Cloud Computing Standards Compendium

JTC1 SC 38 Cloud Computing and Distributed Platforms

ISO/IEC 17788:2014 Information Technology – Cloud computing – Overview and vocabulary
**Scope:** Provides an overview of cloud computing along with a set of terms and definitions. It is a terminology foundation for cloud computing standards.

**Scope:** Specifies the cloud computing reference architecture (CCRA). The reference architecture includes the cloud computing roles, cloud computing activities, and the cloud computing functional components and their relationships.

ISO/IEC 19086-1:2016 Information technology – Cloud computing – Service level agreement (SLA) framework – Part 1 Overview and concepts
**Scope:** Seeks to establish a set of common cloud SLA building blocks (concepts, terms, definitions, contexts) that can be used to create cloud Service Level Agreements (SLAs). This document specifies an overview of cloud SLAs, identification of the relationship between the cloud service agreement and the cloud SLA, concepts that can be used to build cloud SLAs, and terms commonly used in cloud SLAs.

ISO/IEC 19086-3:2017 Information technology – Cloud computing – Service level agreement (SLA) framework – Part 3: Core conformance requirements
**Scope:** Specifies the core conformance requirements for service level agreements (SLAs) for cloud services based on ISO/IEC 19086-1 and guidance on the core conformance requirements. This document is for the benefit of and use by both cloud service providers and cloud service customers.

ISO/IEC 19944:2107 Information technology – Cloud computing – Cloud services and devices: Data flow, data categories and data use
**Scope:** Extends the existing cloud computing vocabulary and reference architecture in ISO/IEC 17788 and ISO/IEC 17789 to describe an ecosystem involving devices using cloud services.

ISO/IEC 17203:2017 Information technology – Open Virtualization Format (OVF) specification
**Scope:** Specifies an open, secure, portable, efficient and extensible format for the packaging and distribution of software to be run in virtual machines.

**Scope:** Describes a Web services protocol based on SOAP for use in management-specific domains.
Scope: Establishes vocabulary, guidelines, and general technical principles underlying service oriented architecture (SOA), including principles relating to functional design, performance, development, deployment, and management.

Scope: Describes a Reference Architecture for SOA Solutions which applies to functional design, performance, development, deployment and management of SOA Solutions.

ISO/IEC 19941:2017 Information technology – Interoperability and portability
Scope: Specifies cloud computing interoperability and portability types, the relationship and interactions between these two cross-cutting aspects of cloud computing and common terminology and concepts used to discuss interoperability and portability, particularly relating to cloud services.

Standards under development

New project registered in TC/SC work programme (2017-02-03)
Rationale: Follow on from ISO 17788.

ISO/IEC AWI 22624 Information Technology – Cloud Computing – Taxonomy based data handling for cloud services
New project registered in TC/SC work programme (2017-07-11)
Rationale: Follow on from ISO 19944.

JTC1 SC 27 IT Security Techniques

Scope: Gives guidelines for information security controls applicable to the provision and use of cloud services by providing: additional implementation guidance for relevant controls specified in ISO/IEC 27002; additional controls with implementation guidance that specifically relate to cloud services.

Scope: Establishes commonly accepted control objectives, controls and guidelines for implementing measures to protect Personally Identifiable Information (PII) in accordance with the privacy principles in ISO/IEC 29100 for the public cloud computing environment. In particular, ISO/IEC 27018:2014 specifies guidelines based on ISO/IEC 27002, taking into
consideration the regulatory requirements for the protection of PII which might be applicable within the context of the information security risk environment(s) of a provider of public cloud services.

Scope: Specifies fundamental information security requirements for defining, implementing, operating, monitoring, reviewing, maintaining and improving supplier and acquirer relationships. These requirements cover any procurement and supply of products and services, such as manufacturing or assembly, business process procurement, software and hardware components, knowledge process procurement, Build-Operate-Transfer and cloud computing services.

Scope: Provides cloud service customers and cloud service providers with guidance on gaining visibility into the information security risks associated with the use of cloud services and managing those risks effectively, and responding to risks specific to the acquisition or provision of cloud services that can have an information security impact on organizations using these services.