SITE DETAIL REPORT

CONTROL SYSTEMS CYBERSECURITY EVALUATION



CSET Viability Test 03

10/4/2018

Assessor:





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Advisory

CSET® is only one component of the overall cybersecurity picture and should be complemented with a robust cybersecurity program within the organization. A self-assessment with CSET cannot reveal all types of security weaknesses, and should not be the sole means of determining an organization's security posture.

The tool will not provide a detailed architectural analysis of the network or a detailed network hardware/software configuration review. It is not a risk analysis tool so it will not generate a complex risk assessment. CSET is not intended as a substitute for in depth analysis of control system vulnerabilities as performed by trained professionals. Periodic onsite reviews and inspections must still be conducted using a holistic approach including facility walk downs, interviews, and observation and examination of facility practices. Consideration should also be given to additional steps including scanning, penetration testing, and exercises on surrogate, training, or non-production systems, or systems where failures, unexpected faults, or other unexpected results will not compromise production or safety.

CSET assessments cannot be completed effectively by any one individual. A cross-functional team consisting of representatives from operational, maintenance, information technology, business, and security areas is essential. The representatives must be subject matter experts with significant expertise in their respective areas. No one individual has the span of responsibility or knowledge to effectively answer all the questions.

Data and reports generated by the tool should be managed securely and marked, stored, and distributed in a manner appropriate to their sensitivity.







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Access Control #1		
Question:	Does the information system prevent and audit the execution of privileged functions by non-privileged users?	Alternate
Alternate Justification:	Gaps: Endpoint assignees are local admin. No centralized means to audit execution of privileged function. Addressed by: POAM item AC1	

Access Control #2		
Question:	Are user sessions terminated automatically based upon defined conditions (e.g. 15 minute timeouts)?	Alternate
Alternate Justification:	Gaps: UI sessions not auto-terminated Addressed by: POAM item AC2	

Access Control #3		
Question:	Does the organization encrypt controlled unclassified information on mobile devices?	Alternate
Alternate Justification:	Gaps: BYOD mobile device mail clients enrollment does not require encrypted storage. Addresses by: POAM item AC3	

Access Control #4		
Question:	Does the organization restrict access to privileged functions and security information to authorized personnel?	Alternate
Alternate Justification:	Gaps: End user regular user accounts are privileged on their endpoints. Addresses by: POAM item AC1	

Access Control #5		
Question:	Are access control policies and associated access mechanisms to control access to the system?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard)	

Addressed by: POAM item AC5	
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Access Control #9		
Question:	Does the system: (a) display the system use information before granting further access; (b) ensure that any references to monitoring, recording, or auditing are consistent with privacy accommodations for such systems that generally prohibit those activities; and (c) include a description of the authorized uses of the system?	Alternate
Alternate Justification:	Gaps: No banner message, so no refernces and no authorized use description. Addresses by: POAM item AC9	

Access Control #11		
Question:	Is multifactor authentication used for local access to non-privileged accounts?	Alternate
Alternate Justification:	Gaps: No MFA implemented for any use case. Addresses by: POAM item AC11	

Account Management #1		
Question:	Are user account names different than email user accounts?	Alternate
Alternate Justification:	Gaps: External email address same as UPN and email address contains samaccountname. Addresses by: POAM item AM1	

Account Management #2		
Question:	Are user or device identifiers disabled after a time period of inactivity (e.g., 30 days)?	Alternate
Alternate Justification:	Gap: Identifiers (user and computer) are not disabled stemming from lapsed activity. Addresses by: POAM item AM2	

Account Management #3		
Question:	Are users of system accounts with access to a defined list of security functions or security-relevant information required to use non-privileged accounts when accessing other system functions?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard)	



Account Management #7		
Question:	Is there a division of responsibilities and separation of duties of individuals to eliminate conflicts of interest?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) Addressed by: POAM item AM7	

Audit and Accountability	#1	
Question:	Are alerts responded to in a timely manner?	Alternate
Alternate Justification:	Gaps: Alert response times and SLAs not fully developed. Addressed by: POAM item AA1	

Audit and Accountability	#2	
Question:	Is there a real-time alert when any defined event occurs?	Alternate
Alternate Justification:	Gaps: Incomplete audit capturing capability. No solution to detect/notify if existing audit capturin to storage/hardware failures, etc.). Addressed by: POAM item AA2 Notes: 3.3.4 is focused on lack of alert due to an undetected fault/failure in the audit capturing syst	

Audit and Accountability	#3	
Question:	Does the system provide an audit reduction and report generation capability?	Alternate
Alternate Justification:	Gaps: Incomplete audit capturing and reduction capability Addressed by: POAM item AA2	

Audit and Accountability	#4	
Question:	Are automated mechanisms used to integrate audit review, analysis, and reporting into processes for investigation and response to suspicious activities?	Alternate
Alternate Justification:	Gaps: Incomplete audit capturing capability.	



