INFORMATION SECURITY UPDATE

ISO 2019 Summer Plans and Direction

University at Buffalo
Information Technology

THE ISO

Information Security Office

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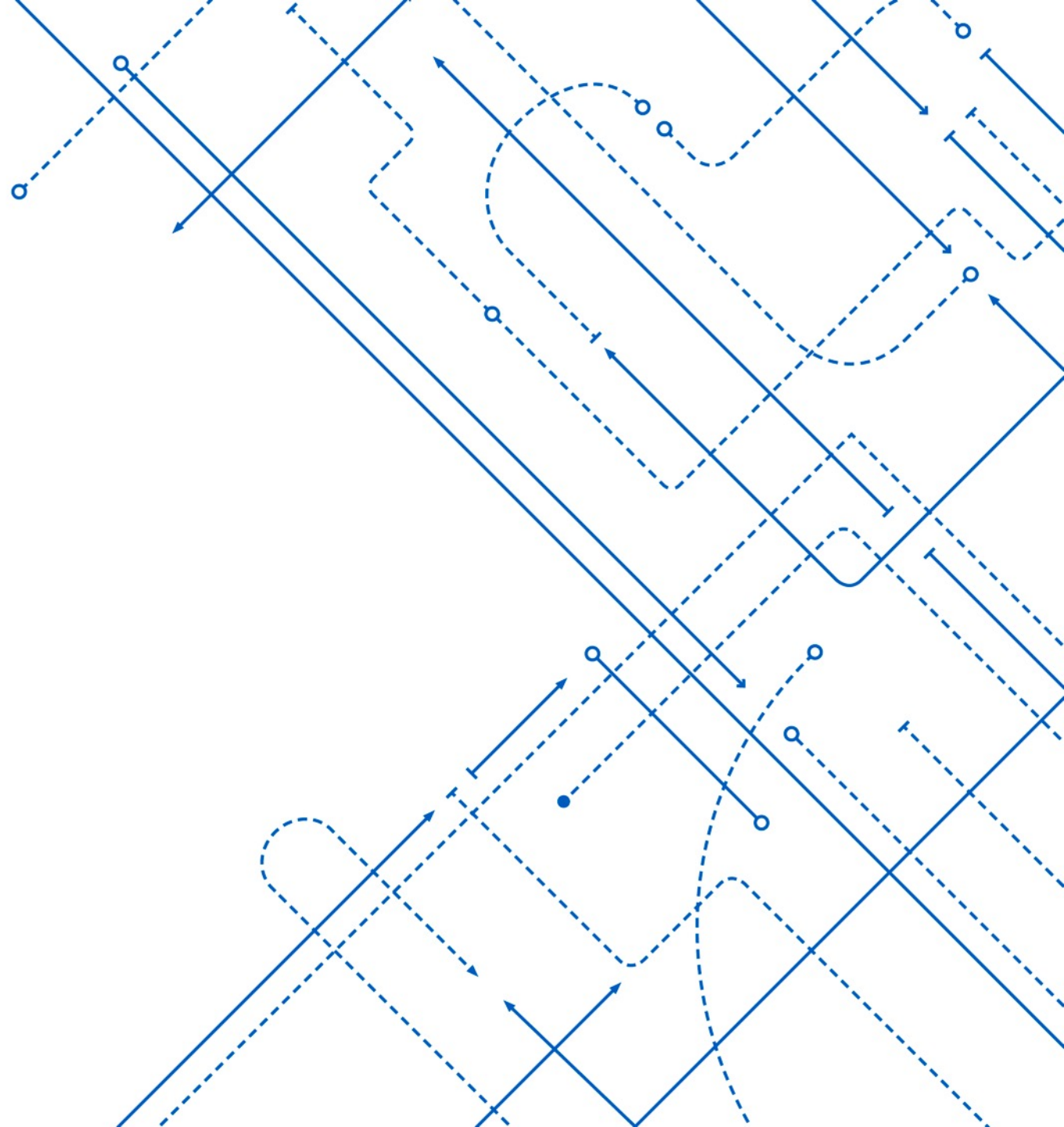


The Practice of Information Security

Two main divisions of professional practice in the ISO

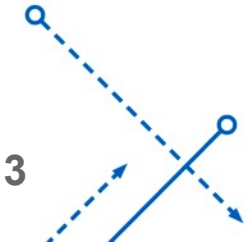
- Security Operations (SecOps): “Technical” security controls (plus “physical”)
- Risk & Compliance: “Administrative” security controls
- (Plus everyone does Response, TEA, Office functions, etc.)

SecOps examples

- SIEM, vulnerability scanner, firewalls, anti-virus, penetration testing tools, 2-factor authentication, remote access gateways, IDS/IPS, login IDs and passwords, data recovery/forensics, etc.

