SUPPLEMENT 3

State Information Security and Privacy Requirements

State Data Handling Requirements

Revision History:

Date:	Description of Change:	Version
10/01/2019	Updated the State Information Security and Privacy Requirements as well as the State Data Handling Requirements to align with current practices.	1.0

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State Information Security, Privacy and Data Handling Requirements Instructions

When providing a response to this Supplement, please follow the instructions below and frame your response as it relates to your proposed solution e.g., cloud (Software as a Service, Platform as a Service, or Infrastructure as a Service), on-premises, or hybrid.

1. After each specific requirement the offeror must provide a response on how the requirement will be met or indicate if it is not applicable and why.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (laaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement shall not be modified.

2. In the event there is a security or privacy requirement outlined in this supplement that needs to be met by a compensating control, please identify it in Appendix A – Compensating Controls to Security and Privacy Requirements. Please be sure to provide a rationale for the change.

Reference	Current Language	Contractor's Proposed Change	Rationale of Proposed Change			
Example: Supplement S - Page 11	Example: Provide vulnerability management services for the Contractor's internal secure network connection, including supporting remediation for identified vulnerabilities as agreed. As a minimum, the Contractor must provide vulnerability scan results to the State monthly.	Example: Provide vulnerability management services for the Contractor's internal secure network connection, including supporting remediation for identified vulnerabilities as agreed. As a minimum, the Contractor must provide vulnerability scan results to the State weekly.	Per company policy vulnerability report are only provided to customers on a quarterly basis.			

3. Upon completion, please submit the security supplement responses with the proposal documentation.

Overview and Scope

This supplement shall apply to the Contracts for all work, services, locations (e.g., cloud (Software as a Service, Platform as a Service, or Infrastructure as a Service), on-premises, or hybrid) along with the computing elements that the Contractor will perform, provide, occupy, or utilize in conjunction with the delivery of work to the State and any access to State resources in conjunction with the delivery of work.

The selected Contractor will accept the security and privacy requirements outlined in this supplement in their entirety as they apply to the services being provided to the State. The Contractor will be responsible for maintaining information security in environments under the Contractor's management and in accordance with State IT security policies and standards.

This scope shall specifically apply to:

- Major and minor projects, upgrades, updates, fixes, patches, and other software and systems inclusive of all State elements or elements under the Contractor's responsibility utilized by the State.
- Any systems development, integration, operations, and maintenance activities performed by the Contractor.
- Any authorized change orders, change requests, statements of work, extensions, or amendments to this contract.
- Contractor locations, equipment, and personnel that access State systems, networks or data directly or indirectly.
- Any Contractor personnel or sub-contracted personnel that have access to State confidential, personal, financial, infrastructure
 details or sensitive data.

The terms in this supplement are in addition to the Contract terms and conditions. In the event of a conflict for whatever reason, the highest standard contained in this contract shall prevail.

Please note that any proposed compensating controls to the security and privacy requirements outlined in this supplement are required to be identified in Appendix A – Compensating Controls to Security and Privacy Requirements. Contractors are asked not to make any changes to the language contained within this supplement.

State Requirements Applying to All Solutions

This section describes the responsibilities for both the selected Contractor and the State of Ohio as it pertains to State information security and privacy standards and requirements for all proposed solutions whether cloud, on-premises, or hybrid based. The Contractor will comply with State of Ohio IT security and privacy policies and standards as they apply to the services being provided to the State. A list of IT policy and standard links is provided in the State IT Policy and Standard Requirements and State IT Service Requirements supplement.

1. State Information Security and Privacy Standards and Requirements

The Contractor is responsible for maintaining the security of information in accordance with State security policies and standards. If the State is providing the network layer, the Contractor must be

responsible for maintaining the security of the information in environment elements that are accessed, utilized, developed, or managed. In either scenario, the Contractor must implement information security policies, standards, and capabilities as set forth in statements of work and adhere to State policies and use procedures in a manner that does not diminish established State capabilities and standards.

1.1. The Offeror's Responsibilities

The offeror's responsibilities with respect to security services include the following, where applicable:

- 1.1.1. Support State IT security policies and standards, which includes the development, maintenance, updates, and implementation of security procedures with the State's review and approval, including physical access strategies and standards, User ID approval procedures, and a security incident action plan.
- 1.1.2. Support the implementation and compliance monitoring as per State IT security policies and standards.
- 1.1.3. If the Contractor identifies a potential issue with maintaining an "as provided" State infrastructure element in accordance with a more stringent State level security policy, the Contractor shall identify and communicate the nature of the issue to the State, and, if possible, outline potential remedies for consideration by the State.
- 1.1.4. Support intrusion detection and prevention, including prompt State notification of such events and reporting, monitoring, and assessing security events.
- 1.1.5. Provide vulnerability management services for the Contractor's internal secure network connection, including supporting remediation for identified vulnerabilities as agreed. At a minimum, the Contractor shall provide vulnerability scan results to the State monthly.
- 1.1.6. Develop, maintain, update, and implement security procedures, with State review and approval, including physical access strategies and standards, ID approval procedures and a security incident response plan.
- 1.1.7. Manage and administer access to the systems, networks, system software, systems files, State data, and end users if applicable.
- 1.1.8. Install and maintain current versions of system software security, assign and reset passwords per established procedures, provide the State access to create User IDs, suspend and delete inactive User IDs, research system security problems, maintain network access authority, assist in processing State security requests, perform security reviews to confirm that adequate security procedures are in place on an ongoing basis, provide incident investigation support (jointly with the State), and provide environment and server security support and technical advice.
- 1.1.9. Develop, implement, and maintain a set of automated and manual processes to ensure that data access rules are not compromised.

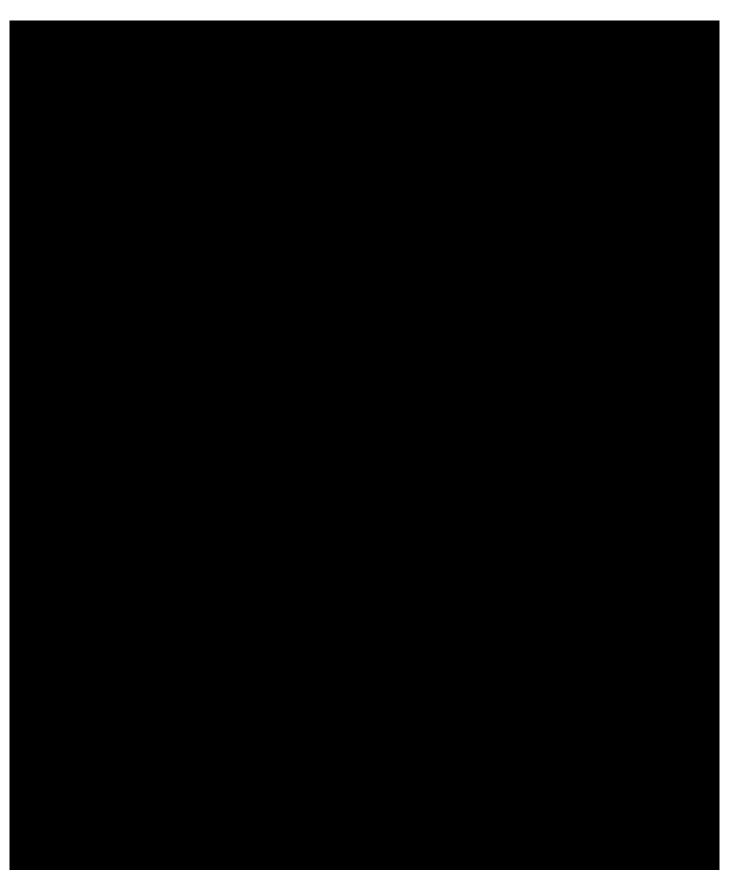
1.1.10. Perform physical security functions (e.g., identification badge controls and alarm responses) at the facilities under the Contractor's control.

