



# Plant Applications 8.2

Global Configuration



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# Plant Applications Global Configuration

Plant Applications Global Configuration provides the tools and methods available to install, troubleshoot, configure, update, tweak, debug and monitor performance of the Proficy Server. A Plant Applications administrator should become familiar with all of the tools that are available for proper maintenance of the system and ease of troubleshooting.

The Plant Applications **.log** and **.shw** files are a mechanism for analyzing the Plant Applications system. They provide an excellent source of data for troubleshooting and understanding current configuration. There are many SQL Server tools to help in debugging and maintenance. An administrator should be familiar with the SQL Server tools available. Also, the Microsoft Performance Monitor shows real time performance statistics that can identify problems within the system.

The Proficy Server parameters that are available to customize settings used by the Plant Applications system are explained in detail. There are a number of Plant Applications site parameters that the administrator should be aware of when troubleshooting issues with the Proficy Server. Site parameters are used to set global default values for items such as passwords, number of log in attempts, directory locations etc. specific to a site. It is important for a site to understand what site parameters are available, how to configure them and to set default values according to the requirements for the site.

Performing system backups should be a part of an administrator's daily maintenance routine. A site should have standard measures to adequately preserve and restore a Microsoft SQL Server database. This can be done with software such as BackupExec, ARCserve, or using SQL Server itself.

## Global Configuration Node



**Global Configuration** is where you configure components that affect almost all aspects of Plant Applications.

- From **Schedule Statuses**, you add and manage production schedule statuses. Schedule statuses indicate the status a process order is set at. The status can be used to indicate the various statuses a process order cycles through.
- From **Data Types**, you add and manage data types, which defines what data type, such as "integer," can be entered in associated variable cells.
- From **Data Source Types**, you add and manage data source types, which are used to identify the source of data for a variable.
- From **Color Schemes**, you manage color schemes, which you can apply to various displays.
- From **Reason Trees**, you configure reason trees, which are used to identify reasons for downtime or waste and the actions taken.
- From **Subscription Information**, you manage subscriptions, which allow Plant Applications to launch an upload of data to an external system, such as an ERP system, based on the status triggers you specify.
- From **Engineering Units**, you add and manage engineering units and conversion information, which are units of measurement used in bills of materials.

- From **Administer Site Parameters**, you change the default values of the site parameters, which are used to set global default values for items, such as passwords, number of log in attempts and directory locations, which are specific to a site.
- From **Administer Production Statuses**, you add and manage production statuses, which are used to indicate the current status a production event is in on a specific production unit.
- From **Administer Calculations**, you create and manage a library of calculations.
- From **Administer Alarms**, you configure alarm, which compare data to product-based specification limits in real time and are used to alarm critical variables where acknowledgement of a violation is required.
- From **Administer Events**, you add and manage event types, which provide a snapshot of data over a period of time or at a specific point in time.
- From **Administer Models**, you manage event detection models, which are used to capture events such as reel turn-ups, batch starts/stops, product changes, consumption of product on a production line, and so on.
- From **Administer Language Prompts**, you edit the translated prompts presented in the user interface.
- From **Administer Multi-Lingual Translation**, you create two descriptions, one local and one global, for almost everything in the database.

## Configuration with a Manufacturing Database

Configuration of Plant Applications changes for some items if you are connected to a Unified Manufacturing Database (UMDB), which merges Plant Applications tables with Proficy SOA (S95) data structures. Refer to topics about the Manufacturing Execution System (MES) Core Service Provider and UMDB in the online help.

If you are not using a UMDB but connecting to a Plant Applications database, proceed with Plant Applications configuration by following the instructions in this section.

## Establishing Fault Logic

After determining a location, you must use VBScript to identify the faults for each location. Click the drop-down list of locations (for each location that has faults) and fill in the script. End each script with `Fault = <Fault Name>`, or `Fault = <Fault Value>`. If you provide a fault that does not match one already defined in the fault list, the model still logs downtime; however, the fault is ignored.

To search for available faults and automatically fill in either the value or the name, click **Insert Fault...** Only those faults already identified for the selected location are displayed.

You can also click **Check Syntax** to check that the script follows proper VBScript syntax.

A fault script can be defined for each location. However, only the fault script for the location determined by location logic will run.

### Fault Logic Example #1

In this example, if alias A = 1 then the fault "Conveyor Fault" is returned; if A = 2 then the fault "Lubrication" is returned.

```
if A = 1 Then Fault = "Conveyor Fault"  
if A = 2 Then Fault = "Lubrication"
```

### Fault Logic Example #2

This example checks to see if the bits are set in a given alias and return the fault accordingly.

```
if A And &H1 Then Fault = 0
if A And &H2 Then Fault = 1
You can also use the following:
if A And &H1 Then Fault = "Conveyor Fault"
if A And &H2 Then Fault = "Lubrication"
```

### Fault Logic Example #3

This example rounds the value in alias A and then uses a case statement to return Fault codes.

```
Select Case Round(A)
Case 0 Fault = "R1 Jam"
Case 1 Fault = "R1 Jam"
Case 2 Fault = "R1 Starve"
Case 4 Fault = "R1 Block"
End Select
```

You can also use the following:

```
Select Case Round(A)
Case 0 Fault = 1
Case 1 Fault = 2
Case 2 Fault = 3
Case 4 Fault = 4
End Select
```

## Gallery Physical Path

This is the physical location of the Web Part Gallery for customers who are using DDRK to control their Dashboard.

To change this site parameter:

1. Log in to the Plant Applications Administrator.
 

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---
2. Open **Global Configuration**.
3. Right-click on **Administer Site Parameters** and select **Edit Site Parameters** from the pop-up menu.
4. In the Site Parameters dialog box, under Dashboard double-click on Gallery Physical Path.
5. In the **Edit Parameter** dialog box, click in the **Value** field and enter the path that is the physical location for your Web Part Gallery.
6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Input Tags

You can define as many inputs as necessary. For each input, an alias is automatically assigned. When logic is defined for the model, this alias is used to refer to a specific input inside the script (or model logic). The Trigger column determines whether or not a change in value of the specified tag will cause the model to be triggered or evaluated. Items with the trigger off are collected and passed into the model when one of the other tags change. At least one tag must have the trigger on for the model to work. Inputs marked as triggers are constantly monitored by the Event Manager for data changes. Non-trigger inputs are only monitored or read when a trigger tag changes.

Add tags to the model by typing in the tag name from the Tag Search screen. You can press Shift or Ctrl to select multiple tags. You can also use the browse button (...) to the right of the tag to search. You must choose an attribute for each tag. This determines what will be passed in as an input to the model. The only choices are Value and Time-stamp, with Value as the default. You can add the same tag as several different inputs to the same model.

The Sampling Type and Time Offset determine how tag information is collected from the historian and how it will be passed into the model. Choices include Interpolated, Last Good Value, and Next Good Value. In the Precision column, you can set the number of decimal places for the input value of the tag.

You can use the time offset to offset the collection of tag information by plus or minus 'n' seconds relative to the time-stamp that triggered the model to fire (as opposed to the time-stamp the downtime event started, finished, and so forth).

## Reloading Proficy Server Services

Reloading a service causes it to re-build its cache of configuration data. Depending on the service and the amount of configuration in the system, this may take several minutes to reload. For example, reloading the Calculation Manager may take it off-line for 10 minutes while it re-builds its cache. During this period, data will not be lost, but it will be delayed.

**Reloading** and **restarting** service settings are configured with User and Site Parameters. These parameters contain a value in minutes which identify the time period, going back from NOW, for a service to be backdated so that it captures all of the activities (e.g. redo calculations, trigger events, data changes etc.) from this earlier period using the new configuration setting.

---

*User parameters take precedence over Site parameters. User parameters are set directly against a service. Site parameters provide a global setting for the site.*

---

Reloading of services is defaulted to 30 minutes and restarting of services is defaulted to go back 3 days, e.g. Event Manager goes back 3 days on a restart, on a reload it goes back 30 minutes. Administrators must take great caution to not set these parameters to go too far back in time or they will overload the system. These parameters are configured directly in the SQL tables.

Proficy Server services are configured to automatically reload every six hours and then they run using their configuration cache.

### Service Reload Guide

- **Reload Alarm Manager (Alarm Mgr):** A configuration reload should be done when alarm configuration changes are made.
- **Reload Calculation Manager (Calculation Mgr):** A configuration reload should be done when calculation configuration changes. The Calculation Manager also supports reloading with an Effective Date set back in time. ALL calculation variables are recalculated back to that time.
- **Reload Email Engine:** A configuration reload should be done when the Email Engine configuration changes.

- **Reload Event Manager (EventMgr):**-A configuration reload should be done when an Event Model configuration changes. The Event Manager Service should be reloaded when new event detection information has been configured. It is very important when reloading to set the reload date to the last day an event was detected prior to starting up if the system has been down for more than one hour.
- **Reload FTP Engine:** A configuration reload should be done when FTP configuration changes are made.
- **Reload Reader:** A configuration reload should be done if any time based variables are added or updated. The Reader also supports reloading with an Effective Date set back in time. ALL variables have their time based data recollected back to that time. This can be detrimental to system performance.
- **Reload Stubber:** A configuration reload should be done when configuration changes are made that impact test scheduling or if time based AutoLog sheets have a time interval changed.
- **Reload Summary Manager:**A configuration reload should be done when an Event Based variable configuration changes.
- **Reload Writer:**A configuration reload should be done when a variable has the Output Tag changed.

## Establishing Running Logic

Once you define inputs, these values can be used in VBScripts to determine information about the model, such as the source location. Depending on the logic you are editing, you must include at least one of the statements listed in the following table.

Model #	The script determines	You must include at least one of these statements in the script
All Models	Whether or not the line is running	Running = True Running = False
Model 211	The location	Location = "location name"
Model 212	The equipment status	Status = True Status = False
All Models	Faults for each location	Fault = "Fault name" Fault = Fault value

The running script determines whether or not the production line is running. If the line is not running (Running = False), all subsequent scripts are fired. If the line is running (Running = True), none of the subsequent scripts are fired.

## Examples of Running Logic

### Running Logic Example #1

In this example of a Running Logic model, **F** is the alias that corresponds to FIX.LINESPEED.F\_CV. This line is said to be running when the LINESPEED tag is greater than 20. The line is *not* running if the LINESPEED is less than 20.

```
if F < 20 then
Running = False
else
Running = True
end if
```



## Running Logic Example #2

In this example, the line is running when the aliases for **A**, **B**, and **C** are all equal to zero. It assumes, of course, that A, B, and C each have tags corresponding to them (such as FaultTag, ErrorFlagTag, and AlarmTag). If any of the tags have a non-zero value, then the line is assumed to be down; a downtime event is then triggered.

```
if A+B+C THEN
Running = False
else
Running = True
end if
```

## Show Additional Web Part Configuration Tabs

This parameter controls the visibility of the advanced tabs in the Web Parts Administrator. By setting this parameter to **True**, two additional tabs are displayed in the Web Parts Administrator. The tabs are: **Manage Parameter Types** and **Manage Dialogs**.

To change this site parameter:

1. Log in to the Plant Applications Administrator.  

---

*You must have **Administrator** access to the Administrator security group to change site parameters.*

---
2. Open **Global Configuration**.
3. Right-click on **Administer Site Parameters** and select **Edit Site Parameters** from the pop-up menu.
4. In the Site Parameters dialog box, under Dashboard double-click on Show Additional Web Part Configuration Tabs.
5. In the **Edit Parameter** dialog box, select either **True** or **False** from the **Value** drop-down list.
6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Subscription Upload Result Sets

These result sets have nothing to do with the result sets that Plant Applications supports, such as Result Set 15, ProductionPlan and Result Set 16, ProductionSetup.

-----  
-- Resultset 1: Last Run Time and IDs for the Post-Processing Orchestration  
-----

```
@TimeStamp DATETIME
@SubscriptionGroupId INT,
@SubscriptionGroupDesc VARCHAR(255),
@SubscriptionId INT,
```

@DataSourceId INT,

-----  
-- Resultset 2: Order Confirmation  
-----

PUBLISH\_DATE DATETIME,  
PROCESS\_ORDER VARCHAR(100),  
START\_TIME DATETIME,  
END\_TIME DATETIME,  
PROCESS\_SEGMENT\_ID VARCHAR(100),  
CONFIRMATION INT,  
COMPLETE INT,  
TECO INT,  
Sequence INT

-----  
-- Resultset 3: Material Produced Actual (MPA)  
-----

Returned if SubscriptionGroupId = ProductionPerformanceGroupId

OR SubscriptionGroupId = OrderConfirmationGroupPid

SELECT PUBLISH\_DATE DATETIME,  
PROCESS\_ORDER VARCHAR(100),  
EVENT\_ID INT,  
START\_TIME DATETIME,  
END\_TIME DATETIME,  
SAP\_PRODUCT VARCHAR(100),  
BATCH VARCHAR(100),  
QUANTITY REAL,  
UOM VARCHAR(100),  
DataType VARCHAR(255),  
PROCESS\_SEGMENT\_ID VARCHAR(100),  
STORAGE\_ZONE VARCHAR(100),  
PPId INT,  
PathId INT,  
Sequence INT

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---

-- Resultset 4: Material Produced Actual Properties (MPAP)

---

Returned IF SubscriptionGroupId = ProductionPerformanceGroupId

EVENT\_ID INT,  
PROPERTY\_NAME VARCHAR(100),  
VALUE\_STRING VARCHAR(100),  
DATA\_TYPE VARCHAR(100),  
UOM VARCHAR(100),  
TestId INT

---

-- Resultset 5: Material Consumed Actual (MCA)

---

Produced IF SubscriptionGroupId = ConsumptionPerformanceGroupId

PUBLISH\_DATE DATETIME,  
PROCESS\_ORDER VARCHAR(100),  
EVENT\_COMPONENT\_ID INT,  
SOURCE\_EVENT\_NUMBER VARCHAR(100),  
START\_TIME DATETIME,  
END\_TIME DATETIME,  
SAP\_PRODUCT VARCHAR(100),  
QUANTITY REAL,  
UOM VARCHAR(100),  
DataType VARCHAR(255),  
PROCESS\_SEGMENT\_ID VARCHAR(100),  
STORAGE\_ZONE VARCHAR(100),  
PPId INT,  
PathId INT,  
Sequence INT

---

-- Resultset 6: Material Consumed Actual Property (MCAP)

---

Produced IF SubscriptionGroupId = ConsumptionPerformanceGroupId

```
EVENT_COMPONENT_ID INT,  
PROPERTY_NAME VARCHAR(100),  
VALUE_STRING VARCHAR(100),  
DATA_TYPE VARCHAR(100),  
UOM VARCHAR(100),  
TestId INT
```

---

```
-- Resultset 7: Test Header
```

---

```
Produced if SubscriptionGroupId = TestConformanceGroupId
```

```
PUBLISH_DATE DATETIME,  
PROCESS_ORDER VARCHAR(100),  
TEST_HEADER_ID INT,  
TEST_SEGMENT_ID VARCHAR(100),  
BATCH VARCHAR(100),  
START_TIME DATETIME,  
END_TIME DATETIME,  
TEST_NAME VARCHAR(100),  
PPId INT,  
PathId INT,  
EventId INT,  
Sequence INT
```

---

```
-- Resultset 8: Test Details
```

---

```
TEST_HEADER_ID INT,  
TEST_DESC VARCHAR(100),  
ENTRY_ON DATETIME,  
RESULT VARCHAR(100),  
DATA_TYPE VARCHAR(100),  
COMMENT VARCHAR(1000),  
DISPOSITION VARCHAR(100),  
UnitOfMeasure VARCHAR(100),
```

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TestId INT,

Sequence INT

## Schedule Statuses

Schedule statuses indicate the status at which a process order is set. Examples of standard schedule statuses are **Active**, **Complete**, **Next**, **Overproduced**, **Pending**, **Planning**, and **Underproduced**. The status can be used to indicate the various statuses a process order cycles through.

There are two schedule statuses that have special logic written around them: **Active** and **Complete**. The **Active** status is used to determine when to calculate production amounts for a process order. In the Schedule View display, the currently active process order is used to track the actual quantity produced against a process order and its planned quantity. Changing the status of an active process order from **Active** to **Complete** allows a different process order to be activated. If another process order has a status of **Next**, it will automatically become the active process order when the current active process order is moved to **Complete**.


