

Office of Information Technology

Institutional Type: Administrative

Applies to: Faculty, staff, student employees, students, and volunteers

POLICY DATES

Issued: 2/8/2011
Revised Last: 4/13/2023
Edited by: Dave Smith
Reviewed: April 2023

This policy establishes the requirements for reporting and responding to information security incidents.

Definitions

Term	Definition			
Incident	An attempted or successful unauthorized access, use, disclosure, modification or destruction of information; interference with information technology operation; or violation of explicit or implied acceptable use policy. Examples of incidents include (but are not limited to): Unauthorized access of systems or data Inappropriate usage of systems or data Unauthorized change to computer or software Loss or theft of equipment used to store personal information or confidential University data Unwanted disruption or denial of service Interference with the intended use of university resources Compromised user account			
Serious Incident	An incident that may pose a threat to university resources, stakeholders, and/or services. Specifically, an incident is designated as serious if it meets one or more of the following criteria: Unauthorized disclosure Modification or destruction of personal information Involves legal issues Disruption of critical services Involves active threats Involves public interest 			
Personal Information	Is defined as a person's first name, first initial and last name in combination with any one or more of the following data elements: • Social security number • Driver license number or non-operating identification license • Financial account number or credit/debit card number in combination with any required security code.			
Incident Response Team	Team comprised of key administrators that meet quarterly on a regular basis and called together when an incident has occurred. Key administrators include VP of Business Affairs, Controller, VP of Marketing, Director of IT for Security, CIO, Senior Network Analyst, Assoc. VP of Student Affairs, Asst. VP and Registrar, etc.			
Ransomware (Continued)	Ransomware is malicious software that covertly encrypts your files—preventing you from accessing them—and then demands payment for their safe recovery. Like most tactics employed in cyberattacks, ransomware attacks can occur after clicking on a phishing link or visiting a compromised website. Ransomware attacks happen similarly to other malware-based attacks. The threat actors conducted targeted spear phishing attacks. The user clicks on a link in the phishing email that instructed the user to install malicious malware software. Typical Delivery Methods			

Office of Information Technology

Applies to: Faculty, staff, student employees, students, and volunteers

Term	Definition		
	The first step of any ransomware attack is to get the malware installed on the host system. This typically occurs using specific techniques for initial access:		
	Spear phishing—victims receive an attachment or link that they click		
	 Drive-by—an attacker is able to exploit a vulnerability in the web browser or related applications 		
	• Exploitation —an attacker is able to exploit a vulnerability and gain access to a remote system or allow the ransomware to propagate automatically		
	 Replication through removable media—this also includes networked media that ransomware encrypts at the same time as it infects the victim 		
	Valid accounts—an attacker has valid credentials to the target system and can authenticate to it		

Policy Details

This policy formalizes the requirements for reporting and responding to information security incidents. It serves to minimize the negative consequences of incidents and to improve the University's ability to promptly restore operations affected by such incidents. It ensures incidents are promptly reported to the appropriate officials, that they are consistently and adequately responded to, and that serious incidents are properly monitored.

Employees must be aware of their responsibilities in detecting security incidents to facilitate the incident response plan and procedures. All employees have the responsibility to assist in the incident response procedures within their particular areas of responsibility. Some examples of security incidents that an employee might recognize in their day to day activities include, but are not limited to:

- Theft, damage or unauthorized access (e.g., papers missing from their desk, broken locks, missing log files, video evidence of a break-in or unscheduled/unauthorized physical entry).
- Fraud Inaccurate information within databases, logs, files or paper records.

When possible, the Office of Information IT Technical Services staff will abide by this standard and the Incident Response Plan to mitigate the threat. In an urgent situation requiring immediate action and leaving no time for collaboration, the Executive Director of IT & CIO, VP of Business Affairs or Director of IT for Security or designated staff is authorized under this Policy to disconnect any affected device from the network, and to assess vulnerabilities and verify safeguards of university resources.

Roles and Responsibilities

University-related persons have the following primary roles and responsibilities in connection with incidents:

Users of University Resources

- Promptly report actual or suspected incidents to the Office of Information Technology.
- If the Office of Information Technology is unavailable or unable to correct an incident, disconnect any affected device's network connection (the Ethernet cable, disable wireless, but not the power supply) and report the incident to the Director of IT for Security, Executive Director of IT & CIO or VP Business Affairs. In addition, if the incident involves
 - Suspected unauthorized access, theft of university computing equipment or information, or another
 possible crime. Also report the incident to the University of Mount Union Campus Security Department
 and to local authorities if it occurred away from the main campus.
 - Personal identifiable information
 - o Payment cardholder data.
- If a serious incident occurs, report it to Director of IT for Security, Executive Director of IT & CIO or VP of Business Affairs.

