

# ONESPAN SERVICE ORGANIZATION CONTROLS (SOC<sup>SM</sup>) 3 REPORT

ON ONESPAN'S DESCRIPTION OF  
ITS ONESPAN SIGN SYSTEM AND  
ON THE SUITABILITY OF THE  
DESIGN AND OPERATING  
EFFECTIVENESS OF ITS CONTROLS  
RELEVANT TO SECURITY,  
AVAILABILITY, CONFIDENTIALITY  
AND PRIVACY.

Throughout the Period of  
January 1, 2018 to  
December 31, 2018.

**PUBLIC**

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# 1. Independent Service Auditors' Report

To: Management of OneSpan Inc.

## Scope

We have been engaged to report on OneSpan accompanying statement titled "Statement by Management of OneSpan" (statement) that the controls within OneSpan's OneSpan Sign system (system) were effective throughout the period January 1, 2018, to December 31, 2018, to provide reasonable assurance that OneSpan's service commitments and system requirements were achieved based on the trust services criteria relevant to security, availability, confidentiality, and privacy (applicable trust services criteria) set forth in TSP section 100, *2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality, and Privacy* (AICPA, *Trust Services Criteria*).

## Service Organization's Responsibilities

OneSpan is responsible for its service commitments and system requirements and for designing, implementing, and operating effective controls within the system to provide reasonable assurance that OneSpan's service commitments and system requirements were achieved. OneSpan has also provided the accompanying statement about the effectiveness of controls within the system. When preparing its statement, OneSpan is responsible for selecting, and identifying in its statement, the applicable trust service criteria and for having a reasonable basis for its statement by performing an assessment of the effectiveness of the controls within the system.

## Our Independence and Quality Control

We have complied with the relevant rules of professional conduct / code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies Canadian Standard on Quality Control 1, Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## Service Auditor's Responsibilities

Our responsibility, under this engagement, is to express an opinion, based on the evidence we have obtained, on whether management's statement that controls within the system were effective throughout the period to provide reasonable assurance that the service organization's service commitments and system requirements were achieved based on the applicable trust services criteria.

Our engagement was conducted in accordance with Canadian Standard on Assurance Engagements 3000, Attestation Engagements Other than Audits or Reviews of Historical Financial Information, set out in the CPA Canada Handbook – Assurance. This standard requires that we plan and perform our engagement to obtain reasonable



assurance about whether management's statement is fairly stated, in all material respects. We believe that the evidence we obtained is sufficient and appropriate to provide a reasonable basis for our opinion.

Our reasonable assurance engagement included:

- Obtaining an understanding of the system and the service organization's service commitments and system requirements;
- Assessing the risks that controls were not effective to achieve OneSpan's service commitments and system requirements based on the applicable trust services criteria;
- Performing procedures to obtain evidence about whether controls within the system were effective to achieve OneSpan's service commitments and system requirements based the applicable trust services criteria; and
- Our engagement also included performing such other procedures as we considered necessary in the circumstances.

### **Inherent Limitations**

There are inherent limitations in the effectiveness of any system of internal control, including the possibility of human error and the circumvention of controls.

Because of their nature, controls may not always operate effectively to provide reasonable assurance that the service organization's service commitments and system requirements were achieved based on the applicable trust services criteria. Also, the projection to the future of any conclusions about the effectiveness of controls is subject to the risk that controls may become ineffective because of changes in conditions or that the degree of compliance with the policies or procedures may deteriorate.

### **Opinion**

In our opinion, management's statement that the controls within OneSpan's OneSpan Sign system were effective throughout the period January 1, 2018, to December 31, 2018, to provide reasonable assurance that OneSpan's service commitments and system requirements were achieved based on the applicable trust services criteria is fairly stated, in all material respects.

A handwritten signature in black ink that reads 'KPMG LLP' with a horizontal line underneath.