The other schedule statuses and any statuses that you add are used mainly for reporting purposes.

### Adding a Schedule Status

If your plant uses different schedule statuses, you can either add new schedule statuses or rename the existing default schedule statuses.

Another way to add schedule statuses is to [export the schedule statuses](#), make changes to the file, and then import the changes back into the Proficy database.


To add a schedule status:

1. In the Plant Applications **Server Manager** tree, expand  **Global Configuration**.
2. Right-click on **Schedule Statuses** and click **Add New Schedule Status**. An editable text field appears.
3. Type the name of the schedule status and press ENTER.

### Exporting Schedule Status Configuration

You can export your configured schedule statuses into an Excel workbook and then use the Excel workbook to import the information into another Plant Applications database or you can make changes to the workbook and then import the information back into the same Plant Applications database.


To export schedule statuses:

1. In the Plant Applications Server Manager tree, expand  **Global Configuration**.
2. Right-click **Schedule Statuses** and click **Export Schedule Statuses**. The **Configuration Export** dialog box appears.
3. Make sure the **Schedule Statuses** option is selected and click **OK**. The export process will begin. An Excel workbook will be created with a worksheet that will contain your schedule status configuration information.

### Enable PO Ordering

In the Schedule View display, the selected process order can be moved up or down one row on the path it is bound to, switching places with the process order above or below it. The status the process order is in must have Enable PO Ordering enabled.

To enable PO ordering:

1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Expand **Schedule Statuses**, right-click on a status and select **Enable <schedule status> PO Ordering**.

## Data Types

The Data Type for the variable defines what data can be entered in associated variable cells. The system has pre-configured data types, however you can also create custom data types. The system configured valid data types are:

**Array Float:** an array of floating-point numbers between -9999999.999999 and 9999999.999999.

**Array Integer:** an array of integer numbers between -36,768 and 36,768.

**Array String:** an array of sequences of up to 25 characters.

**Comment:** a comment variable.

**Float:** a floating-point number.

**Integer:** an integer number between -36,768 and 36,768.

**Logical:** provides a checkbox in the AutoLog sheet for a variable.


**String:** a sequence of characters.

**Custom Data Types:** are user defined pick lists that can be created and used for selecting multiple values for an Autolog variable.

## Creating Custom Data Types and Phrases

Custom data types enable you to create multiple values which can be selected for a specific variable in an Autolog display. When you create a variable and select the user-defined data type, the phrases created for the specific user-defined data type are then presented in a drop-down list in an Autolog sheet.

For example, you can create a data type named **Shift** and create three phrases: **Shift A**, **Shift B**, and **Shift C**. Next, you can create a variable named **Shift** and select the data type **Shift**. When you add the variable to an Autolog display, you will be able to select **Shift A**, **Shift B**, or **Shift C** from a list in the Autolog display for the variable **Shift**.

1. In the Plant Applications Server Manager tree, expand  **Global Configuration**.
2. Right-click **Data Types** and click **New Data Type**. An editable text field appears.
3. Type in the name of the new data type.
4. Select the new data type; right-click and select **New Phrase**. An editable text field appears under the new data type.
5. Type in the name of the new phrase.
6. Repeat **New Phrase** until each phrase has been selected.

## Global Configuration

7. Phrases may be arranged in order by dragging each phrase into the appropriate position. Dropping a phrase on top of another will cause the dropped phrase to move *before* the phrase being dropped on.

## Exporting Custom Data Types


You can export your custom data types into an Excel worksheet. You can then modify the data and import the information back into the Plant Applications server or to another Plant Applications server.

To export custom data types:

1. In the Plant Applications Administrator, expand **Global Configuration**.
2. Right-click **Data Types** and select **Export Data Types**. The **Configuration Export** dialog box appears.
3. Ensure **Custom Data Types** is selected and click **OK**. Excel automatically starts and a worksheet is created containing the custom data type configurations.

## Importing Custom Data Types

To import custom data types:

1. Open the Excel file containing the configurations you wish to import, and ensure that each line item you wish to import contains an 'x' in the **Selected** column.
2. Open or return to the Plant Applications Administrator.
3. In the Server Manager tree, expand  **Global Configuration**.
4. Right-click **Data Types** and select **Import Configuration**. The import process will begin.
5. If the import is successful, a message will be displayed.
6. Click **OK** and refresh the server.

## Data Source Types

In order to interface Plant Applications with external systems (such as enterprise resources systems), you can add data sources and map cross-references between external systems' keys and items in Plant Applications.

Data source cross-reference configurations can be exported to and imported from and from Excel. For more information, see [Creating Cross-References for a Data Source](#).

### Default Data Source Types


By default, Plant Applications provides 12 data source types. They are:

- AcquiData
- Aliased
- Autoline
- AutoLog
- CalculationMgr
- File Transfer
- Historian
- Other

- Replix
- SAP
- Undefined
- Valmet Lab Data

## Adding Data Source Types

To add a new data source:

1. In the Plant Applications Administrator Server Manager tree, expand  **Global Configuration**.
2. Right-click on the **Data Source Types** folder and choose **Add New Data Source**. The Data Source Types folder expands, and a new item, ready for naming, appears at the top of the list.
3. Enter the name of the new data source and then press ENTER.

---

*Use the right-click menu commands to rename or delete the data sources that you have added.*

---

4. Right-click the new data source and choose **Activate**.

---

*To avoid items being cross-referenced to the wrong data sources, you should deactivate the external data sources that are not in use.*

---

## System Cross References Dialog Box

To access this dialog box: In the Plant Applications Administrator, right-click on a Data Source (**Global Configuration > Data Source Types**) and click **Modify System Cross References**.

In the **System Cross References** dialog box, you configure cross-references between Plant Applications items and "foreign" keys within an external system.

You can also import and export system cross references to and from Excel.

### Subscription

Choosing a subscription from the drop-down list serves two purposes:

- It filters searches for existing cross-references.
- It allows you to enter XML information for the selected subscription, which will be used by the connector to an external system. For the Enterprise Connector, you will most likely need to select **Variables** for the **Plant Applications Item**. If you select:
  - **ProductionPerformance** subscription, then the stored procedure will expect `<MaterialProducedActualProperty>` to be entered in the XML Header data box.
  - **ConsumptionPerformance** subscription, then the stored procedure will expect `<MaterialConsumedActualProperty>` to be entered in the XML Header data box.
  - **TestConformance** subscription, then the stored procedure will expect `<TestPerformance>` to be entered in the XML Header data box.

When you choose a subscription from the drop-down menu, a window opens in the center of the dialog box, allowing you to enter additional information that identifies the cross-referenced items.

### Plant Applications Item



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This is a search filter for existing cross references, and also limits hits when searching for Plant Applications items to add when creating new cross-references. If you are searching for existing cross references, select the item type associated with the cross reference you want to find before clicking Search. If you are adding new items, choose the item type you want to add before clicking Add New.

### Search String

This is a search filter for existing cross-references. Enter a character string contained within the name(s) of the items you wish to find. The search will return only items in the category defined in Plant Applications Item.

### Filter


Enter a string to limit hits when adding new items. Characters may be from the beginning, within, or at the end of an item name. You may use the percent symbol (%) as a wild card character within the string.

### New Alias

Enter the name of an alias to which to map a foreign key.

## Creating Cross-References for a Data Source

To create cross-references for a data source:

1. In the Server Manager tree, expand  **Global Configuration** and then the **Data Source Types** folder.
2. Right-click the data source for which you wish to create cross-references and then click **Modify System Cross References**.
3. In the **System Cross References** dialog box, choose the Plant Applications Item type for which you want to create cross-references. Note that relevant column headings appear in the main window. Click **Add New** at the bottom right of the dialog box to open the **Search** dialog box.
4. Use the **Search** dialog box to locate and select the Plant Applications items you wish to add. When you have made your selection, click **OK** to close the **Search** dialog box. The selected items now appear in columns in the **System Cross References** main window.

---

*Items previously mapped to the current data source will not be returned in a search.*

---

5. In the **Foreign Key** column, for each line item enter the key ID for the external system.
6. To map a foreign key to an alias, enter a name for the alias in **New Alias**, and then click **Add**. You can then enter the foreign key for the alias.


## Exporting Cross-reference Configurations

To export cross-reference configurations to an Excel file:

1. In the Server Manager tree, expand  **Global Configuration** and then the **Data Source Types** folder.
2. Right click the data source containing the cross-references you wish to export and click **Export Cross Reference**. Excel opens with the exported configurations appearing in a worksheet.
3. Save the Excel file.

## Importing Cross-reference Configurations

To import cross-reference configurations from an Excel file:

1. Open the Excel file containing the configurations you wish to import, and ensure that each line item you wish to import contains an 'x' in the Selected column.
2. Open or return to the Plant Applications Administrator.
3. In the Server Manager tree, expand  **Global Configuration** and then the **Data Source Types** folder.
4. Right click the data source to which you want to import cross-references, and then click **Import Configuration**.

## Color Schemes



*To manage color schemes:* In the Plant Applications **Server Manager** tree, expand  **Global Configuration** and expand **Color Schemes**.

Color schemes determine the color of various parts of a display, such as the font color, specification colors, and background color. You can use the default color schemes or create your own. When you create a display, you can apply your color scheme through the display options.

By default, two color schemes are provided for you: **<Default>** and **GradeBook Operator**.

### Creating Color Schemes

To create a custom color scheme:

1. In the Plant Applications Server Manager tree, expand  **Global Configuration**.
2. Right-click on **Color Schemes** and click **Add New Color Scheme**. An editable text field will appear.
3. Type name for the New Color Scheme and press ENTER.
4. Right click on the scheme and click **Edit <color scheme>**. The **Color Scheme Editor** dialog box appears.
5. Under the **Color** column, click the color cell you want to change. The **Color** dialog box appears.
6. Select a color and click **OK**. The cell is updated with the selected color.
7. Click the  **Save** button then close the **Color Scheme Editor** dialog box.

### Deleting a Color Scheme

*To manage color schemes:* In the Plant Applications **Server Manager** tree, expand  **Global Configuration** and expand **Color Schemes**.

When you delete a color scheme that is being used by a display, the display will automatically revert to the default color scheme.

*You cannot delete the **<Default>** color scheme.*

To delete a custom color scheme:

1. Right-click on the color scheme you want to delete and click **Delete <color scheme>**. The **Confirm Delete** dialog box appears.
2. Click **OK** to delete the color scheme.

## Renaming Color Schemes

*To manage color schemes:* In the Plant Applications **Server Manager** tree, expand  **Global Configuration** and expand **Color Schemes**.

When you rename a color scheme, any display that uses the color scheme will automatically be updated with the new name.

---

*You cannot rename the <Default> color scheme.*

---

To rename a color scheme:

1. Right-click on the color scheme you want to rename and click **Rename <color scheme>**. The color scheme name becomes an editable field.
2. Type the new name of the color scheme and press ENTER.

## Reason Trees

Reasons Trees are the association of individual reasons into a multiple level hierarchy. This hierarchy, or "tree," is meant to provide a drill-down of reasons, presumably from a general category to more and more specific reasons at lower levels of the tree.

The different levels of the tree can be used at report time to provide different "angles" of reporting. Each level of the Reason Tree is given a title or "Level." This is used in reporting and shows up in the client application as a descriptive title for each Reason Level.

### Multiple Reasons

It is really dependent on the detail you want to report Downtime or Waste by. If you want to analyze Downtime to the specific "fault" level, then you will need a Reason roughly for each possible fault. You will also need appropriate Reasons to fill out higher levels of the tree to provide some organization and drill down into those detailed faults.

### Multiple Reason Trees

You generally need only one Reason Tree for Downtime, and one Reason Tree for Waste. Some sites have a standard Reason Tree that they use across all types of operations in a plant. This provides a standard set of reporting without regard to equipment type or process. The drawback of this approach is that detailed fault information that is specific to the equipment or process can be overlooked.

A compromise approach is to have a standard Reason Tree structure for Level 1 and 2, then move into equipment specific reasons for Level 3 and beyond. This allows you to report Downtime or Waste across the plant in a standard way for broad categories while also allowing you to report at a detailed level for each piece of equipment.

This makes for very large Reason Trees and associated maintenance issues; however, it is generally worthwhile in the information that can be extracted in reporting.

### Reason Trees and Downtime Reporting

The two main purposes of Reason Trees are to provide drill-down for operators to enter and investigate Reasons, and to categorize items for reporting. A general strategy is to make the first level of Reasons broad categories and to have subsequent levels drill into more and more detail. This will allow you to report and classify Downtime or Waste items at a broad category level down to a detailed level.

At report time, it is possible to report on specific lower-level Reasons without specifying a higher-level Reason (essentially by specifying **any** or the wildcard character at higher levels on the hierarchy).

### Changing Reason Trees

When simply re-arranging a Reason Tree, the historical data is not altered. However the client Displays may not view the historical data the same way. In other words, if you alter the hierarchy and relationships between Reasons (and particularly reason levels), the client may not be able to display reasons within the current hierarchy because the drill-down path has changed. Again, this will not affect reporting, so unless you intend to change the Reasons attached to historical information, this will not be a large issue.

Deleting Reasons all together (as opposed to simply removing it from the Reason Tree) will impact historical data. Any place a deleted Reason showed up in history will be nulled. For the records affected, only the deleted Reason will be nulled, so other levels will remain intact for reporting. As far as viewing from the client displays, the same issues as discussed in the above paragraph apply.

## Creating Reason Trees

### Overview

1. [Define list of available Reasons](#)
2. [Define list of Categories](#)
3. [Create Reason Tree](#)
4. [Create Reason Tree Headers](#)
5. [Arrange available Reasons in a tree](#)


### Step 1: Define list of available Reasons

When you consider what reasons to add, you should think in terms of "cause" reasons and "action" reasons. **Cause reasons** would be those things that caused the Downtime or Waste event to occur. **Action reasons** would be the actions taken in response to the event. If you choose to, you can create a Reason Tree for Causes and then a Reason Tree for Actions, which can be used when configuring Alarm Templates and Production Events, such as Downtime, Waste, or User-defined events.

---

*You can also add new reasons when you create your Reason Trees in [Step 5](#).*

---

1. Expand  Global Configuration and the Reason Trees folder.
2. To create a new **Reason**, right-click on the **Reasons** folder and click **Add New Reason**. The **New Reason** dialog box appears.
3. Do the following:
  - In the **Description** box, type the name of the new Reason. Reason names must be unique on a given server.
  - In the **Code** box, type the code for this Reason. This field is not required by Plant Applications, but it may be used for grouping Reasons on custom reports and used by the SDK.
  - Select **Not Required [Comment]** if no comment is required when the user selects this Reason from within a Display.
  - Select **Required [Comment]** to force the user to enter a comment whenever this Reason is selected from within a Downtime Display.

---

*Comments can be required only from within a Downtime Display. You can still add comments from other Displays, such as Alarm Displays, but they can not be made to be required.*

---



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- Select **Suggested [Comment]** to give the user the option of entering a comment when this Reason is selected from within a Display.
4. Click the **Apply** button to add the new Reason and to continue adding additional Reasons.
  5. After adding all your Reasons, click **OK**.

### Step 2: Define your Reason Categories

Reason Categories allow you to group Reasons together for reporting purposes. This will help you track Downtime across production lines, for example. You can create a Reason Category and attach the Reason Category to different Reasons in your Reason Tree. Then, any Downtime associated with one of the Reasons that are attached to a particular Reason Category gets totaled under that Reason Category.

When you attach a Reason Category to a Reason Level 1, all Reasons underneath the Reason Level 1 are also attached to the Reason Category. Reasons can also have more than one Reason Category attached to them.



Default Reason Categories are identified by a blue Reason Category icon  and cannot be renamed or edited. User-defined Reason Categories are identified by a red Reason Category icon . The following default Reason Categories are provided:

- Breaks
- Outside Area
- Planned Downtime
- Unavailable Time
- Unplanned Downtime

To create a new Reason Category:

1. Open **Global Configuration**.
2. Open the **Reason Trees** folder.
3. Right-click on the **Categories** folder and select **Add New Reason Category** from the pop-up menu.
4. Type the name of the new Reason Category and press **Enter**.

