The Open Group

OPAF (Open Process Automation™ Forum): Glossary and Abbreviations

Version 2.0

This document contains the Glossary and Abbreviations used in Open Process Automation Forum™ (OPAF) documents published by The Open Group in or before March 2020.
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Preface

The Open Group

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- Working with suppliers, consortia, and standards bodies to develop consensus and facilitate interoperability, to evolve and integrate specifications and open source technologies
- Offering a comprehensive set of services to enhance the operational efficiency of consortia
- Developing and operating the industry’s premier certification service and encouraging procurement of certified products

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This Document

This document – Glossary and Abbreviations – contains definitions for terms and expansions for abbreviations that are used in Open Process Automation Forum™ (OPAF) documents published by The Open Group in or before March 2020. It is Version 2.0. It has been developed and approved by The Open Group.

In particular, it supports the following documents:

- O-PAST™ Standard, Version 2.0 (and earlier)
- The Open Group O-PAST™ Certification Program: Certification Policy, Version 1.0
Trademarks

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Glossary

**Accredited Verification Lab**

An independent organization that has met the O-PAS Accredited Verification Lab criteria defined in the Accredited Verification Lab agreement, has entered into the O-PAS Accredited Verification Lab agreement with the Certification Authority, and makes available assessors to perform assessments of Products for the purpose of O-PAS certification.

**Accredited Verification Lab Register**

The official list of all Accredited Verification Labs.

Note: This register is maintained by the Certification Authority and made publicly available via the Certification Authority’s website.

**Advanced Computing Platform**

Computing platform which implements Distributed Control Node (DCN) functionality but has scalable computing resources (memory, disk, CPU cores) to handle applications or services that require more resources than are typically available on a small profile Distributed Control Platform (DCP) or for applications which cannot be easily or efficiently distributed.

**Analog Input**

A member of the Input group of function blocks. It utilizes and conditions sensor or measurement-device data from its selected OSS input CHANNEL in order to produce a Process Variable (PV) as part of the Function Block Application Process (FBAP).

**Analog Output**

A member of the Output group of function blocks. As outlined in the O-PAS Standard, it both communicates and performs functions bi-directionally. In the forward path, it prepares and sends final output values as part of a Function Block Application Process (FBAP) by delivering setpoint data to positioner or final element devices. In the backward path, it collects and reports readback data to supervisory function blocks requiring verification of final position status.

**Application**

A single indivisible element, comprised of a program and associated configuration and data, that performs a set of coordinated and related functions.

Note: See O-PAS Part 1, Appendix C for additional information.
Application Management Data Store

Describes characteristics of the DCN device and is the repository of configuration specifications driving the Function Block Application Process (FBAP). There is only one AMDS in a DCN.

Application Management Interface

Functional unit that is used to control the execution of Layer-F applications.

Auditability and Accountability

Acts of logging which actions are taken on a system to ensure that the actions of a system entity may be traced uniquely to that entity, which can be held responsible for its actions. [Source: ANSI/ISA-62443-1-1:2007]

Authorization

Defines which operations an actor is allowed to perform on a given resource. [Source: ANSI/ISA-62443-1-1:2007]

Availability

Property of ensuring timely and reliable access to and use of control system information and functionality. [Source: ANSI/ISA-62443-1-1:2007]

Basic Configuration Format

Standard format for configuration information of DCNs and DCFs.

Examples of configuration information include: tag name, description, I/O mapping, alarm information.

Note: This configuration information is created by offline configuration tools.

See also: Companion Configuration Format.

Certificate

An electronic document issued to Suppliers formally declaring that a Product successfully conforms to the O-PAS Conformance Requirements and thus is considered a Certified Product.

Certification Agreement

The agreement between the Supplier and the Certification Authority that defines the certification service to be provided and contains the legal commitment by the Supplier to the conditions of the certification program.

Certification Authority

The organization officially sanctioned to manage the day-to-day operations of the certification program in accordance with the policies defined in the Certification Policy.
Note: The Open Group is the Certification Authority for the O-PAS Certification Program.