June 18, 2019  
Montreal, Canada

## 2. STATEMENT BY ONESPAN MANAGEMENT

We are responsible for designing, implementing, operating, and maintaining effective controls within the OneSpan Sign system throughout the period January 1, 2018, to December 31, 2018, to provide reasonable assurance that OneSpan's service commitments and system requirements relevant to security, availability, confidentiality, and privacy were achieved. Our description of the boundaries of the system is presented in section 3 and identifies the aspects of the system covered by our statement.

We have performed an evaluation of the effectiveness of the controls within the system throughout the period January 1, 2018, to December 31, 2018, to provide reasonable assurance that OneSpan's service commitments and system requirements were achieved based on the trust services criteria relevant to security, availability, confidentiality, and privacy (applicable trust services criteria) set forth in TSP section 100, 2017 Trust Services Criteria for Security, Availability, Processing Integrity, Confidentiality, and Privacy (AICPA, Trust Services Criteria). OneSpan's objectives for the system in applying the applicable trust services criteria are embodied in its service commitments and system requirements relevant to the applicable trust services criteria. The principal service commitments and system requirements related to the applicable trust services criteria are presented in section 4.

There are inherent limitations in any system of internal control, including the possibility of human error and the circumvention of controls. Because of these inherent limitations, a service organization may achieve reasonable, but not absolute, assurance that its service commitments and system requirements are achieved.

We confirm that the controls within the system were effective throughout the period January 1, 2018, to December 31, 2018, to provide reasonable assurance that OneSpan's service commitments and system requirements were achieved based on the applicable trust services criteria.

Christian Vezina  
Chief Information Security Officer  
June 18, 2019

### 3. ONESPAN'S DESCRIPTION OF THE BOUNDARIES OF ITS ONESPAN SIGN SYSTEM

#### Company Overview

Since 1992, OneSpan (formerly Silanis Technology, Inc.) has delivered e-signature solutions to organizations of all sizes, including banks, credit unions, insurers, pharmaceutical companies and government agencies. Built on a single SaaS platform that can be deployed in the cloud or on premises, we offer a flexible and scalable solution to help organizations to digitize business processes and conduct secure enterprise transactions that touch the customer.

#### Product Introduction

OneSpan Sign is an e-signature solution that enables users to electronically prepare, send and sign documents over the web. This process typically requires four steps:

1. Upload document(s).
2. Identify signer(s).
3. Define signature and data capture fields.
4. Select the authentication method and send.

The solution was built for businesses and projects of all sizes—making e-signatures available to everyone, regardless of deployment preference, budget or IT resources. Users simply create and send out digital documents and e-forms to clients for signing. OneSpan Sign manages the online signing process so that electronic contracts and records are enforceable, compliant and secure. Customers can monitor all in-progress transactions, identify bottlenecks and empower users to take action to keep digital processes moving forward. See Figure 1 below for a typical e-signature transaction workflow.

