	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	
03.04.07	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.08	Authorized Software – Allow by Exception	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.08.ODP[01]	Authorized Software – Allow by Exception	the frequency at which to review and update the list of authorized software programs is defined.	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	
A.03.04.08.a	Authorized Software – Allow by Exception	software programs authorized to execute on the system are identified.	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	
A.03.04.08.b	Authorized Software – Allow by Exception	a deny-all, allow-by-exception policy for the execution of authorized software programs on the system is implemented.	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	
A.03.04.08.c	Authorized Software – Allow by Exception	the list of authorized software programs is reviewed and updated <A.03.04.08.ODP[01]: frequency>.	Functional	intersects with	Approved Technologies	AST-01.4	Mechanisms exist to maintain a current list of approved technologies (hardware and software).	5	
03.04.09	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.04.10	System Component Inventory	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.10.ODP[01]	System Component Inventory	the frequency at which to review and update the system component inventory is defined.	Functional	intersects with	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: (1) Accurately reflects the current systems, applications and services in use; (2) Identifies authorized software products, including business justification details; (3) Is at the level of granularity deemed necessary for tracking and reporting; (4) Includes organization-defined information deemed necessary to achieve effective property accountability; and (5) Is available for review and audit by designated organizational personnel.	5	
A.03.04.10.a	System Component Inventory	an inventory of system components is developed and documented.	Functional	intersects with	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: (1) Accurately reflects the current systems, applications and services in use; (2) Identifies authorized software products, including business justification details; (3) Is at the level of granularity deemed necessary for tracking and reporting; (4) Includes organization-defined information deemed necessary to achieve effective property accountability; and (5) Is available for review and audit by designated organizational personnel.	5	
A.03.04.10.b[01]	System Component Inventory	the system component inventory is reviewed <A.03.04.10.ODP[01]: frequency>.	Functional	intersects with	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: (1) Accurately reflects the current systems, applications and services in use; (2) Identifies authorized software products, including business justification details; (3) Is at the level of granularity deemed necessary for tracking and reporting; (4) Includes organization-defined information deemed necessary to achieve effective property accountability; and (5) Is available for review and audit by designated organizational personnel.	5	
A.03.04.10.b[02]	System Component Inventory	the system component inventory is updated <A.03.04.10.ODP[01]: frequency>.	Functional	intersects with	Asset Inventories	AST-02	Mechanisms exist to perform inventories of technology assets that: (1) Accurately reflects the current systems, applications and services in use; (2) Identifies authorized software products, including business justification details; (3) Is at the level of granularity deemed necessary for tracking and reporting; (4) Includes organization-defined information deemed necessary to achieve effective property accountability; and (5) Is available for review and audit by designated organizational personnel.	5	
A.03.04.10.c[01]	System Component Inventory	the system component inventory is updated as part of component installations.	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.	5	
A.03.04.10.c[02]	System Component Inventory	the system component inventory is updated as part of component removals.	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.	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)
A.03.04.10.c[03]	System Component Inventory	the system component inventory is updated as part of system updates.	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.	5	
03.04.11	Information Location	Determine If: the location of CUI is identified and documented.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.11.a[01]	Information Location	the location of CUI is identified and documented.	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	
A.03.04.11.a[01]	Information Location	the location of CUI is identified and documented.	Functional	intersects with	Information Location	DCH-24	Mechanisms exist to identify and document the location of information and the specific system components on which the information resides.	5	
A.03.04.11.a[02]	Information Location	the system components on which CUI is processed are identified and documented.	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	
A.03.04.11.a[02]	Information Location	the system components on which CUI is processed are identified and documented.	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	
A.03.04.11.a[03]	Information Location	the system components on which CUI is stored are identified and documented.	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	
A.03.04.11.a[03]	Information Location	the system components on which CUI is stored are identified and documented.	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	
A.03.04.11.b[01]	Information Location	changes to the system or system component location where CUI is processed are documented.	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	
A.03.04.11.b[01]	Information Location	changes to the system or system component location where CUI is processed are documented.	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.	5	
A.03.04.11.b[01]	Information Location	changes to the system or system component location where CUI is processed are documented.	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	
A.03.04.11.b[02]	Information Location	changes to the system or system component location where CUI is stored are documented.	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	
A.03.04.11.b[02]	Information Location	changes to the system or system component location where CUI is stored are documented.	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.	5	
A.03.04.11.b[02]	Information Location	changes to the system or system component location where CUI is stored are documented.	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	
03.04.12	System and Component Configuration for High-Risk Areas	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.04.12.ODP[01]	System and Component Configuration for High-Risk Areas	configurations for systems or system components to be issued to individuals traveling to high-risk locations are defined.	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	
A.03.04.12.ODP[02]	System and Component Configuration for High-Risk Areas	security requirements to be applied to the system or system components when individuals return from travel are defined.	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	
A.03.04.12.a	System and Component Configuration for High-Risk Areas	systems or system components with the following configurations are issued to individuals traveling to high-risk locations: <A.03.04.12.ODP[01]: configurations>.	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.	5	
A.03.04.12.b	System and Component Configuration for High-Risk Areas	the following security requirements are applied to the system or system components when the individuals return from travel: <A.03.04.12.ODP[02]: security requirements>.	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.	5	
03.05.01	User Identification and Authentication	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.01.ODP[01]	User Identification and Authentication	circumstances or situations that require re-authentication are defined.	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.	5	
A.03.05.01.a[01]	User Identification and Authentication	system users are uniquely identified.	Functional	intersects with	Authenticate, Authorize and Audit (AAA)	IAC-01.2	Mechanisms exist to strictly govern the use of Authenticate, Authorize and Audit (AAA) solutions, both on-premises and those hosted by an External Service Provider (ESP).	5	
A.03.05.01.a[02]	User Identification and Authentication	system users are authenticated.	Functional	intersects with	Authenticate, Authorize and Audit (AAA)	IAC-01.2	Mechanisms exist to strictly govern the use of Authenticate, Authorize and Audit (AAA) solutions, both on-premises and those hosted by an External Service Provider (ESP).	5	
A.03.05.01.a[03]	User Identification and Authentication	processes acting on behalf of users are associated with uniquely identified and authenticated system users.	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.	5	
A.03.05.01.b	User Identification and Authentication	users are reauthenticated when <A.03.05.01.ODP[01]: circumstances or situations>.	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.	5	
03.05.02	Device Identification and Authentication	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.02.ODP[01]	Device Identification and Authentication	devices or types of devices to be uniquely identified and authenticated before establishing a connection are defined.	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	
A.03.05.02[01]	Device Identification and Authentication	<A.03.05.02.ODP[01]: devices or types of devices> are uniquely identified before establishing a system connection.	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	
A.03.05.02[02]	Device Identification and Authentication	<A.03.05.02.ODP[01]: devices or types of devices> are authenticated before establishing a system connection.	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	
03.05.03	Multi-Factor Authentication	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.03[01]	Multi-Factor Authentication	multi-factor authentication for access to privileged accounts is implemented.	Functional	intersects with	Multi-Factor Authentication (MFA)	IAC-06	Automated mechanisms exist to enforce Multi-Factor Authentication (MFA) for: (1) Remote network access; (2) Third-party systems, applications and/or services; and/ or (3) Non-console access to critical systems or systems that store, transmit and/or process sensitive/regulated data.	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)
A.03.05.03[01]	Multi-Factor Authentication	multi-factor authentication for access to privileged accounts is implemented.	Functional	intersects with	Out-of-Band Multi-Factor Authentication	IAC-06.4	Mechanisms exist to implement Multi-Factor Authentication (MFA) for access to privileged and non-privileged accounts such that one of the factors is independently provided by a device separate from the system being accessed.	5	
A.03.05.03[02]	Multi-Factor Authentication	multi-factor authentication for access to non-privileged accounts is implemented.	Functional	intersects with	Multi-Factor Authentication (MFA)	IAC-06	Automated mechanisms exist to enforce Multi-Factor Authentication (MFA) for: (1) Remote network access; (2) Third-party systems, applications and/or services; and/ or (3) Non-console access to critical systems or systems that store, transmit and/or process sensitive/regulated data.	5	
A.03.05.03[02]	Multi-Factor Authentication	multi-factor authentication for access to non-privileged accounts is implemented.	Functional	intersects with	Out-of-Band Multi-Factor Authentication	IAC-06.4	Mechanisms exist to implement Multi-Factor Authentication (MFA) for access to privileged and non-privileged accounts such that one of the factors is independently provided by a device separate from the system being accessed.	5	
