# Notes on Glossary Terms

*September 24, 2021*

This is not an exhaustive list of all terms that are relevant in the OSA space. Rather terms included have emerged from the other working groups of the OSA, have been included as a seeding exercise for this first release, or included for the sake of completeness of a particular conceptual group.

The glossary is generated in a SKOS (Simple Knowledge Organization System) tool, which provides an inherent structure. Output in flat alphabetical form for this document removes some of that context, and for that reason some additional “Related Concepts” have been included in this iteration and minor changes made to make definitions more able to stand independently, without reference to related terms. This is particularly true of the arrangement for a Base Environment (based upon the MCMA model) under Service. (See figure 1 for a simple illustration of the organization of concepts in their original broader/narrower terms hierarchy.)

Not all acronyms included in the glossary will have a definition: those without a definition are included because they feature in OSA specifications or other definitions and it is generally good practice to provide the long form of acronyms and abbreviations, but no further description was deemed necessary. (Acronyms are noted within Scope Notes.)

Some concepts will have no OSA definition: where there was an existing definition produced by another standards body that served OSA’s needs, only that is included.

On the other hand, some concepts have multiple definitions, e.g. from OSA, NIST, and ISO. This might be because the differing emphasis or nuance was seen as helpful in supporting understanding, though it is possible these may be winnowed down. Only definitions that are broadly in-line with the OSA understanding of a term are included. Generally, the OSA has aimed to make its definitions very concise and other definitions may provide more detail.

Some concepts have an OSA vocabulary group definition only. For these terms we could not find an appropriate existing definition generated by a standards body.

Some concepts have two OSA definitions. This happens where one definition is quoted from an OSA-produced specification (now or soon to be submitted to SMPTE), and another – usually more general one – has emerged from the work of the Vocabulary Group. There will be a process to examine both definitions and determine whether they should be reconciled into one, or if there is a good case for them both to persist.

This release does not include additional terms that are currently only proposed or candidates. The next glossary release will include those terms and any terms that emerge from current activity by OSA working groups.

# Terms

1. **API**
   1. [**Alternative Labels**](http://www.w3.org/2004/02/skos/core#altLabel)
      1. Application Programming Interface
   2. [**Scope Note**](http://www.w3.org/2004/02/skos/core#scopeNote)
      1. Acronym
   3. [**Related Concepts**](http://www.w3.org/2004/02/skos/core#related)
   4. Application

# Application

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. App
    2. Application Program
    3. Application Software
    4. Application System
    5. Software Application
    6. Software Application Program

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. 1. software designed to help users perform particular tasks or handle particular types of problems, as distinct from software that controls the computer itself 2. software or a program that is specific to the solution of an application problem. ISO/IEC/IEEE 24765:2017, Systems and software engineering — Vocabulary, 3.192: application software
    2. A system for collecting, saving, processing, and presenting data by means of a computer. The term application is generally used when referring to a component of software that can be executed. The terms application and software application are often used synonymously. NISTIR 7695, Common Platform Enumeration: Naming Specification Version 2.3, 2011
    3. Software designed for a specific purpose or operational area. OSA Vocabulary Group, June 2021.
    4. Software making requests and receiving responses using the API. Note 1 to entry: multiple applications may communicate via the API. OSA: IMF Registration Service API (SMPTE ST-2125:202x), Terms and Definitions, 3.1, application.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [API](https://vocabulary.pbs.org/OSAGlossary/2)

# Architectural Layer

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. One of the components of an architectural model that is organized into several stacked and interrelated parts, each with its own focus and function, with defined relationships between layers. OSA Vocabulary Group, June 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Architecture](https://vocabulary.pbs.org/OSAGlossary/34)

# Architecture

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Software Architecture

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. High-level modeling describing the structure and behavior of a given system, comprising components and the connections between them. OSA Vocabulary Group, June 2021.
    2. The fundamental concepts or properties of a system in its environment embodied in its elements, relationships, and in the principles of its design and evolution. NIST SP 800-160, Volume 1, Systems Security Engineering: Considerations for a Multidisciplinary Approach in the Engineering of Trustworthy Secure Systems, 2018, after ISO/IEC/IEEE 42010: 2011, Systems and software engineering — Architecture description, 3.2.

