Purpose and Summary

This document establishes the Network, Server, and Transmission Policy for the University of Arizona. This policy defines appropriate network, server, and transmission security controls to protect the confidentiality, integrity, and availability of University Information Resources.

Scope

This policy applies to all Information Systems and Information Resources owned or operated by or on behalf of the University. All University-Related Persons with access to University Information or computers and systems operated or maintained on behalf of the University are responsible for adhering to this policy.

Definitions

CISO: The senior-level University employee with the title of Chief Information Security Officer.
Information Owner: The individual(s) or Unit with operational authority for specified University Information and responsibility for establishing the controls for its generation, collection, processing, dissemination, and disposal. This individual or Unit is responsible for making risk tolerance decisions related to such Information on behalf of the University and is organizationally responsible for any loss associated with a realized information security risk scenario.

Information Resource Owner: Collective term used to refer to Information Owners and Information System Owners.

Information Resources: University Information and related resources, such as equipment, devices, software, and other information technology.

Information System: A major application or general support system for storing, processing, or transmitting University Information. An Information System may contain multiple subsystems. Subsystems typically fall under the same management authority as the parent Information System. Additionally, an Information System and its constituent subsystems generally have the same function or mission objective, essentially the same operating characteristics, the same security needs, and reside in the same general operating environment.

Information System Owner: The individual(s) or Unit responsible for the overall procurement, development, integration, modification, and operation and maintenance of an Information System. This individual or Unit is responsible for making risk tolerance decisions related to such Information Systems on behalf of the University and is organizationally responsible for the loss, limited by the bounds of the Information System, associated with a realized information security risk scenario.

ISO: The University Information Security Office, responsible for coordinating the development and dissemination of information security policies, standards, and guidelines for the University.

Unit: A college, department, school, program, research center, business service center, or other operating Unit of the University.

University Information: Any communication or representation of knowledge, such as facts, data, or opinions, recorded in any medium or form, including textual, numerical, graphic, cartographic, narrative, or audiovisual, owned or controlled by or on behalf of the University.

University-Related Persons: University students and applicants for admission, University employees and applicants for employment, Designated Campus Colleagues (DCCs), alumni, retirees, temporary employees of agencies who are assigned to work for the University, and third-party contractors engaged by the University and their agents and employees.

Policy

A. All Classifications of University Information

1. Information Resource Owners with responsibility for Information Resources that store, process, or transmit University Information of any classification, as defined in the University Information Resource Classification Standard [2], must establish or adopt documented procedures that establish the controls required by this Policy. Procedures must be appropriate to the level of information security risk to protect network, server, and transmission security and meet, at a minimum, the following requirements:
   a. Network architectures, boundary protection schemes, and other security features and controls for network systems must be specified, documented, implemented, modified,
and maintained using methods that ensure risk-informed decisions.

b. Network devices must be hardened by making appropriate changes to default account settings and configurations before the device is installed or implemented. Hardening must include, but is not limited to:
   i. Changing default passwords using strong password methodologies, as defined in the University Password Standard [3].
   ii. Changing the name of or removing default accounts, except where there is an absolute requirement for the default account name.
   iii. Disabling or blocking nonessential services.
   iv. Restricting access to management interfaces to nominated managed networks, management devices, or systems.
   v. Disabling or blocking nonessential guest or world read access.

B. Restricted University Information

1. Information Resource Owners with responsibility for Information Resources that store, process, or transmit University Information classified as Restricted, as defined in the University Information Resource Classification Standard [2], must establish or adopt additional documented procedures to augment those defined in Paragraph A (above). These additional procedures must meet, at a minimum, the following additional requirements:
   a. Information Resources that do not meet security requirements for storing, processing or transmitting Restricted University Information must not be connected to any other Information Resource or network that has these requirements.
   b. Each Information Resource that houses Restricted University Information connected to a University network must utilize an operating system that is both actively supported by the system's vendor and has a documented current commitment by such vendor to publishing ongoing security updates for the system.
   c. Remote access (i.e., access from off-campus or through a connection from an off-campus network) to Information Systems that store, process, or transmit Restricted University Information must require multi-factor authentication and be via a Virtual Private Network or must have compensating controls as a replacement when systems are accessed remotely (see Remote Access Compensating Controls Guidelines [4] for guidance).
   d. Network transmission of Restricted University Information must be encrypted with cryptographic modules that meet industry standards and University Encryption Standard [5].

