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HIGHER ED & RESEARCH TECH SUMMIT

How to Skillfully Improve Your Security Posture with Existing Microsoft 365 Resources & Internal Staff

Our Presenters



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About Selkirk College



- Founded in 1966
- 9 geographically distanced campus (30 min – 4 hours drive)
- Over 2,000 student FTE 2023/2024
- High speed WAN campus interconnect
- Complex legacy infrastructure
- Thriving research department
- Programs ranging from Digital Fabrication to Blacksmithing

Challenges



- Small IT team
- Ever-expanding infrastructure needs
- New technology, new unknown challenges
- Covid!

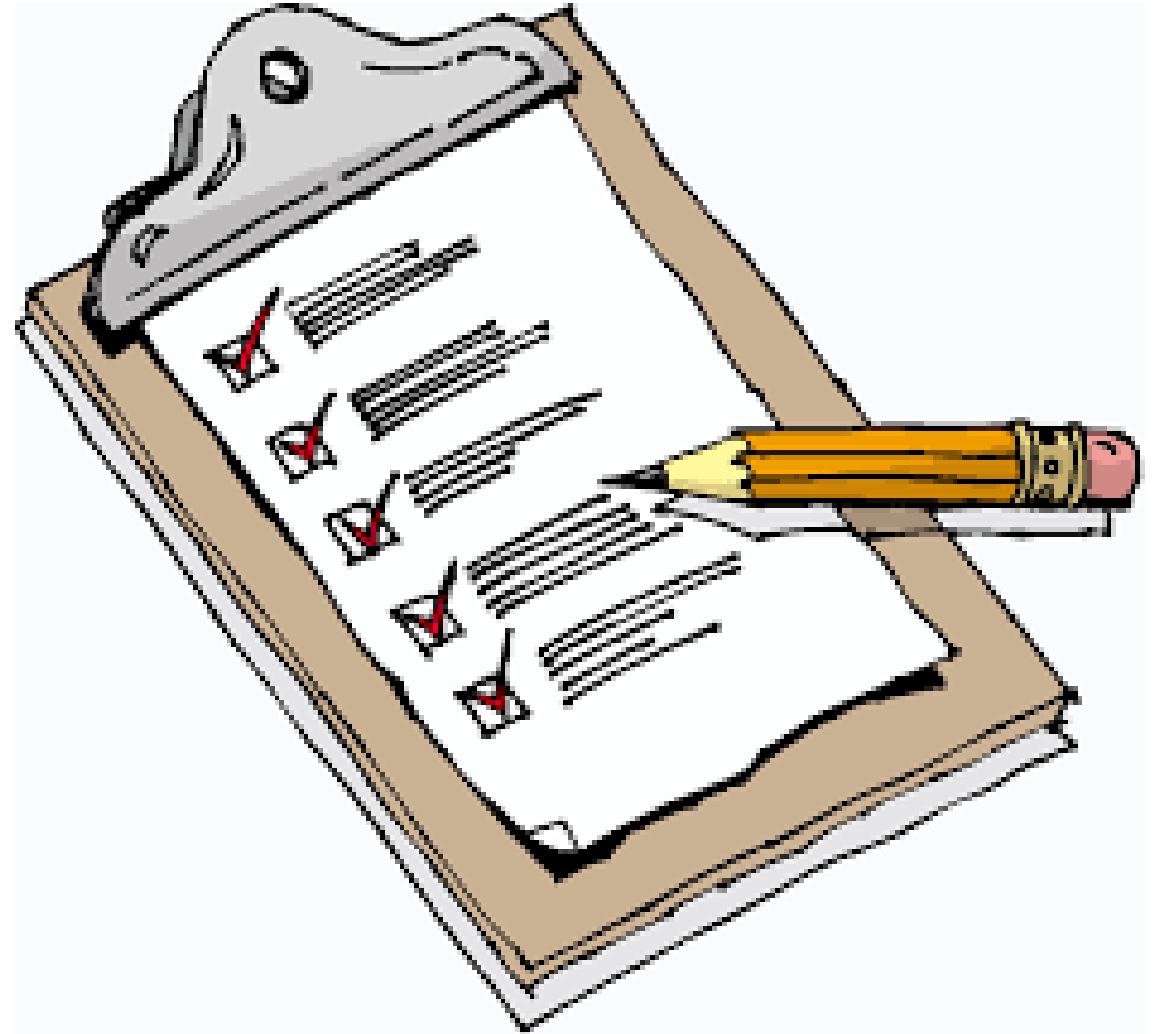
Our approach

- Formally assess your current state
- Train staff to fill in skill gaps
- Practice good operational hygiene
- Set aside time for security activities
- Know what to do if something bad happens
- Don't try to do it all yourself