To attach a Reason Category to a Reason:

1. Open the **Trees** folder.
2. Open the desired **Reason Tree**.
3. Open the **Reason Tree** folder.
4. Right-click on the desired **Reason** and select **Attach Categories** from the pop-up menu.
5. In the **Add Category to tree** dialog box, under **Non-members**, select one or more Reason Categories to attach to the Reason and click the **Add Selected**  button.
6. Click the **Close**  button to close the **Add Category to tree** dialog box.

### Step 3: Create your Reason Tree

1. To create a new Reason Tree, right-click on the **Trees** folder and select **Add New Reason Tree** from the pop-up menu.
2. Type the name of the new Reason Tree and press **Enter**.

---

*Reason tree names must be unique on a given server.*

---

#### Step 4: Create Reason Levels

Reason levels help you further refine your reasons. When you create your Reason Levels, start with the broadest level first. The second Reason Level that you add becomes a sub-reason under the first level. If you add a third reason level, that becomes a sub-reason under the second Reason Level. You can add up to four Reason Levels.

---

*Reason Levels are also used as column headings in the various Displays, such as the Downtime Display or the Waste Display.*

---

1. Open the newly created Reason Tree. Right-click on **Reason Level Titles** and select **Add New Reason Level Title**.
2. Type in the name of the Reason Level Title for Level 1 of the new Reason Tree and press **Enter**.
3. Repeat steps 1 - 2 to add additional Reason Levels.

---

*You can add up to four Reason Levels.*

---





#### Step 5: Structure your Trees

1. To add a **Level 1 Reason**, open the desired Reason Tree.
2. Right-click on the **Reason Tree** folder and select **Edit Reason Tree Membership** from the pop-up menu.

---


*You can add new reasons by selecting **Add New Reason** from the pop-up menu. For more information about using the **New Reason** dialog box, [click here](#).*

---

3. In the **Add Reasons to tree** dialog box, select one or more Reasons from the Non-Members list and click the **Move Selected**  button
4. Click the Close  button.
5. To add a **Level 2 Reason**, right-click a **Level 1 Reason** and select **Edit Next Level Reason Membership** from the pop-up menu.
6. In the **Add Reasons to tree** dialog box, select one or more Reasons from the Non-Members list and click the **Move Selected**  button.
7. Click the Close  button.
8. Repeat these steps for each Reason in Level 1 and for each subsequent Reason until the Reason Tree is complete.

## Exporting Reasons

To export reasons:


1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Expand **Reason Trees**, right-click **Reasons** and select **Export Reasons**. The **Configuration Export** dialog box appears.
3. Ensure **Event Reasons** is selected and click **OK**. Excel automatically starts and a worksheet is created containing the reason configuration.

## Importing Reasons

To change the name of a reason, change the **New Reason Name** before you import the configurations.


To import reasons:

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1. Ensure the Excel workbook that contains the reason configuration is open and the configurations you want to import are selected.
2. In the Plant Applications Administrator, expand  **Global Configuration**.
3. Expand **Reason Trees**, right-click **Reasons** and select **Import Configuration**.
4. Click **OK**.

## Exporting Trees

To export trees:


1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Expand **Reason Trees**, right-click **Trees** and select **Export Trees**. The **Configuration Export** dialog box appears.
3. Select or clear the following options.
  - **Reason Tree Setup:** This option will export the reason tree name, any assigned security group, and the reason level titles.
  - **Reason Tree Categories:** This option will export the reason tree name, all reason levels that have an assigned category, and the category.
  - **Reason Tree Data:** This option exports the reason tree name and the reason levels. You can then change or add a reason, change **FALSE** to **TRUE** under **Add Missing Reasons**, and select the changed rows. This will add new reasons to the database and attach them to the reason tree.
4. Click **OK**. Excel automatically starts and a worksheet is created containing the reason tree configuration.

## Importing Trees

After you've exported your tree configurations, you can edit the configurations and then import the changes into Plant Applications.

- **Reason Trees worksheet:** You can change or add reason level titles for each tree. If you change the reason tree name, a new tree is created.
- **Reason Category worksheet:** You can edit an existing category and add a new category. Upon import, the category will be added to the lowest level reason.
- **Event Reason Tree worksheet:** You can then change or add a reason, change **FALSE** to **TRUE** under **Add Missing Reasons**, and select the changed rows. This will add new reasons to the database and attach them to the reason tree.

To import reason trees:

1. Ensure the Excel workbook that contains the tree configuration is open and the configurations you want to import are selected.
2. In the Plant Applications Administrator, expand  **Global Configuration**.
3. Expand **Reason Trees**, right-click **Trees** and select **Import Configuration**. Your selected configurations are imported.
4. Click **OK** and refresh the server.

## Subscription Information

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*In order to use subscriptions, there are a few registry changes that must be made. For more information, see [Enterprise Connector service](#).*

---

Plant Applications supports interaction with ERP systems through comprehensive, complex subscriptions, as well as incremental updates. Subscriptions allow Plant Applications to launch an upload of data ([performance upload](#)) to an external system, based on the status triggers you specify. For example, you may wish to update your ERP system every hour and on batch completion, but only when the schedule's status is Running and also whenever the Production Plan status changes from Pending to Complete. Subscriptions are also used to update the Plant Applications database when information is received from ([schedule download](#)) an ERP system.

Subscription information populates the ERP\_Transactions, Subscription, Subscription\_Groups, and Subscriptions\_Triggers tables in the Plant Applications database.

By default, Plant Applications includes five pre-defined subscription groups and subscriptions. These subscriptions conform to the S95/B2MML standards as defined by the World Batch Forum ([www.wbf.org](http://www.wbf.org)). The subscription groups and subscriptions are:

- ScheduleDownload
- ProductionPerformance
- ConsumptionPerformance
- TestConformance
- OrderConfirmation

## Subscription Prerequisites

Several areas in Plant Applications must be addressed prior to using subscriptions:

**Plant Model:** Configure the Plant Model to represent your manufacturing equipment. See The Plant Model.

**Products:** In Product Management, create products for both finished products and the formulation items that are used in making them. "FreshFace Toothpaste," for example, is a product, but baking soda (one of the many formulation items that go into the toothpaste) is also handled as a product. See How To Add New Products and Product Families.

After they are configured, associate the products to appropriate units in the plant model. See Mapping Products To Units.

**Production Events and Genealogy:** To generate consumption against formulation items that are associated with product or process orders, genealogy must occur between production events and raw material events. See Configuring Placeholder Production Events On A Unit and Creating and Configuring The Genealogy View Display.

**Event Components:** All events that are linked to the production event (records in the Event Components table that link the production event to a raw material event) are searched, and the Dimension X field from the Event Component record, where the field Report\_As\_Consumption is set to 'r;1', is used as the amount of product consumed.

**Execution paths:** Configure production execution paths in the plant model. See Defining Execution Paths.

**External Data Sources & Cross References, Subscriptions & Triggers:** If required — for example, if you want to retrieve process orders from an ERP system—configure external data sources, cross references, subscriptions and triggers as required for Plant Applications to interact with an external applications. See [Data Source Types](#) and [Subscription Information](#).



**Engineering Units:** Engineering Units must be created before working with bills of materials. See [Engineering Units](#).

## Production Schedule Download

[XML Schemas](#)The ScheduleDownload subscription is triggered when the Enterprise Connector receives an XML file containing scheduling information from the BizTalk server. Based on the root node of the XML file, the Enterprise Connector calls the spS95\_ProductionScheduleDownload stored procedure. The stored procedure updates the production plan, production schedule and bill of materials tables in the Plant Applications database. The stored procedure also returns Result Sets 15 and 16 to the Enterprise Connector. The Enterprise Connector publishes the result sets to the Plant Applications message bus, which passes the information to the appropriate Plant Applications client displays and reports.

If there are any errors, the spS95\_ProductionScheduleDownload stored procedure returns error codes to the Enterprise Connector. The Enterprise connector matches the error code to an email message code and determines what message to send and to whom it should be sent.

## Production Performance Upload

Once a process order completes and based on your defined triggers, the production performance information is uploaded via BizTalk to an ERP system.

The Enterprise Connector executes the "gatekeeper" stored procedure. The gatekeeper stored procedure looks at the Subscription, Subscription\_Trigger, and Subscription\_Group tables to determine which subscription to process. Based on the ID of the subscription, the gatekeeper calls another stored procedure (in the case of a performance upload, spS95\_IncrementalProductionPerformance) that returns a result set to the Enterprise Connector. The Enterprise Connector will then create one or more XML files, which get processed by the appropriate BizTalk orchestration.

The upload stored procedure returns different [result sets](#), depending on the subscription group the subscription ID that was passed belongs to.

---

*These result sets have nothing to do with the result sets that Plant Applications supports, such as Result Set 15, ProductionPlan and Result Set 16, ProductionSetup.*

---

Subscription Group	Result Sets Returned
OrderConfirmation	Result Sets <a href="#">1</a> , <a href="#">2</a> , <a href="#">3</a>
ProductionPerformance	Result Sets <a href="#">1</a> , <a href="#">2</a> , <a href="#">3</a> , <a href="#">4</a>
ConsumptionPerformance	Result Sets <a href="#">1</a> , <a href="#">2</a> , <a href="#">5</a> , <a href="#">6</a>
TestPerformance	Result Sets <a href="#">1</a> , <a href="#">2</a> , <a href="#">7</a> , <a href="#">8</a>

### Four Production Performance Upload Subscriptions

There are four subsets of the ProductionPerformance upload. Each subset subscription has a priority assigned to the subscription group to which it belongs. The priority determines which subscription is processed first if there are multiple messages. In order of priority, the four subsets are:

**ProductionPerformance (1):** The ProductionPerformanceUpload subscription is an ISA S95 standard and uses the ProductionPerformance schema to upload process order information to an ERP via BizTalk server. The ProductionPerformanceUpload reports actual production and includes:

- Material Produced Actual (MPA) information correlates to Event IDs in Plant Applications.
- Material Produced Actual Properties (MPAP) are the test results.

**ConsumptionPerformance (2):** The ConsumptionPerformance subscription is an ISA S95 standard and uses the ProductionPerformance schema. The ConsumptionPerformance subscription reports actual consumption, and includes:

- Material Consumed Actual (MCA) information that correlates to event components in Plant Applications.
- Material Consumed Actual Properties are the test results.

**TestConformance (3):** The TestConformance subscription is not currently an ISA S95 standard. It does, however, follow the ProductionPerformance schema. The TestConformance subscription reports quality information.

**OrderConfirmation (4):** The OrderConfirmation subscription is not currently an ISA S95 standard. It does, however, follow the ProductionPerformance schema. The OrderConfirmation is sent only once, when an order is completed. It should be the last message sent.

## Subscription Groups

Subscription Groups are a way to categorize your subscriptions. By default, Plant Applications installs five subscription groups: one for schedule downloads and four for performance uploads.

You can create your own custom subscriptions and either add them to an existing subscription group or add them to a new subscription group.

Each subscription group has a stored procedure attached to it that is called when the particular subscription is triggered.

The S95/B2MML interface connector solution provides some flexibility in the handling of exceptions (unknown data such as product name, no supporting path in the plant model, etc) that may be encountered as the Schedule is downloaded from the Foreign System, parsed and examined in Plant Applications. Flexibility is provided by permitting the user to predetermine how certain exceptions should be handled when encountered.

A number of possible exceptions are predicted within the code. These conditions all have default exception handling routines associated with them. These defaults are configurable and can be changed to other available choices depending on the requirements of the site.

The pre-defined exception handling choices are added as User Defined Properties (UDP) and the default is configured in the UDP related tables. The defaults should be confirmed or changed as part of the configuration of the Production Download solution.

### Creating a Subscription Group

To manage subscription information: In the **Plant Applications Administrator**, expand the **Server Manager** tree and expand **Global Configurations**.

Each subscription group is assigned a unique ID, Subscription\_Group\_ID, and is added to the Subscription table in the Plant Applications database.

To create a new subscription group:

1. Right-click the **Subscription Information** folder and click **New Subscription Group**. The Subscription Information folder expands and an empty text field becomes active.

## Global Configuration

2. Type the name of the subscription group and press ENTER.

After you have created a subscription group, you can perform the following tasks by right-clicking on the subscription group.

- Add a new subscription group
- [Edit the subscription group properties](#)
- Delete the subscription group

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*When you delete a subscription group, any subscriptions that are members of the subscription group are deleted and all information is deleted from the Subscription, Subscription\_Group, and Subscription\_Trigger tables.*

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- Rename the subscription group
- [Create a new subscription](#)
- Import and export subscriptions

### Subscription Group Properties

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To manage subscription information: In the **Plant Applications Administrator**, expand the **Server Manager** tree and expand **Global Configurations**.

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Subscription group properties are used to determine the order in which the subscriptions are uploaded and identify the stored procedure to call when a subscription is triggered.


To edit subscription group properties:

1. Right-click a subscription group and click **Subscription Group Properties**. The **Subscription Groups** dialog box appears.
2. In the **Stored Procedure** box, click the **Browse** button. The **Select the stored procedure** dialog box appears which lists all of the stored procedure with the **spLocal** prefix.
3. Click the stored procedure and click **OK**. The **Select the stored procedure** dialog box closes and the **Stored Procedure** box is populated with the name of the stored procedure.
4. In the **Priority** box, type the number of the priority. This will determine the order that messages are uploaded and the order the subscription groups are sorted in the tree.
5. Click **OK**.

### Exporting Subscription Groups

When you export subscription groups, you export the configured properties for each subscription group.


To export subscription groups:

1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Right-click **Subscription Groups** and select **Export Subscription Groups**. The **Configuration Export** dialog box appears.
3. Ensure that **Subscription Groups** is selected and click **OK**. Excel will automatically start and a worksheet containing subscription group configurations will be created.

### Importing Subscription Groups

You can either change an existing subscription group description or add a new row. You cannot change the stored procedure or priority of an existing group. Furthermore, after you import a subscription group, you must add subscriptions to it, either manually or through import.

To import subscription groups:

1. Ensure the Excel workbook that contains the subscription groups configuration is open and the configurations you want to import are selected.
2. In the Plant Applications Administrator, expand  **Global Configuration**.
3. Right-click **Subscription Groups** and select **Import Configuration**. Your selected configurations are imported.
4. Click **OK** and refresh the server.



## Subscriptions

Subscriptions allow Plant Applications to launch an upload of data to an external system, based on the [status triggers](#) you specify. For example, you may wish to update your ERP system every hour and on batch completion, but only when the schedule's status is Running and also whenever the Production Plan status changes from Pending to Complete.

### Creating a Subscription

To manage subscription information: In the **Plant Applications Administrator**, expand the **Server Manager** tree and expand **Global Configurations**.

1. Expand **Subscription Information**.
2. Right-click a [subscription group](#) and click **New Subscription**. The subscription group expands, and a new item, ready for naming, appears at the top of the list.
3. Type the name of the new subscription and then press ENTER.

By default, new subscriptions are active, which is indicated by the  green icon. Inactive subscriptions are indicated by a  red icon.

### Editing Subscription Properties

To manage subscription information: In the **Plant Applications Administrator**, expand the **Server Manager** tree, expand **Global Configurations**, and expand **Subscription Information**.


Subscription properties determine when a subscription is triggered and how various errors are handled, via the user-defined properties (UDPs). You can create triggers based on time or production status change or both. If you configure both triggers, and a production change triggers a subscription before the time interval has elapsed, the start time of the interval is reset.



*Triggers affect only performance uploads.*

1. Expand the subscription group.
2. Right-click a subscription and click **Subscription Properties**. The **Subscription** dialog box appears.
3. To trigger this subscription based on **time**, click the **General** tab and do the following:
  - a. Type a new description in the **Description** box, if necessary.  


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*Subscription names must be unique on a server.*


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  - b. Select or clear the **Active** check box.
  - c. From the **Table** list, select either **Production Plan** or **Events**. This will determine what to use as a key. If you select **Production Plan**, you can select a production execution path. If you select **Events**, you can select production events.
  - d. In the **Key** box, click the  **Browse** button. The **Assign Property Value** dialog box appears.

