



Information Technology

Subject: MALWARE PROTECTION POLICY
Scope: ALL MIDDLESEX COUNTY ITS SUPPORTED WORKSTATIONS, LAPTOPS AND SERVERS
Issued: September 26, 2023
Revised:

Purpose

The purpose of this policy is to outline the implementation and configuration of endpoint protection tools, user security awareness, early detection and mitigation security systems and ensure staff are aware of security policies in place on their IT assets.

Definitions

"(ITS) Asset" means any physical electronic device owned by Middlesex County, which may contain or have access to sensitive information such as files and emails or has considerable value and is uniquely identifiable via a serial number.

"Endpoint" any device which connects to a computer network, such as a server, workstation, or laptop.

"Grayware" is a potentially unwanted program (PUP), which is not obviously malicious and is not classified as a virus but can still be irritating or harmful. Common forms of grayware include Adware and Spyware.

"ITS" means Information Technology Services.

"Malware" is catch-all term for software which is designed to disrupt, damage, or gain unauthorized access to a computer system.

"Middlesex County ITS" is the department at Middlesex County responsible for procurement, maintenance, and support of Information Systems



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Policy

Middlesex County ITS shall ensure:

- a) Procedures and tools exist to guard against, detect, and report malicious software
- b) Middlesex County ITS personnel are trained and proficient in the use of the security solutions used to protect against malicious software
- c) Staff are aware of the security policies enforced on their workstations

Procedure

1. Antivirus Software / Endpoint Protection Tools

Antivirus and Endpoint Protection tools shall be configured according to best practices as defined by the software vendor, including:

- a) Any ITS workstation, laptop, and server supported by Middlesex County ITS capable of running an approved Antivirus/Endpoint Protection Tool shall have one installed.
- b) Antivirus and Endpoint Protection Tools shall be configured to receive regular malware definition updates.
- c) All Antivirus/Endpoint Protection tools shall be configured to automatically scan files for potential security threats as they are created, accessed, modified, and deleted.
- d) Supported systems shall be configured to automatically perform a full scan of a device on a scheduled basis.

Staff shall not modify, disable, or tamper with Middlesex County ITS installed Antivirus/Endpoint Protection Tools.

2. Adaptive Defense and Quarantined Applications

Middlesex County ITS approved Antivirus and Endpoint Protection Tools operate using a concept known as adaptive defense. Adaptive defense allows these tools to identify threats as they occur without any prior knowledge of the threat itself.

Should an unknown software application be run on an ITS Asset, it may be automatically quarantined by the Antivirus and Endpoint Protection Tool. These quarantined



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applications are subject to review by Middlesex County ITS prior to them being allowed to run on an ITS Asset.

Additionally, adaptive defense allows an Antivirus and Endpoint Protection Tool to identify common actions or behaviors conducted on an ITS Asset. Should the behaviours become atypical, the system may flag them for review or prevent further action from being taken on the ITS Asset. Systems or services which have been flagged in this manner is subject to review by Middlesex County ITS to determine if the potential threat is legitimate.

3. System Quarantine

In accordance with the Middlesex County Incident Response Plan:

Should an ITS Asset be identified as infected with a threat including but not limited to; a virus, malware, trojan or ransomware, the ITS asset may be quarantined from the network, with all connectivity restricted.

ITS Assets quarantined in this manner will not be recoverable, including any saved or unsaved files stored on the ITS Asset.

In extreme cases, Middlesex County ITS may deem the ITS Asset unfit for purpose and recommend its disposal, destruction, and replacement.

4. Unsupported Critical Devices and Systems

Devices and/or Systems which are required to provide critical Middlesex County functions which are not capable of running an Approved Antivirus/Endpoint Protection tools shall:

- a) Have best-effort Antivirus/Endpoint protection tools (such as an older version or a protection tool from an alternate vendor) installed and enabled, and;
- b) Be replaced or upgraded as soon as reasonably possible, with a timeline to be determined through discussion of Middlesex County ITS and the Department Head for which the function or service is performed, and;
- c) Remain isolated from other systems or services except for systems or services which are required for the Unsupported Critical Device to function



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5. Least Privilege

To mitigate potential spread during an incident, all staff accounts shall be configured according to the principle of least privilege, as defined in the Middlesex County IT Access Control Policy (IT Policy 12.01).

6. Email Attachment Restriction

All inbound email messages to sites supported by Middlesex County ITS are subject to automatic scanning for malicious links or attachments.

Emails which contain potentially malicious links or attachments are automatically quarantined for further review. Should the quarantined email later be determined to be legitimate, it can be released to the intended recipient.

7. Macros and Scripting/Automation

Documents capable of performing automatic actions using scripting or macros, shall be subject to review by Middlesex County ITS prior to their use.

Productivity suites which support the use of these scripts or macros shall be configured to automatically prevent their use until action is taken to explicitly trust the document containing such script or macro, with approval from Middlesex County ITS.

8. Software Installation and Security Assessments

All software, extensions, or applications installed on Middlesex County computer systems shall be installed by Middlesex County ITS staff or a Middlesex County ITS approved third-party software vendor, unless prior approval has been obtained through the Middlesex County Director of ITS.

Middlesex County ITS may conduct security assessments on any software, extension or application requested by staff prior to their installation.

9. Training and Education

Middlesex County ITS conducts regular scheduled automated phishing campaigns. These campaigns are intended to foster staff awareness of potential cyber-security threats and the methods in which they may be distributed.



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Middlesex County ITS encourages all staff who may be uncertain if an email, website or file is suspicious to contact the Middlesex County Service Desk for further assistance via email at servicedesk@middlesex.ca or via telephone at 519-930-1001 xt 3000.

Security Awareness Training is provided to staff by Middlesex County ITS using third-party vendors and support tools.

10. Compliance

Middlesex County ITS enforces this Policy and the related standards at all times. Anyone who has reason to suspect a deliberate and / or significant violation of this Policy is encouraged to promptly report it to the Middlesex County ITS Service Desk. Policy violations that come to the attention of the ITS Service Desk will be escalated to the Director of ITS.

Staff in violation of this policy may be subject to disciplinary action up to and including termination.