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Architectural Layer](https://vocabulary.pbs.org/OSAGlossary/40)
    2. [Event-Driven Architecture](https://vocabulary.pbs.org/OSAGlossary/35)
    3. [Rule-Based Architecture](https://vocabulary.pbs.org/OSAGlossary/36)
    4. [Zero-Trust Architecture](https://vocabulary.pbs.org/OSAGlossary/65)

# as-a-Service

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Anything-as-a-Service
    2. Everything-as-a-Service
    3. XaaS

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A business and provisioning model wherein various computing and data storage resources are hosted by a third party and made available on a subscription or on-demand basis. OSA Vocabulary Group, June 2021.

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Function-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/39)
    2. [Infrastructure-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/43)
    3. [Platform-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/41)
    4. [Software-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/42)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Cloud Computing](https://vocabulary.pbs.org/OSAGlossary/4)
    2. [Cloud Deployment Model](https://vocabulary.pbs.org/OSAGlossary/45)
    3. [Serverless Computing](https://vocabulary.pbs.org/OSAGlossary/22)

# Base Environment

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. MCMA Environment
    2. Media Services Environment
    3. Minimum Media Services Environment

## [Non-Preferred Labels](http://www.w3.org/2004/02/skos/core#hiddenLabel)

* + 1. MCMA Core
    2. MCMA Project

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A minimum media processing environment that comprises at least two services: a registry and a job processor, and any additional services required to perform assigned tasks. OSA Vocabulary Group, June 2021, based on the model developed by MCMA.
    2. An MCMA [environment] comprises a grouping of several discrete logical parts known as "services." MCMA: https://mcma.io/concepts/mcma-project.html (modified).

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Service](https://vocabulary.pbs.org/OSAGlossary/23)

# Cloud Computing

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A general term for the provision of hosted services. Also used to differentiate processing or workflows enacted within the cloud from simple storage. OSA Vocabulary Group, June 2021.
    2. A model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction. NIST SP 800-145, The NIST Definition of Cloud Computing, 2011.
    3. A paradigm for enabling network access to a scalable and elastic pool of shareable physical or virtual resources with self-service provisioning and administration on-demand. ISO/IEC 17788:2014, Information technology — Cloud computing — Overview and vocabulary, 3.25.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [as-a-Service](https://vocabulary.pbs.org/OSAGlossary/37)
    2. [Serverless Computing](https://vocabulary.pbs.org/OSAGlossary/22)

# Cloud Deployment Model

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Cloud

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The utilization of some configuration of hosted computing resources and infrastructure. OSA Vocabulary Group, June 2021.
    2. Ways in which cloud computing can be organized based on the control and sharing of physical or virtual resources. ISO/IEC 22123-1: Information technology — Cloud computing —Part 1: Vocabulary, 3.3.1.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Deployment Model](https://vocabulary.pbs.org/OSAGlossary/38)

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Hybrid Cloud](https://vocabulary.pbs.org/OSAGlossary/47)
    2. [Multi-Cloud](https://vocabulary.pbs.org/OSAGlossary/50)
    3. [Private Cloud](https://vocabulary.pbs.org/OSAGlossary/48)
    4. [Public Cloud](https://vocabulary.pbs.org/OSAGlossary/49)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [as-a-Service](https://vocabulary.pbs.org/OSAGlossary/37)

# Cloud, The

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Cloud

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A collection of networked remote servers. ISO 20294:2018, Graphic technology — Quantification and communication for calculating the carbon footprint of e-media.
    2. Remote networked server infrastructure used for storage, processing and/or services and accessed via TCP/IP and related internet protocols. OSA Vocabulary Group, June 2021.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [TCP/IP](https://vocabulary.pbs.org/OSAGlossary/88)

# Deployment Model

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A model of how an application is mapped to a distributed deployment network. ISO/IEC 16500-8:1999, Information technology — Generic digital audio-visual systems — Part 8: Management architecture and protocols, 3.7 (modified).
    2. The specification or description of how software components should be (or are) mapped onto physical hardware, be that provided locally, virtualized, or hosted. OSA Vocabulary Group, June 2021.