- e. Make your selection from the **Value** list.
  - f. Click **OK**. The **Assign Property Value** dialog box closes.
  - g. In the **Interval** box, type the number of minutes to specify the frequency at which this subscription is triggered.
  - h. In the **Offset** box, enter the number of minutes after midnight at which the first subscription would have been triggered. Thereafter, the interval determines the frequency. For example, with an offset of 1 and an interval of 20, Plant Applications calculates the trigger time based on the first subscription having fired at 00:21 and then every 20 minutes thereafter.
4. To trigger this subscription by **event**, click the **Triggers** tab and do the following:
- a. Click the  **New** button. A row is added.
  - b. From the **Table** column, select either **Production Plan** or **Events**. This will determine what to use as a key. If you select **Production Plan**, you can select a production execution path. If you select **Events**, you can select production events.
  - c. In the **Key** column, click the  **Browse** button. The **Assign Property Value** dialog box appears.
  - d. Make your selection from the **Value** list.
  - e. Click **OK**. The **Assign Property Value** dialog box closes.
  - f. The **Column** column displays the name of the column in the selected table.
  - g. In the **From** column, select a production status.
  - h. In the **To** column, select a production status.


Example:

Let's assume you selected **Production Plan** as your table, in the From column you selected In Progress, and in the To column you selected Complete. Then, when the value in the PP\_Status\_Id column of the Production\_Plan table changes from In Progress to Complete, this subscription would be triggered.

---

*You can trigger subscriptions by both time and event, or just by time or just by event. If you use both triggers and the subscription is triggered by change in production status, then the time interval will be reset based on the time of the event. For example, if you have a time trigger of 10 minutes and an event triggers a subscription after five minutes, the subscription will not trigger again until either another change in production status occurs or 10 minutes has elapsed.*

---

5. On the **User Defined Properties** tab, do the following:
  - a. Click **Add** to add new user-defined properties.
  - b. Click **Update** to update the value of a user-defined property.
  - c. Click **Delete** to delete user-defined properties.
6. Click the  **Save** button to save your changes.

## Exporting Subscriptions

When you export a subscription, you export the configured properties for the subscription. You can export only one subscription at a time.

To export subscriptions:


1. In the Plant Applications Administrator, expand  **Global Configuration**.

2. Expand **Subscription Information**.
3. Right-click on the subscription you want to export and select **Export Subscriptions**. The **Configuration Export** dialog box appears.
4. Ensure **Subscriptions** is selected and click **OK**. Excel will automatically start and a worksheet containing the configuration for the selected subscription will be created.

### Importing Subscriptions

You can edit an existing subscription group description and a new subscription will be added upon successful completion of an import. You can also edit the subscription description and a new subscription will be added to the subscription group. However, you cannot edit or add any information to the other columns without changing the subscription group description or the subscription description or both.

To import subscriptions:

1. Ensure the Excel workbook that contains the subscription configuration is open and the configuration you want to import is selected.
2. In the Plant Applications Administrator, expand  **Global Configuration**.
3. Expand **Subscription Information**.
4. Right-click on a subscription and select **Import Configuration**. Your selected configurations are imported.
5. Click **OK** and refresh the server.

### XML Schemas of Subscription Messages

These chapters are intended to describe the schemas used by the Enterprise Connector that implements the ISA 95 (S95) standard to define the interface between an enterprise's business and manufacturing systems through an XML-based tagging schema called B2MML version 2.

The Business To Manufacturing Markup Language (B2MML) is used courtesy of the WBF. For more information about WBF and B2MML you can visit:

<http://www.wbf.org/displaycommon.cfm?an=1&subarticlenbr=45>.

#### XML Schemas

Enterprise Connector uses three different schemas:

- Production Schedule
- Production Performance
- Test Performance

The Production Schedule that is used by the Enterprise Connector is a subset of the schema defined by the B2MML. The Enterprise Connector will utilize only the information that is required.

The Production Performance is used by the Enterprise connector in three subsets:

- Production Performance Production Confirmation
- Production Performance Consumption Confirmation
- Production Performance Order Confirmation

This schema is as well defined by the B2MML and Enterprise Connector will use only the necessary data on each case.

## Global Configuration

The Test Performance Schema is not a current standard supported by B2MML, it's our own schema designed in anticipation that it will be adopted by the B2MML.

### Production Schedule Schema

This chapter defines the production schedule schema that is used by the Enterprise Connector.

#### ProductionSchedule

Contains a definition of a production schedule, including the location of the scheduled elements, the publication date of the schedule, the time range of the schedule, and the list of production requests that make up the schedule.

#### ProductionRequest

Contains a definition of a production request element of a production schedule, including the associated product to be produced, the time range of the request, the priority of the request, the segment requirements of the request, and the definition of the expected segment response.

#### SegmentRequirement

Contains a definition of the schedule for a specific segment of production, including an identification of the associated product or process segment, the time range of the request, the expected duration of the request, production parameters for the segment, and the definition of the personnel, equipment, material produced, material consumed, and consumables to be used in production.

#### EquipmentRequirement

Contains a definition of an equipment requirement for a segment requirement, including an identification of the quantity of the resource used, or a definition of required subsets identified by resource properties.

#### MaterialProducedRequirement

Contains a definition of a material to be produced for a segment requirement, including an identification of the quantity of the resource produced, or a definition of required subsets identified by resource properties.

#### MaterialProducedRequirementProperty

Contains a definition of a subset of a material produced in a segment requirement, including the value used to identify the subset and the quantity of the material produced.

#### MaterialsConsumedRequirement

Contains a definition of a material to be consumed for a segment requirement, including an identification of the quantity of the resource consumed, or a definition of required subsets identified by resource properties.

#### MaterialsConsumedRequirementProperty

Contains a definition of a subset of a material consumed in a segment requirement, including the value used to identify the subset and the quantity of the material consumed.

### ***Description and Proficy Mapping***

Element	Order Only	Order & BOM	Description	Proficy Mapping Definition
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<b>ProductionSchedule (PS)</b>	X	X	Main Header element. No specific meaning	N/A
ID	X	X	Contains SAP IDOC Number.	N/A -> This not used in Proficy but should you want it recorded you can use the User Defined Parameter (UDP) linked to the Production_Plan record. (Table_Value_Fields). If there were 3 IDOCs there would be 3 UDP entries in the Table_Value_Fields table.
Description	X	X	Not used	N/A
<b>Location</b>	X	X	The sub elements below define the area of the plant the schedule applies.	N/A. This is not used in Proficy since there is a more specific definition of location found under MaterialProducedRequirement.
EquipmentID	X	X		
EquipmentElementLevel	X	X		
<b>Location</b>	X	X		
EquipmentID	X	X		
EquipmentElementLevel	X	X		
PublishedDate	X	X	Not used	N/A
StartTime	X	X	Not used	N/A
EndTime	X	X	Not used	N/A
EquipmentElementLevel	X	X	Not used	N/A
<b>ProductionRequest</b>	X	X	This element defines a single schedule item. There can be more than one ProductionRequest, or Schedule, within a single ProductionSchedule XML file.	Each instance of this element will be associated with a unique Production_Plan Record in the Proficy Database.
ID	X	X	This defines the Process Order Number. This is the Unique SAP Order ID.	Production_Plan.Process_Order. If the Process Order exists in the Production_Plan table but has never been active then Update with new values; If the Process Order does not exist then Add new Process Order with Status Pending; If Process Order is active then fail (see error handling)



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Description	X	X	This will be used to specify special instructions related to the Process Order. For example: Use Care	This will be stored as a comment associated with the Production Plan. Comments.Comment_Text will contain the comment and the associated Comment_Id will be recorded in the Production_Plan.Comment_Id field. The SAP Interface will have a known userid. Only comments with this known userid will be updated. Comments with other userids will be maintained and chained the comments of this Production Plan.
ProductProductionRuleID	X	X	This defines the specific Recipe (BOM) which will be used when producing this Process Order.	This will be associated with the appropriate BOM_Formulations record in the Proficy Database which represents this recipe. The value will become the BOM_Formulations.BOM_Formulation_Desc and the associated BOM_Formulation_Id will be recorded in Production_Plan.BOM_Formulation_Id
StartTime	X	X	Not used	N/A
EndTime	X	X	Not used	N/A
Priority	X	X	Not used	N/A
<b>SegmentRequirement</b>	X	X	In the case that this Process Order will travel through multiple pieces of equipment (Production Units), there will be one SegmentRequirement for each piece of equipment. There must be at least one SegmentRequirement.	N/A
ID	X	X	Unique Sequence Id starting with 1.	N/A
ProductSegmentID	X	X	Not Used	N/A
ProcessSegmentID	X	X	Not Used	N/A
Description	X	X	Not Used	N/A
EarliestStartTime	X	X	Defines the planned start time for the Process Order	Production_Plan.Forecast_Start_Time

LatestEndTime	X	X	Defines the planned end time for the Process Order	Production_Plan.Forecast_End_Time
Duration	X	X	Not Used	N/A
ProductionParameter	X	X	Not Used	N/A
PersonnelRequirement	X	X	Not Used	N/A
<b>EquipmentRequirement</b>	X	X	The sub-elements below this define the specific equipment which this Process Order will run on.	N/A
EquipmentID	X	X	This contains the unique SAP Code which identifies the piece of Production Equipment.	This ID will be mapped to a Production Execution Path in Proficy in the table PrdExec_Paths. The ID will either be stored in the table PrdExec_Paths.Path_Code or as a foreign system key associated with this Path in the Cross Reference Tables.
EquipmentClassID	X	X	Not Used	N/A
Description	X	X	Not Used	N/A
Location	X	X	Not Used	N/A
Quantity	X	X	Not Used	N/A
EquipmentRequirement Property	X	X	Not Used	N/A
RequiredByRequestedSegmentResponse	X	X	Not Used	N/A
<b>MaterialProducedRequirement</b>	X	X	The sub-elements below this define the material to be produced by this process order. If multiple materials will be produced (ie different lots, etc) there will be multiple MaterialProducedRequirements.	Each MaterialProducedRequirement will result in a Production_Setup record with the PP_Id column associated to the Production_Plan.PP_Id of the corresponding Process Order. Optionally, if there is only 1 MaterialProducedRequirement, and no MaterialLotId or MaterialSubLotId is specified below, this may be omitted and all relevant data can be stored directly in the Production_Plan record.
MaterialClassID	X	X	Not Used	N/A

## Global Configuration

MaterialDefinitionID	X	X	This is the Unique SAP Id for the Product to be produced.	This ID will be mapped to a specific record in the Products table in the Proficy Database. It will either be stored in the Products.Prod_Code or as a foreign system key associated with this Product in the Cross Reference Table.
MaterialLotID	X	X	In Batching operations, this will contain the Batch Number for the material produced. In Non-Batch operations, this will likely be blank.	Will be stored as a Production_Setup.Pattern_Code
MaterialSubLotID	X	X	Not Used	N/A
Description	X	X	Contains the Description of the Material to be produced.	This will only be used in the event that the Product defined in the MaterialDefinitionId is not found in the Proficy Database. In this case, a new Product will be created in Proficy with the Prod_Code = MaterialDefinitionId and the Prod_Desc = Description. In all other cases, this element is ignored.
<b>Location</b>	X	X	The sub-elements below this where the material produced will be stored. i.e. Which SAP warehouse location.	N/A
EquipmentID	X	X	The Unique SAP ID of the site where the material will be produced.	This is not used in Proficy as it is assumed that one Proficy Server will only have one SAP Site included.
EquipmentElementLevel = Site	X	X	Hard coded to Site to indicate that this Location Element defines the Site level of the hierarchy	N/A
<b>Location</b>	X	X	Defines another layer of more detail on the location.	N/A
EquipmentID	X	X	The Unique SAP ID of the particular Warehouse within the Plant where the material will be placed after production.	This will be associated with a specific Production_Unit in the Proficy Database. The actual ID will be stored in the Cross Reference tables associated with this unit.

EquipmentElementLevel = StorageZone	X	X	Hard coded to StorageZone to indicate that this Location Element defines the specific Warehouse	N/A
<b>Quantity</b>	X	X	The sub-elements below this will define the quantity to produce	N/A
QuantityString	X	X	This will contain the Quantity to produce	Production_Setup.Forecast_Quantity -> Note amount of this Quantity will depend on whether Proficy Units of Measure and SAP Units of Measure are the same. If they are not, conversion will be performed.
DataType	X	X	This will specify the datatype of the above Quantity measurement. In all cases, it will be float	N/A
UnitOfMeasure	X	X	This will contain the Unit Of Measure (Eng Units) of the above quantity.	If this Unit of Measure differs from the Unit of Measure for Dimension X of the Event Sub Type to be produced, it will be converted using the configured conversion factor. The converted quantity will be placed in the Production_Setup.Forecast_Quantity. If the Unit of Measure is the same -> do nothing. The Unit of Measure for Dimension X was configured when the Production unit was attached to the Path and configured to count production on this unit
<b>Quantity</b>	X	X	This element and its sub-elements contain a second measurement for how much to produce. For example above might be KG and this might be Boxes.	This is not supported in Proficy and will not be mapped.
QuantityString	X	X		N/A
DataType	X	X		N/A
UnitOfMeasure		X		N/A

Global Configuration

<b>MaterialProducedRequirementProperty</b>	X	X	A MaterialProducedRequirementProperty is essentially an extended attribute of the MaterialProducedRequirement.	In general, all MaterialProducedRequirementProperty types (defined by the ID) will result in a record in Table_Fields with the Value stored in Table_Field_Values.
ID = QualityStatus	X	X		Table_Fields will contain a record with Table_Field_Desc = QualityStatus
Description	X	X	Not Used	N/A
<b>Value</b>	X	X		N/A
ValueString	X	X	Default Stock Type for this Material: - = unrestricted - "X" = Quality Inspection Required - "S" = Blocked	As described above, this will be stored in Table_Field_Values associated with the Table_Field_Id defined above.
DataType	X	X	Always string	N/A
UnitOfMeasure	X	X	Not Used	N/A
Quantity	X	X	Not Used	N/A
<b>MaterialProducedRequirementProperty</b>	X	X	A MaterialProducedRequirementProperty is essentially an extended attribute of the MaterialProducedRequirement.	In general, all MaterialProducedRequirementProperty types (defined by the ID) will result in a record in Table_Fields with the Value stored in Table_Field_Values.
ID = InspectionLotId	X	X	Inspection Lot Number Not used if Process Order and Batch ID are used to identify Quality Inspection Lot.	Table_Fields will contain a record with Table_Field_Desc = InspectionLotId
Description	X	X	Not Used	N/A
<b>Value</b>	X	X	Not Used	N/A
ValueString	X	X	Inspection Lot Number	As described above, will be stored in Table_Field_Values associated with the Table_Field_Id defined above.
DataType	X	X	Always String	N/A
UnitOfMeasure	X	X	Not Used	N/A
Quantity	X	X	Not Used	N/A
RequiredByRequestedSegmentResponse	X	X	Not Used	N/A

<b>MaterialConsumedRequirement</b>		X	Each MaterialConsumedRequirement Element represents an individual BOM item required to produce the Process Order	Will be stored in the Proficy Database as a BOM_Formulation_Item. The BOM_Formulation_Item will be associated with the BOM_Formulation record which was defined by the ProductionRuleId Element above.
MaterialClassID		X	Not Used	N/A
MaterialDefinitionID		X	The SAP Id for the Raw Material to be consumed.	The MaterialDefinitionId will be mapped to a Proficy Product either via the Products.Prod_Code or via the Cross Reference Tables.
MaterialLotID		X	Defines the Lot from which the material is to be used.	Stored as part of the BOM_Formulation_Item record in the Lot_Desc column.
MaterialSubLotID		X	Not Used	Not Used
Description		X	Contains the Description of the Material to be consumed.	This will only be used in the event that the Product defined in the MaterialDefinitionId is not found in the Proficy Database. In this case, a new Product will be created in Proficy with the Prod_Code = MaterialDefinitionId and the Prod_Desc = Description. In all other cases, this element is ignored.
<b>Location</b>		X	The sub-elements below this where the material to be consumed is stored. i.e. Which SAP warehouse location.	N/A
EquipmentID		X	The Unique SAP ID of the site where the material is stored.	This is not used in Proficy as it is assumed that one Proficy Server will only have one SAP Site included.
EquipmentElementLevel		X	Hard coded to Site to indicate that this Location Element defines the Site level of the hierarchy	N/A
<b>Location</b>		X	Defines another layer of more detail on the location.	N/A

