# Internal Use Only UNADOPTED DRAFT



# Williamson County Information Technology

# **Access Control Policy**

Sensitivity: None Criticality: High Primary Type: Policy

# Summary

# **Purpose**

The purpose of this policy is to establish access controls to be applied to information systems in the interest of

- A. Protecting data, information, and information systems integrity
- B. Preserving restricted access to sensitive and confidential information, and
- C. Ensuring availability of information and information systems to those permitted to access and use them in performance of assigned or assumed duties

The primary objective for implementing access controls is to ensure that users accessing information systems are doing so within the scope and authority of their functions. This is a necessary safeguard against unintended or unwarranted modification of data and information contained within those systems. It is also a safeguard against unauthorized disclosure of information protected by law. This policy provides guidance for the management and use of access controls regulating access to Williamson County information systems.

# Scope

This policy is platform and technology neutral and applies to all information systems used by Williamson County for conducting county business. It applies to all users as defined in this document below.

<u>Disambiguation: Except for below headings addressing physical access to server rooms, this policy does not apply to physical or perimeter access to county-managed facilities. Physical access policy direction and documentation shall be provided and managed by Williamson County Facilities.</u>

# **Definitions**

### **Access Controls**

The processes, rules and deployment mechanisms that control access to information systems, resources, and physical access to premises

#### **Administrative Controls**

Documented and adopted policy, standards, procedure, processes put in place to help uniformly regulate operations and controls that are not implemented by technology

### **Application Owner**

Employee(s) that have been designated the primary manager(s) of an information system

### Asset and Service Management System / ITIL System

ServiceNow

#### Authentication

The act of verifying the identity of a user and/or the user's eligibility to access information systems

#### **Business Associate**

A non-county-employed individual or organization performing functions, activities, or services on behalf of Williamson County

#### Department

Unless specifically noted otherwise, the use of the word "department" or related forms of that word includes both Commissioners Court departments and all elected offices that utilize the Williamson County technology infrastructure.

#### **Department Head**

A user or employee responsible for fiscal activities under the budget cost center(s) for which they have signature approval authority (or) the chief official responsible for the activities within the domain of their primary jurisdiction and charter

### **Department Liaison to ITS**

A non-ITS user or employee who is not a department head, but is delegated the authority to make decisions regarding identity assignment, system configuration, or administration of non-ITS-managed information systems

# **Employee Asset / Hiring Manager**

A department level employee responsible for ServiceNow asset management requests, asset assignments, and termination of asset access.

#### **ITS-Managed Information System**

An information system that is managed or administered by Williamson County ITS (e.g., Kronos, Telestaff, Oracle, Microsoft 365, Agenda Quick, Performance Center).

# Identifier/Identity

A unique username or other mechanism assigned to an individual person for use in gaining user-level access to information systems or information

# Information System

Any technology used to collect, process, store, transmit, or display data in support of county department business objectives

# **Least Privilege**

A risk management concept wherein only the least amount of access needed to accomplish a business objective is enabled by default or subsequent authorization. The practice of least privilege is incorporated to ensure certain information or system functionality is not exposed to risk of compromise or misuse

#### **Mobile Device**

Any portable information system used in support of county business objectives. Examples include, but are not limited to, smart phones and tablets, but **do not** include laptop computers

#### **Multi-Factor Authentication**

A combination of more than one authentication method, such as token and password (or personal identification number [PIN] or token and biometric device)

#### Non- ITS Managed Information System

An information system that is NOT managed or administered by Williamson County ITS

#### **Password**

A protected, generally computer-encrypted string of characters that authenticate a computer user for access to a computer or information system

#### **Peripheral Hardware Device**

An auxiliary device that connects to and works with a computer to (A) put information into it or (B) get information out of it for purposes of enhancement of desired function or result. May include data storage device (USB), audio, video, networking, or communications device connected to a computer wirelessly or by physical connection

## **Privileged Account**

A user account that enables an individual to establish or modify identification or authority credentials, access rules, production applications, application feature sets, operating system functions or network parameters and rules

#### **Restricted/Confidential Information**

Information or data classified as Confidential by Williamson County Data Management Policy

#### Service Account

A user account that is created explicitly to run a particular function or service on an operating system for an application

### Service Management System / ITIL System

ServiceNow

#### Single Sign On (SSO)

An authentication scheme that allows a user to log in with a single ID and password to any of several related, yet independent, information systems. True single sign-on allows the user to log in once and access services without re-entering authentication factors

#### **System Administrator**

A user(s) who manage(s) the operation of an information system or particular electronic communication service

