Honeywell

# Experion PKS
# Dictionary

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# Contents

# Dictionary items

This section contains an alphabetical listing of acronyms, terms, and phrases used in Experion PKS.

### Revision history

| Revision | Date | Description |
|---|---|---|
| A | February 2015 | Initial release of the document. |

### Related topics

# A

## abnormal states

*n*. The *SCM* states of *Aborting*, *Stopping*, *Stopped*, *Holding*, and *Held* are collectively referred to as the abnormal states.

## absolute origin

*n*. Origin *parameter* that is at the starting point of the *parameter* projection chain.

See also: *immediate origin*, *parameter*.

## absolute origin block

*n*. Block on which the absolute origin parameter is defined.

## AC

*n*. Abbreviation for *alternating current*.

Compare: *DC*.

## access capability

*n*. An identifiable Control Builder construct that represents a set of criteria; all of the criteria must be met in order to grant access. An access capability is associated with each Control Builder security element. For example, the construct could indicate that access only will be granted if the user is a member of `TPS_Engineer`, AND has access to a particular set of equipment.

## access token

*n*. The token represented by the handle passed to the log on process that represents the user and his/her access permissions. It uniquely identifies the user who has logged on. It contains the user's security ID, the names of any groups to which the user belongs, and any Windows privileges pertaining to the user.

Windows access token attributes are:

- Security ID (user's personal identifier – typically corresponds to the user's name)
- Group IDs (Groups to which the user belongs)
- Windows Privileges (usually none – identify protected security sensitive services user may invoke)
- Default owner (usually same as the Security ID)
- Primary group (not used – typically for collecting security IDs into organizational groups for POSIX)

See also: *run-time authorization*.

## accumulator point

*n*. A type of *standard point* that is used to represent counters. Information contained in the accumulator point can include: the raw value, a process value, a rollover value, a scale factor, and a meter factor.

See also: *standard point*.

## ACE

*n*. Abbreviation for *application control environment*.

## ACL

*n*. Abbreviation for *access control list*.

## acronym

*n*. A text string that represents a state or value of a point parameter in a display. From an operator's point of view, it much easier to understand the significance of an acronym, such as "Stopped," than it is to interpret the meaning of an abstract value, such as "0."

## action algorithm

*n*. An *algorithm* that initiates an action, such as requesting a report, when the PV of the point to which it is attached changes value.

Compare: *PV algorithm*.

See also: *algorithm*.

## active connector

Also known as *inside connector*.

*n*. A block or parameter reference permanently dedicated to a particular parameter within a *basic function block*. Active connectors provide special functionality within the block that is not available from *passive connectors*.

Compare: *passive connector*.

See also: *active parameter*.

## Active Directory

*n*. A Microsoft technology, part of the Active Platform, that is designed to enable applications to find, use, and manage directory resources (for example, user names, network printers, and permissions) in a distributed computing environment. Distributed environments are usually heterogeneous collections of networks that often run proprietary directory services from different providers. To simplify directory-related activities associated with locating and administering network users and resources, *Active Directory* presents applications with a single set of interfaces that eliminates the need to deal with differences between and among these proprietary services. *Active Directory* is a component of the *Windows Open Services Architecture* (WOSA).

## active high

*n*. A signal that is true when the voltage is *Logic Level One*.

Compare: *active low*.

## active low

*n*. A signal that is true when the voltage is *Logic Level Zero*.

Compare: *active high*.

## active memory

*n*. The total amount of memory used by a virtual machine. This amount may be less than the allocated memory

## active parameter

*n*. A parameter with a dedicated connection resource called an *active connector*.

See also: *active connector*.

## ActiveX component

*n*. A type of application designed to be called up from other applications, rather than being executed independently. (ActiveX is a set of technologies developed by Microsoft.) An example of an ActiveX component is a custom dialog box, which works in conjunction with a script.

See also: *ActiveX document*.

## ActiveX document

*n*. An ActiveX-compliant document. (ActiveX is a set of technologies developed by Microsoft.) Examples include Microsoft Word documents and Microsoft Excel spreadsheets.

See also: *ActiveX component*.

## activity

*n*. A series of actions (with a start time and an end time) that occur within a plant. The term provides a market-neutral entity that can represent products such as batches, movement automation, and procedural operations.

See also: *activity entity*.

## activity entity

Also known as *recipe*.

*n*. An object from which an *activity* can be created (for example, RCM or SCM for batch/procedure activities).

See also: *activity*, *recipe*.

## administrative privileges

*n*. All of the computer rights and privileges that a person would have with computer Administrator password security.

## advanced alarm management

*n*. A name given to either of two optional alarm management systems, "Three Stage Alarm Management" and "Structured Response Management." In both systems, an alarm instruction display appears when an operator acknowledges an alarm. Operators must carry out the instructions and enter a description of their actions in an alarm response display.

## AGA

Abbreviation for *American Gas Association*.

*n*. The *American Gas Association* (www.aga.org), founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States.

## AI

*n*. Abbreviation for *analog input*.

Compare: *DI*.

See also: *input*.

## AIC

*n*. Abbreviation for *analog input channel* function block.

## AIM

*n*. Abbreviation for *analog input module* function block.

## alarm

*n*. An indication (visual and/or audible) that alerts an operator at a Station of an abnormal or critical condition. Each alarm has a *type* and a *priority*. Alarms can be assigned either to individual points or for system-wide conditions, such as a controller communications failure. Alarms can be viewed on a Station display and included in reports. Experion classifies alarms into the following types:

- PV Limit
- Unreasonable High and Unreasonable Low
- Control Failure
- External Change

## alarm/event journal

*n*. A file that records all alarms and events. It is accessed to generate reports and can also be archived to offline media.

## alarm line

*n*. Station's *alarm line* generally displays the most recently unacknowledged alarm. (The *alarm line* may be hidden on your system, or it may be configured to operate in a special manner.)

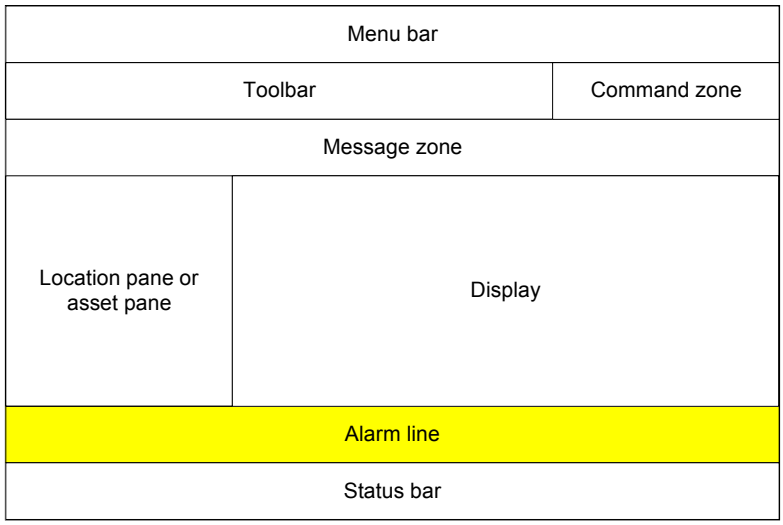



**Figure 1: Alarm line**

## alarm priority

*n*. One of four levels of severity specified for the alarm. The alarm priorities from least to most severe are:

- Journal
- Low
- High
- Urgent

## algorithm

Also known as *point algorithm*.

*n*. A set of rules that enhance a *point's* functionality by operating on *point* data either before or after normal point processing. There are two types of point algorithms: *PV algorithm* and *action algorithm*.

See also: *action algorithm*, *algorithm block*, *derived point*, *point*, *PV algorithm*.

## algorithm block

*n*. A 32-word block that is assigned to each algorithm/point combination. It is used to store the algorithm's configuration details and run-time (working) values.

## alias table

*n*. A matrix that associates alias names with the actual *parameters* the aliases may resolve to at run-time. The *alias table* is the key component to the common *SCM* function. It creates the foundation for *dynamic indirection*.

See also: *dynamic indirection*, *parameter*, *SCM*.

## allocated memory

*n*. The total amount of memory allocated to a virtual machine. This is the maximum amount of memory the virtual machine can use.

## American Gas Association

Also known as *AGA*.

*n*. The *American Gas Association* (www.aga.org), founded in 1918, represents more than 200 local energy companies that deliver clean natural gas throughout the United States.

## analog point

*n*. A type of *standard point* that is used to represent continuous values that are either real or integer. Continuous values in a process include: pressure, flow, fill levels, and temperature.

See also: *standard point*.

## ANSI

*n*. Acronym for *American National Standards Institute*.

## AO

*n*. Abbreviation for *analog output*.

Compare: *DO*.

See also: *output*.

## AOC

*n*. Abbreviation for *analog output channel* function block.

## AOM

*n*. Abbreviation for *analog output module* function block.

## API

*n*. Abbreviation for *application programming interface*.

## application

*n*. A computer program. Station and Experion are both applications, as is Microsoft Word.

## application operational workloads

*n*. Workloads (that is, virtual machines) associated with the process being controlled, but are not the primary means by which it is controlled. For example, eServer and Honeywell advanced applications.

## application program

*n*. A user-written program integrated into Experion using an *application programming interface* (API).

## approved

*n*. Acceptable to the authority having jurisdiction.

## area

*n*. A logical sub-section of your building or site. Custom displays, points, and access configuration can be partitioned by area. Operators or Stations can be assigned access to particular areas only. *Areas* are generally aligned with physical areas of a building or site.

## ASA

*n*. Abbreviation for *application specific architecture*. Architecture and protocol specification used in *ControlNet* networks.

## ASIC

*n*. Abbreviation for *application specific integrated circuit*.

## aspect ratio

*n*. The aspect ratio is defined as the width of an image divided by its height. A tall, thin image has a low aspect ratio, whereas a short, wide image has a large aspect ratio.

For cardholder images, the aspect ratio is: 0.85 (370×438 pixels).

For signature images, the aspect ratio is: 3.7 (370×100 pixels).

## assembly

*n*. An *I/O* device-defined data structure holding information about all channels of the device.

## asset

*n*. An entity representing fixed plant equipment, facilities, or buildings. All assets have a tag name, an item name, and a full item name. An asset can be assigned to an operator or Station for the purposes of *scope of responsibility*, that is, for the purposes of controlling what an operator or Station can view or control in your Experion system.

Previously known as an *area*.

## asset filter

*n*. The *Asset Filter*, when applied, filters the Equipment Summary to show only equipment belonging to a specific asset.

## asset model

*n*. A model that provides an organizational structure to enable you to engineer your Experion system around your key entities. It provides a hierarchical structure that is intended to resemble your organization.

## Asset view

*n*. A navigation view in Quick Builder that can be used to view items listed by asset to which they are assigned.

## assignable assets

*n*. *Assets* that can be assigned to an operator or Station for the purposes of controlling what an operator or Station can view or control in the Experion system.

## assigned function

*n*. A function or set of functions assigned to a *chassis*, for example, a *controller* (*chassis*) within a bottling plant may have an *assigned function* to wash bottles.

See also: *chassis*, *controller*, *redundancy*.

## assignment

*n*. Act of associating a *CM*, *SCM* or *IOM* with a *CEE*, prior to loading to the *CEE*.

See also: *CEE*, *CM*, *IOM*, *SCM*.

## associated items

*n*. Items in Quick Builder that are automatically created as part of an equipment item are referred to as *associated items*. These items are deleted if an equipment item is deleted.

Associated items can include, but are not limited to:

- Controllers
- SCADA points
- EFM items

## association

*n*. The mapping of *I/O channel function blocks* to *I/O module function blocks*, which interface the physical *I/O device's* data.

See also: *I/O channel function blocks*, *I/O device*, *I/O module function blocks*.

## ATL

*n*. Abbreviation for *ActiveX template library*.

## ATM

*n*. Abbreviation for *asynchronous transfer mode*. A communications protocol based on cell switching.

## AUI

*n*. Abbreviation for *attachment unit interface*. A 15-pin D Port connection on the *network interface card* (NIC) or transceiver enabling connection to 10 Base 5 Ethernet cable. Typically used to connect the card to a transceiver.

## automatic checkpointing

*n*. In a redundant server system, automatic checkpointing is the automatic transfer of database updates from the primary server to the backup server.

## automation system architecture

*n*. In the scope of the control platform, ASA is a communication transport layer and set of network layer protocols.

## auxiliary parameter

*n*. A parameter on an *analog point*, in addition to PV, SP, OP, and MD, that can be used to store custom data. Up to four auxiliary parameters can be used to read and write four related values without having to build extra points.

See also: *analog point*.

## availability

*n*. The ability of a device to carry out its *assigned functions* based on its probability of failure. *Mean Time Between Failure* (MTBF) is a measure of availability.

See also: *assigned function*, *MTBF*.

## AWG

*n*. Abbreviation for *American Wire Gauge*.

# B

## backplane

*n*. A printed circuit board, located in the back of the chassis, providing data bus, power bus, and mating connectors for all installed modules.

## bad value

*n*. A parameter value, (for example, *PV*), that is indeterminate, which is the result of conditions such as unavailable input.

## basename

*n*. In a redundant server and/or dual network system, a server's name consists of a:

- *Basename*, a prefix that is identical for all servers/connections
- Suffix, which identifies the server and, if applicable, the connection

For example, if the basename is *`hsserv`*, the server names in a redundant server, dual network system would be:

- *`hsserva0`*
- *`hsserva1`*
- *`hsservb0`*
- *`hsservb1`*

If the basename is *`hsserv`*, the server names in a redundant server system would be:

- *`hsserva`*
- *`hsservb`*

## base template

*n*. The immediate derivation/instantiation parent of a *template*/strategy.

See also: *root template*, *template*.

In relation to the Equipment Template Builder, a *base template* refers to the property that defines the Equipment Template on which another Equipment Template is based.

## basic function block

*n*. A *block* that exists as a component of a *container function block*. *Basic function blocks* implement the core functionality of Experion control operations such as *PID*, *device control*, and Logic gates. *Basic function blocks* have dependent names but not *tag names*.

See also: *block*, *container function block*, *device control*, *function block*, *PID*, *tag name*.

## BB

*n*. Abbreviation for *basic block*.

## BCD File

*n*. Acronym for *Function Block Chart Data BLOB* file.

See also: *BLOB*.

## BDC

*n*. Abbreviation for *backup domain controller*. An online backup to the primary domain controller (PDC) for Windows NT 4.0 domains. Not applicable for Windows 2000 domains, where multiple domain controllers are peers (no *primary* or *backup*).

## BEM

*n*. Abbreviation for *battery extension module*.

## BFB

*n*. Abbreviation for *basic function block* (a synonym of *basic block*).

## binding

*n*. A process to locate:

- the data owner block for an input connection
- the reference destination block for an output connection

## BLOB

*n*. Acronym for *binary large object*.

See also: *BCD file*.

## block

*n*. A unit of data and operation within Experion. Experion uses blocks as the component from which control strategies are built. The two categories of blocks are hardware entities and functional entities.

## block symbol

*n*. The symbol or icon shown to the user during graphical configuration operations. It represents one view of a *block*. Another view of the function block would be a block configuration form.

See also: *block*, *function block*.

## block symbol configuration form

*n*. The display form where you enter block configuration information, such as pin orientation, parameters used, and so on

See also: *block symbol*.

## BNA

Abbreviation for *building network adapter*.

*n*. A *device* on a *LAN* that connects up to two *channels* by way of a serial connection.

See also: *channel*, *device*, *LAN*.

## BNC

*n*. Abbreviation for *Bayonet Neill-Concelman*. A type of coaxial connector.

## bonding

*n*. The permanent joining of metallic parts to form an electrically conductive path that will ensure electrical continuity and the capacity to conduct safely any current likely to be imposed.

## Boolean

*n*. Of, pertaining to, or characteristic of logical (true, false) values. Many languages directly support a Boolean data type, with predefined values for true and false; others use integer data types to implement Boolean values, usually (although not always) with 0 equaling false and “not 0” equaling true

## BOOTP

*n*. Acronym for *Network Boot Protocol*. Use to provide IP address and image file path to diskless nodes. RFC-951, RFC-1542, RFC-2132.

## braid

*n*. The conductive shield surrounding the signal conductor in a coaxial cable. Used to minimize electromagnetic interference.

## branch

*n*. An *SCM* block that allows selection divergence and convergence. Only one path of many is chosen.

## branch node

*n*. In Gas Operations Suite, a *branch node* is a *pipeline node* that has three openings:

1. An inlet.
2. An outlet.
3. A branch.

Flow measurement occurs at the branch.

See also: *flow meter*, *node*, *pipeline*.

## byte

*n*. Short for binary term. A unit of data, today almost always consisting of 8 bits. A byte can represent a single character, such as a letter, a digit, or a punctuation mark. Because a byte represents only a small amount of information, amounts of computer memory and storage are usually given in kilobytes (1024 bytes), megabytes (1,048,576 bytes), or gigabytes (1,073,741,824 bytes).

Abbreviation: B.

# C

## C1

*n*. Abbreviation for *controller 1*.

## C2

*n*. Department of Defense C2 security.

## C200 controller

*n*. A shorthand reference to a *hybrid controller* that includes a C200 version *control processor module* (CPM). The C200 CPM model TC-PRS021 supersedes the C100 CPM model TC-PNX021 and can be used with both non-redundant and redundant *hybrid controller* configurations. The C100 CPM could only be used with non-redundant controller configurations.

Compare: *C300 controller*.

See also: *controller*, *CPM*, *hybrid controller*.

## C300 controller

*n*. A shorthand reference to a *hybrid controller* that includes a C300 version *control processor module* (CPM). Introduced with the Experion system R300.

Compare: *C200 controller*.

See also: *controller*, *CPM*, *hybrid controller*.

## C300 emulations

*n*. The Hiway boxes are emulated in the C300 controllers by translating the HG box and slot configuration files into standard Experion Control Builder configuration files using the HSE Creator Tool. These translated files when imported into the Experion ERDB using Control Builder create Control Module configuration which emulate the functionality of Hiway slots.

## cabinet

Also known as *enclosure*.

*n*. An enclosure for industrial controls that is used to provide a degree of protection against defined environmental elements. Rated by type of protection they provide by the *National Electrical Manufacturers Association* (NEMA).

## Canadian Electrical Code

*n*. Canadian standard for electrical installations.

## capability file

*n*. This file contains some or all of the given *Fieldbus* device's information that can be read from a *device* online. It consists of both resource information (what the device can potentially do) and value information (how the device should actually be set up).

See also: *device*, *Foundation Fieldbus*, *resource file*.

## CB

Abbreviation for *Control Builder*.

*n*. The control building software, running on a Windows operating system, that provides an environment in which to build control strategies using function blocks for the Honeywell *control processor*. It includes the Function Block Builder, SCM Builder, Function Block Symbols, SCM Symbols and Configuration Forms, SCM Blocks and Configuration Forms, Function Block Faceplate, and the Data Entry Mechanism.

## CCL

Abbreviation for *control component library*.

*n*. A collection of related *dynamic function blocks* and associated support structures. Customers can load CCLs to Experion *controllers*, independent of Experion*controller* releases. *Control component libraries* (CCLs) are the transaction unit for licensing, distributing, installing, and uninstalling *dynamic function blocks*.

See also: *controller*, *dynamic function blocks*.

## CCL DE

Abbreviation for *control component library development environment*.

*n*. A set of tools for creating *control component libraries*.

See also: *control component library*.

## CCLB

Abbreviation for *control component library builder*.

*n*. A specific software tool for creating *control component libraries* (CCLs).

See also: *control component library*.

## CCLP

Abbreviation for *control component library package*.

*n*. A single file, containing all necessary files and other structures for use in distributing *control component libraries* (CCLs) and installing them at customer sites.

See also: *control component library*.

## CCM

Abbreviation for *cycle communications manager*.

*n*. *Control execution environment* (CEE) kernel object that oversees the issuing of periodic request for peer data.

See also: *CEE*.

## CCT

*n*. Abbreviation for *control component technology*.

## CD

*n*. Abbreviation for *compact disc*.

## CD-ROM

*n*. Abbreviation for *compact disc read-only memory*.

## CDA

Abbreviation for *control data access*.

*n*. The Experion control system communication infrastructure and data access interface schema that provides application integration with Experion system objects.

## CDS

Abbreviation for *custom data structure*.

*n*. A *function block* of the Utility function block family that is a build-time defined data structure, which can be used by other function blocks.

See also: *function block*.

## CEC

Abbreviation for *Canadian Electrical Code*.

*n*. Canadian standard for electrical installations.

See also: *NEC*

## central processing unit

Also known as *CPU*.
*n*. The computational and control unit of a computer. The CPU is the device that interprets and executes instructions. It has the ability to fetch, decode, and execute instructions and to transfer information to and from other resources over the computer's main data-transfer path, the bus. By definition, the CPU is the chip that functions as the "brain" of a computer. However, in some instances the term encompasses both the processor and the computer's memory or, even more broadly, the main computer console (as opposed to peripheral equipment).

## CEE

Abbreviation for *control execution environment*.

*n*. The *control execution environment* supports execution of a set of *function blocks* for solving control applications. It runs in the *hybrid controller* as a software layer built on top of the control software infrastructure.

See also: *function block*, *hybrid controller*.

## Certificate Authority (CA)

A Certificate Authority is an entity that issues digital certificates. In Experion, there is a single Certificate Authority for each Security Area.

## Certificate

A certificate is an electronic document that uses a digital signature to bind a public key with an identity. Experion nodes obtain a certificate signed by the Certificate Authority that is used to represent the nodes identity.

## CFBD

Abbreviation for *control function block definition*.

*n*. The controller definition of the *function block* required to load the *function block* to the *controller*. For example, the *CFBD* keeps the *parameter* value and *block* connections.

See also: *block*, *controller*, *function block*, *parameter*.

## CFX

Acronym for *common file exchange*.

*n*. A proprietary export format from *FLOWCAL* to export data from Electronic Flow Measurement (EFM) systems. Two versions of *CFX* apply: *CFX 5* and *CFX 7*.

Compare: *CSV*.

## channel

*n*. The communications port used by the server to connect to a controller.

Channels are one slot, point, or screw terminal of an I/O device for a single I/O value, and are defined using the Quick Builder tool.

## chassis

Also known as *device*.

*n*. A single *ICP* enclosure, with *backplane*, power supply, communications, and in most cases, controller module(s).

See also: *backplane*, *ICP*.

## chassis ID

*n*, Given a *redundant chassis pair*, there is a need to reference an individual *chassis* logically (that is, Redundancy State: `Primary`, or `Secondary`) or physically (that is, Chassis ID: `Chassis A`, or `Chassis B`). `Chassis`

*A* and *Chassis B* are used as generic references to the physical chassis, assuming that most systems will label their chassis pairs with an *A/B* suffix.

Since chassis placement (upper/lower; right/left; and so on) is optional, a position-dependent reference is unsuitable.

See also: *chassis*, *primary*, *redundant chassis pair*, *secondary*.

## checkpoint

*n*. The act of taking a snapshot of memory resident data, and writing it to disk (or other stable storage) to enable the restart of a process after it has begun.

## checkpointing

*v*. In a *redundant server* system, the process of transferring database updates from the *primary* server to the *secondary* (backup) server.

See also: *primary*, *redundant server*, *secondary*.

## child window

*n*. Refers to a window inside of an *application* main window. The *application* creates as many child windows as necessary to support its functionality.

See also: *application*.

## CIFS

*n*. Acronym for *common internet file system*.

## CIM

Abbreviation for *communications interface module*.

*n*. Used to connect a *controller* to the *server* via a serial link.

Compare: *EIM*.

## CIP

Abbreviation for *control and information protocol*.

*n*. Protocol used on *ControlNet* networks at the Transport and Application Layer.

See also: *ControlNet*.

## CK

*n*. Abbreviation for *control kernel*.

## CL

Abbreviation for *control library*.

*n*. A set of *OLE* custom interfaces that provide access to the *ERDB*.

See also: *ERDB*, *OLE*.

## clean database

*n*. Database shipped from the factory.

## clean or empty ERDB

*n*. Experion *engineering repository database* (ERDB) consisting of the *DB schema* and *system templates*. There are no *user templates* or *function block* instances.

Compare: *null ERDB*.

See also: *DB schema*, *ERDB*, *function block*, *system template*, *user template*.

## cleanpoint

*n*. A point in time at which a set of data entities reaches a state of consistency, as defined by the *application*.

## click

*v*. To press and release a mouse button once without moving the mouse. Clicking is usually performed to select or deselect an item or to activate a program or program feature.

Compare: *double-click*.

See also: *drag*, *right click*.

## client software

*n*. An umbrella term covering Experion components, including Station, Display Builder, and Quick Builder.

## client

*n*. In Honeywell terminology, applications, which are the components of the system that communicate with servers. For example, the Station and Control Builder applications.

## clipboard

*n*. A special memory resource maintained by Windows operating system. The clipboard stores a copy of the last information that was copied or cut. A paste operation passes data from the clipboard to the current application. A clipboard allows information to be transferred from one application to another, provided the second application can read data generated by the first. For example, you can use the clipboard to copy text from a word processor document and insert (paste) it into Station's Message Pad or an e-mail message.

Data copied using the clipboard is static and will not reflect later changes.

## clone

*n*. A copy of a virtual machine.

## CM/cm

1. *CM* is an abbreviation for *control module*.

   Also known as *control module function block*.

   *n*. A container block within *Control Builder* that serves as an encapsulation of basic *function blocks*.

   See also: *Control Builder*, *function block*.
2. *n*. *cm* (note case) is also used for centimeter(s).

## CNB

*n*. *ControlNet* communications/bridge cards for the *ICP chassis*.

See also: *chassis*, *ControlNet*, *ICP*.

## CNet

Acronym for *control network*.

*n*. A *local area network* (LAN) specification developed by Allen-Bradley for control networks. Standardized and maintained by *ControlNet International, Ltd*.

See also: *ControlNet*, *LAN*.

## CNF file

*n*. Acronym for *function block instance configuration file*.

## CNI

Acronym for *ControlNet interface*.

*n*. The printed circuit card that is installed into the *server*. It enables the *server* and associated databases to communicate to the *hybrid controller* by way of the *ControlNet* network. With cables, the *ControlNet interface* links the *controller* with remote I/O module *chassis* via the I/O network and/or other system controllers and plant networks via *ControlNet*.

See also: *chassis*, *controller*, *ControlNet*, *ControlNet A*, *ControlNet B*, *hybrid controller*, *server*.

## CNI EISA

*n*. Acronym for *ControlNet interface extended industry-standard architecture*.

See also: *ControlNet interface*.

## CNI module

*n*. *ControlNet interface* module, located on a *controller* or *I/O* (remote) *chassis*.

Compare: *CNI module for PC*.

See also: *chassis*, *controller*, *ControlNet*, *I/O*.

## CNI module for PC

*n*. *ControlNet interface* module for PC, located on the server.

Compare: *CNI module*.

See also: *ControlNet*, *server*.

## COA

Abbreviation for *controller object adapter*.

*n*. Provides a level of abstraction for the objects in the *CEE* to communicate with external objects in the *TPS*. This subsystem takes two forms in the *CPM*:

1. Initiator Control Object Adapter, iCOA
2. Responder Control Object Adapter, rCOA

This subsystem's parallel in the *XPM* architecture is a combination of the Database Interface Task (DBIF), Comm/Ctrl Interface (CCI), and the UCN Interface (HPI).