1.2 The State's Responsibilities

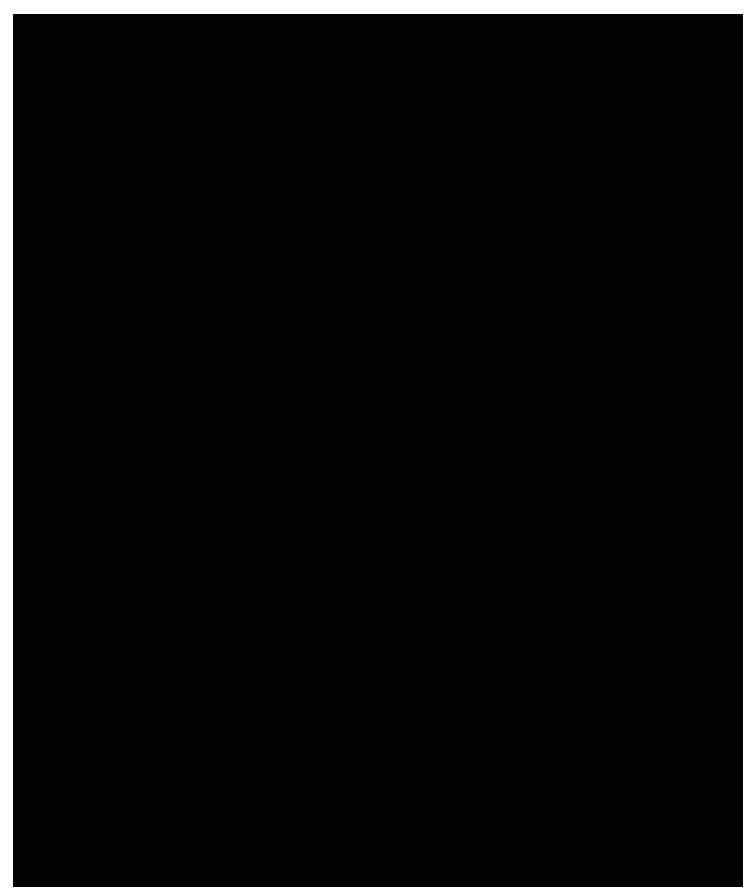
The State will:

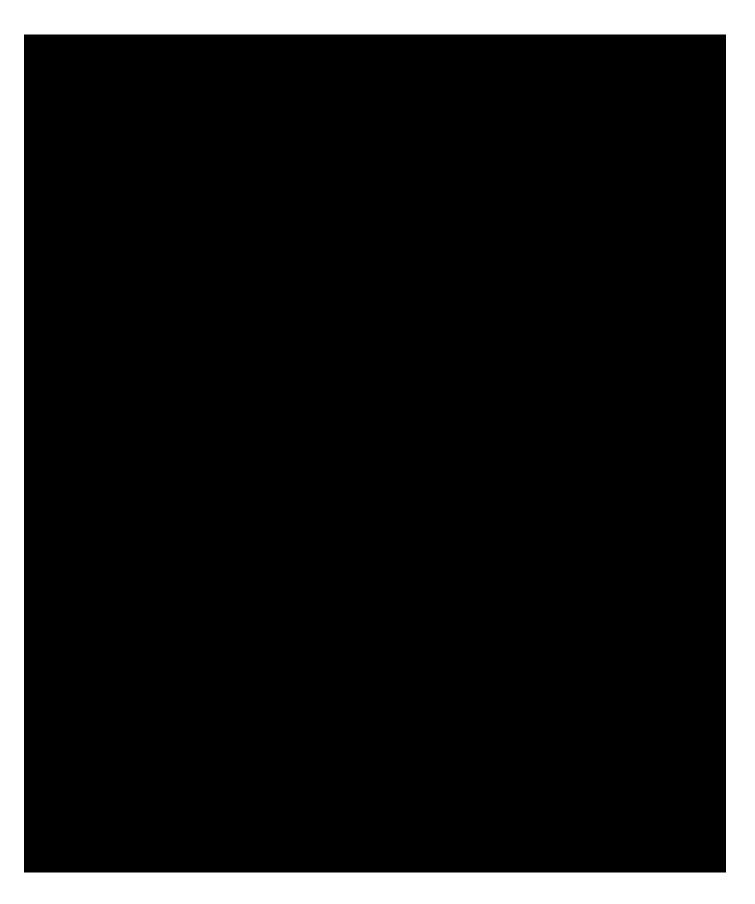
- 1.2.1. Develop, maintain, and update the State IT security policies, including applicable State information risk policies, standards, and procedures.
- 1.2.2. Provide the Contractor with contact information for security and program personnel for incident reporting purposes.
- 1.2.3. Provide a State resource to serve as a single point of contact, with responsibility for account security audits.
- 1.2.4. Support intrusion detection, prevention, and vulnerability scanning pursuant to State IT security policies.
- 1.2.5. Conduct a Security and Data Protection Audit, if deemed necessary, as part of the testing process.
- 1.2.6. Provide audit findings material for the services based upon the security policies, standards and practices in effect as of the effective date and any subsequent updates.
- 1.2.7. Assist the Contractor in performing a baseline inventory of User IDs for the systems for which the Contractor has security responsibility.
- 1.2.8. Authorize user IDs and passwords for State personnel for the system's software, software tools and network infrastructure systems and devices under Contractor management.

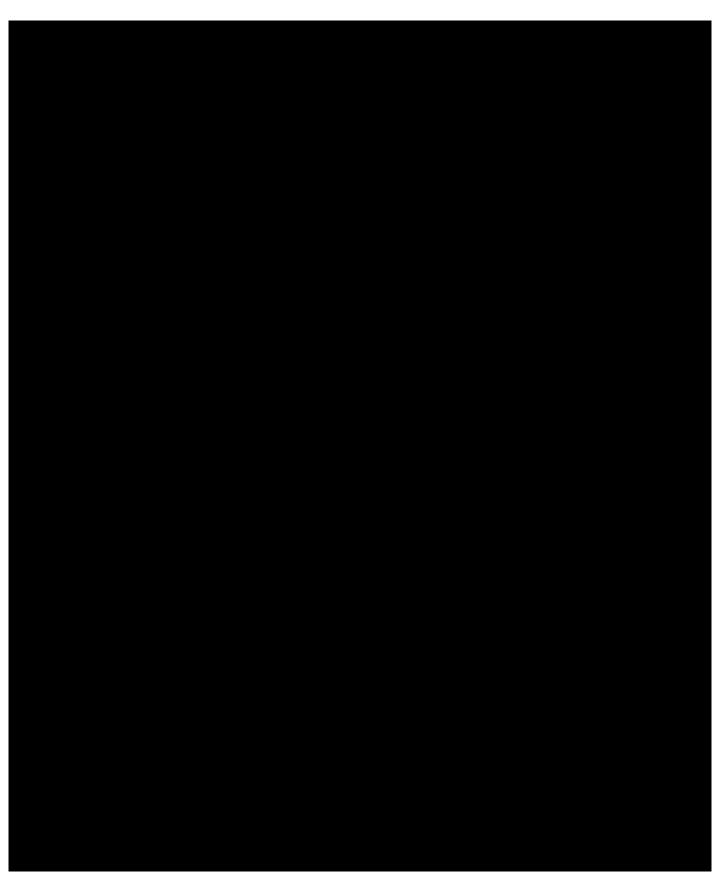
Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement shall not be modified.















1.3. Periodic Security and Privacy Audits

The State will be responsible for conducting periodic security and privacy audits and will generally utilize members of the Office of Information Security and Privacy, the Office of Budget and Management – Office of Internal Audit, and the Auditor of State, depending on the focus area of the audit. Should an audit issue or finding be discovered, the following resolution path shall apply:

If a security or privacy issue exists in any of the IT resources furnished to the Contractor by the State (e.g., code, systems, computer hardware and software), the State will have responsibility to address or resolve the issue. The State may elect to work with the Contractor, under mutually agreeable terms for resolution services or the State may elect to address the issue independent of the Contractor. The Contractor is responsible for resolving any security or privacy issues that exist in any of the IT resources they provide to the State.

For in-scope environments and services, all new systems implemented or deployed by the Contractor must comply with State security and privacy policies and standards.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

1.3.1. State Penetration and Controls Testing

The State may, at any time in its sole discretion, elect to perform a Security and Data Protection Audit. This includes a thorough review of Contractor controls, security/privacy functions and procedures, data storage and encryption methods, backup/restoration processes, as well as security penetration testing and validation. The State may utilize a third-party Contractor to perform such activities to demonstrate that all security, privacy, and encryption requirements are met.

State acceptance testing will not proceed until the Contractor cures, according to the State's written satisfaction, all findings, gaps, errors or omissions pertaining to the audit. Such testing will be scheduled with the Contractor at a mutually agreed upon time.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

1.3.2. System Security Plan

A completed System Security Plan must be provided by the Contractor to the State and the primary point of contact from the Office of Information Security and Privacy no later than the end of the project development phase of the System Development Life Cycle (SDLC). The plan must be updated annually or when major changes occur within the solution. The templates referenced below are the required format for submitting security plans to the State.



Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

1.3.3. Risk Assessment

A Risk Assessment report completed within the past 12 months must be provided to the State and the primary point of contact from the Office of Information Security and Privacy no later than the project development phase of the System Development Life Cycle (SDLC). A new risk assessment must be conducted every two years, or as a result of significant changes to infrastructure, a system or application environment, or following a significant security incident.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.



1.4. Security and Data Protection

All solutions must classify data per State of Ohio IT-13 Data Classification policy and per the sensitivity and criticality, must operate at the appropriate baseline (low, moderate, high) as defined in National Institute of Standards and Technology (NIST) Special Publication (SP) 800-53, "Security and Privacy

Controls for Federal Information Systems and Organizations" (current, published version), be consistent with Federal Information Security Management Act ("FISMA 2014") requirements, and offer a customizable and extendable capability based on open-standards APIs that enable integration with third party applications. The solution must provide the State's systems administrators with 24x7 visibility into the services through a real-time web-based "dashboard" capability that enables them to monitor, in real or near real time, the services' performance against the established service level agreements and promised operational parameters.

