System and Organization Controls (SOC)

SOC for Cybersecurity

Helping you build trust and transparency

Disclaimer: The contents of this publication do not necessarily reflect the position or opinion of the American Institute of CPAs, its divisions and its committees. This publication is designed to provide accurate and authoritative information on the subject covered. It is distributed with the understanding that the authors are not engaged in rendering legal, accounting or other professional services. If legal advice or other expert assistance is required, the services of a competent professional should be sought.

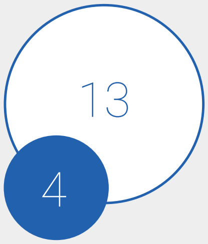
Contents

CPAs and cybersecurity: Helping you build trust and transparency

**Stolen data. System shutdowns. Widely publicized breaches.
High-dollar lawsuits.**

Is your organization prepared for a cybersecurity attack? Boards of directors, senior management and other stakeholders are requesting more information than ever before about organizations' cybersecurity risk management programs.

Using the AICPA's SOC for Cybersecurity framework, CPAs can provide assurance over the effectiveness of controls within your organization's cybersecurity risk management program, helping build trust and transparency for customers, investors and leadership.



4 of the leading 13 information security and cybersecurity consultants are CPA firms.

CPA firms deploy multidisciplinary teams composed of licensed CPAs and information technology and security specialists to ensure a comprehensive and thorough evaluation of your cybersecurity risk management program and its effectiveness in meeting your organization's cybersecurity objectives.

What is SOC for Cybersecurity?

The SOC for Cybersecurity examination provides an independent, entity-wide assessment of your organization's cybersecurity risk management program.

- Appropriate for businesses, not-for-profits and virtually any other type of organization
- Helps reduce uncertainty and build resilient organizations by evaluating effectiveness of existing cybersecurity processes and controls
- Permits flexibility by not constraining management to a particular security management framework or control framework
- Results in a general use report on whether:
  - The description of an entity's cybersecurity risk management program is presented in accordance with description criteria and
  - The controls within that program were effective in achieving the entity's cybersecurity objectives

62%

of executives expect to see an increase in reporting requests from their board of directors on cybersecurity program effectiveness.

(Source: Deloitte, 2018. "Corporate Boards May Be More Likely Than Regulators to Scrutinize Cybersecurity Program Effectiveness This Year.")

AICPA cybersecurity risk management reporting framework

The AICPA cybersecurity risk management reporting framework helps organizations communicate about the effectiveness of their cybersecurity risk management programs via three components:

- Description Criteria for Management's Description of an Entity's Cybersecurity Risk Management Reporting Program — This is used by management to provide transparency regarding its cybersecurity risk management program and used by CPAs to report on management's description. Management's description provides users of the report with information that can help them understand the entity's cybersecurity risks and how it manages those risks. Description criteria includes considerations on the nature of an entity's business and operations, factors affecting inherent cybersecurity risk, risk governance and assessment process and the monitoring of the cybersecurity program, among other criteria.

- 2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality and Privacy — This is used by management to evaluate the effectiveness of controls and used by CPAs providing advisory or attestation services to evaluate and report on the effectiveness of controls within the cybersecurity risk management program.

- AICPA Guide Reporting on an Entity's Cybersecurity Risk Management Program and Controls — This attestation guidance assists CPAs engaged to examine and report on an entity's cybersecurity risk management program (SOC for Cybersecurity). This guide also contains information that can assist management in understanding the SOC for Cybersecurity engagement and its responsibilities with respect to the engagement.