Addressed by: POAM item AA2 Notes: 3.3.1 is focused on the creation, protection, and retention of audit records as a basic requirement.

Audit and Accountability	#5	
Question:	Are the permitted actions specified for each authorized information system process, role, and/or user in the audit and accountability policy?	Alternate
Alternate Justification:	Gaps: Role based access not consistently or rigorously applied across enterprise and not stipulated Addressed by: POAM item AA5	l in Doc hierarchy.

Audit and Accountability	#6	
Question:	Is there the capability to automatically process audit records for events of interest based on selectable event criteria?	Alternate
Alternate Justification:	Gaps: Audit reduction capability limited to a couple systems. No enterprise-level capability. Addressed by: POAM item AA2	

Audit and Accountability	#7	
Question:	Does the system protect audit information and audit tools from unauthorized access, modification, and deletion?	Alternate
Alternate Justification:	Gaps: No SIEM solution to capture audit information, so no audit information to protect. Addressed by: POAM item AA2	

Audit and Accountability	#8	
Question:	Is the list of defined auditable events reviewed and updated on a defined frequency?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating identification reviewing auditable events Addressed by: POAM item AA8	fying and periodically

Audit and Accountability	#9	
Question:	Does the system protect against an individual falsely denying having performed a particular action?	Alternate
Alternate Justification:		



Gaps: Logging configuration for datastores and applications housing sensitive data not uniformly configured to capture who did what when. Addressed by: POAM item AA9

Audit and Accountability #10		
Question:	Is access to management of audit functionality authorized only to a limited subset of privileged users? Are audit records of nonlocal accesses to privileged accounts and the execution of privileged functions protected?	Alternate
Alternate Justification:	Gaps: Audit functionality management not restricted on endpoints because each employee is local Otherwise it is appropriately restricted. Addressed by: POAM item AA10	admin on his/her endpoint.

Communication Protection #1		
Question:	Does the system monitor and manage communications at the system boundary and at key internal boundaries within the system?	Alternate
Alternate Justification:	Gaps: Though robust technological solutions are in place at both external and key internal bounda cases where their configuration must be more stringent to meet our control objectives. Like and integrate the monitoring of these solutions. Addressed by: POAM item CP1 Notes: 3.13.5 is addressed by the current DMZ deployment	

Communication Protection #2		
Question:	Are the number of access points to the system limited to allow for better monitoring of inbound and outbound network traffic?	Alternate
Alternate Justification:	Gaps: At some branch offices firewalls are currently configured such that they would not interdict gateway connection from an on-site device. Addressed by: POAM item CP2	an unauthorized alternative

Communication Protection #3			
Question:	Does the system deny network traffic by default and allow network traffic by exception?	Alternate	
Alternate Justification:	Gaps: As noted in CP2, at some branch offices firewalls are currently configured such that they w unauthorized alternative gateway connection from an on-site device. Addressed by: POAM item CP2	ould not interdict an	



Communication Protection #4		
Question:	Does the system prevent remote devices that have established connections (e.g., PLC, remote laptops) with the system from communicating outside that communications path with resources on uncontrolled/unauthorized networks?	Alternate
Alternate Justification:	Gaps: Though an in-flight project is currently correcting this, split tunnelling is currently enabled Addressed by: POAM item CP4	for some enpoint devices.

Communication Protection #8		
Question:	Does the organization document information flow control enforcement by using protected processing level (e.g., defensive architecture) as a basis for flow control decisions?	Alternate
Alternate Justification:	Gaps: We have not currently deployed or enabled a solution that could detect and interdict unauth have not established a classification standard (which would include CUI as a type) and othe elements to drive use of data classification. We have not indoctrinated the workforce in data their usage. Addressed by: POAM item CP8 Note: 3.1.3 and AC-4 are specifically about controlling where CUI is allowed to travel, distinct froit.	er document hierarchy a classification standards and

Configuration Management #1			
Question:	Are individual access privileges, physical access, and logical access restrictions associated with configuration changes to the system defined, documented, and approved?	Alternate	
Alternate Justification:	Gaps: Though our physical and logical access controls generally restrict ability to change configur correct roles, we lack the policy, control objective, and standard documentation hierarchy of management program should be based on. These guiding components will require refineme request workflow. Addressed by: POAM item CM2 Notes: This item is focused defining and enforcing access restrictions administrative and technol access to make changes to the system to only those explicitly allowed to, and further to spectremning from review and approval.	omponents that our change ents to the existing change logical that constrain the	