Certification Guide

The document that describes the processes for how a Supplier achieves certification for a Product.

Note: The Guide is used in conjunction with the Certification Policy and provides detailed instructions on the steps a Supplier must take to get a Product certified and where to obtain relevant information and documents.

Certification Logo

The certification mark or other marks as designated by The Open Group for use in association with O-PAS certification.

Certification Policy

The document that defines the policies that govern the operation of the O-PAS Certification Program.

Certification Register

The official list of all Certified Products.

Note: This register is maintained by the Certification Authority and made publicly available via the Certification Authority’s website.

Certification System

The software and hardware information systems and the supporting certification documents used in the certification process.

Certification System Deficiency

An error in the certification system, which is inhibiting the certification process.

Note: A Certification System Deficiency is one possible outcome of a Problem Report.

Certified Product

A Product that has successfully completed the certification process and for which the Supplier of such Product has been notified in writing by the Certification Authority that certification has been achieved and such certification is still in force.

CHANNEL

Number (or virtual termination) of the logical hardware channel that is connected to either an Input or Output function block. It facilitates the O-PAS Signal Source/Sink (OSS) connection to be used between the cyber and the physical domains.
**Client**

Software application that utilizes services specified by a server to send and receive messages to and from that server.

**Companion Configuration Format**

Addendum to Basic Configuration Format defining the format of configuration information to support additional functionality of DCFs and DCNs.

Note: Contains an information model.

**Companion Configuration Format Application**

Application written using a standard language that is defined through a Companion Configuration Format.

Example of such a language: IEC 61131-3 Structured Text.

**Configuration Management Interface**

Functional unit that is used to download configuration information to a conformant component and to upload the configuration information from a conformant component.

**Conformance Certificate**

Document issued to a software Supplier formally declaring that a Conformance Unit has successfully met the requirements for O-PAS certification.

**Conformance Claim**

The Supplier’s documented set of claims identifying the Profile(s) to which the Product conforms, including which optional features are supported. It provides a precise identification of the Certified Product and the environment in which conformance is guaranteed.

**Conformance Declaration**

Supplier’s documented set of claims describing precisely the way in which the Product conforms to the specified Profile(s) depicted in the Conformance Requirements, including which optional features are supported.

Note: This provides a precise identification of the Product and the environment in which its conformance is guaranteed.

**Conformance Requirements**

Definition of the mandatory and optional behavior a Product must implement in order to be considered conformant.

Note 1: There is a set of Conformance Requirements for each Profile in the O-PAS Standard.
Note 2: Optional functionality must meet the applicable Conformance Requirements only if the Supplier claims support for such functionality in the Conformance Claim.

**Conformance Test**
Tests used to verify that a Product supports the interface functionality.

**Conformance Test Suite**
Test suite that will accept software object code/binaries and produce a pass/fail with respect to all Conformance Requirements covered by the test suite plus a detailed report of the test results.

**Conformance Unit**
An individually testable element that is defined within the O-PAS Standard and listed in the Verification Matrix for each Profile.

**Conformant**
With respect to the O-PAS Standard, this term applies when a Conformance Unit meets all of the stated requirements.

**Control Element**
A node which is performing control functions.

**DCF Services**
A set of services available for platform-independent applications.

See Distributed Control Framework.

**Distributed Control Framework**
Software environment for executing distributed control, distributed applications, and distributed I/O access.

**Distributed Control Node**
The software environment for execution of all layers of applications. A project references one or more DCNs. A DCN is hosted in a physical platform.

Note: In the development phase there may be definitions of DCNs that have not been assigned to physical platforms.

**Distributed Control Platform**
Hardware and system software platform that contains one or more DCFs.
Event-driven
Data delivered by a publisher or server according to some defined event trigger.

External Certification Body
Existing standards governance organization that is referenced in the O-PAS Standard.

Facet
A definition of partial functionality.

Fault Tolerance
Degree to which a system, product, or component operates as intended despite the presence of hardware or software faults. [Source: ISO/IEC 25010:2011]

Field Device
Sensor, actuator, or equipment installed in the field. In the O-PAS Standard it is understood that the field device is attached to the system.

