Glossary

A

Action Code

An action code is a code that can be associated with a description of a particular solution of a calibration failure.

Apparatus

An apparatus is a wiring entity that pertains to different types of wiring devices. These are multi-purpose wiring devices that accept wires and signals, for example, barriers, opto-couplers, relays, repeaters, isolators, and so forth.

Area

The middle default level of the plant hierarchy. The Domain Administrator can change the plant hierarchy structure and also apply user-defined plant hierarchy level names instead of the defaults (plant, area, and unit). After saving the plant hierarchy structure, the levels become permanently fixed for that domain. The level names remain flexible.

As Found

In the **Result Points** pane of the **Calibration Data Entry** window, you type instrument values that you test before calibration in the **As Found** field. If these values exceed the permissible error, the software highlights them in red.

As Left

In the **Result Points** pane of the **Calibration Data Entry** window, you type instrument values that you observe after calibration in the **As Left** field. If these values exceed the permissible error, the software highlights them in red and prompts you to fill out a work request.

AsBuilt

AsBuilt is the main body of data in an Operating owner domain. AsBuilt contains data that you can use as a basis to specify the changes you need to make in the database. AsBuilt data can include engineering data that was integrated on completion of projects.

Audit Trail Repository

The audit trail repository contains time data (year, month, day, hour, minutes, and seconds) about each operation performed in a particular domain.

Auto-Wiring

Auto-wiring is a SmartPlant Instrumentation feature that allows you to make automatic batch connections between terminal strips, and to effect cross wiring using various types of cable.

B

Binder Package

A Binder package is a collection of documents that need to be maintained together. Two types of Binder packages are available: Specification Binder packages and General Document Binder packages. You create and manage Binder packages in the Document Binder module.

Block Association Method (Automatic)

Enables you to associate blocks with instrument types. Using this method, you first assign one or more existing blocks to a specific instrument type, and then apply these blocks, so that in the **Loop Explorer,** they are automatically associated with all tag numbers belonging to a particular instrument type. These blocks are marked in green:  .

Block Association Method (Manual)

Enables you to associate blocks with tag numbers. Using this method, you manually associate one or more blocks with a specific instrument tag. In the **Loop Explorer**, manually associated blocks are marked in red:  .

Breakdown Maintenance

The SmartPlant Instrumentation breakdown maintenance features deal with the malfunction of equipment. The breakdown maintenance process starts when a member of the technical staff issues a work request. The actual maintenance is mediated by a repair form, which is issued by the maintenance supervisor or foreman.

Building Section

A building section is a cable routing section that passes through a building, and does not contain positions.

By Category

This loop drawing generation method enables you to group panels in SmartLoop drawing sections according to the panel category. For example, when generating a drawing using this method, if the software identifies a DCS panel, it displays the panel in the default CONTROL SYSTEM section.

This method is always applied in batch generation when you select the SmartLoop method in the **Generate Loop Drawings** dialog box.

By Custom Symbol

This loop drawing generation method is used for generating Enhanced SmartLoop reports where you can define your own symbols for SmartPlant Instrumentation entities and place these symbols on a drawing sheet wherever you require. You can also add other entities and macros to the drawing. When you next generate an Enhanced SmartLoop report for the specified loop, the symbols appear on the sheet exactly where you positioned them.

By Location

This loop drawing generation method enables you to group panels in SmartLoop drawing sections according to the panel location specified in the Wiring module. When using this method, if no panel location is defined, the software assigns the panel to the appropriate drawing section according to the panel category and applies the category name to that section.

If you add a macro attribute to an entity on a drawing, the software displays this attribute automatically on all of the drawings assigned to the By Location method in the entire domain. If you want to display a macro attribute only on specific drawings, use the By Location with Setting method.

By Location with Setting

This loop drawing generation method is useful if you want to display macro attributes only on specific SmartLoop drawings with panels grouped in drawing sections according to the By Location method (according to the panel location specified in the Wiring module).

For this method to take effect, you need to assign source loop numbers to a particular setting in the **Loop Diagram Settings** dialog box.

