

# Information Security Roles and Responsibilities

---

## Purpose

The purpose of this document is to clearly define roles and responsibilities that are essential to the implementation of the University's [Information Security Policy](#). Article 9 - Information Technology - Part 1 Information Technology Security Plan.

## Scope

These Roles and Responsibilities apply to all faculty, staff and third-party agents of the University as well as any other University affiliate who is authorized to access Institutional Data.

## Maintenance

These Roles and Responsibilities will be reviewed by the University's Office of Information Security every 5 years or as deemed appropriate based on changes in technology or regulatory requirements.

## Definitions

*Agent*, for the purpose of these Roles and Responsibilities, is defined as any third-party that has been contracted by the University to provide a set of services and who stores, processes or transmits Institutional Data as part of those services.

*The Information Technology Committee*, the ITC is a University-wide advisory committee established to provide communication, collaboration and coordination on issues regarding information technology policy, planning, resource management, standards, procedures and priorities that will develop and enhance the effective use of information technology by faculty, staff and students.

*The Senior IM&T Leadership*, is a committee formed of the CIO, CISO, The Director of Infrastructure & Support Services, and the Director of Institutional Systems and Architecture.

Information System is defined as any electronic system that stores, processes, or transmits information.

Institutional Data is defined as any data that is owned or licensed by the University. See the [Policy for Data Classification](#) for more information.

## Roles and Responsibilities

The University's Information Security Policy states that, “Individuals who are authorized to access Institutional Data shall adhere to the appropriate Roles and Responsibilities, as defined in documentation approved by the ESCC and maintained by the Information Security Office.” These roles and responsibilities are defined as follows.

---

### The Senior IM&T Leadership

Are responsible for the following items:

- a. Reviewing and recommending strategies to implement the [Information Security Plan, Article 9](#).
  - b. Analyzing the business impact of proposed information security strategies on the University
  - c. Approving proposed information security strategies
- 

### Information Technology Committee

The Committee reports to both the Senior Vice President - CFO and the Senior Vice President for Academic Affairs - Provost. Faculty Senate and Student Senate representatives of the ITC enable a line of communication between the ITC, Faculty Senate, and the Student Senate. Specific oversight responsibilities related to implementation of the University of Northern Colorado [Information Security Plan, Article 9](#) include the following:

- a. Reviewing and recommending strategies to implement the [Information Security Plan, Article 9](#).
  - b. Serving as a champion for accepted strategies within respective business units and/or colleges.
  - c. Overseeing the review of [Information Security Plan, Article 9](#) exceptions.
-

# UNIVERSITY OF NORTHERN COLORADO

## **Chief Information Security Officer**

The Chief Information Security Officer is a senior-level employee of the University who oversees the University's information security program. Responsibilities of the Chief Information Security Officer include the following:

- a. Developing and implementing a University-wide information security program.
  - b. Documenting and disseminating information security policies and procedures.
  - c. Coordinating the development and implementation of a University-wide information security training and awareness program.
  - d. Coordinating a response to actual or suspected breaches in the confidentiality, integrity or availability of Institutional Data.
- 

## **Data Steward**

A Data Steward is a senior-level employee of the University who oversees the lifecycle of one or more sets of Institutional Data. Responsibilities of a Data Steward include the following:

**a. Assigning an appropriate classification to Institutional Data.**

All Institutional Data should be classified based on its sensitivity, value and criticality to the University. The University has adopted three primary classifications: public, private and restricted. See the [Policy for Data Classification](#) for more information.

**b. Assigning day-to-day administrative and operational responsibilities for Institutional Data to one or more Data Custodians.**

Data Stewards may assign administrative and operational responsibility to specific employees or groups of employees. A Data Steward could also serve as a Data Custodian. In some situations, multiple groups will share Data Custodian responsibilities. If multiple groups share responsibilities, the Data Steward should understand what functions are performed by what group.

**c. Approving standards and procedures related to day-to-day administrative and operational management of Institutional Data.**

While it is the responsibility of the Data Custodian to develop and implement operational procedures, it is the Data Steward's responsibility to review and approve these standards and procedures. A Data Steward should consider the classification of the data and associated risk tolerance when reviewing and approving these standards and procedures. For example, high risk and/or highly sensitive data may warrant more comprehensive documentation and, similarly, a more formal review and approval process. A Data Steward should also consider his or her relationship with the Data Custodian(s). For example, different review and

# UNIVERSITY OF NORTHERN COLORADO

approval processes may be appropriate based on the reporting relationship of the Data Custodian(s).