03.05.04	Replay-Resistant Authentication	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.04[01]	Replay-Resistant Authentication	replay-resistant authentication mechanisms for access to privileged accounts are implemented.	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	
A.03.05.04[01]	Replay-Resistant Authentication	replay-resistant authentication mechanisms for access to privileged accounts are implemented.	Functional	intersects with	Replay-Resistant Authentication	IAC-02.2	Automated mechanisms exist to employ replay-resistant authentication.	5	
A.03.05.04[02]	Replay-Resistant Authentication	replay-resistant authentication mechanisms for access to non-privileged accounts are implemented.	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	
A.03.05.04[02]	Replay-Resistant Authentication	replay-resistant authentication mechanisms for access to non-privileged accounts are implemented.	Functional	intersects with	Replay-Resistant Authentication	IAC-02.2	Automated mechanisms exist to employ replay-resistant authentication.	5	
03.05.05	Identifier Management	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.05.ODP[01]	Identifier Management	the time period for preventing the reuse of identifiers is defined.	Functional	intersects with	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	5	
A.03.05.05.ODP[02]	Identifier Management	characteristic used to identify individual status are defined.	Functional	intersects with	Identity User Status	IAC-09.2	Mechanisms exist to identify contractors and other third-party users through unique username characteristics.	5	
A.03.05.05.a	Identifier Management	authorization is received from organizational personnel or roles to assign an individual, group, role, service, or device identifier.	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	
A.03.05.05.b[01]	Identifier Management	an identifier that identifies an individual, group, role, service, or device is selected.	Functional	intersects with	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	5	
A.03.05.05.b[02]	Identifier Management	an identifier that identifies an individual, group, role, service, or device is assigned.	Functional	intersects with	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	5	
A.03.05.05.c	Identifier Management	the reuse of identifiers for <A.03.05.05.ODP[01]: time period> is prevented.	Functional	intersects with	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	5	
A.03.05.05.d	Identifier Management	individual identifiers are managed by uniquely identifying each individual as <A.03.05.05.ODP[02]: characteristic>.	Functional	intersects with	Identity User Status	IAC-09.2	Mechanisms exist to identify contractors and other third-party users through unique username characteristics.	5	
03.05.06	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.07	Password Management	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.07.ODP[01]	Password Management	the frequency at which to update the list of commonly used, expected, or compromised passwords is defined.	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.	5	
A.03.05.07.ODP[01]	Password Management	the frequency at which to update the list of commonly used, expected, or compromised passwords is defined.	Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	5	
A.03.05.07.ODP[02]	Password Management	password composition and complexity rules are defined.	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	
A.03.05.07.a[01]	Password Management	a list of commonly used, expected, or compromised passwords is maintained.	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.	5	
A.03.05.07.a[01]	Password Management	a list of commonly used, expected, or compromised passwords is maintained.	Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	5	
A.03.05.07.a[02]	Password Management	a list of commonly used, expected, or compromised passwords is updated <A.03.05.07.ODP[01]: frequency>.	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.	5	
A.03.05.07.a[02]	Password Management	a list of commonly used, expected, or compromised passwords is updated <A.03.05.07.ODP[01]: frequency>.	Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	5	
A.03.05.07.a[03]	Password Management	a list of commonly used, expected, or compromised passwords is updated when organizational passwords are suspected to have been compromised.	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.	5	
A.03.05.07.a[03]	Password Management	a list of commonly used, expected, or compromised passwords is updated when organizational passwords are suspected to have been compromised.	Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	5	
A.03.05.07.b	Password Management	passwords are verified not to be found on the list of commonly used, expected, or compromised passwords when they are created or updated by users.	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.	5	
A.03.05.07.b	Password Management	passwords are verified not to be found on the list of commonly used, expected, or compromised passwords when they are created or updated by users.	Functional	intersects with	Password Managers	IAC-10.11	Mechanisms exist to protect and store passwords via a password manager tool.	5	
A.03.05.07.c	Password Management	passwords are only transmitted over cryptographically protected channels.	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	
A.03.05.07.c	Password Management	passwords are only transmitted over cryptographically protected channels.	Functional	intersects with	Protection of Authenticators	IAC-10.5	Mechanisms exist to protect authenticators commensurate with the sensitivity of the information to which use of the authenticator permits access.	5	
A.03.05.07.d	Password Management	passwords are stored 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	
A.03.05.07.d	Password Management	passwords are stored in a cryptographically protected form.	Functional	intersects with	Protection of Authenticators	IAC-10.5	Mechanisms exist to protect authenticators commensurate with the sensitivity of the information to which use of the authenticator permits access.	5	
A.03.05.07.e	Password Management	a new password is selected 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.	5	
A.03.05.07.e	Password Management	a new password is selected upon first use after account recovery.	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	
A.03.05.07.f	Password Management	the following composition and complexity rules for passwords are enforced: <A.03.05.07.ODP[02]: rules>.	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	
A.03.05.07.f	Password Management	the following composition and complexity rules for passwords are enforced: <A.03.05.07.ODP[02]: rules>.	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	
03.05.08	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.09	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.10	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.05.11	Authentication Feedback	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.11	Authentication Feedback	feedback of authentication information during the authentication process is obscured.	Functional	intersects with	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.	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)
03.05.12	Authenticator Management	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.05.12.ODP[01]	Authenticator Management	the frequency for changing or refreshing authenticators is defined.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.ODP[02]	Authenticator Management	events that trigger the change or refreshment of authenticators are defined.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.a	Authenticator Management	the identity of the individual, group, role, service, or device receiving the authenticator as part of the initial authenticator distribution is verified.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.b	Authenticator Management	initial authenticator content for any authenticators issued by the organization is established.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.c[01]	Authenticator Management	administrative procedures for initial authenticator distribution are established.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.c[02]	Authenticator Management	administrative procedures for lost, compromised, or damaged authenticators are established.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.c[03]	Authenticator Management	administrative procedures for revoking authenticators are established.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.c[04]	Authenticator Management	administrative procedures for initial authenticator distribution are implemented.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.c[05]	Authenticator Management	administrative procedures for lost, compromised, or damaged authenticators are implemented.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.c[06]	Authenticator Management	administrative procedures for revoking authenticators are implemented.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.d	Authenticator Management	default authenticators are changed at first use.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.e	Authenticator Management	authenticators are changed or refreshed <A.03.05.12.ODP[01]: frequency> or when the following events occur: <A.03.05.12.ODP[02]: events>.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.f[01]	Authenticator Management	authenticator content is protected from unauthorized disclosure.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.f[01]	Authenticator Management	authenticator content is protected from unauthorized disclosure.	Functional	intersects with	Protection of Authenticators	IAC-10.5	Mechanisms exist to protect authenticators commensurate with the sensitivity of the information to which use of the authenticator permits access.	5	
A.03.05.12.f[02]	Authenticator Management	authenticator content is protected from unauthorized modification.	Functional	intersects with	Authenticator Management	IAC-10	Mechanisms exist to securely manage authenticators for users and devices.	5	
A.03.05.12.f[02]	Authenticator Management	authenticator content is protected from unauthorized modification.	Functional	intersects with	Protection of Authenticators	IAC-10.5	Mechanisms exist to protect authenticators commensurate with the sensitivity of the information to which use of the authenticator permits access.	5	
03.06.01	Incident Handling	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.06.01[01]	Incident Handling	an incident-handling capability that is consistent with the incident response plan is implemented.	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	
A.03.06.01[02]	Incident Handling	the incident handling capability includes preparation.	Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover: (1) Preparation; (2) Automated event detection or manual incident report intake; (3) Analysis; (4) Containment; (5) Eradication; and (6) Recovery.	5	
A.03.06.01[03]	Incident Handling	the incident handling capability includes detection and analysis.	Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover: (1) Preparation; (2) Automated event detection or manual incident report intake; (3) Analysis; (4) Containment; (5) Eradication; and (6) Recovery.	5	
A.03.06.01[04]	Incident Handling	the incident handling capability includes containment.	Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover: (1) Preparation; (2) Automated event detection or manual incident report intake; (3) Analysis; (4) Containment; (5) Eradication; and (6) Recovery.	5	
A.03.06.01[05]	Incident Handling	the incident handling capability includes eradication.	Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover: (1) Preparation; (2) Automated event detection or manual incident report intake; (3) Analysis; (4) Containment; (5) Eradication; and (6) Recovery.	5	
A.03.06.01[06]	Incident Handling	the incident handling capability includes recovery.	Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover: (1) Preparation; (2) Automated event detection or manual incident report intake; (3) Analysis; (4) Containment; (5) Eradication; and (6) Recovery.	5	