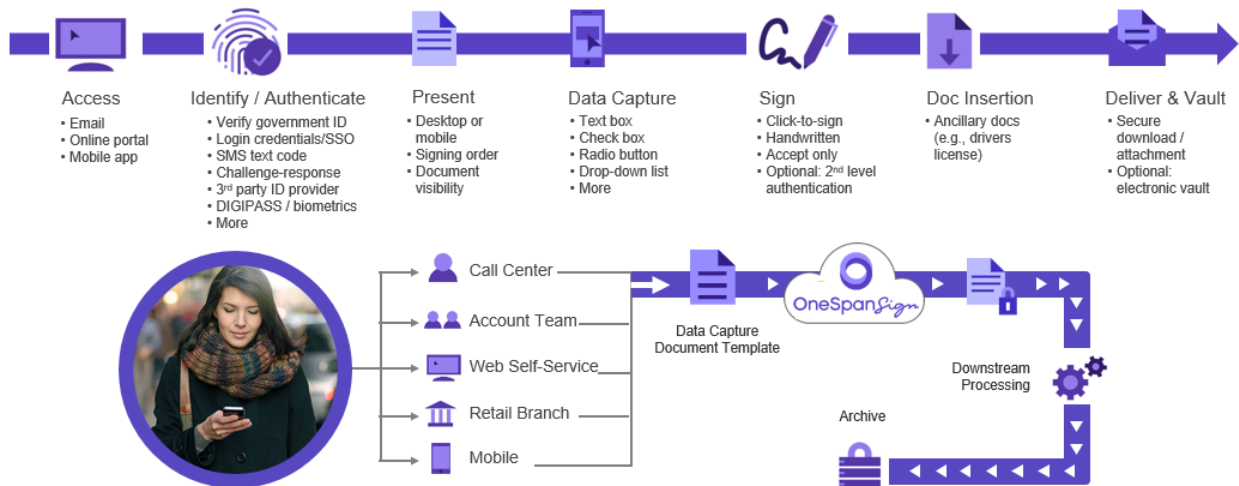


Figure 1: E-signature transaction workflow with OneSpan Sign

With OneSpan Sign, customers have the ability to authenticate the user's identity using a variety of methods including email, SMS, Question/Answer and third-party authentication services. Digital encryption securely seals each signature block after signing and the embedded audit trail reports on who signed, in what order, at what time and in what locations. This audit trail travels with the e-signed document and does not require connection to the OneSpan Sign Service ("Service").

In addition, OneSpan Sign offers a patented active audit trail called "e-Witness" that captures everything that occurs during a transaction, from beginning to end. This provides businesses with stronger customer insight and evidence than is possible with paper. Organizations can then reproduce the entire e-transaction for litigation, regulatory and internal control purposes.

OneSpan Sign is available in two plans:

- **Professional Plan** – A user-based e-signature service. This plan is ideal for sender-initiated processes where customers want to start using e-signatures immediately; there is no software to install and no IT involvement.
- **Enterprise Plan** – A flexible and scalable electronic signature solution for organizations that want to integrate e-signing capabilities into their web applications and 3rd party or homegrown systems. It offers an open API and fully supported SDKs to facilitate rapid development, testing and deployment.

Both plans include prebuilt connectors for popular 3<sup>rd</sup> party applications such as Salesforce, SharePoint, Dynamics CRM and Box that provide out-of-the-box integration with business applications that organizations know and use every day.

The Professional and Enterprise plans can be deployed publicly or privately in the cloud, or on premises behind the firewall.

## Components of the System Providing the Service

This section describes infrastructure, software, people, procedures, data, and privacy practices used to deliver the Service.

### Infrastructure

By leveraging cloud partners, OneSpan Sign can scale the required infrastructure resources whenever the need arises. OneSpan's cloud partners have extensive global data center networks. This provides OneSpan Sign with a robust environment that is highly available with a quick disaster recovery capability to another geographic region. Utilizing cloud technology ensures OneSpan Sign can quickly be scaled up and expand operations to meet its customers' growing needs.

OneSpan regularly reviews its cloud partners' compliance to validate that controls in place are sufficient to meet OneSpan's requirements.

As per good practices, infrastructure is split into multiple network segments and firewall technology is used to control network traffic and allow required traffic. System instances are hardened to help ensure that required services are running. Administrative access to the system requires multifactor authentication. User accesses are logged and controlled, and mechanisms are in place to help prevent system abuse.

OneSpan Sign is monitored on a 24/7 basis, including through the use of intrusion detection tools. Events are centrally correlated, providing system administrators with continuous visibility over, and automated notifications in case of potential incidents, including system health or security.

Vulnerability scanning and intrusion tests are performed periodically through the use of tools to detect areas that require patching or other remediation to help protect against outside threats. Patches are applied regularly to help ensure the system stays up to date and secure.

## Software

OneSpan Sign is designed based a 3-tier architecture approach, comprised of different types of instances. Unless otherwise indicated, instances are built from standardized Images and are hardened as per OneSpan Sign's hardening guidelines.

- **Presentation layer:** This layer is running public-facing instances in the form of load balancers and outbound proxies to allow secure inbound traffic to the Service and outbound traffic to integrated customers and interfaces to external third-party services.
- **Application layer:** This layer hosts the OneSpan Sign front-end web services handling the package creation and manipulation in the form of a web User Interface (UI). This layer also runs back-end instances handling all the business logic associated with the Service, including the API requests.
- **Database layer:** Database instances supporting the Service are running in this layer. Databases reside on encrypted volumes for data protection. Backups and replication of the data are performed in multiple zones and datacenter for high availability and disaster recovery purposes.

