

UTM INFORMATION SECURITY

CAMPUS COUNCIL – WEDNESDAY, JANUARY 24TH, 2018

LUKE BARBER, Acting Director, Infrastructure, Solutions & Security

UTM I&ITS

IT'S BAD OUT THERE

WE NEED TO HARDEN UP

HERE'S WHAT WE'RE DOING



DATA BREACH STATISTICS

DATA RECORDS LOST OR STOLEN SINCE 2013

9,198,580,293

ONLY 4% of breaches were "Secure Breaches" where encryption was used and the stolen data was rendered useless.

DATA RECORDS ARE LOST OR STOLEN AT THE FOLLOWING FREQUENCY



EVERY DAY

4,993,800



EVERY HOUR

208,075



EVERY MINUTE

3,468



EVERY SECOND

58

Prosecutors Open Criminal Investigation Into Equifax Breach

By TARA SIEGEL BERNARD SEPT. 18, 2017



RELATED COVERAGE



Cuomo Proposes Stricter Regulations for Credit Reporting Agencies SEPT. 18, 2017



Equifax Breach Prompts Scrutiny, but New Rules May Not Follow SEPT. 15, 2017

ANDY GREENBERG SECURITY 05.05.17 07:32 PM

HACKERS HIT MACRON WITH HUGE EMAIL LEAK AHEAD OF FRENCH ELECTION



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18 revelations from Wikileaks' hacked Clinton emails

NEWS CALGARY

University of Calgary suffers a data breach into employees' personal records

BY LAURA BOOTH, CALGARY SUN
 FIRST POSTED: SUNDAY, SEPTEMBER 27, 2015 09:07 PM MDT | UPDATED: SUNDAY, SEPTEMBER 27, 2015 09:07 PM MDT



University of Calgary campus. FILE PHOTO

TECH November 30, 2016 11:34 am Updated: November 30, 2016 11:56 am

Hackers disable Carleton University computer system, demand bitcoins

By Tania Kohut
 Senior National Online Journalist, Breaking News Global News

Comments Facebook 206 Twitter LinkedIn 286 Email Print



Carleton University's IT network has been attacked, with hackers demanding Bitcoin payment. THE CANADIAN PRESS/AP/Rick Bowmer

Listen A A +

Carleton University's IT network was taken over Tuesday, by hackers using

University of Calgary pays hackers \$20,000 after ransomware attack

SHAWN LOGAN
 More from Shawn Logan

Published on: June 7, 2016 | Last Updated: June 8, 2016 10:22 AM MDT



The University of Calgary paid a \$20,000 ransom in untraceable Bitcoins to shadowy hackers after a devastating malware attack.



Linda Dalgetty, the school's vice-president of finance and services, said the cyberattack that crippled multiple systems on May 28 used so-called ransomware, which locks or encrypts computers and networks until a monetary ransom is paid.



She said officials agreed to pay the ransom to ensure critical systems could be restored, but noted it will take some time for the university's IT staff to apply the encryption keys to the infected machines.

"What happens is you pay the ransom and the bad guys physically provide the keys," Dalgetty said Tuesday, noting more than 100 computers were affected by the virus.

