MOSS-ADAMS LLP

IGNITING GROWTH

Why a SOC Report Makes All the Difference

Many service organizations depend on the integrity of their control environment to protect their business as well as that of their customers. With new technologies being unveiled at record speeds and the increasing prevalence of third-party vendors, that integrity is more complicated to secure.

One way to ensure internal controls are in place and operating effectively is to conduct a system and organization control (SOC) audit. While these reports aren't required, financial statement auditors use them to reduce audit procedures, and sophisticated service organizations push for them as confirmation that their data is protected.

WHY ISSUE A SOC REPORT?

More and more companies are outsourcing services. Ideally, a third-party vendor would exert the same level of internal controls you would. To make sure everyone is on the same page, it's important to know what your vendors are doing when it comes to:

- Financial and performance history
- Security and availability safeguards
- Reliable processing integrity
- Confidential and private records
- Regulatory and operational compliance
- Compliance with service level agreements
- Regular due diligence and monitoring

New services within outsourcing arrangements that drive SOC adoption include:

- Software as a service (SaaS)
- Infrastructure as a service (IaaS)
- Platform as a service (PaaS)
- Cloud providers

WHO NEEDS SOC?

SOC examinations aren't just for technology corporations. They benefit a range of different clients from financial institutions to benefit plan administrators and health care organizations. Traditional outsourcing arrangements apply to:

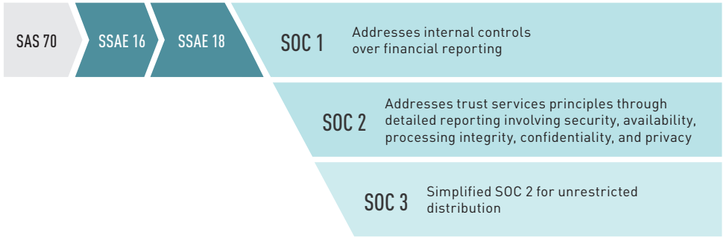
- Financial institutions
- Bank trust departments
- Credit unions
- Collection agencies
- Hedge fund accounting services
- Data analysts
- Payroll bureaus
- Third-party administrators
- Benefit plan administrators
- Document management
- Specialized services

The Evolution of SOC

Prior to 2011, service organization reports were completed under Statement on Auditing Standards (SAS) No. 70. The American Institute of Certified Public Accountants (AICPA) then moved to Statement on Standards for Attestation Engagements (SSAE) No. 16 to account for limitations within SAS 70, keep pace with changes in regulatory compliance, and more closely mirror international auditing standards.

After the SAS 70 report was retired, SSAE No. 16 was implemented to help technology service providers address their growing assurance needs. In April 2016, it was replaced by SSAE No. 18, which affects naming convention, vendor management, complementary subservice organization controls, service auditor risk assessment, and written assertion requirements. The terms SSAE 18 and SOC 1 are interchangeable.

In addition to SOC 1, which focuses on internal controls over financial reporting, there's also SOC 2 for a broader range of service providers with internal controls that can cover any combination of security, availability, processing integrity, confidentiality, and privacy. SOC 3 is a smaller scale SOC 2.



SOC 1, 2 & 3: The Differences

SOC audits aren't formally required, but they're increasingly being requested as part of doing business. The purpose of a SOC engagement is to report on the effectiveness of a company's internal controls and safeguards they have in place while providing feedback that's both independent and actionable.

There are three kinds of SOC reports and two types within each kind. Each has a specific use. Which is right for you?

Increase in demand:

SOC 2 REQUESTS
are increasing in tandem with the IT industry's growth.

If this continues, demand for SOC 2 audits will eventually overtake SOC 1.

Most requested

TRUST SERVICES PRINCIPLES:
Security, availability, and processing integrity.

Demand for privacy may change with AICPA revisions. See page 10.

Majority of reports use the

CARVE-OUT METHOD.

Learn more on page 9.

Choose the Right Report

		CONTROL DOMAINS	AUDIT FOCUS	DISTRIBUTION
SOC 1	***Assesses internal controls for*** financial reporting	▸ Transaction processing ▸ Supporting IT general controls	Service provider–defined: CONTROL OBJECTIVES *Vary depending on the type of service provided*	RESTRICTED *to users and auditors*
SOC 2	***Assesses internal controls for*** compliance or operations	▸ Infrastructure ▸ Software ▸ People ▸ Procedures ▸ Data	Standardized: TRUST SERVICES PRINCIPLES • Security • Availability • Processing integrity • Confidentiality • Privacy *Principles covered are selected by the service provider*	RESTRICTED *to users, auditors, and specified parties*
SOC 3	***A smaller scale SOC 2 report*** for marketing purposes			UNRESTRICTED

Choose the Right Type

Each kind of SOC engagement has two types of report. See pages 8 and 9 for details.

