SUMIT

IT SECURITY EVENT SERIES

WEEKLY IN OCTOBER

Reimagined

INFORMATION AND TECHNOLOGY SERVICES
UNIVERSITY OF MICHIGAN

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Two Capabilities, One Goal: Email Security with Area 1 and Virtru

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The Current Threat Landscape

Phishing, or the practice of sending someone a fake or spoofed message in order to get them to reveal sensitive information or to install malicious software, continues to be a threat, and more specifically a source of ransomware infections. Malware taking advantage of phishing can lead to:

- Loss or corruption of data
- Reputational and financial harm
- Legal and/or regulatory issues

What is Area 1?

- A cloud-based anti-phishing solution
- It works with the U-M Gmail system to detect and mitigate threats in email
- Is customized to meet our needs
- Used across U-M, including by Michigan Medicine

Complements Existing Capabilities

- Area 1 crawls the internet identifying the websites, tools, and techniques used by attackers
- It uses those characteristics to calculate the risk of messages
- It flags malicious messages so that they are delivered to a user's spam folder
- By automating anti-phishing, it frees up security staff to focus on work that requires their expertise

What Is the Goal of a Phish?

Often driven by a false sense of urgency or with the intent to provide immediate benefit, the intended actions in a phish include:

- Updating a password
- Promise of personal financial benefit
- Verifying an online account

What Does Area 1 Look For?

Area 1 works by identifying specific, high-risk characteristics of email which include:

- **Domain spoof:** Appears to originate from U-M
- **Name spoof:** Poses as a U-M trusted and known individual
- **Attributes spoof:** Provides copycat logos or branding
- **Known attack sources:** Existing threat actors and campaigns

Area 1 Anti-Phishing

Area 1 Can’t Do it Alone

Since the roll out in March, Area 1 has processed 700M+ messages and mitigated 700K+ malicious messages

Area1 is just part of an overall strategy. Keeping systems and data secure includes a comprehensive set of steps including:

- **Using two-factor authentication whenever possible**
- **Keeping hardware and software up-to-date**
- **Backing up data and managing remote access**

What Can *I* do to Protect My Email?

What is Virtru?

- An easy to use, email security enhancement tool for Gmail
- Simplifies end-to-end email encryption
- Is **available at no cost** to all Google at U-M Gmail users *(U-M Faculty, Staff, and Students using Gmail)*

NOTE: *Michigan Medicine email users can use the encryption tool already provided by Michigan Medicine.*

What Virtru Does

- Encrypt email and attachments
- Prevent email content from being opened when forwarded
- Watermark attachments sent to recipients
- Set an email expiry date
- Revoke access to previously sent messages on demand
- Non-Virtru users can read and reply to messages you send them

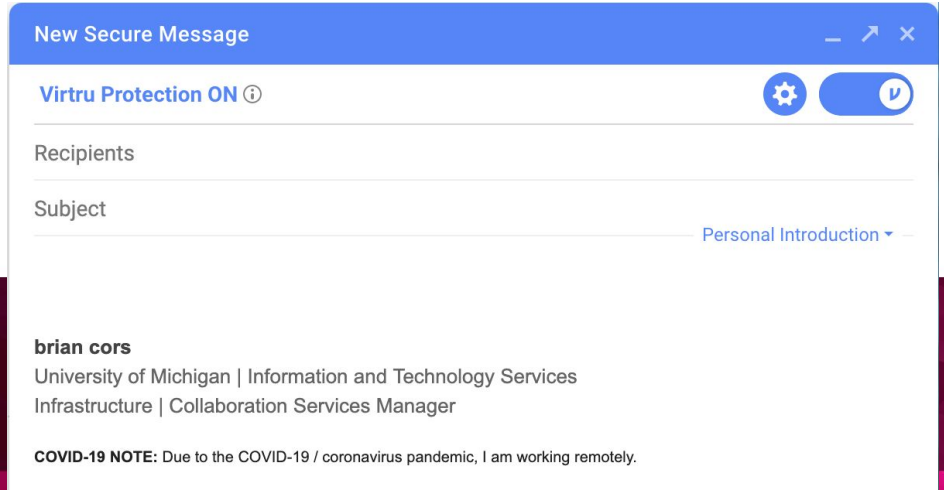
Getting Started with Virtru

In order to use Virtru:

- Currently need to use Google Chrome and the Gmail web interface
- Install the Virtru Email Protection Google Chrome extension
- A free iOS or Android application is available for mobile devices *(NOTE: Not recommended as primary email app)*

Start Using Virtru!

Let’s get you started using Virtru. **Right now.**



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Use Cases

Use Virtru to encrypt your messages and control access to them. For example, encrypt emails that include:

- Personally identifiable information (PII), such as name, birth date, or address
- Excel spreadsheet attachment with U-M names and uniqnames or UMID numbers
- Grades and other student education records
- Approved for Export Controlled data*

Use Cases to Avoid

Some types of sensitive information **should not be sent via email**, even with Virtru encryption. For example, do not send email with:

- Payment Card Industry (PCI) data (credit cards)
- Certain types of regulated data, such as Federal Information Security Act (FISMA) data

Visit the U-M Sensitive Data Guide to understand what Virtru can be used for.

Things to Know

- Subject lines of email message are never encrypted
- Vitru available via Google Chrome and the Virtru extension
- Virtru will work with MCommunity groups
- Gmail may try to auto-translate decrypted messages
- You will periodically be asked to re-activate Virtru

NOTE: *MCommunity group sync currently happens at 2:00 EDT / 1:00 EST AM daily.*

Resources and Documentation

Sensitive Data Guide

- Virtru at U-M

Safe Computing

- Virtru: Added Security for Your GMail
- Phishing & Suspicious Email

Questions or Feedback?

Have questions or feedback?

Contact the ITS Service Center

https://its.umich.edu/help