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Cloud Deployment Model](https://vocabulary.pbs.org/OSAGlossary/45)
    2. [Hybrid Deployment Model](https://vocabulary.pbs.org/OSAGlossary/46)
    3. [On-Premises Deployment Model](https://vocabulary.pbs.org/OSAGlossary/44)

# EBU

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. European Broadcasting Union

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym
    2. Organization

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [MCMA](https://vocabulary.pbs.org/OSAGlossary/30)

# End Point

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Endpoint

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. An association between a binding and a network address, specified by a URI, that may be used to communicate with an instance of a service. An end point indicates a specific location for accessing a service using a specific protocol and data format. W3C Web Services Glossary, 2004: https://www.w3.org/TR/ws-gloss/
    2. Software receiving requests and providing responses using the API. OSA: IMF Registration Service API (SMPTE ST-2125:202x), Terms and Definitions, 3.2.

# ETag

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Entity Tag

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Abbreviation

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. An opaque validator for differentiating between multiple representations of the same resource, regardless of whether those multiple representations are due to resource state changes over time, content negotiation resulting in multiple representations being valid at the same time, or both. An entity-tag consists of an opaque quoted string, possibly prefixed by a weakness indicator. IETF RFC 7232: Hypertext Transfer Protocol (HTTP/1.1): Conditional Requests, June 2014.
    2. An opaque validator for differentiating between multiple representations of the same resource. OSA Vocabulary Group, June 2021, based on HTTP 1.1.
    3. Software making requests and receiving responses using the API entity tag as defined in the HTTP protocol. OSA: IMF Registration Service API (SMPTE ST-2125:202x), Terms and Definitions, 3.3.

# Event-Driven Architecture

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A computing model wherein work is performed in response to specified occurrences or state changes that serve as triggers, automatically initiating designated actions or functions. OSA Vocabulary Group, June 2021.
    2. A deterministic architecture where work is performed in response to specified occurrences or state changes. Note: When given events are detected ECA (Event-Condition-Action) rules are triggered, and appropriate actions taken or functions implemented. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.1.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Architecture](https://vocabulary.pbs.org/OSAGlossary/34)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Function](https://vocabulary.pbs.org/OSAGlossary/8)
    2. [Function-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/39)
    3. [Rule-Based Architecture](https://vocabulary.pbs.org/OSAGlossary/36)

# Function

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. OSA Vocabulary Group, June 2021

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A single-purpose, short-lived, granular unit of code that runs only in response to specified triggers. OSA Vocabulary Group, June 2021.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Event-Driven Architecture](https://vocabulary.pbs.org/OSAGlossary/35)
    2. [Function-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/39)
    3. [Serverless Computing](https://vocabulary.pbs.org/OSAGlossary/22)

# Function-as-a-Service

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. FaaS
    2. Functions-as-a-Service

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of cloud computing services that allow the creation of very granular tasks (functions) as small, self-contained pieces of codes that can be concatenated together in a rule-based, event-driven architecture to perform automated processes. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.3.
    2. A category of computing services that allows the creation of very granular capabilities that can be concatenated together within a rule-based, event-driven architecture to perform automated tasks and processes. OSA Vocabulary Group, June 2021.
    3. Cloud service category in which the capability provided to the cloud service customer is the execution of cloud service customer application code, in the form of one or more functions that are each triggered by a cloud service customer specified event. ISO/IEC TS 23167:2020: Information technology — Cloud computing — Common technologies and techniques, 3.17.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [as-a-Service](https://vocabulary.pbs.org/OSAGlossary/37)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Event-Driven Architecture](https://vocabulary.pbs.org/OSAGlossary/35)
    2. [Function](https://vocabulary.pbs.org/OSAGlossary/8)
    3. [Rule-Based Architecture](https://vocabulary.pbs.org/OSAGlossary/36)
    4. [Serverless Computing](https://vocabulary.pbs.org/OSAGlossary/22)