Formal Assessment

- Takes “opinion” out of the equation
- Allows you to track progress
- Informed exceptions are OK
- Revisit exceptions on a regular basis



Microsoft Funded Workshops

- Endpoint Management and Security
- Microsoft Secure Identities & Access
- Defend Against Threats with Security Incident & Event Management (SIEM) Plus XDR
- Investigate & Respond to Risky Behavior
- Microsoft 365 Protect & Govern Sensitive Data
- Mitigate Compliance & Privacy Risks
- Microsoft Purview Portfolio



Threat Protection Workshop

Findings and Recommendations

Ed Hargrave
Steeves and Associates
December 9th 2021



CIS Control and Benchmarks



CIS Critical Controls® Version 8

18 top-level best practices containing 153 prioritized safeguards

CONTROL 01 Inventory and Control of Enterprise Assets	CONTROL 02 Inventory and Control of Software Assets	CONTROL 03 Data Protection
CONTROL 04 Secure Configuration of Enterprise Assets and Software	CONTROL 05 Account Management	CONTROL 06 Access Control Management
CONTROL 07 Continuous Vulnerability Management	CONTROL 08 Audit Log Management	CONTROL 09 Email and Web Browser Protections
CONTROL 10 Malware Defenses	CONTROL 11 Data Recovery	CONTROL 12 Network Infrastructure Management
CONTROL 13 Network Monitoring and Defense	CONTROL 14 Security Awareness and Skills Training	CONTROL 15 Service Provider Management
CONTROL 16 Applications Software Security	CONTROL 17 Incident Response Management	CONTROL 18 Penetration Testing

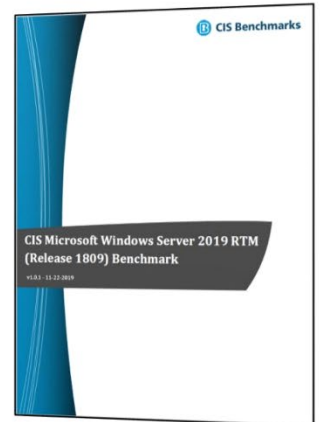
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CIS Benchmarks

Consensus-developed secure configuration guidelines

- 100+ CIS Benchmarks
- Covering 25+ vendor product families
 - Operating Systems, Server Software, Cloud Providers, Network Devices, Desktop Software
- Recognized by industry frameworks
 - FISMA, FedRAMP, PCI
- Community developed
 - CIS members, subject matter experts, security community experts, and technology vendors
- Map to CIS Critical Controls



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Train your staff to fill in skills gaps

- There are training resources available for every learning style.
- In addition to general awareness training, make sure you include role specific training for **IT staff** and **developers**
- Continue to mentor IT staff on an ongoing basis

[Province of BC Cyber Security Courses](#)



A screenshot of the British Columbia Cybersecurity Courses website. The page title is "Cybersecurity Courses" and it lists various online courses. The "Online Courses" section is expanded to show "Cloud" courses, including "AWS Training and Certification", "Cloud Concepts - Principles of cloud computing", and "Azure fundamentals". Below this, there are two sections: "Alberta" and "British Columbia", each with a list of universities and colleges that offer these courses. The "Alberta" section lists Athabasca University, Concordia University of Edmonton, King's University, MacEwan University, Mount Royal University, University of Alberta, University of Calgary, and University of Lethbridge. The "British Columbia" section lists Kwantlen Polytechnic University, Simon Fraser University, Thompson Rivers University, University of British Columbia, University of Northern British Columbia, University of the Fraser Valley, University of Victoria, Vancouver Community College, and Vancouver Island University.