	EXAMINATION PERIOD	SOC REPORTS			TESTING COVERAGE		
		SOC 1	SOC 2	SOC 3	Design	Operating Effectiveness	Results of Tests
TYPE 1	POINT in time	✓	✓		✓		
TYPE 2	PERIOD of time	✓	✓		✓	✓	✓

SOC 1

SOC 1 looks at internal controls for financial reporting. For example, a financial services provider that provides transaction processing may request a report to look at its transaction processing and operations.

Once an organization defines the controls it would like examined, there's a lot of work that goes into an independent examination to assess if those controls are in place and operating efficiently. SOC 1 is considered an auditor-to-auditor communication, which means an auditor provides it and then hands it to the auditor requesting it.

There are two types of reports for these engagements:

Type 1

This looks at the design and implementation of internal controls *at a certain point in time*, which gives this examination a so-called as-of date.

Type 2

This is the report you want. It looks at design and operating effectiveness of internal controls *over a period of time*, usually a 12-month period, which gives a much more meaningful perspective compared with Type 1.

Distribution of SOC 1 examination details is restricted to management, customers, and financial statement auditors in order to keep sensitive information confidential. However, you can look for the AICPA seal to see if a company completed its examination.

Even when you may not have access to a SOC 1 or 2 report because of distribution restrictions, you can look for a SOC compliant seal on a company's Web site or other materials.

SOC 2

Most technology companies have a need for SOC 2 audits, regardless of their line of service, because they use or are themselves third-party vendors that store, process, or maintain data.

There's been huge growth in the number of SOC 2 examinations performed—and it's anticipated to continue. This is in large part due to increased security concerns that rise proportionally as the IT industry promotes new products and services in the cloud.

SOC 2 examinations emphasize system reliability by measuring the effectiveness of internal controls related to five **trust services principles**:

1. **Security**
2. **Availability**
3. **Confidentiality**
4. **Processing integrity**
5. **Privacy**

Each of these trust principles has predefined criteria (*see page 11*).

SOC 2 reports are now considered a base requirement for technology service providers. They're embraced by:

- Software as a service (SaaS)
- Infrastructure as a service (IaaS)
- Platform as a service (PaaS)
- Cloud-based providers
- Data centers and colocation facilities
- IT-managed services companies
- IT-hosted services
- Business intelligence software

Similar to a SOC 1 report, there are two types within SOC 2:

Type 1

This looks at management's description of a service provider's system and the suitability of the *design* of controls.

Type 2

This looks at management's description of a service provider's system and the suitability of the *design and operating effectiveness* of controls.

Also like SOC 1, SOC 2 examination details can be distributed only to management, current and prospective customers, and financial statement auditors.

SOC 3

SOC 3 reports are essentially a smaller-scale SOC 2 report and used primarily for public distribution. Companies generally must complete a SOC 2 audit before requesting a SOC 3 report. While demand is extremely low for these reports, the distribution element can often be compelling for companies.

CARVE-OUT VERSUS INCLUSIVE METHOD

Many service providers prefer the carve-out method, which includes the services performed by a vendor organization in the service provider's system description but excludes the control objectives and related controls of the subservice organization.

The inclusive method looks at the services performed by a vendor in the service provider's system description as well as the control objectives and related controls of the vendor's organization. Start-ups that have most of their functions in house, or bigger companies that have a large number of in-house processes, may opt for the inclusive method.

The Trust Services Principles

- SECURITY
- AVAILABILITY
- CONFIDENTIALITY
- PROCESSING INTEGRATION
- PRIVACY

Every report includes security as part of the common criteria.

Management can choose which of the other trust services principles they'd like to include in the examination.

For instance, if you believe a service provider is dealing with confidential information, then you should push for that trust services principle to be included.

