Desktop, Laptop, and Portable Device Data Classification System Requirements

September 12, 2013

Purpose of this document

This document outlines and provides an explanation for some of the most important and possibly contentious elements of the proposed data classification system (DCS) for computers, tablets, smartphones, and other portable storage devices such as flash drives and portable hard drives. For the purpose of this document, the term "device" is used generically to describe all types of end-user computers and devices.

This document is intended to provide information about device security and use requirements when such devices are used for work purposes, whether owned by the University or by an individual. It should be noted that it is critical to manage personally-owned devices when used for work purposes in close accordance with the DCS. Improper management of personally-owned devices pose similar risks to University information and data.

Level 1 and Level 2 information & data

Devices that only store or access information intended for public consumption or that store or access information/data that is not restricted or confidential in nature, such as budgets, memos, etc.

These requirements establish a security baseline for management of all devices.

1. A qualified IT professional must setup/provision devices. Users must not change or work around established security settings and security software.

Some may argue that if the data/information on a device is intended for public consumption, there is no need to professionally manage the device because information is not at risk. However, compromised devices can have a negative impact on other devices, systems and networks so they must be managed and maintained in accordance with basic security standards at all times. IT support staff will be responsible for adherence to established standards.

- 2. Ensure device access is handled securely:
 - a. Access devices with full operating systems (i.e., laptops and desktops) via a user's login ID and strong password.
 - b. Access devices with limited operating systems (i.e., certain tablets and smart phones) with a PIN or password. Very simple PINs (i.e., 1111, 1234, etc.) should be avoided.
- 3. Devices must not be used as servers.

The University already has a <u>DCS for servers</u> that includes more stringent security settings and risk mitigation tools. End-user devices must not be used as servers.

4. Devices used for work purposes must use Virtual Private Networking (VPN) or other secure connection/transmission technologies when connecting via a public or unsecured wireless network.

Devices, information and data can be compromised when attached to unsecure or untrusted wireless networks. VPN and other secure technologies can mitigate this risk.

5. Devices should not be used as a hotspot for other devices to connect to the Internet.

As with the use of unsecured wireless networks, opening up a device for other users to "join" in order to connect to the Internet subjects both devices to unnecessary security risks.

Lock all devices (i.e., make inaccessible by unauthorized users) and physically secure portable devices when unattended.

Unlocked devices provide access to systems and applications by unauthorized users and are more likely to be stolen as they are more valuable in an unlocked state.

Laptop and computer peripheral theft is a worldwide problem. The University receives numerous reports of stolen laptops and computer cases. In turn, computer cases often contain flash drives containing University and sometimes personal information and data.

 Store all original and/or current versions of data, information, documents, etc. on a University-owned, provided or endorsed system (server) rather than stored on the device.

This requirement is intended to ensure that original and current copies of work-related information and data are always available to both individual employees and to the University in general. Device failures are common and experience has shown that information/data on a failed device is often unrecoverable. University or departmental application, file and storage servers provide a higher level of assurance for information/data availability and recovery.

8. Device encryption and/or password protection of sensitive files stored on the device is recommended.

The central IT department at each campus has encryption tools and services available to encrypt devices. If your device is encrypted and subsequently lost or stolen, at least the information and data on the device will not be accessible. Consult with IT support staff before encrypting a device.

9. Report lost or stolen devices to the Information Security Office and to Law Enforcement if appropriate. This is a restatement of an existing policy.

The University is often required to report the loss of certain types of information/data to state and federal authorities. Furthermore, the information security offices at each campus work in conjunction with law enforcement to try to recover devices.

Level 3 - Restricted information & data

Devices that store or access restricted information/data. Examples include but are not limited to student data protected by FERPA, other forms of personally identifiable information (PII) and personnel/HR information and records.

All requirements detailed previously in this document apply to level 3 devices as well as the following additional requirements:

Special care must be taken when transferring, selling or otherwise disposing of systems that contain level 3
data to ensure compliance with University policies and procedures for surplus/disposal.

All disposal or transfer activities should be routed through IT support staff who understand how to best dispose of devices and have the tools to ensure they are wiped before transfer. It is important that personally-owned devices be completely wiped when they are no longer needed.

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2. Device encryption is strongly recommended, especially for portable devices.

The central IT department at each campus has encryption tools and services available to encrypt devices. If your device is encrypted and subsequently lost or stolen, at least the information and data on the device will not be accessible. Consult with IT support staff before encrypting a device.

3. International Travel

It is highly recommend that employees not travel internationally with sensitive or restricted data on their device(s). Consult the <u>information security travel standards</u> as well as your IT professional for additional assistance.

Level 4 - Highly Restricted information & data

Examples of highly restricted data include patient information (HIPAA), social security numbers, credit card numbers, and biometric data.

All requirements documented previously in this document apply to level 4 devices as well as the following additional requirements:

1. Must be managed by a qualified IT professional

2. Device encryption is required.

All devices storing or accessing level 4 information and data must be encrypted. Devices that do not support encryption are not authorized to access level 4 information and data. Typically, devices that can't be encrypted are obsolete and should be replaced with more current technology.

The central IT departments at each campus have encryption tools available for use on University-issued devices. Consult with IT support staff before encrypting a device.

3. Devices, if capable, must deploy an automatic wipe after a certain number of bad login attempts. Recommended wipe at 10 attempts.

Supporting Information:

Information Security Policy: http://www.umsystem.edu/ums/rules/bpm/bpm1200/manual_1203

UM Information Security Program: http://infosec.missouri.edu/

Information Security Officers: http://infosec.missouri.edu/admin/iso.html

Data Classification System (DCS): http://infosec.missouri.edu/classification/