UOFT ATTACK SURFACE

TRAFFIC

74260 ALL TIME WI-FI DEVICES PEAK

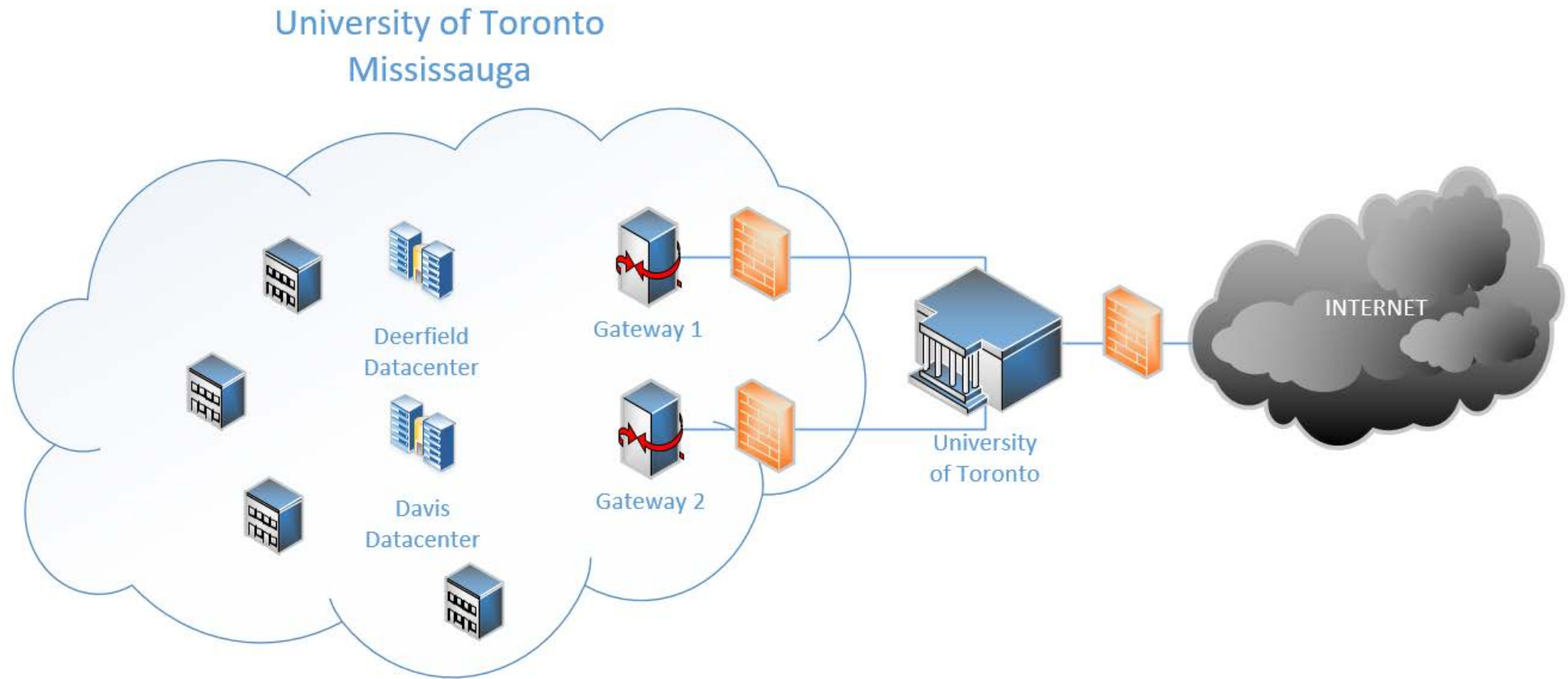
THOUSANDS OF RECON ATTACKS PER DAY, MILLIONS OF ATTACKS PER WEEK

EMAIL

1.5-3 MILLION EMAILS A DAY

1-2 MILLION FILTERED AS SPAM, 50K-600K VIRUSES FILTERED

NETWORK TOPOGRAPHY



HERE'S WHAT WE'RE DOING