If the solution is cloud based, the Contractor must obtain an annual audit that meets the American Institute of Certified Public Accountants (AICPA) Statements on Standards for Attestation Engagements ("SSAE") No. 16, Service Organization Control 1 Type 2 and Service Organization Control 2 Type 2. The audit must cover all operations pertaining to the Services covered by this Agreement. The audit will be at the sole expense of the Contractor and the results must be provided to the State within 30 days of its completion each year.

At no cost to the State, the Contractor must immediately remedy any issues, material weaknesses, or other items identified in each audit as they pertain to the Services.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

1.5. Data

- 1.5.1. "State Data" includes all data and information created by, created for, or related to the activities of the State and any information from, to, or related to all persons that conduct business or personal activities with the State, including, but not limited to Sensitive Data.
- 1.5.2. "Sensitive Data" is any type of data that presents a high or moderate degree of risk if released or disclosed without authorization. Sensitive Data includes but not limited to:
- 1.5.2.1. Certain types of personally identifiable information (PII) that is also sensitive, such as medical information, social security numbers, and financial account numbers.
 - 1.5.2.2. Federal Tax Information (FTI) under IRS Special Publication 1075,
- 1.5.2.3. Protected Health Information (PHI) under the Health Insurance Portability and Accountability Act (HIPAA)
- 1.5.2.4. Criminal Justice Information (CJI) under Federal Bureau of Investigation's Criminal Justice Information Services (CJIS) Security Policy.
- 1.5.2.5. The data may also be other types of information not associated with an individual such security and infrastructure records, trade secrets, and business bank account information.

1.6. Protection and Handling the State's Data

To protect State Data as described in this contract, the Contractor must use due diligence to ensure computer and telecommunications systems and services involved in storing, using, or transmitting State Data are secure and to protect State Data from unauthorized disclosure, modification, use or destruction.

To accomplish this, the Contractor must adhere to the following requirements regarding State Data:

- 1.6.1. Maintain in confidence State Data it may obtain, maintain, process, or otherwise receive from or through the State in the course of the contract.
- 1.6.2. Use and permit its employees, officers, agents, and subcontractors to use any State Data received from the State solely for those purposes expressly contemplated by the contract.
- 1.6.3. Not sell, rent, lease, disclose, or permit its employees, officers, agents, and sub-contractors to sell, rent, lease, or disclose, any such State Data to any third party, except as permitted under this contract or required by applicable law, regulation, or court order.
- 1.6.4. Take all commercially reasonable steps to (a) protect the confidentiality of State Data received from the State and (b) establish and maintain physical, technical, and administrative safeguards to unauthorized access by third parties to State Data received by the Contractor from the State.
- 1.6.5. Apply appropriate risk management techniques to balance the need for security measures against the sensitivity of the State Data.
- 1.6.6. Ensure that its internal security policies, plans, and procedures address the basic security elements of confidentiality, integrity, and availability of State Data.
- 1.6.7. Align with existing State Data security policies, standards and procedures designed to ensure the following:
 - 1.6.7.1. Security and confidentiality of State Data
- 1.6.7.2. Protection against anticipated threats or hazards to the security or integrity of State Data
 - 1.6.7.3. Protection against the unauthorized access to, disclosure of, or use of State Data
- 1.6.8. Suggest and develop modifications to existing data security policies and procedures or draft new data security policies and procedures when gaps are identified.
- 1.6.9. Maintain appropriate access control and authorization policies, plans, and procedures to protect system assets and other information resources associated with State Data.
- 1.6.10. Give access to State Data only to those individual employees, officers, agents, and subcontractors who reasonably require access to such information in connection with the performance of Contractor's obligations under this contract.
- 1.6.11. Maintain appropriate identification and authentication processes for information systems and services associated with State Data.
- 1.6.12. Any Sensitive Data at rest, transmitted over a network, or taken off-site via portable/removable media must be encrypted pursuant to the State's data encryption standard, Ohio IT Standard ITS-SEC-

- 01, "Data Encryption and Cryptography," and Ohio Administrative Policy IT-14, "Data Encryption and Securing State Data."
- 1.6.13. Any data encryption requirement identified in this supplement means encryption that complies with National Institute of Standards and Technology's Federal Information Processing Standard 140-2 demonstrated by a valid FIPS certificate number.
- 1.6.14. Maintain plans and policies that include methods to protect against security and integrity threats and vulnerabilities, as well as detect and respond to those threats and vulnerabilities.
- 1.6.15. Implement and manage security audit logging on information systems, including computers and network devices.
- 1.6.16. Cooperate with any attempt by the State to monitor Contractor's compliance with the foregoing obligations as reasonably requested by the State. The State will be responsible for all costs incurred by the Contractor for compliance with this provision of this subsection.
- 1.6.17 Upon request by the State, promptly destroy or return to the State, in a format designated by the State, all State Data received from or through the State.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

1.7. Contractor Access to State Network Systems and Data

The Contractor must maintain a robust boundary security capability that incorporates generally recognized system hardening techniques. This includes determining which ports and services are required to support access to systems that hold State Data, limiting access to only these ports, and disabling all others.

To do this, the Contractor must:

1.7.1 Use assets and techniques such as properly configured firewalls, a demilitarized zone for handling public traffic, host-to-host management, Internet protocol specification for source and

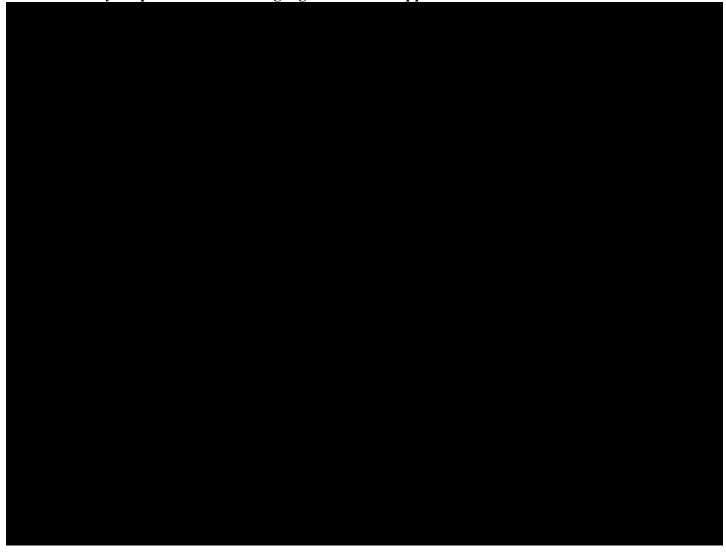
- destination, strong authentication, encryption, packet filtering, activity logging, and implementation of system security fixes and patches as they become available.
- 1.7.2. Use multifactor authentication to limit access to systems that contain Sensitive Data, such as Personally Identifiable Information.
- 1.7.3. Assume all State Data is both confidential and critical for State operations. The Contractor's security policies, plans, and procedures for the handling, storage, backup, access, and, if appropriate, destruction of State Data must be commensurate to this level of sensitivity unless the State instructs the Contractor otherwise in writing.
- 1.7.4. Employ appropriate intrusion and attack prevention and detection capabilities. Those capabilities must track unauthorized access and attempts to access State Data, as well as attacks on the Contractor's infrastructure associated with the State Data. Further, the Contractor must monitor and appropriately address information from its system tools used to prevent and detect unauthorized access to and attacks on the infrastructure associated with the State Data.
- 1.7.5. Use appropriate measures to ensure that State Data is secure before transferring control of any systems or media on which State data is stored. The method of securing the State Data must be in alignment with the required data classification and risk assessment outcomes, and may include secure overwriting, destruction, or encryption of the State data before transfer of control in alignment with NIST SP 800-88. The transfer of any such system or media must be reasonably necessary for the performance of the Contractor's obligations under this contract.
- 1.7.6. Have a business continuity plan in place that the Contractor tests and updates no less than annually. The plan must address procedures for responses to emergencies and other business interruptions. Part of the plan must address backing up and storing data at a location sufficiently remote from the facilities at which the Contractor maintains State Data in case of loss of State Data at the primary site. The Contractor's backup solution must include plans to recover from an intentional deletion attempt by a remote attacker exploiting compromised administrator credentials.