#### **Technical Controls**

The policies, procedures, organizational structure, and electronic access controls put in place to help ensure security (confidentiality, integrity, and availability) of information systems

#### **Technology Asset**

Any technology device or software/software license/software subscription used in the performance of assigned duties or connected to any network paid for by Williamson County or maintained by Williamson County Information Technology Services (ITS)

### **Termination Request**

A request to cancel all user access to information systems due to departure of the individual from Williamson County

#### User

Any employee, elected official, volunteer, intern, external agency employee, vendor, contractor, or 3<sup>rd</sup>-party that accesses Williamson County information, information system(s) or devices(s)

#### **User-Level Access**

Any attempt to access an information system or obtain information initiated by an individual person

# **Roles and Responsibilities**

- Users are required to adhere to this policy while using any county information system.
- Elected Officials and Department Heads are required to ensure all employees are informed of this policy and that each employee fully understands and undertakes to comply with this policy.

# **Policy**

For both ITS-managed and non-ITS-managed information systems, administrative and technical controls shall be adopted to ensure the security of information systems in the interest of preserving the integrity, confidentiality, and availability of the data within those systems. This policy and supporting standards and procedures define minimally necessary parameters for managing access control.

Supporting department level standards and procedures may build upon these minimum parameters but must not conflict with this policy and associated standards.

#### A. Access Control

- 1. General Principles
  - a. User Identity
    - i. All users shall be assigned a unique username (identity) by Williamson County ITS.
    - ii. A unique email address shall be associated with each user identity assigned to employees by Williamson County ITS on or shortly after their date of hire and communicated to the employee via Williamson County Human Resources.
    - iii. The identity assigned by ITS shall be the representation of a user for purposes of regulating access and permissions as well as for tracking cyberactivity.
  - b. User Password(s)
    - i. Temporary passwords shall be changed after one use.
    - ii. Passwords shall be managed in accordance with <u>Williamson County Access Controls</u>
      Standard and Procedures
    - iii. Passwords for <u>any</u> information systems shall be reset if there is reason to believe that a user's account has been compromised.
  - c. Least Privilege and Role Based Access, Temporary Elevation of Privilege
    - i. Employees shall be granted the lowest level of permissions necessary to accomplish assigned duties efficiently
    - ii. Temporary elevation of privilege may be extended for higher-level administrative or temporary duty assignments

- iii. Such temporary changes in permission shall define an explicit and reasonable time constraint, and shall be documented:
  - 1. By electronic logging within the information system(s) or
  - 2. Within the ITS Service Management System (i.e., as an asset assigned to the employee by the Employee Asset / Hiring Manager)
- 2. Hardware Access to Information Systems
  - a. **ALL hardware devices not obtained from ITS, including hardware drivers,** connected to Williamson County information systems shall be authorized formally by ITS in writing.
  - b. Hardware that is capable of being monitored for security purposes shall be monitored by security monitoring information systems deployed by ITS.
  - c. TRUST CERTIFICATES: Computers normally able to access the Williamson County network shall be isolated from access to the network if not logged in to the network for a time period defined in Access Controls Standard and Procedures. Following the defined period of inactivity, users of these devices shall not be able to use the devices without ITS intervention.
  - d. Hardware that is discovered to be deployed without the documentation required by this policy shall
    - If there <u>is apparent threat</u> to the cyber environment: be subject to being disabled by ITS and quarantined until the hardware can be deemed secure for use within the Williamson County environment.

Affected department head(s), elected official(s), and/or department liaisons to ITS shall be immediately notified by a member of ITS management of any unauthorized device upon disabling and quarantine.

OR

- ii. If there <u>is no apparent threat</u> to the cyber environment: ITS shall notify the affected department prior to disabling. The department may request an exception for continued use while the device is assessed for security approval.
- e. Security assessments shall be conducted and dispositioned in cooperation among departments and ITS.
- 3. Physical Access to Server Rooms and Data Centers
  - a. Physical access to rooms containing servers shall be restricted to authorized personnel.
  - b. No equipment other than approved equipment or devices shall be introduced to, removed from, or modified within the Williamson County network environment, including server racks or connections within server rooms, without consent in writing from Williamson County ITS.
- 4. Shared Devices Caution
  - a. Shared devices <u>may</u> incorporate the use of Single Sign On (SSO) for employee access to certain Information Systems (e.g., Office 365, Oracle). To avoid inadvertent unauthorized access using identities of others, users shall ensure that they are authorized to use the account to which they have access.