See also: *CEE*, *CPM*, *interprocess message record*, *TPS*, *XPM*.

## Collaboration Station

*n*. A type of *Station* that represents your operation on a large interactive touchscreen in a view designed to facilitate communication and collaboration. A Collaboration Station can be used to gather a range of key content so that it is easily accessible during a collaboration. This can include Experion displays, documents, websites, and other common file types.

A Collaboration Station connects to the *eServer* for read only access to process data and *alarms*.

Compare: *Console Extension Station*, *Console Station*, *Flex Station*.

See also: *eServer*, *Station*.

## collection

*n*. A set of named values or *display objects* that are used in *scripts*.

See also: *display object*, *script*.

## collision

*n*. When two devices try to send *scan packets* at the same time. In *Ethernet networks*, *collisions* are considered normal events and the *CSMA/CD* access method is designed to quickly restore the *network* to normal activity after a *collision* occurs.

See also: *CSMA/CD*, *Ethernet*, *network*, *scan packet*.

## combo points

*n*. Combo points functionality is used to manage name collisions that can occur when two identical tag names exists in the HG as well as in Experion.
When an EHB is used to connect Experion controllers to an LCN network, identical tag names can exist on the HG point and on the algorithm CM. In such scenarios, if you load the algorithm CM to the ESV-T, name collision occurs. To manage such name collisions, the Combo Point functionality is introduced. The Combo

Point functionality extends the operation of the TPS point. You can configure the tag names of the algorithm CMs, if the same tag name exists in the HG, as a Combo Point.

## comma-delimited file

Synonym for *CSV*.

*n*. Filename extension assigned to text files containing tabular data (row and column) of the type stored in database fields. CSV files enable communication between database systems that use different formats. As the name indicates, individual data entries are separated by commas. If the data in a field contains a comma, the field is further surrounded with quotation marks.

Compare: *TSV*.

## command zone

*n*. The right-most section of *Station's* toolbar where you can enter commands.

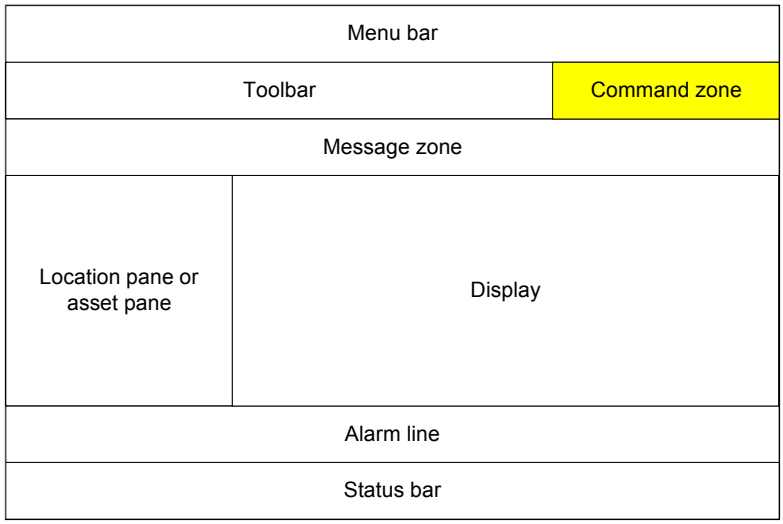



**Figure 2: Command zone**

Compare: *message zone*.

See also: *Station*.

## common file exchange

Also known as *CFX*.

*n*. A proprietary export format from *FLOWCAL* to export data from Electronic Flow Measurement (EFM) systems. Two versions of *CFX* apply: *CFX 5* and *CFX 7*.

Compare: *CSV*.

## common file format

*n*. The format of a *capability file*, which is a readable text document based on a Windows initialization (*.ini) file type.

See also: *capability file*.

## common internet file system

*n*. A protocol that provides shared access to files, printers, serial ports, and miscellaneous communications between nodes on a network.

## communication protocol

*n*. When used in the context of *Electronic Flow Measurement* (EFM), a combination of the specific *controller* type and the protocol and addressing scheme used by the controller. When configuring a *meter template*, the Engineer selects the device family, which in turn selects the *communication protocol* that the template uses.

See also: *controller*, *EFM*, *meter template*.

## communications cable

*n*. The transmission media providing the physical paths for carrying data between devices. In Experion, communications cables are typically used to establish the Process Control Network networks and the *Ethernet* network, linking Experion workstations and *servers*.

See also: *Ethernet*.

## communications interface module

Also known as *CIM*.

*n*. Used to connect a *controller* to the *server* via a serial link.

Compare: *EIM*.

See also: *controller*, *server*.

## compressor

*n*. In Gas Operations Suite, a *compressor* represents a mechanical device that increases the pressure of gas to move it through the *pipeline*.

See also: *compressor station node*, *flow meter*, *pipeline*.

## compressor station node

*n*. In Gas Operations Suite, a *compressor station node* represents a *pipeline node* that contains one or more *compressors*.

See also: *compressor*, *flow meter*, *node*, *pipeline*.

## conduit

*n*. A pipe, tube, tray, or pan for protecting electrical cables and wires.

## configuration database

*n*. The database that defines how system components—such as *Stations*, *controllers*, and *points*—are configured.

See also: *controller*, *point*, *Station*.

## connection

*n*. A user-defined link between parameters that affects data flow at execution time, designating a relationship between the *blocks* and *parameters* joined by the connection. Connections are built from *connectors* at one or both ends of the connection.

See also: *block*, *connector*, *parameter*.

## connection manager

*n*. A *Fieldbus Foundation* service to manage *connection* information about device types, *devices*, and *blocks* that are actively communicating with a host application. The *Control Builder* application supplied with the Engineering Tools application implements this service in an offline mode.

See also: *block*, *connection*, *device*, *Fieldbus Foundation*.

## connector

*n*. A reference to a *parameter* or *block* that is part of the implementation of a *connection*. There are two types of connectors within *CEE*: *active* and *passive*.

See also: *active connector*, *block*, *CEE*, *connection*, *parameter*, *passive connector*.

## console

*n*. A logical grouping of *Console Stations* and *Console Extension Stations*.

See also: *Console Extension Station*, *Console Station*.

## Console Extension Station

*n*. A *Flex Station* that is connected to a *Console Station* rather than to an Experion *server*.

See also: *Console Station*, *Flex Station*, *server*.

## Console Station

*n*. A *Station* that has direct access to Process Controllers in addition to the Experion *server*. Because of this direct access, there is no loss of view of critical process data if the server fails.

Compare: *Console Extension Station*, *Flex Station*.

See also: *server*, *Station*.

## consolidate connections

A feature, which ensures that a single connection is used for a group of ArmorPoint I/O modules, instead of one connection per I/O module. Consolidating the connections optimizes the usage of network bandwidth because data for all the ArmorPoint I/O modules is transferred over a single connection.

## constant

*n*. A fixed numeric value.

## container function block

*n*. A *function block* that can contain other *blocks*. *CEE* and *Control Builder* support two types of container blocks: *control module* and *sequential control module*.

See also: *block*, *CEE*, *Control Builder*, *control module*, *function block*, *sequential control module*.

## container point

*n*. A type of *standard point* that ties together a set of other (related) *standard points* so that you can manage them as if they were one *point*. A *container point* is, in effect, a user-defined point type that matches your data requirements for a particular type of device or scenario.

See also: *point*, *standard point*.

## continuity

*n*. Uninterrupted *connection* or signal path.

## continuity tester

*n*. A test device that checks for uninterrupted *connections* or signal paths.

## control and information protocol

*n*. Protocol used on *ControlNet* networks at the Transport and Application Layer.

See also: *ControlNet*.

## Control Builder

*n*. The control building software, running on a Windows operating system, that provides an environment in which to build control strategies using function blocks for the Honeywell *control processor*. It includes the Function Block Builder, SCM Builder, Function Block Symbols, SCM Symbols and Configuration Forms, SCM Blocks and Configuration Forms, Function Block Faceplate, and the Data Entry Mechanism.

See also: *control processor*.

## control component library

*n*. A collection of related *dynamic function blocks* and associated support structures. Customers can load CCLs to Experion *controllers*, independent of Experion*controller* releases. *Control component libraries* (CCLs) are the transaction unit for licensing, distributing, installing, and uninstalling *dynamic function blocks*.

See also: *controller*, *dynamic function blocks*.

## control component library builder

*n*. A specific software tool for creating *control component libraries* (CCLs).

See also: *control component library*.

## control component library development environment

*n*. A set of tools for creating *control component libraries*.

See also: *control component library*.

## control component library package

*n*. A single file, containing all necessary files and other structures for use in distributing *control component libraries* (CCLs) and installing them at customer sites.

See also: *control component library*.

## control data access

Also known as: *CDA*.

*n*. The Experion control system communication infrastructure and data access interface schema that provides application integration with Experion system objects.

## control drawing

*n*. The *child window* that represents the *control module* as it is being edited. It shows the *blocks* and *connections* contained within it and is where you build your control strategy. The *control drawing* can be one of two types; *control modules* or *sequential control modules*. The drawing gives a view of the internals of a *control module/ sequential control module*.

See also: *block*, *connection*, *control module*, *sequential control module*.

## control execution environment

*n*. The *control execution environment* supports execution of a set of *function blocks* for solving control applications. It runs in the *hybrid controller* as a software layer built on top of the control software infrastructure.

See also: *function block*, *hybrid controller*.

## control failure alarm

*n*. For *analog points* and *status points*, an alarm configured to work when an *OP*, *SP*, or *MD*, or a *parameter* control is issued and a *demand scan* on the source address, performed by the server, finds their value does not match the controlled value.

See also: *analog point*, *demand scan*, *MD*, *OP*, *parameter*, *SP*, *status point*.

## control function block definition

Also known as *CFBD*.

*n*. The controller definition of the *function block* required to load the *function block* to the *controller*. For example, the *CFBD* keeps the *parameter* value and *block* connections.

See also: *block*, *controller*, *function block*, *parameter*.

## control level

*n*. A *security level* (a number from 0–255) assigned to a *point*. Only operators who have been assigned a *control level*—equal to or higher than—a point's control level can control that *point*.

See also: *point*, *security level*.

## control library

Also known as *CL*.

*n*. A set of *OLE* custom interfaces that provide access to the *ERDB*.

See also: *ERDB*, *OLE*.

## control module

Also known as *control module function block*.

*n*. A container block within *Control Builder* that serves as an encapsulation of basic *function blocks*.

See also: *Control Builder*, *function block*.

## control module function block

*n*. A container block within *Control Builder* that serves as an encapsulation of basic *function blocks*.

See also: *Control Builder*, *function block*.

## control network

Also known as *CNet*.

*n*. A *local area network* (LAN) specification developed by Allen-Bradley for control networks. Standardized and maintained by *ControlNet International, Ltd*.

See also: *ControlNet*, *LAN*.

## control parameter

*n*. A *point parameter* that is used as a control. A *control parameter* has both a source address and a destination address. The destination for the parameter value is usually an address within the *controller*. *Control parameters* can be defined as automatic (*server* can change) or manual (operator can change).

See also: *controller*, *point parameter*, *server*.

## control processor

*n*. A shorthand reference to the *control processor module* (CPM) in an Experion *hybrid controller* that provides regulatory, sequential, and fast logic control. A unit controller with Process Manager style ControlWare functionality, fast logic control functionality, Level 1 & Level 2 batch functionality, and custom data entities; one module of the *controller*.

See also: *controller*, *CPM*, *hybrid controller*.

## control processor module

*n*. The module within the *hybrid controller* in which Experion control strategies (including continuous, logic, motor, and sequence applications) execute. It communicates with I/O and peer devices via the ICP backplane and the connected *supervisory control* network. Together with an ICP backplane and I/O devices, the *CPM* constitutes a controller. Note that the C200 version CPM supports both non-redundant and redundant *hybrid controller* configurations. It supersedes the C100 CPM, which could only be used in non-redundant *hybrid controller* configurations

See also: *C200 controller*, *control processor*, *hybrid controller*, *supervisory control*.

## control solver

*n*. Commercial name for the downloaded software in the *control processor* ( personality image). It is a flexible control environment for executing regulatory, logic, and *sequential control* functions in the *control processor*.

See also: *control processor*, *sequential control module*.

## controller

Also known as *remote terminal unit*, *RTU*.

*n*. A generic term for a device that is used to control and monitor one or more processes in field equipment. The most common control and monitoring device in an access control and security system is an access control panel. Other devices include security monitoring panels, elevator controllers, and fire monitoring devices. Controllers include *programmable logic controllers* (PLCs), loop controllers, bar code readers, and scientific analyzers.

See also: *C200 controller*, *control processor*, *CPM*, *hybrid controller*, *network node controller*, *PLC*.

## controller object adapter

*n*. Provides a level of abstraction for the objects in the *CEE* to communicate with external objects in the *TPS*. This subsystem takes two forms in the *CPM*:

1. Initiator Control Object Adapter, iCOA
2. Responder Control Object Adapter, rCOA

This subsystem's parallel in the *XPM* architecture is a combination of the Database Interface Task (DBIF), Comm/Ctrl Interface (CCI), and the UCN Interface (HPI).

See also: *CEE*, *CPM*, *interprocess message record*, *TPS*, *XPM*.

## ControlNet

*n*. The time-critical, deterministic, high speed Experion communications network used to transfer signals and messages between the system *server* and connected *controllers* (Supervisory ControlNet), or between

controllers and *I/O chassis* (I/O ControlNet). *ControlNet* utilizes a publish/subscribe (producer/consumer) network model to achieve maximum flexibility and performance. *ControlNet* is a trademark of *Allen-Bradley Inc*.

See also: *chassis*, *controller*, *ControlNet A*, *ControlNet B*, *I/O*, *server*.

## ControlNet A

*n*. One of two *ControlNet* networks in a redundant *ControlNet* configuration.

Compare: *ControlNet B*

See also: *ControlNet*.

## ControlNet B

*n*. One of two *ControlNet* networks in a redundant *ControlNet* configuration.

Compare: *ControlNet A*

See also: *ControlNet*.

## ControlNet interface

*n*. The printed circuit card that is installed into the *server*. It enables the *server* and associated databases to communicate to the *hybrid controller* by way of the *ControlNet* network. With cables, the *ControlNet interface* links the *controller* with remote I/O module *chassis* via the I/O network and/or other system controllers and plant networks via *ControlNet*.

See also: *chassis*, *controller*, *ControlNet*, *ControlNet A*, *ControlNet B*, *hybrid controller*, *server*.

## COTS

*n*. Abbreviation for *commercial off-the-shelf*.

## CP

1. Abbreviation for *control platform*.
2. Abbreviation for *control processor*.

   *n*. A shorthand reference to the *control processor module* (CPM) in an Experion *hybrid controller* that provides regulatory, sequential, and fast logic control. A unit controller with Process Manager style ControlWare functionality, fast logic control functionality, Level 1 & Level 2 batch functionality, and custom data entities; one module of the *controller*.

   See also: *controller*, *CPM*, *hybrid controller*.

## CPM

Abbreviation for *control processor module*.

*n*. The module within the *hybrid controller* in which Experion control strategies (including continuous, logic, motor, and sequence applications) execute. It communicates with I/O and peer devices via the ICP backplane and the connected *supervisory control* network. Together with an ICP backplane and I/O devices, the *CPM* constitutes a controller. Note that the C200 version CPM supports both non-redundant and redundant *hybrid*

*controller* configurations. It supersedes the C100 CPM, which could only be used in non-redundant *hybrid controller* configurations

See also: *C200 controller*, *control processor*, *hybrid controller*, *supervisory control*.

## CPU

Abbreviation for *central processing unit*.

*n*. The computational and control unit of a computer. The CPU is the device that interprets and executes instructions. It has the ability to fetch, decode, and execute instructions and to transfer information to and from other resources over the computer's main data-transfer path, the bus. By definition, the CPU is the chip that functions as the "brain" of a computer. However, in some instances the term encompasses both the processor and the computer's memory or, even more broadly, the main computer console (as opposed to peripheral equipment).

## crimp tool

*n*. Tool used to attach *ControlNet* connectors to prepared coaxial cable.

See also: *ControlNet*.

## CSMA/CD

Acronym for *Carrier Sense Multiple Access with Collision Detection*.

*n*. An element defined by the *IEEE 802.3* specification. It is an access method, which is used by devices connected to an *Ethernet* segment. Each device senses availability of the medium, transmits, and then listens for any collisions. (If a collision occurs, at a random time interval, the transmission is retried.)

See also: *Ethernet*, *IEEE 802.3*.

## CSV

Abbreviation for *comma separated values*.

*n*. Filename extension assigned to text files containing tabular data (row and column) of the type stored in database fields. CSV files enable communication between database systems that use different formats. As the name indicates, individual data entries are separated by commas. If the data in a field contains a comma, the field is further surrounded with quotation marks.

Compare: *TSV*.

## CUI

*n*. Abbreviation for *control user interface*.

## custom application

*n*. A user-written application that has been integrated with Experion.

## custom data structure

*n*. A *function block* of the Utility function block family that is a build-time defined data structure, which can be used by other function blocks.

See also: *function block*.

## CV

*n*. Abbreviation for *calculated variable*.

## cycle communications manager

*n*. *Control execution environment* (CEE) kernel object that oversees the issuing of periodic request for peer data.

See also: *CEE*.

# D

## DAC

*n*. Acronym for *data acquisition function block*. Also abbreviated as *DataAcq*.

## data entry mechanism

Also known as *DEM*.

*n*. Generalized *control user interface* (CUI) data entry mechanism used when working with live data in the *controller* (run-time) rather than with an off-line configuration form (build-time).

See also: *controller*.

## data format

*n*. A format applied to the raw *parameter* value being read from a *controller*. *Data formats* are used for scaling, and to read values that are floating point or other.

To apply a data format, you type it as the last part of the *controller* address for the parameter value.

See also: *controller*, *parameter*.

## data link (DLL)

*n*. Defines how messages are transmitted on a multi-drop network. It uses a deterministic centralized bus scheduler called a *link active scheduler* (LAS) to manage access to the *Fieldbus*. It controls scheduled and unscheduled communications on the *Fieldbus* in a publish/subscribe environment.

See also: *Foundation Fieldbus*, *link active scheduler*.

## database controller

Also known as *user scan task controller*.

*n*. A *virtual controller*, which is represented by a *user table*. The table is scanned by the *server* as if it were a physical *device*.

See also: *controller*, *device*, *server*, *user table*.

## database point

*n*. Any *point* that has one or more *parameters* with database addresses, as opposed to *field addresses*.

See also: *field address*, *parameter*, *point*, *point parameter*.

## database populator

*n*. The internal tool that installs *libraries* (both *static* and *CCL* libraries) in an engineering repository.

See also: *CCL*, *library*, *static library*.

## datacenter

A datacenter is the primary container of inventory objects, such as hosts and virtual machines. A vCenter Server can contain multiple datacenters.

For large virtualization implementations, datacenters can be used to represent organizational units within the enterprise. In addition to providing a container, the datacenter also serves as a boundary when using advanced features including vMotion.

For Experion virtualizations, a datacenter is used to contain all of the Experion virtual machines.

## datastore

Logical containers that hide the specifics of each storage device and provide a uniform model for storing virtual machine files. Datastores can also be used for storing ISO images, virtual machine templates, and floppy disk images.

## DBIF

*n*. Acronym for *database interface*.

## DbPOP

Acronym for *database populator*.

*n*. The internal tool that installs *libraries* (both *static* and *CCL* libraries) in an engineering repository.

See also: *CCL*, *library*, *static library*.

## DB schema

*n*. The design of the database, which includes the tables, stored queries, indexes, and relationships between tables. The schema excludes the table data (table records).

## DC

*n*. Abbreviation for *direct current*.

Compare: *AC*.

## DCD

*n*. Abbreviation for *data carry detect*.

## DCS

*n*. Abbreviation for *distributed control system*.

## DD

Abbreviation for *device description*.

*n*. A binary file that provides the definition for parameters in the *FBAP* of a device. For example, what *function blocks* a device contains, and what *parameters* are in those *blocks*.

See also: *block*, *FBAP*, *function block*, *parameter*.

## DDE

*n*. Abbreviation for *dynamic data exchange*.

## DDL

Abbreviation for *device definition language*

*n*. This is the language that vendors use to define their device's *function blocks* and *parameters*.

See also: *function block*, *parameter*.

## DDO

Abbreviation for *device description object*.

*n*. The suffix name for incremental *DD* binary files supplied by vendors that are to be converted to full and complete *DD* binary files by the *Fieldbus Foundation* synthesizer.

See also: *DD*, *Fieldbus Foundation*.

## DDS

Abbreviation for *device description service*.

*n*. A software *library* developed by the *Fieldbus Foundation* that provides a generic access to a *DD*.

See also: *DD*, *Fieldbus Foundation*, *library*.

## default

*n*. The value that an application automatically selects if the user does not explicitly select another value.

## deleted items

*n*. In *Quick Builder*, an *item* that has been flagged for deletion from the *server* database and appears in the Deleted grouping. When a download is performed, the *item* is deleted from both the *server* database and the *Quick Builder* project database.

See also: *item*, *Quick Builder*, *server*.

## DEM

Abbreviation for *data entry mechanism*.

*n*. Generalized *control user interface* (CUI) data entry mechanism used when working with live data in the *controller* (run-time) rather than with an off-line configuration form (build-time).

See also: *controller*.

## demand scan

*v*. A *scan* of a *point parameter* that is requested by an operator, a *report*, or an *application*.

Compare: *exception scan*, *periodic scan*.

See also: *application*, *point parameter*, *report*, *scanning*.

## demilitarized zone

Also known as *DMZ*.

*n*. In a computer *network*, a demilitarized zone is an area with some *firewall* protection, but is visible to the outside world.

See also: *firewall*, *network*.

## derived point

*n*. A *standard point* that is mapped to another *point* or a user table. *Derived points* are typically used to perform a function-such as raising an *alarm* or running an *algorithm* that the referenced *point* or *user table* cannot perform.

See also: *algorithm*, *point*, *standard point*, *user table*.

## Deutsche Industrie Normenausschuss

*n*. A German association that sets standards for the manufacture and performance of electronics and electrical devices.

## DevCtl

Abbreviation for *device control*.

*n*. This *function block* provides an operator representation and alarming functions for control of digital field *devices*, such as motors, valves, and pumps. It provides control for up to three outputs with processing based upon PV (process feedback) of up to four inputs.

## device

1. *n*. A physical device connected to the trunk, and having a network address. Examples of devices are an Experion server, a an Experion Station, and a *controller*.
2. *n*. A single *ICP* enclosure, with *backplane*, power supply, communications, and in most cases, controller module(s).

   Also known as *chassis*.

   See also: *backplane*, *ICP*.

## device control

Also known as *DevCtl*.

*n*. This *function block* provides an operator representation and alarming functions for control of digital field *devices*, such as motors, valves, and pumps. It provides control for up to three outputs with processing based upon PV (process feedback) of up to four inputs.

See also: *function block*, *device*.

## device description

Also known as *DD*.

*n*. A binary file that provides the definition for parameters in the *FBAP* of a device. For example, what *function blocks* a device contains, and what *parameters* are in those *blocks*.

See also: *block*, *FBAP*, *function block*, *parameter*.

## device description item

Also known as *DD item*.

*n*. Item is a fundamental concept of the *device description language* (DDL). It makes up the description of the *device* and can be any of the following constructs: Array, Block, Collection, Domain, Edit Display, Item Array, Menu, Program, Record, Refresh Relation, Response Code, Variable, Variable List, WAO Relation.

See also: *device*, *device description language*.

## device description language

Also known as *DDL*.

*n*. This is the language that vendors use to define their device's *function blocks* and *parameters*.

See also: *function block*, *parameter*.

## device description object

Also known as *DDO*.

*n*. The suffix name for incremental *DD* binary files supplied by vendors that are to be converted to full and complete *DD* binary files by the *Fieldbus Foundation* synthesizer.

See also: *DD*, *Fieldbus Foundation*.

## device description service

Also known as *DDS*.

*n*. A software *library* developed by the *Fieldbus Foundation* that provides a generic access to a *DD*.

See also: *DD*, *Fieldbus Foundation*, *library*.

## device description synthesizer

Also known as *DD synthesizer*.

*n*. A tool supplied by the *Fieldbus Foundation*. It combines incremental *DDs* with unresolved references, with *Fieldbus Foundation* standard *DDs* to produce a complete/full DD that can be used with *DDS*.

See also: *DD*, *DDS*, *device description*, *Fieldbus Foundation*.

## device profile

*n*. A configuration tool for Allen-Bradley *I/O* modules. There is a *device profile* for each *I/O* module type.

See also: *I/O*.

## DH+

*n*. Acronym for *Data Hiway Plus*.

## DHCP

*n*. Abbreviation for *dynamic host configuration protocol*.

## DHI

Abbreviation for *data hiway interface*.

## DI

*n*. Abbreviation for *digital input*.

Compare: *AI*.

See also: *input*.

## DIC

*n*. Abbreviation for *digital input channel function block*.

See also: *function block*.

## DIM

*n*. Abbreviation for *digital input module function block*.

See also *function block*.

## DIN

Abbreviation for *Deutsche Industrie Normenausschuss*.

*n*. A German association that sets standards for the manufacture and performance of electronics and electrical devices.

## DIN rail

*n*. Mechanic *device* used to mount and *ground* compatible *devices* and products. Often found in control *cabinets* (*enclosures*).

See also: *cabinet*, *device*, *enclosure*, *ground*.

## DIP

*n*. Abbreviation for *dual inline package*.

## dirty pop

*n*. A database that is no longer the clean database.

## display

*n*. *Station* uses displays to present Experion information to operators in a manner that they can understand. The style and complexity of *displays* varies according to the type of information being presented. *Displays* are sometimes called *pages*, a term that also applies to Web pages. *Displays* are created using *HMIWeb Display Builder* or *Display Builder*.

See also *Display Builder*, *HMIWeb Display Builder*, *page*, *Station*.

## Display Builder

*n*. The Experion tool for creating custom *displays* with a proprietary *DSP* format. (Web-based displays are created using *HMIWeb Display Builder*.)

See also: *display*, *DSP displayHMIWeb Display Builder*.

## display elements

*Display elements* are used in the Equipment Summary and the tabular view of the Equipment Detail to display data associated with an equipment item. Display elements can include:

- Alphanumeric
- Link
- Dual Indicator
- Check box
- Combo box

## display object

*n*. An item in a *display*, such as a button or indicator, that is associated with a *point* or a command.

See also: *display*, *local display object*, *point*.

## disposable secondary

*n*. A *secondary* is disposable when:

1. The *primary* can successfully communicate with it, and
2. It is not requesting the *primary* to initialize.

Compare: *indisposable secondary*.

See also: *readiness*, *secondary*, *secondary readiness*.

## distributed system architecture

Also known as *DSA*.

*n*. An option that enables multiple Experion systems to share data, *alarms*, and *history*.

See also: *alarm*, *history*, *host server*, *local server*, *remote server*.

## DLL

Abbreviation for *dynamic link library*.

*n*. A feature of the *Microsoft* Windows family of operating systems that allows executable routines to be stored separately as files with *DLL* extensions and to be loaded only when needed by an application. A *dynamic-link library* has several advantages. First, it does not consume any memory until it is used. Second, because a *dynamic-link library* is a separate file, a programmer can make corrections or improvements to only that module without affecting the operation of the calling application or any other *dynamic-link library*. Finally, a programmer can use the same *dynamic-link library* with other applications.