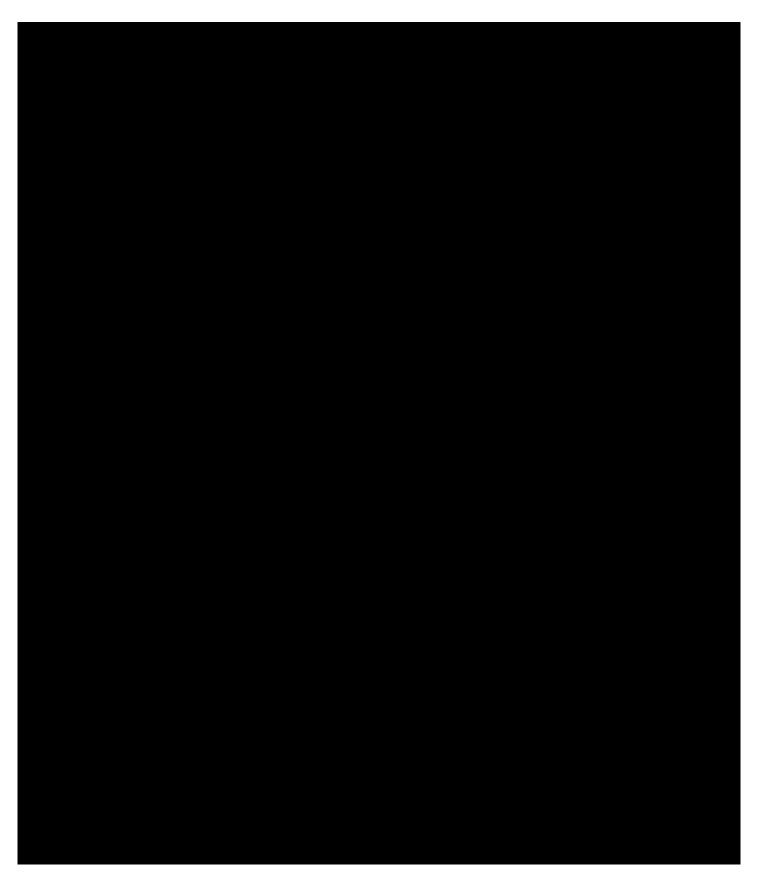
The plan also must address the rapid restoration, relocation, or replacement of resources associated with the State Data in the case of a disaster or other business interruption. The Contractor's business continuity plan must address short- and long-term restoration, relocation, or replacement of resources that will ensure the smooth continuation of operations related to the Sensitive Data. Such resources may include, among others, communications, supplies, transportation, space, power and environmental controls, documentation, people, data, software, and hardware. The Contractor also must provide for reviewing, testing, and adjusting the plan on an annual basis.

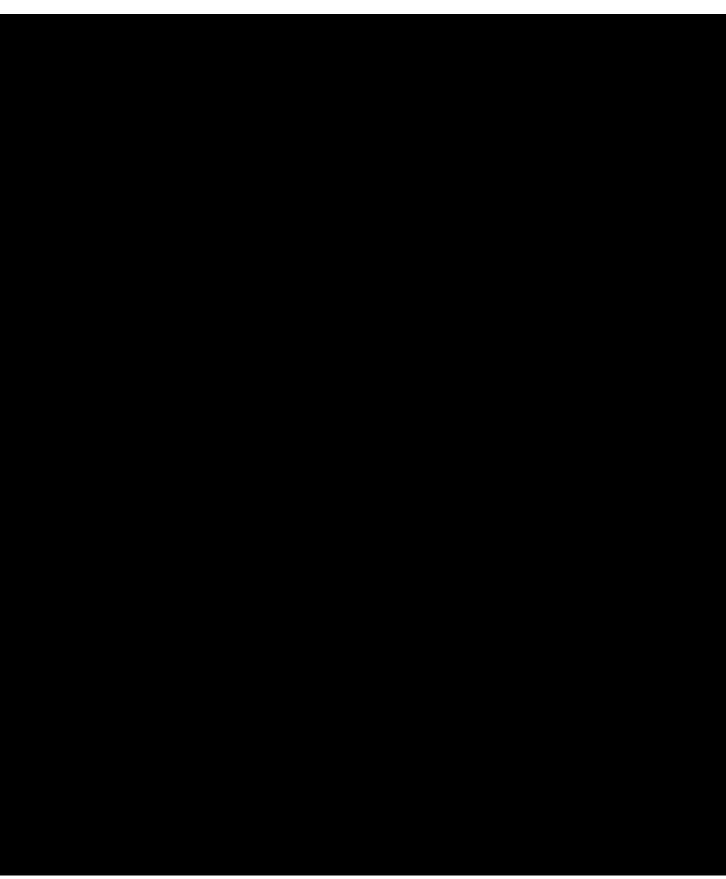
1.7.7. Not allow State Data to be loaded onto portable computing devices or portable storage components or media unless necessary to perform its obligations under this contract. If necessary, for such performance, the Contractor may permit State Data to be loaded onto portable computing devices or portable storage components or media only if adequate security measures are in place to ensure the integrity and security of State Data. Those measures must include a policy on physical security and appropriate encryption for such devices to minimize the

- risk of theft and unauthorized access as well as a prohibition against viewing sensitive or confidential data in public or common areas.
- 1.7.8. Ensure that portable computing devices have anti-virus software, personal firewalls, and system password protection. In addition, State Data must be encrypted when stored on any portable computing or storage device or media or when transmitted across any data network.
- 1.7.9. Maintain an accurate inventory of all such devices and the individuals to whom they are assigned.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.