Office of Information Technology

Applies to: Faculty, staff, student employees, students, and volunteers

- Assist various parties to resolve the incident and help improve practices and prevent or minimize the occurrence
 of such incidents in the future.
- In the course of reporting, tracking, and responding to an incident, protect and keep confidential any confidential university data or personal information.
- Document any information you know while waiting for appropriate personnel. If known, this must include date, time, and the nature of the incident. Any information you can provide will aid in responding in an appropriate manner.

IT Security/Technical Services Personnel/ UMU Security Personnel

Evaluate and respond to incidents on a timely basis to prevent additional loss of or harm to university resources, in accordance with University policies.

- Assist various parties to resolve the incident and help improve practices and prevent or minimize the occurrence
 of such incidents in the future.
- Following initial reporting and upon performing remedial actions for any serious incident notify Network Services
 of IT, Director of IT for Security, Executive Director & CIO or VP of Business Affairs for accurate closure of the
 problem report.
- Notify the affected user of remedial steps taken and recommended mitigating activities.
- In the course of reporting, tracking, and responding to an *incident*, protect and keep confidential any confidential university information or personal information.
- Quarterly scan for unauthorized wireless devices and report any found to the Network Services department for immediate deactivation.
- Maintain a problem report or other documentation of the incident.
- Communicate to the appropriate parties any actions that need to be taken by them, the reasons for them, the steps required to re-establish service and any relevant technical information about the incident.
- Initiate escalation procedures to the appropriate office or party as necessary.
- In the course of reporting, tracking, and responding to an incident, protect and keep confidential any confidential university information or personal information.

Executive Director of IT, Director of IT for Security and VP of Business Affairs

- Coordinate investigation of serious incidents and Initiate escalation procedures to the appropriate office, BOT or party as necessary
- Conduct all investigations in accordance with Federal and Ohio statues.
- All communications with law enforcement or the public will be coordinated by VP or Business Affairs or VP of Marketing.

Incident Response Team

- This team meets quarterly and anytime there is a suspected incident.
- This team completes an annual tabletop incident test and/or incident handler training and documents these
 events.

Incident Response Steps (Plan)

Phase 1: Detect/Analysis

- Determine whether incident has occurred
 - Document any indicators (sign that an incident has occurred)
 - Look for correlating information (logs, etc.)
 - Perform research (knowledge base/search engines)
 - o If evidence exist of an incident has occurred, inform Office of Information Technology and begin Phase II

Phase 2: Categorize incident

- · Identify the type of incident that occurred
 - A. Phishing/compromised credentials
 - B. Malware
 - C. Lost/Stolen Device/Lost or Stolen Data
 - D. Compromised Device Chain of Custody
 - E. Other

Office of Information Technology

Applies to: Faculty, staff, student employees, students, and volunteers

Phase 3: Category-Specific Containment/Eradication/Recovery/Documentation

A. Phishing/Compromised Credentials

- Client/End User
 - Inventory sites using those credentials
 - Change passwords for all sites
 - If any financial credentials were compromised
 - Notify credit agencies and place fraud alert on account
 - Contact Credit Card companies
 - Contact Bank(s)
 - Monitor accounts for suspicious activity
 - Check for malware on computer (see Phase 3B)
- Institution
 - Review access logs of any campus related servers
 - If accessed, determine what data has been compromised
 - Notify appropriate stakeholders affected by data breach working with VP or Marketing and VP of Business Affairs

B. Malware

- Use malware removal tools
- o Document and research type of malware, and how it affects device
- o Remove system restore points that may be infected
- o Ensure all system/security updates are downloaded and installed
- Ensure device has current active malware protection installed

C. Lost Device

- Determine ownership of device:
 - If University
 - University will notify police if device was stolen
 - If Client
 - Client should notify police if device was stolen
 - If device has cell-service, should contact provider to disconnect account (after tracking/wiping has been attempted)
- Is the device trackable?
 - If so, try to determine location of device for recovery of device
- Can the device be remotely wiped?
- o Can the device be remotely locked?
 - If so, lock the device until it is recovered.
- Continue to Phase 3D for compromised device chain of custody

D. Compromised Device Chain of Custody

- o Document length of time the device was out of chain of custody
- o Was device password protected?
 - If no, assume data on device is potentially compromised
 - If yes, proceed to next step
- o Was device encrypted?
 - If no, assume data on device is potentially compromised
 - If yes, proceed to next step
- Has the device been recovered?
- Prevent personal info access
 - Reconstruct a list of apps used on the device
 - Change appropriate passwords
- Inventory potential data breaches and notify stakeholders

E. Other

- Gather detailed information and decide best remediation approach
- For all categories, complete Phase 4

Office of Information Technology

Applies to: Faculty, staff, student employees, students, and volunteers

Phase 4: General Containment, Eradication, Recovery, Documentation

Focus on the containment, eradication and recovery of the incident. Provide documentation along the way. Keep Data Incident Log files updated.