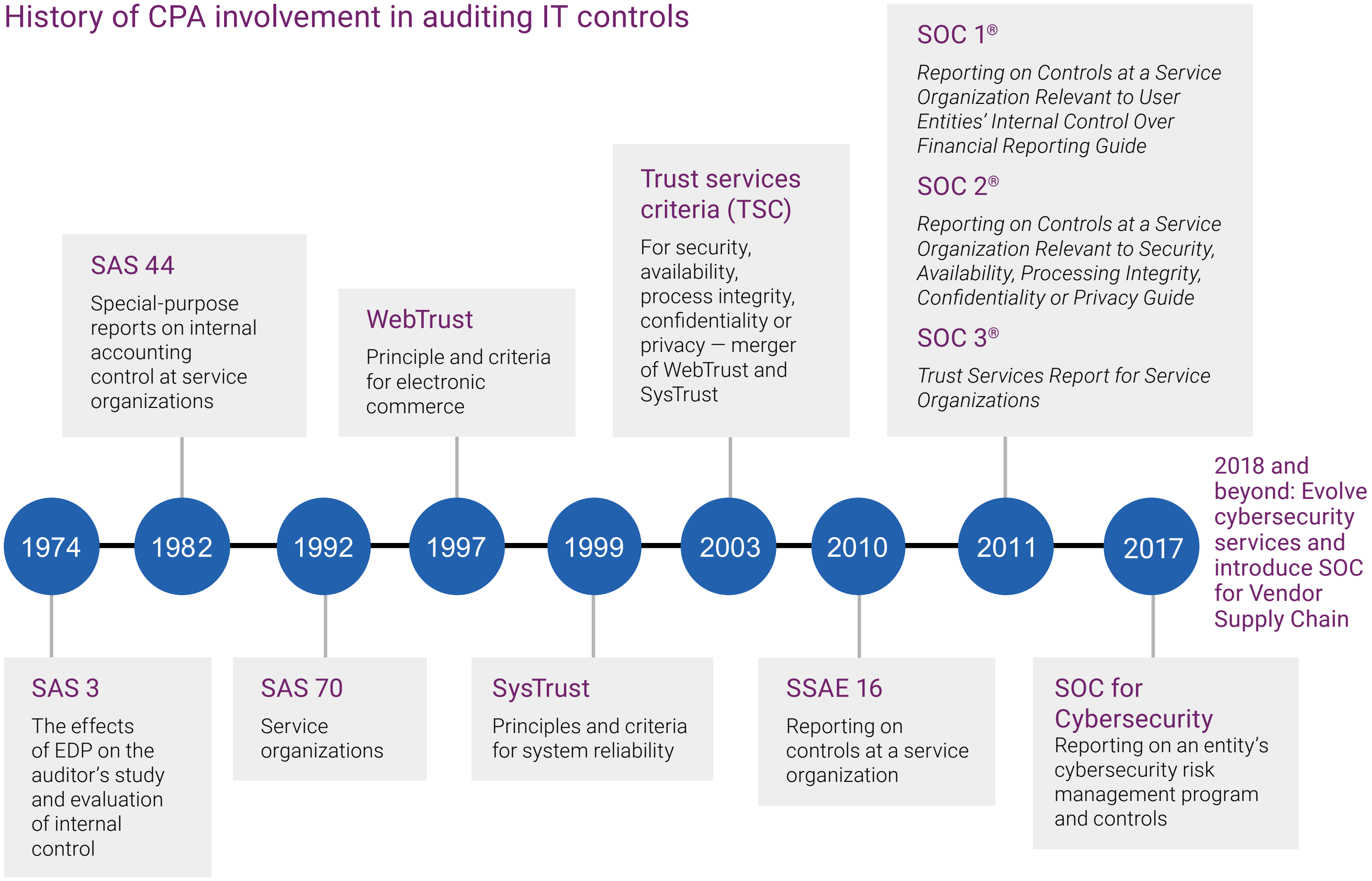
Why CPA firms? Education. Experience. Expertise.

The education, experience and expertise of CPAs position them as the premier providers of SOC for Cybersecurity services.