See also: *OLE in-process handler*, *OLE in-process server*.

## DMZ

Abbreviation for *demilitarized zone*.

*n*. In a computer *network*, a demilitarized zone is an area with some *firewall* protection, but is visible to the outside world.

See also: *firewall*, *network*.

## DNS

*n*. Abbreviation for *domain name system*.

## DO

*n*. Abbreviation for *digital output*.

Compare: *AO*.

See also: *output*.

## DOC

*n*. Abbreviation for *digital output channel function block*.

See also: *function block*.

## DOM

*n*. Abbreviation for *digital output module function block*.

See also: *function block*.

## domain

*n*. A logical collection of computers that share a common security definition. Domain security and *logon* permissions are controlled by special servers called domain controllers. Users cannot access server resources in a domain until the domain controller has authenticated them.

See also: *DNS*.

## Domain tree

*n* A collection of domains that share a contiguous namespace.

## double-click

*v*. To press and release a mouse button twice without moving the mouse. Double-clicking is a means of rapidly selecting and activating an application or application feature.

Compare: *click*.

See also: *drag*, *right click*.

## downtime

*n*. The time during which a piece of *equipment* is not operating. *Downtime* may be the result of a fault; or it may be deliberate, as in the case of a motor turned off for maintenance.

See also: *equipment*.

## drag

*v*. To move an image, window, or object from one place on the screen to another by "grabbing" it and pulling it to its new location using the mouse. The mouse pointer is positioned over the object, and the mouse button is pressed and held while the mouse is moved to the new location.

See also: *click*, *double-click*, *right click*.

## DSA

Abbreviation for *distributed server architecture*.

*n*. An option that enables multiple Experion systems to share data, *alarms*, and *history*.

See also: *alarm*, *history*, *host server*, *local server*, *remote server*.

## DSP display

*N*. A *display* in *Station* created in *Display Builder*, which has a proprietary format. Contrast with an HMIWeb display, which is created in *HMIWeb Display Builder* and is based on Web standards.

See also *Display Builder*, *HMIWeb Display Builder*, *Station*.

## DSR

*n*. Abbreviation for *data signal ready*.

See also: *DTR*.

## DTE

*n*. Abbreviation for *data terminal equipment*.

## DTR

*n*. Abbreviation for *data terminal ready*.

See also: *DSR*.

## dual-bit status point

*n*. A *status point* that reads two bits. *Status points* can read one, two, or three bits.

See also: *status point*.

## dual redundancy

*n*. A form of *redundancy* involving a pair of *devices* that operate with one *device* performing the *assigned functions* (the set of functions assigned to that device) while the other remains in some state of readiness to assume responsibility for the *assigned functions* should the first *device* experience a failure.

See also: *assigned function*, *redundancy*, *redundancy state*.

## dummy controller

*n*. A *controller* defined as the *point parameter* source address location when you want to *scan* values from a database. In order for scanning to occur, every *point* source address must be linked to a *controller* so that it can be included in a *scan packet*. The *dummy controller* and the *channel* on which it is built do not need to be working.

See also: *channel*, *controller*, *point*, *point parameter*, *scan*, *scan packet*.

## dust cap

*n*. Protective device used to prevent dust, dirt, and other buildup on *ControlNet* connectors.

See also: *ControlNet*

## dynamic function block

*n*. *Function blocks* that are not always resident in a *controller*, but can be installed to and removed from *controllers* using *CCT*.

See also: *CCT*, *controller*, *function block*.

## dynamic indirection

*n*. Allows a client *block* to communicate to different data owner/destination *blocks* at run-time, through a single primary communication channel. This provides the ability for a user to create a single *SCM* that may control different equipment each time it runs.

See also: *alias table*, *block*, *SCM*.

## dynamic-link library

Also known as *DLL*.

*n*. A feature of the *Microsoft* Windows family of operating systems that allows executable routines to be stored separately as files with *DLL* extensions and to be loaded only when needed by an application. A *dynamic-link library* has several advantages. First, it does not consume any memory until it is used. Second, because a *dynamic-link library* is a separate file, a programmer can make corrections or improvements to only that module without affecting the operation of the calling application or any other *dynamic-link library*. Finally, a programmer can use the same *dynamic-link library* with other applications.

See also: *OLE in-process handler*, *OLE in-process server*.

# E

## ECC

Abbreviation for *ERDB Consistency Checker*.

*n*. A tool to validate the internal consistency of the ERDB.

## edge detection

*n*. In *pulse input module* hardware, all timing, counting, and frequency functions begin with the transition of the signal (applied to the screw terminals) from *Low–to–High* or *High–to–Low*. The *parameter* name is *EDGEDETECT*.

See also: *parameter*, *pulse input module*.

## EFM

Abbreviation for *electronic flow measurement*.

*n*. *EFM* collects the following data from flow *meters* and *flow computers*:

- Historical flow logs (typically, hourly and daily transaction records)
- Meter configurations
- Alarm logs
- Event logs

Experion then exports these logs to *CSV*, *TSV,* and *CFX* file formats for use by third-party billing and/or gas measurement systems, for example FLOWCAL.

See also: *CFX*, *CSV*, *flow computer*, *meter*, *TSV*.

## EHB

Abbreviation for *Experion Hiway Bridge* .

*n*. An enhanced HG that is capable of connecting to the Hiway boxes on the LCN as well as their C300 emulations that are loaded on to the Experion C300 controllers. The EHB functions as a junction gateway, which can simultaneously connect to the physical Hiway boxes through the coaxial cable and also connect to the emulated boxes through the FTE. The FTE connectivity is established by upgrading the HG with the EHBI card. The EHBI card enables communication to the emulated boxes through the FTE. The remaining network hardware components of the HG - the K4LCN and the DHI cards remain unchanged both physically and functionally.

## EHBI

Abbreviation for *Experion Hiway bridge interface*.

*n*. An interface board to establish connectivity between the K4LCN processor with the modified HG personality and the FTE network.

## EHPM

Abbreviation for *Enhanced High-Performance Process Manager*.

*n*. An FTE-based controller that contains a set of algorithms and tools for implementing integrated control strategies. The EHPM is the HPM node that has been enhanced to support connectivity to the Experion ACE/C300 through FTE.

## EHPM Point Import Utility

*n*. This tool facilitates the import of EHPM points from a NIM checkpoint file into ERDB.

## EIM

Abbreviation for *Ethernet interface module*.

*n*. Used to connect a *controller* to the *server* via an *Ethernet* link (*LAN*).

Compare: *CIM*.

See also: *controller*, *Ethernet*, *LAN*, *server*.

## electrical resistance

*n*. The in-phase current–retarding effect all conductors exhibit to some extent.

See also: *ohmmeter*.

## electromagnetic interference

Also known as *EMI*.

*n*. Disturbances of equipment operation caused by electromagnetic fields from external sources.

## electronic flow measurement

Also known as *EFM*.

*n*. *EFM* collects the following data from flow *meters* and *flow computers*:

- Historical flow logs (typically, hourly and daily transaction records)
- Meter configurations
- Alarm logs
- Event logs

Experion then exports these logs to *CSV*, *TSV,* and *CFX* file formats for use by third-party billing and/or gas measurement systems, for example FLOWCAL.

See also: *CFX*, *CSV*, *flow computer*, *meter*, *TSV*.

## electrostatic discharge

Also known as *ESD*.

*n*. *Sparking* between an electrically charged object and a conductor, or between two electrically charged objects.

## electronic signature

*n*. A combination of a user ID and password that are used as the legally binding equivalent of a handwritten signature.

See also: *Operator-based security*

## ELPM

*n*. Abbreviation for *Ethernet loop processor module*.

See also: *Ethernet*.

## embedded block

*n*. Includes *handler*, *step*, *transition*, and *basic function blocks*.

See also: *basic function block*, *function block*, *handlers*, *step block*, *transition block*.

## EMDB

Abbreviation for *Enterprise Model Database*.

*n*. A database that contains the source descriptions of the plant's assets and alarm groups used in the Enterprise Model.

## EMI

Abbreviation for *electromagnetic interference*.

*n*. Disturbances of equipment operation caused by electromagnetic fields from external sources.

## enclosure

Also known as *cabinet*.

*n*. An enclosure for industrial controls that is used to provide a degree of protection against defined environmental elements. Rated by type of protection they provide by the *National Electrical Manufacturers Association* (NEMA).

## EMSN

Abbreviation for *Experion Migration Storage Node*.

*n*. A location used for storing data (databases, system configuration, operating system preferences, and so on) when migrating an Experion platform.

## engineering repository database

Also known as *ERDB*.

*n*. The database, or set of databases, that support the control system development (build function support). It consists of the ER *DB schema*, *system templates*, *user-defined templates*, and *function block* instances.

See also: *clean or empty ERDB*, *DB schema*, *ERDB transition*, *function block*, *master*, *null ERDB*, *Jet*, *replica*, *system template*, *user-defined template*.

## ENIM

Abbreviation for *Enhanced Network Interface Module*.

*n*. An FTE-based node that provides the interface between the LCN and the EUCN. The ENIM is the NIM node that has been enhanced to support connectivity to the EHPM.

## EPSS

*n*. Abbreviation for *electronic performance support system*.

## equipment

*n*. A general term including material, fittings, devices, appliances, fixtures, apparatus, and the like used as a part of, or in connection with, an electrical installation.

*n*. In relation to Quick Builder items, *Equipment* typically represents real-world equipment, such as a pump, generator, or well. In Station, operational displays will auto-generate detail and summary displays for equipment.

## Equipment Detail

The *Equipment Detail* shows information specific to an equipment item. This is the equivalent of a Point Detail display. The Equipment Detail supports one or more equipment views. The default view for the Equipment Detail is defined in the Equipment Template.

## equipment filter

An *equipment filter* can be applied to the Equipment Summary so that only equipment matching a specified criteria is listed. This criteria is defined in the Equipment Template.

## equipment module

*n* A functional group of process *equipment* (usually analog and *device controls* centered around an *equipment unit*) and the associated Level-1 control functions. It can alternately be thought of as a *sub-unit*.

See also: *device control*, *equipment*, *equipment unit*.

## equipment properties

*Equipment properties* are created as parameters on the equipment, not the points that make up the equipment. Each Equipment Template contains a section defining the properties for the equipment.

The equipment property may reference another point parameter, and contains:

- Parameter type (defines the data type of the parameter, such as string, float)
- Build time attributes
- Optionally, a default value

The equipment property value may be referenced within the template by using the following syntax:

```
[%parameter:specifier%], where
parameter = reference to an equipment property
specifier = an optional .NET numeric format specifier to use when converting a referenced numeric
property value into a string
For example, "d4" - an integer number may resolve to a four character strong padded with zeros:
<DefaultValue>Well number [%Well:d4%]</DefaultValue>
```

## Equipment Summary

The *Equipment Summary* lists all equipment that meet the selected asset and equipment filter criteria. Equipment is grouped by equipment type and can be presented in either a table or card layout.

## Equipment Template

The Equipment Template is used to create and visualize equipment. It contains:

- Library properties
- Common properties
- Rules to create Associated items
- Point references
- Visualization information, including views, display elements, and related content.

## equipment type

The general type of equipment. For example, a Well. There may be specific types of Well, such as pumping, free flowing, but they all share the same Equipment Type.

The equipment type is used in the equipment visualization to group equipment into tables of the same type.

## equipment type definition

The equipment type definition is used to visualize groups of equipment that have the same type. It contains:

- Table definition
- Filters

## equipment unit

*n*. A major piece of process *equipment* such as a vessel, heat exchanger, reactor, and so on. It may consist of several *equipment modules* and/or *devices* with their associated control strategies.

See also: *device*, *equipment*, *equipment module*.

## equipment views

An Equipment Detail display can have multiple visual representations, which are referred to as *Equipment views*. These are defined in the Equipment Template. An equipment view must belong to one of the following categories:

- Table
- Schematic
- Trend

## ER

*n*. Abbreviation for *engineering repository*.

See also: *ERDB*.

## ERDB

Acronym for *engineering repository database*.

*n*. The database, or set of databases, that support the control system development (build function support). It consists of the ER *DB schema*, *system templates*, *user-defined templates*, and *function block* instances.

See also: *clean or empty ERDB*, *DB schema*, *ERDB transition*, *function block*, *master*, *null ERDB*, *Jet*, *replica*, *system template*, *user-defined template*.

## ERDB translation

*v*. The process of converting an older version of the *ERDB* to a new version of the *ERDB* that is compatible with the current release of the Experion software. This is implemented through the *Import/Export tool*.

See also *ERDB*.

## Error 5

*n*. Access denied (WinNT).

## ESD

Acronym for *electrostatic discharge*.

*n*. *Sparking* between an electrically charged object and a conductor, or between two electrically charged objects.

## eServer

*n*. A specialized Experion *server* that provides read-only access to *displays* for casual users who do not have access to *Station*, and read only access to process data and *alarms* for *Collaboration Station* users via the level 4 business network.

See also: *alarm*, *Collaboration Station*, *display*, *server*, *Station*.

## ESIS

Abbreviation for *Experion software installation server*.

*n*. *Experion software installation server* provides a single repository for all Experion software and can be used for installing and migrating Experion software on multiple systems simultaneously. ESIS can be updated for any media updates or new media releases.

## ES-T

Acronym for *Experion Station - TPS*.

*n*. A specialized *Station* that includes TPS components, including an LCNP4 card so that it can communicate over the *TPS network*.

See also: *Station*, *TPS system*.

## ESVT

Abbreviation for *Experion Server-TPS*.

*n*. A specialized Experion *Server* that includes *TPS* components and is fitted with an LCNP4 card so that it can communicate over the *TPS network*.

See also: *server*, *TPS system*.

## ESXi

*n*. A virtualization layer that runs on physical servers (hosts) that allows the sharing of the underlying physical machine resources between different virtual machines, each running its own operating system.

Through ESXi, you can run virtual machines, and you can install operating systems, run applications, and configure the virtual machines. Configuration includes identifying the virtual machine's resources, such as storage devices.

## ESXi host

*n*. A host is a computer that is running ESXi virtualization software to run virtual machines.

Hosts provide the CPU and memory resources that the virtual machines use and give virtual machines access to storage and network resources. Multiple virtual machines can run a host at the same time.

## ETBC

*n*. Abbreviation for *engineering tools backup component*.

## Ethernet

*n*. A *local area network* specification developed by Xerox in 1976. The specification served as the basis for the IEEE 802.3 standard, which specifies the physical and lower software layers of the *network*. It uses *CSMA/CD* to handle simultaneous transmissions and is the most popular *LAN* technology is use today. More commonly used to reference an *Ethernet network* running at 10 Mbps.

See also: *CSMA/CD*, *fast Ethernet*, *fault tolerant Ethernet*, *gigabit Ethernet*, *IEEE 802.3*, *local area network*, *network*.

## EtherNet/IP

*n*.EtherNet/IP is an industrial Ethernet network solution available for manufacturing automation.

From the ODVA website: "EtherNet/IP is a member of a family of networks that implements the Common Industrial Protocol (CIP) at its upper layers. CIP encompasses a comprehensive suite of messages and services for a variety of manufacturing automation applications, including control, safety, synchronization, motion, configuration and information."

## ETN

Abbreviation for *Enhanced TPS Node*.

*n*. An enhanced version of TPS Node that enables virtualization of computer hardware by removing LCNP4 cards and replacing them with a combination of Enhanced TPS Node Interface (ETNI) and K4LCN processor boards installed in the LCN chassis.
Depending on the requirement, there are two options available with ETN:

- *Physical ETN:* Comprises of a physical server/workstation that connects to the K4LCN-ETNI processor boards through the FTE.
- *Virtual ETN:* Comprises of a virtual machine on a server that connects to the K4LCN-ETNI processor boards through the FTE.

## ETNI

Abbreviation for *Enhanced TPS Node Interface*.

*n*. An interface board used to establish connectivity between the TPS emulator software installed on the computer and the K4LCN processor board installed in the ETN node.

## EU

*n*. Abbreviation for *engineering unit*.

See also: *point parameter*.

## EUCN

Abbreviation for *Enhanced Universal Control Network*.

*n*. An FTE-based, dual communications network based on the ISO open system communication standards. It introduces the ENIM and the EHPM, wherein the traditional co-axial cable system is replaced by the FTE.

## EULA

Abbreviation for *Experion end user license agreement*

*n*. *Experion end user license agreement* contains important terms and conditions for installation and use of the software.

## event

*n*. A significant change in the status of an element of the system such as a *point* or piece of hardware. Some *events* may be classified as an *alarm*. *Events* can be viewed on *displays* and included in *reports*.

See also: *alarm*, *display*, *point*, *report*.

## event archiving

*n*. The Experion function that allows you to archive events to a *network* file server, to tape, or to another backup medium.

See also: *extended event archiving*, *network*.

## Excel Data Exchange

*n*. A network option.

## exception history

*n*. The type of *history* that collects snapshots when *controller* notifies the *server* of a change in one or more *parameter* values.

Compare: *extended history*, *fast history*, *standard history*.

See also: *controller*, *history*, *point parameter*, *server*.

## exception scan

*n*. A scan that takes place when a *controller* notifies the *server* of a change in one or more *parameter* values. *Exception scanning* is used to reduce the *scanning* load on the server.

Compare: *demand scan*, *periodic scan*.

See also: *controller*, *parameter*, *scanning*, *server*.

## Experion Server-TPS

Also known as *ESVT*.

*n*. A specialized Experion *Server* that includes *TPS* components and is fitted with an LCNP4 card so that it can communicate over the *TPS network*.

See also: *server*, *TPS system*.

## Experion Station-TPS

*n*. A specialized *Station* that includes TPS components, including an LCNP4 card so that it can communicate over the *TPS network*.

See also: *Station*, *TPS system*.

## export

1. *v*. In relation to *Station displays*, this refers to the process of registering a *display* with the *server* so that it can be called up in *Station*.

   See also: *display*, *server*, *Station*.

2. *v*. In relation to *Quick Builder*, this refers to the process of converting the configuration data in a *project* file into text files for use with other *applications*.

   See also: *application*, *project*, *Quick Builder*.

## extended event archiving

*n*. Every *event*, such as *point* status change or an operator action, is stored in an *event* journal. The online *event* journal is capable of storing only a certain number of events. With *extended event archiving* you can archive these events to disk or tape, where they may be stored for future retrieval.

See also: *event*, *event archiving*, *point*.

## extended history

*n*. The type of *history* that collects 1-hour, 8-hour, and 24-hour snapshots of *point parameter* values.

Compare: *exception history*, *fast history*, *standard history*.

See also: *history*, *point parameter*.

# F

## faceplate

*n*. A specialized pop-up that shows a subset of the details shown on the matching *point detail (or template) display*. It typically shows the *point's* run-time values and control settings. A *faceplate* appears when an operator clicks an object that is linked to a *point*.

See also: *point*, *point detail display*.

## falling edge

*n*. In a *pulse input module*, signal transitions from high to low voltage cause an *off-to-on* transition in the *ASIC* functions.

Compare: *rising edge*.

See also: *ASIC*, *pulse input module*, *voltage threshold*.

## FAS

Abbreviation for *Fieldbus access sublayer*.

*n*. Defines the types of services used to pass information to the *Fieldbus message specification* layer. The types of services are defined as *virtual communication relationships* (VCR).

See also: *Fieldbus message specification*, *Foundation Fieldbus*.

## fast Ethernet

*n*. An extension to the *IEEE* specification to cover *Ethernet* speeds of 100 Mbps. (*IEEE 802.3u*)

See also: *Ethernet*, *IEEE*, *IEEE 802.3*

## fast history

*n*. The type of *history* that collects snapshots of *point parameter* values at regular intervals. (The interval, between 1 and 30 seconds, is specified when Experion is installed.)

Compare: *exception history*, *extended history*, *standard history*.

See also: *history*, *point parameter*.

## fault tolerant Ethernet

Also known as *FTE*.

*n*. A Honeywell product that provides *network redundancy* using standard *Ethernet* hardware.

See also: *Ethernet*, *network*, *redundancy*.

## FB

Abbreviation for *function block*.

*n*. An executable software object that performs a specific task, such as measurement or control, with inputs and outputs that connect to other entities in a standard way. They can be connected and grouped together to construct simple or complex control strategies. You can view *function blocks* as a *symbol*, *configuration form*, as part of a strategy, or as a *user-defined view* in a operator schematic.

See also: *function block configuration form*, *function block faceplate*, *function block symbol*.

## FBAP

Abbreviation for *function block application process*.

*n*. Defines *blocks* to represent different types of application functions. The three types of blocks are the resource block, the *function block*, and the transducer block.

See also: *block*, *function block*.

## FBB

Abbreviation for *function block builder*.

*n*. Used to build a control strategy consisting of *function blocks*, data flow connections, and other user defined objects.

See also: *function block*.

## FBCF

Abbreviation for *function block configuration form*.

*n*. A form used to configure a *function block*. The form represents one view of a *function block*. Another view of the *function block* would be a *function block symbol*.

See also: *function block*, *function block symbol*.

## FBFP

Abbreviation for *function block faceplate*.

*n*. The *function block faceplate* is used to monitor user specified *parameters* of the *block*. For example, the user could display *SP*, *PV*, and OUT of a *PID* block.

See also: *block*, *function block*, *parameter*, *PV*, *SP*.

## FBS

Abbreviation for *function block symbol*.

*n*. The symbol or icon shown to the user that represents one view of a *function block*. Another view of the *function block* would be a *function block configuration form*.

See also: *function block*, *function block configuration form*.

## FEE

*n*. Abbreviation for *fast control execution environment*.

## FEP

*n*. Abbreviation for *fluorinated ethylene propylene*.

## ferrule

*n*. A metal ring slid over and crimped onto a coaxial cable, at the connector for the purpose of attaching the connector to the cable.

## FF

Abbreviation for *Foundation Fieldbus*.

*n*. An enabling technology for dynamically integrating dedicated field devices with digitally based control systems. It defines how all "smart" field devices are to communicate with other devices in the control network. The technology is based upon the International Standards Organization's Open System Interconnection (OSI) model for layered communications.

See also: *Fieldbus Foundation*.

## FFD

Abbreviation for *focused function developer*.

*n*. Developers who specialize in domain-specific solutions. In the context of this document, *FFDs* create *CCLs*. This is in contrast to:

- Developers who are responsible for the generally applicable *controller* infrastructure.
- Customers or users who use the *CCLs* to create and execute control strategies.

See also: *CCL*, *controller*.

## FF LD

*n*. Abbreviation for *Foundation Fieldbus linking device*.

See also: *F1 Fieldbus link*.

## FFO

Abbreviation for *Fieldbus Foundation object*.

*n*. The suffix name for the complete/full *DD* binary file.

See also: *DD*, *Foundation Fieldbus*.

## field address

*n*. The address within the *controller* that contains stored information from a field *device* being monitored by the *controller*.

See also: *controller*, *device*.

## Fieldbus access sublayer

Also known as *FAS*.

*n*. Defines the types of services used to pass information to the *Fieldbus message specification* layer. The types of services are defined as *virtual communication relationships* (VCR).

See also: *Fieldbus message specification*, *Foundation Fieldbus*.

## Fieldbus Foundation

*n*. The *Fieldbus Foundation* is a not-for-profit corporation made up of over 160 leading suppliers and customers of process control and manufacturing automation products. Since its inception in 1994, it is totally dedicated to developing one standard, "open," interoperable field communication model known as *Foundation Fieldbus*. Honeywell is a founding and supporting member of the foundation.

See also: *Foundation Fieldbus*.

## Fieldbus Foundation object

Also known as *FFO*.

*n*. The suffix name for the complete/full *DD* binary file.

See also: *DD*, *Foundation Fieldbus*.

## Fieldbus Foundation tokenizer

*n*. A *Fieldbus Foundation* tool that converts an ASCII text file written in conformance with the Device Description Language specification into a *DD* binary file.

See also: *DD*, *Fieldbus Foundation*, *Foundation Fieldbus*.

## Fieldbus interface module

Also known as *FIM*.

*n*. A double-wide module that plugs into a non-redundant *controller* or remote *I/O chassis*. It connects up to two *H1 Fieldbus links* through a companion remote termination panel (RTP). These independent links each have their own link schedule, link master, and time master functions.

See also: *chassis*, *controller*, *Foundation Fieldbus*, *H1 Fieldbus link*, *I/O*.

## Fieldbus message specification

Also known as *FMS*.

*n*. Defines how *Fieldbus devices* exchange user application messages across the *Fieldbus* using a set of standard message formats. It uses object descriptions that are stored in an object dictionary (OD) to facilitate data communication. The object dictionary also includes descriptions for standard data types such as floating point, *integer*, *Boolean*, and bit string.

See also: *Boolean*, *device*, *Foundation Fieldbus*, *integer*.

## field wiring

*n*. The wires and/or cables that interconnect the *controller's I/O* to sensing and control devices at the process.

See also: *controller*, *I/O*.

## firewall

*n*. A software or hardware barrier that sits between two *networks*, typically between your *LAN* and the Internet. A *firewall* can be programmed to restrict access between *networks* by allowing some types of network traffic through while blocking others.

See also: *LAN*, *network*.

## FIF

*n*. Abbreviation for *fractal image format*, a method of image compression.

## FIM

Abbreviation for *Fieldbus interface module*.

*n*. A double-wide module that plugs into a non-redundant *controller* or remote *I/O chassis*. It connects up to two *H1 Fieldbus links* through a companion remote termination panel (RTP). These independent links each have their own link schedule, link master, and time master functions.

See also: *chassis*, *controller*, *Foundation Fieldbus*, *H1 Fieldbus link*, *I/O*.

## Flex Station

*n*. A *Station* that is generally installed on a computer other than the *server* computer, but is connected to the *server* using either a *static* or *rotary connection*.

When a *Flex Station* is connected to a *Console Station*, rather than to the *server*, it is called a *Console Extension Station*.

Compare: *Console Extension Station*, *Console Station*.

See also: *connection*, *rotary Station*, *server*, *static Station*, *Station*.

## flexible point

*n*. A *point* on a *system interface* or *point server*. The database structure of a *flexible point* is determined by the *system interface* or *point server*, rather than by Experion.

See also: *point*, *point server*, *system interface*.

## floating bias

*n*. A calculated component of the *output bias* that provides:

1. A bumpless output following initialization of a secondary, and
2. A ramped return to the fixed operating bias.

An initializing *secondary* builds a request for the *primary*, which contains an initialization value (*INITVAL*); and in order to provide a bumpless output, the *primary* must set its output to *INITVAL*. When the *primary* receives an

initialization request, it sets the floating bias to the difference between calculated output minus operating fixed bias and INITVAL. Thereafter, the *primary* reduces the floating bias at a user-specified rate until it reaches zero. The floating bias is normally zero.

See also: *output bias*, *primary*, *secondary*.

## flow computer

*n*. A computational device that converts the analog and digital signals from *flow meters* plus temperature, pressure and gas composition data into flow rates and totalized flow values at standard conditions. The *flow computer* uses one or more algorithms (such as *AGA Report No.3* or *AGA Report No.7*) corresponding to the type of flow meter to which it is connected.

See also: *electronic flow measurement*, *flow meter*.

