Higher Ed & Security: FISMA, NIST, & CIPSEA

10/27/2017

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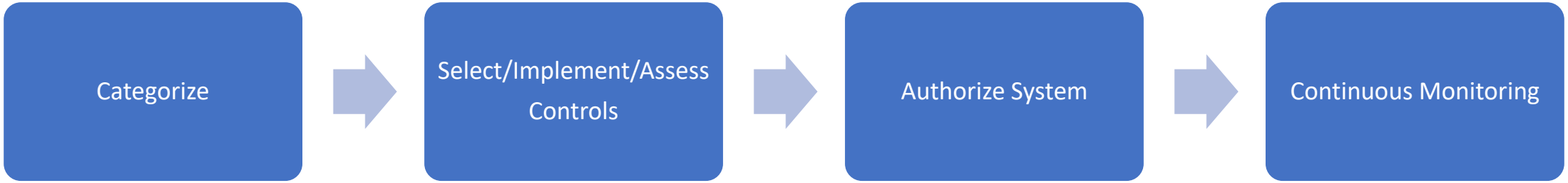
Federal Information Security Management Act (FISMA)

FISMA

- Passed in 2002 as Title III of the E-Government Act
- Mandates information security practices for agency systems
- Grants systems that comply with FISMA an ATO (Authority to Operate)

FISMA

NIST Risk Management Framework



FISMA

- FIPS 199: Standards for Security Categorization of Federal Information
  - Security Dimensions
    - Confidentiality
    - Integrity
    - Availability
  - Impact
    - Low, Medium, High

FISMA

- FIPS 200: Minimum security requirements for federal systems
  - 17 categories of security controls
- NIST 800-53: Security and Privacy Controls for Federal Systems
  - System Security Plan (NIST 800-18)

FISMA

NIST 800-53 Families

TABLE 1-1: SECURITY CONTROL CLASSES, FAMILIES, AND IDENTIFIERS

IDENTIFIER	FAMILY	CLASS
AC	Access Control	Technical
AT	Awareness and Training	Operational
AU	Audit and Accountability	Technical
CA	Security Assessment and Authorization	Management
CM	Configuration Management	Operational
CP	Contingency Planning	Operational
IA	Identification and Authentication	Technical
IR	Incident Response	Operational
MA	Maintenance	Operational
MP	Media Protection	Operational
PE	Physical and Environmental Protection	Operational
PL	Planning	Management
PS	Personnel Security	Operational
RA	Risk Assessment	Management
SA	System and Services Acquisition	Management
SC	System and Communications Protection	Technical
SI	System and Information Integrity	Operational
PM	Program Management	Management

FISMA

- Continuous Monitoring
  - NIST 800-137
    - Define
    - Establish
    - Implement
    - Analyze and Respond
    - Review and Update
  - Tools and Technologies
    - Vulnerability Management
    - Patch Management
    - Event and Incident Management
    - Malware Detection
    - Asset, License, and Configuration Management
    - Network Management
    - Information Management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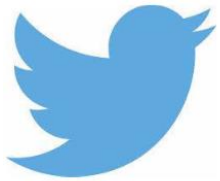
FUTURE OF PRIVACY FORUM

Questions?



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