Configuration Management #5		
Question:	Are configuration changes tested, validated, and documented before installing them on the operational system, and has testing been ensured to not interfere with system operations?	Alternate
Alternate Justification:	Gaps: Pre-approval testing, validation, and documentation, as well as preventing testing from disr are not an explicitly required part of the change management process.	upting production operations

	Addressed by: POAM item CM5
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Configuration Management #6		
Question:	Are mandatory configuration settings used for products employed within the system?	Alternate
Alternate Justification:	Gaps: Baseline security configuration settings for system devices are not consistently defined or v nor do documentation hierarchy elements exist to require that. Addressed by: POAM item CM6	alidated before deployment,

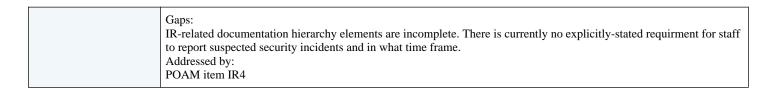
Configuration Management #7		
Question:	Is there a defined list of software programs authorized to execute on the system? Is the authorization policy a deny-all, permit-by-exception for software allowed to execute on the system? Is it reviewed at least annually?	Alternate
Alternate Justification:	Gaps: Software program execution is not currently managed or controlled. Addressed by: POAM item AC1	

Continuity #1		
Question:	Does the alternate processing site provide information security measures equivalent to that of the primary site?	Alternate
Alternate Justification:	Gaps: When endpoint is off prem it lacks next-gen firewall protections. Addressed by: POAM item C1	

Incident Response #2		
Question:	Does the organization test its incident response capabilities?	Alternate
Alternate Justification:	Gaps: There is no standard requiring incident response plan testing, nor is periodic testing current Addressed by: POAM item IR2	ly performed.

Incident Response #4		
Question:	Are personnel required to report suspected security incidents to the organizational incident response authority within a defined time-period?	Alternate
Alternate Justification:		





Information Protection #1		
Question:	Is removable system media and system output marked indicating the distribution limitations, handling caveats, and applicable security markings?	Alternate
Alternate Justification:	Gaps: Data classification system and related media marking standards, including for CUI, do not of Addressed by: POAM item IP1	exist yet.

Information Protection #2		
Question:	Is system digital and non-digital media sanitized before disposal or release for reuse?	Alternate
Alternate Justification:	Gaps: Data classification system and related sanitization requirements, including for CUI, do not of Addressed by: POAM item IP2	exist yet.

Information Protection #3		
Question:	Is the system media securely stored within protected areas?	Alternate
Alternate Justification:	Gaps: Data classification system and related secure storage requirements, including for CUI, do n Addressed by: POAM item IP3	ot exist yet.

Information Protection #4		
Question:	Is accountability for system media maintained during transport outside controlled areas?	Alternate
Alternate Justification:	Gaps: Data classification system and related media transport accountability requirements includin Addressed by: POAM item IP4	g for CUI, do not exist yet.

Information Protection #5		
Question:	Are cryptographic mechanisms used to protect digital media during transport outside of controlled areas?	Alternate
Alternate Justification:	Justification: Gaps: Data classification system and related encryption requirements for transport, including for CUI, do not exist yet.	



Addressed by: POAM item IP5

Maintenance #4		
Question:	Is the use of system maintenance tools approved and monitored?	Alternate
Alternate Justification:	Gaps: Documentation hierarchy stipulating the the requirement and standards for tools, mechanism approved and monitored is lacking. Addressed by: POAM item MT4	ms, and personnel to be

Maintenance #6		
Question:	Does the system require multifactor authentication for remote maintenance access?	Alternate
Alternate Justification:	Gaps: Two factor authentication is currently only employed for a pilot group. Addressed by: POAM items AC2	

Maintenance #7		
Question:	Are all sessions and remote connections terminated when remote maintenance is completed?	Alternate
Alternate Justification:	Gaps: Session autotermination is not currently implemented. Addressed by: POAM items AC11	

Media Protection #1		
Question: Does the organization limit CUI media access to authorized users? Alternate		
Alternate Justification:	Gaps: Data classification system and related least privilege requirements, including for CUI, do not Addressed by: POAM item MP1	ot exist yet.

Monitoring & Malware #4		
Question:	Is unauthorized use of the system identified? (e.g., log monitoring)	Alternate
Alternate Justification:	Gaps: No SIEM solution to capture and consolidate system use, so tracking of unauthorized use is Addressed by:	fragmented and incomplete.