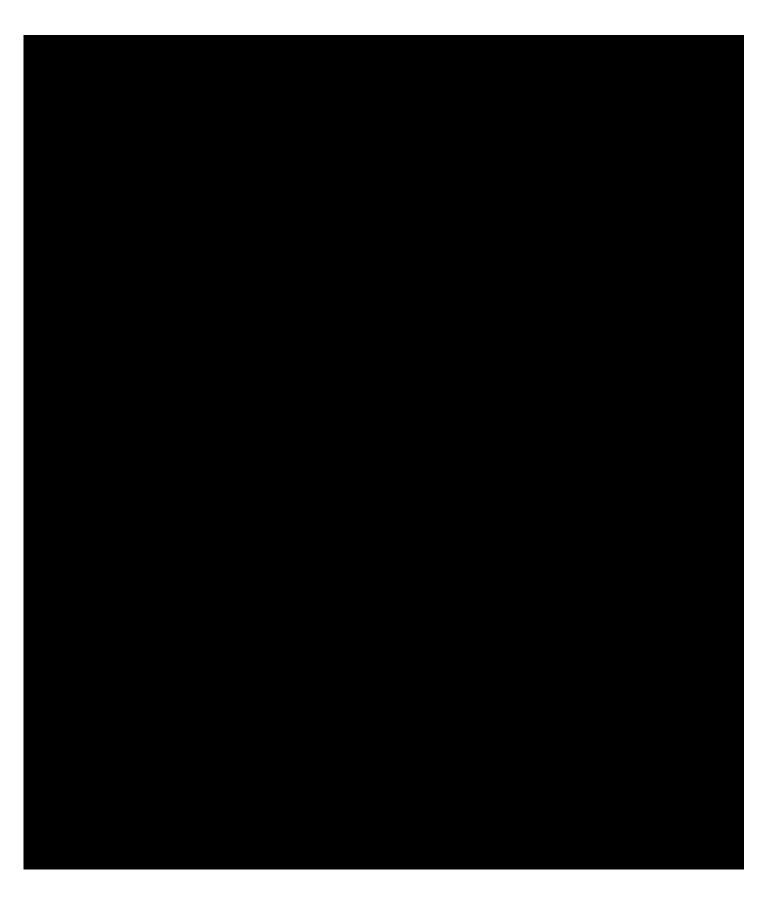


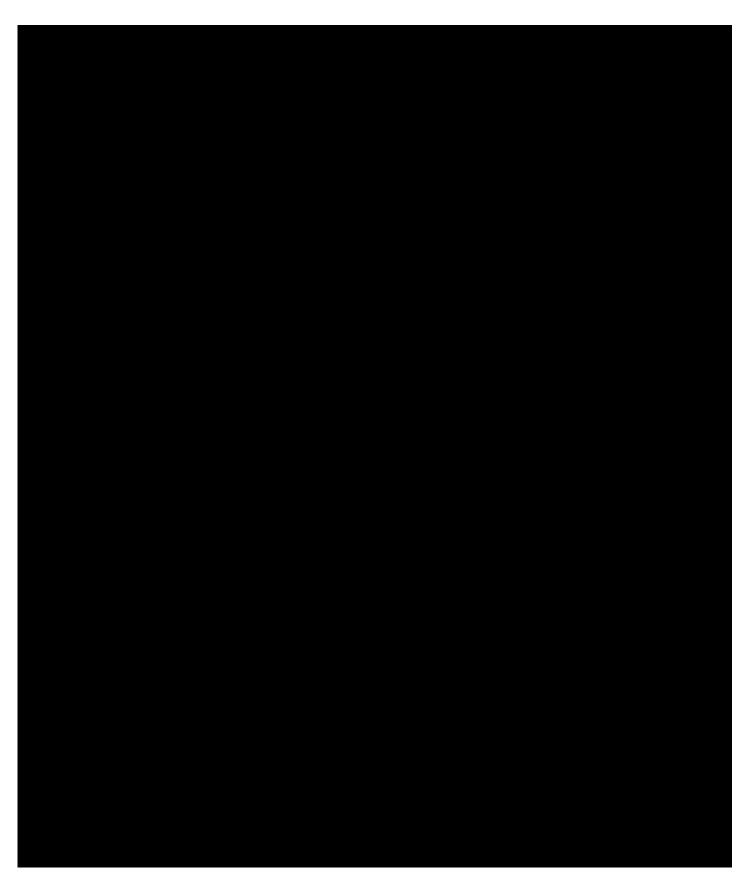


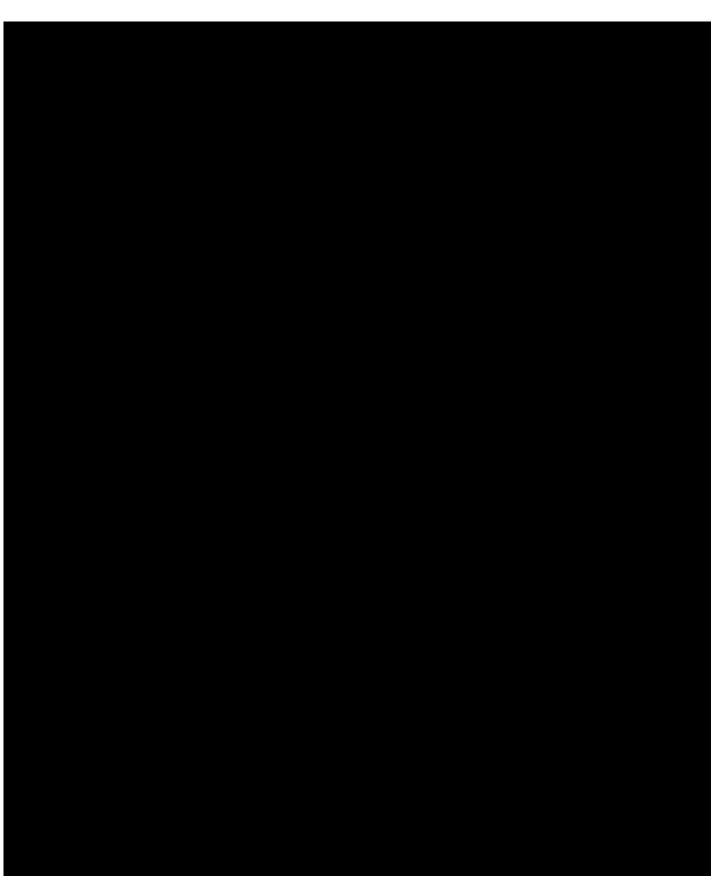
1.8. State Network Access (VPN)

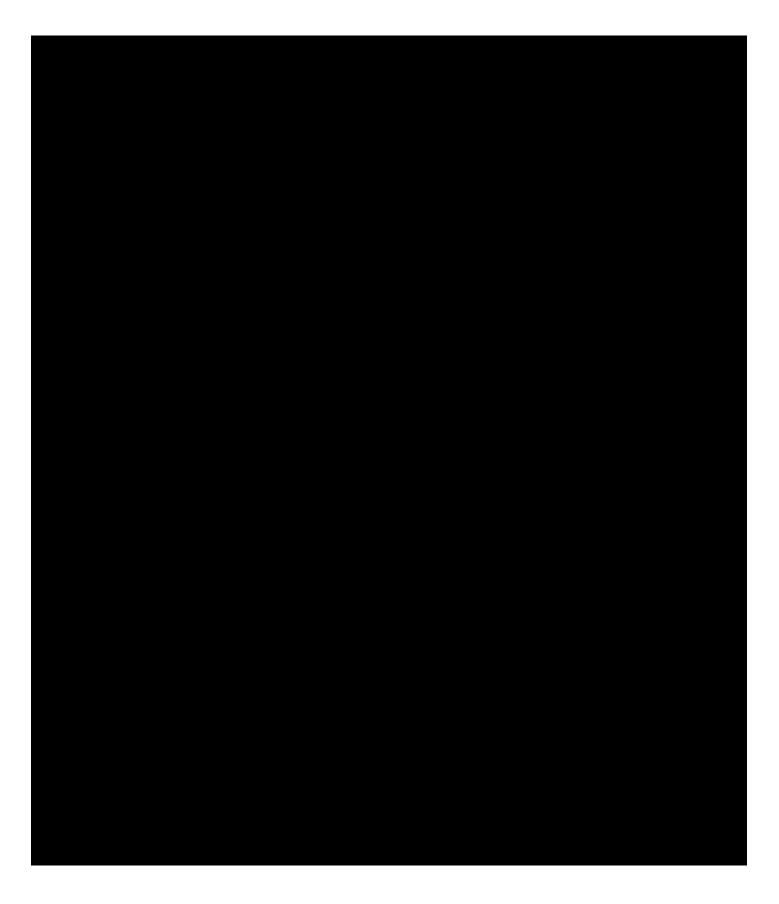
Any remote access to State systems and networks, Contractor or otherwise, must employ secure data transmission protocols, including transport layer security (TLS) and public key authentication, signing and/or encryption. In addition, any remote access solution must use Secure Multipurpose Internet Mail Extensions (S/MIME) to provide encryption and non-repudiation services through digital certificates and the provided public key infrastructure (PKI). Multifactor authentication must be employed for users with privileged network access by State provided solutions.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.







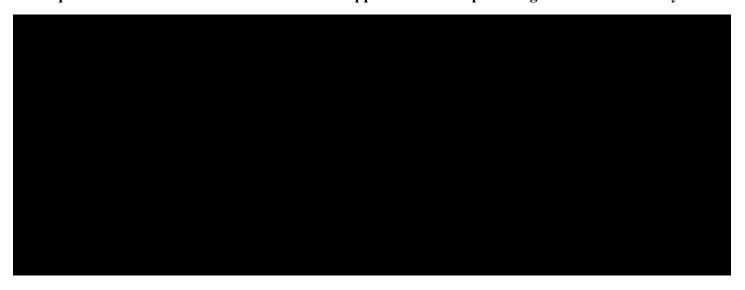




1.9. Portable Devices and Media

The Contractor must have reporting requirements for lost or stolen portable computing devices authorized for use with State Data and must report any loss or theft of such devices to the State in writing as defined in Section 3 Contractor Responsibilities Related to Reporting of Concerns, Issues and Security/Privacy Issues. The Contractor must have a written policy that defines procedures for how the Contractor must detect, evaluate, and respond to adverse events that may indicate an incident or an attempt to attack or access State Data or the infrastructure associated with State Data.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security



2. State and Federal Data Privacy Requirements

All systems and services must be designed and must function according to Fair Information Practice Principles (FIPPS), which are transparency, individual participation, purpose specification, data minimization, use limitation, data quality and integrity, security, accountability, and auditing.

To the extent that personally identifiable information (PII) in a system is "protected health information" under the Health Insurance Portability and Accountability Act (HIPAA) Privacy Rule, the FIPPS principles must be implemented in alignment with the HIPAA Privacy Rule. To the extent that there is PII in a system that is not "protected health information" under HIPAA, the FIPPS principles must still be implemented and, when applicable, aligned to other laws or regulations.

2.1 Contractor Requirements

The Contractor specifically agrees to comply with state and federal confidentiality and information disclosure laws, rules and regulations applicable to the work associated with this Contract including but not limited to:

- 2.1.1. United States Code 42 USC 1320d through 1320d-8 (HIPAA).
- 2.1.2. Code of Federal Regulations for Public Health and Public Welfare: 42 CFR 431.300, 431.302, 431.305, 431.306, 435.945, 45 CFR164.502 (e) and 164.504 (e).
- 2.1.3. Ohio Revised Code (ORC) 1347.01, 1347.04 through 1347.99, 2305.24, 2305.251, 3701.243, 3701.028, 4123.27, 5101.26, 5101.27, 5160.39, 5168.13, and 5165.88.
- 2.1.4. Corresponding Ohio Administrative Code Rules and Updates.
- 2.1.5. Systems and services must support and comply with the State's security operational support model, which is aligned to NIST SP 800-53 (current, published version).
- 2.1.6. IRS Publication 1075, Tax Information Security Guidelines for federal, state, and local agencies.
- 2.1.7. Criminal Justice Information Systems Policy.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

2.2. Federal Tax Information (FTI)

All computer systems receiving, processing, storing, or transmitting Federal Tax Information (FTI) must meet the requirements defined in IRS Publication 1075.

2.2.1. IRS 1075 Performance Requirements:

In the performance of this contract, the contractor agrees to comply with and assume responsibility for compliance by his or her employees with the following requirements:

- 2.2.1.1. All work involving FTI will be done under the supervision of the Contractor or the Contractor's employees.
- 2.2.1.2. The contractor and the contractor's employees with access to or who use FTI must meet the background check requirements defined in IRS Publication 1075.
- 2.2.1.3. Any federal tax return or return information made available in any format shall be used only for the purposes of performing this contract. Information contained in such material will be treated as confidential and will not be divulged or made known in any manner to any person except as may be necessary in the performance of this contract. Disclosure to anyone other than an officer or employee of the Contractor is prohibited.
- 2.2.1.4. All federal tax returns and return information will be accounted for upon receipt and properly stored before, during, and after processing. In addition, all related output will be given the same level of protection as required for the source material.
- 2.2.1.5. The Contractor certifies that the IRS data processed during the performance of this contract will be completely purged from all data storage components of its computer facility, and no output will be retained by the Contractor after the work is completed. If immediate purging of all data storage components is not possible, the Contractor certifies that any IRS data remaining in any storage component will be safeguarded to prevent unauthorized disclosure.
- 2.2.1.6. Any spoilage or any intermediate hard copy printout that may result during the processing of IRS data will be given to the State or its designee. When this is not possible, the Contractor will be responsible for the destruction of the spoilage or any intermediate hard copy printouts and will provide the State or its designee with a Statement containing the date of destruction, description of material destroyed, and the method used.
- 2.2.1.7. All computer systems receiving, processing, storing or transmitting FTI must meet the requirements defined in the IRS Publication 1075. To meet functional and assurance requirements, the security features of the environment must provide for the managerial, operations, and technical IRS 1075 controls. All security features must be available and activated to protect against unauthorized use of and access to Federal Tax Information.
- 2.2.1.8 No work involving Federal Tax Information furnished under this contract will be subcontracted without prior written approval of the IRS.
- 2.2.1.9. The Contractor will maintain a list of employees authorized access. Such list will be provided to the agency and, upon request, to the IRS reviewing office.