## flow meter

*n*. An instrument for measuring the rate of flow of gas or liquid through a pipe. The raw readings from the *flow meter* are converted to standardized flow rates and totals at base conditions by a *flow computer*.

Compare: *generic flow meter*, *orifice flow meter*, *station flow meter*, *turbine flow meter*, *ultrasonic flow meter*, *virtual flow meter*.

See also: *flow computer*.

## FMS

Abbreviation for *Fieldbus message specification*.

*n*. Defines how *Fieldbus devices* exchange user application messages across the *Fieldbus* using a set of standard message formats. It uses object descriptions that are stored in an object dictionary (OD) to facilitate data communication. The object dictionary also includes descriptions for standard data types such as floating point, *integer*, *Boolean*, and bit string.

See also: *Boolean*, *device*, *Foundation Fieldbus*, *integer*.

## focus

*n*. In computing terms, focus means to *mark* an object so that it can be used or controlled in some way. For example, if you want to enter data into a field, you need to give it focus so that the text/number you type is inserted into that field.

## focused function developer

Also known as *FFD*.

*n*. Developers who specialize in domain-specific solutions. In the context of this document, *FFDs* create *CCLs*. This is in contrast to:

- Developers who are responsible for the generally applicable *controller* infrastructure.
- Customers or users who use the *CCLs* to create and execute control strategies.

See also: *CCL*, *controller*.

## folder

*n*. A container to further refine the grouping of inventory objects, for example, to group objects based on a physical location. Folders can also be used to assign security permissions. Inventory objects placed within a folder have the same permissions as the folder.

For large virtualization implementations, folders can be used to group datacenters, and then within datacenters, folders can be used to group related ESXi hosts for an Experion cluster or system. You can use folders to group hosts into any logical grouping that suits your organization.

## Forests

*n* Collection of domain controllers that trust each other. Forests are units of replication, units of delegation, and security boundaries.

## Foundation Fieldbus

Also known as *FF*.

*n*. An enabling technology for dynamically integrating dedicated field devices with digitally based control systems. It defines how all "smart" field devices are to communicate with other devices in the control network. The technology is based upon the International Standards Organization's Open System Interconnection (OSI) model for layered communications.

See also: *Fieldbus Foundation*.

## FPGA

*n*. Abbreviation for *field programmable gate array*.

## FRC

*n*. Abbreviation for *free running counter*.

## free format report

*n*. An optional report type that enables users to generate their own reports.

See also: *report*.

## frequency integration period

*n*. In a *pulse input module*, the interval of time in which a frequency calculation will be performed. The parameter name is `FREQPERIOD`.

See also: *pulse input module*.

## FSMO

*n*. Abbreviation for *Flexible Single Master Operations*.

A specialized role assigned to domain controllers for performing specific functions.

## FTA

*n*. Abbreviation for *field termination assembly* (for serial interface).

## FTE

Abbreviation for *fault tolerant Ethernet*.

*n*. A Honeywell product that provides *network redundancy* using standard *Ethernet* hardware.

See also: *Ethernet*, *network*, *redundancy*.

## FTP

*n*. Abbreviation for *file transfer protocol*.

## full item name

*n*. In the Experion *asset model*, the *full item name* consists of the *item name* of the entity combined with the *item name* of its parent, and so forth, up to a top level node. A *full item name* uniquely identifies an entity within the system. For example, `/Plant/Filtration/Tank/FlowMeter`.

Compare: *item name*, *tag name*.

See also: *asset model*, *point*.

## function block

Also known as *FB*.

*n*. An executable software object that performs a specific task, such as measurement or control, with inputs and outputs that connect to other entities in a standard way. They can be connected and grouped together to construct simple or complex control strategies. You can view *function blocks* as a *symbol*, *configuration form*, as part of a strategy, or as a *user-defined view* in a operator schematic.

See also: *function block configuration form*, *function block faceplate*, *function block symbol*.

## function block application process

Also known as *FBAP*.

*n*. Defines *blocks* to represent different types of application functions. The three types of blocks are the resource block, the *function block*, and the transducer block.

See also: *block*, *function block*.

## function block builder

Also known as *FBB*.

*n*. Used to build a control strategy consisting of *function blocks*, data flow connections, and other user defined objects.

See also: *function block*.

## function block configuration form

Also known as *FBCF*.

*n*. A form used to configure a *function block*. The form represents one view of a *function block*. Another view of the *function block* would be a *function block symbol*.

See also: *function block*, *function block symbol*.

## function block faceplate

Also known as *FBFP*.

*n*. The *function block faceplate* is used to monitor user specified *parameters* of the *block*. For example, the user could display *SP*, *PV*, and OUT of a *PID* block.

See also: *block*, *function block*, *parameter*, *PV*, *SP*.

## function block symbol

Also known as *FBS*.

*n*. The symbol or icon shown to the user that represents one view of a *function block*. Another view of the *function block* would be a *function block configuration form*.

See also: *function block*, *function block configuration form*.

# G

## gateway router

*n*. Network device used to route network communications between separate networks.

## GC server

*n*. Abbreviation for *Global Catalog* server.

Another specialized role assigned to a domain controller.

## generic flow meter

*n*. In Gas Operations Suite, a *generic flow meter* represents a physical flow meter in the field, using any mechanism to calculate the flow. The results are not reconciled with a server-calculated flow.

See also: *flow meter*.

## GFBD

Abbreviation for *graphical function block definition*.

*n*. The graphical definition of the *function block* required to view the *function block* on the supervisory platform. For example, it keeps the *function block* properties such as color and exposed connectors' locations.

See also: *function block*.

## gigabit Ethernet

*n*. An extension to the *IEEE* specification to cover *Ethernet* speeds of 1,000 Mbps or 1 Gbps. (IEEE 802.3z)

See also: *Ethernet*, *IEEE*, *IEEE 802.3*.

## global data ownership

*n*. Global means that there is one-and-only-one owner of any particular data element across the entire automation system. This has advantages primarily in the area of engineering efficiency. Global data allows the Experion system to provide a unified build environment.

In the Experion system, the *controller* owns some data while other data is owned by a *server*-based database known as the *system repository*. Each data element is owned by one-and-only-one of these entities. This provides robustness because all users throughout the Experion system, whether in the control layer or the supervisory layer, are dealing with the same value for that data at any given point in time.

See also: *controller*, *server*, *system repository*.

## GPMC

*n* Abbreviation for *Group Policy Management Console*.

A primary Microsoft tool for managing group policies.

## GPOs

*n* Abbreviation for *Group Policy Objects*.

GPOs contain the Group Policy settings. You can link GPOs in a domain to sites, domains, or OUs.

## GPS

*n*. Abbreviation for *global positioning system*: An earth satellite-based accurate time source.

## graphical function block definition

Also known as *GFBD*.

*n*. The graphical definition of the *function block* required to view the *function block* on the supervisory platform. For example, it keeps the *function block* properties such as color and exposed connectors' locations.

See also: *function block*.

## ground

*v*. An object or path making an electrical connection with earth providing a common return for an electrical circuit.

See also: *grounding-electrode*.

## grounding-electrode

*n*. A device (for example, ground plate, ground rod) that facilitates making *ground* low-resistance connections to earth.

See also: *ground*.

## group

*n*. A group of up to eight related *points* whose main *parameter* values appear in the same group *display*.

Compare: *operating group*.

See also: *display*, *parameter*, *point*.

## Group Policy

An infrastructure used for delivering and applying one or more configurations/policy settings to the users and the computers within an Active Directory environment.

## guaranteed store

*n*. The *primary* acknowledges *parameter* write only after the *secondary* has accepted the store.

See also: *parameter*, *primary*, *secondary*.

## guest operating system

*n*. An operating system that runs inside a virtual machine. For example, Microsoft Windows Server 2008 or Windows 7.

## GUI

*n*. Abbreviation for *graphical user interface*.

## GUID

*n*. Acronym for *globally unique identifier*.

# H

## H1 Fieldbus link

*n*. The logical medium by which H1 *Fieldbus* devices are interconnected. It is composed of one or more physical segments interconnected by bus repeaters or couplers. All of the devices on a link share a common schedule, which is administered by that link's current *LAS*.

See also: *FF LD*, *Foundation Fieldbus*, *LAS*.

## H1 Fieldbus segment

*n*. An independent electrical environment consisting of wire, terminators, and a power source per IEC 61158-1/ISA S50.1 for supporting *Fieldbus devices*.

See also: *device*, *Foundation Fieldbus*.

## handlers

*n*. A set of steps and *transition blocks* that are used to describe sequential behavior. Applied within an *SCM* for the *main handler*, interrupt handler, check handler, restart handler, stop handler, hold handler, and abort handler.

See also: *main handler*, *SCM*, *transition block*.

## hardware definition file

*n*. A file that contains the configuration details of system components such as *Flex Stations*, *controllers* (other than *process controllers*) and printers. Hardware definition files are created by *Quick Builder* and have a *.hdw* file extension.

See also: *controller*, *Flex Station*, *process controller*, *Quick Builder*.

## HASE

Abbreviation for *Hiway algorithm slot emulation*.

*n*. The emulation of an Hiway slot algorithm is called HASE. The HASEs are comprised of multiple CMs, in which one CM called the algorithm CM has the capabilities such as PID control, alarm processing, and so on.

## HBSE

Abbreviation for *Hiway box slot emulation*.

*n*. The emulation of Hiway box configuration is called HBSE. Each HBSE contains a single HRB that supports transfer of Hiway messages between the C300 Controller and the EHB.

## HCI

Abbreviation for *Honeywell communications interface*.

*n*. *HCI* is the communications infrastructure used extensively by control system software components in the Experion system. *HCI* provides Honeywell added-value extensions to *OPC* functionality.

See also: *OPC*.

## HG

Abbreviation for *Hiway Gateway*.

*n*. A node that interconnects the Data Hiway to the LCN.

## hidden connections

*n*. A feature that automatically configures invisible secondary connections for cases such as back initialization of a cascaded loop.

## high security network architecture

*n*. Experion's *high security network architecture* represents best practice for *fault tolerant Ethernet*-based systems under Experion Release 200 and later. It comprises a specific set of qualified network components, including *switches* and *routers*, and template configuration files to assist with the setup of *switches* and *routers*.

See also: *fault tolerant Ethernet*, *router*, *switch*.

## history

*n*. *Point parameter* values that are collected to enable tracking and analysis of long-term trends. The types of history are *standard history*, *fast history*, *exception history*, and *extended history*.

See also: *exception history*, *extended history*, *fast history*, *point parameter*, *standard history*.

## history gate

*n*. A *parameter* of a *status point* that is used to control the collection of history for other *points*. History is only collected if the *history gate* is in the nominated state.

See also: *parameter*, *point*, *status point*.

## HMIWeb Display Builder

*n*. The Experion tool for creating custom HMIWeb *displays*.

See also: *display*, *template display*.

## Honeywell communications interface

Also known as *HCI*.

*n*. *HCI* is the communications infrastructure used extensively by control system software components in the Experion system. *HCI* provides Honeywell added-value extensions to *OPC* functionality.

See also: *OPC*.

## Honeywell library tree

Also known as *library tree*.

*n*. One of the three *tree views* available within *Control Builder*. The set of block templates from which the user can create block instances (copies).

Compare: *loaded tree*, *project tree*.

See also: *Control Builder*, *tree view*.

## host memory

*n*. The total amount of physical memory on a physical server (host).

## host server

*n*. In a *DSA* system, the *server* on which a *remote point's* definition is stored and from which *alarms* associated with the *point* originate.

See also: *alarm*, *DSA*, *point*, *remote point*.

## HPM

*n*. Acronym for *high-performance process manager* (a *TDC 3000 controller*).

See also: *controller*, *TDC 3000*.

## HRB

Abbreviation for *Hiway responder block*.

*n*. HRBs are special purpose communication blocks that support transfer of Hiway messages between the C300 Controller and the LCN EHB. HRB blocks are automatically instantiated in Control Modules when Hiway slot emulations are created by the Hiway Slot Emulation Creator Tool. They are then imported into Experion engineering repository database using Control Builder along with their parent Control Module.

## HTML

*n*. Acronym for *hypertext markup language*.

## HTTP

*n*. Acronym for *hypertext transfer protocol*.

## hub

*n*. Used to concentrate *network* connections into one *device*. Usually placed in a central location, standalone *hubs* typically connect from 4-24 *devices*. More advanced hubs can be *stacked* or *cascaded* together for more capacity.

See also: *device*, *network*.

## hybrid controller

*n*. Chassis with a *control processor module* (CPM) installed. The processor works with a shared family of racks, power supplies, I/O modules, and communication cards.

See also: *C200 controller*, *control processor*, *controller*, *CPM*.

# I

## I/F

*n*. Abbreviation for *interface*.

## I/O

*n*. Abbreviation for *input/output*.

## I/O channel function block

Also known as *input/output channel function block*, *IOC*.

*n*. A *CEE* basic *block* representing one channel of an *IOM*. *IOCs* allow users to create applications within *CMs*, which are de-coupled from the physical configuration of the *IOM* devices. *IOCs* are paired with particular channels of *IOMs* through the process of I/O association.

See also: *block*, *CEE*, *CM*, *IOM*.

## I/O device

Also known as *input/output device*.

*n* The hardware device providing terminals and processing power to accept input signals from transmitters, thermocouples, and so on and send output signals to valves, motors, and so on. A variety of I/O modules are available for analog inputs/outputs and digital inputs/outputs.

The *CEE* obtains data from the *I/O devices* and stores it within I/O modules. Transport from I/O devices and *CEE* is made through the *ControlNet* and associated software services.

See also: *CEE*, *ControlNet*, *I/O device*.

## I/O link

Also known as *IOLINK*.

*n*. Serves as data repository for *IOP function blocks* in *Control Builder* to provide communications interface with process manager I/O.

See also: *Control Buildercontroller*, *function block*, *I/O*, *IOP*.

## I/O link interface module

Also known as *IOLIM*.

*n*. A double-wide module that plugs into a non-redundant or redundant *controller*. It connects to *input/output processor* (IOP) card file to interface process manager I/O with the system.

See also: *controller*, *I/O*, *IOP*, *redundancy*.

## I/O manager

Also known as *input/output manager*.

*n*. Subsystem that runs in the *CPM* (or AC) and is responsible for establishing and monitoring communications connections to *I/O devices*, holding *I/O device* configuration data, and knowing the organization of the image table.

See also: *CPM*, *I/O devices*.

## I/O module function block

Also known as *input/output module function block*, *IOM*.

*n*. The *CPM* resident *function block* that works with *IOC function blocks* to interface *I/O device* data to control execution environment (*CEE*).

See also: *CEE*, *CPM*, *function block*, *I/O device*, *IOC*.

## I/O processor

Also known as *IOP*.

*n*. Associated with process manager I/O.

See also: *I/O*, *I/O link*.

## ICP

*n*. Abbreviation for *integrated control protocol*.

## IDE

Abbreviation for *integrated development environment*.

A (usually graphic) interface that consolidates the software development tools set (editors, browsers, debuggers, compilers, linkers, and make).

## IEC

*n*. Abbreviation for *International Electrotechnical Commission*.

## IEC 61131-3

*n*. A standard that specifies the syntax and semantics of a unified suite of programming languages for programmable *controllers*. These consist of two textual languages (Instruction List, and Structured Text), and two graphical languages (Ladder Diagram, and Function Block Diagram). Sequential Function Chart elements are also defined for structuring the internal organization of programs and *function blocks*.

See also: *controller*, *function block*, *IEC*.

## IEEE

*n*. Acronym for *Institute of Electrical and Electronic Engineers*.

## IEEE 802.3

*n*. An *Ethernet* specification commonly defined by the *Institute of Electrical and Electronic Engineers* (IEEE). The 802.3 specification covers rules for configuring *Ethernet LANs*, the types of media that can be used, and how the elements of the *network* should interact.

See also: *CSMA/CD*, *Ethernet*, *fast Ethernet*, *gigabit Ethernet*, *IEEE*, *LAN*, *network*.

## IKB

*n*. Acronym for *integrated keyboard*.

Compare: *Operator entry panel*, *USKB*.

## immediate origin

*n*. *Immediate origin* is the same as *absolute origin* if there is no multi-level projection. *Immediate origin* refers to the next level of origin if the *parameter* is of multiple levels.

See also: *absolute origin*, *parameter*.

## import

*n*. The process of creating and configuring function blocks in the *ERDB* from previously exported *function block* configuration data.

Compare: *export*.

See also: *ERDB*, *ERDB translation*, *function block*, *IXP*.

## in

*n*. Abbreviation for *inch(es)*.

## indisposable secondary

*n*. A *secondary* is indisposable if the *primary* cannot communicate with it (that is, it cannot fetch its BACKCALCOUT), or if it is requesting the *primary* to initialize.

Compare: *disposable secondary*.

See also: *readiness*, *secondary*, *secondary readiness*.

## initializable connection

*n*. A connection between an initializable input variable and an initializable output. Initializable connections always have an associated BACKCALC connection.

See also: *initializable input/initializable output*, *windup status*.

## initializable input/initializable output

*n*. These are variable attributes. That is, certain variables are designated to be initializable inputs or initializable outputs. These attributes are assigned by Honeywell and cannot be changed by the user.

When the user creates a connection between an initializable input and an initalizable output, the system automatically creates a BACKCALC SECDATA connection between them.

See also: *initializable connection*.

## initialization propagation

*v*. Allows cascade controls to be reestablished after they have been interrupted without causing "bumps" in the process.

Initialization propagation requires each regulatory control *block* in a cascade to check its *secondary*, to see if the cascade has been broken. If it has, each *block* will initialize itself, and provide an initialization request and initialization value to its *primary*. In this way, the initialization will start at the final control element and propagate upstream.

See also: *block*, *primary*, *secondary*.

## input

1. *n*. Energy, signals, or information provided to a circuit or device from an external source.
2. *n*. The terminals of a device or circuit to which energy, signals, or information is applied.

See also: *AI*, *DI*.

## input/output channel function block

Also known as *I/O channel function block*, *IOC*.

*n*. A *CEE* basic *block* representing one channel of an *IOM*. *IOCs* allow users to create applications within *CMs*, which are de-coupled from the physical configuration of the *IOM* devices. *IOCs* are paired with particular channels of *IOMs* through the process of I/O association.

See also: *block*, *CEE*, *CM*, *IOM*.

## input/output manager

Also known as *I/O manager*.

*n*. Subsystem that runs in the *CPM* (or AC) and is responsible for establishing and monitoring communications connections to *I/O devices*, holding *I/O device* configuration data, and knowing the organization of the image table.

See also: *CPM*, *I/O devices*.

## input/output device

Also known as *I/O device*.

*n* The hardware device providing terminals and processing power to accept input signals from transmitters, thermocouples, and so on and send output signals to valves, motors, and so on. A variety of I/O modules are available for analog inputs/outputs and digital inputs/outputs.

The *CEE* obtains data from the *I/O devices* and stores it within I/O modules. Transport from I/O devices and *CEE* is made through the *ControlNet* and associated software services.

See also: *CEE*, *ControlNet*, *I/O device*.

## input/output module function block

Also known as *I/O module function block*, *IOM*.

*n*. The *CPM* resident *function block* that works with *IOC function blocks* to interface *I/O device* data to control execution environment (*CEE*).

See also: *CEE*, *CPM*, *function block*, *I/O device*, *IOC*.

## input value

*n*. Read-only values that are usually *scanned* from the *controller* registers but can be from other server addresses. Input values can represent eight discrete states. Up to three values can be read from an address in order to determine a state.

See also: *controller*, *scanning*.

## inside connector

Also known as *active connector*.

*n*. A block or parameter reference permanently dedicated to a particular parameter within a *basic function block*. Active connectors provide special functionality within the block that is not available from *passive connectors*.

Compare: *passive connector*.

See also: *active parameter*.

## instance

*n*. A column of cells that holds reference *parameters* for the *aliases*.

See also: *alias table*, *parameter*.

## instance parameter

*n*. A single cell that holds a reference *parameter* for an *alias*.

See also: *alias table*, *parameter*.

## integrated account

*n* A combination of a Windows account and an *Operator ID*.

See also: *Operator ID*.

## integer

*n*. A number format that includes only whole numbers.

Compare: *real*, *signed*, *unsigned*.

## Integrated Development Environment

Also known as *IDE*.

A (usually graphic) interface that consolidates the software development tools set (editors, browsers, debuggers, compilers, linkers, and make).

## integrated personal Station

Also known as *IPS*.

*n*. Operator *display* workstation connected to the *server*.

See also: *display*, *server*, *Station*.

## integrated services digital network

Also known as *ISDN*.

*n* An evolving set of communications standards for a digital network carrying both voice and data.

## interprocess message record

*n*. This structure is used to pass information between the *controller object adapter* and the *CK* block manager for communications across the *network*.

See also: *controller object adapter*, *CK*, *network*.

## IOC

Abbreviation for *input/output channel function block*.

*n*. A *CEE* basic *block* representing one channel of an *IOM*. *IOCs* allow users to create applications within *CMs*, which are de-coupled from the physical configuration of the *IOM* devices. *IOCs* are paired with particular channels of *IOMs* through the process of I/O association.

See also: *block*, *CEE*, *CM*, *IOM*.

## IOFB

*n*. Abbreviation for *I/O function block*.

See also: *IOC*, *IOM*.

## IOLIM

Abbreviation for *I/O link interface module*.

*n*. A double-wide module that plugs into a non-redundant or redundant *controller*. It connects to *input/output processor* (IOP) card file to interface process manager I/O with the system.

See also: *controller*, *I/O*, *IOP*, *redundancy*.

## IOLINK

Abbreviation for *I/O link*.

*n*. Serves as data repository for *IOP function blocks* in *Control Builder* to provide communications interface with process manager I/O.

See also: *Control Buildercontroller*, *function block*, *I/O*, *IOP*.

## IOM

Abbreviation for *input/output module function block*.

*n*. The *CPM* resident *function block* that works with *IOC function blocks* to interface *I/O device* data to control execution environment (*CEE*).

See also: *CEE*, *CPM*, *function block*, *I/O device*, *IOC*.

## IOP

Abbreviation for *I/O processor*.

*n*. Associated with process manager I/O.

See also: *I/O*, *I/O link*.

## IPS

Abbreviation for *integrated personal Station*.

*n*. Operator *display* workstation connected to the *server*.

See also: *display*, *server*, *Station*.

## IRQ

*n*. Acronym for *interrupt request*.

## ISA

*n*. Abbreviation for *industry standard architecture*.

## ISDN

Abbreviation for *integrated services digital network*.

*n* An evolving set of communications standards for a digital network carrying both voice and data.

## isolated

*n*. A technique for electrically separating two circuits or *devices* while permitting signals and information to pass.

See also: *device*.

## item

*n*. In *Quick Builder*, the elements necessary for data acquisition and control that compromise the Experion *server* data and are defined in the *project* file. These are:

- *Channel*
- *Controller*
- *Station*

- *Point*

See also: *channel*, *controller*, *point*, *project*, *Quick Builder*, *server*, *Station*.

## item grouping

*n*. A collection of *items* grouped by a common *property*.

See also: *item*, *property*.

## item list

*n*. In *Quick Builder*, a listing of the *items* defined in the project file that displays in every *project view*. The *item list* can be used to find an *item* and then display its *property page* details.

See also: *item*, *property page*, *project view*, *Quick Builder*.

## item name

*n*. In the Experion *asset model*, an *item name* is an intuitive name given to a *point* that can be used as an alternative to the *tag name*. The *item name* does not have to be unique.

Compare: *full item name*, *tag name*.

See also: *asset model*, *point*.

## item number

*n Item numbers* are used in the *server* database to identify *items*. In *Quick Builder*, the number is assigned to an item internally. The *item numbers* for *channels*, *controllers*, *Stations*, and printers can be overwritten in *Quick Builder* to match an existing system database.

See also: *channel*, *controller*, *item*, *Quick Builder*, *server*, *Station*.

## IXP

*n*. Acronym for *Import/Export tool*.

See also: *ERDB translation*.

# J

## Jet

*n* The Microsoft Access database engine used by Experion *applications* to access the *ERDB*.

See also: *application*, *ERDB*.

## JPEG

*n*. Abbreviation for *Joint Picture Experts Group*. A method of compressing images.

## jumper

*n*. A movable device for providing an electrical connection or short between to points on a circuit board for the purpose configuring the equipment for a specific function or operation.

# K

## K4LCN

*n*. High Density Local Control Network, 68040 Processor/Memory/LCN Interface. LCN module printed circuit board that contains a microprocessor, memory, and LCN interface.

## KB

*n*. Abbreviation for *kilobyte*. One kilobyte is equal to 1,024 bytes.

## keeper

*n*. A *moderator* capable of storing the *ControlNet parameters* during a power failure and restoring the *parameters* upon power up.

See also: *ControlNet*, *moderator*, *parameter*.

## key parameters

*Key parameters* are automatically generated based on the corresponding equipment table. They typically include a list of display elements for an equipment item that have been configured as being part of the *key parameters* category. Key parameters are shown by default on the tabular view of the Equipment Detail display.

## kg

*n*. Abbreviation for *kilogram*.

## KTC

*n*. Acronym for *communications to controller*.

See also: *controller*.

# L

## L1

*n*. Line 1 side of *AC* line.

Compare: *L2*.

See also: *AC*.

## L2

*n*. Line 2 side of *AC* line.

Compare: *L1*.

See also: *AC*.

## LAN

Abbreviation for *local area network*.

*n*. A general term to refer to the *network* and its components that are local to a particular set of *devices*.

Compare: *WAN*.

See also: *CNet*, *device*, *network*.

## LAS

Abbreviation for *link active scheduler*.

*n*. The LAS operates at the data link layer as the bus arbiter for the link. All *Fieldbus* links must have a *link active scheduler*.

See also: *Foundation Fieldbus*.

## LCL

*n*. Abbreviation for *lower control limit*.

Compare: *UCL*.

## LCN

Abbreviation for *online data search*.

*n*. Online Data Search tool can be used to search for points with conditions on the parameter values residing in a controller and/or devices. This search can be started from the enterprise system level or from the server level. To search for a point, a query must be defined and executed.

## LCS620

*n*. Honeywell Logic Control System 620 *controller*.

See also: *controller*.

## LED

*n*. Abbreviation for *light emitting diode*.

## license

*n*. A license contains the following items that are permitted to run on a given system.

- Information regarding the set of applications.
- Installations of those applications.
- Individually licensable features of those applications.

See also: *license key*, *online license upgrade*.

## license information record

Also known as *license key*.

*n*. The construct that describes what is *licensed*.

See also: *license*.

## license key

Also known as *license information record*.

*n*. The construct that describes what is *licensed*.

See also: *license*.

## library properties

*Library properties* apply only to the Equipment Template, and are used to describe and categorize the template within Quick Builder. Changing a template library property will not cause any equipment derived from that template to be modified. Library properties include:

- Name
- Label
- Description
- Categories
- Tool tip
- Icon

## library tree

Also known as *Honeywell library tree*.

*n*. One of the three *tree views* available within *Control Builder*. The set of block templates from which the user can create block instances (copies).

Compare: *loaded tree*, *project tree*.

See also: *Control Builder*, *tree view*.

## life cycle indicator

*n*. The icon next to the objects in the *project tree* view in *Control Builder* that indicates the objects with assignment/loaded status.