Monitoring & Malware #6			
Question:	Is there an organizational policy defining the frequency of vulnerability scans?	Alternate	
Alternate Justification:	Gaps: The org recently procured an enterprise vulnerability and baseline scanning system but has Addressed by: POAM item MM6	yet to beging deployment.	

Monitoring & Malware #7		
Question:	Is the list of system vulnerabilities scanned updated on a defined frequency or when new vulnerabilities are identified and reported?	Alternate
Alternate Justification:	Gaps: The org recently procured an enterprise vulnerability and baseline scanning system but has Addressed by: POAM item MM6	yet to beging deployment.

Personnel #2		
Question:	Are electronic and physical access permissions reviewed when individuals are reassigned or transferred?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating review access permisions during and after personnel actions such as terminations and transfers. Addressed by: POAM item PT1	w of electronic and physical

Physical Security #1		
Question:	Are lists of personnel with authorized access developed and maintained, and are appropriate authorization credentials issued?	Alternate
Alternate Justification:	Gaps: Physical access control patterns and practices are not uniform across the enterprise. There is a lack of document hierarchy elements (policy control objective standard) stipulating the requirements for physical access controls.	

Physical Security #2		
Question:	Is physical access monitored to detect and respond to physical security incidents?	Alternate





Alternate lustification:	Gaps: Physical access control patterns and practices are not uniform across the enterprise. There is a lack of document hierarchy elements (policy, control objective, standard) stipulating the requirements for physical access monitoring. Addressed by: POAM item PS2
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Physical Security #4			
Question:	Are visitors escorted and monitored as required in the security policies and procedures?	Alternate	
Alternate Justification:	Gaps: Physical access control patterns and practices are not uniform across the enterprise. There is hierarchy elements (policy, control objective, standard) stipulating the requirements for esc visitors. Addressed by: POAM item PS1		

Physical Security #5		
Question:	Are visitor access records maintained, and are all physical access logs retained for as long as required by regulations or per approved policy?	Alternate
Alternate Justification:	Gaps: Physical access control patterns and practices are not uniform across the enterprise. There is hierarchy elements (policy, control objective, standard) stipulating the requirements for visit physical access logs retention. Addressed by: POAM item PS5	

Plans #3		
Question:	Is the risk assessment plan updated annually or whenever significant changes occur to the system, the facilities where the system resides, or other conditions that may affect the security or accreditation status of the system?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating the di management model, including requirements for periodic and as-needed re-assessment. Addressed by: POAM item RM3	gital services risk

Policies & Procedures General #1		
Question:	Is the system managed using a system development life-cycle methodology that includes security considerations?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy control objective standard) defining system development lifecycle	



Portable/Mobile/Wireless #1			
Question:	Is the use of mobile code documented, monitored, and managed? (Java, JavaScript, ActiveX, Postscript, etc.)	Alternate	
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating document requirements for mobile code, so such controls are at best partial. Addressed by: POAM item PMW1	mentation, monitoring and	

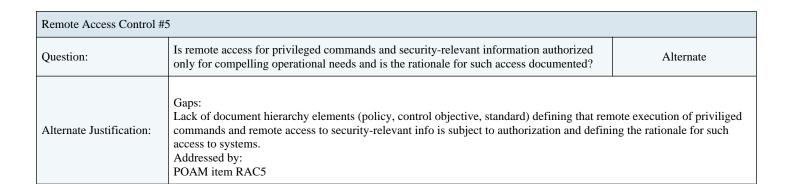
Portable/Mobile/Wireless #2		
Question:	Is each mobile device connection to the system authorized?	Alternate
Alternate Justification:	Gaps: Lack of an official request and authorization process for mobile device connections. Addressed by: POAM item PMW2	

Portable/Mobile/Wireless #4			
Question:	Is the use of writable, removable media restricted on the system?	Alternate	
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating accept requirements for removable media. Technological controls not configured to restrict and confidence by: POAM item PMW4		

Remote Access Control #1		
Question:	Are restrictions imposed on authorized individuals with regard to the use of organization-controlled removable media on external systems?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating accept requirements for removable media, including restrictions pertaining to connection to extern Technological controls not configured to restrict and control removable media use. Addressed by: POAM item RAC1	

Remote Access Control #2		
Question:	Are all the methods of remote access to the system authorized, monitored, and managed?	Alternate
Alternate Justification:	Gaps: Remote access session monitoring is partial at best. Addressed by: RAC2	