Global Configuration

EquipmentID		X	The Unique SAP ID of the particular Warehouse within the Plant where the material is stored.	This will be associated with a specific Production_Unit in the Proficy Database. The actual ID will be stored in the Cross Reference tables associated with this unit. If the ID is not found in the Cross Reference tables or the Prod_Units table then the message will fail (see error handling)
EquipmentElementLevel		X	Hard coded to StorageZone to indicate that this Location Element defines the specific Warehouse	N/A
<b>Quantity</b>		X		
QuantityString		X	Defines the quantity to Consume.	This will be stored in the BOM_Formulation_Item record in the Quantity field.
DataType		X	This will specify the datatype of the above Quantity measurement. In all cases, it will be float	N/A
UnitOfMeasure		X	This will contain the Unit Of Measure (Eng Units) of the above quantity.	If this Unit of Measure differs from the Unit of Measure for the BOM_Formulation_Item in the Master Formulation, it will be converted using the configured conversion formula.
<b>MaterialConsumedRequirementProperty</b>		X	A MaterialConsumedRequirementProperty is essentially an extended attribute of the MaterialConsumedRequirement.	In general, most MaterialConsumedRequirementProperty types (defined by the ID) will result in a record in Table_Fields with the Value stored in Table_Field_Values. There are a few exceptions however.
ID = MaterialReservationId		X	The MaterialReservationId element specifies the SAP Id of the BOM Reservation. This is the official Reservation in SAP of the material to be consumed.	Table_Fields will contain a record with Table_Field_Desc = MaterialReservationId
Description		X	Not Used	N/A
<b>Value</b>		X	Not Used	N/A

ValueString		X	The MaterialReservationId from SAP will be stored here.	As described above, will be stored in Table_Field_Values associated with the Table_Field_Id defined above.
DataType		X	Always String	N/A
UnitOfMeasure		X	Not Used	N/A
Quantity		X	Not Used	N/A
<b>MaterialConsumedRequirementProperty</b>		X	A MaterialConsumedRequirementProperty is essentially an extended attribute of the MaterialConsumedRequirement.	In general, most MaterialConsumedRequirementProperty types (defined by the ID) will result in a record in Table_Fields with the Value stored in Table_Field_Values. There are a few exceptions however.
ID = MaterialReservationSequence		X	The MaterialReservationSequence element specifies the Sequence number of this specific Materials Reservation within the overall MaterialReservation (BOM)	Table_Fields will contain a record with Table_Field_Desc = MaterialReservationSequence
Description		X	Not Used	N/A
<b>Value</b>		X	Not Used	N/A
ValueString		X	The MaterialReservationSequence from SAP will be stored here.	As described above, will be stored in Table_Field_Values associated with the Table_Field_Id defined above.
DataType		X	Always String	N/A
UnitOfMeasure		X	Not Used	N/A
Quantity		X	Not Used	N/A
<b>MaterialConsumedRequirementProperty</b>		X	A MaterialConsumedRequirementProperty is essentially an extended attribute of the MaterialConsumedRequirement.	
ID = Scrap Percent		X	A ScrapPercent defines the standard waste expected from a given material	Within the BOM_Formulation_Items table, this will be stored in the Scrap_Factor column. The ID=Scrap Percent is the key to determine that this will go to the Scrap_Factor column.
Description		X	Not Used	N/A



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<b>Value</b>		X	Not Used	N/A
ValueString		X	The ScrapPercent value	BOM_Formulation_Items.Scrap_Factor
DataType		X	Always float	N/A
UnitOfMeasure		X	Not Used	N/A
Quantity		X	Not Used	N/A
<b>MaterialConsumedRequirementProperty</b>		X	A MaterialConsumedRequirementProperty is essentially an extended attribute of the MaterialConsumedRequirement.	In general, most MaterialConsumedRequirementProperty types (defined by the ID) will result in a record in Table_Fields with the Value stored in Table_Field_Values. There are a few exceptions however.
ID = SpecialStockIndicator		X	Special Stock Indicator: - "K" = Supplier Owned [AccountNumber required] - blank = consume site Owned stock - "Z" = SAP will determine which stock to consume.)	Table_Fields will contain a record with Table_Field_Desc = SpecialStockIndicator
Description		X	Not Used	N/A
<b>Value</b>		X	Not Used	N/A
ValueString		X	The SpecialStockIndicator from SAP will be stored here.	As described above, will be stored in Table_Field_Values associated with the Table_Field_Id defined above.
DataType		X	Always String	N/A
UnitOfMeasure		X	Not Used	N/A
Quantity		X	Not Used	N/A
<b>MaterialConsumedRequirementProperty</b>		X	A MaterialConsumedRequirementProperty is essentially an extended attribute of the MaterialConsumedRequirement.	In general, most MaterialConsumedRequirementProperty types (defined by the ID) will result in a record in Table_Fields with the Value stored in Table_Field_Values. There are a few exceptions however.
ID = AccountNumber		X	Account Number of the Vendor or Creditor (Likely not used)	Table_Fields will contain a record with Table_Field_Desc = AccountNumber
Description		X	Not Used	N/A
<b>Value</b>		X	Not Used	N/A

ValueString		X	The AccountNumber from SAP will be stored here.	As described above, will be stored in Table_Field_Values associated with the Table_Field_Id defined above.
DataType		X	Always String	N/A
UnitOfMeasure		X	Not Used	N/A
Quantity		X	Not Used	N/A
<b>MaterialConsumedRequirementProperty</b>		X	A MaterialConsumedRequirementProperty is essentially an extended attribute of the MaterialConsumedRequirement.	In general, most MaterialConsumedRequirementProperty types (defined by the ID) will result in a record in Table_Fields with the Value stored in Table_Field_Values. There are a few exceptions however.
ID = StockDeterminationGroup		X	Stock Determination Group. Materials which are candidates for Supplier Owned Inventory have a stock determination group set up in their material master.	Table_Fields will contain a record with Table_Field_Desc = StockDeterminationGroup
Description		X	Not Used	N/A
<b>Value</b>		X	Not Used	N/A
ValueString		X	The StockDeterminationGroup from SAP will be stored here.	As described above, will be stored in Table_Field_Values associated with the Table_Field_Id defined above.
DataType		X	Always String	N/A
UnitOfMeasure		X	Not Used	N/A
Quantity		X	Not Used	N/A
RequiredByRequestedSegmentResponse		X		
SegmentResponse		X		

### Sample XML for Production Schedule

```
<?xml version="1.0" encoding="utf-8" ?>
<ProductionSchedule xmlns="http://www.wbf.org/xml/b2mml-v02">
<ID>0000000479308838</ID>
<Location>
  <EquipmentID>1662</EquipmentID>
  <EquipmentElementLevel>Site</EquipmentElementLevel>
- <Location>
```

## Global Configuration

```
<EquipmentID>0</EquipmentID>
<EquipmentElementLevel>Area</EquipmentElementLevel>
</Location>
</Location>
- <ProductionRequest>
  <ID>000901602441</ID>
  <ProductProductionRuleID>1010</ProductProductionRuleID>
  <StartTime>2006-01-23T00:00:00</StartTime>
  <EndTime>2006-01-23T07:12:00</EndTime>
- <SegmentRequirement>
  <ID>1</ID>
  <EarliestStartTime>2006-01-23T00:00:00</EarliestStartTime>
  <LatestEndTime>2006-01-23T07:12:00</LatestEndTime>
- <EquipmentRequirement>
  <EquipmentID>JXXS</EquipmentID>
</EquipmentRequirement>
- <MaterialProducedRequirement>
  <MaterialDefinitionID>000000000084962822</MaterialDefinitionID>
  <MaterialLotID>6023JAJ0</MaterialLotID>
  <Description> 50G FLEX</Description>
- <Location>
  <EquipmentID>1662</EquipmentID>
  <EquipmentElementLevel>Site</EquipmentElementLevel>
</Location>
- <Quantity>
  <QuantityString>16695.000</QuantityString>
  <DataType>float</DataType>
  <UnitOfMeasure>CS</UnitOfMeasure>
</Quantity>
- <Quantity>
  <QuantityString>16695.000</QuantityString>
  <DataType>float</DataType>
  <UnitOfMeasure>CS</UnitOfMeasure>
</Quantity>
- <MaterialProducedRequirementProperty>
  <ID>QualityStatus</ID>
  <Description />
- <Value>
  <ValueString>X</ValueString>
  <DataType>string</DataType>
</Value>
<Quantity />
```

```

    </MaterialProducedRequirementProperty>
- <MaterialProducedRequirementProperty>
  <ID>InspectionLotID</ID>
  <Description />
- <Value>
  <ValueString>000000000000</ValueString>
  <DataType>string</DataType>
  </Value>
  <Quantity />
</MaterialProducedRequirementProperty>
</MaterialProducedRequirement>
- <MaterialConsumedRequirement>
  <MaterialDefinitionID>000000000010042526</MaterialDefinitionID>
  <Description>Salt Flake and SSA</Description>
- <Location>
  <EquipmentID>1662</EquipmentID>
  <EquipmentElementLevel>Site</EquipmentElementLevel>
- <Location>
  <EquipmentID>STSO</EquipmentID>
  <EquipmentElementLevel>StorageZone</EquipmentElementLevel>
</Location>
</Location>
- <Quantity>
  <QuantityString>379.725</QuantityString>
  <DataType>float</DataType>
  <UnitOfMeasure>KG</UnitOfMeasure>
  </Quantity>
- <MaterialConsumedRequirementProperty>
  <ID>MaterialReservationID</ID>
  <Description />
- <Value>
  <ValueString>0043845745</ValueString>
  <DataType>string</DataType>
  </Value>
  <Quantity />
</MaterialConsumedRequirementProperty>
- <MaterialConsumedRequirementProperty>
  <ID>MaterialReservationSequence</ID>
  <Description />
- <Value>
  <ValueString>0010</ValueString>
  <DataType>string</DataType>

```

## Global Configuration

```
</Value>
<Quantity />
</MaterialConsumedRequirementProperty>
- <MaterialConsumedRequirementProperty>
  <ID>ScrapPercent</ID>
  <Description />
- <Value>
  <ValueString>170.00</ValueString>
  <DataType>float</DataType>
  <UnitOfMeasure>percent</UnitOfMeasure>
</Value>
<Quantity />
</MaterialConsumedRequirementProperty>
  </MaterialConsumedRequirement>
</SegmentRequirement>
</ProductionRequest>
</ProductionSchedule>
```

## Production Performance (Production/Consumption Confirmation)

This section defines the production performance order confirmation schema used by the Enterprise Connector.

### ProductionPerformance

The top level element. Contains a definition of a report on production performance, including the location of the performance, the publication data of the performance report, the ID of the associated production schedule, the duration of the production performance, and the list of production responses making up the production performance report. May include application specific defined elements.

### ProductionResponse

Contains a definition of a production response report, including the identification of an associated production request, the product produced, the duration of the report, and the segments making up the production response. May include application specific defined elements. May be a top level element for defined locations.

### SegmentResponse

Contains a definition of a report on a segment. Includes the duration, production data, personnel, equipment, material produced, material consumed, and consumables used.

### MaterialProducedActual

Contains a report on actual material resources produced. May define the quantity of the resource produced, or may contain a list of property definitions and quantities for each property subset.

### Description and Proficy Mapping

Element	Pr od	Co ns	Description	Proficy Mapping Definition
<b>ProductionPerformance</b>	X	X		
ID	X	X	Not Used	N/A
Description	X	X	Not Used	N/A

Subscription Information

Location	X	X	Not Used	N/A
PublishedDate	X	X	The current time when the document was produced.	GETDATE()
ProductionScheduleID	X	X	Not Used	N/A
StartTime	X	X	Not Used	N/A
EndTime	X	X	Not Used	N/A
EquipmentElementLevel	X	X	Not Used	N/A
<b>ProductionResponse</b>	X	X	There is one Production Response element for each Process Order this Message refers to. There will never be more than 1 Process Order in a single message so there will never be more than 1 ProductionResponse section.	
ID	X	X	The sequence number for the ProductionResponse. Always 1	1
ProductionRequestID	X	X	This should be the Unique SAP Id for the Process Order.	Production_Plan.Process_Order
ProductProductionRuleID	X	X	Not Used	N/A
StartTime	X	X	Not Used	N/A
EndTime	X	X	Not Used	N/A
<b>SegmentResponse</b>	X	X	There will be a SegmentResponse for each piece of equipment where the process order was produced. Typically, there will only be one SegmentResponse section.	
ID	X	X	Sequence Number for the segment response.	1
ProductSegmentID	X	X	Not Used	N/A
ProcessSegmentID	X	X	Indicates which type of transaction this schema is. For the purposes of Appendix B, this will always be MAKE	MAKE
Description	X	X	Not Used	N/A
ActualStartTime	X	X	Not Used specifically by SAP. Will provide Actual Start time of the Process order.	Production_Plan.Actual_Start_Time

Global Configuration

ActualEndTime	X	X	Posting date in the document (yyyyMMdd) Previous Date: if midnight	Production_Plan.Actual_End_Time or Interval End Time (GETDATE) in the case of a Periodic update of an open Process order.
ProductionData	X	X	Not Used	N/A
PersonnelActual	X	X	Not Used	N/A
EquipmentActual	X	X	Not Used	N/A
<b>MaterialProducedActual</b>	X		There will be one MaterialProducedActual for each Batch/Lot/Event recorded in Proficy against the Process Order.	
MaterialClassID	X			
MaterialDefinitionID	X		Indicates the SAP MaterialDefinitionId (Product) of the material Produced.	Depending on if the Event has an Applied product assigned or not, this will come from either Production_Starts.Prod_ID or Events.Applied_Product.
MaterialLotID	X		Lot / Batch Number of the material produced.	Events.Event_Num
MaterialSubLotID	X		Not Used	N/A
Description	X		Not Used	N/A
<b>Location</b>	X		The sub-elements below this where the material produced is stored. i.e. Which SAP warehouse location the material is stored.	N/A
EquipmentID	X		The Unique SAP ID of the ste where the material is stored.	This is not used in Proficy as it is assumed that one Proficy Server will only have one SAP Site included. This will be hardcoded in BizTalk or in a parameter where BizTalk can pick it up.
EquipmentElementLevel	X		Hard coded to Site to indicate that this Location Element defines the Site level of the hierarchy	Site
<b>Location</b>	X		Defines another layer of more detail on the location.	