FieldComm Group
The organization (based in Austin, Texas) that is responsible for development and maintenance of standards and specifications for FOUNDATION™ Fieldbus (FF), HART, and FDI industrial communication protocols.

FOUNDATION™ Fieldbus
Two-way, multi-drop industrial communication link among intelligent measurement and control devices. It serves as a Local Area Network (LAN) for advanced process control, remote input/output, and high-speed factory automation applications.

Function Block
Software model which contains input/output variables, through variables, internal variables, and an internal behavior description of the functions to be performed.

Function Block Application Process
In order to perform useful calculations, function blocks may be assembled into associations of distributed applications within devices which can be defined as application processes per ISO 7498.

High Availability
Availability at least three orders of magnitude better than Standard Availability.
Highway Addressable Remote Transducer

Legacy, hybrid (analog with superimposed digital) industrial automation communications protocol, based on Frequency Shift Keying (FSK) technology.

IEC 61131 Application


IEC 61499 Application


Import/Export Format

Specification of an AutomationML package and AutomationML rules used for the exchange of Layer-F applications.

Information Model

Format (such as a UML model) or information that provides the rules and structure for the technology-specific information and exchange models (for example, AutomationML and OPC UA), which have different ways of representing the same information.

Information Technology

Use of any computers, storage, networking, and other physical devices, infrastructure, and processes to create, process, store, secure, and exchange all forms of electronic data for business processes.

Integrity

Property of protecting the accuracy and completeness of assets, and the guarding against improper modification or destruction of data. [Source: ANSI/ISA-62443-1-1:2007 updated and FIPS 199]

Interchangeability

Ability of a component to be replaced by another component without modification.

Note: This is the ability to define components that are made to specifications that ensure that they are so nearly identical that they will fit into any assembly of the same type. One such part can freely replace another, without any custom hardware or software fitting.

International Electrotechnical Commission

The organization (based in Geneva, Switzerland) that is responsible for international standards and conformity assessments for all electrical, electronic, and related technologies.
Interoperability/Interoperable

Ability of two or more systems or components to exchange information and to use the information that has been exchanged. [Source: ISO/IEC/IEEE 24765:2017]

Interpretation (INT)

Decision made by the Specification Authority that elaborates or refines the meaning of the O-PAS Standard or the application of a standard referenced by the O-PAS Standard.

Note: An Interpretation is one possible outcome of a Problem Report.

Layer-F Application

Application that is defined via the O-PAS configuration specifications defined in one or more of the subparts of O-PAS Part 6 – Information and Exchange Models.

Localized Text

Text in a language specified by the LocaleId.

Examples of LocaleId include: “de” for German; “de-AU” for Austrian German.

Note: The default LocaleId is “en” for English.

M-to-N Redundancy

A form of resilience that ensures system availability in the event of component failure. Components (M) have one or more independent backup components (N).

Message

Data exchanged between client and server, or between publisher and subscriber.

Modularity

Degree to which a system or computer program is composed of discrete components such that a change to one component has minimal impact on other components. [Source: ISO/IEC/IEEE 24765:2017]

Network Node

A connection point with the capability to recognize, process, and forward data transmissions to other network nodes along distributed network routes.

Network Time Protocol

Networking protocol for clock synchronization between computer systems over variable-latency data networks.
O-PAS Boundary Signal

Information that has just entered, or is ready to leave, an O-PAS domain.

Note 1: This is most commonly used for information to or from a field system that is being controlled from within an O-PAS domain.

Note 2: This can also be used for information passing through a gateway to or from an O-PAS domain.

O-PAS Connectivity Framework

Connectivity framework layer that provides a logical data exchange service to the endpoints participating in an information exchange. [Source: derived from The Industrial Internet of Things Volume G5: Connectivity Framework, IIC:PUB:G5:V1.0:PB:20170228]

O-PAS Control Application

An abstract class that represents one of the various types of Layer-F applications defined in the O-PAS Standard.

