Exploring Emerging Cyber Attest Requirements

With a focus on SOC for Cybersecurity

("Cyber Attest")

RubinBrown®

Introductions and Overview

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Companies will soon have new way to gut check cyber risk

COMPLIANCE WEEK
THE LEADING INFORMATION SERVICE ON CORPORATE GOVERNANCE, RISK, AND COMPLIANCE

TIMELY Discussion

SEC Spotlight

Cybersecurity

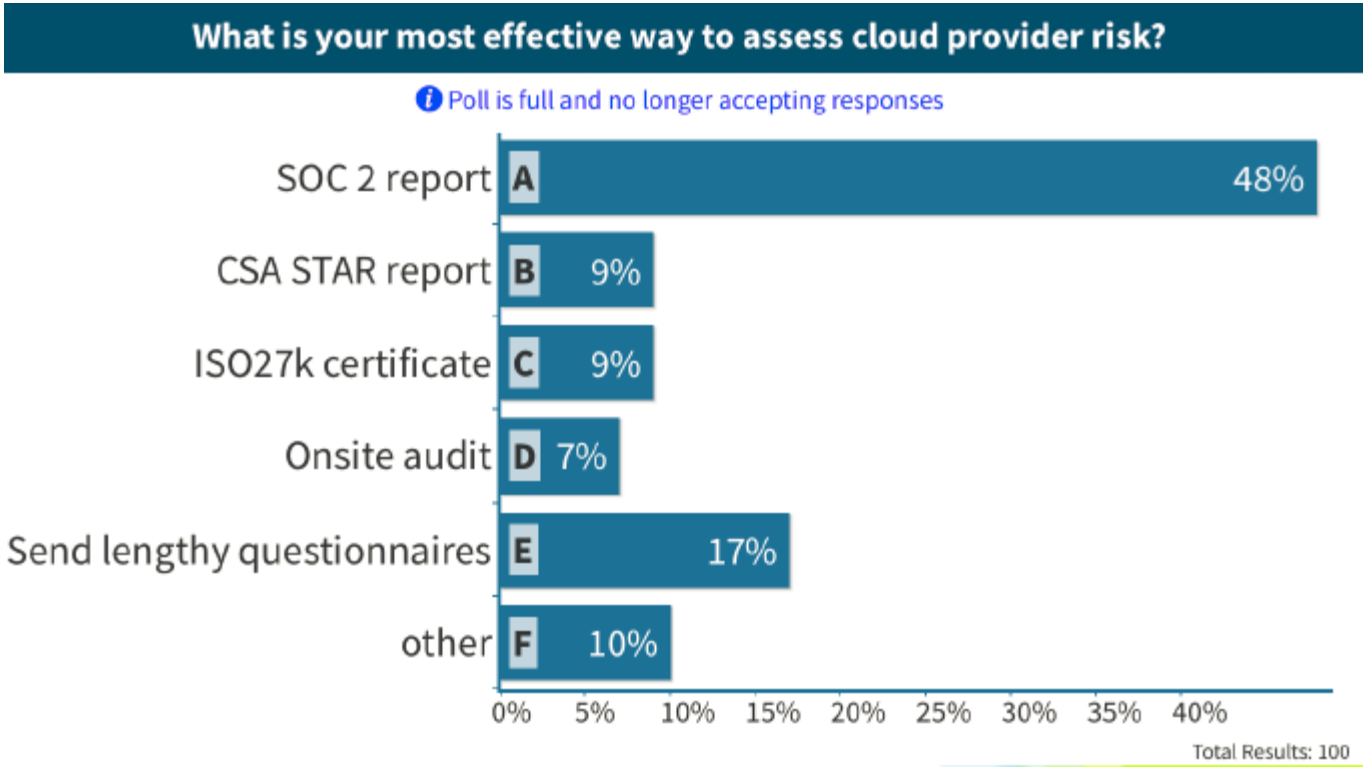
PCAOB
Public Company Accounting Oversight Board

Going forward, as noted in the Strategic Plan, PCAOB staff will continue to research the role of auditors with respect to fraud and potential emerging audit risk areas, such as cybersecurity.