I&ITS INFOSEC OPERATIONS

TRAINING AND AWARENESS CAMPAIGNS

OPERATIONAL/CRITICAL INCIDENT RESPONSE

GROWING THE TEAM

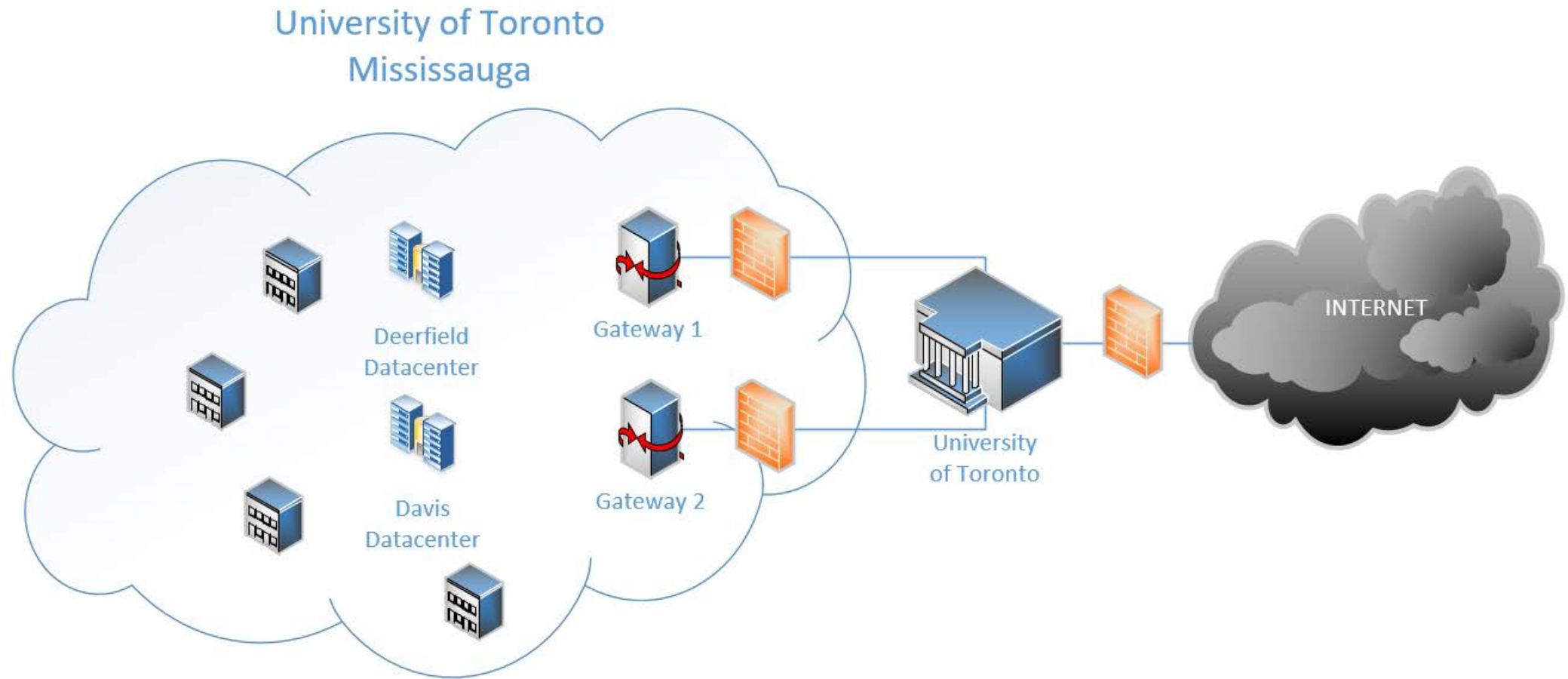
KPMG AUDIT

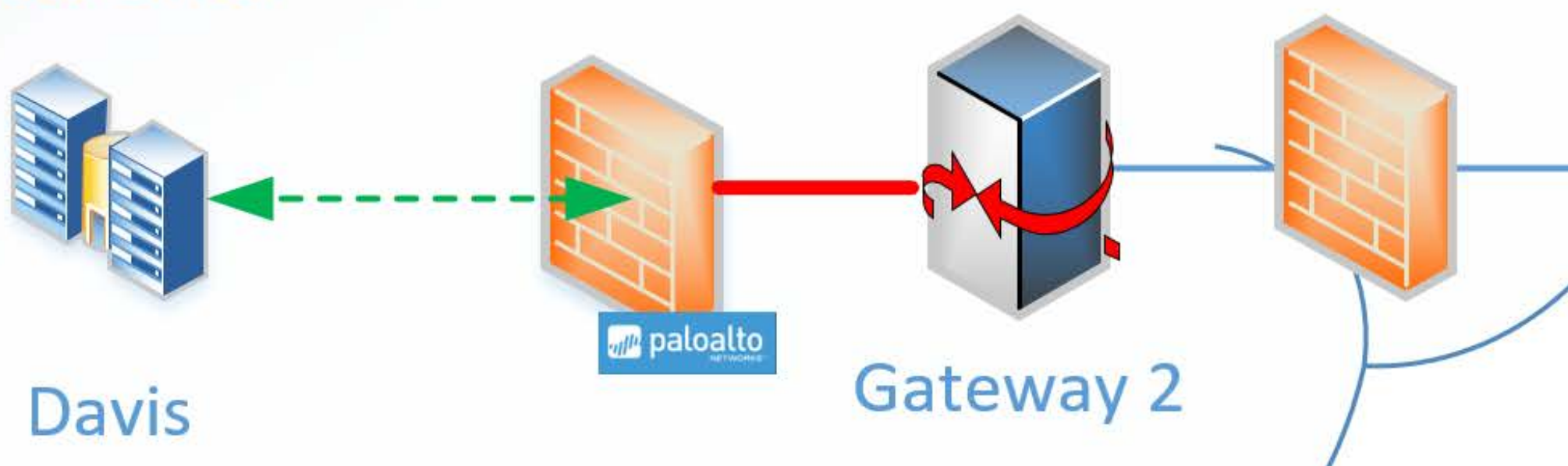
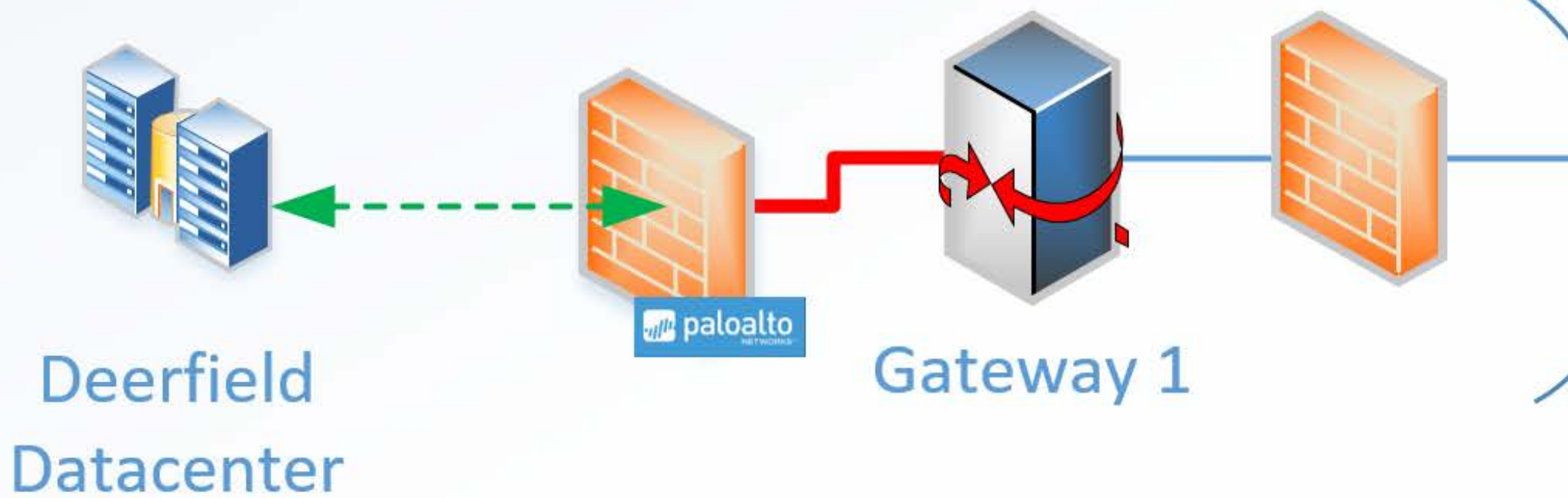
PERFORMED IN CONCERT WITH U OF T INTERNAL AUDIT