- Knowledge of relevant IT systems and technology, including mainframes, networking, firewalls, network management systems, security protocols and operating systems
- Understanding of IT processes and controls — such as management of operating systems, networking and virtualization software and related security techniques; security principles and concepts; software development; and incident management and information risk management
- Experience with common cybersecurity publications and frameworks (NIST CSF, ISO 27001/27002, 2013 COSO *Internal Control — Integrated Framework*, COBIT 5, etc.)
- Expertise in evaluating processes, control effectiveness and providing advisory services relating to these matters
- Multidisciplinary teams that incorporate certified information security professionals such as Certified Information Systems Security Professionals (CISSP), Certified Information Systems Auditors (CISA) and Certified Information Technology Professionals (CITP®)
- Proficiency in measuring performance against established criteria, applying appropriate procedures for evaluating against those criteria and reporting results
- Strict adherence to service-specific professional standards, professional code of conduct and quality control requirements
- Holistic understanding of entity's industry and business, including whether the industry in which the entity operates is subject to specific types of or unusual cybersecurity risks and uses specific industry technology systems
- Objectivity, credibility and integrity
- Independence, professional skepticism and commitment to quality
- Strong analytical skills
- International perspective for global organizations

CPAs: Forerunners in the cybersecurity movement

History of CPA involvement in auditing IT controls



1974

SAS 3

The effects of EDP on the auditor's study and evaluation of internal control

1982

SAS 44

Special-purpose reports on internal accounting control at service organizations

1992

SAS 70

Service organizations

1997

WebTrust

Principle and criteria for electronic commerce

1999

SysTrust

Principles and criteria for system reliability

2003

Trust services criteria (TSC)

For security, availability, process integrity, confidentiality or privacy — merger of WebTrust and SysTrust

2010

SSAE 16

Reporting on controls at a service organization

2011

SOC 1®

Reporting on Controls at a Service Organization Relevant to User Entities' Internal Control Over Financial Reporting Guide

SOC 2®

Reporting on Controls at a Service Organization Relevant to Security, Availability, Processing Integrity, Confidentiality or Privacy Guide

SOC 3®

Trust Services Report for Service Organizations

2017

SOC for Cybersecurity

Reporting on an entity's cybersecurity risk management program and controls

2018 and beyond: Evolve cybersecurity services and introduce SOC for Vendor Supply Chain

1970s – CPAs required to consider effects of electronic data processing on the evaluation of internal control in financial statement audits.

1990s – CPAs begin performing SAS 70 audits to report on the effectiveness of internal control over financial reporting.

2000s – CPAs begin using the trust services criteria for evaluating controls relevant to security, availability, processing integrity, confidentiality and privacy and issuing SOC reports to address vendor management needs related to outsourced services.

2017 – Introduction of SOC for Cybersecurity attestation services for CPAs to report on the effectiveness of controls within an organization's cybersecurity risk management program.

2018 and beyond – Continue to evolve cybersecurity services and introduce SOC for Vendor Supply Chain to enable users of products produced, manufactured and distributed by an entity to better understand and manage risks, including cybersecurity risks, arising from their business relationships with the entity.

(Source: Whitworth, Martin. "The 13 Global Providers That Matter Most and How They Stack Up." The Forrester Wave™: Information Security Consulting Services, Q1 2016. Jan. 29, 2016

For information about obtaining permission to use this material other than for personal use, please email mary.walter@aicpa-cima.com. All other rights are hereby expressly reserved. The information provided in this publication is general and may not apply in a specific situation. Legal advice should always be sought before taking any legal action based on the information provided. Although the information provided is believed to be correct as of the publication date, be advised that this is a developing area. The Association, AICPA and CIMA cannot accept responsibility for the consequences of its use for other purposes or other contexts.

The information and any opinions expressed in this material do not represent official pronouncements of or on behalf of the AICPA, CIMA or the Association of International Certified Professional Accountants. This material is offered with the understanding that it does not constitute legal, accounting or other professional services or advice. If legal advice or other expert assistance is required, the services of a competent professional should be sought.

The information contained herein is provided to assist the reader in developing a general understanding of the topics discussed but no attempt has been made to cover the subjects or issues exhaustively. While every attempt to verify the timeliness and accuracy of the information herein as of the date of issuance has been made, no guarantee is or can be given regarding the applicability of the information found within to any given set of facts and circumstances.

P: 919.402.4500 | F: 919.402.4505 | W: aicpa-cima.com