Compliance and Responsibilities

Compliance

Tracking, Measuring, and Reporting

The ISO must develop, test, review, maintain, and communicate a representation of the University-wide information security posture to University leadership. The ISO is authorized to initiate mechanisms to track the effective implementation of information security controls associated with this policy and to produce reports measuring individual or Unit compliance to support University decision making.
Recourse for Noncompliance

The ISO is authorized to limit network access for individuals or Units not in compliance with all information security policies and related procedures. In cases where University resources are actively threatened, the CISO must act in the best interest of the University by securing the resources in a manner consistent with the Information Security Incident Response Plan. In an urgent situation requiring immediate action, the CISO is authorized to disconnect affected individuals or Units from the network. In cases of noncompliance with this policy, the University may apply appropriate employee sanctions or administrative actions, in accordance with relevant administrative, academic, and employment policies.

Exceptions

Requests for exceptions to any information security policies may be granted for Information Systems with compensating controls in place to mitigate risk. Any requests must be submitted to the CISO for review and approval pursuant to the exception procedures published by the CISO [6].

Frequency of Policy Review

The CISO must review information security policies and procedures annually, at minimum. This policy is subject to revision based upon findings of these reviews.

Responsibilities

University-Related Persons

All University-Related Persons are responsible for complying with this policy and, where appropriate, supporting and participating in processes related to compliance with this policy.

Information Owners and Information System Owners

Information Owners and Information System Owners are responsible for implementing processes and procedures designed to provide assurance of compliance with the minimum standards, as defined by the ISO, and for enabling and participating in validation efforts, as appropriate.

Chief Information Security Officer

The ISO must, at the direction of the CISO:

- identify solutions that enable consistency in compliance and aggregate and report on available compliance metrics;
- develop, establish, maintain, and enforce information security policy and relevant standards and processes;
- provide oversight of information security governance processes;
- educate the University community about individual and organizational information security responsibilities;
- measure and report on the effectiveness of University information security efforts; and
- delegate individual responsibilities and authorities specified in this policy or associated standards and procedures, as necessary.

Vice Presidents, Deans, Directors, Department Heads, and Heads of Centers

All Vice Presidents, Deans, Directors, Department Heads, and Heads of Centers must take
appropriate actions to comply with information technology and security policies. These individuals have ultimate responsibility for University resources, for the support and implementation of this policy within their respective Units, and, when requested, for reporting on policy compliance to the ISO. While specific responsibilities and authorities noted herein may be delegated, this overall responsibility may not be delegated.

Related Information*

- ISO Website [7]
- University Information Resource Classification Standard [2]

Revision History*


02/01/2023: Revisions to Policy Section, paragraph A.1.b.i. to add new link, paragraph B.1.a. - revised to only reference restricted information, paragraph B.1.c. - revised to include reference to published guidance, paragraph B.1.d. - revised to be consistent and to add link to relevant standard. Grammatical revisions throughout.

10/2021: Revisions to Policy Section A - All Classifications of University Information - change in classification level; Policy Section B substantive changes; Compliance and Responsibilities Section - revision to Tracking, Measuring and Reporting Section: ISO tracking and reporting responsibilities; Related Information Section updated; several hyperlinks updated.

01/24/2020: Non-substantive revisions.

03/19/2019: Replaces Interim policy.

Source

URL: https://policy.arizona.edu/information-technology/network-server-and-transmission-security-policy

Links

[1] mailto:security@arizona.edu [2]