2016 GENERAL ELECTION

LESSONS LEARNED

Voting Machine Security



Physical Security

Who and How?

Statewide Seal Use Protocols

- Seal use protocol training class is required
- Criminal background check is required
- State purchases voting machine seals
- Vendor must be ISO 9001 certified
- Seal inspections before and after any election is required
- Voting machine delivery tracking is required

Statewide Pre-election Testing Protocols

- Maintenance Diagnostics or Preventative Maintenance
- Ballot verification
- Test voting (Ascending or Descending Pattern)

Access to Voting Machines

• <u>Election Officials</u>

- Password Strength
 - Length, Special Characters, Expiration
- Multifactor or Two Factor Authentication
 - Something you have and something you know





Access to Voting Machines

• <u>Manufacturers</u>

- Company Ownership
- Company Policies and Procedures

NJ Office of Information Technology Chris Christie, Governor E. Steven Emanuel, Chief Technology C		300 Riverview Plaza		
~		NO:		SUPERSEDES:
STATE OF NEW JERSEY		09-11-P1-N	IJOIT	N/A
		LAST REVIEWED):	DATE PUBLISHED:
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		VERSION:	EFFECT	TIVE DATE:
Title: 169-00-01 – Business Entity, IT Services and/or Extranet		2.0	Date	of Signature
		FOR INFORMATI Office of Policy an		

ATTN: Directors of Administration and Agency IT Managers

I. PURPOSE

The purpose of these procedures is to establish access rules, security expectations and responsibilities for the Sponsoring Agencies and Business Entities when Information Technology (IT) services are planned, or are made available to agencies, and/or when establishing an operating an extranet connection(s) to the State of New Jersey Next Generation Services Network (NGSN) for conducting electronic business with the State of New Jersey.

II. AUTHORITY

This policy is established under the authority of the State of New Jersey. <u>N.J.S.A.</u> 52:18a-230 b, This policy defines New Jersey Office of Information Technology's (NJOIT) role with regard to technology within the Executive Branch community of State Government.

The New Jersey Office of Information Technology (NJOIT) reserves the right to change or amend this circular.

III. SCOPE

These procedures apply to all personnel including, business entities, employees, temporary workers, volunteers, contractors and those employed by contracting entities, and others who are authorized to access enterprise information resources and/or systems regardless of what technology is used for the connection.

IV. DEFINITIONS

Please refer to the statewide policy glossary at http://www.state.nj.us/it/ps/glossary/index.html.

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V. PROCEDURES

- A. All Sponsoring Agencies and their Business Entities utilizing an IT and/or Extranet services shall adhere to the following:
 - Sponsoring Agencies that require IT services and/or extranet connectivity to a Business Entity must complete a System Architecture Review. This process is initiated by completing a BCR (Business Case Review) form.
 - Sponsoring Agencies that have completed the business case review and have obtained preliminary approval for IT services and/or extranet connectivity, must file a Business Entity Application form (<u>Appendix A</u>) through the Statewide Office of Information Security.
- Before any extranet connections are established, the Sponsoring Agency and the Business Entity must execute the Extranet Agreement (<u>Appendix</u> <u>B</u>).
- The Sponsoring Agency together with the Business Entity and OIT where applicable, must complete the Business Entity Extranet Operational Form (Appendix C).
- 5. The Sponsoring Agency must maintain all documentation associated with extranet activity. They must review the details of the documentation on a regular basis to ensure the accuracy of the content. They must also notify all parties if any contact information changes.
- B. The Business Entity must complete the Security Controls Assessment Checklist (<u>Appendix D</u>). The checklist must be reviewed and approved by the Statewide Office of Information Security prior to the system or application going into production.
 - Any agency that wishes to connect to a pre-existing IT service and/or extranet connection must execute an Extranet Agreement (Appendix B) with the Sponsoring Agency and OIT.
 - When access is no longer required, the Sponsoring Agency must notify OIT's SOIS and WAN groups within 30 days. Staff at these groups will then terminate connectivity.

C. Establishing Agreement

Sponsoring agencies that require connectivity to or from a Business Entity must complete a Business Case Review (BCR) form that can be obtained by sending an email request to <u>sar@oit.nj.gov</u>. The agencies must also participate in the SAR to review the anticipated project, prior to submission of a Business Entity IT Service and/or Extranet Application (Appendix A).