INCLUDED BROAD RANGE OF IT AND IS PROCESSES

FINDINGS BUILT INTO I&ITS ANNUAL GOALS AND OBJECTIVES

NETWORK TOPOGRAPHY





Administrative Authority

The President or designate shall have overarching responsibility for the protection of the University's Digital Assets. The President or designate is authorized to approve Procedures and Standards and to promote Guidelines for the protection of the University's Digital Assets.

Academic and administrative unit heads shall be responsible for ensuring the protection of Digital Assets within their units in accordance with this Policy and associated Procedures and Standards.

In order to ensure broad consultation in planning and decision-making processes, an **Information Security Council** (ISC) will be established by the President or designate. The ISC will: assist in the review of envisioned and unanticipated risks to the University's Digital Assets; collaborate with the President or designate to initiate information security initiatives; educate the University community on digital security best practices; and develop and recommend Procedures, Standards and Guidelines for the protection of the University's Digital Assets.

In support of these shared responsibilities, each unit shall in consultation with the ITS Information Security department, and others as appropriate, develop an Information Risk Management Program appropriate to the circumstances of the unit, to be approved by the unit head. The President or designate, in collaboration with the ISC, will review such programs to ensure compliance with this Policy and associated Procedures and Standards.

Procedures, Standards and Guidelines must be consistent with the University's mission and purpose, as well as all relevant University Policies and Agreements, including those dealing with the protection of academic freedom. The President or designate will provide regular updates to the ISC about progress in developing and implementing Procedures, Standards and Guidelines in support of this Policy.

THANK YOU!

LUKE BARBER, UTM I&ITS

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<HTTPS://UOFT.SERVICE-NOW.COM/UTM>

(MAKE SURE YOU HOVER TO DISCOVER!!!!)

Appendix

- U of T Acceptable Use of Information and Communication Technology
<http://www.provost.utoronto.ca/policy/use.htm>
- U of T Freedom of Information & Protection of Privacy
<http://http://www.fippa.utoronto.ca/>
- Access and Privacy Practices
<http://www.provost.utoronto.ca/Assets/Provost+Digital+Assets/Provost/Provost+Digital+Assets/Provost/fippa.pdf>
- UTM Digital Asset and Information Protection Guidelines
[http:// https://www.utm.utoronto.ca/iits/digital-asset-and-information-protection-guidelines](http://https://www.utm.utoronto.ca/iits/digital-asset-and-information-protection-guidelines)
- UTM Service Portal
<https://uoft.service-now.com/utm>