EquipmentID	X		The Unique SAP ID of the particular Warehouse within the Plant where the material is stored.	A Variable associated with the Production Event will contain this Location information. The Variable will be populated with the appropriate location based on what was provided in the ProductionSchedule. The Value for this element will then be retrieved from Tests.Result for the appropriate variable on the given Production Event.
EquipmentElementLevel	X		Hard coded to StorageZone to indicate that this Location Element defines the specific Warehouse	StorageZone
<b>Quantity</b>	X		The elements below this indicate the size of this Production Event	N/A
QuantityString	X		The actual size produced rounded to 3 decimal places.	Event_Details.Initial_Dimension_X for the Production Event.
DataType	X		Always Float	Float
UnitOfMeasure	X		Will indicate the unit of measure the above size is measured in.	Event_Sub_Type.Dimension_X_EngUnits
<b>MaterialProducedActual Property</b>	X		MaterialProducedActualProperties represent Variable data associated with a Production Event and flagged to be sent to SAP.	N/A
ID = QualityStatus	X		ID will indicate the Property Name. In this case QualityStatus	The Proper name will be found in the System Cross Reference Tables, if not found, the Variable Descriptions (Variables.Var_Desc) will be used.
Description	X		Not Used	N/A
<b>Value</b>	X		The elements below this will indicate the value for the Property.	N/A
ValueString	X		This will store the actual value of the Variable	Tests.Result for the Variable
DataType	X		This will store the Data Type of the Variable	Variables.Data_Type_Id (mapped to the correct Data_Types.Data_Type_Desc field)



Global Configuration

UnitOfMeasure	X		This will store the Unit of Measure for the Variable.	Variables.Eng_Units.
Quantity	X		Not Used	N/A
RequiredByRequestedSegmentResponse	X		Not Used	N/A
<b>MaterialProducedActual Property</b>	X		MaterialProducedActualProperties represent Variable data associated with a Production Event and flagged to be sent to SAP.	N/A
ID = ShelfLifeExpirationDate	X		ID will indicate the Property Name. In this case ShelfLifeExpirationDate	The Proper name will be found in the System Cross Reference Tables, if not found, the Variable Descriptions (Variables.Var_Desc) will be used.
Description	X		Not Used	N/A
<b>Value</b>	X		The elements below this will indicate the value for the Property.	N/A
ValueString	X		This will store the actual value of the Variable	Tests.Result for the Variable
DataType	X		This will store the Data Type of the Variable	Variables.Data_Type_Id (mapped to the correct Data_Types.Data_Type_Desc field)
UnitOfMeasure	X		This will store the Unit of Measure for the Variable.	Variables.Eng_Units.
Quantity	X		Not Used	N/A
RequiredByRequestedSegmentResponse	X		Not Used	N/A
RequiredByRequestedSegmentResponse	X		Not Used	N/A

<b>MaterialConsumedActual</b>		X	There will be one MaterialConsumedActual for each Raw Material consumed (Goods Issue) in producing this Process Order.	All Raw Material consumptions are expected to be recorded in the Proficy as Production events connected by Event_Component records to the Production Events produced in the making of the Process Order.  In some cases, the Raw Material will be directly connected to the Production Event produced, but in others, it will be necessary to go back several levels of Genealogy (Event_Components) in order to find the actual Raw Material. Further details on the rules for determining the actual Raw Materials to report will be defined in the Detail Design document to follow this document.
MaterialClassID		X	Not Used	N/A
MaterialDefinitionID		X	This will indicate the MaterialDefinitionId (Product) of the Raw Material consumed	Depending on if the Event has an Applied product assigned or not, this will come from either Production_Starts.Prod_ID or Events.Applied_Product.
MaterialLotID		X	This will indicate the Batch or Lot ID of the material consumed.	Events.Event_Num of the consumed (Source) Production Event.
MaterialSubLotID		X	Not Used	N/A
Description		X	Not Used	N/A
<b>Location</b>		X	The sub-elements below this where the material consumed was stored. i.e. Which SAP warehouse location the material was stored.	N/A
EquipmentID		X	The Unique SAP ID of the site where the material was stored.	This is not used in Proficy as it is assumed that one Proficy Server will only have one SAP Site included. This will be hardcoded in BizTalk or in a parameter where BizTalk can pick it up.

Global Configuration

EquipmentElementLevel		X	Hard coded to Site to indicate that this Location Element defines the Site level of the hierarchy	Site
<b>Location</b>		X	Defines another layer of more detail on the location.	
EquipmentID		X	The Unique SAP ID of the particular Warehouse within the Plant where the material is stored.	A Variable associated with the consumed Production Event will contain this Location information. The Variable will be populated with the appropriate location information. The Value for this element will then be retrieved from Tests.Result for the appropriate variable on the consumed Production Event.
EquipmentElementLevel		X	Hard coded to StorageZone to indicate that this Location Element defines the specific Warehouse	StorageZone
<b>Quantity</b>		X	The elements below this indicate the amount consumed from the Production Event	N/A
QuantityString		X	The actual size consumed rounded to 3 decimal places.	Event_Components.Dimension_X  Some additional rules apply when you have to go up multiple levels of Genealogy to find the raw materials in order to decide which measurement of consumption is the actual one to use for reporting. These rules will be defined in the Detail Design document to follow this document.
DataType		X	Always Float	Float
UnitOfMeasure		X	Will indicate the unit of measure the above size is measured in.	Event_Sub_Type.Dimension_X_EngUnits

<b>MaterialConsumedActualProperty</b>	X	MaterialConsumedActualProperties represent Variable data associated with an Event_Component record and flagged to be sent to SAP.	N/A
ID = MaterialReservationID	X	ID will indicate the Property Name. In this case MaterialReservationID	The Proper name will be found in the System Cross Reference Tables, if not found, the Variable Descriptions (Variables.Var_Desc) will be used.
Description	X	Not Used	N/A
<b>Value</b>	X	The elements below this will indicate the value for the Property.	N/A
ValueString	X	This will store the actual value of the Variable	Tests.Result for the Variable
DataType	X	This will store the Data Type of the Variable	Variables.Data_Type_Id (mapped to the correct Data_Types.Data_Type_Desc field)
UnitOfMeasure	X	This will store the Unit of Measure for the Variable.	Variables.Eng_Units.
<b>Quantity</b>	X	Not Used	N/A
RequiredByRequestedSegmentResponse	X	Not Used	N/A
<b>MaterialConsumedActualProperty</b>	X	MaterialConsumedActualProperties represent Variable data associated with an Event_Component record and flagged to be sent to SAP.	N/A
ID = MaterialReservationSequence	X	ID will indicate the Property Name. In this case MaterialReservationSequence	The Proper name will be found in the System Cross Reference Tables, if not found, the Variable Descriptions (Variables.Var_Desc) will be used.
Description	X	Not Used	N/A
<b>Value</b>	X	The elements below this will indicate the value for the Property.	N/A
ValueString	X	This will store the actual value of the Variable	Tests.Result for the Variable

Global Configuration

DataType		X	This will store the Data Type of the Variable	Variables.Data_Type_Id (mapped to the correct Data_Types.Data_Type_Desc field)
UnitOfMeasure		X	This will store the Unit of Measure for the Variable.	Variables.Eng_Units.
Quantity		X	Not Used	N/A
RequiredByRequestedSegmentResponse		X	Not Used	N/A
<b>MaterialConsumedActualProperty</b>		X	MaterialConsumedActualProperties represent Variable data associated with an Event_Component record and flagged to be sent to SAP.	N/A
ID = SpecialStockIndicator		X	ID will indicate the Property Name. In this case SpecialStockIndicator	The Proper name will be found in the System Cross Reference Tables, if not found, the Variable Descriptions (Variables.Var_Desc) will be used.
Description		X	Not Used	N/A
<b>Value</b>		X	The elements below this will indicate the value for the Property.	N/A
ValueString		X	This will store the actual value of the Variable	Tests.Result for the Variable
DataType		X	This will store the Data Type of the Variable	Variables.Data_Type_Id (mapped to the correct Data_Types.Data_Type_Desc field)
UnitOfMeasure		X	This will store the Unit of Measure for the Variable.	Variables.Eng_Units.
Quantity		X		
RequiredByRequestedSegmentResponse		X		
<b>MaterialConsumedActualProperty</b>		X	MaterialConsumedActualProperties represent Variable data associated with an Event_Component record and flagged to be sent to SAP.	N/A
ID = AccountNumber		X	ID will indicate the Property Name. In this case AccountNumber	The Proper name will be found in the System Cross Reference Tables, if not found, the Variable Descriptions (Variables.Var_Desc) will be used.

Description		X	Not Used	N/A
<b>Value</b>		X	The elements below this will indicate the value for the Property.	N/A
ValueString		X	This will store the actual value of the Variable	Tests.Result for the Variable
DataType		X	This will store the Data Type of the Variable	Variables.Data_Type_Id (mapped to the correct Data_Types.Data_Type_Desc field)
UnitOfMeasure		X	This will store the Unit of Measure for the Variable.	Variables.Eng_Units.
Quantity		X	Not Used	N/A
RequiredByRequestedSegmentResponse		X	Not Used	N/A
<b>MaterialConsumedActualProperty</b>		X	MaterialConsumedActualProperties represent Variable data associated with an Event_Component record and flagged to be sent to SAP.	N/A
ID = Heel		X	ID will indicate the Property Name. In this case Heel	The Proper name will be found in the System Cross Reference Tables, if not found, the Variable Descriptions (Variables.Var_Desc) will be used.
Description		X	Not Used	N/A
<b>Value</b>		X	The elements below this will indicate the value for the Property.	N/A
ValueString		X	This will store the actual value of the Variable	Tests.Result for the Variable
DataType		X	This will store the Data Type of the Variable	Variables.Data_Type_Id (mapped to the correct Data_Types.Data_Type_Desc field)
UnitOfMeasure		X	This will store the Unit of Measure for the Variable.	Variables.Eng_Units.
Quantity		X	Not Used	N/A
RequiredByRequestedSegmentResponse		X	Not Used	N/A
ConsumableActual		X	Not Used	N/A
SegmentResponse		X	Not Used	N/A
RequiredByRequestedSegmentResponse		X	Not Used	N/A
SegmentState		X	Not Used	N/A

**Sample XML file for Production Performance Production Confirmation**

```
- <ProductionPerformance>
  <Description>Production Performance Production</Description>
  <PublishedDate>2006-03-21T10:54:23.8870000-08:00</PublishedDate>
- <ProductionResponse>
  <ID>1</ID>
  <ProductionRequestID>0000000000006</ProductionRequestID>
- <SegmentResponse>
  <ID>1</ID>
  <ProcessSegmentID>MAKE</ProcessSegmentID>
  <ActualStartTime>2006-03-21T10:14:23.0000000-08:00</ActualStartTime>
  <ActualEndTime>2006-03-21T10:38:09.0000000-08:00</ActualEndTime>
- <MaterialProducedActual>
  <MaterialDefinitionID>00000000011080431</MaterialDefinitionID>
  <MaterialLotID>9000000000006</MaterialLotID>
- <Location>
  <EquipmentID>0000</EquipmentID>
  <EquipmentElementLevel>Site</EquipmentElementLevel>
- <Location>
  <EquipmentID>LDFM</EquipmentID>
  <EquipmentElementLevel>StorageZone</EquipmentElementLevel>
</Location>
</Location>
- <Quantity>
  <QuantityString>300</QuantityString>
  <DataType>float</DataType>
  <UnitOfMeasure>Kg</UnitOfMeasure>
</Quantity>
- <MaterialProducedActualProperty>
  <ID>Auto TO Creation with LTA</ID>
  <Description>Auto TO Creation with LTA</Description>
- <Value>
  <ValueString />
  <DataType>string</DataType>
  <UnitOfMeasure />
</Value>
</MaterialProducedActualProperty>
</MaterialProducedActual>
</SegmentResponse>
</ProductionResponse>
</ProductionPerformance>
```

**Sample XML file for Production Performance Consumption Confirmation**

```

- <ProductionPerformance>
  <Description>Production Performance Consumption</Description>
  <PublishedDate>2005-10-20T10:53:41.0370000-07:00</PublishedDate>
- <ProductionResponse>
  <ID>1</ID>
  <ProductionRequestID>00000000012</ProductionRequestID>
- <SegmentResponse>
  <ID>1</ID>
  <ProcessSegmentID>MAKE</ProcessSegmentID>
  <ActualStartTime>2005-10-19T11:54:54.0000000-07:00</ActualStartTime>
  <ActualEndTime>2005-10-19T11:57:54.0000000-07:00</ActualEndTime>
- <MaterialConsumedActual>
  <MaterialDefinitionID>00000000011080431</MaterialDefinitionID>
  <MaterialLotID>001441</MaterialLotID>
- <Location>
  <EquipmentID>0000</EquipmentID>
  <EquipmentElementLevel>Site</EquipmentElementLevel>
- <Location>
  <EquipmentID>Test Mucilloid</EquipmentID>
  <EquipmentElementLevel>StorageZone</EquipmentElementLevel>
</Location>
</Location>
- <Quantity>
  <QuantityString>20</QuantityString>
  <DataType>float</DataType>
  <UnitOfMeasure>kg</UnitOfMeasure>
</Quantity>
</MaterialConsumedActual>
</SegmentResponse>
</ProductionResponse>
</ProductionPerformance>

```

**Production Performance (Order Confirmation)**

This section defines the production performance order confirmation schema used by the Enterprise Connector.

**ProductionPerformance**

The top-level element. Contains a definition of a report on production performance, including the location of the performance, the publication data of the performance report, the ID of the associated production schedule, the duration of the production performance, and the list of production responses making up the production performance report. May include application specific defined elements.



## Global Configuration

### ProductionResponse

Contains a definition of a production response report, including the identification of an associated production request, the product produced, the duration of the report, and the segments making up the production response. May include application specific defined elements. May be a top level element for defined locations.

### SegmentResponse

Contains a definition of a report on a segment. Includes the duration, production data, personnel, equipment, material produced, material consumed, and consumables used.

### MaterialProducedActual

Contains a report on actual material resources produced. May define the quantity of the resource produced, or may contain a list of property definitions and quantities for each property subset.

### **Description and Proficy Mapping**

<b>Element</b>	<b>Description</b>	<b>Proficy Mapping Definition</b>
<b>ProductionPerformance</b>		
ID	Not Used	N/A
Description	Not Used	N/A
PublishedDate	The current time when the document was produced.	GETDATE()
ProductionScheduleID	Not Used	N/A
StartTime	Not Used	N/A
EndTime	Not Used	N/A
EquipmentElementLevel	Not Used	N/A
<b>ProductionResponse</b>	There is one Production Response element for each Process Order this Message refers to. There will never be more than 1 Process Order in a single message so there will never be more than 1 ProductionResponse section.	
ID	The sequence number for the ProductionResponse. Always 1	1
ProductionRequestID	This should be the Unique SAP Id for the Process Order.	Production_Plan.Process_Order
ProductProductionRuleID	Not Used	N/A
StartTime	Not Used	N/A
EndTime	Not Used	N/A

<b>SegmentResponse</b>	There will be a SegmentResponse for each piece of equipment where the process order was produced. Typically, there will only be one SegmentResponse section.	
ID	Sequence Number for the segment response.	1
ProductSegmentID	Not Used	N/A
ProcessSegmentID	Indicates which type of transaction this schema is.	ORDER CONFIRMATION
Description		
ActualStartTime	Not Used specifically by SAP. Will provide Actual Start time of the Process order.	Production_Plan.Actual_Start_Time
ActualEndTime	Posting date in the document (yyyyMMdd) Previous Date: if midnight	Production_Plan.Actual_End_Time or Interval End Time (GETDATE) in the case of a Periodic update of an open Process order.
ProductionData		
PersonnelActual		
EquipmentActual		
<b>MaterialProducedActual</b>	There will be one MaterialProducedActual for each Batch/Lot/Event recorded in Proficy against the Process Order.	
MaterialClassID	Not Used	N/A
MaterialDefinitionID	Indicates the SAP MaterialDefinitionId (Product) of the material Produced.	Depending on if the Event has an Applied product assigned or not, this will come from either Production_Starts.Prod_ID or Events.Applied_Product.
MaterialLotID	Lot / Batch Number of the material produced.	Events.Event_Num
MaterialSubLotID	Not Used	N/A
Description	Not Used	N/A
<b>Quantity</b>	The elements below this indicate the size of this Production Event	N/A
QuantityString	The actual size produced rounded to 3 decimal places.	Event_Details.Initial_Dimension_X for the Production Event.
DataType	Always Float	Float
UnitOfMeasure	Will indicate the unit of measure the above size is measured in.	Event_Sub_Type.Dimension_X_Eng Units

## Global Configuration

<b>Any</b>	Additional *Wildcard* data	The Any section of the schema will be populated with the value of any Process Order Variable which has been identified for upload to SAP as part of the Order Confirmation message.
ConfirmProcessOrder	This will be a variable associated with the Process order	The Cross Reference Table, or Variable Description will be used as the element name and the Tests.Result will be used as the value
DeliveryComplete	This will be a variable associated with the Process order	The Cross Reference Table, or Variable Description will be used as the element name and the Tests.Result will be used as the value
TECOProcessOrder	This will be a variable associated with the Process order	The Cross Reference Table, or Variable Description will be used as the element name and the Tests.Result will be used as the value

### Sample XML file for Production Performance (Order Confirmation)

```

- <ProductionPerformance>
  <Description>Production Performance Order Confirmation</Description>
  <PublishedDate>2005-12-14T10:42:57.0000000-08:00</PublishedDate>
- <ProductionResponse>
  <ID>1</ID>
  <ProductionRequestID>000000000100</ProductionRequestID>
- <SegmentResponse>
  <ID>1</ID>
  <ProcessSegmentID>ORDER CONFIRMATION</ProcessSegmentID>
  <ActualStartTime>2005-12-14T10:42:57.0000000-08:00</ActualStartTime>
  <ActualEndTime>2006-01-06T10:13:19.0000000-08:00</ActualEndTime>
- <MaterialProducedActual>
  <MaterialDefinitionID>00000000011080431</MaterialDefinitionID>
  <MaterialLotID>1012</MaterialLotID>
  <Description>00000000011080431</Description>
- <Quantity>
  <QuantityString>100</QuantityString>
  <DataType>float</DataType>
  <UnitOfMeasure>kg</UnitOfMeasure>
</Quantity>
</MaterialProducedActual>
- <MaterialProducedActual>
  <MaterialDefinitionID>00000000011080431</MaterialDefinitionID>
  <MaterialLotID>1013</MaterialLotID>
  <Description>00000000011080431</Description>

```

```

- <Quantity>
  <QuantityString>200</QuantityString>
  <DataType>float</DataType>
  <UnitOfMeasure>kg</UnitOfMeasure>
</Quantity>
</MaterialProducedActual>
</SegmentResponse>
- <Any>
  <ConfirmProcessOrder>1</ConfirmProcessOrder>
  <DeliveryComplete>0</DeliveryComplete>
  <TECOProcessOrder>0</TECOProcessOrder>
</Any>
</ProductionResponse>
</ProductionPerformance>

```

### Test Performance (Quality Data)

This section defines the Test performance schema that is used by the Enterprise Connector.