03.06.02	Incident Monitoring, Reporting, and Response Assistance	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.06.02.ODP[01]	Incident Monitoring, Reporting, and Response Assistance	the time period to report suspected incidents to the organizational incident response capability is defined.	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.	5	
A.03.06.02.ODP[01]	Incident Monitoring, Reporting, and Response Assistance	the time period to report suspected incidents to the organizational incident response capability is defined.	Functional	intersects with	Incident Stakeholder Reporting	IRO-10	Mechanisms exist to timely-report incidents to applicable: (1) Internal stakeholders; (2) Affected clients & third-parties; and (3) Regulatory authorities.	5	
A.03.06.02.ODP[02]	Incident Monitoring, Reporting, and Response Assistance	authorities to whom incident information is to be reported are defined.	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.	5	
A.03.06.02.ODP[02]	Incident Monitoring, Reporting, and Response Assistance	authorities to whom incident information is to be reported are defined.	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	
A.03.06.02.ODP[02]	Incident Monitoring, Reporting, and Response Assistance	authorities to whom incident information is to be reported are defined.	Functional	intersects with	Regulatory & Law Enforcement Contacts	IRO-14	Mechanisms exist to maintain incident response contacts with applicable regulatory and law enforcement agencies.	5	
A.03.06.02.a[01]	Incident Monitoring, Reporting, and Response Assistance	system security incidents are tracked.	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	
A.03.06.02.a[02]	Incident Monitoring, Reporting, and Response Assistance	system security incidents are documented.	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	
A.03.06.02.b	Incident Monitoring, Reporting, and Response Assistance	suspected incidents are reported to the organizational incident response capability within <A.03.06.02.ODP[01]: time period>.	Functional	intersects with	Incident Handling	IRO-02	Mechanisms exist to cover: (1) Preparation; (2) Automated event detection or manual incident report intake; (3) Analysis; (4) Containment; (5) Eradication; and (6) 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)
A.03.06.02.b	Incident Monitoring, Reporting, and Response Assistance	suspected incidents are reported to the organizational incident response capability within <A.03.06.02.ODP[01]: time period>.	Functional	intersects with	Integrated Security Incident Response Team (ISIRT)	IRO-07	Mechanisms exist to establish an integrated team of cybersecurity, IT and business function representatives that are capable of addressing cybersecurity & data privacy incident response operations.	5	
A.03.06.02.b	Incident Monitoring, Reporting, and Response Assistance	suspected incidents are reported to the organizational incident response capability within <A.03.06.02.ODP[01]: time period>.	Functional	intersects with	Incident Stakeholder Reporting	IRO-10	Mechanisms exist to timely-report incidents to applicable: (1) Internal stakeholders; (2) Affected clients & third-parties; and (3) Regulatory authorities.	5	
A.03.06.02.c	Incident Monitoring, Reporting, and Response Assistance	incident information is reported to <A.03.06.02.ODP[02]: authorities>.	Functional	intersects with	Incident Stakeholder Reporting	IRO-10	Mechanisms exist to timely-report incidents to applicable: (1) Internal stakeholders; (2) Affected clients & third-parties; and (3) Regulatory authorities.	5	
A.03.06.02.d	Incident Monitoring, Reporting, and Response Assistance	an incident response support resource that offers advice and assistance to system users on handling and reporting incidents is provided.	Functional	intersects with	Integrated Security Incident Response Team (ISIRT)	IRO-07	Mechanisms exist to establish an integrated team of cybersecurity, IT and business function representatives that are capable of addressing cybersecurity & data privacy incident response operations.	5	
A.03.06.02.d	Incident Monitoring, Reporting, and Response Assistance	an incident response support resource that offers advice and assistance to system users on handling and reporting incidents is provided.	Functional	intersects with	Incident Stakeholder Reporting	IRO-10	Mechanisms exist to timely-report incidents to applicable: (1) Internal stakeholders; (2) Affected clients & third-parties; and (3) Regulatory authorities.	5	
A.03.06.02.d	Incident Monitoring, Reporting, and Response Assistance	an incident response support resource that offers advice and assistance to system users on handling and reporting incidents is provided.	Functional	intersects with	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.	5	
03.06.03	Incident Response Testing	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.06.03.ODP[01]	Incident Response Testing	the frequency at which to test the effectiveness of the incident response capability for the system is defined.	Functional	intersects with	Incident Response Testing	IRO-06	Mechanisms exist to formally test incident response capabilities through realistic exercises to determine the operational effectiveness of those capabilities.	5	
A.03.06.03	Incident Response Testing	the effectiveness of the incident response capability is tested <A.03.06.03.ODP[01]: frequency>.	Functional	intersects with	Incident Response Testing	IRO-06	Mechanisms exist to formally test incident response capabilities through realistic exercises to determine the operational effectiveness of those capabilities.	5	
03.06.04	Incident Response Training	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.06.04.ODP[01]	Incident Response Training	the time period within which incident response training is to be provided to system users is defined.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.ODP[02]	Incident Response Training	the frequency at which to provide incident response training to users after initial training is defined.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.ODP[03]	Incident Response Training	the frequency at which to review and update incident response training content is defined.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.ODP[04]	Incident Response Training	events that initiate a review of the incident response training content are defined.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.a.01	Incident Response Training	incident response training for system users consistent with assigned roles and responsibilities is provided within <A.03.06.04.ODP[01]: time period> of assuming an incident response role or responsibility or acquiring system access.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.a.01	Incident Response Training	incident response training for system users consistent with assigned roles and responsibilities is provided within <A.03.06.04.ODP[01]: time period> of assuming an incident response role or responsibility or acquiring system access.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.06.04.a.02	Incident Response Training	incident response training for system users consistent with assigned roles and responsibilities is provided when required by system changes.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.06.04.a.03	Incident Response Training	incident response training for system users consistent with assigned roles and responsibilities is provided <A.03.06.04.ODP[02]: frequency> thereafter.	Functional	intersects with	Role-Based Cybersecurity & Data Privacy Training	SAT-03	Mechanisms exist to provide role-based cybersecurity & data privacy-related training: (1) Before authorizing access to the system or performing assigned duties; (2) When required by system changes; and (3) Annually thereafter.	5	
A.03.06.04.b[01]	Incident Response Training	incident response training content is reviewed <A.03.06.04.ODP[03]: frequency>.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.b[02]	Incident Response Training	incident response training content is updated <A.03.06.04.ODP[03]: frequency>.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.b[03]	Incident Response Training	incident response training content is reviewed following <A.03.06.04.ODP[04]: events>.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
A.03.06.04.b[04]	Incident Response Training	incident response training content is updated following <A.03.06.04.ODP[04]: events>.	Functional	intersects with	Incident Response Training	IRO-05	Mechanisms exist to train personnel in their incident response roles and responsibilities.	5	
03.06.05	Incident Response Plan	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.06.05.a.01	Incident Response Plan	an incident response plan is developed that provides the organization with a roadmap for implementing its incident response capability.	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.	5	
A.03.06.05.a.02	Incident Response Plan	an incident response plan is developed that describes the structure and organization of the incident response capability.	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.	5	
A.03.06.05.a.03	Incident Response Plan	an incident response plan is developed that provides a high-level approach for how the incident response capability fits into the overall organization.	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.	5	
A.03.06.05.a.04	Incident Response Plan	an incident response plan is developed that defines reportable incidents.	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.	5	
A.03.06.05.a.05	Incident Response Plan	an incident response plan is developed that addresses the sharing of incident information.	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.	5	
A.03.06.05.a.06	Incident Response Plan	an incident response plan is developed that designates responsibilities to organizational entities, personnel, or roles.	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.	5	
A.03.06.05.b[01]	Incident Response Plan	copies of the incident response plan are distributed to designated incident response personnel (identified by name or by role).	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.	5	
A.03.06.05.b[02]	Incident Response Plan	copies of the incident response plan are distributed to organizational elements.	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.	5	
A.03.06.05.c	Incident Response Plan	the incident response plan is updated 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	
A.03.06.05.d	Incident Response Plan	the incident response plan is protected from unauthorized disclosure.	Functional	intersects with	Defined Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity roles & responsibilities for all personnel.	5	
A.03.06.05.d	Incident Response Plan	the incident response plan is protected from unauthorized disclosure.	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	
A.03.06.05.d	Incident Response Plan	the incident response plan is protected from unauthorized disclosure.	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	
03.07.01	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.02	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.03	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.07.04	Maintenance Tools	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.07.04.a[01]	Maintenance Tools	the use of system maintenance tools is approved.	Functional	intersects with	Maintenance Tools	MNT-04	Mechanisms exist to control and monitor the use of system maintenance tools.	5	
A.03.07.04.a[02]	Maintenance Tools	the use of system maintenance tools is controlled.	Functional	intersects with	Maintenance Tools	MNT-04	Mechanisms exist to control and monitor the use of system maintenance tools.	5	
A.03.07.04.a[03]	Maintenance Tools	the use of system maintenance tools is monitored.	Functional	intersects with	Maintenance Tools	MNT-04	Mechanisms exist to control and monitor the use of system maintenance tools.	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)
A.03.07.04.b	Maintenance Tools	media with diagnostic and test programs are checked for malicious code before the media are used in the system.	Functional	intersects with	Inspect Media	MNT-04.2	Mechanisms exist to check media containing diagnostic and test programs for malicious code before the media are used.	5	
