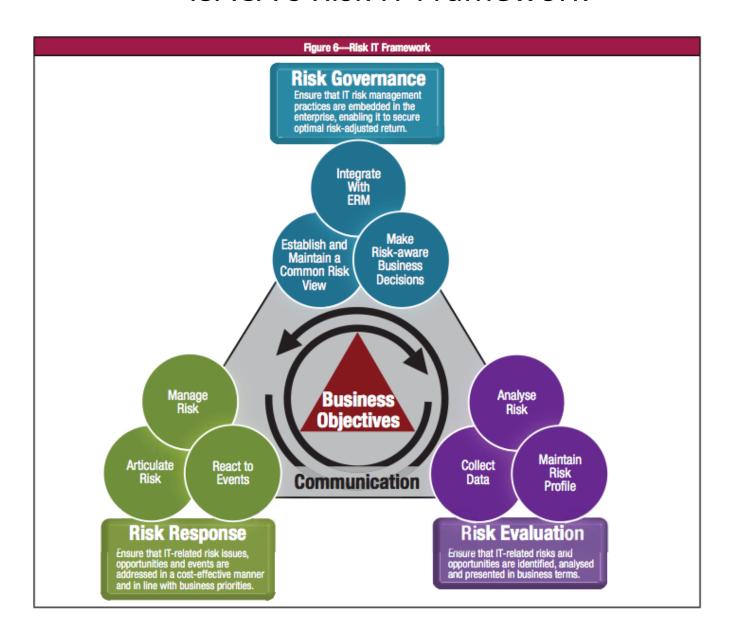
IT Risk Week 11

ISACA's Risk IT Framework



ISACA's Risk IT Framework

- 1. What is IT Risk?
- 2. What are the three types of IT Risk?
- 3. What are the three risk processes that an enterprise ought to have?
- 4. What is risk appetite?
- 5. What is risk tolerance?
- 6. What are the three parts of a risk culture?

Risk Evaluation

- What are some ways you might express IT risk in business terms?
 - COBIT
 - COSO ERM
- What is a risk scenario?
- What is a risk factor?
- What are the four types of risk response and when would you use them?

Two views of cyber-security controls

ISACA	SANS
Preventive	Getting In
Detective	Staying In
Corrective	Acting



Twenty Critical Security Controls for Effective Cyber Defense: Consensus Audit Guidelines (CAG)

Version 3.1 October 3, 2011

Table of Contents	
Twenty Critical Security Controls for Effective Cyber Defense: Consensus Audit Guidelines	
(CAG)	
Version 3.1 October 3, 2011	
Introduction	
Forging Consensus among Chief Information Security Officers, Chief Information Officers, and	
Inspectors General on Technical Requirements for System Administrators and Security Personnel	
Relationship of the 20 Critical Controls to National Institute of Standards and Technology Guideli	
Relationship of the 20 Critical Controls to the Australian Government's Defence Signals Directora	
35 Strategies to Mitigate Targeted Cyber Intrusions	
Relationship of the 20 Critical Controls to the National Security Agency's Associated Manageable	
Network Plan Revision 2.1 Milestones and Network Security Tasks	
Document Contributors	
The 20 Critical Controls	
Insider versus Outsider Threats	
Relationship to Other US Federal Guidelines, Recommendations, and Requirements	
Periodic and Continual Testing of Controls	
Future Evolution of the 20 Critical Controls	
Description of Controls	
Critical Control 1: Inventory of Authorized and Unauthorized Devices	
Critical Control 2: Inventory of Authorized and Unauthorized Software	
Critical Control 3: Secure Configurations for Hardware and Software on Laptops, Workstations, a	
Servers	
Critical Control 4: Continuous Vulnerability Assessment and Remediation	
Critical Control 5: Malware Defenses	
Critical Control 6: Application Software Security	
Critical Control 7: Wireless Device Control	
Critical Control 8: Data Recovery Capability	
Critical Control 9: Security Skills Assessment and Appropriate Training to Fill Gaps	
Critical Control 10: Secure Configurations for Network Devices such as Firewalls, Routers, and	
Switches	
Critical Control 11: Limitation and Control of Network Ports, Protocols, and Services	
Critical Control 12: Controlled Use of Administrative Privileges	

SANS Control # 3: Secure Configurations of HW & SW

- Utah Department of Health 701,000 records
 - Policy to delete information not followed
 - Old configuration gave hacker access
- St. Joseph's Health System 32,000 records
 - "...security settings incorrect."
- SANs quick wins: Standard, hardened builds, preferably put on by vendors, no variations unless specifically approved

Version A. J. October J. 2011

Table of Construction
Control Control Control for Discolor Cyber Delause Consusus statis Guideline
Table of Construction
Control Control Control
Control Control Control
Control Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Control
Contro

Switches. 55
Critical Control 11: Limitation and Control of Network Parts, Protocols, and Services. 55
Critical Control 12: Controlled Use of Administrative Privileges. 64

SANS Control # 3: Controlled Access Based on Need to Know

- Memorial Healthcare System 10,000 records
 - Two employees "...improper access"
 - Intended to file fraudulent tax returns
- South Carolina Department of Health 228,000 records
 - Employee moved 17 spreadsheets by email
- SANS quick wins: multi-level data classification with access allowed to minimally acceptable authorized users

Twenty Critical Security Controls for Effective Cyber Defense: Consensus Audit Guidelines (CAG)

Persion 3.1 October 3. 2011

Table of Contents
Table of Table of Table of Table of Table
Terride Little
Table of Table of Table
Table of Table of Table
Table of Table
Table of Table
Table of Table

SANS Control # 17: Data Loss Prevention Data-in-motion

- South Carolina Department of Health 228,000 records
 - Employee moved 17 spreadsheets by email
- CA In-home support Services 701,000 records
 - Unencrypted microfiche lost on way to insurance company
- SANS: Monitor outbound transactions for anomalies, move data using secure, authenticated, encrypted mechanisms

Twenty Critical Security Controls for Effective Cyber Defense: Consensus Audit Guidelines (CAG)

Table of Contents

Finish at 1 Confert 7, 2017.

Introduction

Toping Commons among Clief Information Security Officers, Clief Information Officers, and

Toping Commons among Clief Information Security Officers, Clief Information Officers, Clief

Reductionship of the 2 Collisis Clientish in Security Information of Standardson and Technology Guideline

Reductionship of the 22 Collisis Clientish in Security Information Operationship of the 22 Collisis Clientish Information

Reductionship of the 22 Collisis Clientish in the National Security Information

Reductionship of the 22 Collisis Clientish in the National Security Information

Reductionship of the 22 Collisis Clientish in the National Security Information

Reductionship of the 22 Collisis Clientish in the National Security Information

Reduction Security Information of Security Reduction Security Information

Reduction Security Information Security Information

Reduction Security Information Security Information

Reduction Security Information Security Reduction

Reduction Security Security Information Security Reduction

Reduction Security Se

The 20 Critical Costrols
Insider versus Cultival Treats
Relationship to Other US Federal Guidelines, Recommendations, and Requirements
Relationship to Other US Federal Guidelines, Recommendations, and Requirements
Periodic and Contessional Testing of Contents
Future Evolution of the 20 Critical Controls
Description of Controls
Critical Control I Inventor of Authoristed and Universitatives Devices

Critical Costant B. Treastivery of Anthonics and Unseathwater Chineses.

Childral Costant B. Secus Configurations in Fordises and Software on Lapsaya, Westerdards
Servers.

Childral Costant B. Acceptance Various Mills Assessment and Samediurians.

Childral Costant B. Aughstonia Chinese Society

Childral Costant B. Cost