Contact Information

- Lead IT Handler
- Affected Client
 - Name
 - o Role
 - o Department
 - Email Address
 - o Phone Number
 - Office Location

Incident Details

- Date/Time
 - When did the incident start:
 - When the incident was discovered/detected:
 - O When the incident was reported:
 - O When the incident was resolved/ended:
- Physical location of the incident:
- Current status of the incident
- Source/cause of the incident, including hostnames and IP addresses
- Description of the incident (e.g. how it was detected, what occurred):
- Description of affected resources (e.g., networks, hosts, applications, data), including systems' hostnames, IP addresses, and function:
- Prioritization factors (functional impact, information impact, recoverability, etc.):
- Mitigating factors (e.g. stolen laptop, etc.)
- Responses actions performed (e.g., shut off host, disconnected from network, etc.)
- Other organizations contracted (e.g. software vendor, credit agencies, etc.)
- Include any additional relevant information

Phase 5: Reporting

Prepare a written report to submit to Executive Director of IT, VPAA, President Council and BOT if necessary.

- Descript the incident in general terms and include the type of customer information that was subject of unauthorized access or use.
- What has the institution done to protect the information from further unauthorized access.
- Current status of the incident response
- Summary of the incident
 - Incident Handling Actions
 - Lot of actions taken by all handlers
 - Contact information for all involved parties
- · List of evidence gathered
- Incident Handler Comments
- Cause of the incident
- · Cost of the incident
- Business impact of the incident

Ransomware Response:

Ransomware can bring business processes to a halt and put critical data at risk. It is important to try to prevent them, by educating the campus community and putting processes in place to improve security.

User education is the first line of defense in our defense against ransomware. Employees and students should not click on suspicious links or visit websites that are known to carriers of malicious contents. The Office of Information Technology strive to remind users to be cautious. We include notices of emails that come from the outside and conduct annual training as well as regular phishing testing.

Office of Information Technology

Applies to: Faculty, staff, student employees, students, and volunteers

There are a number of steps that have been put in place to try to mitigate this threat. These steps include multi-factor authentication, firewall rules, network segmentation, review of account access, improved processes of creation of accounts, removal of admin rights to local devices, limiting access to mission critical data, encryption, etc. See Information Security Policy for more details.

Unfortunately, ransomware can still happen. Below are the general steps that would be taken in order to respond to a ransomware attack. When facing a ransomware attack, it's best to have a plan. The majority of ransomware attacks are initially spawned by malicious documents or malware.

- Begin to determine the impact of the ransomware
- · Remove systems that are impacted from network to reduce risk
- Gather the incident response team and contact authorities such as FBI, etc. for assistance and further direction.
- · Rebuild the system from known safe baseline
- Scan system with up-to-date antivirus solution
- · Block malicious domains identified
- Terminate malicious process
- Quarantine network traffic
- · Lock effected accounts and change passwords
- Block necessary IP addresses
- Identify and remove malicious email
- Block senders email address
- Determine to pay or not to pay most authorities will recommend not to pay and recover from latest safe backups.

If the incident is a breach of customer data, the following information should be included in a customer notice as directed by the GLBA.

- A general description of the incident and the information that was the subject of unauthorized access.
- A telephone number for further information and assistance.
- A reminder "to remain vigilant" over the next 12 to 24 months.
- A recommendation that incidents of suspected identity theft be reported promptly
- A general description of the steps taken to protect the information from further unauthorized access or us.

The notification process also includes notifying FSA at CPSSAIG@ed.gov the day of the breach. This is accordance the Student Aid Internet Gateway (SAIG), Department of Education.

Annual cybersecurity training is conducted and is a requirement that all employees take on an annual basis. This training is in effort to educate the campus community and assist us in our prevention efforts against cybersecurity attacks.

Responsibilities

Position or Office	Responsibilities
Office of Information Technology (Technical Services, Director of IT)	Update of policy and response to incident

Contacts

Subject	Office	Telephone	E-mail/URL
	Office of Information Technology	330-823-2854	IT@mountunion.edu
	Business Office	330- 823-6566	businessoffice@mountunion.edu

Office of Information Technology

Applies to: Faculty, staff, student employees, students, and volunteers

History

This policy was established in 2011 part of PCI rules and regulations.

All changes must be listed sequentially, including edits and reviews. Note when the policy name or number changes.

Issued: 2/8/2011 Revised: 4/13/2023 Edited: Dave Smith Reviewed: April 2023