# HTTP

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Hypertext Transfer Protocol

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A stateless application-level protocol for distributed, collaborative, hypertext information systems. IETF RFC 7231: HTTP 1.1.
    2. A stateless application-level request/response protocol that uses extensible semantics and self-descriptive message payloads for flexible interaction with network-based hypertext information systems. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.4.

# Hybrid Cloud

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of computing services that is made up of both private and public cloud resources. OSA Vocabulary Group, June 2021.
    2. A composition of at least two distinct cloud infrastructures [typically private and public] that remain unique entities, but are bound together by standardized or proprietary technology that enables data and application portability. NIST SP 800-145, The NIST Definition of Cloud Computing, 2011 (modified).
    3. Cloud deployment model using at least two different cloud deployment models. ISO/IEC 17788: Information technology — Cloud computing — Overview and vocabulary, Section 3.2.23,

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Cloud Deployment Model](https://vocabulary.pbs.org/OSAGlossary/45)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. Public Cloud
    2. Private Cloud

# Hybrid Deployment Model

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Hybrid

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. OSA Vocabulary Group, June 2021

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The utilization of some combination of hosted, on-premises, and/or virtualized computing resources and infrastructure. OSA Vocabulary Group, June 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Deployment Model](https://vocabulary.pbs.org/OSAGlossary/38)

# Idempotent

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. An interaction that returns identical results when invoked with identical parameters regardless of the number of times invoked. OSA Vocabulary Group, June 2021.
    2. Returns identical results when invoked with identical parameters regardless of the number of times invoked. OSA: IMF Registration Service API (SMPTE ST-2125:202x), Terms and Definitions, 3.4

# Infrastructure-as-a-Service

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. HaaS
    2. Hardware-as-a-Service
    3. IaaS

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of computing services that provides infrastructural components such as servers, storage, and network as virtualized resources. OSA Vocabulary Group, June 2021.
    2. The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer is able to deploy and run arbitrary software, which can include operating systems and applications. The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g., host firewalls). NIST SP 800-145, The NIST Definition of Cloud Computing, 2011.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [as-a-Service](https://vocabulary.pbs.org/OSAGlossary/37)

# Interoperability

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The ability of two or more systems or applications to exchange information and to mutually use the information that has been exchanged. NIST SP 500-XXX: The NIST Cloud Federation Reference Architecture, 2019 (Draft), Appendix A, Cloud Federation Terms and Definitions.

# Job

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A stored set of processes that may be used to perform a specific piece of work or operation on media files as needed. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.6.
    2. A unit of work that may be performed by a stored set of processes within a service-based media environment. OSA Vocabulary Group, June 2021, based on MCMA documentation.
    3. User-defined unit of work that is to be accomplished by a computer. ISO/IEC/IEEE 24765:2017: Systems and software engineering — Vocabulary, 3.1542 (modified).