See also: *Control Builder*, *project tree*.

## line power

*n*. The electrical power provided from the conductors of a power line.

Compare: *line voltage*.

## line voltage

*n*. The voltage between conductors of a power line.

Compare: *line power*.

## link

Also known as *subnet*.

*n*. A collection of *nodes* with unique addresses.

See also: *node*.

## link active scheduler

Also known as *LAS*.

*n*. The LAS operates at the data link layer as the bus arbiter for the link. All *Fieldbus* links must have a *link active scheduler*.

See also: *Foundation Fieldbus*.

## listed

*n*. Equipment or materials included in a list published by an organization acceptable to the authority having jurisdiction and concerned with product evaluation. That authority maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate designated standards or has been tested and found suitable for use in a specified manner.

## load

*n*. Experion *activity* that results in the *function block* being loaded from the *system repository* to the *controller* (or *control execution environment*).

See also: *activity*, *control execution environment*, *controller*, *function block*, *system repository*.

## loaded tree

*n*. One of the three *tree views* available within *Control Builder*. The modules that have been Assigned to a *CEE* and *loaded* to the *controller* are shown here.

Compare: *library tree*, *project tree*.

See also: *CEE*, *Control Builder*, *controller*, *load*, *tree view*.

## local

*n*. In Honeywell terminology, refers to a physical connection between two Experion *devices* using coaxial or fiber optic cabling.

See also: *device*.

## local area network

Also known as *LAN*.

*n*. A general term to refer to the *network* and its components that are local to a particular set of *devices*.

Compare: *WAN*.

See also: *CNet*, *device*, *network*.

## local display object

*n*. A dynamic *display object* that displays information or issues a command, but which is not linked to the *server*. Such *display objects* are used in conjunction with *scripts*.

See also: *display*, *display object*, *point*, *script*.

## local point

*n*. In a *DSA* system, a *point* that is managed by the current *server*. *Points* managed by other *servers* are called *remote points*.

Compare: *remote point*.

See also: *DSA*, *local server*, *point*, *remote server*, *server*.

## local server

*n*. In a *DSA* system, the *server* to which *Station* (or other component) is connected.

Compare: *host server*, *remote server*.

See also: *DSA*, *server*, *Station*.

## logon

*v*. Procedure defined to identify a user. The intent of a logon procedure is to prevent unauthorized users from accessing the system in ways they are not permitted to do so.

See also: *access token*.

## logical shared memory

Also known as *LSM*.

*n*. *Redundancy* technique whereby the *primary* and *secondary* act as if they have one single shared memory, which is acted upon (updated) by the *primary*. In reality, each has its own memory that is maintained to be exact at a clean point of execution.

See also: *primary*, *redundancy*, *secondary*.

## LRN

*n* Abbreviation for *logical resource number*, which identifies a *server* task.

See also: *server*.

## LSM

Abbreviation for *logical shared memory*.

*n*. *Redundancy* technique whereby the *primary* and *secondary* act as if they have one single shared memory, which is acted upon (updated) by the *primary*. In reality, each has its own memory that is maintained to be exact at a clean point of execution.

See also: *primary*, *redundancy*, *secondary*.

# M

## m

*n*. Meter. Unit of measurement of length. One meter is the equivalent of 39.370 inches. Also known as metre.

## mA

*n*. Milliamp. Unit of measurement of electric current.

## MAC

*n*. Abbreviation for *media access control*.

## main handler

*n*. The main part of the *SCM* program that performs the primary operation for the *SCM*. The *SCM* program contains one and only one *main handler*.

See also: *handlers*, *SCM*.

## main line valve branch node

*n*. In Gas Operations Suite, a *main line valve branch node* represents a *pipeline node* that contains a *main line valve node* and has flow measurement at the *branch*.

See also: *branch*, *main line valve node*, *node*, *pipeline*.

## main line valve node

*n*. In Gas Operations Suite, a *main line valve node* represents a *pipeline node* that contains a main line valve.

See also: *node*, *pipeline*.

## management ESXi host

*n*. An ESXi host that is assigned management workloads.

## management node

*n*. A virtual machine, or physical machine, running management workloads, such as vCenter Server, Windows domain controller, and so on. Some management nodes, such as vDR, can only be virtual machines.

## management workloads

*n*. Workloads (virtual machines) associated with the administration of the virtual infrastructure.

## manual gas chromatograph

*n*. In Gas Operations Suite, a *manual gas chromatograph* represents a virtual instrument where the values of the various gas components are manually entered instead of using the measurements from a *physical gas chromatograph*.

Compare: *physical gas chromatograph*, *station gas chromatograph*.

## master

*n*. The *primary* copy of a redundant *engineering repository database* (ERDB). Also referred to as *design master*.

See also: *ERDB*, *primary*, *replica*.

## MAU

*n*. Abbreviation for *medium attachment unit*. An Ethernet Transceiver, a transmitter-receiver a device that both transmits and receives analog or digital signals. The term is used most frequently to describe the component in local-area networks (*LANs*) that actually applies signals onto the network wire and detects signals passing through the wire. For many *LANs*, the transceiver is built into the network interface card (*NIC*). Some types of networks, however, require an external transceiver.

## MB

Also known as *Mbyte*.

*n*. Acronym for *megabyte*. Usually 1,048,576 bytes ($2^{20}$); sometimes interpreted as 1 million bytes.

## MBCS

*n*. Acronym for *MultiByte character set*.

## MByte

Also known as *MB*.

*n*. Acronym for *megabyte*. Usually 1,048,576 bytes ($2^{20}$); sometimes interpreted as 1 million bytes.

## MCI

*n*. Abbreviation for *Media Control Interface*. A standard interface for controlling devices such as sound cards, CD players, and video capture devices. Typically, each manufacturer supplies an MCI device driver for a product, which must be installed before the product can be used.

## MD

Abbreviation for *Mode parameter*.

Also known as *mode*.

*n*. A *point parameter* that determines whether or not the operator can control the point value.

- In a *status point*, the *MD* determines whether the operator can control the *output parameter*.

- In an *analog point*, the *MD* determines whether the operator can control the *setpoint parameter*.

See also: *analog point*, *output parameter*, *point parameter*, *setpoint parameter*, *status point*.

## MDI

*n*. Abbreviation for *multiple document interface* (Microsoft Windows ™).

## mean

*n*. Average of the observations in the subgroup (for example, X-BAR).

See also: *R-BAR*, *X-BAR*, *X-BAR-BAR*.

## MEDE

Abbreviation for *Microsoft Excel Data Exchange*.

*n*. A network option used mainly for reporting that can be used to capture the most recent point and history information in the server and display it in Microsoft Excel spreadsheets.

## memory overcommit

Allocating more memory to the virtual machines than the physical memory available on the ESXi host.

## message

*n*. Supplementary information that helps operators understand the significance of an *alarm*. (An *alarm* provides only basic details, such as *point* ID, date/time and priority.)

See also: *alarm*, *alarm priority*, *point*.

## message zone

*n*. The line below *Station's* toolbar where explanatory messages and prompts appear.

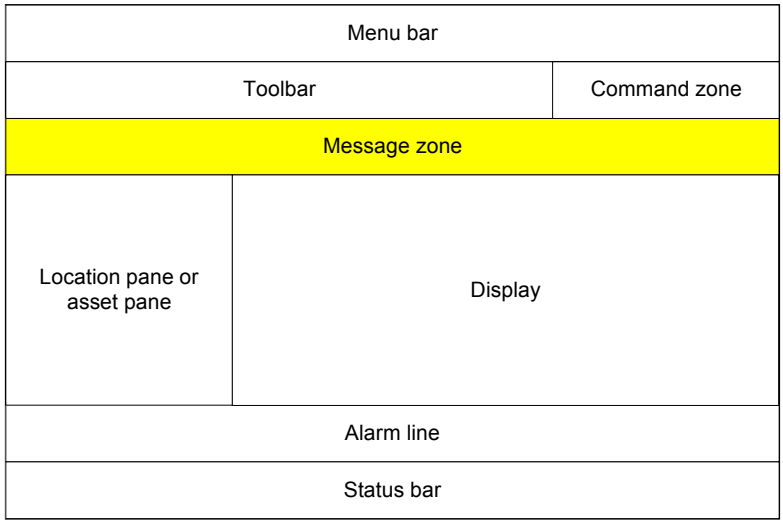



**Figure 3: Message zone**

Compare: *command zone*.

See also: *Station*.

## meter

*n*. A direct representation of a meter, such as an *EFM* meter. Each *meter* associates with one *meter template*, which defines the meter device and how its data is accessed through the controller.

See also: *EFM*, *meter template*.

## meter location

*n*. The physical location of a *meter*.

See also: *meter*.

## meter station branch node

*n*. In Gas Operations Suite, a *meter station branch node* represents a branched *pipeline node* that contains flow meters with flow measurements at the inlet and the branch.

See also: *meter station node*, *node*, *pipeline*.

## meter station node

*n*. In Gas Operations Suite, a *meter station node* represents a *pipeline node* that contains one or more *flow meters*.

See also: *flow meter*, *meter station branch node*, *node*, *pipeline*.

## meter template

*n*. *EFM* term that defines a combination of:

- What *EFM* data can be collection for a flow meter connected to a *flow controller*/*RTU*/*flow computer* of a specific type and configuration.
- How that data is accessed through a specific controller type, using a specific addressing scheme, when the flow meter is attached to a specific run number on the controller/RTU/flow computer, and;
- The formats in which the EFM data collected can be exported.

See also: *EFM*, *meter*, *run*.

## method

*n*. A programmatic means of controlling or interrogating the *Station Automation Object Model*. A method is equivalent to the terms *function* or *command* used in some programming languages.

## MHz

*n*. Acronym for *megahertz*.

## MicroIpm

*n*. *Microlpm* is a registered trademark used for Computerized Hardware and Firmware Controller For Regulating Locking and Security Mechanisms and owned by *Proprietary Controls Systems Corp.*.

1. An access control panel by PCSC.
2. Microsoft Excel Data Exchange.
3. A network option.

## Microsoft Access

Also known as *MS Access*.

*n*. A commercially available, PC relational database.

## Microsoft Excel Data Exchange

Also known as *MEDE*.

*n*. A network option used mainly for reporting that can be used to capture the most recent point and history information in the server and display it in Microsoft Excel spreadsheets.

## Microsoft Management Console

Also known as *MMC*.

*n*. A Microsoft product that facilitates building tools by providing a framework into which components can be plugged-in.

## Microsoft Tape Format

Also known as *MTF*.

*n*. A format for tapes used by the Microsoft NT Backup utility.

## migration

*n*. The process of updating the *ERDB* during an Experion software upgrade, such as R410 to R430. Implemented through *ERDB* translation of the *ERDB* to/from source.

See also: *ERDB*.

## mm

*n*. Abbreviation for *millimeters*.

## MMC

Abbreviation for *Microsoft Management Console*.

*n*. A Microsoft product that facilitates building tools by providing a framework into which components can be plugged-in.

## Mobile Station PKS

*n*. *Mobile Station PKS* enables handheld *devices* to access *Station displays* using a wireless *network*.

See also: *device*, *display*, *network*, *Station*.

## mode

Also known as *MD*, *mode parameter*.

*n*. A *point parameter* that determines whether or not the operator can control the point value.

- In a *status point*, the *MD* determines whether the operator can control the *output parameter*.
- In an *analog point*, the *MD* determines whether the operator can control the *setpoint parameter*.

See also: *analog point*, *output parameter*, *point parameter*, *setpoint parameter*, *status point*.

## mode parameter

Also known as *MD*, *mode*.

*n*. A *point parameter* that determines whether or not the operator can control the point value.

- In a *status point*, the *MD* determines whether the operator can control the *output parameter*.
- In an *analog point*, the *MD* determines whether the operator can control the *setpoint parameter*.

See also: *analog point*, *output parameter*, *point parameter*, *setpoint parameter*, *status point*.

## moderator

*n*. The *node* with the lowest *MAC* ID that is responsible for transmitting the *moderator frame* - a media access control (*MAC*) frame that is used to synchronize the *nodes* and distribute the link configuration parameters.

See also: *MAC*, *node*, *notification frame*.

## MRT

Abbreviation for *migration readiness tool*.

n. The *migration readiness tool* performs checks on servers, controllers, and other system components to verify if they are ready for migration

## ms

*n*. Acronym for *millisecond*.

## MS-DOS

*n*. Acronym for *Microsoft Disk Operating System*.

## MTBF

*n*. Abbreviation for *mean time between failure*.

## MTF

Abbreviation for *Microsoft Tape Format*.

*n*. A format for tapes used by the Microsoft NT Backup utility.

## multi-window Station

*n*. A *Station* that uses several windows-typically two or four-each of which can contain a separate *display*. A *multi-window Station* uses *SafeView* to manage the placement of its windows.

See also: *display*, *SafeView*, *Station*.

## multiple static Station

*n*. The term used when up to four instances of *Station* are running simultaneously on the same computer. Each instance has a separate, static connection to the *server*.

Compare: *static Station*.

See also: *server*, *Station*.

# N

## N

*n*. Neutral (when used with *L1* and/or *L2*)

See also: *L1*, *L2*.

## N/A

*n*. Abbreviation for *not applicable*.

## N m

*n*. Abbreviation for *Newton meter*.

## NaN

*n*. Abbreviation for *Not a Number*.

## NAP

Abbreviation for *network access port*.

*n*. An RJ-45 port located on the *ControlNet interface* for the PC (model 9904-KTCX) and *ControlNet interface* module (non-redundant media model TC-CCN011, redundant media model TC-CCR011). Used as a non-direct *ControlNet* connection point for PCs.

See also: *ControlNet interface*.

## NAS

Acronym for *network attached storage*.

## National Electrical Code

Also known as *NEC*.

*n*. United States standard for *NEC* electrical installations.

See also: *CEC*

## National Electrical Manufacturers Association

Also known as *NEMA*.

*n*. An association of Electrical Equipment and Medical Imaging Manufacturers that establishes consensus standards through its membership. Founded in 1926 and headquartered in Rosslyn, Virginia, USA.

## National Fire Protection Association

Also known as *NFPA*.

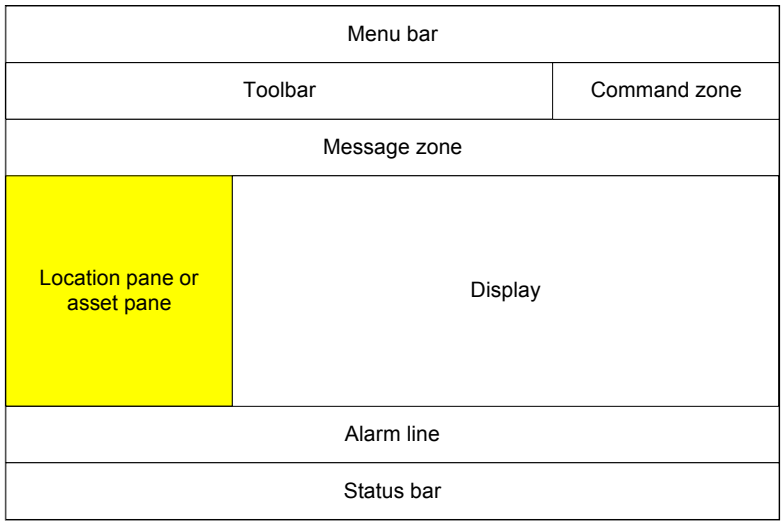
*n*. The mission of the international nonprofit *NFPA*, established in 1896, is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education. Sponsor of the *National Electrical Code*.

See also: *National Electric Code*.

## Navigation pane

*n*. The section to the left of *Station's* system *displays* that is reserved for menus. Clicking an entry in the *Navigation pane* calls up the associated *display*.

You can call up the top-level Navigation menu by clicking the yellow triangle at the top of the panel.




See also: *display*, *Station*.

## NCL

*n*. Abbreviation for *notification circular list*.

## NDP

Abbreviation for *notification distribution publisher*.

*n*. The *CDA* service that accepts *notification packets* from the a *notification generator* and sends them to *notification distribution subscribers* bundled as *notification packages*.

Compare: *notification distribution subscriber*.

See also: *CDA*, *notification generator*, *notification package*, *notification packet*.

## NDS

Abbreviation for *notification distribution subscriber*.

*n*. The *CDA* application layer end-points for *notification distribution publishers*. It establishes one end-point for each publisher.

Compare: *notification distribution publisher*.

See also: *CDA*, *notification*.

## NEC

Abbreviation for *National Electrical Code*.

*n*. United States standard for *NEC* electrical installations.

See also: *CEC*

## NEMA

Abbreviation for *National Electrical Manufacturers Association*.

*n*. An association of Electrical Equipment and Medical Imaging Manufacturers that establishes consensus standards through its membership. Founded in 1926 and headquartered in Rosslyn, Virginia, USA.

## network

*n*. The communication connection paths between *nodes*.

See also: *node*.

## network access port

Also known as *NAP*.

*n*. An RJ-45 port located on the *ControlNet interface* for the PC (model 9904-KTCX) and *ControlNet interface* module (non-redundant media model TC-CCN011, redundant media model TC-CCR011). Used as a non-direct *ControlNet* connection point for PCs.

See also: *ControlNet interface*.

## network interface card

Also known as: *NIC*.

*n*. An expansion board inserted into a computer so that the computer can be connected to a *network*. Most *NICs* are designed for a particular type of *network* and media.

See also: *network*.

## network node controller

*n*. A *server* running the system software defined as a *controller* to another *server* running the system software. The *local server* can scan and control *points* that have been defined in the remote *network node controller*.

See also: *controller*, *local server*, *point*, *server*.

## NFPA

Abbreviation for *National Fire Protection Association*.

*n*. The mission of the international nonprofit *NFPA*, established in 1896, is to reduce the worldwide burden of fire and other hazards on the quality of life by providing and advocating consensus codes and standards, research, training, and education. Sponsor of the *National Electrical Code*.

See also: *National Electric Code*.

## NG

Abbreviation for *notification generator*.

*n*. The entity that constructs the *notification message* and assigns the timestamp to the *notification*.

See also: *notification*, *notification message*.

## NIC

Abbreviation for *Network interface card*.

*n*. An expansion board inserted into a computer so that the computer can be connected to a *network*. Most *NICs* are designed for a particular type of *network* and media.

See also: *network*.

## NIC teaming

*v* The grouping together of several physical NICs for form a single logical NIC, which is used for network fault tolerance and load balancing.

## NM

Abbreviation for *notification manager*.

*n*. The *CDA* object that manages all Experion *notifications* and interfaces with *server event* subsystems. It is a *CDA server* process thread that executes on the Experion *server* only.

See also: *CDA*, *event*, *notification*, *server*.

## node

1. *n*. A *node* is a processing location within a *network*. It can be a computer or some other *device*, such as a printer.

   See also: *device*, *network*, *node*.

2. *n*. In Gas Operations Suite, a *node* represents a unique point on the *pipeline* where one or more *pipeline* features, such as a physical *device* or a change in the physical characteristics, are located. A *segment* is defined by a *node* at its beginning and end. *Meter station*, *compressor station*, *mainline valve*, *reducer*, and *branch* are all types of nodes.

   See also: *branch node*, *compressor station node*, *device*, *mainline valve branch node*, *mainline valve node*, *meter station node*, *pipeline*, *reducer node*, *segment*.

## notification

*n*. Any detectable event, alarm, error, or message that announces an abnormal or special condition related to the operation of the process or the control system. The term event is often used interchangeably with notification.

See also: *CDA*, *NCL*, *notification client*, *notification detector*, *notification distribution publisher*, *notification distribution subscriber*, *notification frame*, *notification generator*, *notification manager*, *notification message*, *notification package*, *notification packet*, *notifications distributor*.

## notification client

*n*. The consumer of *notifications* from the *notification manager*. The *server* is the *client* for Experion *notifications*.

See also: *client*, *notification*, *notification manager*, *server*.

## notification detector

*n*. The *block* that detects the initiation or alleviation of a *notification* and announces this data through a *notification generator*. This is a function of certain function blocks provided in Experion's *Control Builder* application.

See also: *block*, *Control Builder*, *notification*, *notification generator*.

## notifications distributor

*n*. The *control data access* (*CDA*) communications service that has the responsibility of caching the *notifications* from all *notification generators* in the *CPM* and when passed an execution thread, to distribute the *notifications* to the rest of the system.

See also: *control data access*, *CPM*, *notification*, *notification generator*.

## notification distribution publisher

Also known as *NDP*.

*n*. The *CDA* service that accepts *notification packets* from the a *notification generator* and sends them to *notification distribution subscribers* bundled as *notification packages*.

Compare: *notification distribution subscriber*.

See also: *CDA*, *notification generator*, *notification package*, *notification packet*.

## notification distribution subscriber

Also known as *NDS*.

*n*. The *CDA* application layer end-points for *notification distribution publishers*. It establishes one end-point for each publisher.

Compare: *notification distribution publisher*.

See also: *CDA*, *notification*.

## notification frame

*n*. A network layer rendering of the *notification message* into one or more network layer frames. Frames are also known as *media access control* (*MAC*) packets. Experion uses *ControlNet MAC* packets.

See also: *ControlNet*, *MAC*, *notification*, *notification message*.

## notification generator

Also known as *NG*.

*n*. The entity that constructs the *notification message* and assigns the timestamp to the *notification*.

See also: *notification*, *notification message*.

## notification manager

Also known as *NM*.

*n*. The *CDA* object that manages all Experion *notifications* and interfaces with *server event* subsystems. It is a *CDA server* process thread that executes on the Experion *server* only.

See also: *CDA*, *event*, *notification*, *server*.

## notification message

*n*. A rendering of the *notification package* by the *Automation Systems Architecture* (*ASA*) transport layer. This message may be made up from multiple network frames.

See also: *ASA*, *notification*, *notification package*.

## notification package

*n*. The accumulation of one or more *notification packets* by a *notification distribution publisher* into an application layer (*CDA*) communication package for a *notification distribution subscriber*.

See also: *CDA*, *notification*, *notification distribution publisher*, *notification distribution subscriber*, *notification packet*

## notification packet

*n*. The expression of the *notification* by the *notification generator*. It is one-to-one with a *notification*.

See also: *notification*, *notification generator*.

## NT

*n*. Acronym for *Microsoft Windows NT Operating System*.

## NTFS

*n*. Acronym for *NT file system*.

See also: *NT*.

## NT security profile

*n*. A collection of *NT* security-related information associated with a User (or user group) ID (for example, a file may permit users of the group `File Friends` read, write, and execute access; a file may permit users of the group `Hackers` no access).

See also: *NT*, *user identification*.

## NT security subsystem

*n*. A Windows *NT* integral subsystem that records the security policies in effect for the local computer, and participates in logging on users.

## NTP

*n*. Abbreviation for *Network Time Protocol*.

## null ERDB

*n*. Experion *ERDB* that consists of only the *ERDB* schema. There are no function block templates or instances.

Compare: *clean or empty ERDB*

See also: *DB schema*, *ERDB*.

# O

## object linking and embedding

Also known as: *OLE*.

*n*. Microsoft's technology for application interoperability. *OLE* is a set of services that provides a powerful means to create documents consisting of multiple sources of information from different applications. Objects can be almost any type of information, including text, bitmap images, vector graphics, voice, or video clips.

See also: *control library*, *OLE automation*, *OLE custom control*, *OLE process control*, *OLE for-Process Control*, *OLE in-process handler*, *OLE in-process-server*, *OLE local server*, *OPC*.

## observation

*n*. A single data *point PV* value.

See also: *observation period*, *point*, *PV*.

## observation period

*n*. The time between *observations*.

See also: *observation*, *PV period*.

## OCX

Acronym for *OLE custom control*.

*n*. An embeddable *OLE* 2.0 in-process server that supports standard *OCX* specifications.

See also: *OLE*.

## ODA

Abbreviation for *open data access*.

*n*. *ODA* includes a number of options, such as *ODBC driver* and *OPC server* and *client*, that enable other applications to exchange data with Experion.

See also: *client*, *ODBC driver*, *OPC*, *server*.

## ODBC

Acronym for *open database connectivity*.

*n*. A standard set of function calls for accessing data in a database. These calls include the facility to make *structured query language* (*SQL*) queries on the database.

See also: *ODA*, *ODBC driver*, *structured query language*.

## ODBC driver

*n*. A driver that processes *open database connectivity* (*ODBC*) calls, queries the database, and returns the results.

See also: *open databases connectivity*.

## ODS

Abbreviation for *local control network*.

*n*. The TDC3000 communications network that connects multiple nodes. A US/GUS is one such node type. The Local Control Network interconnects the LCN-based nodes. The LCN employs dual, redundant cables, cable A and cable B. The link through which all TDC3000-compliant nodes communicate. The term is often used to generically name the link with the nodes attached to the system.

## OEM

*n*. Abbreviation for *original equipment manufacturer*.

## OEP

Abbreviation for *Operator entry panel*.

*n*. A membrane-style keyboard with dedicated function keys. It is suited for use by operators in harsh environments.

Compare: *IKB*, *USKB*.

## offline

*n*. *Offline* is the state where the *chassis* is not performing its *assigned functions*. The *chassis* might or might not be powered while *offline*.

Compare: *online*.

See also: *assigned function*, *chassis*.

## ohmmeter

*n*. An instrument for indicating directly resistance in *ohms* A test device that is normally used to measure *electrical resistance* between any to points, and can be used to check for uninterrupted connections or signal paths.

Compare: *time domain reflectometer*.

See also: *electrical resistance*, *ohm*.

## OLE

Abbreviation for *object linking and embedding*.

*n*. Microsoft's technology for application interoperability. *OLE* is a set of services that provides a powerful means to create documents consisting of multiple sources of information from different applications. Objects can be almost any type of information, including text, bitmap images, vector graphics, voice, or video clips.

See also: *control library*, *OLE automation*, *OLE custom control*, *OLE process control*, *OLE for-Process Control*, *OLE in-process handler*, *OLE in-process-server*, *OLE local server*, *OPC*.

## OLE automation

*n*. The process by which a *server application* exposes programmable objects to other *applications* (automation clients), which enables *clients* to "automate" certain procedures by directly accessing the objects and functionality the *server* makes available.

See also: *application*, *client*, *OLE*, *server*.

## OLE custom control

Also known as: *OCX*.

*n*. An embeddable *OLE* 2.0 in-process server that supports standard *OCX* specifications.

See also: *OLE*.

## OLE for Process Control

Also known as *OPC*.

*n*. A set of standards to facilitate interoperability between applications within the Process Control industry. These include automation/control *applications*, field systems/*devices* or business/office *applications*.

*OPC* specifies a standard interface to be used between two types of *applications* called *OPC clients* and *OPC servers*.

- An *OPC server* is an *application* that collects data, generally directly from a physical *device*, and makes it accessible through the *OPC* interface.
- An *OPC client* requests and uses the data provided by an *OPC server*.

By having a standard interface, *OPC clients* and *servers* written by different vendors can communicate.

See also: *application*, *client*, *device*, *server*.

## OLE in-process handler

*n*. An *OLE in-process handler* is a *dynamic-link library* (DLL) that runs in an *OLE* container's process space. It handles a limited set of the *OLE* objects services. There is a default *OLE handler* provided by Microsoft that handles drawing and copying of an object without activating the *local server*. It is used primarily with *local servers*.

See also: *dynamic-link library*, *handler*, *local server*, *OLE*.