- 5. Management and Inventory of User Access
  - a. Granting and Revocation of Access to Information Systems shall be in accordance with the Williamson County <u>Access Controls Standard and Procedures</u>.
  - b. Permission to access ITS-managed information systems shall be recorded in the employee's list of assigned assets in the Asset and Service Management System / ITIL System
- 6. Foreign Travel Notification shall be made for users <u>working</u> or <u>accessing work-related</u> content from locations outside of the United States.

#### **B.** Authorized Identity

- 1. Individual User Accounts
  - a. Shall be used for specific information system access and record creation or modification
  - b. The use of technology access controls shall be applied where possible (e.g., session idle timers, IP access restrictions, password complexity rules, multi-factor authentication, Single Sign On)
- 2. Multiple Factor Authentication (MFA)
  - a. Only approved methods of MFA will be accepted as defined in the <u>Access Control Standards</u> and <u>Procedures</u>.
  - b. User accounts with access to information systems containing **Confidential** data as defined in the Williamson County <u>Data Management Policy</u> from outside of the county-managed network shall be subject to ITS-approved multiple-factor authentication and comply with the <u>Access Controls Standard and Procedures</u>, and current CJIS Policy.
- 3. Generic User Accounts
  - a. Are strongly discouraged, AND
  - b. Shall be inventoried and maintained by ITS within Active Directory, AND
  - c. Be assigned a documented owner with an individual user identity
  - d. Shall comply with the <u>Access Controls Standard and Procedures</u>
  - e. May be subject to compensating security controls (e.g., limitation of permissions)

#### 4. Service Accounts

- a. Shall be associated with application owners or a system administrator
- b. Shall be audited at least annually by ITS or at the direction of ITS
- c. Shall comply with the <u>Access Control Standards and Procedures</u>
- 5. System Administrator, Auditor, and Privileged Accounts
  - a. System administrator(s) shall be documented in the approved ITS software asset inventory
  - b. Administrator accounts shall be associated with active users.
    - i. Credentials used to access information systems or network components **shall not be defaults** established by the manufacturer.
    - ii. Default credentials from the manufacturer shall be changed, deleted, or otherwise disabled upon receipt and installation of the information system.
  - c. Administrator accounts shall use multi-factor authentication where available
  - d. System Administrators are responsible for the management of Privileged Accounts.
  - e. User Access and Least Privilege Audits

- i. Williamson County ITS shall ensure a review of users with administrative privilege on all ITS-managed information systems is conducted at least annually
- ii. For non-ITS-managed information systems, department heads are responsible for annual review of users with administrative privilege to ensure compliance with least privilege.

# **Exceptions**

Exceptions to technology-related policies, standards, and procedures must be documented via the Policy Exception Procedure and approved by the department head of the department requesting the exception, and by Williamson County ITS. Certain exception may require authorization by or consultation with Williamson County Human Resources, Purchasing, Facilities, Legal Counsel, Risk Management, Auditor's Office, Budget Office, or Commissioner's Court.

# **Violations**

Violations of this policy are subject to immediate remediation in the interest of the security of county assets and resources. Immediate remediation may involve quarantine of hardware from connection to Williamson County Information Systems.

Violations of this policy may constitute concurrent violation of the Williamson County <u>Acceptable Use</u> <u>Policy</u>, and result in escalating disciplinary actions up to and including termination of employment.

Misuse or abuse, intentional or unintentional, malicious, or benign, of electronic systems and services may result in the temporary suspension or permanent revocation of user credentials and disciplinary action, up to and including termination of employment.

# Related Policies, Titles, Forms, and Authorities

Acceptable Use Policy
Access Controls Standard and Procedures
Data Management Policy
Foreign Travel Notification Standard and Procedure
Foreign Travel Notification Form

### **Contact Office**

Except as otherwise stated herein, the contact for questions or clarifications pertaining to this policy may be directed to a user's department leadership. Department leadership should contact the ITS Service Desk for appropriate routing. ITS Service Desk hours are 0500 – 2000 on county working days.

Employee Portal: ServiceNow
Email: servicedesk@wilco.org

Phone: 512-943-1456

#### **Administrative Notes:**

<u>Policy Class</u>: Risk Management <u>Policy Family</u>: Information Security

Policy: Access Control

Responsible: ITS Director of Policy

Accountable: ITS CIO

Consulted: Williamson County Risk Management, Legal Counsel

Informed: All Users, with Attestation

# **Revision History**

Version	Date	Description
1.0		Policy Adoption by Williamson County Commissioners Court
0.1	10/25/22	First draft towards ITS GRC Engineering, CIS, NIST compliance with input
		from Human Resources, Risk Management, Legal Counsel