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base Environment](https://vocabulary.pbs.org/OSAGlossary/33)
    2. [Job Processor](https://vocabulary.pbs.org/OSAGlossary/55)
    3. [Job Profile Repository](https://vocabulary.pbs.org/OSAGlossary/60)
    4. [MCMA](https://vocabulary.pbs.org/OSAGlossary/30)

# Job Assignment

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. JobAssignment
    2. MCMA Job Assignment

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The allocation of a given job to the service(s) capable of fulfilling it within a base environment. Each instance will be associated with a URL identifier in the executing service. OSA Vocabulary Group, June 2021.
    2. URL pointing to the jobAssignment instance in the executing service. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), 11.6.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Job Processor](https://vocabulary.pbs.org/OSAGlossary/55)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment

# Job Execution

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. JobExecution
    2. MCMA Job Execution

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The performance of a job within a base environment. Each instance will be associated with a URL identifier in the job processor. OSA Vocabulary Group, June 2021.
    2. URL pointing to the jobExecution instance in the job processor. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x)

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Job Processor](https://vocabulary.pbs.org/OSAGlossary/55)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment

# Job Processor

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. JobProcessor
    2. MCMA Job Processor

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A service used to manage job(s): receive service requests; allocate them to the appropriate job profiles and capabilities listed within a registry; assign identifiers; and monitor and store execution status via log entries. One of the required components of a base environment. OSA Vocabulary Group, June 2021, based on MCMA documentation.
    2. A service which stores all the jobs (of any kind) that would need to be executed. In this service, whenever a job is starting, running or completing/failing, a log entry shall be created. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), 11.
    3. The brain of the MCMA environment. It should be the entry point for all requested processing, as it handles the routing of these requests, known as jobs, to the services that can process them. The job processor is also responsible for monitoring jobs, both to check if they have exceeded specified limits on processing time and to clean up old job data when it's no longer needed. MCMA Website: https://mcma.io/concepts/, accessed May 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Base Environment](https://vocabulary.pbs.org/OSAGlossary/33)

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Job Assignment](https://vocabulary.pbs.org/OSAGlossary/74)
    2. [Job Execution](https://vocabulary.pbs.org/OSAGlossary/73)
    3. [Log](https://vocabulary.pbs.org/OSAGlossary/56)
    4. [Status Reporting](https://vocabulary.pbs.org/OSAGlossary/76)
    5. [Tracker](https://vocabulary.pbs.org/OSAGlossary/57)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Job](https://vocabulary.pbs.org/OSAGlossary/71)
    2. [MCMA](https://vocabulary.pbs.org/OSAGlossary/30)

# Job Profile

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A template describing the operation(s) performed by a job and the expected input and output parameters. Stored in the job profile repository with an associated URL and retrievable with an HTTP GET request. OSA Vocabulary Group, June 2021.
    2. URL where the job profile is stored and retrievable with a HTTP GET request. The job profile indicates which specific operation is going to be performed. It also describes which input and output parameters are expected. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), 5.3.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Job Profile Repository](https://vocabulary.pbs.org/OSAGlossary/60)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment

# Job Profile Repository

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. MCMA Job Profile Repository

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The library of job profiles available for re-use within a base environment. OSA Working Group, June 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Registry](https://vocabulary.pbs.org/OSAGlossary/54)

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Job Profile](https://vocabulary.pbs.org/OSAGlossary/72)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Job](https://vocabulary.pbs.org/OSAGlossary/71)
    2. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment

# JSON

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. JavaScript Object Notation

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A lightweight, text-based, language-independent data interchange format [that] defines a small set of formatting rules for the portable representation of structured data. IETF RFC 8259, The JavaScript Object Notation (JSON) Data Interchange Format, 2017 (modified).
    2. A lightweight, text-based, language-independent data-interchange format used to represent structured data. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.5.

# Log

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Job Log
    2. MCMA Log

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A record of statuses collected during job execution within a base environment and stored within a job processor. OSA Vocabulary Group, June 2021.
    2. A record of statuses collected during job execution. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.7.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Job Processor](https://vocabulary.pbs.org/OSAGlossary/55)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment

# MCMA

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Media Cloud Microservice Architecture