The agency will have the right to void the Contract if Contractor fails to provide the safeguards described above.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

2.2.2. IRS 1075 Criminal/Civil Sanctions

- 2.2.2.1. Each officer or employee of any person to whom returns or return information is or may be disclosed will be notified in writing by such person that returns or return information disclosed to such officer or employee can be used only for a purpose and to the extent authorized herein, and that further disclosure of any such returns or return information for a purpose or to an extent unauthorized herein constitutes a felony punishable upon conviction by a fine of as much as \$5,000 or imprisonment for as long as 5 years, or both, together with the costs of prosecution. Such person shall also notify each such officer and employee that any such unauthorized further disclosure of returns or return information may also result in an award of civil damages against the officer or employee in an amount not less than \$1,000 with respect to each instance of unauthorized disclosure. These penalties are prescribed by IRCs 7213 and 7431 and set forth at 26 CFR 301.6103(n)-1.
- 2.2.2.2. Each officer or employee of any person to whom returns or return information is or may be disclosed shall be notified in writing by such person that any return or return information made available in any format shall be used only for the purpose of carrying out the provisions of this contract. Information contained in such material shall be treated as confidential and shall not be divulged or made known in any manner to any person except as may be necessary in the performance of the contract. Inspection by or disclosure to anyone without an official need-toknow constitutes a criminal misdemeanor punishable upon conviction by a fine of as much as \$1,000 or imprisonment for as long as 1 year, or both, together with the costs of prosecution. Such person shall also notify each such officer and employee that any such unauthorized inspection or disclosure of the officer or employee (United States for Federal employees) in an amount equal to the sum of the greater of \$1,000 for each act of unauthorized inspection or disclosure with respect to which such defendant is found liable or the sum of the actual damages sustained by the plaintiff as a result of such unauthorized inspection or disclosure plus in the case of a willful inspection or disclosure which is the result of gross negligence, punitive damages, plus the costs of the action. These penalties are prescribed by IRC 7213A and 7431.
- 2.2.2.3. Additionally, it is incumbent upon the Contractor to inform its officers and employees of the penalties for improper disclosure imposed by the Privacy Act of 1974, 5 U.S.C. 552a.

Specifically, 5 U.S.C. 552a(i)(1), which is made applicable to Contractors by 5 U.S.C. 552a(m)(1), provides that any officer or employee of a Contractor, who by virtue of his/her employment or official position, has possession of or access to agency records which contain individually identifiable information, the disclosure of which is prohibited by the Privacy Act or regulations established thereunder, and who knowing that disclosure of the specific material is prohibited, willfully discloses the material in any manner to any person or agency not entitled to receive it, shall be guilty of a misdemeanor and fined not more than \$5,000.

2.2.3. Inspection

The IRS and the Agency, with 24 hour notice, shall have the right to send its inspectors into the offices and plants of the Contractor for inspection of the facilities and operations performing any work under this contract for compliance with requirements defined in IRS Publication 1075. The IRS' right of inspection shall include the use of manual, and/or automated scanning tools to perform compliance and vulnerability assessment of information technology (IT) assets that access, store, process or transmit FTI. On the basis of such inspection, corrective actions may be required in cases where the Contractor is found to be noncompliant with contract safeguards.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

2.3. Disclosure

Disclosure to Third Parties. This Contract must not be deemed to prohibit disclosures in the following cases:

2.3.1. Required by applicable law, regulation, court order or subpoena; provided that, if the Contractor or any of its representatives are ordered or requested to disclose any information provided by the State, whether Sensitive Data or otherwise, pursuant to court or administrative order, subpoena, summons, or other legal process or otherwise believes that disclosure is required by any law, ordinance, rule or regulation, Contractor must notify the State within 24 hours in order that the State may have the opportunity to seek a protective order or take other appropriate action. Contractor must also cooperate in the State's efforts to obtain a protective order or other

reasonable assurance that confidential treatment will be accorded the information provided by the State. If, in the absence of a protective order, Contractor is compelled as a matter of law to disclose the information provided by the State, Contractor may disclose to the party compelling disclosure only the part of such information as is required by law to be disclosed (in which case, prior to such disclosure, Contractor must advise and consult with the State and its counsel as to the scope of such disclosure and the nature of wording of such disclosure) and Contractor must use commercially reasonable efforts to obtain confidential treatment for the information:

- 2.3.1.1. To State auditors or regulators.
- 2.3.1.2. To service providers and agents of either party as permitted by law, provided that such service providers and agents are subject to binding confidentiality obligations.
- 2.3.1.3. To the professional advisors of either party, provided that such advisors are obligated to maintain the confidentiality of the information they receive.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

2.4. Background Investigations of Contractor Personnel

Contractor agrees that (1) the State of Ohio will conduct background investigations on Contractor personnel who will perform Sensitive Services (as defined below), and (2) no ineligible personnel will perform Sensitive Services under this contract. The term "ineligible personnel" means any person who (a) has been convicted at any time of any criminal offense involving dishonesty, a breach of trust, money laundering, or who has entered into a pre-trial diversion or similar program in connection with a prosecution for such offense, (b) is named by the Office of Foreign Asset Control (OFAC) as a Specially Designated National, or (c) has been convicted of a felony.

"Sensitive Services" means those services that (i) require access to customer, consumer, or State employee information, (ii) relate to the State's computer networks, information systems, databases or secure facilities under circumstances that would permit modifications to such systems, or (iii) involve unsupervised access to secure facilities.

Contractors who will have access to Federal Tax Information (FTI) or Criminal Justice Information (CJI) must complete a background investigation that is favorably adjudicated, prior to being permitted to access the information. In addition, existing Contractors with access to FTI or CJI that have not

completed a background investigation within the last 5 years must complete a background investigation that is favorably adjudicated, prior to being permitted to access the information.

FTI or criminal justice background investigations will include:

- 2.4.1. FBI Fingerprinting (FD-258)
- 2.4.2. Local law enforcement agencies where the employee has lived, worked and/or attended school within the last five years
- 2.4.3. Citizenship/residency eligibility to legally work in the United States
- 2.4.4. New employees must complete USCIS Form I-9, which must be processed through the Federal E-Verify system
- 2.4.5. FTI training, with a 45 day wait period

In the event that the Contractor does not comply with the terms of this section, the State may, in its sole and absolute discretion, terminate this Contract immediately without further liability.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

3. Contractor Responsibilities Related to Reporting of Concerns, Issues, and Security/Privacy Issues

3.1. General

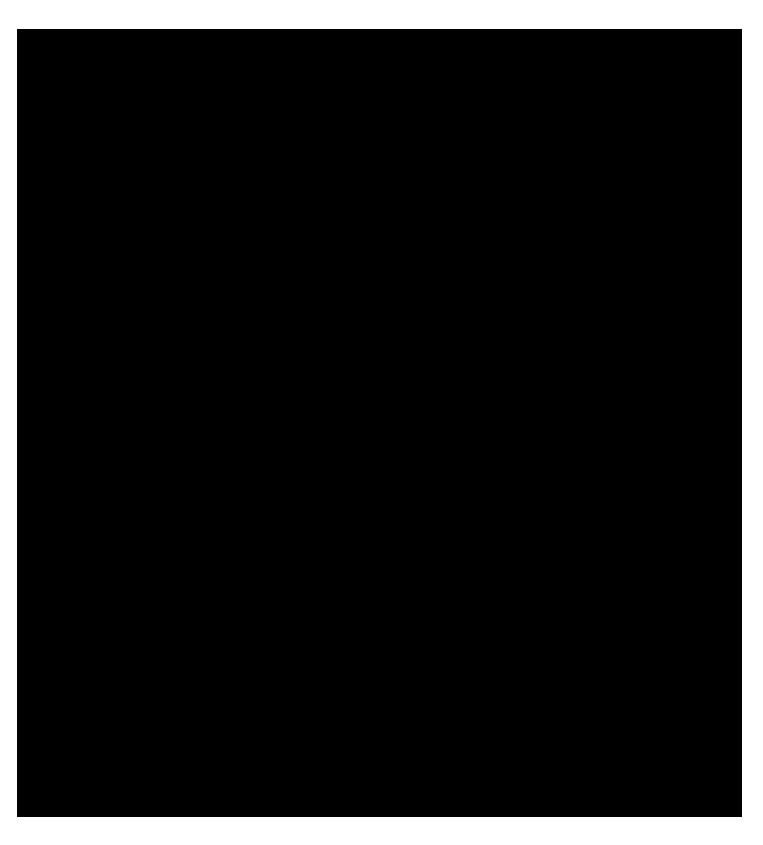
If, over the course of the Contract a security or privacy issue arises, whether detected by the State, a State auditor, or the Contractor, that was not existing within an in-scope environment or service prior to the commencement of any contracted service associated with this Contract, the Contractor must:

- 3.1.1. Notify the State of the issue or acknowledge receipt of the issue within two (2) hours.
- 3.1.2. Within forty-eight (48) hours from the initial detection or communication of the issue from the State, present a potential exposure or issue assessment document to the State account representative and the State Chief Information Security Officer with a high-level assessment as to resolution actions and a plan.
- 3.1.3. Within four (4) calendar days, and upon direction from the State, implement, to the extent commercially reasonable, measures to minimize the State's exposure to the security or privacy issue until such time as the issue is resolved.
- 3.1.4. Upon approval from the State, implement a permanent repair to the identified issue at the Contractor's cost.