O-PAS Execution Engine

An execution resource as defined in IEC 61804, IEC 61131-3, and IEC 61499.

An O-PAS execution engine will typically be associated with an OPC UA server/client that implements the services and information models defined in the O-PAS Standard, Version 2.0. It is often implemented as a Layer-I application, and internal structure and definitions are outside the scope of Version 2.0.

O-PAS Function Block Application


O-PAS Function Block Group

Collection of Layer-F function blocks that does one of the following:

- Is hosted in an O-PAS execution engine in a DCN and controlled by an O-PAS execution engine
- Hosts a set of signals
- Uses a set of signals
- Is associated with an O-PAS control application

O-PAS Information Model

Model of the information managed by the O-PAS Standard.
Note: This information is represented using OPC UA Information Model notation and definition format.

**O-PAS Node**

Logical or physical device in an O-PAS system.

**O-PAS Signal Source or O-PAS Signal Sink**

Decouples function blocks from the local Input/Output (I/O) functions required to read sensors and command output hardware. OSSs perform I/O signal conditioning and also contain information such as calibration details and sensor specifics. There is only one OSS channel selected for each input or output of an associated function block.

**O-PAS System**

A collection of O-PAS conformant components all exchanging information using the OCF.

**O-PAS Test Suite**

Description and procedures (may include toolsets) used by Suppliers and the Accredited Verification Lab(s) to demonstrate that a Product meets the Conformance Requirements.

Note 1: A Supplier uses the O-PAS Test Suite(s) to help the Supplier determine whether the Product is conformant and ready to enter the certification process.

Note 2: An Accredited Verification Lab uses the O-PAS Test Suite(s) as one of the means to determine whether the Product is conformant.

**OCF Communication Interface**

Functional unit that provides a configurable interface to the OCF.

**Operational Technology**

Hardware and software that detects or causes a change through the direct monitoring and/or control of physical devices, processes, and events in the enterprise.

**Package**

Container file that holds a collection of parts and relationships between the parts. The purpose of the package is to aggregate constituent components of a document (or other type of content) into a single object.

**Physical Layer**

 Receives messages from the Communications Stack and converts the messages into physical signals on the I/O transmission medium, and *vice versa.*
Physical Platform

The hardware that runs the project’s software and applications.

See O-PAS Part 1 – Technical Architecture Overview (Informative) for the definition, and see O-PAS Part 7 – Physical Platform for the specification of the physical platform.

Also identified as a Distributed Control Platform (DCP). A project contains one or more physical platforms. A physical platform hosts zero or more DCNs.

Note: In the development phase there may be definitions of physical platforms that have not been assigned DCNs.

Platform-Dependent Application

Application written to execute using a native DCP Operating System (OS) and services.

Platform-Independent Application

Application written to run in a DCF environment using the DCF services.

Portability

Ease with which a system or component can be transferred from one hardware or software environment to another. [Source: ISO/IEC/IEEE 24765:2017]

Problem Report

A report of a problem inhibiting certification.

Note 1: The problem can be reported on the Certification Authority’s website by any party involved in the certification process.

Note 2: Possible resolutions of a Problem Report are Interpretation, Test Suite Deficiency, or Certification System Deficiency.

Process Variable

Conditioned output of the Analog Input (AI) block that is used as the input parameter in the PID equation. The PV is representative of the actual measured value of the process to be controlled.

Product

A Supplier’s commercial offering that implements one or more of the Profiles defined in the O-PAS Standard.

Note: A Product can be composed of one or more components.
PROFIBUS Nutzerorganisation eV

The organization (based in Karlsruhe, Germany) that is responsible for development and maintenance of standards and specifications for PROFIBUS and PROFINET industrial communication protocols.

Profile

A full-featured definition of functionality that must be supported.

Note: Certification is to one or more Profiles.

Proportional, Integral, and Derivative Control Function

Feedback control loop mechanism (algorithm) used in continuously modulated control applications. It is a member of the Control group of function blocks.

Publisher

Application that produces messages for subscribers.

Quality of Service

Set of requirements related to data delivery.