Those trust services principles apply to these system components during an examination:

INFRASTRUCTURE	Physical structures, IT, and other hardware, including facilities, computers, equipment, mobile devices, and telecommunications networks
SOFTWARE	Application programs and IT system software that support application programs, such as operating systems, middleware, and utilities
PEOPLE	The personnel involved in the governance, operation, and use of a system—namely developers, operators, entity users, vendor personnel, and managers
PROCEDURES	Automated and manual procedures
DATA	Transaction streams, files, databases, tables, and output used or processed by a system

Revisions & Advancements

AICPA PRIVACY REVISIONS

Key revisions to the privacy principle create a new set of privacy criteria to better reflect the changing technology and business environment. It also adds illustrative risk and controls related to privacy and other clarifications. These changes are effective for periods ending on or after December 16, 2016, with early implementation permitted.

ADVANCEMENTS IN THE PIPELINE

Trust services principles will be updated to align with the Committee of Sponsoring Organizations of the Treadway Commission's (COSO) 2013 framework. The adoption date is expected to be within 2017, with early adoption permitted.

Implementation of SOC 2+ will include the Health Information Trust Alliance (HITRUST) or other criteria.

Data integrity may be added as a sixth trust services principle.

Criteria Topics by Principle

SECURITY	AVAILABILITY	CONFIDENTIALITY	PROCESSING INTEGRATION	PRIVACY
• IT security policy • Security awareness and communication • Risk assessment • Logical access • Physical access • Environmental controls • Security monitoring • User authentication • Incident management • Asset classification and management • Systems development and maintenance • Personnel security • Configuration management • Change management • Monitoring and compliance	• Availability policy • Backup and restoration • Incident management • Disaster recovery • Business continuity management • Security • Change management • Monitoring and compliance	• Confidentiality policy • Confidentiality of inputs • Confidentiality of data processing • Confidentiality of outputs • Information disclosures (including third parties) • Confidentiality of information in systems development • Incident management • Security • Change management • Monitoring and compliance	• System processing integrity policies • Completeness, accuracy, timeliness, and authorization of inputs, system processing, and outputs • Information tracing from source to disposition • Incident management • Security • Change management • Availability • Monitoring	• Privacy policies • Personally identifiable information (PII) classification • Risk assessment • Incident and breach management • Provision of notice • Choice and consent • Collection • Use and retention • Disposal • Access • Disclosure to third parties • Security for privacy • Quality • Monitoring and enforcement

What Drives a SOC Examination?

SOC 1 and SOC 2 are now being used by service providers in a host of industries, but technology, financial institutions, and health care IT are particular growth sectors.

For technology companies, the main issues driving adoption of SOC reporting include the rapid rate of cloud adoption, cybersecurity threats, and compliance involving the Cloud Security Alliance (CSA), International Organization for Standardization, and the National Institute of Standards and Technology. Compliance issues for technology in health care related to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and HITRUST are powerful drivers when it comes to trust principles within security, confidentiality, and privacy of information.

Here are some other drivers, in no particular order of prevalence:

CLIENTS AND DUE DILIGENCE

Service providers don't conduct a SOC examination just because they want one; they request a report because user entities and user entities' auditors demand them—this is the primary driver. When you use a third-party service organization, you're hiring it to do work completely and accurately for the right fee. Part of due diligence and evaluating the completeness and accuracy of the work your service provider performs is to look at its SOC report.

REDUCE AUDITOR PROCEDURES

A company can significantly reduce the effort required by auditors and customers when evaluating a service organization with an effectively structured SOC audit and well-designed controls supported by meaningful test procedures. As such, the better the SOC report, the greater the reliance on testing with fewer auditor procedures needed by the report users.

COMPETITIVE MEASURE

In some cases, having a SOC audit is the minimum requirement for companies looking to enter a given market or to gain or retain customers.

DEVELOP INTERNAL CONTROLS

A number of organizations requesting SOC audits are start-ups—emerging entities with five to 50 employees. While raising funds or going public, they're looking to develop their internal controls, set up a risk assessment infrastructure, or create sophisticated documentation controls. In these cases, issuing a SOC report can increase the organization's credibility and boost confidence in its management by validating an organization's control environment.

COMPLIANCE

Organizations also conduct SOC audits to comply with the requirements of Section 404 of the Sarbanes-Oxley Act (SOX 404) or other financial or business audit requirements. Organizations funded by external financiers may also require the issuance of a SOC report. Similarly, regulatory authorities oftentimes request that companies undertake SOC audits.