## OLE in-process server

*n*. An *OLE in-process server* is a *dynamic-link library* (DLL) that runs in an *OLE* container's process space. It handles all of the *OLE* objects' services.

Compare: *OLE in-process handler*.

See also: *dynamic-link library*, *handler*, *OLE*, *server*.

## OLE local server

*n*. An *OLE local server* is a standalone executable that runs in its own process space. It handles all of the *OLE* objects' services.

See also: *local server*, *OLE*.

## ONL

Abbreviation for *operation name list*.

*n*. A feature that allows specifying a substituted name that is filled in when a *block* or *template* is instantiated.

See also: *block*, *template*.

## online

*n*. *Online* is the state of a *chassis* where that *chassis* is performing its *assigned functions*.

Compare: *offline*.

See also: *assigned function*, *chassis*.

## online license upgrade

*n*. *License* information that changes the licensing of existing features. This changes the existing *license key*.

See also: *license*, *license key*

## OP

Abbreviation for *output parameter*.

*n*, An *analog point* or *status point parameter* used to issue control values. The *OP* is related to the *mode parameter* and can be changed by an operator only if the *mode* is manual.

*Output* represents the raw value of a *point*.

- In the case of an *analog point*, *OP* is expressed as a percentage of its full value.
- In the case of a *status point*, *OP* has four possible values (0 to 3), which represent the desired value for the *PV*.

A calibration formula or table is used to convert the *OP* to the *PV* (process value). In the case of a temperature sensor, the formula might result in a *PV* of 100 degrees when the *OP* is 50%, and a *PV* of 200 degrees when the *OP* is 100%. In the case of an electrical switch, the *PV* would be **Off** when the *OP* is 0, and **On** when the *OP* is 1.

See also: *analog point*, *mode*, *mode parameter*, *output*, *parameter*, *point*, *PV*, *status point*

## OPC

Acronym for *OLE for Process Control*.

*n*. A set of standards to facilitate interoperability between applications within the Process Control industry. These include automation/control *applications*, field systems/*devices* or business/office *applications*.

*OPC* specifies a standard interface to be used between two types of *applications* called *OPC clients* and *OPC servers*.

- An *OPC server* is an *application* that collects data, generally directly from a physical *device*, and makes it accessible through the *OPC* interface.
- An *OPC client* requests and uses the data provided by an *OPC server*.

By having a standard interface, *OPC clients* and *servers* written by different vendors can communicate.

See also: *application*, *client*, *device*, *server*.

## OpenCCT

*n*. Acronym for *open control component technology*, a sub-product of Experion.

## open data access

Also known as: *ODA*.

*n*. *ODA* includes a number of options, such as *ODBC driver* and *OPC server* and *client*, that enable other applications to exchange data with Experion.

See also: *client*, *ODBC driver*, *OPC*, *server*.

## open database connectivity

Also known as: *ODBC*.

*n*. A standard set of function calls for accessing data in a database. These calls include the facility to make *structured query language* (*SQL*) queries on the database.

See also: *ODA*, *ODBC driver*, *structured query language*.

## operation name list

Also known as *ONL*.

*n*. A feature that allows specifying a substituted name that is filled in when a *block* or *template* is instantiated.

See also: *block*, *template*.

## operating group

*n*. A group of up to eight arbitrarily chosen *points* that can be viewed by an operator on a standard *Station display*. An *operating group* can be defined in *Quick Builder* or in *Station*.

Compare: *group*.

See also: *display*, *point*, *Quick Builder*, *Station*.

## Operator-based security

*n*. With *operator-based security*, each operator is assigned a unique identification (and appropriate access rights), and must log on to *Station* with a password.

Compare: *Station-based security*.

See also: *operator ID*, *operator password*, *operator security level*, *security level*, *Station*.

## operator entry panel

Also known as *OEP*.

*n*. A membrane-style keyboard with dedicated function keys. It is suited for use by operators in harsh environments.

Compare: *IKB*, *USKB*.

## operator ID

*n*. A unique identification assigned to each operator when using *operator-based security*, and which is required when logging on to *Station*.

See also: *operator-based security*, *Station*.

## operator password

*n*. A character string (not echoed on screen) used with the *operator ID* to sign on to an operator *Station*.

See also: *operator ID*, *Station*.

## operator security level

*n*. Access to *Station* functions is limited by an operators's *security level*. Two types of *Station* security are available: *operator-based security* and *Station-based security*.

See also: *operator-based security*, *station*, *Station-based security*.

## orifice flow meter

*n*. In Gas Operations Suite, an *orifice flow meter* represents a physical *flow meter* that measures flow using an orifice plate. Experion uses the input measurements from the orifice flow meter instrumentation to calculate the AGA 3 orifice flow. This result can be reconciled against the calculated result from the flow computer in the field.

See also: *flow meter*.

## OU

*n*. Abbreviation for *Organizational Unit*.

An Active Directory container that contains domain objects like users, groups, computers, and other OUs.

## output

1. *n*. Energy, signals, or information from a circuit or device to another external circuit or device.
2. *n*. The terminals of a device or circuit from which energy, signals, or information is transmitted.

See also: *AO*, *DO*.

## output parameter

Also known as *OP*.

*n*, An *analog point* or *status point parameter* used to issue control values. The *OP* is related to the *mode parameter* and can be changed by an operator only if the *mode* is manual.

*Output* represents the raw value of a *point*.

- In the case of an *analog point*, *OP* is expressed as a percentage of its full value.
- In the case of a *status point*, *OP* has four possible values (0 to 3), which represent the desired value for the *PV*.

A calibration formula or table is used to convert the *OP* to the *PV* (process value). In the case of a temperature sensor, the formula might result in a *PV* of 100 degrees when the *OP* is 50%, and a *PV* of 200 degrees when the *OP* is 100%. In the case of an electrical switch, the *PV* would be **Off** when the *OP* is 0, and **On** when the *OP* is 1.

See also: *analog point*, *mode*, *mode parameter*, *output*, *parameter*, *point*, *PV*, *status point*

## output bias

*n*. A value that is used to modify the calculated variable (*CV*) of most Regulatory Control blocks. Depending on its sign, the *output bias* is added-to or subtracted-from the *CV*.

*Output bias* has two components:

- Fixed operating bias (OPBIAS.FIX)
- Floating bias (OPBIAS.FLOAT).

The total bias is the sum of the two compponents.

## outside connector

Also known as *passive connector*.

*n*. A *parameter* reference used within a *passive connection*.

See also: *parameter*, *passive connection*.

## override interlock

*n*. An interlock that, when active, forces the *device* to its reference state.

Compare: *permissive interlock*.

# P

## P/S

*n*. Abbreviation for *power supply*.

See also: *UPS*.

## P2P

Acronym for *peer-to-peer*.

*n*. Inter-object communication that occurs between objects in multiple *CEEs*.

See also: *CEE*.

## page

*n*. A *display* or Web page.

See also: *display*.

## PAR

*n*. Abbreviation for *product anomaly report*.

## parallel branch

*n*. An *SCM block* that allows synchronous divergence and convergence. Many paths started at the same time and executed in parallel.

Compare: *branch*.

See also: *block*, *SCM*, *step*, *transition*.

## parameter

Also known as *point parameter*.

*n*. A unit of information about a *point*. For example, an *analog point* includes *parameters* such as *process variable parameter* (PV), *output parameter* (OP) and *setpoint parameter* (SP).

See also: *analog point*, *output parameter*, *point*, *process variable*, *setpoint parameter*.

## parameter connection

*n*. A connection made by using *parameter connector*, the same as named *parameter connection*.

See also: *parameter connector*.

## parameter connector

*n*. A wire that is connected at one end of a *block symbol pin*. It allows you to connect two *pins* that either do not reside in the same *control drawing*, or are not in close proximity to each other in the same *control drawing*.

See also: *block symbol*, *control drawing*, *parameter connection*, *pin*.

## partner

*n*. From an *redundant chassis pair* standpoint, the other *chassis*. From a module standpoint, the module in the same slot of the *partner chassis*.

See also: *chassis*, *redundant chassis pair*.

## passive connection

*n*. A *parameter* between *passive parameters*. *Passive parameters* have not dedicated an *active connector*. Data flow between *passive parameters* is accomplished through the *passive connections* services provided by CM FB.

See also: *active connector*, *parameter*, *passive connector*, *passive parameter*.

## passive connector

Also known as *outside connector*.

*n*. A *parameter* reference used within a *passive connection*.

See also: *parameter*, *passive connection*.

## passive parameter

*n*. A *parameter* that has not dedicated an *active connector* resource.

See also: *active connector*, *parameter*, *passive connection*, *passive connector*.

## PBIM

Refers to the *PBIM-SST* block.

*n*. The block template name in the Experion system that represents the *SST-PFB-CLX* or *SST-PB3-CLX-HWL* (*Profibus* Interface Module) – a 1756 form-factor card, model number *SST-PFB-CLX* or *SST-PB3-CLX-HWL*, which is manufactured by *Molex Inc.* (formerly *Woodhead Industries Inc.*, and before that, *SST*).

See also: *Profibus*, *PTO*, *SST*, *SST-PFB-CLX-RLL and SST-PB3-CLX-HWL*.

## PBIM-SST

*n*. The block template name in the Experion system that represents the *SST-PFB-CLX* or *SST-PB3-CLX-HWL* (*Profibus* Interface Module) – a 1756 form-factor card, model number *SST-PFB-CLX* or *SST-PB3-CLX-HWL*, which is manufactured by *Molex Inc.* (formerly *Woodhead Industries Inc.*, and before that, *SST*).

See also: *Profibus*, *PTO*, *SST*, *SST-PFB-CLX-RLL and SST-PB3-CLX-HWL*.

## PC

*n*. Abbreviation for *personal computer*.

## PCCC

*n*. Abbreviation for *programmable controller communications commands*.

## PCode

Also known as *pseudo-code*.

*n*. A string of tokens used to execute an expression.

## PCR

*n*. Abbreviation for *parameter comparison and reconciliation*. This function extends the load functionality of Control Builder allowing you to view the list of parameters with difference in database and live values. You can invoke PCR from a controller, CEE, FIM, FFLINK, CM or at the device-level during reload or standalone operation.

## PDC

*n* Abbreviation for *primary domain controller* .

## Peer-to-Peer

Also known as *P2P*.

*n*. Inter-object communication that occurs between objects in multiple *CEEs*.

See also: *CEE*.

## peer network

*n*. A *peer network* is a communications *network* on which peer objects can establish a dialog using CKA or the simpler ASA services.

See also: *ASA*, *network*.

## periodic scan

*n*. A *scan* that is performed at regular intervals.

See also: *scanning*.

## permissive interlock

*n*. An interlock that, when not active, prevents its reference state from being commanded.

Compare: *override interlock*.

## physical gas chromatograph

*n*. In Gas Operations Suite, a *physical gas chromatograph* represents a physical analytical instrument that measures the content of various components in a gas sample.

Compare: *manual gas chromatograph*, *station gas chromatograph*.

## PI

*n*. Abbreviation for *pulse input*.

## PIC

*n*. Acronym for *pulse input channel block*.

## PICFastCutoff

*n*. Acronym for *pulse input with fast cutoff channel block*.

## PIChannel

*n*. Acronym for *pulse input channel block*.

## PID

*n*. Abbreviation for *proportional*, *integral*, and *derivative* control modes.

## PIM

Abbreviation for *pulse input module*.

*n*. A single-wide I/O module that serves as the interface board between the *process controller* and field transducers that provide pulse inputs. Typically, the *PIM* might be used to accept pulse inputs from:

- Tachometers, to determine required speeds of rotation for motors, fans, and pumps.
- Flow meters, to determine totalized process flows such as inputs to batch dosing operations.

See also: *process controller*.

## pin

1. *n*. Abbreviation for *plant information network*.
2. *n*. The term *pin* is the graphical representation of a *connector* on a *block symbol*.

   See also: *block symbol*, *connector*, *wire*.

## pipeline

*n*. In Gas Operations Suite, a *pipeline* represents a complete transmission pipeline system, consisting of one or more *routes*.

See also: *node*, *route*, *segment*.

## PITotalizer

*n*. Acronym for *pulse input totalizer*.

## PLC

Abbreviation for *programmable logic controller*.

*n*. A control and monitoring unit that connects to a field *device* and controls low-level plant processes with very high-speed responses. A *PLC* usually has an internal program that scans the *PLC* input registers and sets the output registers to the values determined by the program. When connected to the *server*, the input and output values stored in the *PLC* registers can be referenced, and the *server* can read and write to these memory addresses.

See also: *device*, *server*.

## pNIC

An acronym for physical NIC (network interface card).

## PO

*n*. Abbreviation for *pulse output*.

## point

Also known as *pt*.

*n*. A data structure that, in most cases, contains information about a field entity.

Experion includes a number of in-built point types (called *standard points*), but your system will also include:

- *process points* if you have Experion Process
- *flexible points* if you have any system interfaces or point servers

See also: *flexible point*, *process point*, *standard point*.

## point algorithm

Also known as *algorithm*.

*n*. A set of rules that enhance a *point's* functionality by operating on *point* data either before or after normal point processing. There are two types of point algorithms: *PV algorithm* and *action algorithm*.

See also: *action algorithm*, *algorithm block*, *derived point*, *point*, *PV algorithm*.

## point definition file

*n*. A file that contains the configuration details of *standard points*. *Point definition files* are created by *Quick Builder* and have a `.pnt` file extension.

See also: *Quick Builder*, *standard point*.

## Point Detail display

*n*. A *display* that shows *parameter* values, configuration settings, and other details about a specific type of *point*. There is a separate *Point Detail display* for each type of *point*.

See also: *display*, *parameter*, *point*, *Station*.

## point parameter

Also known as *parameter*.

*n*. A unit of information about a *point*. For example, an *analog point* includes *parameters* such as *process variable parameter* (PV), *output parameter* (OP) and *setpoint parameter* (SP).

See also: *analog point*, *output parameter*, *point*, *process variable*, *setpoint parameter*.

## point references

*n*. *Point references* allow parameters of a point to be available as parameters on an equipment item. Alarms are aggregated from the point to the equipment.

The referenced point can be any point in the system, including those automatically created as associated items for an equipment item.

## point server

*n*. A high-level interface that allows Experion to exchange data with another *application* or subsystem without the need for separately defining *points* in Experion.

The database structure of a *point* on a *point server* (called a *flexible point*) is determined by the application/subsystem, rather than by Experion.

See also: *application*, *flexible point*, *point*.

## policy

A policy defines how two nodes will communicate with each other.

## policy agent (PA)

The Policy Agent is a component of the Experion Secure Communications architecture responsible for establishing certificates and policies for the node on which it resides.

## policy decision point (PDP)

The Policy Decision Point is a component of the Experion Secure Communications architecture responsible for storing the Secure Communications configuration settings and sending certificates and policies to Policy Agents.

## policy enforcement point (PEP)

The Policy Enforcement Point is a component of the Experion Secure Communications architecture responsible for enforcing the configured policies. The TCP/IP communication stack is the Policy Enforcement Point in both C300 controller and Windows nodes.

## policy list

The policy list for a node is a set of policies in accordance with which a node communicates with other nodes.

## primary

1. *n*. For Regulatory Control blocks in a cascade strategy: A *primary* is an upstream *block* from which an initializable input is fetched. A *block* has one primary for each initializable input.

   See also: *block*.

2. *n*. The *controller* (or *chassis*) that is currently controlling the *redundant* process by carrying out the *assigned functions*.

   Compare: *secondary*.

   See also: *assigned function*, *chassis*, *controller redundancy*.

## principle

*n*. An active entity, such as a person or process, that attempts to access a *Control Builder* target, security measures control *principles'* access to targets. A *Control Builder* object may operate as both a *principle* and a target.

For example, when a user attempts to launch *Control Builder*, the *application* is the target of the launch command operation. In this role as target, the *application* has security characteristics that determine which *principles* are capable of launching it. Once launched, the *application* may change its role to a *principle* and access other *Control Builder* objects.

See also: *application*, *Control Builder*.

## privilege

*n*. A system-level predefined right. *Privileges* are typically associated with a user, not with an object. *Privileges* override security requirements (for example, a user who is permitted disk backup bypasses each file object security – that is, if a *privilege* exists, the access control to the objects/*parameters* is not bypassed, otherwise there would need to be an access control entry on each object for each *privilege*).

For Windows *NT*, *privileges* are encoded in the access token, and are reserved for *NT* system use.

For *Control Builder*, this concept applies to granting an access right for a *Control Builder* action, such as to IDLING a *controller*. *Control Builder* system *privileges* appear based on group membership rather than to individual user IDs and are represented by an *NT*-style access control entry.

See also: *Control Builder*, *NT*, *parameter*.

## process control

*n*. The control activity that includes the control function needed to provide sequential, regulatory, and discrete control and to gather and display data.

## process controller

*n*. Experion's *controller*, which can handle all possible control requirements-whether for continuous processes, batch processes, discrete operations, or machine control needs. The term is used to refer to all control hardware (*chassis*, power supply, *control processor* and *ControlNet* bridge) as a single entity.

Points on a *process controller* are called *process points*.

See also: *chassis*, *controller*, *ControlNet*, *control processor*, *process controller*, *process point*.

## process operational workloads

Workloads (that is, virtual machines) associated with the process being controlled. For example, Experion servers, Flex Stations, OPC servers, and Engineering Stations.

## process point

*n*. A *point* on a *process controller*.

See also: *point*, *process controller*.

## process software

*n*. An umbrella term for *Control Builder* and other *process controller* software.

See also: *Control Builder*, *process controller*.

## process variable

Normally abbreviated as *PV*.

*n*. An actual value in a process. In the case of an *analog point*, for example, the *PV* represents values such as temperature, flow, and pressure. A *PV* may also be sourced from another *parameter* or be calculated from two or more measured or calculated variables using a *point algorithm*.

See also: *analog point*, *parameter*, *point algorithm*, *PV algorithm*, *PV clamp*, *PV period*.

## processing unit

Also known as *PU*.

*n*. Represents a platform-independent amount of processing resources (time) required to complete a predefined amount of computational (control) work.

## production ESXi host

*n* An ESXi host that is assigned production workloads.

## production rules

*n*. The grammar, in BNF format (*Backus Normal Form* or *Backus–Naur Form*), used to describe a language. The *common file format* used to construct the resource file follows specific production rules.

See also: *common file format*.

## production workloads

*n* Workloads (virtual machines) associated with the Experion system and process, and encompasses both the application operational workloads and process operational workloads. However, it does not include the management workloads.

## Profibus

Acronym for *process field bus*.

*n*. A standard for field bus communication in automation technology and was first promoted in 1989 by *BMBF* (German department of education and research) and then used by *Siemens*.

See also: *PTO*, *SST*, *SST-PFB-CLX-RLL and SST-PB3-CLX-HWL*.

## programmable logic controller

Also known as *PLC*.

*n*. A control and monitoring unit that connects to a field *device* and controls low-level plant processes with very high-speed responses. A *PLC* usually has an internal program that scans the *PLC* input registers and sets the output registers to the values determined by the program. When connected to the *server*, the input and output values stored in the *PLC* registers can be referenced, and the *server* can read and write to these memory addresses.

See also: *device*, *server*.

## project

*n*. In *Quick Builder*, a working database file that enables you to make changes to the *server* database without affecting the configuration data that is currently being used to run the system.

See also: *Quick Builder*, *server*.

## project tree

*n*. One of the three *tree views* available within *Control Builder*. Your control strategy is displayed in this tree.

Compare: *library tree*, *loaded tree*.

See also: *Control Builder*, *tree view*.

## project view

*n*. In *Quick Builder*, a window in which you can view, add, and modify any items in the current project file.

See also: *Quick Builder*.

## projected CM/SCM

*n*. *Block* on which a projected *parameter* has been defined.

See also: *block*, *CM*, *parameter*, *SCM*.

## property

*n*. In *Display Builder*, a *property* is attribute or characteristic of an object within the *Station Automation object model*. For example, a display object has properties that define its height, width, and color.

See also: *Display Builder*, *Station Automation object model*.

## property page

*n*. One page of a *property sheet*. In *Quick Builder*, a tabbed page in the **Project View** window that displays information about the currently selected item or items. Most of the information can be displayed or modified.

See also: *property sheet*, *Quick Builder*.

## property sheet

*n*. Another term for a *Tabbed Dialog box*, an integrated group of dialog boxes (or pages) individually selected by tabs along their top edge.

See also: *property page*, *Quick Builder*.

## protocol

*n*. A language used to communicate over types of *network* media.

See also: *ASA*, *ATM*, *BOOTP*, *CIP*, *DHCP*, *FTP*, *HTTP*, *ICP*, *SNMP*, *TCP/IP*.

## PS12x.x

*n*. Experion release number for PS120 releases and PS121 releases.

## pseudo-code

Also known as *PCode*.

*n*. A string of tokens used to execute an expression.

## pSOS

*n*. The *controller* operating system.

See also: *controller*.

## pt

Abbreviation for *point*.

*n*. A data structure that, in most cases, contains information about a field entity.

Experion includes a number of in-built point types (called *standard points*), but your system will also include:

- *process points* if you have Experion Process
- *flexible points* if you have any system interfaces or point servers

See also: *flexible point*, *process point*, *standard point*.

## PTO

*n*. Abbreviation for *Profibus Trade Organization*.

See also: *Profibus*.

## PU

Also known as *processing unit*.

*n*. Represents a platform-independent amount of processing resources (time) required to complete a predefined amount of computational (control) work.

## pulse input IOM

*n*. Refers to the *pulse input module* hardware module.

See also: *pulse input module*.

## pulse input IOM FB

*n*. Refers to the *pulse input module function block* that executes in the *control processor* and represents the actual hardware to control strategies.

See also: *control processor*, *function block*, *pulse input module*.

## pulse input module

Also known as *PIM*.

*n*. A single-wide I/O module that serves as the interface board between the *process controller* and field transducers that provide pulse inputs. Typically, the *PIM* might be used to accept pulse inputs from:

- Tachometers, to determine required speeds of rotation for motors, fans, and pumps.
- Flow meters, to determine totalized process flows such as inputs to batch dosing operations.

See also: *process controller*.

## PV

Abbreviation for the *process variable*.

*n*. An actual value in a process. In the case of an *analog point*, for example, the *PV* represents values such as temperature, flow, and pressure. A *PV* may also be sourced from another *parameter* or be calculated from two or more measured or calculated variables using a *point algorithm*.

See also: *analog point*, *parameter*, *point algorithm*, *PV algorithm*, *PV clamp*, *PV period*.

## PV algorithm

*n*. An algorithm that gathers/manipulates data. The result of the algorithm is usually stored in the PV of the point to which it is attached. A PV algorithm is processed when the PV changes from its previously scanned value.

Compare: *action algorithm*.

See also: *algorithm*.

## PV clamp

*n*. For an *analog point*, a configuration that will immobilize the *process variable* (PV) at 0% if it falls below the entry low limit value or 100% if it goes above the entry high limit value.

See also: *analog point*, *PV*.

## PV period

*n*. An amount of time specified for the scanning of the point process value (*PV*) parameter. The *PV period* determines the frequency with which the *server* will perform the *scan*. The *server* groups point addresses into *scan packets* by *PV period* and *controller*.

See also: *controller*, *PV*, *scanning*, *scan packet*, *server*.

## PVC

*n*. Acronym for *polyvinyl chloride*.

## PWMC

*n*. Abbreviation for *pulse width modulator channel*.

# Q

## Quick Builder

*n*. The Experion tool used to configure system components, such as *standard points*, *flex Stations*, *controllers* (other than *process controllers*), *electronic flow measurement* (EFM), and printers.

See also: *controller*, *electronic flow measurement* (EFM), *flex Station*, *process controller*, *standard point*

## Quick Builder database

The SQL database in which Quick Builder stores its configuration data.

# R

## R

Also known as *subgroup range*.

*n*. The difference between the maximum *observation* value and the minimum *observation* value within that *subgroup*.

See also: *observation*, *subgroup*.

## rack

*n*. *Chassis* or cardfile capable of accepting plug-in modules.

See also: *chassis*.

## radial menu

*n*. A radial menu is configured on a *Collaboration Station workspace* to provide access to content and Microsoft Lync contacts.

See also: *Collaboration Station*, *workspace*.

## RAM

Abbreviation for *random access memory*.

*n*. *Semiconductor*-based memory that can be read and written by the *central processing unit* (CPU) or other hardware devices. The storage locations can be accessed in any order. Note that the various types of *ROM* memory are capable of random access but cannot be written to. The term *RAM*, however, is generally understood to refer to volatile memory that can be written to as well as read.

See also: *central processing unit*, *ROM*, *semiconductor*.

## R-BAR

*n*. The *mean* of the *R* values (for example group range average).

Compare: *X-BAR*, *X-BAR-BAR*.

See also: *mean*.

## RC

*n*. Abbreviation for *redundancy* cable.

See also: *redundancy*.

## RCP

Abbreviation for *redundant chassis pair*.

*n*. A pair of *chassis* (single *ICP* enclosures with *backplane*, power supply, communication(s), and in most cases, *controller* module(s)) configured for redundant operation. The *RCP* may or may not have 'control' as its *assigned function* (it may not have any *controllers* in its *chassis* complement).

See also: *assigned function*, *backplane*, *chassis*, *controller*, *ICP*, *redundancy*.

## RD

Abbreviation for *redundancy director*.

*n*. Serves as the alternate redundancy manager in the absence of the *redundancy module* (RM).

See also: *redundancy*, *redundancy module*.

## RDB

*n*. Abbreviation for *reference destination block*.

See also: *block*.

## read-only connection

*n*. The real connection between the origin *parameters* when a projected connection is made.

See also: *parameter*, *parameter connection*, *read-only parameter connector*.

## read-only parameter connector

*n*. The indication of a read-only connection; it cannot be modified directly.

See also: *parameter*, *parameter connection*, *read-only connection*.

## readiness

*n*. The readiness of the *chassis* in the *redundant chassis pair*. The levels are: disqualified, synchronizing, synchronized, standby.

See also: *chassis*, *redundant chassis pair*, *redundancy state*, *secondary readiness*.

## real

*n*. A number format that includes both whole numbers (*integers*) and fractional numbers. For example, 2.0, 10,230.7684, and so on.

Compare: *integer*, *signed*, *unsigned*.

## recipe

*n*. A set of predefined values downloaded by the Recipe Manager to points that control a particular process. The individual values are, in effect, the "ingredients“ for the recipe.

See also: *activity entity*.

## reducer node

*n*. In Gas Operations Suite, a *reducer node* represents a *node* that caters for a change in the pipe diameter.

See also: *node*.

## redundancy

*n*. The use of multiple similar devices such that if one fails, the remaining unit(s) will take over the *assigned functions* (the set of functions assigned to the device) thereby improving the device's availability (the ability of the device to carry out its *assigned functions* based on its probability of failure).

See also: *assigned function*, *dual redundancy*, *redundancy state*.

## redundancy director

Also known as *RD*.

*n*. Serves as the alternate redundancy manager in the absence of the *redundancy module* (RM).

See also: *redundancy*, *redundancy module*.

## redundancy module

Also known as *RM*.

*n*. With a redundant controller *chassis*, the *RM* provides automatic backup for the *primary controller*.

See also: *chassis*, *controller*, *primary*, *redundancy*, *redundant chassis pair*.