Note: Quality of service sets quantitative limits on attributes such as timeliness, liveliness, and lifespan.

Redundancy

Duplication of a hardware or software function, allowing a failed component to be fixed or replaced without disrupting operation.

Reply

Server response to a client’s request for data.

Request

Action by a client utilizing a service to request data from a server.

Resource Block

Named block consisting of contained parameters which provides an interface to common resource capabilities or information.

Scalability

Degree to which a system can have its capacities adjusted to meet system requirements.
Security Level

Measure of confidence that the IACS is free from vulnerabilities and functions in the intended manner. [Source: ANSI/ISA-62443-3-3:2013]

Server

Software application that provides a set of services to clients specific to exchange of information.

Session

Logical connection between client and server that contains state.

Signal

Representation of a physical quantity or calculated value.

Size, Weight, and Power

Size, shape, weight, and power consumption of a component.

Specification Authority

The entity responsible for developing, maintaining, and interpreting the O-PAS Standard.

Note: The Open Process Automation Forum is the Specification Authority.

Standard Availability

Where a single fault would cause a system to fail with a calculable availability per the Mil Spec Handbook (MIL-HDBK-217F).

See also High Availability.

Standard Conformance

Meeting 100% of the published O-PAS specifications.

Subscriber

Application that receives messages from publishers.

Supplier

An organization that is either applying for certification in or has certified a Product in the O-PAS Certification Program.
System Management Interface

Functional unit that is used to manage a system of conformant components from multiple vendors.

Terminal Assembly

Module to which field wiring is attached. The TA is a passive component which may employ the use of fuses and/or barrier technologies.

Test Suite Deficiency

An agreed error in a test suite.

Note: A Test Suite Deficiency is one possible outcome of a Problem Report.

Test Suite Maintenance Authority

The organization(s) responsible for maintaining the O-PAS Test Suite(s).

Note: The Open Process Automation Forum is the Test Suite Maintenance Authority.

Trademark License Agreement

The agreement that contains the legal commitment by the Supplier to the conditions for use of the Certification Logo.

Transducer Block

Named block consisting of contained parameters which provides an interface to one or more functional capabilities of a resource.

UA Node

OPC UA node.

Note 1: An OPC UA node is a fundamental component of an OPC UA address space.

Note 2: Used as a shorthand in O-PAS Part 4 in ensuring a clear distinction between an OPC UA node versus an O-PAS node.

Verification Matrix

A document that details the Conformance Requirements and corresponding Conformance Units for each Profile and how those Conformance Units will be verified.
Abbreviations