A.03.07.04.c	Maintenance Tools	the removal of system maintenance equipment containing CUI is prevented 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	Prevent Unauthorized Removal	MNT-04.3	Mechanisms exist to prevent or control the removal of equipment undergoing maintenance that containing organizational information.	5	
03.07.05	Nonlocal Maintenance	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.07.05.a[01]	Nonlocal Maintenance	nonlocal maintenance and diagnostic activities are approved.	Functional	intersects with	Remote Maintenance	MNT-05	Mechanisms exist to authorize, monitor and control remote, non-local maintenance and diagnostic activities.	5	
A.03.07.05.a[02]	Nonlocal Maintenance	nonlocal maintenance and diagnostic activities are monitored.	Functional	intersects with	Remote Maintenance	MNT-05	Mechanisms exist to authorize, monitor and control remote, non-local maintenance and diagnostic activities.	5	
A.03.07.05.b[01]	Nonlocal Maintenance	multi-factor authentication is implemented in the establishment of nonlocal maintenance and diagnostic sessions.	Functional	intersects with	Multi-Factor Authentication (MFA)	IAC-06	Automated mechanisms exist to enforce Multi-Factor Authentication (MFA) for: (1) Remote network access; (2) Third-party systems, applications and/or services; and/ or (3) Non-console access to critical systems or systems that store, transmit and/or process sensitive/regulated data.	5	
A.03.07.05.b[02]	Nonlocal Maintenance	replay resistance is implemented in the establishment of nonlocal maintenance and diagnostic sessions.	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	
A.03.07.05.b[02]	Nonlocal Maintenance	replay resistance is implemented 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.	5	
A.03.07.05.b[02]	Nonlocal Maintenance	replay resistance is implemented in the establishment of nonlocal maintenance and diagnostic sessions.	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.	5	
A.03.07.05.c[01]	Nonlocal Maintenance	session connections are terminated 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.	5	
A.03.07.05.c[01]	Nonlocal Maintenance	session connections are terminated when nonlocal maintenance is completed.	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.	5	
A.03.07.05.c[02]	Nonlocal Maintenance	network connections are terminated when nonlocal maintenance is completed.	Functional	intersects with	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.	5	
03.07.06	Maintenance Personnel	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.07.06.a	Maintenance Personnel	a process for maintenance personnel authorization is established.	Functional	intersects with	Authorized Maintenance Personnel	MNT-06	Mechanisms exist to maintain a current list of authorized maintenance organizations or personnel.	5	
A.03.07.06.b	Maintenance Personnel	a list of authorized maintenance organizations or personnel is maintained.	Functional	intersects with	Authorized Maintenance Personnel	MNT-06	Mechanisms exist to maintain a current list of authorized maintenance organizations or personnel.	5	
A.03.07.06.c	Maintenance Personnel	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	
A.03.07.06.c	Maintenance Personnel	non-escorted personnel who perform maintenance on the system possess the required access authorizations.	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	
A.03.07.06.c	Maintenance Personnel	non-escorted personnel who perform maintenance on the system possess the required access authorizations.	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	
A.03.07.06.d[01]	Maintenance Personnel	organizational personnel with required access authorizations are designated to supervise the maintenance activities of personnel who do not 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	
A.03.07.06.d[02]	Maintenance Personnel	organizational personnel with required technical competence are designated to supervise the maintenance activities of personnel who do not 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	
03.08.01	Media Storage	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.08.01[01]	Media Storage	system media that contain CUI are physically controlled.	Functional	intersects with	Media Storage	DCH-06	Mechanisms exist to: (1) Physically control and securely store digital and non-digital media within controlled areas using organization-defined security measures; and (2) Protect system media until the media are destroyed or sanitized using approved equipment, techniques and procedures.	5	
A.03.08.01[02]	Media Storage	system media that contain CUI are securely stored.	Functional	intersects with	Media Storage	DCH-06	Mechanisms exist to: (1) Physically control and securely store digital and non-digital media within controlled areas using organization-defined security measures; and (2) Protect system media until the media are destroyed or sanitized using approved equipment, techniques and procedures.	5	
03.08.02	Media Access	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.08.02	Media Access	access to CUI on system media is restricted to authorized personnel or roles.	Functional	intersects with	Media Access	DCH-03	Mechanisms exist to control and restrict access to digital and non-digital media to authorized individuals.	5	
03.08.03	Media Sanitization	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.08.03	Media Sanitization	system media that contain CUI are sanitized prior to disposal, release out of organizational control, or release for reuse.	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.	5	
03.08.04	Media Marking	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.08.04[01]	Media Marking	system media that contain CUI are marked to indicate distribution limitations.	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.	5	
A.03.08.04[02]	Media Marking	system media that contain CUI are marked to indicate handling caveats.	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.	5	
A.03.08.04[03]	Media Marking	system media that contain CUI are marked to indicate applicable CUI markings.	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.	5	
03.08.05	Media Transport	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.08.05.a[01]	Media Transport	system media that contain CUI are protected 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	
A.03.08.05.a[02]	Media Transport	system media that contain CUI are controlled 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	
A.03.08.05.b	Media Transport	accountability for system media that contain CUI is maintained 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	
A.03.08.05.c	Media Transport	activities associated with the transport of system media that contain CUI are documented.	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	
03.08.06	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.08.07	Media Use	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.08.07.ODP[01]	Media Use	types of system media with usage restrictions or that are prohibited from use are defined.	Functional	intersects with	Media Use	DCH-10	Mechanisms exist to restrict the use of types of digital media on systems or system components.	5	
A.03.08.07.a	Media Use	the use of the following types of system media is restricted or prohibited: <A.03.08.07.ODP[01]: types of system media>.	Functional	intersects with	Media Use	DCH-10	Mechanisms exist to restrict the use of types of digital media on systems or system components.	5	
A.03.08.07.b	Media Use	the use of removable system media without an identifiable owner is prohibited.	Functional	intersects with	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.	5	
03.08.08	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.

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)
03.08.09	System Backup – Cryptographic Protection	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.08.09.a	System Backup – Cryptographic Protection	the confidentiality of backup information is protected.	Functional	intersects with	Cryptographic Protection	BCD-11.4	Cryptographic mechanisms exist to prevent the unauthorized disclosure and/or modification of backup information.	5	
A.03.08.09.b	System Backup – Cryptographic Protection	cryptographic mechanisms are implemented to prevent the unauthorized disclosure of CUI at backup storage locations.	Functional	intersects with	Cryptographic Protection	BCD-11.4	Cryptographic mechanisms exist to prevent the unauthorized disclosure and/or modification of backup information.	5	
03.09.01	Personnel Screening	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.09.01.ODP[01]	Personnel Screening	conditions that require the rescreening of individuals are defined.	Functional	intersects with	Personnel Screening	HRS-04	Mechanisms exist to manage personnel security risk by screening individuals prior to authorizing access.	5	
A.03.09.01.ODP[01]	Personnel Screening	conditions that require the rescreening of individuals are defined.	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	
A.03.09.01.a	Personnel Screening	individuals are screened prior to authorizing access to the system.	Functional	intersects with	Personnel Screening	HRS-04	Mechanisms exist to manage personnel security risk by screening individuals prior to authorizing access.	5	
A.03.09.01.b	Personnel Screening	individuals are rescreened in accordance with the following conditions: <A.03.09.01.ODP[01]: conditions>.	Functional	intersects with	Personnel Screening	HRS-04	Mechanisms exist to manage personnel security risk by screening individuals prior to authorizing access.	5	
03.09.02	Personnel Termination and Transfer	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.09.02.ODP[01]	Personnel Termination and Transfer	the time period within which to disable system access is defined.	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	
A.03.09.02.ODP[01]	Personnel Termination and Transfer	the time period within which to disable system access is defined.	Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
A.03.09.02.a.01	Personnel Termination and Transfer	upon termination of individual employment, system access is disabled within <A.03.09.02.ODP[01]: time period>.	Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
A.03.09.02.a.02[01]	Personnel Termination and Transfer	upon termination of individual employment, authenticators associated with the individual are terminated or revoked.	Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
A.03.09.02.a.02[02]	Personnel Termination and Transfer	upon termination of individual employment, credentials associated with the individual are terminated or revoked.	Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
A.03.09.02.a.03	Personnel Termination and Transfer	upon termination of individual employment, security-related system property is retrieved.	Functional	intersects with	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.	5	
A.03.09.02.a.03	Personnel Termination and Transfer	upon termination of individual employment, security-related system property is retrieved.	Functional	intersects with	Personnel Termination	HRS-09	Mechanisms exist to govern the termination of individual employment.	5	
A.03.09.02.a.03	Personnel Termination and Transfer	upon termination of individual employment, security-related system property is retrieved.	Functional	intersects with	Asset Collection	HRS-09.1	Mechanisms exist to retrieve organization-owned assets upon termination of an individual's employment.	5	
A.03.09.02.b.01[01]	Personnel Termination and Transfer	upon individual reassignment or transfer to other positions in the organization, the ongoing operational need for current logical and physical access authorizations to the system and facility is reviewed.	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	
A.03.09.02.b.01[02]	Personnel Termination and Transfer	upon individual reassignment or transfer to other positions in the organization, the ongoing operational need for current logical and physical access authorizations to the system and facility is confirmed.	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	