Background

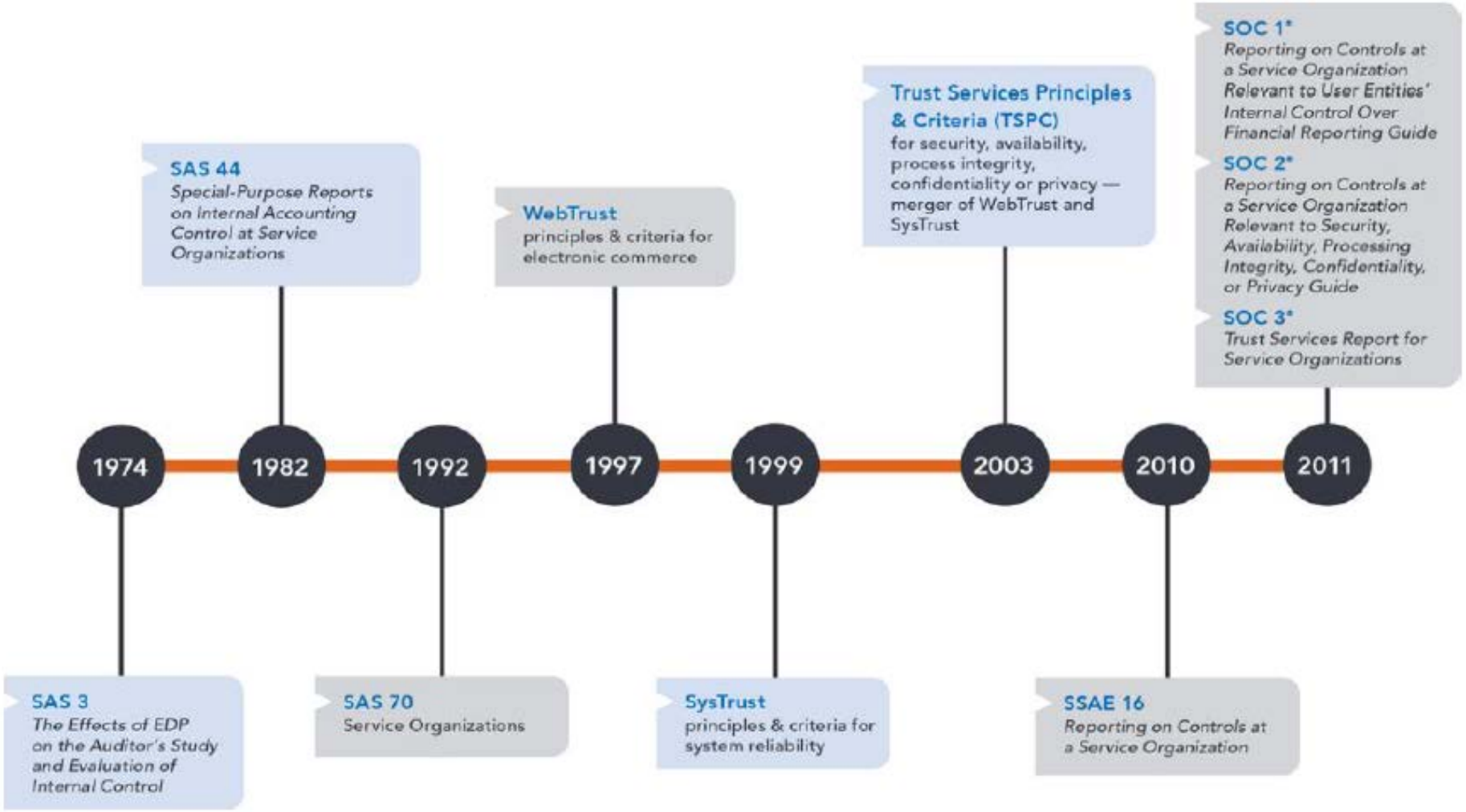
- Concept of third-party trust and independent assessment
- Increase in SOC 2 requests
- A greater need to understand entity-level cybersecurity as well

SOC 2 - Most Effective Way to Assess….



Source: RSAConference2017 San Francisco | February 13 – 17 | Moscone Center
SESSION ID: CSV-W11
Cloud Security Assessments: You're Doing It Wrong!