MONITORING CONTROL

Like formal vendor due diligence, SOC reports can help highlight specific controls in place at a service organization. This helps customers understand the core controls they're able to leverage to better monitor performance. By understanding these automated and manual controls, an informed customer is empowered to maintain much tighter oversight of third-party vendors.

REGULATORY CHANGES

The implementation of the Affordable Care Act (ACA) in 2010 added a host of regulatory and compliance requirements, including measures to ensure the privacy of patient data. Health care organizations are required to maintain more stringent controls on privacy and confidentiality, considering the type of information they maintain. This, in turn, has increased the demand for SOC 2 audits on the part of health care organizations. Similarly, HIPAA and HITRUST are driving a rapid increase in demand for SOC reports.

SERVICE PROVIDERS DON'T CONDUCT A SOC EXAMINATION JUST BECAUSE THEY WANT ONE. THEY REQUEST A REPORT BECAUSE USER ENTITIES AND THEIR RESPECTIVE AUDITORS DEMAND THEM.

How to Prepare for a SOC Audit

The process for getting a technology service provider started with SOC 1 and SOC 2 is relatively straightforward. Once this preliminary readiness assessment is complete, a timeline can be put in place for the engagement that will be driven based upon the results of the assessment.

01
Determine if there's **sufficient demand** for the SOC audit.

02
Assign a **SOC lead** and ***solicit*** **commitment** from control owners.

03
Understand the **process, time, and effort** involved.

04
Select a **service auditor.**

05
Choose which report to issue—**SOC 1, 2, or 3** and a Type 1 or 2 report.

06
Plan and prepare for the **SOC audit.**

- Determine impact related to subservice organizations.
- Self-assess readiness of controls and remediate gaps.
- Document the system descriptions and controls for the audit.

07
Participate in the **examination.**

A Note On Controls

There's no ideal ratio in terms of IT controls versus business controls assessed during a SOC examination. In SOC 2 audits, IT controls make up the majority of controls. For SOC 1, the number of controls varies from 15 to 20, or, in some cases, over 200, with IT controls representing up to one-third of the total controls.

Technology service providers should avoid using a universal benchmark for the number of controls; instead, they should focus on a clear understanding of the nature and specificity of the controls required for their unique operating environments and the expectations of their customers given the solutions being brought to market.

In designing these controls, service providers need to have:

- A clear understanding of the controls they **currently have** and what additional controls they **need to have**
- The time frame necessary to implement the additional controls

Neglecting this analysis can lead to an unclear definition of controls, which can then result in unneeded delays in the audit process itself.

REMEMBER:

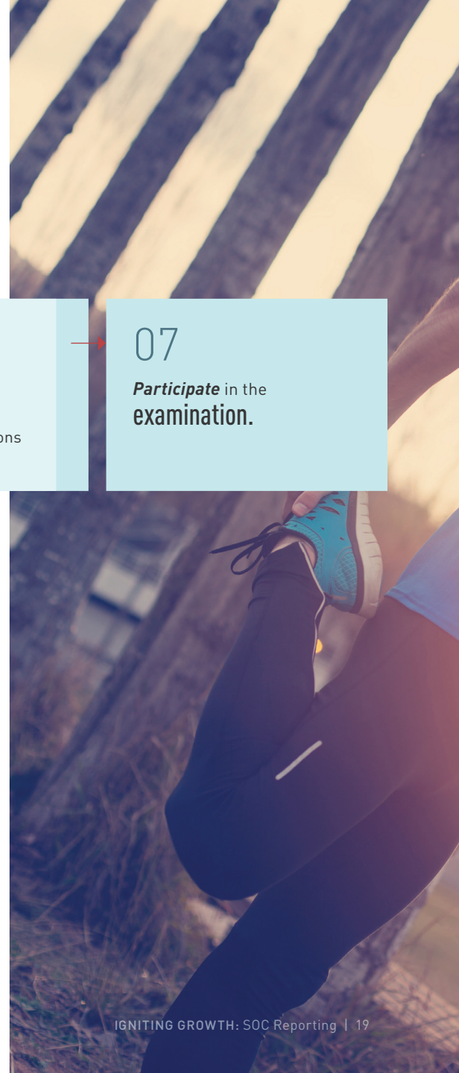
The SOC process takes time and effort.

Select the right service auditor to help you define the scope of controls, the type of audit, and the timing.

Put in place an effective internal team to help support the audit effort.