#### TestPerformance

Contains a definition of a report on Test Performance, including the publication data, the ID of the test performance report and the quality

#### TestResponse

Contains a definition of the report including the list of responses or changed process orders since the last upload. It can be sent many times during the lifespan of a Process Order.

#### TestSegmentResponse

Contains the duration of the test as well as the identification of the equipment, there can be many testsegmentresponses per batch.

#### TestData

Contains the Event Comment designating a "FAIL" Disposition, "Warning" Comments on specified/configured, Test Variable designating a "Pass" Disposition and the test result

#### TestResult

Contains the result of each test as well as the identification of each variable test, it can be many test results.

### Description and Proficy Mapping

Element	Description	Proficy Mapping Definition
<b>TestPerformance</b>		
ID	Unique Id of Test Performance Report	N/A
Description	Not Used	N/A
Location	Not Used	

Global Configuration

PublishedDate	The current time when the document was produced.	GETDATE()
TestScheduleID	ID of Associated Test Schedule	N/A
StartTime	Not Used	N/A
EndTime	Not Used	N/A
EquipmentElementLevel	Not Used	N/A
<b>TestResponse</b>	List of Responses (List of changed Process Orders since last upload -> for Phase 1 List of Completed Process orders as designated by Production_Plan_Status = (UDP for PO definitely complete(Confirm toSAP etc) since last upload.  There can be many TestResponses	
ID	The sequence number for the TestResponse. Unique Response ID; Scope within this TestPerformance so integer starting with 1	1
TestRequestID	This should be the Unique SAP Id for the SAP Inspection Lot ID	N/A
ProductionRequestID	Unique Order ID; Corresponds to ProductionRequestID in ProductionSchedule	Production_Plan.Process_Order
TestDefinitionID	Not Used	N/A
StartTime	Not Used	N/A

EndTime	Not Used	N/A
<b>TestSegmentResponse</b>	<p>There will be a SegmentResponse for each piece of equipment (Path) where the process order was produced. Typically, there will only be one SegmentResponse section. However a generic solution would provide for the possibility of many Segment Responses</p> <p>There can be many TestSegmentResponses per Batch</p>	
ID	Sequence Number for the segment response.	1
TestSegmentID	ID of Business View of Testing IE -> END OF BATCH	Table_Fields will contain a record with Table_Field_Desc = TestSegmentID Value stored in Table_Field_Values = will be -> as per this example END OF BATCH & against subscr record
Description		
ActualStartTime	Actual Start Time of this Process Order	Events.Start_Time
ActualEndTime	Actual End Time or Interval end Time of this Process order	Events.Timestamp
<b>TestData</b>	Section Identifier	
ID	Not Used	N/A
Code	Not Used	N/A
Name	LOT RELEASE	Table_Fields will contain a record with Table_Field_Desc = TestDataName Value stored in Table_Field_Values = will be -> as per this example LOT RELEASE & subscription record
Description	Not Used	N/A
StartTime	Not used	N/A

## Global Configuration

EndTime	Date and time of this test event	The First Result_On timestamp for the variables that are being reported on in this Production Event segment response.
PerformedBy	Not used	N/A
ReviewedBy	Not used	N/A
Type	Not used	N/A
Comment	Not used	N/A
Disposition	Not used	N/A
Status	Not used	N/A
<b>TestResult</b>	There can be many TestResults	
ID	QM_YIELD	<p>Test Result Variables that are to be uploaded to SAP for this Production Event will be signified by having SAPTest=xxxxx In the extended_info of the variables. IE SAPTest=QM_YIELD</p> <p>Extended_Info may be used for more than one purpose on variables. When parsing the extended_info field sections will be separated by a semi- colon SAPTest=QM_YIELD;Otherpurpose= ;OtherPurpose2=</p>
Description	Not used	N/A
DataEntryTime	Date and Time the entry was made	Tests.Entry_On
ExpirationTime	Not used	N/A
EnteredBy	Not used	N/A
ReviewedBy	Not used	N/A
<b>Result</b>		
ValueString	50.2	Tests.Result (Production Event Variable). Send original value -> no formatting or rounding.
DataType	Float	If numeric value always send float.
UnitOfMeasure	Not used	N/A
Comment	Good	Variable.Comment_Id mapped to Comments.Comment_Text
Disposition	A ---Pass => A; Fail => R; Otherwise null.	N/A
Comment	Not used	N/A
Disposition	Not used	N/A
Status	Not used	N/A
RequiredByRequestedSegmentResponse	Not used	N/A

<b>TestResult</b>	Quality Comment Example If there is no result but Comment is not null, then map only Fields noted under this TestResult section to a ZXCOMM record.  There will only be one COMMENT Test Result per TestData (LOT RELEASE)	
ID	COMMENT	N/A
Description	Not Used	N/A
DataEntryTime	2001-12- 17T09:30:47- 05:00	Events.Entered_On
ExpirationTime	Not Used	N/A
EnteredBy	Not Used	N/A
ReviewedBy	Not Used	N/A
<b>Result</b>		
ValueString		N/A
DataType		N/A
UnitOfMeasure	Not used	N/A
Comment	Bird in Batch	Events.Comment_Id mapped to Comments.Comment_Text
Disposition	A ---Pass => A; Fail => R; Otherwise null. Proficy will always return full string of FAIL as the Disposition for a <b>Event</b> Comment.	FAIL
Status	Not used	N/A
RequiredByRequestedSegmentResponse	Not used	N/A
MaterialTestedActual		
MaterialClassID		N/A
MaterialDefinitionID		



## Global Configuration

MaterialLotID	MaterialLotID is SAP Batch ID: Lot / Batch Number Normally: Ignored. If there is more than one Batch in an Order, this will be used to determine for which Batch the Inspection Lot is recorded.	Will only have a value for production events or batch operations.  Events.Event_Num  If there is only one Batch per Process order then return nothing.  If there is not a batch number then return nothing.
MaterialSubLotID	Not used	N/A
MaterialSampleID	Not used	N/A
Description	Not used	N/A
Location	Not used	N/A
Quantity	Not used	N/A
MaterialTestedActualProperty	Not used	N/A
RequiredByRequestedSegmentResponse	Not used	N/A
PersonnelActual	Not used	N/A
EquipmentActual	Not used	N/A
MaterialConsumedActual	Not used	N/A
ConsumableActual	Not used	N/A
TestSegmentResponse	Not used	N/A
RequiredByRequestedSegmentResponse	Not used	N/A
SegmentState	Not used	N/A
Any	Not used	N/A

### Sample XML file for Test Performance

```
<?xml version="1.0" encoding="utf-8" ?>
- <TestPerformance>
  <Description>Test Performance</Description>
  <PublishedDate>2005-10-20T10:53:53.3470000-07:00</PublishedDate>
- <TestResponse>
  <ID>1</ID>
  <ProductionRequestID>000000000003</ProductionRequestID>
- <TestSegmentResponse>
  <ID>1</ID>
  <TestSegmentID>End Of Batch</TestSegmentID>
  <ActualStartTime>1900-01-01T00:00:00.0000000-08:00</ActualStartTime>
```

```

    <ActualEndTime>2005-10-18T16:12:04.0000000-07:00</ActualEndTime>
- <TestData>
    <ID>1</ID>
    <Name>Lot Release</Name>
    <StartTime>1900-01-01T00:00:00.0000000-08:00</StartTime>
    <EndTime>2005-10-18T16:12:04.0000000-07:00</EndTime>
- <TestResult>
    <ID>QUA001</ID>
    <DataEntryTime>2005-10-18T16:12:12.9230000-07:00</DataEntryTime>
- <Result>
    <ValueString>11</ValueString>
    <DataType>float</DataType>
  </Result>
</TestResult>
- <TestResult>
    <ID>QUA002</ID>
    <DataEntryTime>2005-10-18T16:12:12.9400000-07:00</DataEntryTime>
- <Result>
    <ValueString>12</ValueString>
    <DataType>float</DataType>
  </Result>
</TestResult>
</TestData>
- <MaterialTestedActual>
    <MaterialLotID>001394</MaterialLotID>
  </MaterialTestedActual>
</TestSegmentResponse>
</TestResponse>
</TestPerformance>

```

## Engineering Units

At the global level in Plant Applications, engineering units (units of measurement used in bills of materials, subscriptions, and event subtypes) can be added. Excel import and export is supported.

Using Excel, unit conversions can also be created, imported, and exported.

You must create one engineering unit for the unit of measure used on the production unit and one engineering unit for the unit of measure used by the external system, such as an ERP.

---




*Engineering units must be configured prior to administering bills of materials, subscriptions, or event subtypes.*

---

### Creating Engineering Units

Engineering units must be configured prior to administering bills of materials or subscriptions.

To add an engineering unit:

1. In the Server Manager tree, expand  **Global Configuration** and the **Engineering Units** folder.
2. Right-click the **Units** folder and click **Add New Engineering Unit**. The **Engineering Units** dialog box appears.
3. Enter a description and code for the new engineering unit, and then click the Save  button. Click the Close  button to close the **Engineering Units** dialog box.

---


*If you want to create configurations in an Excel worksheet, right click the **Engineering Units** folder and click **Export Configurations**. If no units currently exist, Plant Applications will create a blank worksheet in Excel with the appropriate columns inserted; you can later import your configurations into Plant Applications.*

---

## Engineering Unit Conversions

Engineering unit conversions are used to convert engineering units from Plant Applications to another unit of measure used by another system. For example, if you use pounds in Plant Applications and kilograms in an ERP system, you can create conversions to automatically convert the pounds to kilograms. Engineering unit conversions are created in an Excel worksheet and then imported into Plant Applications. Start by [exporting a blank worksheet](#) (containing the appropriate columns) to Excel.

To create new engineering unit conversions:

1. In the **Server Manager** tree, expand  **Global Configuration** and then the **Engineering Units** folder.
2. Right-click the **Engineering Unit Conversions** folder and then click **Export Conversions**.
3. In the **Configuration Export** dialog box, ensure that **Engineering unit conversions** is selected, and then click **OK**. Excel opens with a worksheet containing any existing conversions. If no conversions currently exist, a blank worksheet is created in Excel with the following columns:

Column Name	Description
Return Messages	This column will be populated with status messages after you have imported your unit conversions into Plant Applications.
Selected	Type an <b>X</b> to import this row into Plant Applications. If you don't want a particular row imported, leave it blank.
Description	A user-defined description of this unit conversion.
Engineering Unit Code (From)	The <a href="#">code</a> of the engineering unit you want to convert from. ( <i>The <b>x</b> in <math>y = mx + b</math></i> )
Engineering Unit Code (To)	The <a href="#">code</a> of the engineering unit you want to convert to. ( <i>The <b>y</b> in <math>y = mx + b</math></i> )
Slope	The slope of your conversion equation. ( <i>The <b>m</b> in <math>y = mx + b</math></i> )
Intercept	The intercept of the conversion equation. ( <i>The <b>b</b> in <math>y = mx + b</math></i> )
Custom SQL	Custom SQL code used to convert the engineering units.

4. Enter your engineering units and conversion factors/stored procedures in the worksheet, save the worksheet, and leave it open.
5. Return to the Plant Applications Administrator, right-click **Engineering Unit Conversions** and click **Import Conversions**.


---

*Prior to importing, the engineering units and codes for which you have entered conversions must already exist in the Proficy database. See [Engineering Units](#) for more information.*

---

## Exporting Engineering Units

To export engineering units:

1. In the Server Manager tree, expand  **Global Configuration** and then the **Engineering Units** folder.
2. Right click **Units** and click **Export Engineering Units**. Excel opens with the exported configurations appearing in a worksheet.
3. Save the Excel file.

## Importing Engineering Units

To import engineering units:

1. Open the Excel file containing the configurations you wish to import, and ensure that each line item you wish to import contains an 'x' in the Selected column.
2. Open or return to the Plant Applications Administrator.
3. In the **Server Manager** tree, expand **Global Configuration** and then the **Engineering Units** folder.
4. Right-click the **Units** folder and then choose **Import Configuration**.

# Plant Applications Site Parameters

Site parameters are used to set global default values for items such as passwords, number of log in attempts, directory locations etc. specific to a site. It is important for a site to understand what site parameters are available, how to configure them and to set default values according to the requirements for the site.

---

**NOTE:** *When you modify some site parameters after installing Plant Applications Web Client, a message appears asking to restart the web client services.*

---

You must manually [restart these services in Tomcat Server](#).

- activities-app-service
- activities-service
- mymachine-service-impl
- downtime-app-service
- mes-service-impl
- FaultInfo
- productionmetrics-app-service

## Client Parameters

### Audit Trail Purge Days

## Global Configuration

This site parameter specifies how many days of information will be saved for the audit trail.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the **Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Select Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click Audit Trail Purge Days. The Edit Parameter dialog box appears.
5. In the Value box, type the number of days of audit information you want to keep.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## DaysBackOpenDowntimeEventCanBeAdded

This site parameter works in conjunction with the [OpenDowntimeEventCanBeAddedDaysBack](#) site parameter. If the [OpenDowntimeEventCanBeAddedDaysBack](#) site parameter is set to **True**, the [DaysBackOpenDowntimeEventCanBeAdded](#) site parameter determines how far back (in number of days) you can add an open downtime event. By default, the value is set to **0** (zero), which means that you can add Downtime events as far back as you want.

Keep in mind that when you add an earlier Downtime event, ALL subsequent events are automatically merged.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the **Administrator security group** to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on DaysBackOpenDowntimeEventCanBeAdded.
5. In the Edit Parameter dialog box, enter the number of days back an open Downtime event can be added.

---

*The number of days back starts from the current time.*

---

6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close** button to close the **Site Parameter** dialog box.
8. Refresh the server.

## DefaultDomainName

This site parameter is used to set the domain name for Proficy Server. If a default domain name is specified, a user not belonging to the domain must log on with the domain name and user name in this format: <domain name>\user name.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters, and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click DefaultDomainName. The Edit Parameter dialog box appears.
5. In the Value box, type the Default Domain Name.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## ESignatureInactivityPeriod

The value entered for this site parameter is the number of minutes a user has after authentication to make additional changes without having to authenticate again. For example, let's say the site parameter is set to 2. After you make a change and authenticate that change, you have two minutes to make additional changes without having to authenticate the changes. Additionally, any change you make within the two minutes will re-set the clock to give you another two minutes.