**d. Determining the appropriate criteria for obtaining access to Institutional Data.**

A Data Steward is accountable for who has access to Institutional Data. This does not imply that a Data Steward is responsible for day-to-day provisioning of access. Provisioning access is the responsibility of a Data Custodian. A Data Steward may decide to review and authorize each access request individually or a Data Steward may define a set of rules that determine who is eligible for access based on business function, support role, etc. For example, a simple rule may be that all students are permitted access to their own transcripts or all staff members are permitted access to their own health benefits information. These rules should be documented in a manner that allows little or no room for interpretation by a Data Custodian.

**e. Ensuring that Data Custodians implement reasonable and appropriate security controls to protect the confidentiality, integrity and availability of Institutional Data.**

The Office of Information Security has published guidance on implementing reasonable and appropriate security controls based on three classifications of data: public, private and restricted. See the [Policy for Data Classification](#) and the [Guidelines for Data Protection](#) for more information. A Data Steward will often have their own security requirements specified in contractual language and/or based on various industry standards. Data Stewards should be familiar with their own unique requirements and ensure Data Custodians are also aware of and can demonstrate compliance with these requirements. The Office of Information Security can assist with mapping controls identified in the [Guidelines for Data Protection](#) to controls mandated by contract(s) or industry standards.

**f. Understanding and approving how Institutional Data is stored, processed and transmitted by the University and by third-party Agents of the University.**

In order to ensure reasonable and appropriate security controls are implemented, a Data Steward must understand how data is stored, processed and transmitted. This can be accomplished through review of data flow documentation maintained by a Data Custodian. In situations where Institutional Data is being managed by a third-party, the contract or service level agreement should require documentation of how data is or will be stored, processed and transmitted.

**g. Defining risk tolerance and accepting or rejecting risk related to security threats that impact the confidentiality, integrity and availability of Institutional Data.**

Information security requires a balance between security, usability and available resources. Risk management plays an important role in establishing this balance. Understanding what classifications of data are being stored, processed and transmitted will allow Data Stewards to better assess risks. Understanding legal obligations and the cost of non-compliance will also play a role in this decision making. Both the Office

# UNIVERSITY OF NORTHERN COLORADO

of Information Security and the Office of General Counsel can assist Data Stewards in understanding risks and weighing options related to data protection.

**h. Understanding how Institutional Data is governed by University policies, state and federal regulations, contracts and other legal binding agreements.**

Data Stewards should understand whether or not any University policies govern their Institutional Data. For example, the [Information Security Plan, Article 9](#) governs the protection of all Institutional Data. The [Policy on Student Privacy Rights](#) specifically addresses the privacy of student information. Other policies exist to help govern financial information, health information, etc. Visit the IM&T policy repository for a comprehensive list of University policies. Similarly, Data Stewards are responsible for having a general understanding of legal and contractual obligations surrounding Institutional Data. For example, the Family Educational Rights and Privacy Act (“FERPA”) dictates requirements related to the handling of student information. The Office of General Counsel can assist Data Stewards in gaining a better understanding of legal obligations.

**i. Define the data life cycle for Institutional Data as governed by University policies, state and federal regulations, contracts and other legal binding agreements.**

Data Stewards should understand whether any University policies govern the length of time that Institutional Data should be retained. All data should have an end of life when that data is no longer required to be held by law or regulation. Data is retired for two primary reasons, preservation of University resources and to limit liability. A comprehensive plan should exist to track Institutional Data from the point it enters the University to the time that it is deleted. All Institutional Data should have a defined date when it is retired and disposed of as per the [Information Security Plan, Article 9](#). The data life cycle should also include the transition from active use to storage (including secure storage if the data is classified as Private or Restricted).

---

## **Data Custodian**

A Data Custodian is an employee of the University who has administrative and/or operational responsibility over Institutional Data. In many cases, there will be multiple Data Custodians. An enterprise application may have teams of Data Custodians, each responsible for varying functions. A Data Custodian is responsible for the following:

**a. Understanding and reporting on how Institutional Data is stored, processed and transmitted by the University and by third-party Agents of the University.**

Understanding and documenting how Institutional Data is being stored, processed and transmitted is the first step toward safeguarding that data. Without this knowledge, it is difficult to implement or validate safeguards in an effective manner. One method of

# UNIVERSITY OF NORTHERN COLORADO

performing this assessment is to create a data flow diagram for a subset of data that illustrates the system(s) storing the data, how the data is being processed and how the data traverses the network. Data flow diagrams can also illustrate security controls as they are implemented. Regardless of approach, documentation should exist and be made available to the appropriate Data Steward.