A.03.09.02.b.02	Personnel Termination and Transfer	upon individual reassignment or transfer to other positions in the organization, access authorization is modified to correspond with any changes in operational need.	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	
03.10.01	Physical Access Authorizations	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.10.01.ODP[01]	Physical Access Authorizations	the frequency at which to review the access list detailing authorized facility access by individuals is defined.	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	
A.03.10.01.ODP[01]	Physical Access Authorizations	the frequency at which to review the access list detailing authorized facility access by individuals is defined.	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	
A.03.10.01.a[01]	Physical Access Authorizations	a list of individuals with authorized access to the facility where the system resides is developed.	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	
A.03.10.01.a[02]	Physical Access Authorizations	a list of individuals with authorized access to the facility where the system resides is approved.	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	
A.03.10.01.a[03]	Physical Access Authorizations	a list of individuals with authorized access to the facility where the system resides is maintained.	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	
A.03.10.01.b	Physical Access Authorizations	authorization credentials for facility access are issued.	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	
A.03.10.01.c	Physical Access Authorizations	the facility access list is reviewed <A.03.10.01.ODP[01]: frequency>.	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	
A.03.10.01.d	Physical Access Authorizations	individuals from the facility access list are removed when access is no longer required.	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	
03.10.02	Monitoring Physical Access	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.10.02.ODP[01]	Monitoring Physical Access	the frequency at which to review physical access logs is defined.	Functional	intersects with	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	5	
A.03.10.02.ODP[02]	Monitoring Physical Access	events or potential indications of events requiring physical access logs to be reviewed are defined.	Functional	intersects with	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	5	
A.03.10.02.a[01]	Monitoring Physical Access	physical access to the facility where the system resides is monitored to detect physical security incidents.	Functional	intersects with	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	5	
A.03.10.02.a[02]	Monitoring Physical Access	physical security incidents are responded to.	Functional	intersects with	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	5	
A.03.10.02.b[01]	Monitoring Physical Access	physical access logs are reviewed <A.03.10.02.ODP[01]: frequency>.	Functional	intersects with	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	5	
A.03.10.02.b[02]	Monitoring Physical Access	physical access logs are reviewed upon occurrence of <A.03.10.02.ODP[02]: events or potential indicators of events>.	Functional	intersects with	Monitoring Physical Access	PES-05	Physical access control mechanisms exist to monitor for, detect and respond to physical security incidents.	5	
03.10.03	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.04	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.05	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.10.06	Alternate Work Site	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.10.06.ODP[01]	Alternate Work Site	security requirements to be employed at alternate work sites are defined.	Functional	intersects with	Alternate Work Site	PES-11	Physical security mechanisms exist to utilize appropriate management, operational and technical controls at alternate work sites.	5	
A.03.10.06.ODP[01]	Alternate Work Site	security requirements to be employed at alternate work sites are defined.	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	
A.03.10.06.a	Alternate Work Site	alternate work sites allowed for use by employees are determined.	Functional	intersects with	Alternate Work Site	PES-11	Physical security mechanisms exist to utilize appropriate management, operational and technical controls at alternate work sites.	5	
A.03.10.06.a	Alternate Work Site	alternate work sites allowed for use by employees are determined.	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	
A.03.10.06.b	Alternate Work Site	the following security requirements are employed at alternate work sites: <A.03.10.06.ODP[01]: security requirements>.	Functional	intersects with	Alternate Work Site	PES-11	Physical security mechanisms exist to utilize appropriate management, operational and technical controls at alternate work sites.	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)
A.03.10.06.b	Alternate Work Site	the following security requirements are employed at alternate work sites: <A.03.10.06.ODP[01]: 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.	5	
03.10.07	Physical Access Control	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.10.07.a.01	Physical Access Control	physical access authorizations are enforced at entry and exit points to the facility where the system resides by verifying individual physical access authorizations before granting 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	
A.03.10.07.a.02	Physical Access Control	physical access authorizations are enforced at entry and exit points to the facility where the system resides by controlling ingress and egress with physical access control systems, devices, or guards.	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	
A.03.10.07.b	Physical Access Control	physical access audit logs for entry or exit points are maintained.	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.	5	
A.03.10.07.c[01]	Physical Access Control	visitors are escorted.	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	
A.03.10.07.c[01]	Physical Access Control	visitors are escorted.	Functional	intersects with	Distinguish Visitors from On-Site Personnel	PES-06.1	Physical access control mechanisms exist to easily distinguish between onsite personnel and visitors, especially in areas where sensitive/regulated data is accessible.	5	
A.03.10.07.c[01]	Physical Access Control	visitors are escorted.	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.	5	
A.03.10.07.c[02]	Physical Access Control	visitor activity is controlled.	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	
A.03.10.07.c[02]	Physical Access Control	visitor activity is controlled.	Functional	intersects with	Distinguish Visitors from On-Site Personnel	PES-06.1	Physical access control mechanisms exist to easily distinguish between onsite personnel and visitors, especially in areas where sensitive/regulated data is accessible.	5	
A.03.10.07.c[02]	Physical Access Control	visitor activity is controlled.	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.	5	
A.03.10.07.d	Physical Access Control	keys, combinations, and other physical access devices are secured.	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	
A.03.10.07.e	Physical Access Control	physical access to output devices is controlled to prevent unauthorized individuals from obtaining access to CUI.	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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.10.08	Access Control for Transmission	physical access to system distribution and transmission lines within organizational facilities is controlled.	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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.11.01.ODP[01]	Risk Assessment	the frequency at which to update the risk assessment is defined.	Functional	intersects with	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.	5	
A.03.11.01.a	Risk Assessment	the risk (including supply chain risk) of unauthorized disclosure resulting from the processing, storage, or transmission of CUI is assessed.	Functional	intersects with	Risk Framing	RSK-01.1	Mechanisms exist to identify: (1) Assumptions affecting risk assessments, risk response and risk monitoring; (2) Constraints affecting risk assessments, risk response and risk monitoring; (3) The organizational risk tolerance; and (4) Priorities, benefits and trade-offs considered by the organization for managing risk.	5	
A.03.11.01.a	Risk Assessment	the risk (including supply chain risk) of unauthorized disclosure resulting from the processing, storage, or transmission of CUI is assessed.	Functional	intersects with	Risk Identification	RSK-03	Mechanisms exist to identify and document risks, both internal and external.	5	
A.03.11.01.a	Risk Assessment	the risk (including supply chain risk) of unauthorized disclosure resulting from the processing, storage, or transmission of CUI is assessed.	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.	5	
A.03.11.01.a	Risk Assessment	the risk (including supply chain risk) of unauthorized disclosure resulting from the processing, storage, or transmission of CUI is assessed.	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.	5	
A.03.11.01.a	Risk Assessment	the risk (including supply chain risk) of unauthorized disclosure resulting from the processing, storage, or transmission of CUI is assessed.	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	
A.03.11.01.b	Risk Assessment	risk assessments are updated <A.03.11.01.ODP[01]: frequency>.	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.	5	
A.03.11.01.b	Risk Assessment	risk assessments are updated <A.03.11.01.ODP[01]: frequency>.	Functional	intersects with	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.	5	
03.11.02	Vulnerability Monitoring and Scanning	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.11.02.ODP[01]	Vulnerability Monitoring and Scanning	the frequency at which the system is monitored for vulnerabilities is defined.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.ODP[02]	Vulnerability Monitoring and Scanning	the frequency at which the system is scanned for vulnerabilities is defined.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.ODP[03]	Vulnerability Monitoring and Scanning	response times to remediate system vulnerabilities are defined.	Functional	subset of	Vulnerability & Patch Management Program (VPMP)	VPM-01	Mechanisms exist to facilitate the implementation and monitoring of vulnerability management controls.	10	
A.03.11.02.ODP[03]	Vulnerability Monitoring and Scanning	response times to remediate system vulnerabilities are defined.	Functional	intersects with	Vulnerability Remediation Process	VPM-02	Mechanisms exist to ensure that vulnerabilities are properly identified, tracked and remediated.	5	
A.03.11.02.ODP[04]	Vulnerability Monitoring and Scanning	the frequency at which to update system vulnerabilities to be scanned is defined.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.ODP[04]	Vulnerability Monitoring and Scanning	the frequency at which to update system vulnerabilities to be scanned is defined.	Functional	intersects with	Update Tool Capability	VPM-06.1	Mechanisms exist to update vulnerability scanning tools.	5	
A.03.11.02.a[01]	Vulnerability Monitoring and Scanning	the system is monitored for vulnerabilities <A.03.11.02.ODP[01]: frequency>.	Functional	intersects with	Attack Surface Scope	VPM-01.1	Mechanisms exist to define and manage the scope for its attack surface management activities.	5	
A.03.11.02.a[01]	Vulnerability Monitoring and Scanning	the system is monitored for vulnerabilities <A.03.11.02.ODP[01]: frequency>.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.a[02]	Vulnerability Monitoring and Scanning	the system is scanned for vulnerabilities <A.03.11.02.ODP[02]: frequency>.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	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)
A.03.11.02.a[03]	Vulnerability Monitoring and Scanning	the system is monitored for vulnerabilities when new vulnerabilities that affect the system are identified.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.a[04]	Vulnerability Monitoring and Scanning	the system is scanned for vulnerabilities when new vulnerabilities that affect the system are identified.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.b	Vulnerability Monitoring and Scanning	system vulnerabilities are remediated within <A.03.11.02.ODP[03]: response times>.	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.	5	