A/D    Analog-to-Digital
ACP    Advanced Computing Platform
AFI    Accounting for Financial Instruments
AI     Analog Input
AMDS   Application Management Data Store
AMI    Application Management Interface
AO     Analog Output
API    Application Program Interface
BIOS   Basic Input/Output System
BMC    Baseboard Management Controller
BPS    Bits-Per-Second
CA     Certification Authority
CAEX   Computer Aided Engineering eXchange
CAN    Converged Network Adapter
CHAP   Challenge-Handshake Authentication Protocol
CMI    Configuration Management Interface
COTS   Commercial Off-The-Shelf
CRUD   Create, Read, Update, or Delete
CS     Certification System
CSD    Certification System Deficiency
CSDL   Common Schema Definition Language
CU     Conformance Unit
DASH   Desktop and mobile Architecture for System Hardware (DMTF)
DCB    Data Center Bridging
DCF    Distributed Control Framework
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>DCN</td>
<td>Distributed Control Node</td>
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<tr>
<td>DCP</td>
<td>Distributed Control Platform</td>
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<td>DCS</td>
<td>Distributed Control System</td>
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<td>DDoS</td>
<td>Distributed Denial of Service</td>
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<td>DHCP</td>
<td>Dynamic Host Configuration Protocol</td>
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<td>DIMM</td>
<td>Dual In-line Memory Module</td>
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<td>DMTF</td>
<td>Distributed Management Task Force</td>
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<tr>
<td>DNS</td>
<td>Domain Name System</td>
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<tr>
<td>DoS</td>
<td>Denial of Service</td>
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<tr>
<td>DST</td>
<td>Daylight Saving Time</td>
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<tr>
<td>EDDL</td>
<td>Electronic Device Description Language</td>
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<tr>
<td>EEE</td>
<td>Energy Efficient Ethernet</td>
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<tr>
<td>EPC</td>
<td>Engineering, Procurement, and Construction</td>
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<tr>
<td>ERP</td>
<td>Enterprise Resource Planning</td>
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<tr>
<td>EUI</td>
<td>Extended Unique Identifier</td>
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<tr>
<td>FBAP</td>
<td>Function Block Application Process</td>
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<td>FCC</td>
<td>Federal Communications Commission</td>
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<td>FCG</td>
<td>FieldComm Group</td>
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<tr>
<td>FC HBA</td>
<td>Fibre Channel Host Bus Adapter</td>
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<tr>
<td>FCoE</td>
<td>Fibre Channel over Ethernet</td>
</tr>
<tr>
<td>FDI</td>
<td>Field Device Integration</td>
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<tr>
<td>FF</td>
<td>FOUNDATION™ Fieldbus</td>
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<tr>
<td>FIP</td>
<td>FCoE Initialization Protocol</td>
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<tr>
<td>FPGA</td>
<td>Field Programmable Gate Array</td>
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<td>FRU</td>
<td>Field Replaceable Unit</td>
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<tr>
<td>FSK</td>
<td>Frequency Shift Keying</td>
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<td>HART</td>
<td>Highway Addressable Remote Transducer</td>
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<tr>
<td>HMI</td>
<td>Human-Machine Interface</td>
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<td>HSR</td>
<td>High-availability Seamless Redundancy</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>HVAC</td>
<td>Heating, Ventilation, and Air Conditioning</td>
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<td>IACS</td>
<td>Industrial Automation and Control System</td>
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<tr>
<td>IAM</td>
<td>Identity and Access Management</td>
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<tr>
<td>ICMB</td>
<td>Intelligent Chassis Management Bus</td>
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<tr>
<td>IDE</td>
<td>Integrated Development Environment</td>
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<td>IDS</td>
<td>Intrusion Detection System</td>
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<td>IEC</td>
<td>International Electrotechnical Commission</td>
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<td>IIoT</td>
<td>Industrial Internet of Things</td>
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<tr>
<td>INT</td>
<td>Interpretation</td>
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<tr>
<td>IOPS</td>
<td>I/O Operations Per Second</td>
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<tr>
<td>IPMB</td>
<td>Intelligent Platform Management Bus (server system bus)</td>
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<td>IPMI</td>
<td>Intelligent Platform Management Interface</td>
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<tr>
<td>IPS</td>
<td>Intrusion Prevention System</td>
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<tr>
<td>IPv4</td>
<td>Internet Protocol Version 4</td>
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<tr>
<td>IPv6</td>
<td>Internet Protocol Version 6</td>
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<tr>
<td>IRDI</td>
<td>International Registration Data Identifier</td>
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<tr>
<td>IT</td>
<td>Information Technology</td>
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<tr>
<td>JVM</td>
<td>Java® Virtual Machine</td>
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<tr>
<td>JSON</td>
<td>JavaScript™ Object Notation</td>
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<tr>
<td>KVM-IP</td>
<td>(and KVMIP) Keyboard-Video-Mouse service over an IP network</td>