C

Cable Configuration

Cable configurations are groups of pre-defined settings for creating a cable. The settings include cable type, type and number of cable sets, and the wire properties within each cable set. You must select a cable configuration when creating a new cable.

Cable Drum

Cable drum is a SmartPlant Instrumentation feature that allows you to optimize existing and future cable allocations drawn from the various pulling areas in your plant.

Cable Routing

Cable routing is a Wiring module feature that provides the ability to set up a flexible, modular model of the cable routing in your plant.

Cable Set

A cable set (pairs, triads, and so forth) is a group of wires within a cable.

Cable Type Dependency

Cable type dependency is a method of managing cable data in the Wiring module. Using this method, you can create plant cables only by copying default cables, where each default cable represents a specific cable type. As a result, certain cable properties are fixed because they are cable type-dependent.

Calibration Module

The Calibration module enables you to manage calibration events for the instruments in your plant. For each instrument, you specify values and permitted ranges for the calibration points, trip point values, and alarms.

Case

A case is a set of process data values for a given tag or line. SmartPlant Instrumentation supports multiple cases per tag or line in the Process Data module and multiple cases per tag in the Calculation module.

Claiming Entities

A procedure that involves assigning entities to a project using the AsBuilt data as a source. When claiming an entity, you can set the software to claim the associated entities as well.

Common Pages

In a multi-tag specification, the common page tab folders display the data common to all the instruments associated into the specification.

Complex Analyzer

A complex analyzer is an instrument that can measure physical and chemical properties in a multi-stream, multi-component process flow. You define tags for each stream, and for each stream tag you can define multiple component/property tags. A gas chromatograph is an example of a complex analyzer.

Component Tag

When defining a complex analyzer, a component tag is a unique tag that you create to identity a fluid component within a given stream.

Connector Type

A connector type defines pin configuration and other properties. When you define connectors for a cable, selecting a connector type copies these properties for the cable connector.

Configuration Data

Configuration data is background data that includes default panels and cables, specification forms, instrument types, and various supporting table data.

Conventional Cable

A conventional cable is a cable that is not a fieldbus home-run cable nor a telecom cable. (A fieldbus spur is a conventional cable.)

Conventional Tag Numbers

Conventional tag numbers are instruments that do not belong to Fieldbus, Electrical, Telecom, or Typical tag classes.

Cross-Wiring

Cross wiring allows you to connect two terminal strips by using a cross-wiring cable. You can cross-wire terminal strips that belong the same panel or to two different panels.

Current Item Library

The Current Item Library is the plant default Item Library. The information is filled in to pick out parts of a specific hook-up. You can also enter the required description, material, rating, and so on to provide as much information as possible for the Bill of Material that you can create basing on this data.

Custom Fields

Custom fields are database fields for which the Domain Administrator defines labels on the plant level. If the Domain Administrator enables process data custom fields, you can then enter values for these fields in process data sheets. For calibration custom fields, you enter values in the Calibration module. For all other custom fields, you enter values in the relevant browser views, where you can also edit the default labels.

Custom Page

A custom specification page is any page that is not identical with a SmartPlant Instrumentation library page.

Custom Table

A custom table is a supporting table that the Domain Administrator activates and names at the plant level. Custom table values are available for existing and new tags, with the option of setting default value by instrument type. You can also add the **Name** field of active custom tables to specifications.

Custom Title Block

A custom title block is a specification or report title block that the user creates or modifies in Sybase InfoMaker for import into SmartPlant Instrumentation.

Custom Title Block Assignment Methods

When making or modifying domain definitions, the System Administrator selects the appropriate method to be used in the Specifications module. The methods are:

- **Standard** (used in all modules) — Allows the Domain Administrator to select one specific custom title block to be assigned to all specifications. When this method is used, the software hides all the title block assignment options that are available in the Specifications module.
- **Special** (used in the Specifications module only) — Allows SmartPlant Instrumentation users to assign individual title blocks to any specification, using the title block assignment options available in the Specifications module.

Customized Form

A customized specification form is any form that is not identical with a SmartPlant Instrumentation library form.

D

Default Dimensional Data

Default dimensional data is typical DDP data that you copy to working data for your preliminary instrumentation design. You can modify default data according to the actual vendor dimensional data received from manufacturers.