3.2. Actual or Attempted Access or Disclosure

If the Contractor determines that there is any actual, attempted or suspected theft of, accidental disclosure of, loss of, or inability to account for any Sensitive Data by the Contractor or any of its Subcontractors (collectively "Disclosure") and/or any unauthorized intrusions into Contractor's or any of its Subcontractor's facilities or secure systems (collectively "Intrusion"), Contractor must immediately:

- 3.2.1. Notify the State within two (2) hours of the Contractor becoming aware of the unauthorized disclosure or intrusion.
- 3.2.2. Investigate and determine if an intrusion and/or disclosure has occurred.
- 3.2.3. Fully cooperate with the State in estimating the effect of the disclosure or intrusion and fully cooperate to mitigate the consequences of the disclosure or intrusion.
- 3.2.4. Specify corrective action to be taken.
- 3.2.5. Take corrective action to prevent further disclosure and/or intrusion.

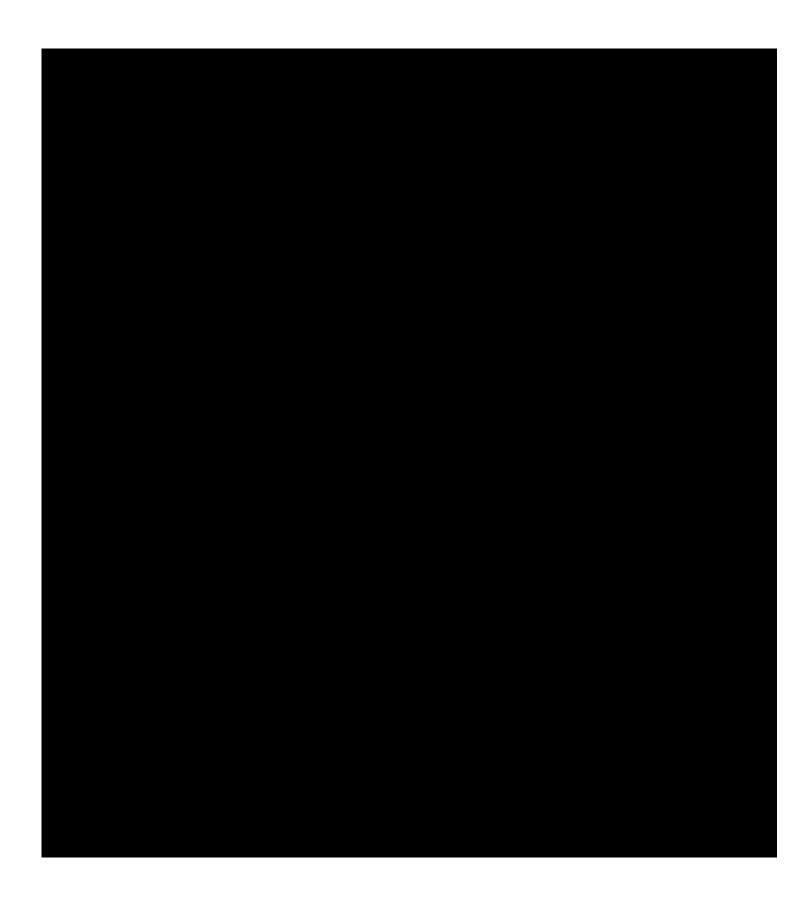


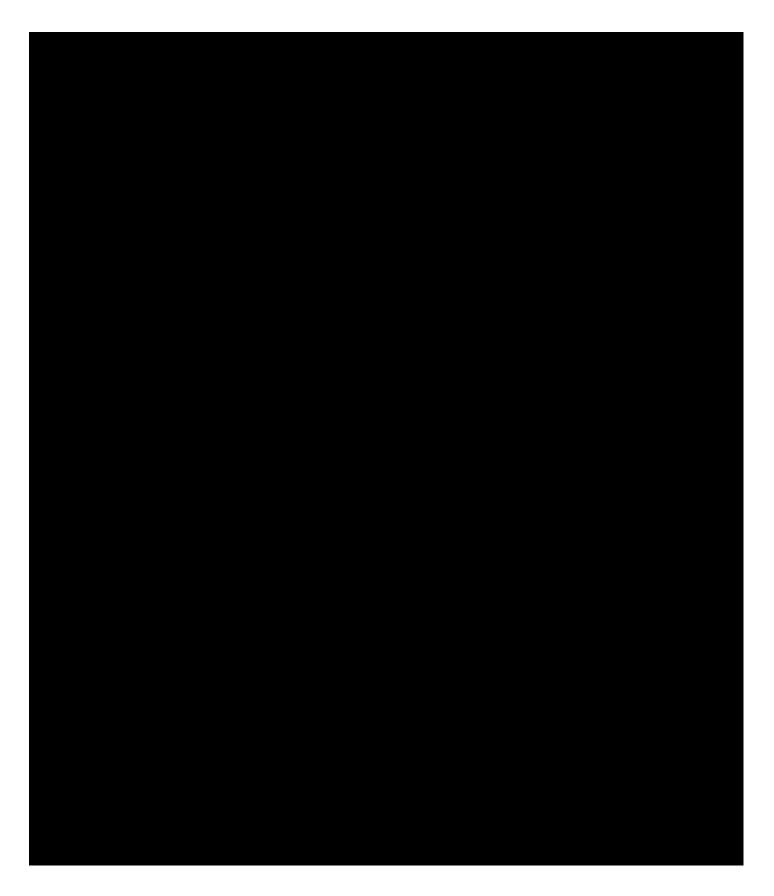
3.3. Unapproved Disclosures and Intrusions: Contractor Responsibilities

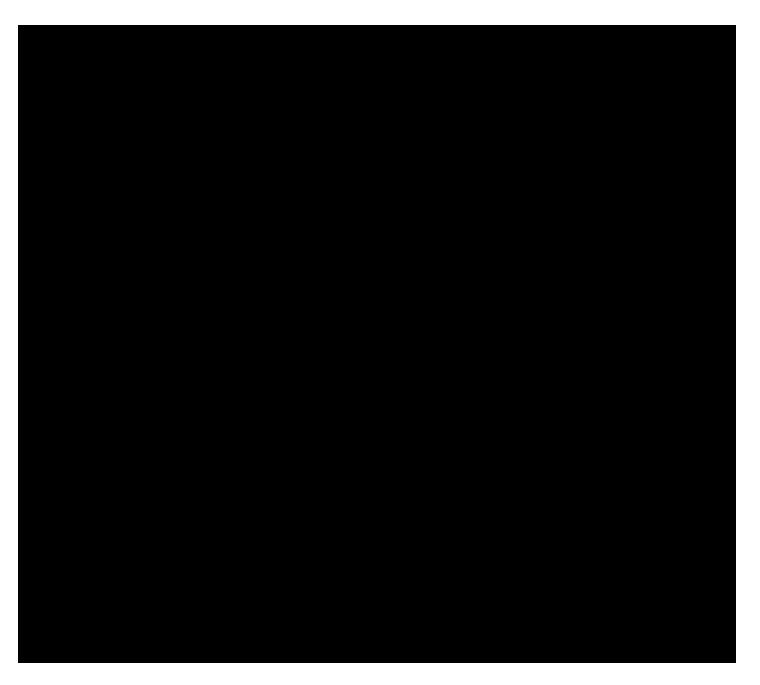
The following are the responsibility of the Contractor to provide at its own cost:

- 3.3.1. The Contractor must, as soon as is practical, make a report to the State including details of the disclosure and/or intrusion and the corrective action the Contractor has taken to prevent further disclosure and/or intrusion. The Contractor must, in the case of a disclosure, cooperate fully with the State to notify the affected persons as to the facts and circumstances of the disclosure of the Sensitive Data. Additionally, the Contractor must cooperate fully with all government regulatory agencies and/or law enforcement agencies that have jurisdiction to investigate a disclosure and/or any known or suspected criminal activity.
- 3.3.2. If, over the course of delivering services to the State under this statement of work for in-scope environments, the Contractor becomes aware of an issue, or a potential issue that was not detected by security and privacy teams, the Contractor must notify the State within two (2) hours. This notification must not minimize the more stringent service level contracts pertaining to security scans and breaches contained herein, which due to the nature of an active breach must take precedence over this notification. The State may elect to work with the Contractor under mutually agreeable terms for those specific resolution services at that time or elect to address the issue independent of the Contractor.
- 3.3.3. If the Contractor identifies a potential issue with maintaining an "as provided" State infrastructure element in accordance with a more stringent State level security policy, the Contractor must identify and communicate the nature of the issue to the State, and, if possible, outline potential remedies.