History of IT and CPA Services



Source: Cybersecurity Attestation Examination Engagement
AICPA Auditing Standards Board, August 3, 2016

What's New

SOC: New definition and service area

SOC for Service Organizations

Internal control reports on the services provided by a service organization providing valuable information that users need to assess and address the risks associated with an outsourced service

- SOC 1®— SOC for Service Organizations: ICFR
- SOC 2®— SOC for Service Organizations: Trust Services Criteria
  - SOC for Service Organizations: SOC 2® HiTrust
  - SOC for Service Organizations: SOC 2® CSA STAR Attestation
- SOC 3® —SOC for Service Organizations: Trust Services Criteria for General Use Report

New: SOC for Cybersecurity

A reporting framework through which organizations can communicate relevant useful information about the effectiveness of their cybersecurity risk management program and CPAs can report on such information to meet the cybersecurity information needs of a broad range of stakeholders

Under Development: SOC for Vendor Supply Chains

An internal controls report on a vendor's manufacturing processes for customers of manufacturers and distributors to better understand the cybersecurity risk in their supply chains

Source: http://www.aicpa.org/interestareas/frc/assuranceadvisoryservices/pages/aicpacybersecurityinitiative.aspx

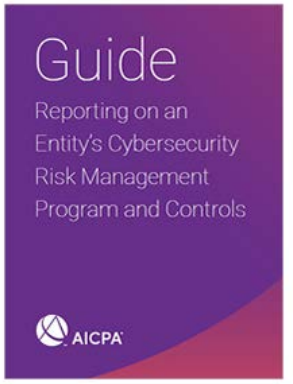
Standards Considered

1. NIST Cybersecurity Framework or NIST CSF
2. International Organization for Standardization (ISO)/IEC 27001/27002 and related standards
3. U.S. Department of Homeland Security requirements for annual FISMA reporting
4. FFIEC questionnaires
5. COBIT 5
6. COSO 2013 framework
7. HIPAA Security Rule
8. PCI DSS 3.1
9. NIST Special Publication 800 series
10. HITRUST CSF

SOC Suite of Services

Reporting Level	Report Category	Intended Audience	Benefit
Entity	**SOC for Cybersecurity**	✓ Board ✓ Management ✓ Investor ✓ Regulator ✓ Analysts	Transparency regarding the entity's cyber risk management
Service Provider	SOC2 (New guide coming)	✓ Business unit management ✓ Vendor risk management ✓ Accounting / internal audit ✓ CISO ✓ BCP	Transparency for the services provided and provides assurance over the selected principles. with detail
Service Provider	SOC 1 (Recently released guide)	Use of these reports is restricted to the management of the service organization, user entities, and user auditors.	Transparency for the services provided and provides assurance over internal control over financial reporting. with detail
Supply Chain	New guide coming	✓ Business unit management ✓ Vendor risk management ✓ Accounting / internal audit ✓ CISO ✓ BCP	Transparency for the services provided and provides assurance over the selected principles. with detail

Cybersecurity Risk Management Examination



An examination engagement to report on whether

A. Management's description of the entity's cybersecurity risk management program is presented in accordance with the description criteria

and

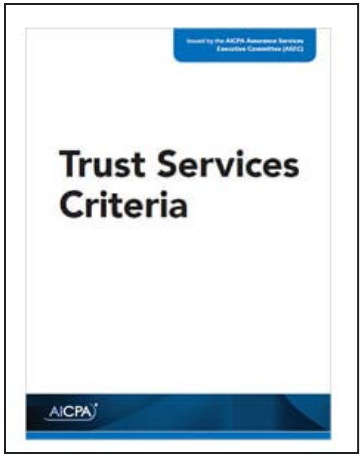
B. The controls within that program were effective to achieve the entity's cybersecurity objectives based on the control criteria.

Note for this presentation: Due to the newness of the service and the Cybersecurity Guide not being released, there could be other considerations not discussed today or corrections needed to items presented.

Two sets of criteria

1. Description criteria used to prepare narrative of the cyber risk management program

2. Control criteria used to evaluate the effectiveness of controls in the program *



* May use other criteria such as the NIST Critical Infrastructure Cybersecurity framework and ISO 27001/27002 as control criteria as long as such criteria are appropriate for the engagement according to AICPA attestation standards.

