



University of Pittsburgh

SAC-PA

Science vs Enterprise - Approaches to Research Computing

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Who am I?

Brian Pasquini

- Assistant Director of Information Security
- Interim CISO
- Some guy who learned from mistakes

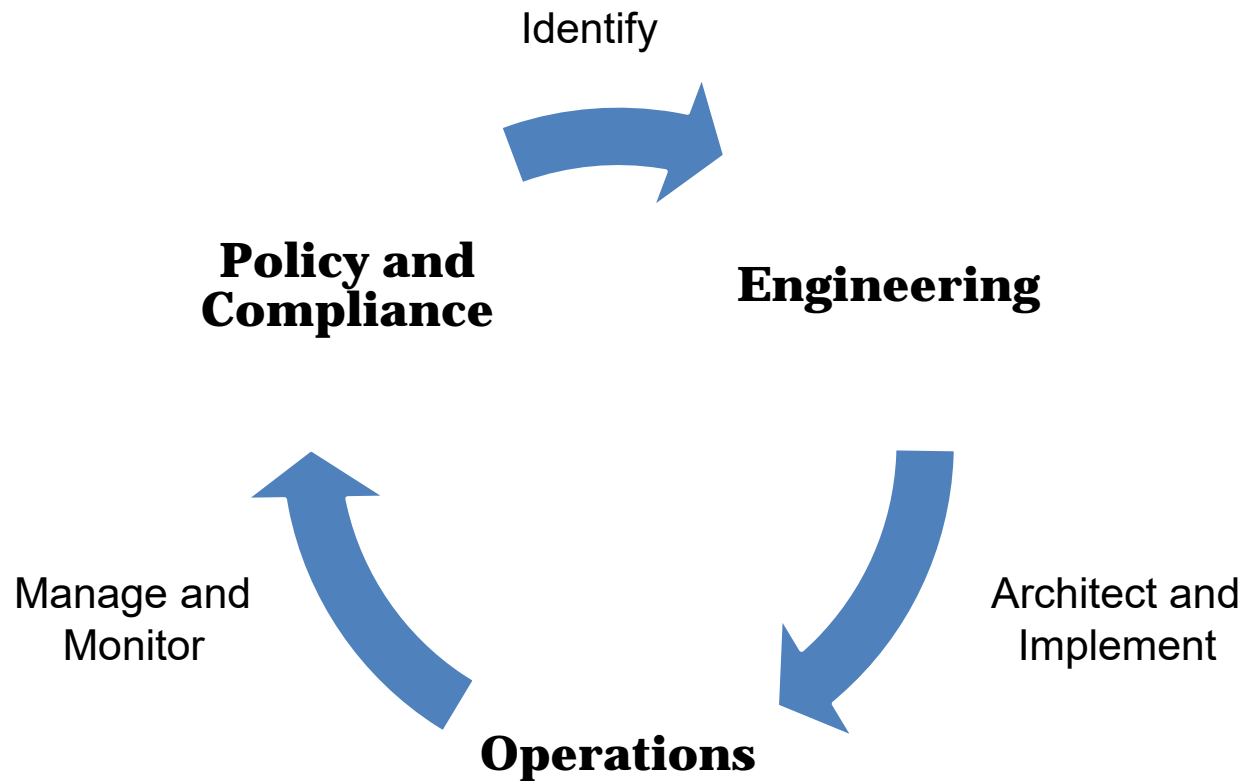


Security Team

- Policy and Compliance
- Engineering
- Operations



Interaction





Mindset

- Confidentiality
- Integrity
- Availability



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*Computing Services and Systems
Development*

**RESEARCHERS
WANT TO
RESEARCH**



Comparison

Enterprise

- Project Manager
- Detailed Budget
- Hard Requirements
- Mostly Technical

Research

- PI
- General Budget
- Soft Requirements
- Mostly Non-Technical



Define the WHAT

Map Data Flow

- Source
- Transfer
- Storage
- Compute
- Publish



Define the WHO

- Researcher
- Systems
- Network
- Security
- Applications



Define the HOW

Centralize Authentication

- Active Directory
- LDAP
- RADIUS

Multifactor

- Duo
- Deepnet

Single Sign On

- Shibboleth

Log Centralization

- Hadoop
- Syslog Cluster



WHERE do I capture all of this?

System Security Plan (SSP)



Tips

- Set Expectations
- Clearly Layout Processes
- Understand Timelines
- Expect to Educate AND Learn



Work in progress and making mistakes

Security Metrics

- Automatic
- Available
- Actionable



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Thank You!