Default Layout

The default layout is a layout that you select per enhanced report type in the **Preferences** dialog box. You can assign the default layout to all SmartPlant Instrumentation entities for which you can generate enhanced reports. The default layout consists of a template .sma file, a title block, and the diagonal wire representation. Also, you can add a user-defined logo to the layout . If you do not select any template in the **Preferences** dialog box, the software uses the NORMAL.SMA file when you generate enhanced reports.

Default Macro Function

A default macro function is a function you apply to all the existing SmartPlant Instrumentation macros at a database level. After setting a macro function as default in the SmartPlant Instrumentation environment, on a generated drawing, the software applies the same function to all the retrieved values automatically. You can only specify one default macro function in the database.

Default Plant

The default plant is the plant that is supplied with SmartPlant Instrumentation (displayed as DEFAULT in the **Plant Hierarchy Explorer**). This plant hierarchy has three levels: Plant, Area, and Unit, which are fixed and cannot be changed. The System Administrator can switch the use of the default plant on or off when making or modifying domain definitions.

You can use the default plant as you would any other plant that you create that is, you can add or delete units, claim entities if the domain type is Operating owner, generate documents, make revisions, and so forth.

Default Sub-Library

Enables you to assign any number of hook-up items and hook-ups. When associating tag numbers with hook-ups that are assigned to the default sub-library, you can use any unassigned tag numbers. The software creates a default sub-library for every item library that you add in SmartPlant Instrumentation. If you do not use any other sub-libraries, the default sub-library becomes the current item library in your plant. You cannot use the default sub-library for pipe spec assignment.

Design Drum

A cable drum in design mode, which has not yet been purchased. It is available for cable drum optimizations or manual assignments. You can delete a design drum or modify its length.

Device Cable

A device cable is a field instrument cable.

Device Panel

A device panel is an instrument that has wiring and instrument tag information. Most device panels are field devices, such as transmitters, transducers, and sensors.

Diagnostic Code

A diagnostic code is a code that can be associated with a description of a particular cause of a calibration failure.

Dimensional Data for Piping (DDP) Module

Enables you to store and manage data regarding the physical dimensions of the instruments on the plant. You fine-tune your DDP through the interplay of default and vendor data. You can export DDP data to an external 3-D piping design application, or use module deliverables for piping design.

Document Binder Module

The Document Binder module is used to gather specifications and other related SmartPlant Instrumentation documents that need to be maintained together. Each collection of documents is known as a Binder package. You can perform a collective update for all the documents in a single Binder package and assign them the same revision number.

Document Numbers (Default)

A default document number is a number that the software assigns to a document that you create, provided that the Domain Administrator has not defined a document number naming convention for that document. The default document numbers for each document type are as follows:

- Instrument specification: <tag number>-SP
- Calculation sheet: <tag number>-CL
- Process data sheet: <tag number>-PD
- Dimensional data sheet: <tag number>-DDP
- Loop drawing: LD <loop number>

For other documents, the software only creates document numbers when naming conventions exist.

Domain

Domain is a term used in SmartPlant Instrumentation to define the working environment for your instrumentation activities. The environment can be either a project or an operating facility.

Domain Administrator

The person responsible for managing the resources that were defined by the System Administrator. The functions of the Domain Administrator include defining projects in a working environment that is an operating facility or manage a working environment which is defined as an engineering company, granting access privileges for users, defining naming conventions, plant hierarchy levels, custom fields, and so forth.

Drawing Type

Used for CAD drawings. Allows you to set the number of loop drawing pages and determine how the software displays loop drawing names, descriptions, drawing blocks, and title blocks in generated CAD drawings.

Dummy Entity

A dummy entity is an entity that is displayed in a project but it has not been claimed for the project. A dummy entity is always associated with another entity that has been claimed for a project. For example, if you claim tag numbers without the associated loop, in the project, this loop appears as a dummy entity.

Dummy entities are view-only and marked by a specific color. When merging project and AsBuilt data, the software ignores the dummy entities.