TIPS FOR DEFINING CONTROLS

- Leverage existing sources:
  - Customer contracts
  - Request for proposal responses
  - Due diligence questionnaires
  - Compliance forms
  - Quality control and internal audits
  - Competitor reports
- Start with a solid outline from which you can expand and formalize.
- Review wording and presentation of controls with your service auditor.
- Isolate control activities from the control descriptions.
- Ensure management has a reasonable basis to assert controls and monitor that they're operating effectively.



Aim for Success: Tips to Combat SOC Audit Challenges

The challenges faced by organizations conducting SOC audits vary depending on their operational maturity.

Generally, service providers that are more operationally mature have ample experience in the SOC audit process and look for ways to improve efficiency and reduce cost. Less operationally mature organizations commonly struggle with up-front issues such as failing to properly prepare for a SOC audit and underestimating the formality needed to generate consistent audit evidence.

In contrast, even larger organizations can be susceptible to risks such as underengineering controls to avoid dealing with complex networks of internal stakeholders. Or they may have highly distributed operations that can make it difficult to implement and enforce standardized controls practices.

Here are some tips to help you avoid common challenges and pitfalls that risk delaying an audit's completion.

COMMIT
TO THE AUDIT PROCESS

Companies often fail to appreciate the sustained organizational effort required to complete the audit and struggle with varying levels of commitment between senior management and staff.

COORDINATE
BETWEEN ALL PARTIES

Navigating a complex network of stakeholders with sometimes competing interests can be a challenging undertaking. While it might be tempting, don't shortchange the audit process by minimizing the areas involved and underengineering the controls.

ASSIGN
ONE POINT OF CONTACT

Auditors need to maintain a number of different communication channels. A single point of contact to oversee the entire process on behalf of the service provider will help streamline this process. It might also make sense for your organization to pull in two contacts—one within IT and the other in finance—to help facilitate communication between the two arenas.

EDUCATE
ON CONTROLS

Control owners and other relevant stakeholders at the service provider often don't understand the nature of the controls and what they're being audited against. This doesn't apply just to an IT director; everyone needs to have a higher level of awareness.

THINK
LONG TERM

Short-term convenience within the service provider culture can often undermine implementation of long-term controls, seriously hinder the SOC audit process, and introduce controls that won't be effective over time.

We're Here to Help

Our approach to staffing SOC audits is to combine industry-focused and seasoned auditors with operational and IT auditors who can address requirements unique to your control environment.

For more information on how to monitor outsourced vendor relationships and ways to manage the risks associated with outsourcing, including SOC reports, contact your Moss Adams professional or email technology@mossadams.com.

INDUSTRY INVOLVEMENT

Moss Adams regularly provides thought leadership involving SOC audits through:

- Membership on the AICPA Assurance Services Executive Committee (ASEC)
- Serving on the ASEC Trust and Information Integrity Task Force

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In addition to our financial statement audit and tax services, our professionals can meet additional operational needs specific to technology companies:

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We provide a full spectrum of consulting services in the areas of IT operations, systems, management, security, and organization.

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We've performed hundreds of royalty compliance audits for software developers, intellectual property licensors, and patent holders.

TRANSACTION SERVICES

Information is your most important asset in any transaction. We work with more than 200 private equity firms and their portfolio companies, ranging in size from emerging funds to those with more than $1 billion under management.

Our valuation consulting services in particular support mergers and acquisitions, financial reporting, ad valorem tax reporting, estate and gift tax reporting, financial feasibility studies, insurance claims, underwriting, employee stock ownership plans, and litigation.

SOC SERVICES

- SOC pre-audit gap analysis and readiness assessments
- Coordination among management, user entities, and auditors
- Coaching and review of client-prepared control objectives and narratives
- Independent assistance to document client-defined control objectives and narratives
- SOC 1, SOC2, and SOC 3 examinations (both Type 1 and 2 audits)
- Aligning SOC 2 and SOC 3 audits to leverage the CSA's Cloud Control Matrix
- SOC 2+ audits, including CSA, HIPAA, HITRUST, GLBA
- Dual reporting under US AICPA attestation standards and International Standard on Assurance Engagements (ISAE) 3042 for clients involved in international markets
- Conversion from 2014 to 2016 Trust Services Principles and the 2017 Trust Services Criteria for SOC 2 and SOC 3 audits
- Compliance management by converging SOC, ISO 27002, FedRAMP, GlBA, PCI DSS, and other regulatory
- Implementation of requirements under SSAE 18

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