Risk Management and Assessment #1		
Question:	Is there an independent assessor or assessment team to monitor the security controls in the system on an ongoing basis?	Alternate
Alternate Justification:	Gaps: Control requirements are only now being defined at the security program level and security on an ongoing basis to measure/validate their effectiveness. Addressed by: POAM item RMA1	controls are not monitored

Risk Management and Assessment #2		
Question:	Are the security controls in the system assessed on a defined frequency, at least annually, to determine the extent the controls are implemented correctly, operating as intended, and producing the desired outcome?	Alternate
Alternate Justification:	Gaps: Control requirements are only now being defined at the security program level, including id outcomes that provide the basis for those control requirements, and the need to reassess the least annually. Addressed by: POAM item RMA2	

System and Communications Protection #1		
Question:	Are systems configured to prohibit remote activation of collaborative computing (e.g., IM, video conferencing) and is there an indication of use to the local user?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating prohi of collaborative computing systems, including requiring indicator to users present that the docorresponding baseline configuration requirement. Addressed by: POAM item SCP1	

System and Services Acquisition #1		
Question:	Are system security engineering principles applied in the specification, design,	Alternate



	development, and implementation of the system?	
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating archit development practices, and systems engineering principles to promote effective security in information systems. Addressed by: POAM item: SSA1	

System Integrity #1		
Question:	Are system flaws identified, reported, and corrected?	Alternate
Alternate Justification:	Gaps: Only a partial scope of system types have system flaw detection, reporting, and remediation Addressed by: POAM item SI1	1.

System Integrity #2		
Question:	Is the time between flaw identification and flaw remediation measured and compared with benchmarks?	Alternate
Alternate Justification:	Gaps: Only a partial scope of system types have system flaw detection, reporting, and remediation formal metric for the timeframe in which flaws must be corrected. Addressed by: POAM item SI2	n, and there is not yet a

System Integrity #3		
Question:	Are internal security alerts, advisories, and directives generated?	Alternate
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) requiring monitor security alerts and advisories, disseminating them internally, and taking appropriate actions Addressed by: POAM item SI3	

System Integrity #5			
Question:	Have unused removable media support files been removed or disabled?	Alternate	
Alternate Justification:	Gaps: Lack of document hierarchy elements (policy, control objective, standard) stipulating mark owner and prohibiting use of such media that lacks owner identification. Addressed by: POAM item SI5	ing removable to indicate the	



System Protection #2			
Question:	Does the system protect the confidentiality of information at rest? (e.g., disk encryption)	Alternate	
Alternate Justification:	Gaps: At-rest data encryption capability is incomplete and is not explicitly required or provided for be stored. Addressed by: POAM item SP2	or in cases where CUI may	

System Protection #3			
Question:	Is the system configured to provide only essential capabilities and specifically prohibits and/or restricts the use of functions, ports, protocols, and/or services as defined in a "prohibited and/or restricted" list?	Alternate	
Alternate Justification:	Gaps: Systems are not consistently checked to be sure only required services and functions are en release. Likewise, document hierarchy elements (policy, control objective, standard) stipular are not yet in place. Addressed by POAM item SP3	1 2	

System Protection #4			
Question:	Are automated mechanisms used to prevent program execution in accordance with defined lists? (e.g., white listing)	Alternate	
Alternate Justification:	Gaps: Software program execution is not currently managed or controlled. Addressed by: POAM item AC1		

System Protection #5		
Question:	Does the system employ processing components that have minimal functionality and data storage (e.g., diskless nodes, thin client technologies)?	Alternate
Alternate Justification:	Gaps: Use cases for which thin nodes would be sufficient and recommended are not defined or established. Addressed by: POAM item SP5	

Training #1			
Question:	Is basic security awareness training provided to all system users before authorizing access to the system, when required by system changes and at least annually thereafter?	Alternate	
Alternate Justification:	Gaps: Security awareness training for system users initial, recurring, or otherwise is not implemented. Addressed by: POAM item TRAIN1		



Training #2			
Question:	Are practical exercises included in the security awareness training that simulate actual cyber-attacks?	Alternate	
Alternate Justification:	Gaps: Security awareness training for system users initial recurring or otherwise is not implemented so simulated		

Training #3			
Question:	Is security-related technical training provided before authorizing access to the system or performing assigned duties, when required by system changes and on an periodic basis?	Alternate	
Alternate Justification:	Gaps: Security awareness training for system users initial, recurring, or otherwise is not implemented. Addressed by: POAM item TRAIN1		





COMPONENT QUESTION DETAILS:

Component:				
Question:	Question:			
Zone:		SAL:		