E

Electrical Tag

Electrical tags are the 'I/O Signals' that you download from SmartPlant Electrical to wire in SmartPlant Instrumentation. They specify and relate to I/O signals such as motor run/stop/fault status and start/stop commands. You need electrical tags for the interface between the two applications.

Engineering Company

Engineering companies are usually contracted to design and build plants based on process information. These are 'grass-roots' projects that usually involve one set of data which may be revised extensively during the life cycle of the plant. In this case, the data for each project is maintained within a single database schema. Once a plant is operational, the domain type can be changed to Operating owner if required, and the owner can perform the necessary maintenance and modernization.

Entity

An entity is a component of your instrumentation data. Entities include loop and tag numbers, wiring panels, terminal strips, terminals, cables, and so forth.

Entity Definitions Document

A DeltaV entity definitions document allows you to verify that required DeltaV objects exist in SmartPlant Instrumentation with DeltaV-compatible fields. These documents are in the XML format, which is used to typify and transfer data.

Entity Registry

The Entity Registry is a database table that can hold references to all SmartPlant Instrumentation entities and records with information about user operations such as deleting, inserting, updating the domain data and so forth.

External Revision

An external revision is a Process Data module revision that applies for an entire <unit>, and is useful where you have made changes to process data that affects the <unit> as a whole. You can only work with external revisions in the Process Data module.

F

Fluid Component

A fluid component is a chemical or physical property that you specify for analysis by a complex analyzer.

Form

A specification form is a template for single-tag specifications. A form is based on one or more specification pages.

Form Data Template

A form data template stores data that you can copy to specifications. Your Specifications module preferences and specification data filter settings determine which fields the software actually copies.

Form Note

In the Document Binder module, you use a form note — based on a form note template — to comment on specifications based on a given form. A form note is specific to a given Specification Binder package.

Form Note Template

In the Document Binder module, a form note template contains text that becomes the initial text for all form notes based on that template. A form note template is available in any Specification Binder package for instrument specifications based on a given form.

Format

A specification format is a template for multi-tag specifications, which display values constant for all the tags on the common pages, and display values that vary from tag to tag on the **Multi-Item List** tab folder. A format is based on a specification form.

G

General Note

A general note is a note that relates to a Binder package as a whole. You create a general note in the Document Binder module **Note Editor**.

General Signal

A general signal is a signal that you create and then link with tag signals. You can use a general signal to treat several tag signals as a group that share common wires.

Global Path

A global path is a root path that applies whenever any user specifies a new path in SmartPlant Instrumentation. After the System Administrator sets a global path, SmartPlant Instrumentation can only specify new paths within the global path folder. In boxes provided for new path definitions, the software only displays path settings as relative path strings. For example, if the global path is \\APP_SERVER\SMARTPLANT\INSTRUMENTATION\, and a user navigates to the PSR folder, the users' path is displayed as \PSR.

Global Revision

Global revisions enable you to add, update, upgrade or delete revisions in batch mode for entities in any of the following modules: Specifications, Process Data, Calculation, Loop Drawings, Hook-Ups, Dimensional Data for Piping, and Wiring.

Governing case

The governing case is the set of process data values for a line or a tag that you select as the active case. If for a given line or a tag you create more than one case, SmartPlant Instrumentation requires that you select a governing case. If you define a single case, the software automatically sets it as the governing case.

H

Home-Run Cable

A home-run cable is the main communication highway between devices on a fieldbus network. A home-run serves the spurs in a given segment, and has a terminator at either end.

Hook-Up Type

A hook-up type is a common name of group of hook-ups that share distinguishing characteristics common to one kind of instrument. These characteristics set one hook-up type apart from another type, for example Flow, Temperature, Level, and so forth.

I

I/O Assignment

The I/O assignment feature enables you to assign an I/O card channel to a specific tag number. The first stage of I/O assignment is associating (coupling) an instrument tag with a control system tag. The second stage is assigning a channel to the coupled pair.

Instrument Criticality

Tag criticality is a user-defined process classification of instruments, for example process safety system, environmentally vital system, quality system, and so forth. Tag categories help you select groups of tags when performing Maintenance module procedures.

