Overview
People, Process, Technology
Q&A
Top 5 in Canada
Top 150 in the world
Founded 1908, 112 years old
6 locations throughout Alberta
200,000+ Active Users
35,000+ Undergraduates
10,000+ Postgraduates
15,000+ Faculty & Staff
45,000+ devices on WiFi
130,000+ public IP’s
100gbps research links
3 data centers
People
Working From Home vs Working From the University

Awareness
Information Management
Privacy and Security
Information is the First Casualty
Misinformation
Fear, Uncertainty and Doubt
Source of Truth
Distributed and Decentralized (at the best of times...)
Target On Our Back
Process
Expedite

Governance, Privacy & Security Reviews

Privacy Impact Assessments
Virtual Private Networks
Remote Desktop Gateways
Virtual Desktop Infrastructure
Unique Users & Devices ≠ Concurrent Users & Devices
Built 10,000 user VPN service in 3 days
Focused on remote access use cases
Communicated use cases to campus
Collectively held our breaths...
vpn.ualberta.ca - Active VPN Tunnels

From 2020/03/01 08:13:00 To 2020/04/07 08:13:00

<table>
<thead>
<tr>
<th>Protocol</th>
<th>Current</th>
<th>Average</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>AnyConnect</td>
<td>380</td>
<td>312</td>
<td>948</td>
</tr>
<tr>
<td>WebVPN</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>IPSec</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>IPsec L2L</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Lessons Learned:
Bandwidth considerations
Cloud access rules
Shutdown buttons in start menus
Communications
Keyword searching is generating false positives
COVID specific malware/phishing is minimal
Same tricks, slightly different approaches
Thank-you!

Questions?

Gordie Mah - Chief Information Security Officer
Michael Spaling - Team Lead, IST Security

May 8, 2020 - ISACA Edmonton Chapter