## People

OneSpan employees are bound by a non-disclosure agreement, as well as a Code of Conduct & Ethics, which they are asked to acknowledge on a yearly basis. A criminal background check is required for employees with access to production systems.

Senior Management's philosophy on the importance of protecting customer information is reflected in OneSpan control environment. OneSpan has developed an extensive set of security policies, standards and processes to help employees understand their individual roles and responsibilities with regards to information security and protection of customer information. Policies are communicated to employees at hire time and again annually, or as required. Multiple roles are defined, along with their responsibilities, such as Chief Information Security Officer, Data Protection Officer, Cloud Operations Director, Change Manager, Human Resources Manager, Product Management team, System Owner, Product Owner, Release Manager, R&D team, Senior Developers, Software Quality Assurance team, etc.

## Procedures

OneSpan has developed procedures and processes to restrict logical access to the system and protect customer data. These procedures and processes are communicated to employees, and reviewed and updated as required to maintain system security. They cover multiple aspects, such as risk management, access controls, secure development, system hardening, change management, patch management, vulnerability management, business continuity, disaster recovery, and incident response.

## Data

The system captures, processes and stores all the data necessary to carry the electronic signing of documents. Data remains within the system's boundaries in the target jurisdiction at all times and is not shared with third parties. All of this data is coming through to the system via its REST API. Both integrated customers and the system's own web User Interface interact with this API over secured HTTPS



connections. Communications to and from the OneSpan Sign system over public networks are encrypted using TLS technology, and data at rest is encrypted for increased security.

## Privacy Practices

OneSpan protects customer information in accordance with the relevant agreement between Customer and OneSpan, and applies privacy laws that are applicable to OneSpan as a data processor of personal information, according to the jurisdiction. A process to handle data subject requests is in place.

## Complementary User-Entity Controls

The OneSpan Sign system was designed with the assumption that certain policies, procedures and controls would be in existence or implemented by user entities. These controls should be in operation at the user entities to complement OneSpan's controls to achieve the customer's security or business requirements in regard to the use of the system.

## 4. PRINCIPAL SERVICE COMMITMENTS AND SYSTEM REQUIREMENTS

OneSpan designs its processes and procedures related to OneSpan Sign to meet its objectives. Those objectives are based on the service commitments that OneSpan makes to its user entities, applicable laws and regulations that govern the provision of the OneSpan Sign Service, and the financial, operational, and compliance requirements that OneSpan has established for the Service.

Service commitments to user entities are documented and communicated in Service Level Agreements (SLAs) and other customer agreements such as the OneSpan Sign Terms and Conditions which are published online (onespan.com). Service commitments include, but are not limited to, the following:

- **Security:** OneSpan has made commitments related to protecting the System and securing customer data. These commitments are addressed through controls such as data encryption, authentication mechanisms, network security and other relevant security controls.
- **Availability:** OneSpan has made commitments related to percentage uptime and connectivity for OneSpan Sign as well as commitments related to service credits for instances of downtime.
- **Confidentiality:** OneSpan has made commitments related to maintaining the confidentiality of customers' data through data classification policy, data encryption and other relevant security controls.
- **Privacy:** OneSpan has made commitments related to protecting Personal Data and put in place processes to help support OneSpan Sign's user entities' commitments.

OneSpan has established operational requirements that support the achievement of service commitments, compliance with applicable laws and regulations, and other system requirements. Such requirements are communicated in OneSpan's policies and procedures, system design documentation, and contractual agreements with customers. Information security policies define an organization-wide approach to how systems and data are protected. These include policies around how the Service is designed and developed, how the system is operated, how the internal business systems and networks are managed and how employees are hired and trained. In addition to these policies, standard operating procedures have been documented on how to carry out specific manual and automated processes required in the operation and development of OneSpan Sign.