Instrument Type Profile

Instrument type profile is a group of default settings that allow you to create new tag numbers with certain predefined properties. For example, you can create new tag numbers associated with a certain specification, system I/O type, default device panel, and so forth. You define an instrument type profile for each instrument type.

L

Library Form

Library specification forms are the forms available by default when you open the **Form Editor** after initializing a domain.

Library Pages

Library specification pages are the pages available by default when you open the **Page Editor** after initializing a domain.

Line Component

Line components are fluid components that you select and define for a given line. When you prepare a line component table for a given line, you need to include all possible fluid components for all of the streams that will be carried by the line. In the process of defining a complex analyzer, you link analyzer stream component tags with fluid components.

List-Type Report

A list-type report is a report that displays a list of entities. Examples of such reports are supporting-table reports and browser views.

If you created a report for a list of entities using a browser view style, or entity search parameters, the software applies a unique document number and revision to this report according to the specified browse view style or to the entity search parameters. For example, in the **Cable Selection for Cable Schedule Report** dialog box, after creating a report for a list of cables filtered according to search parameters, the software applies the unique document number and revision only when selecting the same search parameters again.

You cannot apply global revisions to reports belonging to the list report type because for a global revision, you can only use reports generated for a specific entity.

Local Revision

A local revision is a revision that you add to a specific generated report or drawing. Also, you can add local revisions to some SmartPlant Instrumentation entities, to cables in the Wiring module, for example. You add local revisions to reports in the report print preview and to entities in the dialog boxes where you can edit the entity properties.

Local Signal

A local signal is a signal that does not originate in a device panel (field instrument); you create a local signal within any other kind of panel. For example, in an instrumentation electrical interface cabinet, a local signal starts at a terminal relay.

Locked Drum

A purchased cable drum from which cables were cut. SmartPlant Instrumentation does not allow you to delete a locked drum or to modify its length. A locked drum is not available for optimization or for manual assignment.

M

Macro Function

A macro function can be described as a set of commands associated with a specific macro. This set of commands determine how the software manipulates the target data string. A macro function can retrieve the entire target data string or just a part of the data string and display this string on the generated drawing. You can apply different macro functions to the same macro where this macro appears more than once on a loop drawing.

Maintenance Module

You use the Maintenance module to document the maintenance of instruments in your plant. You plan preventive maintenance in the Instrument Index module and record implementation details in the Maintenance module. You plan and implement breakdown maintenance entirely within the Maintenance module.

Master Tag

In a multi-tag specification, you select one tag to be the master tag. The pages upon which the master tag is based become the common pages for all of the tags in the specification. You can change master tags within a multi-tag specification.

Multi-case

A tag or a line for which you defined multiple cases.

Multi-Drawing

A CAD loop drawing type used to display blocks on more than one page, where each page has an individual drawing name, description, and title block.

Multi-Page Drawing

A CAD loop drawing type used to display drawing blocks on more than one page, where all the pages share the same drawing name, description, and title block.

Multi-Page Form

A multi-page specification form is a form based on more than one specification page. Adding pages to a form enables you to build more comprehensive specifications. You can base a format on a multi-page form or on a single-page form.

Multi-Tag Specification

A multi-tag specification displays values constant for all the tags on common pages, and displays values that vary from tag to tag on the **Multi-Item List** tab folder. A multi-tag specification is based on a specification format.

N

Non-List-Type Report

A non-list-type report is a report that is generated for a specific main entity. Such a report displays the main entity data and associations. An example of a non-list-type report is a panel-strip report, which you can generate for a specific strip. Such a report can display the main strip, two additional strips, numerous cables, and wires.

O

Operating Owner

The Operating owner domain is a domain with AsBuilt functionality. The database is partitioned into several schemas: a single schema for AsBuilt and separate schemas for projects.

An operational plant exists and most of the activities are concerned with routine maintenance or plant modernization (revamps). To facilitate plant modernization, you can create a number of projects within an Operating owner domain. Each project is defined for one plant only, and a plant can have several associated projects.

P

Page

A specification page is the primary template for a SmartPlant Instrumentation specification. You associate pages into a specification form, which is the immediate template for single-tag specifications.