Description Criteria

- A set of benchmarks to use when preparing and evaluating the presentation and description of the entity's cybersecurity risk management program (description).
  - A cybersecurity risk management program is the set of policies, processes and controls designed to protect information and systems from security events that could compromise the achievement of the entity's cybersecurity objectives and to detect and respond to, mitigate and recover from on a timely basis, security events that are not prevented.

Description Criteria

- Examination is in accordance with
  - AT-C section 105 Concepts Common to All Attestation Engagements
  - AT-C section 205, Examination Engagements
- Management is responsible for:
  - Developing, implementing and operating the entity's cybersecurity risk management program
  - Description of the entity's cybersecurity risk management program
  - Assertion about whether the description is presented in accordance with the description criteria
  - Assertion about the effectiveness of the controls within the program based on a set of control criteria

Description Criteria

- May be used under consulting services (CS section 100, Consulting services: Definitions and Standards).

- Designed to permit management to describe entity-wide cybersecurity risk management program
  - May be used to apply to a limited portion of the entity
    - One or more specific business unit(s) /segment(s) which is (are) under an entity-wide or an independent cybersecurity risk management program
    - One or more specific sets of systems or particular sets of information used by the entity

Categories of Description Criteria

1. Nature of Business and Operations
2. Nature of Information at Risk
3. Cybersecurity Risk Management Program Objectives
4. Factors that have a significant effect on inherent cybersecurity risks
5. Cybersecurity risk governance structure
6. Cybersecurity risk assessment process
7. Cybersecurity communications and the quality of cyber security information
8. Monitoring of the cybersecurity risk management program
9. Cybersecurity control processes

Note, each category has 1-4 description criteria and several implementation guidance points

Description Criteria and Related Implementation Guidance

NATURE OF BUSINESS AND OPERATIONS
DC1: The nature of the entity's business and operations, including the principal products or services the entity sells or provides and the methods by which they are distributed
Implementation Guidance *When making judgments about the nature and extent of disclosures to include about this criterion, consider the following:*
• *The entity's principal markets, including the geographic locations of those markets, and changes to those markets*

Trust Services Criteria

- The control criteria used to evaluate and report on controls (suitability of the design and operating effectiveness) relevant to:
  - Security,
  - Availability,
  - Processing integrity,
  - Confidentiality, and/or
  - Privacy

Organization of Trust Services Criteria

- Aligned to the 17 criteria (known as principles) presented in "Internal Control – Integrated Framework, which was revised in 2013 by COSO.
- Includes supplemental criteria supporting:
  - Logical and physical access controls
  - System operations
  - Change management
  - Risk management

Trust Services Categories

- Security
- Availability
- Processing Integrity
- Confidentiality
- Privacy

Trust Services Criteria

- TSC generally not used when engaged to report on entity compliance with laws, regulations, rules, contracts, grant agreements.
- Refer to / consider for the compliance engagement: AT-C section 105 and 315, Compliance Attestation

Trust Services Criteria

- AICPA Statements on Standards for Attestation Engagements
  - SSAE 18 (effective May 1, 2017)
  - AT-C 105, 205

- May be used under consulting services (CS section 100, Consulting services: Definitions and Standards.)

Trust Services Criteria

- Trust Services Criteria and Points of Focus
  (COSO not italics, *TSC in italics,* ***system level only bold italics*** *******):

TSP Ref. #	TRUST SERVICES CRITERIA AND POINTS OF FOCUS
	CONTROL ENVIRONMENT
CC1.1	**COSO Principle 1: The entity demonstrates a commitment to integrity and ethical values.**
	The following points of focus highlight important characteristics relating to this criterion:
	Points of focus specified in the COSO framework:
	• Sets the Tone at the Top—The board of directors and management, at all levels, demonstrate through their directives, actions, and behavior the importance of integrity and ethical values to support the functioning of the system of internal control.

* The font formatting serves as a key to the relative applicability.

Call to Action

1. Understand the standards and the terms

2. Evaluate the benefit to your organization

3. Prepare leadership for expectations in this type of reporting

4. Evaluate readiness
   - Perform an internal use only evaluation (under consulting standards)

Questions

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