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A set of patterns and practices used to govern the implementation of micro-service architectures in cross-cloud and/or hybrid environments, with a particular focus on the needs of media workflows. MCMA Website, https://tech.ebu.ch/groups/mcma.
    2. An initiative of the EBU Technology and Innovation group that provides a base set of patterns and practices to govern the implementation of microservice architectures in cross-cloud and/or hybrid environments, with a particular focus on the allocation of tasks to services within media workflows. OSA Vocabulary Group, June 2021, based on MCMA documentation.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base Environment](https://vocabulary.pbs.org/OSAGlossary/33)
    2. [EBU](https://vocabulary.pbs.org/OSAGlossary/31)
    3. [Job](https://vocabulary.pbs.org/OSAGlossary/71)
    4. [Job Processor](https://vocabulary.pbs.org/OSAGlossary/55)
    5. [Job Repository](https://vocabulary.pbs.org/OSAGlossary/52)
    6. [Registry](https://vocabulary.pbs.org/OSAGlossary/54)

# Microservice

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. micro-service

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A basic element that results from the architectural decomposition of an application’s components into loosely coupled patterns consisting of self-contained services that communicate with each other using a standard communications protocol and a set of well-defined APIs, independent of any vendor, product or technology. NIST SP 800-180: NIST Definition of Microservices, Application Containers and System Virtual Machines, 2016 (Draft).
    2. A modular service-based capability that handles a narrow task and is managed in isolation. OSA Vocabulary Group, June 2021.

# Multi-Cloud

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Cross-Cloud
    2. Intercloud
    3. Interconnected Cloud
    4. Multicloud
    5. Multi-cloud
    6. Multiple Clouds

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. Provisioning cloud resources from multiple cloud providers. NIST SP 500-XXX: The NIST Cloud Federation Reference Architecture (Draft).
    2. The use of services from multiple cloud service providers, typically to provide vendor redundancy and/or to provide a mix of services optimized to the capabilities of each vendor. Likely to present interoperability and portability challenges. OSA Vocabulary Group, June 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Cloud Deployment Model](https://vocabulary.pbs.org/OSAGlossary/45)

# On-Premises Deployment Model

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. On-Prem
    2. On-Prem Deployment Model
    3. On-Premise
    4. On-Premise Deployment Model
    5. On-Premises
    6. Onprem
    7. Onprem Deployment Model

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The utilization of on-site or in-house provisioned and managed computing resources and infrastructure. OSA Vocabulary Group, June 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Deployment Model](https://vocabulary.pbs.org/OSAGlossary/38)

# OSA

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Open Services Alliance
    2. Open Services Alliance for Media

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym
    2. Organization

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. An alliance of organizations with the common goal of enabling open, interoperable services across all aspects of the media ecosystem. OSA Website, https://openservicesalliance.com/who-are-we.

# Platform-as-a-Service

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of computing services that provides an environment for the development and/or deployment of applications. OSA Vocabulary Group, June 2021.
    2. The capability provided to the consumer is to deploy onto the cloud infrastructure consumer-created or acquired applications created using programming languages, libraries, services, and tools supported by the provider. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, or storage, but has control over the deployed applications and possibly configuration settings for the application-hosting environment. NIST SP 800-145: The NIST Definition of Cloud Computing, 2011.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [as-a-Service](https://vocabulary.pbs.org/OSAGlossary/37)

# Portability

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The ability to move an object from one system to another without the loss of functionality. NIST SP 500-XXX: The NIST Cloud Federation Reference Architecture, 2019 (Draft), Appendix A, Cloud Federation Terms and Definitions.