Panel

Panel is a general term that includes various panels or cabinets to which wires are connected. Examples are: PLC (programmable logic controller), DCS (distributed control system), marshaling rack, junction box (fieldbus and generic), device panel, and multi-purpose cabinet.

Panel (Telecom)

The SmartPlant Instrumentation telecom enhancement supports the following panels: field device (plug-and-socket), junction box, distribution frame, splice, patch, and equipment.

Panel-Routing Distance

In cable routing, the panel-routing distance is the cable length between an instrument and the beginning of its routing section.

Password

Your SmartPlant Instrumentation logon password is initially supplied by the System Administrator. You can change your password after entering SmartPlant Instrumentation for the first time. If you have changed your password, you must inform the System Administrator of such a change because the System Administrator is able to override any password changes that you make.

Per Loop

A loop drawing generation method that enables you to generate Enhanced SmartLoop drawings per loop, so that all the signals appear on a single loop drawing.

Per Signal

A loop drawing generation method that enables you to generate Enhanced SmartLoop drawings per signal, so that each signal path appears in a separate drawing.

Plant

Default level 1 of the plant hierarchy. The Domain Administrator can change the plant structure and also apply user-defined plant hierarchy level names instead of the defaults (plant, area, and unit). After saving the plant structure, the plant hierarchy levels become permanently fixed for that domain. The names of the actual plant hierarchy items remain flexible.

PM (Preventive Maintenance) Activity

A PM activity is a set of preventive maintenance tasks listed in the order that they have to be carried out. A PM activity also contains additional information, such as the required calibration values, the down/repair time, the interval and frequency of each PM job, and so forth.

PM (Preventive Maintenance) Attachment

A PM attachment is an external document (a drawing or a text file) that contains a set of instructions provided to a maintenance crew.

PM (Preventive Maintenance) Code

A PM code is a unique identifier associated with a given preventive maintenance procedure.

PM (Preventive Maintenance) Task

A preventive maintenance task is a set of instructions associated with an attachment. PM tasks make up a PM activity.

PowerBuilder Units

The dimensions of dialog boxes, windows, and controls in SmartPlant Instrumentation are defined using PowerBuilder units (PBUs). One PBU equals 1/32 of the current system font height currently used by the Windows system.

Preventive Maintenance

The preventive maintenance features enable the user to schedule and carry out periodic maintenance tasks and procedures. You schedule preventive maintenance from the Instrument Index module and record the results of the activity in the Maintenance module.

Process Function

A classification of instrument types grouped according to their process measurement, for example level, pressure, temperature, and so forth.

Project Administrator

The Project Administrator is a SmartPlant Instrumentation user who has full PROJECT DEFINITION access rights granted by the Domain Administrator. The Project Administrator can enter the Administration module and is responsible for defining the scope of entities for use in projects and selecting the entities for merging back into AsBuilt.

Pulling Area

Pulling areas are locations within a plant where cable drums are concentrated. For each pulling area, you use the cable drum feature to optimize cable drum assignment of the cables required in that area.

Purchased Drum

A cable drum that was already purchased. Although optimization or manual assignment can assign additional cable to a purchased drum, you cannot delete a purchased drum or modify its length.

R

Repair Form

Issuing a repair form is the second stage of breakdown maintenance, following the work request. In general, the maintenance supervisor or foreman issues a repair form. It records the nature of the problem, the repair date, the work group performing the maintenance, down time, repair time, and so forth.

Report Title Block

A report title block is a.psr file that combines lines, database fields, and a logo. In Sybase InfoMaker, you can modify or create report title blocks, which you then make available to SmartPlant Instrumentation. The Domain Administrator assigns title blocks to report types. This process allows for flexibility in setting title blocks for the various reports.

Revision Management Per Document

Allows you to apply a unique document number and revision to a specific report generated for a specific entity, and also allows you to make global revisions.

For example, if you create two reports for a particular strip: a report with adjacent connections and a report without adjacent connections, the document and revision numbers of the two reports cannot be shared. Likewise, if you create two panel-strip reports for two different strips, each report has a unique document number and revision. As a result, the document number and revision added from the report print preview is different from the document number and revision added in the **Revisions** dialog box opened from the entity properties dialog box.