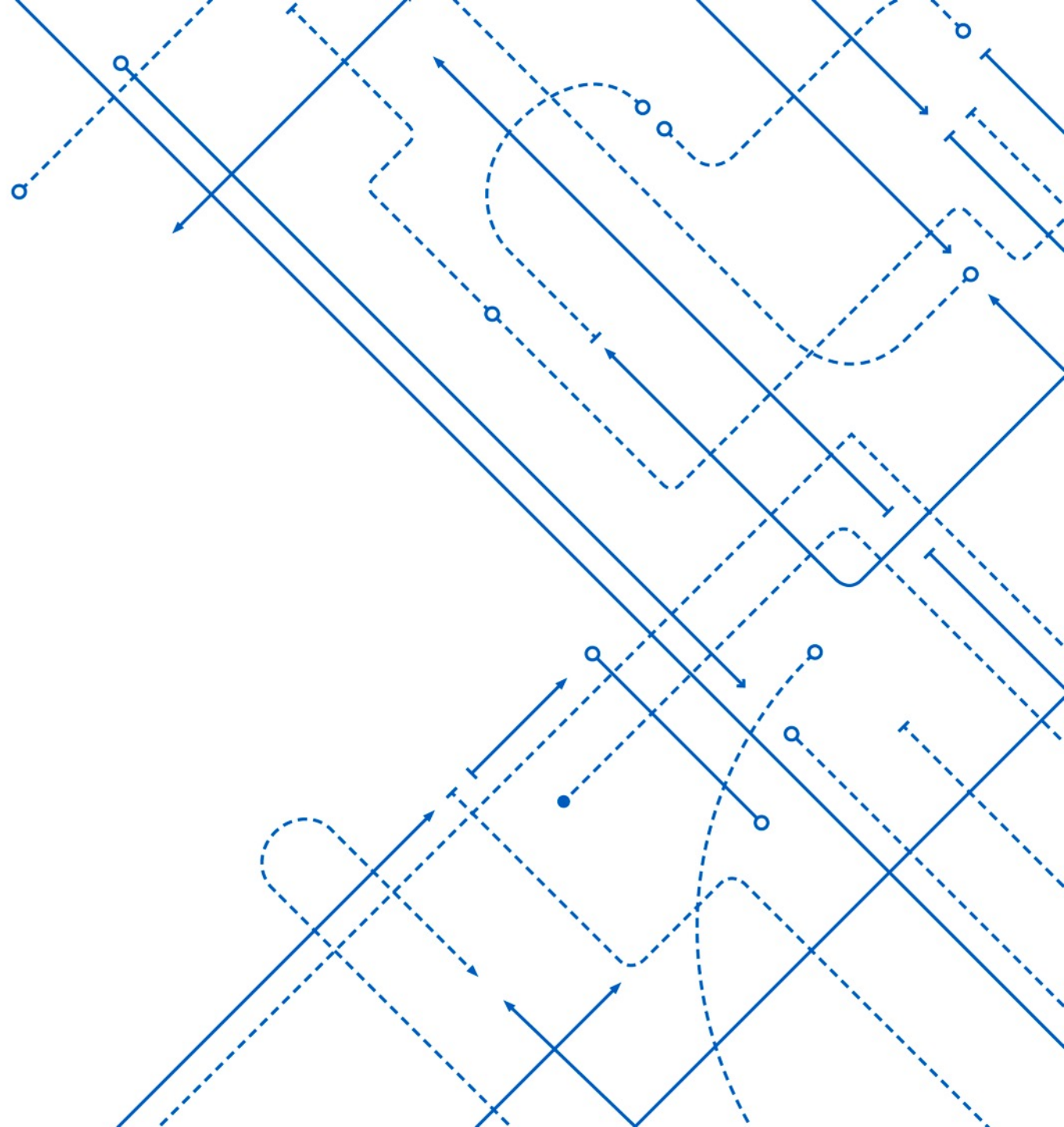
Risk & Compliance examples

- Policies, procedures, risk assessments, security plans, security-email-lists, investigations, HIPAA/PCI/FISMA/NIST/DUAs…, etc.



THE FOUR THINGS OF INFOSEC

Goals or principles



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The Four Things (Goals) of Information Security

Keep the Bad Actors Out

- Edge firewall, controlled remote access and control, datacenter and network closet safeguards, SIEM & IDS/IPS…

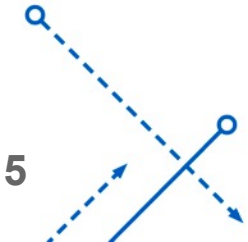
Verify the Trusts

- UBIDs and passwords, MultiFactor Authentication, SIEM & IDS/IPS (logging and alerts, impossible login detection, etc.)

Support creation and sharing of knowledge and information as intended

Keep UB safe by protecting our systems, data, and users

- Security standards, etc.