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	09	Appendix D to -11-P1-NJOIT
	P.O. Box 212 300 Riverview F Trenton, NJ 086	
STATE OF NEW JERSEY		
Security Controls Assessment C	hecklist	

Agency/Business (Extra	net) Entity
Response	
Agency	
Agency Name:	
Application Name:	
Point of Contact:	
Telephone Number:	
Date:	

Business (Extranet) Entity

Name:	
Point of Contact:	
Telephone Number:	
Email Address:	
Security Point of Contact:	
Telephone Number:	
Email Address:	

No.	Doc.	Security Control Item	Security Description/Requirements	Response/Acknowledgemen t
1	T&C	→	The Contractor must provide a security plan for the proposed solution. The document shall describe the administrative, physical technical and systems controls to be used by the system and/or services. The Contractor's security plan must, at a minimum, provide security measures for the following areas: • Facilities Physical Security & Environmental Protection • System Security • System Security • Network Security • Network Security • Network Security • Administrative and Personnel Security The security plan shall provide for review of the Contractor's operations and control system for the proposed solution. The Contractor shall have the capability to detect and report attempted unauthorized entries into the facility and system. All security requirements for the Contractor apply to development, testing, production and backup systems.	
2	T&C	Security Plan	Regulations and security requirements – How the Contractor will address security requirements such as PCI, HIPAA, FISMA and etc.	
3	T&C	\rightarrow	System, Administrative and Personnel Security _The security responsibilities and supervision required for information owned and/or operated by the Contractor. Security responsibilities include responsibilities for administration of the infrastructure, implementing or maintaining security and the protection of the confidentiality, integrity, and availability of information systems or processes.	
4	T&C	\rightarrow	Workforce Security – The control process for hiring and terminating of Contractor's employees, and method used for granting and denying access to the Contractor's network, systems and applications. Identify and define audit controls when employment of the employee terminates. Identify rules of behavior.	
5	T&C		Role-based security access – The products and methods provide role-based security, access enforcement and least privilege.	

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6	T&C	Account Management — The products methods identify and control the account to meet defined regulation and se requirements.	types
7	T&C	Password Management – The appropriate password management controls to defined regulation or security requirement	meet
8	T&C	Logging/Auditing controls – The Contra audit control methods and requirements controls must address all user access an identification linked to any changes to system and data, and provide an audit pr that will make all audit data accessible to and federal audit staff. The audit trail transactions should track date, time, use end-user device that initiated the transs The audit data must be protected, repudiated and restricted to authorized Retention of the audit records will be ref online for at least 90 days and f preserved offline for the period required t contract or State and Federal laws regulations.	. The d user o the occess state of all r, and ction. non- statf. tained urther y the
9	T&C	Incident Management – The method detecting, reporting and responding ti incident, vulnerabilities and threats, methods are tested and exercised.	to an
10	T&C	Vulnerability/Security Assessment – products and methods used for scanni vulnerabilities and remediation of vulnerabilities. Identify and define me used for initiating and completing se assessments. All systems and applic shall be subject to vulnerability assess scans by an independent and accredited party on an annual basis.	the thods ecurity ations sment
11	T&C	Application Security – Where the Contrad providing application hosting or develop services, the Contractor at a minimum sh application vulnerability assessment during development and system te Vulnerabilities shall be remediated pri production release.	oment all run scans esting.
12	T&C	Application Partitioning – Where the Cont is providing application hosting or develop services, the Contractor will have a set and unique (single tenant) partition.	pment

13	T&C		Anti-virus/malware controls – The products and methods for anti-virus and malware controls meet industry standards. It shall include policy statements that require periodic anti-viral software checks of the system to preclude infections and set forth its commitment to periodically upgrade its capability to maintain maximum effectiveness against new strains of software viruses.	
14	T&C	→	Network Security – Where the Contractor has access to State confidential data, and that data will traverse the Contractor's network, the Contractor shall maintain the Contractor's network security to include, but not be limited to: network firewall provisioning, intrusion detection and prevention, denial of service protection, annual independent and accredited third-party penetration testing. The Contractor shall maintain a hardware inventory including name and network address. The Contractor shall maintain network security that conforms to current standards set forth and maintained by the National Institute of Standards and Technology (NIST), including those at: http://web.nvd.nist.gov/view/ncp/repository.	
15	T&C		<u>Database</u> – The products and methods for safeguarding the database(s).	
16	T&C		Data Integrity – The products and methods on the integrity of all stored data and the electronic images, and the security of all files from unauthorized access. The Contractor must be able to provide reports on an as- needed basis on the access or change for any file within the system.	
17	T&C		Server and infrastructure – The products and methods for "hardening" of the hardware's operating systems and software.	
18	T&C		<u>Wireless, Remote and Mobile Access</u> – Where the Contractor has access to State confidential data, and that data traverses the Contractor's network, the Contractor shall have security controls for provisioning accounts, authorization, account/credential verification, audit/logging, VPN, and TCP/UDP ports restrictions.	
19	T&C		<u>Transmission</u> – The products and methods on how its system addresses security measures regarding communication transmission, access and message validation.	
20	T&C		<u>Continuous Monitoring</u> – Where the Contractor has access to State confidential data, and that data will traverse the Contractor's network, the	

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Framework for Improving Critical Infrastructure Cybersecurity

Version 1.0

National Institute of Standards and Technology

February 12, 2014