## redundancy state

*n*. The state of a *redundant chassis pair* (RCP) with regard to *redundancy* and specifically with regard to which *chassis* is handling the *assigned functions* (the set of functions assigned to that device). In a *dual redundant* system, such as *ICP* redundancy, two basic redundancy states exist:

- *Primary* – Refers to the *chassis* carrying out the *assigned functions*.
- *Secondary* – Refers to the *chassis* that is in some degree of readiness to assume responsibility for the *assigned functions*.

The ability of the *secondary* to carry out the *assigned functions* in the event of a *primary* failure is referred to as *secondary readiness*.

See also: *assigned function*, *chassis*, *dual redundancy*, *ICP*, *primary*, *redundancy*, *redundant chassis pair*, *secondary*.

## redundant chassis pair

Also known as *RCP*.

*n*. A pair of *chassis* (single *ICP* enclosures with *backplane*, power supply, communication(s), and in most cases, *controller* module(s)) configured for redundant operation. The *RCP* may or may not have 'control' as its *assigned function* (it may not have any *controllers* in its *chassis* complement).

See also: *assigned function*, *backplane*, *chassis*, *controller*, *ICP*, *redundancy*.

## redundant server

*n*. In a redundant server system, the *secondary* (backup) *server* that is actively linked to the *primary* (running) server, so that it can take control if the *primary server* fails or is shut down.

See also: *primary*, *redundancy*, *secondary*, *server*.

## regulatory documentation

*n*. Documentation defining the rules, criteria, and other information governing an industry or the application of certain technology.

## related content

*Related content* refers to the navigation links defined for the equipment that take you to content that has been defined as related to the current equipment item. When selected, related content appears in a new display rather than being shown within the current equipment display.

## relationship

*n*. Defines that one equipment item is related to another. All *relationship* types are defined in the Equipment Template, and configured when creating equipment based on those templates. Relationship examples could include **`supplies to`**, **`supplied from`**.

## release directory

*n*. A directory structure used to store the *device description* (DD) and related files. Each manufacturer has a directory name that is the registered manufacturer ID number. There is a directory for each device type that a manufacturer produces under their ID directory.

## remote

*n*. In Honeywell terminology, refers to a physical connection between two system devices using modems rather than cabling.

See also: *remote point*, *remote request logon*, *remote server*.

## remote point

*n*. *Points* that reference *points* owned by another *server* in a *DSA* system. *Points* managed by the current *server* are called *local points*.

Compare: *local point*.

See also: *DSA*, *host server*, *local server*, *point*, *remote server*, *server*.

## remote request logon

*n*. A remote request logon is a logon request that is received over a *network* communication connection. Typically, these take the form of requests to access a *network* resource. In remote request logon, the user issuing the request is represented by the *access token* constructed when that user logged on interactively.

See also: *access token*, *network*.

## remote server

*n*. In a *DSA* system, a *server* other than the *server* to which *Station* (or other component) is connected.

Compare: *local server*.

See also: *DSA*, *host server*, *server*, *Station*.

## remote terminal unit

Also known as *controller*, *RTU*.

*n*. A generic term for a device that is used to control and monitor one or more processes in field equipment. The most common control and monitoring device in an access control and security system is an access control panel. Other devices include security monitoring panels, elevator controllers, and fire monitoring devices. Controllers include *programmable logic controllers* (PLCs), loop controllers, bar code readers, and scientific analyzers.

See also: *C200 controller*, *control processor*, *CPM*, *hybrid controller*, *network node controller*, *PLC*.

## repeater

*n*. A *node* that reconstructs and retransmits all traffic it hears on one *network* segment to another.

See also: *network*, *node*.

## replica

*n*. A secondary or backup copy of the *ERDB* that is synchronized with the design *master*.

See also: *ERDB*, *master*, *synchronize*.

## replicated

*n*. An *ERDB* that has been converted to a form where it may be maintained as two *synchronized* copies for *ERDB redundancy* purposes.

See also: *ERDB*, *redundancy*, *replica*, *synchronization*.

## report

*n*. Information collected by the *server* that is formatted for viewing. Experion includes a range of standard reports, and users can create their own customized reports.

See also: *action algorithm*, *free format report*, *PAR*, *script*, *server*.

## resistance temperature detector

p
Also known as *RTD*.

*n*. A sensor that measures temperature through changes in resistance.

## resource file

*n*. The part of the *capability file* that is supplied by the manufacturer. It describes the communication profile, *device* capacity, internal record address assignments, and certain default values for a field *device*. A *capability file* that has only this content is often called a *resource file*.

See also: *capability file*, *device*, *resource file*.

## RFI

*n*. Abbreviation for *radio frequency interference*.

## right-click

*v*. To make a selection using the button on the right side of a mouse or other pointing device. Doing so typically brings up a pop-up menu with options applicable to the object over which the cursor is positioned.

See also: *click*, *double-click*, *drag*.

## rising edge

*n*. In a *pulse input module*, signal transitions from low to high voltage cause an *`Off-to-On`* transition in the *ASIC* functions.

Compare: *falling edge*.

See also: *ASIC*, *pulse input module*, *voltage threshold*.

## RIUP

*n*. Abbreviation for *removal and insertion under power*.

## RLSD

*n*. Abbreviation for *receive line signal detect*.

## RM

Abbreviation for *redundancy module*.

*n*. With a redundant controller *chassis*, the *RM* provides automatic backup for the *primary controller*.

See also: *chassis*, *controller*, *primary*, *redundancy*, *redundant chassis pair*.

## ROM

*n*. Abbreviation for *read-only memory*.

1. A *semiconductor* circuit into which code or data is permanently installed by the manufacturing process.
2. Any *semiconductor* circuit serving as a memory that contains instructions or data that can be read but not modified.

See also: *RAM*, *semiconductor*.

## root template

*n*. Top-level *template* in a *library* as far as derivation is concerned.

See also: *base template*, *library*, *template*.

## rotary Station

*n*. A *Station* that has a temporary connection to the *server*. When a *rotary Station* disconnects from the *server*, the connection becomes available to another *rotary Station*. The maximum number of simultaneous rotary connections is determined by your license.

Compare: *static Station*.

See also: *server*, *Station*.

## route

*n*. In Gas Operations Suite, a *route* represents a continuous non-branching length of pipe in a transmission *pipeline*, consisting of one or more *segments*.

See also: *pipeline*, *segment*.

## router

*n*. A *device* (sometimes a computer) that connects two or more *networks*. *Routers* are typically slower than *switches*, and are located at the point where the *networks* meet. They move traffic between *networks* by looking up a table of network routes. A *router* may forward to another *router*.

See also: *device*, *network*, *switch*

## RPI

Abbreviation for Requested Packet Interval; RPI specifies the rate at which data is updated during a connection.

## RPS

*n*. Abbreviation for *remote peripheral solutions*.

## RPT

*n*. Acronym for *ControlNet network repeater* (Vac model).

Compare: *RPTD*.

See also: *ControlNet*, *repeater*.

## RPTD

*n*. Acronym for *ControlNet network repeater* (Vdc model).

Compare: *RPT*.

See also: *ControlNet*, *repeater*.

## RRSU

*n*. Acronym for *RAM retention start-up*.

See also: *RAM*.

## RSoP

*n* Abbreviation for *Resultant Set of Policy*.

A Microsoft tool for troubleshooting the interaction between multiple GPOs on a specific object.

## RTB

*n*. Abbreviation for *remote terminal block*.

## RTD

Abbreviation for *resistance temperature detector*.

*n*. A sensor that measures temperature through changes in resistance.

## RTDB

*n*. Abbreviation for *real-time database*.

## RTP

*n*. Abbreviation for *remote termination panel*.

## RTS/CTS

*n*. Abbreviation for *request to send/clear to send*.

## RTU

Abbreviation for *remote terminal unit*.

Also known as *controller*.

*n*. A generic term for a device that is used to control and monitor one or more processes in field equipment. The most common control and monitoring device in an access control and security system is an access control panel. Other devices include security monitoring panels, elevator controllers, and fire monitoring devices. Controllers include *programmable logic controllers* (PLCs), loop controllers, bar code readers, and scientific analyzers.

See also: *C200 controller*, *control processor*, *CPM*, *hybrid controller*, *network node controller*, *PLC*.

## run

*n*. A connection between a *controller*/*RTU*/*flow computer* and a flow meter. Each connection is called a *run* and is identified by a run number.

Run number is also known as *tube number*.

See also: *EFM*, *meter template*.

## run-time authorization

*n*. When a software application feature launch is attempted, authorization to use the application/feature is verified. If authorization succeeds, the application is launched. If authorization fails, the application is not launched and the customer is advised accordingly.

*See also: access token*.

## R/W

*n*. Abbreviation for *Read/Write*.

# S

## S9000

*n*. Honeywell Series 9000 loop and logic *controller*.

See also: *controller*, *programmable logic controller*.

## safe state

*n*. The ‘fail safe’ state for a *device control*. This is the state to which the *function block* defaults under specified conditions, such as *Break-before-Make* ‘break’ state or the return state for *Momentary*. In the *TDC 3000* APM, this was fixed as `State 0`.

See also: *device control*, *function block*, *TDC 3000*.

## SafeBrowse object

*n*. A *SafeBrowse* object is a Web browser specifically designed for use with *Station*. *SafeBrowse* includes appropriate security features that prevent users from displaying unauthorized Web pages or other documents in *Station*.

See also: *Station*.

## SafeView

*n*. *SafeView* is used to control the characteristics of, and access to, windows within the Microsoft Windows workspace. It is used in conjunction with *Station* to provide *multi-window Station*.

See also: *multi-window Station*, *Station*.

## sample period

*n*. The time between *subgroups*.

Compare: *subgroup period*

See also: *subgroup*.

## SCADA

*n*. Acronym for *supervisory control and data acquisition*.

See also: *supervisory control*.

## SCADA Controllers view

*n*. A navigation view in Quick Builder that can be used to view items by their associated channel or controller.

## scan

SCAN can also refer to the Experion *server/Station*.

*v*. The technique used by an Experion *server* to read data from a *controller* (other than a *process controller*). *Scanning* is performed for *point parameters* with source addresses, such as *PV*, *SP*, and *OP*. Experion uses *demand scanning*, *exception scanning*, and *periodic scanning* techniques.

Compare: *unsolicited messaging*.

See also: *controller*, *demand scan*, *exception scan*, *OP*, *periodic scan*, *point parameter*, *process controller*, *PV*, *server*, *SP*.

## scanning

*v*. The technique used by an Experion *server* to read data from a *controller* (other than a *process controller*). *Scanning* is performed for *point parameters* with source addresses, such as *PV*, *SP*, and *OP*. Experion uses *demand scanning*, *exception scanning*, and *periodic scanning* techniques.

Compare: *unsolicited messaging*.

See also: *controller*, *demand scan*, *exception scan*, *OP*, *periodic scan*, *point parameter*, *process controller*, *PV*, *server*, *SP*.

## scan packet

*n*. A group of *point parameter* source addresses assembled by the *server* and used as the basic unit of server data acquisition (*scanning*). The *server* groups *points* into *scan packets* based on the *controller* address that they reference and the specified *scan period*.

See also: *controller*, *point parameter*, *point*, *scanning*, *scan period*, *server*

## scan period

*n*. The time interval between successive *scans*.

See also: *scan*.

## scheduler

*n*. A facility used to schedule the control of a *point* on either a *periodic* or once-only (*demand*) basis.

See also: *demand scan*, *periodic scan*, *point*.

## SCM

Abbreviation for *sequential control module*.

*n*. A *container function block* within *Control Builder* that serves as an encapsulation of transition and *step blocks* for sequencing the equipment through a series of distinct states to accomplish a process task, such as heat, cool, agitate, charge, or discharge. The *SCM* may be used to perform a stand alone sequencing operation or for batch control in presence of the Level-3 and Level-4 above. When used in context of batch control, it is referred to as a *phase* (SP88 terminology). The *SCM* is made up of *branches*, *parallel branches*, *steps*, and *transitions*.

See also: *branch*, *container function block*, *Control Builder*, *parallel branch*, *step*, *step block*, *transition*.

## SCMB

Abbreviation for *sequential control module builder*.

*n*. The *SCM* builder is used to build a sequential control strategy consisting of *SCM* blocks (*branches*, *parallel branches*, *steps*, and *transitions*), sequence flow connections, and other user-defined objects.

See also: *SCM*.

## SCN

*n*. Abbreviation for *software change notice*.

## scope of responsibility

Also known as *SOR*.

*n*. Used to assign assets to a specific operator or *Station*. SOR determines what assets can be seen and controlled by the operator.

See also: *Station*.

## screw

*n*. The electrical hardware interface of *Input/Output modules*.

## script

*n*. A script is a mini-program that performs a specific task. Experion supports two types of scripts:

- *Display scripts*, which add extra functionality to displays
- *Server scripts*, which add extra functionality to servers, points, and reports

## SCSI

*n*. Abbreviation for *small computer system interface*.

## SDK

Abbreviation for *software development kit*.

*n*. A collection of tools enabling development. In this case, of *CCLs*.

See also: *CCL*.

## secondary

1. *n*. A Regulatory Control *block* whose control input is pushed from another Regulatory Control *block*.

   See also: *block*.

2. *n*. The *controller* (or *chassis*) in a redundant configuration that would assume primary status and responsibility of the *assigned functions* if the previous *primary controller* failed.

   See also: *assigned function*, *chassis*, *controller*, *primary*.

## secondary readiness

*n*. The ability of the *secondary* of a *redundant chassis pair* in a dual redundant system to carry out the *assigned functions* in the event of a *primary* failure.

Three states (of *secondary readiness*) are available:

1. *Disqualified* - In this state, a *secondary* can not assume the *primary* state.
2. *Synchronizing* - In this state, the two *chassis* have determined that they are compatible and are in the process of copying program and database information from the *primary* to the *secondary*. While in this state, a *secondary* can not assume the *primary* state.
3. *Synchronized* - In this state, the *secondary* can assume the *primary* state. In order for a *secondary* to assume responsibility for the *assigned functions* (from a *primary*), with minimal impact to the *assigned functions*, that *secondary* must closely track the variables and states of the *primary*. The process of aligning the databases of two devices is called *synchronization*. Once two devices are *synchronized*, they must continue to track database changes, or else the *secondary* will revert to a *disqualified* state of readiness.

See also: *assigned functions*, *chassis*, *primary*, *readiness*, *redundant chassis pair*, *secondary*, *synchronization*, *synchronize*.

## security agent

A Security Agent contains the Policy Agent, a Secure Communications component installed during the Experion installation. Security level: The security level is a configuration setting that determines how the nodes of a zone communicate with each other. In Experion, the options available are Cleartext (standard communication) and Encrypted nodes authenticated to establish trust and data is encrypted).

## security area

A security area is a collection of Experion nodes and networks that share similar requirements for the protection of information and to which secure communications settings are applied. A Security Area contains a single Security Manager, and is made up of one or more Security Zones.

## security descriptor

*n*. A security-related data structure contained in, or referenced by, an object. In *Windows NT*, the descriptors are actually attached to the object. The intent of the *security descriptor* is to protect the object from unauthorized access. The *security descriptor* determines who can use an object, and what they can "do with/to" the object. For *Windows NT* objects, the *security descriptor* is the *access control list* (ACL) that defines the list of protections that apply to an object. Each access list is composed of appropriate access control list entries. An access control list entry contains a particular security identifier (for example, a group, or user ID), and a set of access rights.

For *Control Builder* security elements (control objects, system objects, object parameters) the *security descriptor* may be optimized because many *Control Builder* objects will have the same—or very similar—access restrictions associated with them.

See also: *Control Builder*.

## security level

*n*. Access to *Station* functions is limited by an operators's *security level*. Two types of *Station* security are available: *operator-based security* and *Station-based security*.

See also: *operator-based security*, *station*, *Station-based security*.

## security manager

An Experion node is available as a Security Manager when Policy Decision Point (with a configuration database), Certificate Authority, and Policy Agent components are installed on the node. The node is activated as a Security Manager when you run the Security Manager routing setup utility tool.

## security manager proxy

An Experion node is available as a Security Manager Proxy when Policy Decision Point (without a configuration database) and Policy Agent components are installed on the node. The node is activated as a Security Manager Proxy when you run the Security Manager routing setup utility tool.

## security zone

A Security Zone is a group of nodes in a Security Area, for which a single policy is configured

## segment

1. *n*. Trunk sections connected via *taps*, with *terminators* at each end.

   See also: *tap*, *terminator*, *T-tap*, *universal mounting bracket*, *Y-tap*.
2. *n*. In Gas Operations Suite, a *segment* represents a length of transmission *pipeline* with the same physical characteristics for example, diameter, material, or coating, bounded by two *nodes*.

   See also: *node*, *pipeline*.

## security manager proxy

An Experion node is available as a Security Manager Proxy when Policy Decision Point (without a configuration database) and Policy Agent components are installed on the node. The node is activated as a Security Manager Proxy when you run the Security Manager routing setup utility tool.

## semiconductor

*n*. An electrical device or component whose resistivity lies between that of conductors and resistors (for example, integrated circuits, transistors, and so on).

## sequential control module

Also known as *SCM*.

*n*. A *container function block* within *Control Builder* that serves as an encapsulation of transition and *step blocks* for sequencing the equipment through a series of distinct states to accomplish a process task, such as heat, cool, agitate, charge, or discharge. The *SCM* may be used to perform a stand alone sequencing operation or for batch control in presence of the Level-3 and Level-4 above. When used in context of batch control, it is referred to as a *phase* (SP88 terminology). The *SCM* is made up of *branches*, *parallel branches*, *steps*, and *transitions*.

See also: *branch*, *container function block*, *Control Builder*, *parallel branch*, *step*, *step block*, *transition*.

## sequential control module block symbol

*n*. The symbol or icon shown to the user that represents one view of an *SCM block*. Another view of the *SCM* block would be an *SCM* block configuration form.

Compare: *function block symbol*

See also: *block*, *SCM*.

## sequential control module builder

*n*. The *SCM* builder is used to build a sequential control strategy consisting of *SCM* blocks (*branches*, *parallel branches*, *steps*, and *transitions*), sequence flow connections, and other user-defined objects.

See also: *SCM*.

## sequential control module function block

Also known as *SCM*, *sequential control module*.

*n*. A *container function block* within *Control Builder* that serves as an encapsulation of transition and *step blocks* for sequencing the equipment through a series of distinct states to accomplish a process task, such as heat, cool, agitate, charge, or discharge. The *SCM* may be used to perform a stand alone sequencing operation or for batch control in presence of the Level-3 and Level-4 above. When used in context of batch control, it is referred to as a *phase* (SP88 terminology). The *SCM* is made up of *branches*, *parallel branches*, *steps*, and *transitions*.

See also: *branch*, *container function block*, *Control Builder*, *parallel branch*, *step*, *step block*, *transition*.

## Series A I/O

*n*. Previously named *Rail I/O*.

## Series H I/O

*n*. Previously named *Hazardous Rail I/O*.

## Series R I/O

*n*. Previously named *Chassis I/O*.

## server

*n*. The computer on which the Experion database software and server *utilities* run.

See also: *Experion server TPS*.

## server redundancy

*n*. Experion hardware configuration consisting of a *primary server* and a *secondary server*. The *primary server* is connected to all *clients* (such as *Stations*, *Quick Builder*) and all *devices*. The *secondary server* is not connected to any *clients* or *devices*, but receives database information from the *primary server* and keeps the databases *synchronized*. A *redundancy* link (*Ethernet*, *LAN* link) is maintained between *servers* and used to pass

database updates from *primary* to *secondary*. Upon failover, the *primary server* is transferred either manually (via software utility or hardware switch) or automatically (when the *primary* fails) to the *secondary server*.

See also: *client*, *device*, *primary*, *Quick Builderredundancy*, *redundant server*, *secondary*, *server*, *Station*, *synchronize*

## server software

*n*. An umbrella term used to refer to the database software and server *utilities* installed on the Experion *server* computer.

See also: *server*, *utility*.

## server Station

*n*. The term used for *Station* when it runs on the *server*.

See also: *server*, *Station*.

## setpoint parameter

Also known as *SP*.

*n*. The desired value of a *process variable*. *Setpoint* (SP) is an *analog point parameter*, and the value is entered by the operator. The *setpoint* can be changed any number of times during a single process. The *setpoint* is represented in engineering units. See *SP* in the *Control Builder Parameter Reference*.

See also: *analog point*, *parameter*, *process variable*.

## shape

*n*. A special type of *display* object that can be used in numerous *displays*. Shapes can be used as "clip-art" or as *shape sequences*.

See also: *display*, *shape sequence*.

## shape sequence

*n*. A set of related *shapes* that are used in conjunction with *shapelinks*.

A *shape sequence* can be used to:

- Represent the status of a *point* (Each shape represents a particular status).
- Create an animation (Each *shape* is one "frame" in the animation).

See also: *point*, *shape*, *shapelink*.

## shapelink

*n*. A *shapelink* is, in effect, a "window" in which always displays one *shape* of a *shape sequence*. For example, a *shapelink* representing a point's status displays the shape that corresponds to the current status.

See also: *shape*, *shapelink*.

## sheath

*n*. The outer protective covering of a coaxial cable.

## SI

*n*. Abbreviation for *serial interface*. Refers to the *TDC 3000 serial interface*.

See also: *TDC 3000*.

## sigma

*n*. Standard deviation of the *X-BAR* values.

See also: *X-BAR*.

## signal reflections

*n*. Electrical energy returned to a signal source from the load end of a transmission line.

## signed

*n*. A number format that includes both positive and negative numbers.

Compare: *integer*, *real*, *unsigned*.

## significant digit

*n*. Any of the digits of a number beginning with the digit farthest to the left that is not zero and ending with the last digit farthest to the right that is either not zero or that is a zero but is considered to be exact.

## silo cluster

*n*. Experion cluster that is implemented with its own management infrastructure, for example, management host, vSphere client and NAS.

## SIM

*n*. Abbreviation for *serial interface module*.

## Sites

Represent the physical structure of a network.

## SLC

*n*. Abbreviation for *small logic controllers*.

## slot address

*n*. A physical card slot in the *hybrid controller chassis*. *Slot addresses* start from the left with the number 0. The power supply does not occupy a slot.

See also: *chassis*, *hybrid controller*.

## SMP

*n*. Abbreviation for *security management panel*.

## SNMP

Abbreviation for *simple network management protocol*, a standard for internetwork management.

## SNTP

*n*. Abbreviation for *Simple Network Time Protocol*.

## SO

*n*. Abbreviation for *status output*. Used for *fast cutoff* output.

## SOE

*n*. Abbreviation for *sequence of events*. Some types of *controllers*, such as the *TDC 3000* PIU, can time-stamp *events* to millisecond resolution.

See also: *controller*, *event*, *TDC 3000*.

## softkey

*n*. A function key that, when pressed, performs an action specified in the configuration details for the current *display*.

See also: *display*.

## software arbitration

*n*. A software-only technique in which each *server* polls the other via the *LAN* to determine whether the other *server* has failed.

See also: *LAN*, *redundancy*, *server*.

## Software Development Kit

Also known as *SDK*.

*n*. A collection of tools enabling development. In this case, of *CCLs*.

See also: *CCL*.

## SOR

Abbreviation for *scope of responsibility*.

## SP

Abbreviation for the *setpoint parameter* of an *analog point*.

*n*. The desired value of a *process variable*. *Setpoint* (SP) is an *analog point parameter*, and the value is entered by the operator. The *setpoint* can be changed any number of times during a single process. The *setpoint* is represented in engineering units. See *SP* in the *Control Builder Parameter Reference*.

See also: *analog point*, *parameter*, *process variable*.

## SPP

*n*. Abbreviation for *setpoint in percent*.

See also: *setpoint parameter*.

## SPQC

*n*. Abbreviation for *Statistical Process and Quality Control*.

- Standard history
- A type of history collection for a point that provides one-minute snapshots and the following averages based on the one-minute snapshots:
  - 6-minute averages
  - 1-hour averages
  - 8-hour averages
  - 24-hour averages

## SQL

Abbreviation for *structured query language*.

*n*. A database sub-language used in querying, updating, and managing relational databases.

See also: *open database connectivity*.

## SR

Abbreviation for *system repository*.

*n*. The file where all Experion *server point* data is stored.

See also: *point*, *server*.

## SST

*n*. The former third-party manufacturer/supplier of the *Profibus* interface module. The current manufacturer and supplier of the *Profibus* interface module is Molex.

See also: *PBIM-SST*, *Profibus*, *PTO*, *SST-PFB-CLX-RLL and SST-PB3-CLX-HWL*.

## SST-PFB-CLX-RLL, SST-PB3-CLX-HWL

*n*. The model numbers of the *Profibus* interface module, a 1756 form-factor, single space card, which acts as a *Profibus* Master Class 1 device.

See also: *PBIM-SST*, *Profibus*, *SST*.

## standard dictionary

*n*. A *Fieldbus Foundation* file that contains standard strings and enumerations. You can locate a compressed form of the file named `IMPORT.DCT` in the *Control Builder* menu at **File ➤ New ➤ Type ➤ Fieldbus Device**.

See also: *Fieldbus Foundation*.

## standard history

*n*. The type of *history* that collects one-minute snapshots of *point parameter* values, as well as a number of averages based on those one-minute snapshots.

Compare: *exception history*, *extended history*, *fast history*.

See also: *history*, *point parameter*.

## standard point

*n*. Experion's inbuilt *points*. The types of *standard point* are:

- accumulator point
- analog point
- container point
- database point
- status point

See also: *accumulator point*, *analog point*, *container point*, *database point*, *status point*.

## state

*n*. The condition of a field *device* represented by feedback inputs. The state is usually given a descriptive name, like *Run* or *Stop*.

See also: *abnormal states*, *device*, *offline*, *online*, *safe state*, *transition*.

## static library

*n*. A *library* of static *function blocks* present in every *controller* that can change from release to release.

Compare: *system library*, *user library*.

See also: *ATL*, *CCL*, *controller*, *function block*, *library*.

## static Station

*n*. A *Station* that has a permanent connection to the *server*.

Compare: *multiple static Station*, *rotary Station*.

See also: *flex Station*, *multiple static Station*, *server*, *Station*.

## Station

*n*. Experion's main operator interface. *Station* presents information using a series of *displays*.

See also: *display*.

## Station Automation object model

*n*. The *Station Automation object model* provides the programming interface through which *scripts* control *Station* and its *displays*.

See also: *display*, *method*, *property*, *script*, *Station*.

## Station-based security

*n*. With *Station-based security*, a *Station* provides operator-level access to any user. However, users can move to a higher level if they know the appropriate password for that level on that *Station*.

Compare: *operator-based security*.

See also: *Station*.

## station flow meter

*n*. In Gas Operations Suite, a *station flow meter* represents a pair of flow meters that can be configured in serial or parallel. The station flow can be configured by the operator as either flow A, flow B, or flow A + flow B.

## station gas chromatograph

*n*. In Gas Operations Suite, a *station gas chromatograph* represents a virtual gas chromatograph that allows for one *manual gas chromatograph* and two *physical gas chromatographs* to be configured. The operator can then select which set of gas chromatograph component values to use for calculations.

Compare: *manual gas chromatograph*, *physical gas chromatograph*.

## Station identifier

*n*. Unique identifier for a workstation in the system.

See also: *Station*.