Practice good operational hygiene

- Know what you have
- Keep it up to date
- Configure it appropriately
- Control access to it
- Perform regular backups
- Know what normal looks like
- Know what to do if something bad happens
- Rinse and Repeat



ENABLE MULTIFACTOR AUTHENTICATION



APPLY ZERO TRUST PRINCIPLES



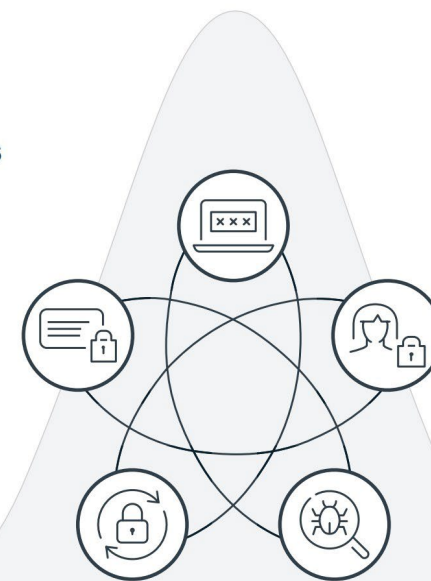
USE MODERN ANTI-MALWARE



KEEP UP TO DATE



PROTECT DATA

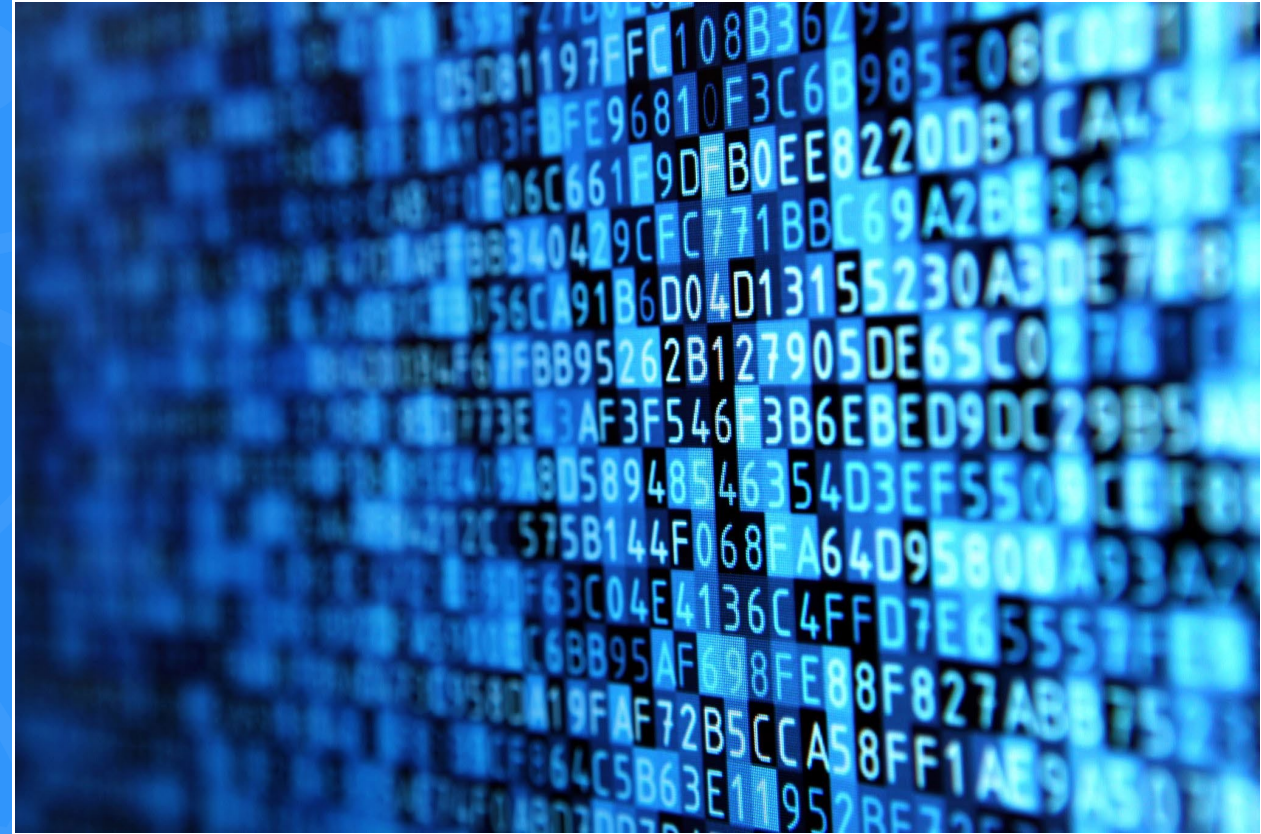


Basic security hygiene still protects against 98% of attacks

Microsoft, Microsoft Digital Defense Report 2022.