A.03.11.02.b	Vulnerability Monitoring and Scanning	system vulnerabilities are remediated within <A.03.11.02.ODP[03]: response times>.	Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
A.03.11.02.c[01]	Vulnerability Monitoring and Scanning	system vulnerabilities to be scanned are updated <A.03.11.02.ODP[04]: frequency>.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.c[01]	Vulnerability Monitoring and Scanning	system vulnerabilities to be scanned are updated <A.03.11.02.ODP[04]: frequency>.	Functional	intersects with	Update Tool Capability	VPM-06.1	Mechanisms exist to update vulnerability scanning tools.	5	
A.03.11.02.c[02]	Vulnerability Monitoring and Scanning	system vulnerabilities to be scanned are updated when new vulnerabilities are identified and reported.	Functional	intersects with	Vulnerability Scanning	VPM-06	Mechanisms exist to detect vulnerabilities and configuration errors by routine vulnerability scanning of systems and applications.	5	
A.03.11.02.c[02]	Vulnerability Monitoring and Scanning	system vulnerabilities to be scanned are updated when new vulnerabilities are identified and reported.	Functional	intersects with	Update Tool Capability	VPM-06.1	Mechanisms exist to update vulnerability scanning tools.	5	
03.11.03	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.11.04	Risk Response	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.11.04[01]	Risk Response	findings from security assessments are responded to.	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.	5	
A.03.11.04[02]	Risk Response	findings from security monitoring are responded to.	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.	5	
A.03.11.04[03]	Risk Response	findings from security audits are responded to.	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.	5	
03.12.01	Security Assessment	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.12.01.ODP[01]	Security Assessment	the frequency at which to assess the security requirements for the system and its environment of operation is defined.	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.	5	
A.03.12.01	Security Assessment	the security requirements for the system and its environment of operation are assessed <A.03.12.01.ODP[01]: frequency> to determine if the requirements have been satisfied.	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	
03.12.02	Plan of Action and Milestones	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.12.02.a.01	Plan of Action and Milestones	a plan of action and milestones for the system is developed to document the planned remediation actions for correcting weaknesses or deficiencies noted during security assessments.	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	
A.03.12.02.a.02	Plan of Action and Milestones	a plan of action and milestones for the system is developed to reduce or eliminate known system vulnerabilities.	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	
A.03.12.02.b.01	Plan of Action and Milestones	the existing plan of action and milestones is updated based on the findings from security assessments.	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	
A.03.12.02.b.02	Plan of Action and Milestones	the existing plan of action and milestones is updated based on the findings from audits or reviews.	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	
A.03.12.02.b.03	Plan of Action and Milestones	the existing plan of action and milestones is updated based on the findings from continuous monitoring activities.	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	
03.12.03	Continuous Monitoring	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.12.03[01]	Continuous Monitoring	a system-level continuous monitoring strategy is developed.	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	
A.03.12.03[02]	Continuous Monitoring	a system-level continuous monitoring strategy is implemented.	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	
A.03.12.03[03]	Continuous Monitoring	ongoing monitoring is included in the continuous monitoring strategy.	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	
A.03.12.03[04]	Continuous Monitoring	security assessments are included in the continuous monitoring strategy.	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	
03.12.04	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.12.05	Information Exchange	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.12.05.ODP[01]	Information Exchange	one or more of the following PARAMETER VALUES are selected: (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	Interconnection Security Agreements (ISAs)	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	
A.03.12.05.ODP[02]	Information Exchange	the frequency at which to review and update agreements is defined.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	
A.03.12.05.a[01]	Information Exchange	the exchange of CUI between the system and other systems is approved using <A.03.12.05.ODP[01]: SELECTED PARAMETER VALUES>.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	
A.03.12.05.a[02]	Information Exchange	the exchange of CUI between the system and other systems is managed using <A.03.12.05.ODP[01]: SELECTED PARAMETER VALUES>.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	
A.03.12.05.b[01]	Information Exchange	interface characteristics for each system are documented as part of the exchange agreements.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	
A.03.12.05.b[02]	Information Exchange	security requirements for each system are documented as part of the exchange agreements.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	

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)
A.03.12.05.b[03]	Information Exchange	responsibilities for each system are documented as part of the exchange agreements.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	
A.03.12.05.c[01]	Information Exchange	exchange agreements are reviewed <A.03.12.05.ODP[02]: frequency>.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	
A.03.12.05.c[02]	Information Exchange	exchange agreements are updated <A.03.12.05.ODP[02]: frequency>.	Functional	intersects with	Interconnection Security Agreements (ISAs)	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	
03.13.01	Boundary Protection	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.01.a[01]	Boundary Protection	communications at external managed interfaces to the system are monitored.	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.	5	
A.03.13.01.a[02]	Boundary Protection	communications at external managed interfaces to the system are controlled.	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	
A.03.13.01.a[03]	Boundary Protection	communications at key internal managed interfaces within the system are monitored.	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.	5	
A.03.13.01.a[04]	Boundary Protection	communications at key internal managed interfaces within the system are controlled.	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	
A.03.13.01.b	Boundary Protection	subnetworks are implemented for publicly accessible system components that are physically or logically separated from internal networks.	Functional	intersects with	Network Segmentation (macrosegmentation)	NET-06	Mechanisms exist to ensure network architecture utilizes network segmentation to isolate systems, applications and services that protect from other network resources.	5	
A.03.13.01.c	Boundary Protection	external system connections are only made 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	
03.13.02	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.03	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.04	Information in Shared System Resources	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.04[01]	Information in Shared System Resources	unauthorized information transfer via shared system resources is prevented.	Functional	intersects with	Information In Shared Resources	SEA-05	Mechanisms exist to prevent unauthorized and unintended information transfer via shared system resources.	5	
A.03.13.04[02]	Information in Shared System Resources	unintended information transfer via shared system resources is prevented.	Functional	intersects with	Information In Shared Resources	SEA-05	Mechanisms exist to prevent unauthorized and unintended information transfer via shared system resources.	5	
03.13.05	Withdrawn	N/A	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	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.06[01]	Network Communications – Deny by Default – Allow by Exception	network communications traffic is denied by default.	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).	5	
A.03.13.06[02]	Network Communications – Deny by Default – Allow by Exception	network communications traffic is allowed by exception.	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).	5	
03.13.07	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.08	Transmission and Storage Confidentiality	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.08[01]	Transmission and Storage Confidentiality	cryptographic mechanisms are implemented to prevent the unauthorized disclosure of CUI during transmission.	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	
A.03.13.08[01]	Transmission and Storage Confidentiality	cryptographic mechanisms are implemented to prevent the unauthorized disclosure of CUI during transmission.	Functional	intersects with	Transmission Confidentiality	CRY-03	Cryptographic mechanisms exist to protect the confidentiality of data being transmitted.	5	
A.03.13.08[02]	Transmission and Storage Confidentiality	cryptographic mechanisms are implemented to prevent the unauthorized disclosure of CUI 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	
A.03.13.08[02]	Transmission and Storage Confidentiality	cryptographic mechanisms are implemented to prevent the unauthorized disclosure of CUI while in storage.	Functional	intersects with	Encrypting Data At Rest	CRY-05	Cryptographic mechanisms exist to prevent unauthorized disclosure of data at rest.	5	
03.13.09	Network Disconnect	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.09.ODP[01]	Network Disconnect	the time period of inactivity after which the system terminates a network connection associated with a communications session is defined.	Functional	intersects with	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.	5	
A.03.13.09	Network Disconnect	the network connection associated with a communications session is terminated at the end of the session or after <A.03.13.09.ODP[01]: time period> of inactivity.	Functional	intersects with	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.	5	
03.13.10	Cryptographic Key Establishment and Management	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.10.ODP[01]	Cryptographic Key Establishment and Management	requirements for key generation, distribution, storage, access, and destruction are defined.	Functional	intersects with	Cryptographic Key Management	CRY-09	Mechanisms exist to facilitate cryptographic key management controls to protect the confidentiality, integrity and availability of keys.	5	
A.03.13.10[01]	Cryptographic Key Establishment and Management	cryptographic keys are established in the system in accordance with the following key management requirements: <A.03.13.10.ODP[01]: requirements>.	Functional	intersects with	Cryptographic Key Management	CRY-09	Mechanisms exist to facilitate cryptographic key management controls to protect the confidentiality, integrity and availability of keys.	5	
A.03.13.10[02]	Cryptographic Key Establishment and Management	cryptographic keys are managed in the system in accordance with the following key management requirements: <A.03.13.10.ODP[01]: requirements>.	Functional	intersects with	Cryptographic Key Management	CRY-09	Mechanisms exist to facilitate cryptographic key management controls to protect the confidentiality, integrity and availability of keys.	5	