3.4. Security Incident Reporting and Indemnification Requirements

3.4.1. The Contractor must report any security incident of which it becomes aware. For the purposes of this document, "Security Incident" means the attempted or successful unauthorized access, use, disclosure, modification, or destruction of information or interference with system operations in an information system. It does not mean unsuccessful log-on attempts, denial of service attacks, unsuccessful network attacks such as pings, probes of firewalls, port scans, or any combination of those, as long as there is no unauthorized access, acquisition, use, or disclosure of Sensitive Data as a result.

- 3.4.2. In the case of an actual security incident that may have compromised Sensitive Data, the Contractor must notify the State in writing within two (2) hours of the Contractor becoming aware of the breach. The Contractor is required to provide the best available information from the investigation.
- 3.4.3. In the case of a suspected incident, the Contractor must notify the State in writing within twenty-four (24) hours of the Contractor becoming aware of the suspected incident. The Contractor is required to provide the best available information from the investigation.
- 3.4.4. The Contractor must fully cooperate with the State to mitigate the consequences of an incident/suspected incident at the Contractor's own Cost. This includes any use or disclosure of the Sensitive Data that is inconsistent with the terms of this Contract and of which the Contractor becomes aware, including but not limited to, any discovery of a use or disclosure that is not consistent with this contract by an employee, agent, or Subcontractor of the Contractor.
- 3.4.5. The Contractor must give the State full access to the details of the breach/suspected breach and assist the State in making any notifications to potentially affected people and organizations that the State deems are necessary or appropriate at the Contractor's own cost.
- 3.4.6. The Contractor must document and provide incident reports for all such incidents/suspected incidents to the State. The Contractor must provide updates to incident reports until the investigation is complete at the Contractor's own cost. At a minimum, the incident/suspected incident reports will include:
 - 3.4.6.1. Data elements involved, the extent of the Data involved in the incident, and the identification of affected individuals, if applicable.
 - 3.4.6.2. A description of the unauthorized persons known or reasonably believed to have improperly used or disclosed State Data, or to have been responsible for the incident.
 - 3.4.6.3. A description of where the State Data is believed to have been improperly transmitted, sent, or utilized, if applicable.
 - 3.4.6.4. A description of the probable causes of the incident.
 - 3.4.6.5. A description of the proposed plan for preventing similar future incidents, including ongoing risk remediation plan approval.
 - 3.4.6.6. Whether the Contractor believes any federal or state laws requiring notifications to individuals are triggered.
- 3.4.7. In addition to any other liability under this contract related to the Contractor's improper disclosure of State Data, and regardless of any limitation on liability of any kind in this Contract, the Contractor will be responsible for acquiring one year's identity theft protection service on behalf of any individual or entity whose Sensitive Data is compromised while it is in the Contractor's possession. This service will be provided at Contractor's own cost. Such identity theft protection must provide coverage from all three major credit reporting agencies and provide

immediate notice through phone or email of attempts to access the individual's credit history through those services.



4. Security Review Services

As part of a regular Security Review process, the Contractor will include the following reporting and services to the State:

4.1. Hardware and Software Assets

The Contractor will support the State in defining and producing specific reports for both hardware and software assets. At a minimum this includes:

- 4.1.1. Deviations from the hardware baseline.
- 4.1.2. Inventory of information types by hardware device.
- 4.1.3. Software inventory compared against licenses (State purchased).
- 4.1.4. Software versions and then scans of versions against patches distributed and applied.

4.2. Security Standards by Device and Access Type

The Contractor must:

- 4.2.1. Document security standards by device type and execute regular scans against these standards to produce exception reports.
- 4.2.2. Document and implement a process for any required remediation.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

4.3. Boundary Defenses

The Contractor must:

- 4.3.1. Work with the State to support the denial of communications to/from known malicious IP addresses.
- 4.3.2. Ensure that the system network architecture separates internal systems from DMZ and extranet systems.
- 4.3.3. Require the use of two-factor authentication for remote login.
- 4.3.4. Support the State's monitoring and management of devices remotely logging into the internal network.
- 4.3.5. Support the State in the configuration of firewall session tracking mechanisms for addresses that access the solution.

4.4. Audit Log Reviews

The Contractor must:

- 4.4.1. Work with the State to review and validate audit log settings for hardware and software.
- 4.4.2. Ensure that all systems and environments have adequate space to store logs.
- 4.4.3. Work with the State to devise and implement profiles of common events from given systems to reduce false positives and rapidly identify active access.
- 4.4.4. Provide requirements to the State to configure operating systems to log access control events.
- 4.4.5. Design and execute bi-weekly reports to identify anomalies in system logs.
- 4.4.6. Ensure logs are written to write-only devices for all servers or a dedicated server managed by another group.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

4.5. Application Software Security

The Contractor must:

- 4.5.1. Perform configuration review of operating system, application, and database settings.
- 4.5.2. Ensure software development personnel receive training in writing secure code.

4.6. System Administrator Access

The Contractor must:

- 4.6.1. Inventory all administrative passwords (application, database, and operating system level).
- 4.6.2. Implement policies to change default passwords in accordance with State policies, following any transfer or termination of personnel (State, existing Materials and Supplies Vendor, or Contractor).
- 4.6.3. Configure administrative accounts to require regular password changes.
- 4.6.4. Ensure user and service level accounts have cryptographically strong passwords.
- 4.6.5. Store passwords in a hashed or encrypted format.

- 4.6.6. Ensure administrative accounts are used only for administrative activities.
- 4.6.7. Implement focused auditing of administrative privileged functions.
- 4.6.8. Configure systems to log entry and alert when administrative accounts are modified.
- 4.6.9. Segregate administrator accounts based on defined roles.







4.7. Account Access Privileges

The Contractor must, in alignment with policy requirements:

- 4.7.1. Review and disable accounts not associated with a business process.
- 4.7.2. Create a daily report that includes locked out accounts, disabled accounts, etc.
- 4.7.3. Implement a process for revoking system access.
- 4.7.4. Automatically log off users after a standard period of inactivity.
- 4.7.5. Monitor account usage to determine dormant accounts.
- 4.7.6. Monitor access attempts to deactivated accounts through audit logging.
- 4.7.7. Profile typical account usage and implement or maintain profiles to ensure that security profiles are implemented correctly and consistently.

Please explain how these requirements will be met within the context of the proposed solution (e.g., Software as a Service (SaaS), Platform as a Service (PaaS), Infrastructure as a Service (IaaS), On-Premises or Hybrid). If this section, or portions of this section, are not applicable, please explain and note as N/A. Please note that any proposed compensating controls and/or requirement modifications must be noted in Appendix A - Compensating Controls to Security and Privacy Requirements. The language within the supplement will not be modified.

4.8. Additional Controls and Responsibilities

The Contractor must meet with the State no less frequently than annually to:

- 4.8.1. Review, update and conduct security training for personnel, based on roles.
- 4.8.2. Review the adequacy of physical and environmental controls.
- 4.8.3. Verify the encryption of Sensitive Data in transit.
- 4.8.4. Review access controls based on established roles and access profiles.
- 4.8.5. Update and review system administration documentation.
- 4.8.6. Update and review system maintenance policies.
- 4.8.7. Update and review system and integrity policies.

- 4.8.9. Review and implement updates to the System security plan.
- 4.8.10 Update risk assessment policies and procedures.
- 4.8.11 Update and implement incident response procedures.

Appendix A – Compensating Controls to Security and Privacy Supplement

In the event that there is a security or privacy requirement outlined in this supplement that needs to be met by a compensating control, please identify it below and provide a proposed language change as well as a rationale for the change.

Reference	Current Language	Contractor's Proposed Change	Rationale of Proposed Change
Example: Supplement S - Page 11	Example: Provide vulnerability management services for the Contractor's internal secure network connection, including supporting remediation for identified vulnerabilities as agreed. As a minimum, the Contractor must provide vulnerability scan results to the State monthly.	Example: Provide vulnerability management services for the Contractor's internal secure network connection, including supporting remediation for identified vulnerabilities as agreed. As a minimum, the Contractor must provide vulnerability scan results to the State weekly.	Per company policy vulnerability report are only provided to customers on a quarterly basis.