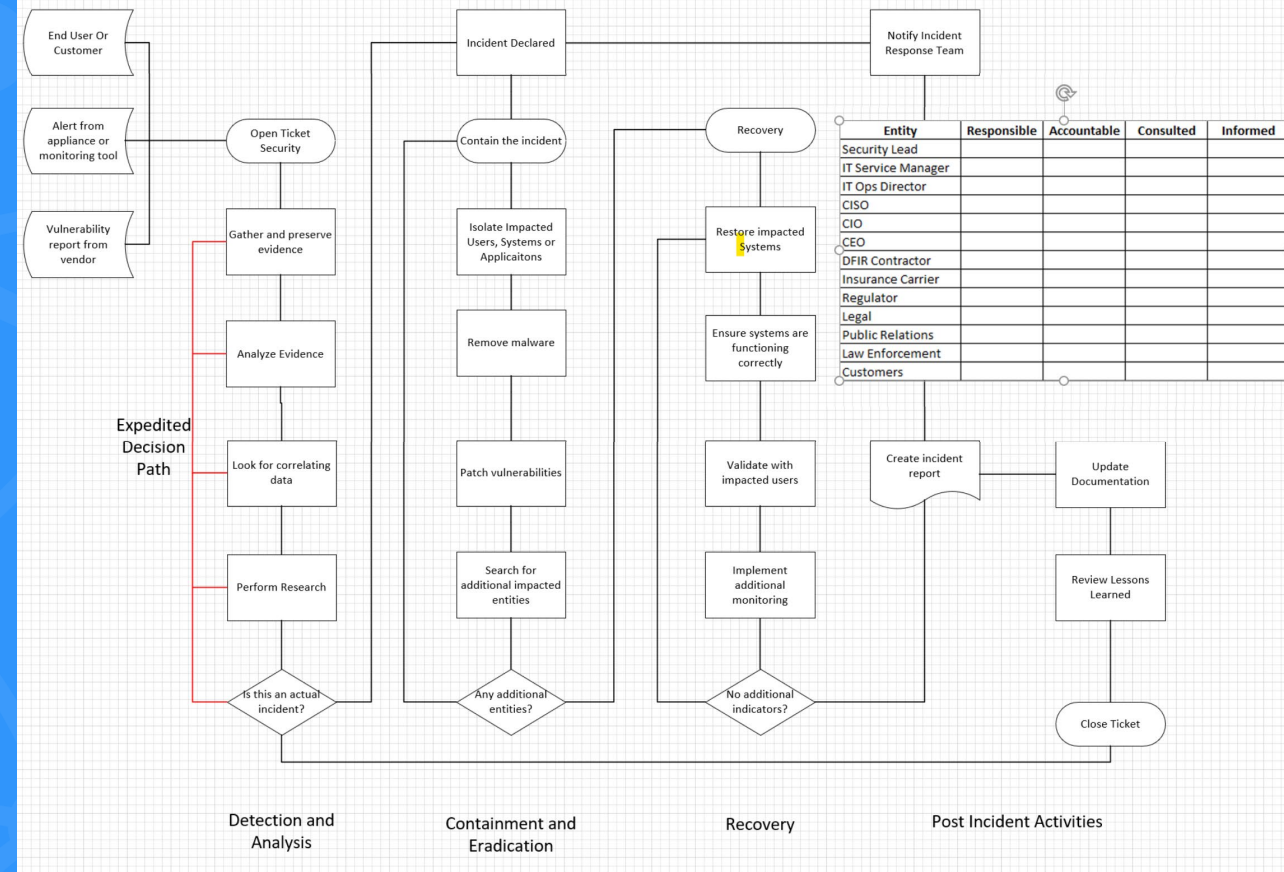
Carve out time for security activities

- We all have day jobs but.....
- Regularly review output from tools
- Resolve events
- Provide management useful data
- Bring the team together weekly to review



If something bad happens....

- Have an incident response plan
- Preserve evidence as you go
- Get help, particularly around forensics
- An incident is a business event
- Don't reinvent the wheel



You're not alone

- Very few organizations can afford to can effectively deal with security completely in house
- Effectively leverage your existing resources, ***INCLUDING HUMANS***





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Comments and Questions