**b. Implementing appropriate physical and technical safeguards to protect the confidentiality, integrity and availability of Institutional Data.**

The Office of Information Security has published guidance on implementing reasonable and appropriate security controls for three classifications of data: public, private and restricted. See the [Policy for Data Classification](#) and the [Guidelines for Data Protection](#) for more information. Contractual obligations, regulatory requirements and industry standards also play an important role in implementing appropriate safeguards. Data Custodians should work with Data Stewards to gain a better understanding of these requirements. Data Custodians should also document what security controls have been implemented and where gaps exist in current controls. This documentation should be made available to the appropriate Data Steward.

**c. Documenting and disseminating administrative and operational procedures to ensure consistent storage, processing and transmission of Institutional Data.**

Documenting administrative and operational procedures goes hand in hand with understanding how data is stored, processed and transmitted. Data Custodians should document as many repeatable processes as possible. This will help ensure that Institutional Data is handled in a consistent manner. This will also help ensure that safeguards are being effectively leveraged.

**d. Provisioning and removing access to Institutional Data as authorized by the Data Steward.**

Data Custodians are responsible for provisioning and removing access based on criteria established by the appropriate Data Steward. As specified above, standard procedures for provisioning and removing access should be documented and made available to the appropriate Data Steward.

**e. Understanding and reporting on security risks and how they impact the confidentiality, integrity and availability of Institutional Data.**

Data Custodians should have a thorough understanding of security risks impacting their Institutional Data. For example, storing or transmitting sensitive data in an unencrypted form is a security risk. Protecting access to data using a weak password and/or not patching a vulnerability in a system or application are both examples of security risks. Security risks should be documented and reviewed with the appropriate Data Steward so that he or she can determine whether greater resources need to be devoted to mitigating these risks. The Office of Information Security Office can assist Data Custodians with gaining a better understanding of their security risks.

## Users

For the purpose of information security, a User is any employee, contractor or third-party Agent of the University who is authorized to access University Information Systems and/or Institutional Data. A User is responsible for the following:

a. **Adhering to policies, guidelines and procedures pertaining to the protection of Institutional Data.**

The Office of Information Security publishes various policies, guidelines and procedures related to the protection of Institutional Data and Information Systems. They can be found on the Office of Information Security [website](#). Business units and/or Data Stewards may also publish their own unique guidelines and procedures. Information on requirements unique to your business unit or a system you have access to can be found by talking to your manager or system administrator.

b. **Reporting actual or suspected vulnerabilities in the confidentiality, integrity or availability of Institutional Data to a manager or the Office of Information Security.**

During the course of day-to-day operations, if a User comes across a situation where he or she feels the security of Institutional Data might be at risk, it should be reported to the Office of Information Security. For example, if a User comes across sensitive information on a website that he or she feels shouldn't be accessible, that situation should be reported to the Office of Information Security. Additional notifications may be appropriate based on procedures unique to a business unit or defined by a Data Steward. It may be appropriate to notify a local security point of contact that will in turn coordinate with the Office of Information Security.

c. **Reporting actual or suspected breaches in the confidentiality, integrity or availability of Institutional Data to the Office of Information Security.**

Reporting a security breach goes hand in hand with reporting vulnerabilities. Once again, it may be appropriate to notify a local security point of contact that will in turn coordinate with the Office of Information Security.

---

## Additional Information

If you have any questions or concerns related to this Policy, please send email to the University's Office of Information Security at [matthew.langford@unco.edu](mailto:matthew.langford@unco.edu).

Additional information can also be found using the following resources:

# UNIVERSITY OF NORTHERN COLORADO

- [Information Security Plan, Article 9](#)
- [Policy for Data Classification](#)
- [Guidelines for Data Protection](#)
- [Procedure for Responding to a Compromised Computer](#)

## Revision History

Version	Published	Author	Description
1.0	2015/02/10	Matt Langford	Original publication.
1.1	2017/07/20	Matt Langford	Annual review. Updated links.
1.2	2020/08/12	Matt Langford	Review. Updated links.