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<tr>
<td>L2P2P</td>
<td>Layer Two Peer-to-Peer</td>
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<td>L3E2E</td>
<td>Layer Three End-to-End</td>
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<td>LAN</td>
<td>Local Area Network</td>
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<td>LDAP</td>
<td>Lightweight Directory Access Protocol</td>
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<td>LL</td>
<td>Ladder Logic</td>
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<td>LUN</td>
<td>Logical Unit Number</td>
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<tr>
<td>LUNID</td>
<td>Logical Unit ID</td>
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<tr>
<td>MAC</td>
<td>Media Access Control address</td>
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<tr>
<td>MES</td>
<td>Manufacturing Execution System</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<tr>
<td>MiB</td>
<td>Measured in Mebibytes</td>
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<tr>
<td>MPC</td>
<td>Model Predictive Control</td>
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<tr>
<td>MRP</td>
<td>Material Resource Planning</td>
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<tr>
<td>MTP</td>
<td>Module Type Package</td>
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<tr>
<td>MTS</td>
<td>Master Time Source</td>
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<td>MTU</td>
<td>Maximum Transmission Unit</td>
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<tr>
<td>MVC</td>
<td>Multi-Variable Control</td>
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<td>NAA</td>
<td>Name Address Authority</td>
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<tr>
<td>NIC</td>
<td>Network Interface Controller</td>
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<td>NPAR</td>
<td>NIC Partitioning</td>
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<td>NPIV</td>
<td>N_Port ID Virtualization</td>
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<td>NTOP</td>
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<tr>
<td>NTP</td>
<td>Network Time Protocol</td>
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<tr>
<td>NVDIMM</td>
<td>Non-volatile Dual In-line Memory Module</td>
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<tr>
<td>OCF</td>
<td>O-PAS Connectivity Framework</td>
</tr>
<tr>
<td>OCI</td>
<td>OCF Communication Interface</td>
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<tr>
<td>OCP</td>
<td>Open Compute Project</td>
</tr>
<tr>
<td>OEM</td>
<td>Original Equipment Manufacturer</td>
</tr>
<tr>
<td>OPAF</td>
<td>Open Process Automation™ Forum</td>
</tr>
<tr>
<td>OS</td>
<td>Operating System</td>
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<tr>
<td>OSS</td>
<td>O-PAS Signal Source/Sink</td>
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<tr>
<td>OT</td>
<td>Operations Technology</td>
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<tr>
<td>PA-DIM</td>
<td>Foundation Process Automation Device Information Model</td>
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<tr>
<td>PCI</td>
<td>Peripheral Component Interconnect</td>
</tr>
<tr>
<td>PCIe</td>
<td>Peripheral Component Interconnect Express</td>
</tr>
<tr>
<td>PID</td>
<td>Proportional-Integral-Derivative</td>
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<tr>
<td>PLC</td>
<td>Programmable Logic Controller</td>
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<tr>
<td>PLM</td>
<td>Product Lifecycle Management</td>
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<td>PMS</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td>PR</td>
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<td>PRP</td>
<td>Parallel Redundancy Protocol</td>
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<td>PTP</td>
<td>Precision Time Protocol</td>
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<tr>
<td>PV</td>
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<td>RDP</td>
<td>Remote Desktop Protocol</td>
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<td>REST</td>
<td>Representational State Transfer</td>
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<tr>
<td>RFB</td>
<td>Remote Frame Buffer</td>
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<td>RPM</td>
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<td>SCM</td>
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<tr>
<td>SDDC</td>
<td>Software Defined Data Center</td>
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<tr>
<td>SDR</td>
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<td>SEL</td>
<td>System Event Log</td>
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<tr>
<td>SFC</td>
<td>Sequential Function Chart</td>
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<tr>
<td>SJB</td>
<td>Smart Junction Box</td>
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<tr>
<td>SKU</td>
<td>Stock Keeping Unit</td>
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<tr>
<td>SL</td>
<td>Security Level</td>
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<td>SLAAC</td>
<td>Stateless Address Automatic Configuration</td>
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<td>Acronym</td>
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<td>SSH</td>
<td>Secure Shell</td>
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<tr>
<td>ST</td>
<td>Structured Text</td>
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<td>SUC</td>
<td>System Unit Class</td>
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<tr>
<td>SWaP</td>
<td>Size, Weight, and Power</td>
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<tr>
<td>TA</td>
<td>Terminal Assembly</td>
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<td>Trivial File Transfer Protocol</td>
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<td>Transport Layer Security</td>
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<tr>
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<td>URI</td>
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<td>UUID</td>
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<td>VF</td>
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