## status line

*n*. *Station's status line* provides an overview of your system's status. For example, a flashing red field indicates that there is at least one unacknowledged alarm.

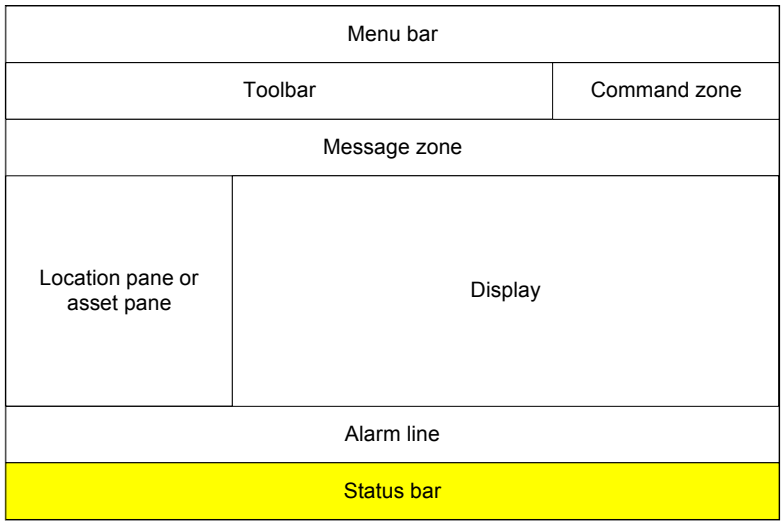



**Figure 4: Status line**

See also: *Station*.

## status point

*n*. A type of *standard point* that is used to represent discrete or digital field values.

See also: *dual-bit status point*, *standard point*.

## step

*n*. The *SCM* consists of a series of control steps called the *SCM-steps*. It is the smallest part of the sequential operation that is of interest to the operator. The *SCM-Step* executes output actions (typically commands to *Level 1* blocks) and defines other attributes such as step alarm time and step-specific exception conditions. An *SCM step block* is a dependent block and is contained within a *SCM block*.

See also: *block*, *SCM*, *step block*.

## step block

*n*. An *SCM Block*, which consists of a step name, number, output actions, and so on.

See also: *block*, *SCM*, *sequential control module*.

## strip gauge

*n*. A device used to establish the cutting depth of the *ControlNet* cable *strip tool* blades.

See also: *ControlNet*, *strip tool*.

## strip tool

*n*. A device used to make the multiple cuts to a *ControlNet* coaxial cable in order to attach connectors.

See also: *ControlNet*

## structured query language

Also known as *SQL*.

*n*. A database sub-language used in querying, updating, and managing relational databases.

See also: *open database connectivity*.

## subgroup

*n*. A group of a specified number of *observations*.

See also: *observation*, *subgroup period*, *subgroup range*, *subgroup size*.

## subgroup period

*n*. The data collection period for a *subgroup*.

Compare: *sample period*

See also: *subgroup*.

## subgroup range

Also known as *R*.

*n*. The difference between the maximum *observation* value and the minimum *observation* value within that *subgroup*.

See also: *observation*, *subgroup*.

## subgroup size

*n*. The number of *observations* in a *subgroup*.

See also: *observation*, *subgroup*.

## subnet

Also known as *link*.

*n*. A collection of *nodes* with unique addresses.

See also: *node*.

## substitute parameter name

*n*. A *parameter* name, beginning with the character `@` that is used as a place holder in expressions or *parameter connectors*. Substitute parameter names must be resolved to actual *parameters* before the *CM* or *SCM* they reside in can be loaded.

See also: *CM*, *parameter*, *patameter connector*, *SCM*.

## substituted name

*n*. A list of substituted names is maintained in each *ERDB* that is resolved when a *block* is instantiated or copied.

See also: *block*, *ERDB*, *operation name list*.

## supervisory control

*n*. The process of writing information to a *controller*. Experion enables both automatic and manual supervisory control.

See also: *controller*, *control processor module*, *mode*.

## supervisory ControlNet

*n*. This network carries supervisory messages between the Experion *server* and *controllers*, as well as *peer-to-peer* messages between *controllers*.

Supervisory ControlNets do not connect Experion operator *Stations* to Experion. This is accomplished using a *Local Area Network* (LAN) above the *server*.

See also: *controller*, *ControlNet*, *LAN*, *peer-to-peer*, *server*, *Station*, *supervisory control*.

## swap

*v*. An (almost) bumpless exchange of control. A swap is a control operation that results in a role reversal between a *primary chassis* and a *synchronized* or standby *secondary chassis*.

Compare: *switchover*.

See also: *chassis*, *primary*, *secondary*, *synchronization*.

## Switch configuration form

User interface representation of the core switch parameters. The switch configuration form presents the user with a set of property pages that can be used for configuring the switch.

## switch

*n*. A multiport device that moves *Ethernet* packets at full wire speed within a *network*. A switch may be connected to another switch in a *network*.

See also: *Ethernet*, *network*.

## Switch configuration file

File that is used to save users inputs in the Switch configuration form.

## Switch text file

Text file generated from the Switch configuration form that can be downloaded to a Switch.

## switchover

*v*. An immediate (possibly interrupted) exchange of control.

In a *redundant chassis pair* (RCP), it is the act of transferring the responsibility for the *assigned functions* from a *chassis* to a synchronized or standby *secondary chassis* due to the occurrence of either a failure, a fault, or the `Initiate Switchover` command.

The resulting state of *readiness*, should the switchover not be due to a failure, and depending on the reason for the switchover, could be either synchronized, synchronizing, or disqualified. A switchover will take place immediately upon detection of a fault or upon reception of a switchover command (versus at the end of a control scan).

Compare: *swap*.

See also: *assigned function*, *chassis*, *readiness*. *redundant chassis pair*, *secondary*

## symbol file (SYM)

*n*. Contains symbolic names that were used in the *DDL* file for the *FBAP* of the device. It is produced by the *Fieldbus Foundation tokenizer*.

See also: *DDL*, *FBAP*, *Fieldbus Foundation tokenizer*.

## synchronization

*v*. In *dual redundancy* control, the process of aligning the databases of two *devices*. Once two *devices* are synchronized, they must continue to track database changes, or else the *secondary* will revert to a disqualified state of *readiness*.

See also: *device*, *dual redundancy*, *readiness*, *secondary*.

## synchronize

*v*. The process of copying database information between *master* and *replica* to bring both copies up to date.

See also: *master*, *replica*.

## SYS

*n*. Acronym for system.

## System Administrator

*n*. Person responsible for defining the database containing user names, passwords, and other such security information that defines the permitted access to the system.

See also: *administrative privileges*.

## system interface

*n*. A high-level interface that allows Experion to exchange data with another *application* or subsystem without the need for separately defining *points* in Experion.

The database structure of a *point* on a *system interface* (called a *flexible point*) is determined by the *application* or subsystem, rather than by Experion.

See also: *application*, *flexible point*, *point*.

## system library

*n*. *Library* created by Honeywell . It can be either a *static library* or a *CCL* library.

See also: *CCL*, *library*, *static library*.

## System.mdw

*n*. The workgroup information file (`system.mdw`) supplied with *Microsoft Access*.

See also: *Microsoft Access*.

## system menu

*n*. Station's *system menu* is a specialized display that provides quick access to the other major displays within *Station*. It is similar to the *Table of Contents* of a book.

Click the button on the *Station* toolbar to call up the *system menu*.

See also: *Station*.

## system repository

Also known as *SR*.

*n*. The file where all Experion *server point* data is stored.

See also: *point*, *server*.

## system template

*n*. *Templates* defined by Honeywell and included in the empty *ERDB* that ships with the Experion software release.

See also: *ERDB*, *template*.

# T

## tab-delimited file

Synonym for *TSV*.

*n*. Filename extension assigned to text files containing tabular data (row and column) of the type stored in database fields. TSV files enable communication between database systems that use different formats. As the name indicates, individual data entries are separated by tabs.

Compare: *CSV*.

## tagged block

*n*. A *function block* with a system global name. *IOMs*, *CMs*, and *SCMs* are examples of *tagged blocks*.

See also: *CM/cm*, *function block*, *IOM, SCM*.

## tag

*n*Data is stored in the form of tags in ControlLogix processors.

## tag name

*n*. A unique identifier given to a *point* or an *asset*.

Compare: *item name*.

See also: *asset*, *point*.

## tap

*n*. The connecting *device* between adjacent *ControlNet* segments. *Tap* consists of two *BNC* connectors for trunkline cable connection, an integral 1-meter drop cable to which nodes are attached, and a *BNC* connector of *ControlNet Interface* (CNI) connection. Several physical models are available to accommodate different mounting layouts.

See also: *BNC*, *ControlNet*, *device*, *segment*, *terminator*, *T-tap*, *universal mounting bracket*, *Y-tap*.

## task

*n*. A usually-dormant *application* that resides on the *server*, waiting for a request. *Tasks* can be activated in several ways, for example: on a regular basis, or when a *status point* changes *state*. *Tasks* include the standard *server* programs and *custom applications*.

See also: *application*, *custom application*, *server*, *state*, *status point*.

## TCP/IP

*n*. Abbreviation for *transmission control protocol/internet protocol*. A standard network protocol.

## TDC 3000

*n*. Abbreviation for *Total Distributed Control* (TDC 3000), now known as the *Total Plant Solution System* (TPS).

See also: *TPS system*.

## TDR

Abbreviation for *time domain reflectometer*.

*n*. A photometric or electronic device for measuring the reflectances of light or other radiant energy. Used for testing coaxial cable for structural return loss. Tests with this device are more extensive and accurate than when performing similar checks for electrical shorts and continuity with an *ohmmeter*.

Compare: *ohmmeter*.

## template

*n*. A *block* or container that resides in the Honeywell *library*.

See also: *ATL*, *base template*, *block*, *library*, *meter template*, *root template*, *system template*, *template display*, *user-defined template*.

## template display

*n*. A standard *HMIWeb display* that is used as a *template* for creating other *displays*.

See also: *display*, *HMIWeb Display Builder*, *template*.

## terminal server

*n*. A *terminal server* allows you to connect several *controllers* and *Stations* to a *LAN* even though they only have serial or parallel ports. Most *terminal servers* also provide a range of serial connection options, such as RS-232, RS-422, and RS-485.

See also: *controller*, *LAN*, *Station*.

## terminator

*n*. A 75-*Ohm* resistor mounted in a *BNC* plug.

The *notification* generator is in the *CP–CEE* as well as the notification manager. The *Station* and *Control Builder applications* are also *notification* generators for operator change *events*.

See also: *application*, *BNC*, *CEE*, *Control Builder*, *CP*, *event*, *notification*, *ohm*, *Station*.

## test script

*n*. *Microsoft Test* is used to automate testing. *Test script* is a sequence of steps stored in a file that can be run without human intervention.

## thermocouple

*n*. A device consisting of two dissimilar metals that when heated produce a *DC* voltage. Used to measure temperature.

See also: *DC*, *VDC*.

## thread

*n*. An *SCM* execution path. Every *thread* can activate only one *SCM step* at a time, and it is stated that the *thread* is located in that particular *step*. The number of *threads* is always equal to the number of simultaneous active *SCM steps*. Multiple *threads* are initialized by the *parallel branch SCM block*.

See also: *block*, *parallel branch*, *SCM*, *step*.

## time domain reflectometer

Also known as *TDR*.

*n*. A photometric or electronic device for measuring the reflectances of light or other radiant energy. Used for testing coaxial cable for structural return loss. Tests with this device are more extensive and accurate than when performing similar checks for electrical shorts and continuity with an *ohmmeter*.

Compare: *ohmmeter*.

## timer

*n*. A programming mechanism for running *scripts* at regular intervals in *Station*.

See also: *script*, *Station*.

## T-nodes

*n.* A collective term for all Experion-TPS nodes, including *Experion Server-TPS*, *Experion Station-TPS*, and *Application Control Environment-TPS* nodes.

See also: *Experion Server-TPS*, *Experion Station-TPS*, *Application Control Environment-TPS*.

## torque

*n*. The force that produces or tends to produce rotation. A measure of rotation producing force.

## TP

*n*. Abbreviation for *trip point*.

## TPL file

*n*. Acronym for *user-defined template* configuration file.

See also: *user-defined template*.

## TPS Station

See *Experion Station - TPS*.

## TPS system

*n*. The *TotalPlant Solution System* (also known as TPS), formerly known as *Total Distributed Control* (TDC 3000).

See also: *Experion Server TPS*, *TDC 3000*, *TPS Station*

## transition block

*n*. The *transition block* defines a distinct process state that must be achieved before the *SCM* can advance to the control step (*step block*) so that it can perform the output actions specified. *Transition* consists of a transition name, input conditions, and so on.

See also: *SCM*, *step block*, *transition*.

## transition

*n*. Defines a distinct process state that must be achieved in order to allow the *SCM* to advance to the control step (*SCM-Step*) so that it can perform the output actions specified.

See also: *SCM*, *transition block*.

## tree view

*n*. One of the *child windows* within *Control Builder*.

See also: *child window*, *Control Builder*.

## trend

*n*. A *display* in which changes in value over time of one or more *point parameters* are presented in a graphical manner.

See also: *display*, *point parameter*.

## trend set

*n*. A set of *point parameter* historical data, usually shown as a graph on a standard *Station display*. *Trend sets* can be defined using *Quick Builder* or a *Station display*.

See also: *display*, *point parameter*, *Quick Builder*, *Station*.

## triggered I/O

*n*. *I/O* action that takes place immediately upon request.

See also: *I/O*.

## trunk

*n*. The bus or central part of a *ControlNet network*.

See also: *ControlNet*, *network*.

## TSV

Abbreviation for *tab separated values*.

Also known as *tab-delimited file*.

*n*. Filename extension assigned to text files containing tabular data (row and column) of the type stored in database fields. TSV files enable communication between database systems that use different formats. As the name indicates, individual data entries are separated by tabs.

Compare: *CSV*.

## T-tap

*n*. A type of *ControlNet* tap that provides two trunk-cable connectors, one on each side, along with a drop-cable exiting bottom, forming a "T" shape.

Compare: *Y-tap*.

See also: *ControlNet*, *segment*, *tap*, *terminator*, *universal mounting bracket*.

## turbine flow meter

*n*. In Gas Operations Suite, a *turbine flow meter* represents a physical *flow meter* that measures flow using a turbine. Experion uses the input measurements from the turbine flow meter instrumentation to calculate the AGA 7 turbine flow. This result can be reconciled against the calculated result from the flow computer in the field.

See also: *flow meter*.

## TWAIN

*n*. The de facto standard interface between software applications and image-capturing devices such as scanners. Nearly all scanners contain a TWAIN driver, but only TWAIN-compatible software can use the technology. The TWAIN specification was developed by the TWAIN Working Group, a consortium of industry vendors formed in 1992. The name is thought by some to be an acronym for the phrase “technology without an interesting name,” although the TWAIN Working Group maintains the name is not an acronym.

# U

## UCL

*n*. Abbreviation for *upper control limit*.

Compare: *LCL*.

## UCN

*n*. Abbreviation for *universal control network*.

## UDC

*n*. Abbreviation for *universal digital controller*.

## UDT

*n*. A Used Defined Tag (UDT) is a structure that stores a group of possibly different data types that function as a single unit, and serve a specific purpose. The structure comprises of one or more members, where each member can be:

- Atomic data type
- Another structured data type
- Single dimension array of an atomic or structure data type.

## UFBC

*n*. Abbreviation for *user files backup component*.

## UI

Abbreviation for *user interface*.

*n*. The portion of a program with which a user interacts. Types of user interfaces include command-line interfaces, menu-driven interfaces, and graphical user interfaces

See also: *CUI*, *GUI*.

## UIO

*n*. Abbreviation for *Universal Input/Output (UIO)* Module.

## ultrasonic flow meter

*n*. In Gas Operations Suite, an *ultrasonic flow meter* represents a physical *flow meter* that measures flow using ultrasonic pulses. Experion uses the input measurements from the ultrasonic flow meter instrumentation to calculate the AGA 9 ultrasonic flow. This result can be reconciled against the calculated result from the flow computer in the field.

See also: *flow meter*.

## unassigned item

*n*. *Items* that do not belong to (or are not associated with) an *asset*. For example, if you build a *point* but do not assign the point to an *asset*, the point is downloaded as an *unassigned item*. Likewise, if you delete an *asset* but retain the *points* that belongs to that *asset*, those *points* become *unassigned items*.

See also: *asset*, *item*, *point*.

## uniform resource locator

Also known as *URL*.

*n*. An address for a resource on the Internet. *URLs* are used by Web browsers to locate Internet resources. A *URL* specifies the *protocol* to be used in accessing the resource (such as `http:` for a *World Wide Web* page or `ftp:` for an *FTP* site), the name of the *server* on which the resource resides (such as `//www.whitehouse.gov`), and, optionally, the path to a resource (such as an *HTML* document or a file on that server).

See also: *FTP*, *HTML*, *HTTP*, *protocol*, *server*, *WWW*.

## universal mounting bracket

*n*. A single *device* used to physically attach *ControlNet T-taps* or *Y-taps* to a mounting surface.

See also: *ControlNet*, *device*, *segment*, *tap*, *terminator*, *T-tap*, *Y-tap*.

## unreasonable high alarm/unreasonable low alarm

*n*. *Alarms* configured for an unreasonably high value and an unreasonably low value for the *PV* of an *analog point*.

See also: *alarm*, *analog point*, *PV*.

## unsigned

*n*. A number format that includes only positive numbers.

Compare: *integer*, *real*, *signed*.

## unsolicited messaging

*n*. The process by which a *controller* initiates a communication session with the Experion *server* when there is a change in a *process variable*. *Unsolicited messaging* can substantially reduce communications traffic, especially if the values change infrequently.

Compare: *scanning*.

See also: *controller*, *process variable*.

## Upgrade Instruction Management Tool

*n*. The *upgrade instruction management tool*generates site-specific migration guide based on the selected migration guides.

## UPS

*n*. Abbreviation for *uninterruptible power supply*.

See also: *P/S*.

## URL

Abbreviation for *uniform resource locator*.

*n*. An address for a resource on the Internet. *URLs* are used by Web browsers to locate Internet resources. A *URL* specifies the *protocol* to be used in accessing the resource (such as *`http:`* for a *World Wide Web* page or *`ftp:`* for an *FTP* site), the name of the *server* on which the resource resides (such as *`//www.whitehouse.gov`*), and, optionally, the path to a resource (such as an *HTML* document or a file on that server).

See also: *FTP*, *HTML*, *HTTP*, *protocol*, *server*, *WWW*.

## user-defined parameter

*n*. A parameter of a SCADA point (accumulator point, analog point, and status point) whose name is defined by the user of the system. The parameter value can be obtained from one of the available configurable sources including memory, server file reference, or another parameter reference.

See also: *accumulator point*, *analog point*, *parameter*, *point parameter*, *scanning*, *status point*.

## user-defined template

*n*. Template that is created by Experion users by modifying a *meter template*, *system template*, another *user template*, or templatizing a strategy.

Compare: *root template*.

See also: *meter template*, *system template*, *template*, *user template*.

## user file

*n*. A *server* database table that is used for application-specific storage. Also called *user table*.

See also: *server*, *user table*.

## user group

*n*. A set of users.

## user identification

*n*. A *Control Builder* user is identified by entering the appropriate user account name as defined by the *system administrator*.

See also: *Control Builder*, *system administrator*.

## user interface

Also known as *UI*.

*n*. The portion of a program with which a user interacts. Types of user interfaces include command-line interfaces, menu-driven interfaces, and graphical user interfaces

See also: *CUI*, *GUI*.

## user library

*n*. *Library* created by user.

See also: *Honeywell library tree*, *library*.

## user manager

*n*. One of the *applications* within the *workgroup administrator utility*.

See also: *workgroup administrator utility*.

## user scan task controller

*n*. A *virtual controller*, which is represented by a *user table*. The table is scanned by the *server* as if it were a physical *device*.

See also: *controller*, *device*, *server*, *user table*.

## user table

*n*. A *server* database table that is used for application-specific storage. Also called *user file*.

See also: *server*, *user file*.

## user template

Also known as *user-defined template*.

*n*. Template that is created by Experion users by modifying a *meter template*, *system template*, another *user template*, or templatizing a strategy.

Compare: *root template*.

See also: *meter template*, *system template*, *template*, *user template*.

## USKB

*n*. Abbreviation for *universal Station keyboard*.

## USR

*n*. Abbreviation for *unit start request*.

## UT

Abbreviation for *Upgrade Tool*.

*n*. The *Upgrade Tool*checks the upgrade readiness of the nodes and its subsystems in an Experion system.

## utility

*n*. An *application*, run from a command line, that performs a configuration or maintenance function. For example, the *lisscn* utility.

See also: *application*.

# V

## VAC

*n*. Abbreviation for *volts, alternating current*.

Compare: *VDC*.

## vCenter server

*n*. The central point for configuring, provisioning, and managing virtualized IT environments.

The central administration service for VMware ESXi hosts that are connected to the management network. vCenter Server directs actions on the virtual machines and the virtual machine hosts (the ESXi hosts).

vCenter Server runs on the management node and connects to the ESXi hosts through the management network.

## vCPU

An acronym for *virtual CPU*.

## VCR

Abbreviation for *virtual communications relationship*.

*n*. Sets up communications for host to talk to a *device*. It acts like a speed dialer to provide for the transfer of data between *applications*. *Foundation Fieldbus* describes these three types of *VCRs*:

- Publish/Subscribe
- Client/Server
- Source/Sink

See also: *application*, *device*, *Foundation Fieldbus*.

## VDC

*n*. Abbreviation for *volts, direct current*.

Compare: *VAC*.

## VFD

Abbreviation for *virtual field device*.

*n*. The management or *function block application process* (FBAP) section of a *device* that is addressable by a *VFD* tag.

See also: *device*, *function block application process*.

## VGA

*n*. Abbreviation for *video graphics array*.

## virtual communications relationship

Also known as *VCR*.

*n*. Sets up communications for host to talk to a *device*. It acts like a speed dialer to provide for the transfer of data between *applications*. *Foundation Fieldbus* describes these three types of *VCRs*:

- Publish/Subscribe
- Client/Server
- Source/Sink

See also: *application*, *device*, *Foundation Fieldbus*.

## virtual controller

Also known as *user scan task controller*.

*n*. A *virtual controller*, which is represented by a *user table*. The table is scanned by the *server* as if it were a physical *device*.

See also: *controller*, *device*, *server*, *user table*.

## virtual field device

Also known as *VFD*.

*n*. The management or *function block application process* (FBAP) section of a *device* that is addressable by a *VFD* tag.

See also: *device*, *function block application process*.

## virtual flow meter

*n*. In Gas Operations Suite, a *virtual flow meter* does not have a corresponding physical *flow meter* in the field. Instead, the flow is calculated on the server by adding or subtracting the measured flows from other meters.

See also: *flow meter*.

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## virtual machine

*n*. A software implementation of a physical computer, which runs an operating system and applications.

## virtual network

*n*. A virtual local area network that is shared by virtual machines running on the same host.

## virtual switch

*n*. A virtualized network switch that manages network traffic between virtual machines and physical network adapters on an ESXi host.

## VM

*n*. Acronym for *virtual machine*.

## vNIC

Acronym for *virtual NIC*.

## voltage threshold

*n*. In a *pulse input module* (PIM), the signal (applied to the screw terminals) is determined to be *high voltage* or *low voltage* based on the *voltage threshold*. Parameter name is *VOLTAGE*.

See also: *pulse input module*.

## vSphere Client

Application that remotely connects to the vCenter Server or ESXi from a Windows computer that is connected to the management network.

## vSwitch

An acronym for *virtual switch*.

# W

## WAN

Abbreviation for *wide area network*.

*n*. A general term to refer to a piece of a *network* and its components that are used to interconnect multiple *LANs* over a wide area.

See also: *LAN*, *network*.

## wide area network

Also known as *WAN*.

*n*. A general term to refer to a piece of a *network* and its components that are used to interconnect multiple *LANs* over a wide area.

See also: *LAN*, *network*.

## Windows NT

Also known as *WinNT*.

*n*. An operating system released by Microsoft Corporation in 1993. The Windows NT operating system, sometimes referred to as simply NT, is the high-end member of a family of operating systems from Microsoft. It is a completely self-contained operating system with a built-in graphical user interface. Windows NT is a 32-bit, preemptive multitasking operating system that features networking, symmetric multiprocessing, multithreading, and security.

## windup status

*n*. *Anti-reset windup status* (also known as *windup status*) is used by *PID*-type *function blocks* to turn integral control on or off.

Every Regulatory Control block maintains a windup status variable for each of its initializable *inputs* and *outputs*. The status indicates how raising or lowering the associated *input* or *output* will affect the final *output* of a cascade control strategy.

See also: *Control Builder*, *controller*, *function blocks*, *input*, *output*.

## WinNT

Acronym for *Microsoft Windows NT™*.

*n*. An operating system released by Microsoft Corporation in 1993. The Windows NT operating system, sometimes referred to as simply NT, is the high-end member of a family of operating systems from Microsoft. It is a completely self-contained operating system with a built-in graphical user interface. Windows NT is a 32-bit, preemptive multitasking operating system that features networking, symmetric multiprocessing, multithreading, and security.

## WINS

*n*. Abbreviation for *Windows Internet Name Service*.

## Wire

*n*. The graphical representation of a connection between two *connectors*. The *wire* is a line with multiple vertices that connects two *pins* on a *block symbol*.

See also: *block symbol*, *connector*, *pin*.

## workgroup administrator utility

*n*. A standard suite of applications supplied with the *Windows NT* operating system. The applications enable you to maintain users, groups, and the security assigned to both.

## workspace

*n*. A workspace is a *Collaboration Station display* created in *HMIWeb Display Builder* that represents the facility.

See also: *Collaboration Station*, *display*, *HMIWeb Display Builder*.

## workspace toolbar

*n*. The workspace toolbar on the *workspace* of a *Collaboration Station* provides access to help, settings, content that is not available via a *radial menu*, and radial menu edit mode.

See also: *Collaboration Station*, *workspace*, *radial menu*.

## WS

*n*. Abbreviation for *work station*. NT is a term that is also used.

## WSE

*n*. Abbreviation for *Westinghouse Security Electronics*.

## WWW

Also known as *w3*, *W3*, *Web*.

*n*. Abbreviation for *World Wide Web*.

# X

## X-BAR

*n*. The *mean* of the *subgroup*.

See also: *mean*, *subgroup*, *X-BAR-BAR*.

## X-BAR-BAR

*n*. The *mean* of the *X-BAR* values.

See also: *mean*, *X-BAR*.

## XPM

*n*. Generic term used to represent the TDC 2000 Process Manager (PM), Advanced Process Manager (APM), and *High-Performance Process Manager* (HPM) family of *controllers*.

See also: *controller*, *HPM*.

# Y

## Y-tap

*n*. A type of *ControlNet* tap that provides to trunk-cable connectors exiting the top, along with a drop-cable exiting bottom, forming a "Y" shape.

Compare: *T-tap*.

See also: *ControlNet*, *segment*, *tap*, *terminator*, *universal mounting bracket*.

# Z

## zoom region

*n*. A zoom region is an area on a *Collaboration Station workspace* that can be enlarged with a single tap.

See also: *Collaboration Station*, *workspace*.

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