# Private Cloud

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of computing services that can be accessed without going through the public Internet and may include both cloud and on-premises resources as well as resources in different physical locations connected by private networks. OSA Vocabulary Group, June 2021.
    2. Services are used exclusively by a single cloud service customer and resources are controlled by that cloud service customer. ISO/IEC 17788: Information technology — Cloud computing — Overview and vocabulary, Section 3.2.32.
    3. The cloud infrastructure is provisioned for exclusive use by a single organization comprising multiple consumers (e.g., business units). It may be owned, managed, and operated by the organization, a third party, or some combination of them, and it may exist on or off premises. NIST SP 800-145: The NIST Definition of Cloud Computing

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Cloud Deployment Model](https://vocabulary.pbs.org/OSAGlossary/45)

# Public Cloud

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of computing services where cloud processing and storage are accessed via the public Internet. OSA Vocabulary Group, June 2021.
    2. Services are potentially available to any cloud service customer and resources are controlled by the cloud service provider. ISO/IEC 17788: Information technology — Cloud computing — Overview and vocabulary, Section 3.2.33.
    3. The cloud infrastructure is provisioned for open use by the general public. It may be owned, managed, and operated by a business, academic, or government organization, or some combination of them. It exists on the premises of the cloud provider. NIST SP 800-145: The NIST Definition of Cloud Computing.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Cloud Deployment Model](https://vocabulary.pbs.org/OSAGlossary/45)

# Registry

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. MCMA Service Registry
    2. Service Registry

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A service used to store available service capabilities and job profiles and make them available for discovery by the job processor or external clients. One of the required components of a base environment. OSA Vocabulary Group, June 2021, based on MCMA documentation.
    2. Used for service discovery. This is used internally by the job processor to find services capable of processing jobs, and can also be used by external clients to find other services that handle other types of resources as well. While the service registry currently only exposes capabilities as mappings of endpoints to resource types, it may be extended to support exposing additional capabilities in the future. MCMA Website: https://mcma.io/concepts/, accessed May 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Base Environment](https://vocabulary.pbs.org/OSAGlossary/33)

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Job Profile Repository](https://vocabulary.pbs.org/OSAGlossary/60)
    2. [Service Repository](https://vocabulary.pbs.org/OSAGlossary/61)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [MCMA](https://vocabulary.pbs.org/OSAGlossary/30)
    2. [Service](https://vocabulary.pbs.org/OSAGlossary/23)

# Rule-Based Architecture

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Rule-Based System

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A deterministic architecture where work is automated according to a set of human-stipulated instructions. OSA Vocabulary Group.
    2. A deterministic architecture where work is performed according to a set of rules. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.2.
    3. Knowledge-based system that draws inferences by applying a set of if-then rules to a set of facts following given procedures. ISO/IEC 2382:2015, Information technology — Vocabulary, 2123875

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Architecture](https://vocabulary.pbs.org/OSAGlossary/34)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Event-Driven Architecture](https://vocabulary.pbs.org/OSAGlossary/35)
    2. [Function-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/39)

# Serverless Computing

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of computing services where servers and other resources are provided by a third-party and accessed only as needed. OSA Vocabulary Group, June 2021.
    2. Cloud service category in which the cloud service customer can use different cloud capabilities types without the cloud service customer having to provision, deploy and manage either hardware or software resources, other than providing cloud service customer application code or providing cloud service customer data. ISO/IEC TS 23167:2020, Information technology — Cloud computing — Common technologies and techniques.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [as-a-Service](https://vocabulary.pbs.org/OSAGlossary/37)
    2. [Cloud Computing](https://vocabulary.pbs.org/OSAGlossary/4)
    3. [Function](https://vocabulary.pbs.org/OSAGlossary/8)
    4. [Function-as-a-Service](https://vocabulary.pbs.org/OSAGlossary/39)

# Service

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A capability stored within a service registry that is created by a logical grouping of the components -- such as microservice(s), function(s), data store(s), and queue(s) -- required to complete a given task. OSA Vocabulary Group, June 2021, based on MCMA documentation.
    2. A logical grouping of one or more micro-services, data stores, queues, or any other components that might be required for the service's intended high-level purpose. MCMA Website, https://mcma.io/concepts/mcma-service.html, accessed May 2021.
    3. An abstract resource that represents a capability of performing tasks that form a coherent functionality from the point of view of providers entities and requesters entities. W3C Web Services Glossary, 2004, https://www.w3.org/TR/ws-gloss/#service.