03.13.11	Cryptographic Protection	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.11.ODP[01]	Cryptographic Protection	the types of cryptography for protecting the confidentiality of CUI are defined.	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	
A.03.13.11.ODP[01]	Cryptographic Protection	the types of cryptography for protecting the confidentiality of CUI are defined.	Functional	intersects with	Transmission Confidentiality	CRY-03	Cryptographic mechanisms exist to protect the confidentiality of data being transmitted.	5	
A.03.13.11.ODP[01]	Cryptographic Protection	the types of cryptography for protecting the confidentiality of CUI are defined.	Functional	intersects with	Encrypting Data At Rest	CRY-05	Cryptographic mechanisms exist to prevent unauthorized disclosure of data at rest.	5	
A.03.13.11	Cryptographic Protection	the following types of cryptography are implemented to protect the confidentiality of CUI: <A.03.13.11.ODP[01]: types of cryptography>.	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	
A.03.13.11	Cryptographic Protection	the following types of cryptography are implemented to protect the confidentiality of CUI: <A.03.13.11.ODP[01]: types of cryptography>.	Functional	intersects with	Transmission Confidentiality	CRY-03	Cryptographic mechanisms exist to protect the confidentiality of data being transmitted.	5	
A.03.13.11	Cryptographic Protection	the following types of cryptography are implemented to protect the confidentiality of CUI: <A.03.13.11.ODP[01]: types of cryptography>.	Functional	intersects with	Encrypting Data At Rest	CRY-05	Cryptographic mechanisms exist to prevent unauthorized disclosure of data at rest.	5	
03.13.12	Collaborative Computing Devices and Applications	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.12.ODP[01]	Collaborative Computing Devices and Applications	exceptions where remote activation is to be allowed are defined.	Functional	intersects with	Collaborative Computing Devices	END-14	Mechanisms exist to unplug or prohibit the remote activation of collaborative computing devices with the following exceptions: (1) Networked whiteboards; (2) Video teleconference cameras; and (3) Teleconference microphones.	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)
A.03.13.12.a	Collaborative Computing Devices and Applications	the remote activation of collaborative computing devices and applications is prohibited with the following exceptions: <A.03.13.12.ODP[01]: exceptions>.	Functional	intersects with	Collaborative Computing Devices	END-14	Mechanisms exist to unplug or prohibit the remote activation of collaborative computing devices with the following exceptions: (1) Networked whiteboards; (2) Video teleconference cameras; and (3) Teleconference microphones.	5	
A.03.13.12.b	Collaborative Computing Devices and Applications	an explicit indication of use is provided to users who are physically present at the devices.	Functional	intersects with	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.	5	
03.13.13	Mobile Code	Determine If: acceptable mobile code is defined.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.13.a[01]	Mobile Code	acceptable mobile code technologies are defined.	Functional	intersects with	Mobile Code	END-10	Mechanisms exist to address mobile code / operating system-independent applications.	5	
A.03.13.13.a[02]	Mobile Code	the use of mobile code is authorized.	Functional	intersects with	Mobile Code	END-10	Mechanisms exist to address mobile code / operating system-independent applications.	5	
A.03.13.13.b[01]	Mobile Code	the use of mobile code is monitored.	Functional	intersects with	Mobile Code	END-10	Mechanisms exist to address mobile code / operating system-independent applications.	5	
A.03.13.13.b[02]	Mobile Code	the use of mobile code is controlled.	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	
A.03.13.13.b[03]	Mobile Code	the use of mobile code is controlled.	Functional	intersects with	Mobile Code	END-10	Mechanisms exist to address mobile code / operating system-independent applications.	5	
03.13.14	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.13.15	Session Authenticity	Determine If: the authenticity of communications sessions is protected.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.13.15	Session Authenticity	the authenticity of communications sessions is protected.	Functional	intersects with	Session Integrity	NET-09	Mechanisms exist to protect the authenticity and integrity of communications sessions.	5	
03.13.16	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.01	Flaw Remediation	Determine If: the time period within which to install security-relevant software updates after the release of the updates is defined.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.14.01.ODP[01]	Flaw Remediation	the time period within which to install security-relevant software updates after the release of the updates is defined.	Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
A.03.14.01.ODP[02]	Flaw Remediation	the time period within which to install security-relevant firmware updates after the release of the updates is defined.	Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
A.03.14.01.a[01]	Flaw Remediation	system flaws are identified.	Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
A.03.14.01.a[02]	Flaw Remediation	system flaws are reported.	Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
A.03.14.01.a[03]	Flaw Remediation	system flaws are corrected.	Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
A.03.14.01.b[01]	Flaw Remediation	security-relevant software updates are installed within <A.03.14.01.ODP[01]: time period> of the release of the updates.	Functional	intersects with	Software & Firmware Patching	VPM-05	Mechanisms exist to conduct software patching for all deployed operating systems, applications and firmware.	5	
A.03.14.01.b[02]	Flaw Remediation	security-relevant firmware updates are installed within <A.03.14.01.ODP[02]: time period> of the release of the updates.	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	Determine If: the frequency at which malicious code protection mechanisms perform scans is defined.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.14.02.ODP[01]	Malicious Code Protection	malicious code protection mechanisms are implemented at system entry and exit points to detect malicious code.	Functional	intersects with	Malicious Code Protection (Anti-Malware)	END-04	Mechanisms exist to utilize anti-malware technologies to detect and eradicate malicious code.	5	
A.03.14.02.a[01]	Malicious Code Protection	malicious code protection mechanisms are implemented at system entry and exit points to eradicate malicious code.	Functional	intersects with	Malicious Code Protection (Anti-Malware)	END-04	Mechanisms exist to utilize anti-malware technologies to detect and eradicate malicious code.	5	
A.03.14.02.a[02]	Malicious Code Protection	malicious code protection mechanisms are updated as new releases are available in accordance with configuration management policy and procedures.	Functional	intersects with	Automatic Antimalware Signature Updates	END-04.1	Mechanisms exist to automatically update anti-malware technologies, including signature definitions.	5	
A.03.14.02.c.01[01]	Malicious Code Protection	malicious code protection mechanisms are configured to perform scans of the system <A.03.14.02.ODP[01]: frequency>.	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	
A.03.14.02.c.01[02]	Malicious Code Protection	malicious code protection mechanisms are configured to perform real-time scans of files from external sources at endpoints or system entry and exit points as the files are downloaded, opened, or executed.	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	
A.03.14.02.c.02	Malicious Code Protection	malicious code protection mechanisms are configured to block malicious code, quarantine malicious code, or take other actions in response to malicious code detection.	Functional	intersects with	Malicious Code Protection (Anti-Malware)	END-04	Mechanisms exist to utilize anti-malware technologies to detect and eradicate malicious code.	5	
03.14.03	Security Alerts, Advisories, and Directives	Determine If: system security alerts, advisories, and directives from external organizations are received on an ongoing basis.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.14.03.a	Security Alerts, Advisories, and Directives	internal security alerts, advisories, and directives are generated, as necessary.	Functional	intersects with	External Threat Intelligence Feeds Feeds	THR-03	Mechanisms exist to maintain situational awareness of vulnerabilities and evolving threats by leveraging the knowledge of attacker tactics, techniques and procedures to facilitate the implementation of preventative and compensating controls.	5	
A.03.14.03.b[01]	Security Alerts, Advisories, and Directives	internal security alerts, advisories, and directives are disseminated, as necessary.	Functional	intersects with	Internal Threat Intelligence Feeds Feeds	THR-03.1	Mechanisms exist to utilize external threat intelligence feeds to generate and disseminate organization-specific security alerts, advisories and/or directives.	5	
A.03.14.03.b[02]	Security Alerts, Advisories, and Directives	internal security alerts, advisories, and directives are disseminated, as necessary.	Functional	intersects with	Internal Threat Intelligence Feeds Feeds	THR-03.1	Mechanisms exist to utilize external threat intelligence feeds to generate and disseminate organization-specific security alerts, advisories and/or directives.	5	
03.14.04	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.05	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.06	System Monitoring	Determine If: the system is monitored to detect attacks.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.14.06.a.01[01]	System Monitoring	the system is monitored to detect indicators of potential attacks.	Functional	subset of	Continuous Monitoring	MON-01	Mechanisms exist to facilitate the implementation of enterprise-wide monitoring controls.	10	
A.03.14.06.a.01[02]	System Monitoring	the system is monitored to detect unauthorized connections.	Functional	subset of	Continuous Monitoring	MON-01	Mechanisms exist to facilitate the implementation of enterprise-wide monitoring controls.	10	
A.03.14.06.a.02	System Monitoring	unauthorized use of the system is identified.	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	
A.03.14.06.c[01]	System Monitoring	inbound communications traffic is monitored to detect unusual or unauthorized activities or conditions.	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.	5	
A.03.14.06.c[02]	System Monitoring	outbound communications traffic is monitored to detect unusual or unauthorized activities or conditions.	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.	5	
03.14.07	Withdrawn	N/A	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
03.14.08	Information Management and Retention	Determine If: CUI within the system is managed in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.14.08[01]	Information Management and Retention	CUI within the system is retained in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.	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	
A.03.14.08[02]	Information Management and Retention	CUI output from the system is managed in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.	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	
A.03.14.08[03]	Information Management and Retention	CUI output from the system is retained in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.	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	
A.03.14.08[04]	Information Management and Retention	CUI output from the system is retained in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.	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	
03.15.01	Policy and Procedures	Determine If: CUI output from the system is retained in accordance with applicable laws, Executive Orders, directives, regulations, policies, standards, guidelines, and operational requirements.	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.