Revision Management Per Entity

Allows you to share the document number and revision in documents created for a specific entity and in all reports generated for that entity. This means that the document number and the revision number that you apply to an entity in the entity properties dialog box are the same as in a print preview of any report generated for this entity.

For example, after creating a revision for a specific strip from the properties dialog box, the document number and revision number are assigned to the revision opened from a print preview of any report generated for this strip (panel-strip report with or without adjacent connections, I/O assignment report, and so forth).

Routing Section

Cable routing sections are conduits that convey the cables in your plant. They subdivide into two categories — trunk and building. You divide a trunk into positions to separate different types of cables, such as instrumentation, power, communication, and so forth.

S

Segment

A fieldbus segment is a section of a fieldbus network that contains a group of devices physically connected by a single pair of wires to a host control device.

Segment-Wide Parameter Profile

A segment-wide parameter profile is a set of parameters that determine the design rules for a given fieldbus segment. These parameters include maximum number of devices allowed per spur and per segment, maximum number of function blocks, and electrical parameters.

Sequence

Signal sequence values are sequential numbers assigned consistently to all of the wires within a given wire group along the signal path of the wire group.

Session

A session contains all the definitions required for merging data, including source database connection parameters, matching between source and target plant hierarchy items, selection of items for merging, and merge options.

Signal

An item type in SmartPlant Electrical that is used for mediating between SmartPlant Electrical and SmartPlant Instrumentation. After performing wiring connections in SmartPlant Instrumentation, it is possible to retrieve the host information back to SmartPlant Electrical, where it appears as read-only properties of the signal.

Signal Level

A unique identifier for each wire in a wire group, which is maintained along the entire connection path.

Simple Analyzer

A simple analyzer is an instrument that measures one physical or chemical property in a single-stream process fluid, for example, a common application of a pH analyzer.

Single Page Drawing

A loop drawing type used to display all the drawing blocks and the title block on a single drawing page.

Spec Data Dictionary

A window in which you create tools that allow you to manipulate a given form. You can create specification data filters, which function automatically when you copy data to a specification from an external file or from another specification. You also build form browser templates, which serve as the basis of form browsers in the Browser module.

Specification Custom Fields

Specification custom fields (spec_udf's) are fields that become available for a given tag after you generate a specification for that tag. In the **Page Editor**, you activate custom fields for a page by including them in that page. After you include the page in a specification form, these fields become available for tags assigned to specifications that you base on that form.

Specification Title Block

A specification title block is a library or customized .psr file that combines lines, database fields, and a logo. You incorporate a title block into a specification form in order to display the relevant information in specifications based on that form.

Standard Macro Function

A standard macro function is a function that is supplied with SmartPlant Instrumentation and contains a set of predefined commands. You can associate a standard function with SmartPlant Instrumentation macros or use a combination of standard functions to create user-defined macro function. Note that you cannot change the code of standard macro functions.

Stream Tag

A stream tag is a unique tag that you create for a given complex analyzer to identify a given stream.

Strip Terminal Configuration

A strip terminal configuration is a group of settings for creating a terminal strip. The settings include the total number of terminals and the terminal numbering system. You select a strip terminal configuration when creating a terminal strip or an I/O card.

Supporting Table

Supporting tables are dialog boxes that allow you to create, delete, and edit the properties of various SmartPlant Instrumentation entities. Some supporting tables control the content of drop-down lists in other dialog boxes.

System Administrator

The person responsible for defining and managing the database infrastructure, creating the list of users including the Domain Administrator, setting audit trail options, setting up database security, generating certain reports, and managing user sessions on multi-user versions.

T

Tag Category

A tag category is a user-defined instrument classification that enables you to categorize instruments by their function or any other way you deem fit, for example, critical system, quality assurance, safety related, process, air-operated, electrically operated, and so forth.

Tag Signal

A tag signal is a signal associated with a tag number, and is generated in a device panel or locally within other types of panels. A tag signal can also be created as a result of I/O assignment.

Terminal Strip

A terminal strip is the element in panels that contains terminals. A terminal strip with I/O functionality is called an I/O card.