## [Narrower Concepts](http://www.w3.org/2004/02/skos/core#narrower)

* + 1. [Base Environment](https://vocabulary.pbs.org/OSAGlossary/33)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Registry](https://vocabulary.pbs.org/OSAGlossary/54)

# Service Repository

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. MCMA Service Repository

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The library of service capabilities available within a base environment in addition to the job templates stored within the job profile repository. OSA Working Group, June 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Registry](https://vocabulary.pbs.org/OSAGlossary/54)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment

# Software-as-a-Service

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. SaaS

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A category of computing services whereby software applications are hosted by a service provider and typically accessed via standard web browsers. OSA Vocabulary Group, June 2021.
    2. The capability provided to the consumer is to use the provider’s applications running on a cloud infrastructure. The applications are accessible from various client devices through either a thin client interface, such as a web browser (e.g., web-based email), or a program interface. The consumer does not manage or control the underlying cloud infrastructure including network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings. NIST SP 800-145: The NIST Definition of Cloud Computing, 2011.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [as-a-Service](https://vocabulary.pbs.org/OSAGlossary/37)

# Status Reporting

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Job Status Reporting
    2. MCMA Status Reporting

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. The real-time reporting of the success, failure, or other condition of the job execution within a base environment. OSA Vocabulary Group, June 2021.
    2. The real-time reporting of the success, failure or other status of the job execution. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions 3.8.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Job Processor](https://vocabulary.pbs.org/OSAGlossary/55)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment

# TCP/IP

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Internet protocol suite
    2. Transmission Control Protocol/Internet Protocol

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Cloud, The](https://vocabulary.pbs.org/OSAGlossary/66)

# Tracker

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Job Tracker
    2. MCMA Tracker
    3. Transaction Tracker

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A token (including a unique identifier) passed between the microservices involved in the completion of a transaction, allowing their correlation. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.9.
    2. A token, including a unique identifier and a human readable label, assigned to each job and used to correlate its execution over all involved components – such as microservices or functions -- as a distributed transaction. OSA Vocabulary Group, June 2021.

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Job Processor](https://vocabulary.pbs.org/OSAGlossary/55)

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [Base](https://vocabulary.pbs.org/OSAGlossary/66) Environment
    2. Job

# URI

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Uniform Resource Identifier

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A compact sequence of characters that identifies an abstract or physical resource. IETF RFC 3986: Uniform Resource Identifier (URI): Generic Syntax, 2005.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [URL](https://vocabulary.pbs.org/OSAGlossary/27)

# URL

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. Uniform Resource Locator

## [Scope Note](http://www.w3.org/2004/02/skos/core#scopeNote)

* + 1. Acronym

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A compact string representation of the location for a resource that is available via the Internet. IETF RFC 2718: Guidelines for new URL Schemes, 1999.
    2. A unique identifier for a web resource that specifies its location on a computer network and a mechanism for retrieving it. OSA: Microservice Status Reporting and Logging (SMPTE ST 2126:202x), Terms and Definitions, 3.10.

## [Related Concepts](http://www.w3.org/2004/02/skos/core#related)

* + 1. [URI](https://vocabulary.pbs.org/OSAGlossary/75)

# Zero-Trust Architecture

## [Alternative Labels](http://www.w3.org/2004/02/skos/core#altLabel)

* + 1. ZTA

## [Definition](http://www.w3.org/2004/02/skos/core#definition)

* + 1. A cybersecurity architecture that is based on zero trust principles and designed to prevent data breaches and limit internal lateral movement. NIST SP 800-207, Zero Trust Architecture, 2020

## [Broader Concepts](http://www.w3.org/2004/02/skos/core#broader)

* + 1. [Architecture](https://vocabulary.pbs.org/OSAGlossary/34)

Diagram

Description automatically generated with low confidence

Figure 1: Glossary terms in SKOS taxonomic (broader/narrower term) arrangement.