Summer 2019 Plans – IV Big Changes/Tools (see top 2 goals)

I. - Fully staff the ISO, improve the presence and communications (ISO Blog, etc.)

II. - Transition to SPLUNK

Logs and logging of all things needed (server security standards!)

Security dashboards, standard reports (Pivots: UBID -> IP -> UBIDs –> IPs ->Activities, etc.) (Impossible travel: login here and from Russia within 10 minutes of each other)

III. - NGFW Firewall tuning and changes – reduce attack surface (integration with Dept. Firewalls)

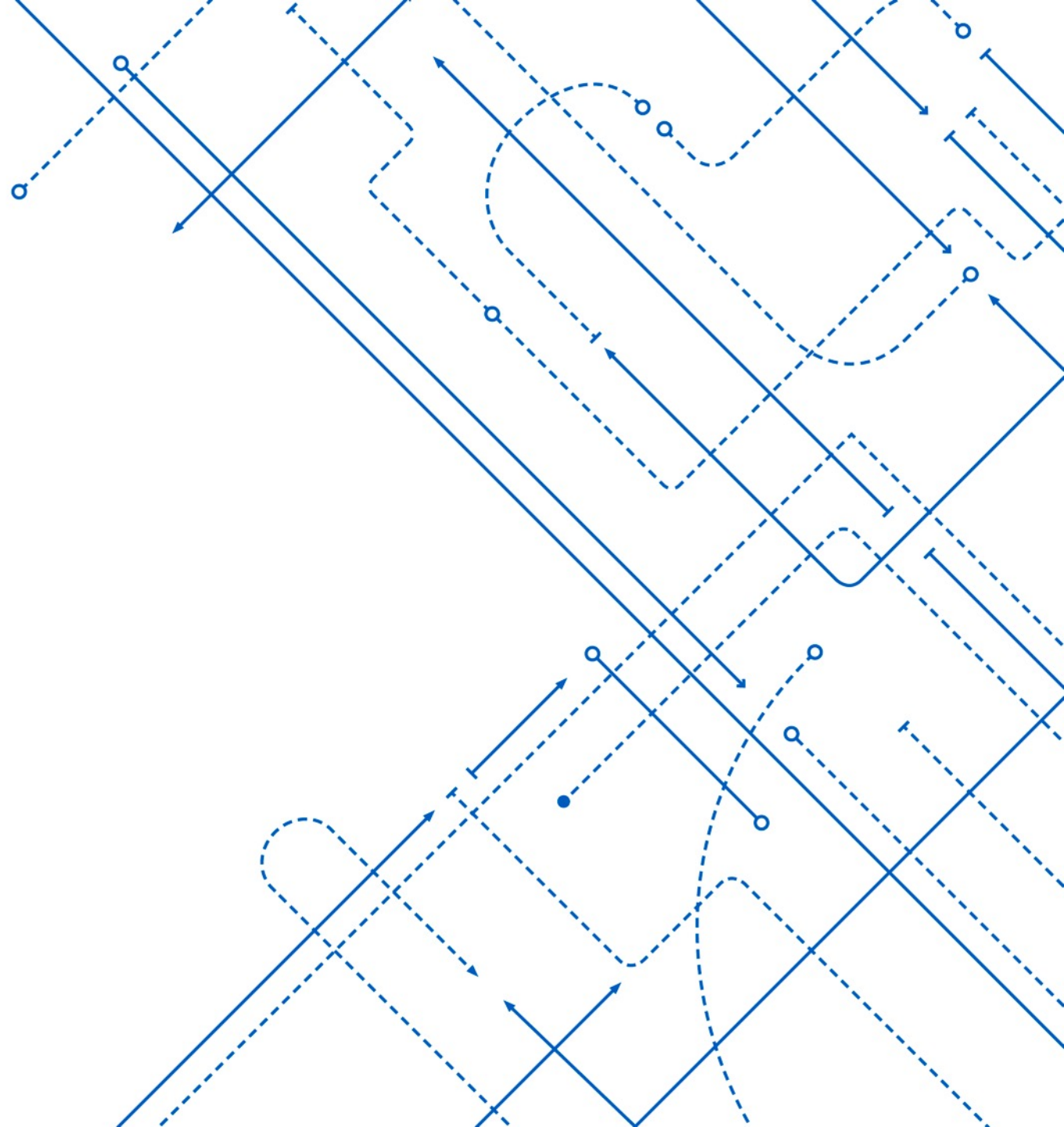
Control & Monitor Remote Access/Remote Control for attacks (RDP, SSH, etc.)

IV. - MFA??? (Next Fall opt-in, 2020 required (protect W2)? Students? Etc.)

Plus ongoing…Category 2 data and principles of protection (Minimum Necessary, Least Privilege…)

…Desktop Security Standard revisited and revisited…email controls/DLP?...

QUESTIONS?



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