Title Block

A title block is a .psr file that combines lines, database fields, and a logo. You use a title block to display general and specific information in documents, based on a template that includes the title block. SmartPlant Instrumentation is shipped with library specification title blocks and report title blocks. In Sybase InfoMaker, you can modify library title blocks and create new title blocks, which you can then import into SmartPlant Instrumentation.

Tray

In cable routing, trays are tracks that hold the positions in a trunk section.

Trunk Section

A trunk is a standard cable routing section that can be utilized in all non-enclosed plant areas. A trunk contains positions, useful to separate different types of cables.

Typical Instrument

In the Maintenance module, you use the typical instrument classification for report generation and other statistics. You can associate work request reasons with a specific typical instrument.

Typical Loop

A typical loop is a combination of user-defined loop properties that you can use as a template for creating loop numbers and tag numbers in batch mode. These properties include a loop measured variable, loop type, loop function and so forth. This template must contain at least one typical tag number.

Typical Tag

A typical tag is a virtual tag that is used for the creation of tag numbers in your plant. Each typical tag must be associated with a specific instrument type and description. Furthermore, you can set tag number properties for a typical tag. For example, you can define service, location, system I/O type, and so forth. You must define at least one typical tag for each typical loop that you create.

U

Unit

The lowest default level of the plant hierarchy. The Domain Administrator can change the plant structure and also apply user-defined hierarchy level names instead of the defaults (plant, area, and unit). After saving the plant structure, the plant hierarchy levels become permanently fixed for that domain. The names of the actual plant hierarchy items remain flexible.

User-Defined Sub-Library

Enables you to assign hook-up items and pipe specs. After you assign a hook-up with a user-defined sub-library that has associated pipe specs, the software automatically filters the tag numbers that you can associate with this hook-up. After assigning a pipe spec with a user-defined sub-library, when making tag – hook-up associations, you can only use tag numbers that have the source pipe spec data.

V

Vendor Dimensional Data

Vendor dimensional data is manufacturer-provided data for the specific instruments that you use or procure on your plant. You use vendor data to certify working data prior to its release.

Virtual Tag

Virtual tags are signals created internally in field devices that are part of a Foundation Fieldbus and Profibus system. Virtual tags are also signals used in creating HART instruments. These signals can be secondary process measured variables that are measured by the same physical instrument where the signals originated.

W

Wildcard

A wildcard is a special character that represents one or more characters. The asterisk (*) or the percent sign (%) represent zero or more characters. The underscore (_) represents any single character.

Windows Authentication Login

Windows authentication login allows the software to create SmartPlant Instrumentation users automatically and assign them to existing groups as soon as these users start SmartPlant Instrumentation. After the System Administrator enables the use of Windows authentication login, the Domain Administrator creates a group with the same name as a user group that already exists in Windows. When starting SmartPlant Instrumentation, a user who belongs to this Windows group does not have to provide any login information but only select the appropriate domain in the **Select <Unit>** dialog box.

Wire End Naming Convention

You can assign a wire end naming convention to the ends of one or more wires belonging to a cable. A convention consists of free segments or segments that designate properties of certain wiring entities. You can also specify separators between segments. The total length of a wire end naming convention can be up to 50 characters.

Wire Group

One or more wires that carry a common signal.

Wiring Module

The Wiring module allows you to define and manage the panels, cables, wiring, connections, routing, and I/O of instrumentation in your plant. Foundation Fieldbus is supported. You can add on the Telecom enhancement.

Wiring Tag

A wiring tag is an instrument based on an instrument type profile for which you selected **Include wiring** on the **Wiring and Control System** tab.

Work Request

Opening a work request is the first stage of breakdown maintenance. In general, it can be initiated by any member of the technical staff, and describes the malfunction or repair required.

Workflow

Workflow is an option that enables the instrument engineer to transfer temporary control of a tag to the process engineer. After entering process data, the process engineer then releases the tag back to the instrument engineer.

Working Dimensional Data

Working dimensional data is the most dynamic data in the Dimensional Data for Piping (DDP) module. You copy to working dimensional data from default and from vendor data, edit it, modify data status, verify the data, and generate a dimensional data sheet for instruments. You can also copy working data to the default data library.