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)
A.03.15.01.ODP[01]	Policy and Procedures	the frequency at which the policies and procedures for satisfying security requirements are reviewed and updated is defined.	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.	5	
A.03.15.01.a[01]	Policy and Procedures	policies needed to satisfy the security requirements for the protection of CUI are developed and documented.	Functional	intersects with	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	5	
A.03.15.01.a[02]	Policy and Procedures	policies needed to satisfy the security requirements for the protection of CUI are disseminated to organizational personnel or roles.	Functional	intersects with	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	5	
A.03.15.01.a[03]	Policy and Procedures	procedures needed to satisfy the security requirements for the protection of CUI are developed and documented.	Functional	intersects with	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	5	
A.03.15.01.a[03]	Policy and Procedures	procedures needed to satisfy the security requirements for the protection of CUI are developed and documented.	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.	5	
A.03.15.01.a[04]	Policy and Procedures	procedures needed to satisfy the security requirements for the protection of CUI are disseminated to organizational personnel or roles.	Functional	intersects with	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	5	
A.03.15.01.a[04]	Policy and Procedures	procedures needed to satisfy the security requirements for the protection of CUI are disseminated to organizational personnel or roles.	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.	5	
A.03.15.01.b[01]	Policy and Procedures	policies and procedures are reviewed <A.03.15.01.ODP[01]: 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.	5	
A.03.15.01.b[01]	Policy and Procedures	policies and procedures are reviewed <A.03.15.01.ODP[01]: frequency>.	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.	5	
A.03.15.01.b[02]	Policy and Procedures	policies and procedures are updated <A.03.15.01.ODP[01]: 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.	5	
A.03.15.01.b[02]	Policy and Procedures	policies and procedures are updated <A.03.15.01.ODP[01]: frequency>.	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.	5	
03.15.02	System Security Plan	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.15.02.ODP[01]	System Security Plan	the frequency at which the system security plan is reviewed and updated is defined.	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	
A.03.15.02.a.01	System Security Plan	a system security plan that defines the constituent system components is developed.	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	
A.03.15.02.a.02	System Security Plan	a system security plan that identifies the information types processed, stored, and transmitted by the system is developed.	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	
A.03.15.02.a.03	System Security Plan	a system security plan that describes specific threats to the system that are of concern to the organization is developed.	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	
A.03.15.02.a.04	System Security Plan	a system security plan that describes the operational environment for the system and any dependencies on or connections to other systems or system components is developed.	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	
A.03.15.02.a.05	System Security Plan	a system security plan that provides an overview of the security requirements for the system is developed.	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	
A.03.15.02.a.06	System Security Plan	a system security plan that describes the safeguards in place or planned for meeting the security requirements is developed.	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	
A.03.15.02.a.07	System Security Plan	a system security plan that identifies individuals that fulfill system roles and responsibilities is developed.	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	
A.03.15.02.a.08	System Security Plan	a system security plan that includes other relevant information necessary for the protection of CUI is developed.	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	
A.03.15.02.b[01]	System Security Plan	the system security plan is reviewed <A.03.15.02.ODP[01]: 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	
A.03.15.02.b[02]	System Security Plan	the system security plan is updated <A.03.15.02.ODP[01]: 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	
A.03.15.02.c	System Security Plan	the system security plan is protected 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.	5	
A.03.15.02.c	System Security Plan	the system security plan is protected from unauthorized disclosure.	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	

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)
A.03.15.02.c	System Security Plan	the system security plan is protected from unauthorized disclosure.	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	
03.15.03	Rules of Behavior	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.15.03.ODP[01]	Rules of Behavior	the frequency at which the rules of behavior are reviewed and updated is defined.	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	
A.03.15.03.a	Rules of Behavior	rules that describe responsibilities and expected behavior for system usage and protecting CUI are established.	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	
A.03.15.03.a	Rules of Behavior	rules that describe responsibilities and expected behavior for system usage and protecting CUI are established.	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.	5	
A.03.15.03.a	Rules of Behavior	rules that describe responsibilities and expected behavior for system usage and protecting CUI are established.	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	
A.03.15.03.a	Rules of Behavior	rules that describe responsibilities and expected behavior for system usage and protecting CUI are established.	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	
A.03.15.03.b	Rules of Behavior	rules are provided to individuals who require access to the system.	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	
A.03.15.03.c	Rules of Behavior	a documented acknowledgement from individuals indicating that they have read, understand, and agree to abide by the rules of behavior is received 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.	5	
A.03.15.03.d[01]	Rules of Behavior	the rules of behavior are reviewed <A.03.15.03.ODP[01]: frequency>.	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	
A.03.15.03.d[02]	Rules of Behavior	the rules of behavior are updated <A.03.15.03.ODP[01]: frequency>.	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	
03.16.01	Security Engineering Principles	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.16.01.ODP[01]	Security Engineering Principles	systems security engineering principles to be applied to the development or modification of the system and system components are defined.	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	
A.03.16.01.ODP[01]	Security Engineering Principles	systems security engineering principles to be applied to the development or modification of the system and system components are defined.	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	
A.03.16.01	Security Engineering Principles	<A.03.16.01.ODP[01]: systems security engineering principles> are applied to the development or modification of the system and system components.	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.	5	
03.16.02	Unsupported System Components	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.16.02.a	Unsupported System Components	system components are replaced when support for the components is no longer available from the developer, vendor, or manufacturer.	Functional	intersects with	Unsupported Systems	TDA-17	Mechanisms exist to prevent unsupported systems by: (1) Replacing systems when support for the components is no longer available from the developer, vendor or manufacturer; and (2) Requiring justification and documented approval for the continued use of unsupported system components required to satisfy mission/business needs.	5	
A.03.16.02.b	Unsupported System Components	options for risk mitigation or alternative sources for continued support for unsupported components that cannot be replaced are provided.	Functional	intersects with	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.	5	
03.16.03	External System Services	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.16.03.ODP[01]	External System Services	security requirements to be satisfied by external system service providers are defined.	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	
A.03.16.03.ODP[01]	External System Services	security requirements to be satisfied by external system service providers are defined.	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	
A.03.16.03.a	External System Services	the providers of external system services used for the processing, storage, or transmission of CUI comply with the following security requirements: <A.03.16.03.ODP[01]: security requirements>.	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	
A.03.16.03.b	External System Services	user roles and responsibilities with regard to external system services, including shared responsibilities with external service providers, are defined and documented.	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).	5	
A.03.16.03.c	External System Services	processes, methods, and techniques to monitor security requirement compliance by external service providers on an ongoing basis are implemented.	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	
A.03.16.03.c	External System Services	processes, methods, and techniques to monitor security requirement compliance by external service providers on an ongoing basis are implemented.	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	
A.03.16.03.c	External System Services	processes, methods, and techniques to monitor security requirement compliance by external service providers on an ongoing basis are implemented.	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.	5	
A.03.16.03.c	External System Services	processes, methods, and techniques to monitor security requirement compliance by external service providers on an ongoing basis are implemented.	Functional	intersects with	Review of Third-Party Services	TPM-08	Mechanisms exist to monitor, regularly review and assess External Service Providers (ESPs) for compliance with established contractual requirements for cybersecurity & data privacy controls.	5	
03.17.01	Supply Chain Risk Management Plan	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.17.01.ODP[01]	Supply Chain Risk Management Plan	the frequency at which to review and update the supply chain risk management plan is defined.	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	
A.03.17.01.a[01]	Supply Chain Risk Management Plan	a plan for managing supply chain risks is developed.	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)
A.03.17.01.a[02]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the research and development of the system, system components, or system services.	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	
A.03.17.01.a[03]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the design of the system, system components, or system services.	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	
A.03.17.01.a[04]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the manufacturing of the system, system components, or system services.	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	
A.03.17.01.a[05]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the acquisition of the system, system components, or system services.	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	
A.03.17.01.a[06]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the delivery of the system, system components, or system services.	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	
A.03.17.01.a[07]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the integration of the system, system components, or system services.	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	
A.03.17.01.a[08]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the operation of the system, system components, or system services.	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	
A.03.17.01.a[09]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the maintenance of the system, system components, or system services.	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	
A.03.17.01.a[10]	Supply Chain Risk Management Plan	the SCRM plan addresses risks associated with the disposal of the system, system components, or system services.	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	
A.03.17.01.b[01]	Supply Chain Risk Management Plan	the SCRM plan is reviewed <A.03.17.01.ODP[01]: 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	
A.03.17.01.b[02]	Supply Chain Risk Management Plan	the SCRM plan is updated <A.03.17.01.ODP[01]: 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	
A.03.17.01.c	Supply Chain Risk Management Plan	the SCRM plan is protected 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.	5	
A.03.17.01.c	Supply Chain Risk Management Plan	the SCRM plan is protected from unauthorized disclosure.	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	
A.03.17.01.c	Supply Chain Risk Management Plan	the SCRM plan is protected from unauthorized disclosure.	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	
03.17.02	Acquisition Strategies, Tools, and Methods	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.17.02[01]	Acquisition Strategies, Tools, and Methods	acquisition strategies, contract tools, and procurement methods are developed to identify supply chain risks.	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	
A.03.17.02[02]	Acquisition Strategies, Tools, and Methods	acquisition strategies, contract tools, and procurement methods are developed to protect against supply chain risks.	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	
A.03.17.02[03]	Acquisition Strategies, Tools, and Methods	acquisition strategies, contract tools, and procurement methods are developed to mitigate supply chain risks.	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	
A.03.17.02[04]	Acquisition Strategies, Tools, and Methods	acquisition strategies, contract tools, and procurement methods are implemented to identify 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	
A.03.17.02[05]	Acquisition Strategies, Tools, and Methods	acquisition strategies, contract tools, and procurement methods are implemented to protect against 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	
A.03.17.02[06]	Acquisition Strategies, Tools, and Methods	acquisition strategies, contract tools, and procurement methods are implemented to 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	
03.17.03	Supply Chain Requirements and Processes	Determine If:	Functional	no relationship	N/A	N/A	N/A	N/A	No requirements to map to.
A.03.17.03.ODP[01]	Supply Chain Requirements and Processes	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 are defined.	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	
A.03.17.03.ODP[01]	Supply Chain Requirements and Processes	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 are defined.	Functional	subset of	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	10	
A.03.17.03.a[01]	Supply Chain Requirements and Processes	a process for identifying weaknesses or deficiencies in the supply chain elements and processes is established.	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)
A.03.17.03.a[01]	Supply Chain Requirements and Processes	a process for identifying weaknesses or deficiencies in the supply chain elements and processes is established.	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	
A.03.17.03.a[02]	Supply Chain Requirements and Processes	a process for addressing weaknesses or deficiencies in the supply chain elements and processes is established.	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	
A.03.17.03.b	Supply Chain Requirements and Processes	the following security requirements are enforced to protect against supply chain risks to the system, system components, or system services and to limit the harm or consequences of supply chain-related events: <A.03.17.03.ODP[01]: security requirements>.	Functional	subset of	Risk Management Program	RSK-01	Mechanisms exist to facilitate the implementation of strategic, operational and tactical risk management controls.	10	
A.03.17.03.b	Supply Chain Requirements and Processes	the following security requirements are enforced to protect against supply chain risks to the system, system components, or system services and to limit the harm or consequences of supply chain-related events: <A.03.17.03.ODP[01]: security requirements>.	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	