---

*The site parameter applies only to user-level authorization. Approver-level authorization will still be required regardless of how this site parameter is set.*

*This parameter can be overridden if the **ESignatureRequireAuthentication** site parameter is set to **True**.*

---

To set the ESignatureInactivityPeriod site parameter:

1. Log on to the Plant Applications Administrator program.
2. Open **Global Configuration**.
3. Right-click on **Administer Site Parameters** and select **Edit Site Parameters**.
4. In the **Site Parameters** dialog box, double-click on **ESignatureInactivityPeriod**.
5. In the **Edit Parameter** dialog box, enter the number of minutes in the **Value** field.
6. Click the **OK** button to save your changes and close the **Edit Parameter** dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## ESignatureRequireAuthentication

If set to **True**, this site parameter overrides the **ESignatureInactivityPeriod** site parameter. In other words, every change will require user verification regardless of the value set in the **ESignatureInactivityPeriod** site parameter. However, if the **ESignatureRequireAuthentication** is set to **True**, then you will need to supply only your password for each user-level verification. Your user name will already be filled in for you. However, anything that requires approver-level verification will still require a name and password.

To set the ESignatureRequireAuthentication site parameter:

1. Log on to the Plant Applications Administrator program.

## Global Configuration

2. Open **Global Configuration**.
3. Right-click on **Administer Site Parameters** and select **Edit Site Parameters**.
4. In the **Site Parameters** dialog box, double-click on **ESignatureRequireAuthentication**.
5. In the **Edit Parameter** dialog box, make a selection from the drop-down list.
6. Click the **OK** button to save your changes and close the **Edit Parameter** dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## GridComboBoxMaxDrop


This site parameter specifies the maximum number of entries that will be displayed in drop-down lists (pick lists) in Downtime, Waste and Autolog displays. If drop-down lists are not displaying correctly, try increasing the value of this site parameter.

To change this site parameter:

1. Log in to the Plant Applications Administrator.  

---

*You must have **Administrator** access to the **Administrator security group** to change site parameters.*

---
2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click GridComboBoxMaxDrop. The Edit Parameter dialog box appears.
5. In the Value box, type the maximum number of entries to display in drop-down lists.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## Largelcons

This site parameter specifies the size of icons in the Plant Applications Client toolbar. Valid values are:

- False = Normal
- True = Larger


To change this site parameter:

1. Log in to the Plant Applications Administrator.  

---

*You must have **Administrator** access to the **Administrator security group** to change site parameters.*

---
2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click Largelcons. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to close the dialog box.

7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## ManageSecurityRolesByNTGroup

If you are using role-based security and have assigned a Windows NT Group to a role and you have a role-based site user who is a member of the NT Group, this site parameter determines whether security is based on the NT Group or the individual role-based site user when the site user log in.

If the parameter is set to True, then when the role-based site user logs in, the site user's security is based on the security of the NT Group to which the site user belongs.

If the parameter is set to False, the security is based on the site user's security levels, not the security of the NT Group to which the site user belongs.

### Example:

- Site user, **Jakob**, is role-based and a member of Windows NT Group, **MES Domain Application Engineers**.
- You have two Security Roles: **Operator** role and **SuperUser** role.
- You make **Jakob** a member of the **Operator** role.
- You make the Windows NT Group, **MES Domain Application Engineers**, a member of the **SuperUser** role.
- You have a Security Group: **Administrator**.
- You assign the Security Role, **Operator**, to the Administrator Security Group with **Admin** access.
- You assign the Security Role, **SuperUser**, to the Downtime Display Security Group with **Read/Write** access.

It would look similar to this:

```
Administrator Security Group
  SuperUser Role (Read/Write access)
    MES Domain Application Engineers
  Operator Role (Admin Access)
    Jakob
```

If the site parameter, **ManageSecurityRolesByNTGroup** is set to **True**, when site user **Jakob** logs in, he will have **Read/Write** access because he is a member of the **MES Domain Application Engineers** group.

If the site parameter, **ManageSecurityRolesByNTGroup** is set to **False**, when site user **Jakob** logs in, he will have **Admin** access.

## OpenDowntimeEventCanBeAddedDaysBack

This site parameter determines whether you can add past Downtime events. By default, this site parameter is set to **True**, which means that, with proper access, a user could add an earlier Downtime event. We suggest you change this to **False** to prevent the addition of Downtime events prior to the current event.

---

*If an earlier Downtime event is added, then ALL Downtime events subsequent to the added event are deleted.*

---



## Global Configuration

If you change the value to **False**, when you try to insert a row in the Downtime display in the Plant Applications Client program, it will appear that your row addition was successful. However, if you close and re-open the display, the changes will not have taken effect.

If you choose to keep this parameter set to **True**, then you should consider changing the value in the [DaysBackOpenDowntimeEventCanBeAdded](#) site parameter.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on OpenDowntimeEventCanBeAddedDaysBack.
5. In the Edit Parameter dialog box, click the Value drop-down arrow and select True or False.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Scanner Date Time Format

This site parameter is used to specify the date format of your barcodes. Use **3** if your barcode dates are in the format YYMMDDHHMMSS. Use **2** if your barcode dates are in a serial number format (for example, 37648.460416667). Use **1** if your barcode dates are in a standard date format (for example, 1/27/03).


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, under Client, double-click on Scanner Date Time Format.
5. In the Edit Parameter dialog box, click in Value box and type one of the following:
  - **3** = Barcode dates are in the format **YYMMDDHHMMSS** (\*%S030127110300\*)
  - **2** = Barcode dates are in serial number format (\*%S37648.460416667\*)
  - **1** = Barcode dates are in a standard date format (\*%S1/27/03,11/Z03\*)
6. Click the **OK** button to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Scanning Prefix Site Parameter

This site parameter specifies the special character used (typically) to identify input characters as coming from a barcode reader. The default value is a tilde, ~.

It is strongly recommended that this value not be changed without good reason. This site parameter is used by Autolog and the Genealogy displays.

In Autolog, a tilde in front of a timestamp will place focus on that specific time. A tilde in front of a number, identifies that number as a variable ID and will place focus on that variable.

In Genealogy, a tilde in front of a two-digit number identifies the first number as the input, based on the order of the input in the Raw Materials tab in the Production Unit Properties dialog box, and the second number as the position, running (1) or staged (2). A tilde in front of "Complete" will complete the production event that has focus. A tilde in front of "Unload" will unload the production event that has focus.

## Session Timeout Duration Site Parameter

This site parameter is used to set the automatic session timeout for Plant Applications Client sessions. When there is no mouse or keyboard input for the duration of the session timeout, the user is logged out of the Plant Applications session and must sign in. Upon authentication, a user has access to the Client displays that were previously open given they have viewing permission.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand **Global Configuration**.
3. Right-click **Administer Site Parameters**, and select **Edit Site Parameters**. The Site Parameters dialog box appears.
4. Double-click **SessionTimeoutDuration** in the **Client** site parameter section. The Edit Parameter dialog box appears.
5. In general, you will ignore the **Host** field as it is typically used for a server and not a Client configuration. It is enabled through a parameters table.
6. In the **Value** box, type a number between 0 and 1440 (number of minutes in 24 hours), which is the number of minutes before the Client is logged off when there is no mouse or keyboard activity. A value of 0 disables the timeout. A value from 1 to 1440 enables the timeout.
7. Click the **OK** button to close the dialog box.
8. Click the **Close** button to close the Site Parameters dialog box.
9. Refresh the server.

## ShowSystemUsersInAdmin Site Parameter

When the ShowSystemUsersInAdmin site parameter is enabled (**True**) the system users are shown under Security Management in the System Users folder. Each user has a set of parameters that are applicable to the service or function they represent.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the **Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click ShowSystemUsersInAdmin. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## TranslatePrompts

This site parameter allows translation to be turned on (True) or off (False).


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the **Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click TranslatePrompts. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## Use Event Number for Scanning

This site parameter determines if a Genealogy display will expect an event number or event ID when scanning a barcode.

- If set to **False**, event IDs are expected.
- If set to **True**, event numbers are expected.

To change this site parameter:


1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the **Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click Use Event Number for Scanning. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.

6. Click the **OK** button to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## WindowsAuthentication



This site parameter works in conjunction with both Windows Info and Mixed Mode when creating or editing site users.

---

*You must have **Administrator access** in the Administrator security group to edit site parameters.*

---

To set the WindowsAuthentication site parameter:

1. In the Plant Applications Administrator, expand the Server Manager tree and click to expand  **Global Configuration**.
2. Right-click **Site Parameters** and click **Edit Site Parameters**. The **Site Parameters** dialog box appears.
3. Double-click **WindowsAuthentication**. The **Edit Parameters** dialog box appears.
4. Make a selection from the **Value** list.
  - If this site parameter is set to **True** and you imported the user's Windows information and you selected the Mixed Mode option, then the user can log in with either their Plant Applications name and password or their Windows name and password. When the user starts either the Administrator or Client program, Plant Applications will use their Windows name and password to automatically log them in.
  - If this site parameter is set to **True** and you imported the user's Windows information and you did not select the Mixed Mode option, then the user must log in using their Windows name and password. When the user starts either the Administrator or Client program, Plant Applications will use their Windows name and password to automatically log them in.
  - If this site parameter is set to **False**, then the user must log in with their Plant Applications name and password.
5. Click the **OK** button to close the **Edit Parameters** dialog box.
6. Click the **Close**  button to close the **Site Parameters** dialog box.

## Dashboard Parameters

### Ad Hoc Report Life (Days)

Use the Ad Hoc Report Life (Days) site parameter to specify the number of days an ad hoc report is kept in the database. The date is based off the date the report was last accessed.

To edit the Ad Hoc Report Life (Days) site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on the Administer Site Parameters folder and click Edit Site Parameter. The Site Parameters dialog box appears.

## Global Configuration

4. Double-click on Ad Hoc Report Life (Days). The Edit Parameter dialog box appears.
5. Type the number of days in the Value box. For example, if you type 4 in the Value box, ad hoc reports will be kept in the database up to four days from the date they were last accessed.
6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Dashboard Engine Server

The Dashboard Engine Server parameter should contain the name of the server where the Plant Applications dashboard services are installed.

To edit the Dashboard Engine Server site parameter:

1. Log in to the Plant Applications Administrator.  

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---
2. Open Global Configuration.
3. Right-click on the Administer Site Parameters folder and click Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click on Dashboard Engine Server. The Edit Parameter dialog box appears.
5. Type the server name in the Value box.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Gallery Physical Path

The Gallery Physical Path parameter contains the physical path of the Web Part gallery.

To edit the Gallery Physical Path site parameter:

1. Log in to the Plant Applications Administrator.  

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---
1. Open **Global Configuration**.
2. Right-click on the **Administer Site Parameters** folder and click **Edit Site Parameters**. The **Site Parameters** dialog box appears.
3. Double-click on **Gallery Physical Path**. The **Edit Parameter** dialog box appears.
4. Enter the physical path to where the Web Parts are located.
5. Click the **OK** button to save your changes and close the dialog box.
6. Click the **Close** button to close the **Site Parameters** dialog box.
7. Refresh the server.

## Gallery Virtual Path

This site parameter determines the virtual directory name for the Web Part Gallery for customers who are using DDRK to drive their dashboard.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, under Dashboard double-click on Gallery Virtual Path.
5. In the Edit Parameter dialog box, click in the Value field and enter the path that is the virtual directory name for your Web Part Gallery.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Microsoft Dashboard Catalog

This is the name of the catalog where dashboard information is stored for customers who are using DDRK for their dashboard.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, under Dashboard double-click on Microsoft Dashboard Catalog.
5. In the Edit Parameter dialog box, click in the Value field and type the name of the catalog.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Microsoft Dashboard Server

This is the name of the server where DDRK is running for customers who are using DDRK to drive their dashboard.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.

## Global Configuration

3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, under Dashboard double-click on Microsoft Dashboard Server.
5. In the Edit Parameter dialog box, click in the Value field and type the name of the server where DDRK is located.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Proficy Dashboard Server

The Proficy Dashboard Server parameter contains the name of the server where the Proficy dashboard is installed.

To edit the Proficy Dashboard Server site parameter:

1. Log in to the Plant Applications Administrator.  

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---
2. Open Global Configuration.
3. Right-click on the Administer Site Parameters folder and click Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click on Proficy Dashboard Server. The Edit Parameter dialog box appears.
5. Type the name of the server where the Proficy dashboard is installed.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Proficy Dashboard Virtual Path Site

The Proficy Dashboard Virtual Path site parameter contains the virtual path of the Proficy dashboard.

To edit the Proficy Dashboard Virtual Path site parameter:

1. Log in to the Plant Applications Administrator.  

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---
2. Open Global Configuration.
3. Right-click on the Administer Site Parameters folder and click Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click on Proficy Dashboard Virtual Path. The Edit Parameter dialog box appears.
5. Enter the virtual path to where the Proficy dashboard is located.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Session Manager Stat Life (Days)

This is the number of days reporting statistics are saved in the database.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Under Dashboard double-click on Session Manager Stat Life (Days). The Edit Parameter dialog box appears.
5. Click in the Value field and type the number of days to save reporting statistics.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Show Additional Web Part Configuration Tabs

Use the Show Additional Web Part Configuration Tabs parameter to control the display of the **Manage Parameter Types** tab and the **Manage Dialogs** tab in the Web Parts Administration dialog box.

---

**CAUTION:** *You must be very careful when using this feature. Only someone with advanced knowledge of Plant Applications, server technology, and web technology should use this feature.*

---



To edit the Show Additional Web Part Configuration Tabs site parameter:

1. Log in to Plant Applications Administrator.

---

*You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

1. Expand  Global Configuration.
2. Right-click on  **Administer Site Parameters** folder and select **Edit Site Parameters**. The **Site Parameters** dialog box appears.
3. Double-click **Show Additional Web Part Configuration Tabs**. The **Edit Parameter** dialog box appears.
4. Select **True** to display the tabs or select **False** to hide the tabs.
5. Click the **OK** button to save your changes and close the dialog box.
6. Click the **Close** button to close the **Site Parameters** dialog box.
7. Refresh the server.

## Web App Physical Path

This is the physical location of the Proficy Dashboard Web application.

To change this site parameter:



## Global Configuration

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, under Dashboard double-click on Web App Physical Path.
5. In the Edit Parameter dialog box, click in the Value field and type the physical path of the server where the Proficy Dashboard Web applications is located.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Excel Add-In Parameters

### EventNumIsNumber

The way you search for product attributes will be affected by how the site parameter, EventNumIsNumber, has been set in the Plant Applications Administrator (Plant Applications Administrator > Global Settings > Site Parameters > Edit Site Parameters). If EventNumIsNumber has a value of **1**, it tells the Plant Applications Add-in that the Primary Event Numbers are *all* numeric. Since Event IDs are also numeric, when you search for production event attributes you will need to tell Plant Applications whether you are using Primary Event Numbers or Event IDs.

#### What if some Primary Event Numbers are numeric and some alpha-numeric?

If some of your Primary Event Numbers are numeric and some alpha-numeric, *and* EventNumIsNumber has a value of **1**, you can simply use your Primary Event Numbers to find the associated attributes. However, if you are using Event IDs, you will need to select **Force ID** option.

### ProdCodelsNumber

The way you search for product attributes will be affected by how the site parameter, ProdCodelsNum, has been set in the Plant Applications Administrator (Plant Applications Administrator > Global Settings > Site Parameters > Edit Site Parameters). If ProdCodelsNum has a value of **1**, it tells the Plant Applications Add-in that the Product Codes are all numeric. Since Product IDs are also numeric, when you search for product attributes you will need to tell Plant Applications whether you are using Product Codes or Product IDs.

#### What if some Product Codes are numeric and some alpha-numeric?

If some of your Product Codes are numeric and some alpha-numeric, *and* ProdCodelsNum has a value of **1**, you can simply use your Product Codes to find the associated attributes. However, if you are using Product IDs, you will need to select **Force ID** option.

### ShowHeader

This site parameter determines the default value in the **Options** dialog box in the Excel Add-in. If set to true, the Show header label option will be the default setting. If set to False, the Hide header label option will be the default.

- **True:** Show header label. Includes row or column headers on your worksheet.

- **False:** Hide header label. Does not include row or column headers on your worksheet.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click ShowHeader. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## UpdateAddInLinks

This site parameter determines the default setting in the Excel Add-in Options dialog box. You can determine if you want Excel to update the Add-in links every time a Plant Applications workbook is opened.

- **Yes:** Update. If you regularly trade (or move) workbooks between computers, we recommend that you select this option to update the links.
- **No:** Don't Update. If the majority of the time you keep your workbooks on the computer where they were created, then you can choose not to update the links.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click UpdateAddInLinks. The Edit Parameter dialog box appears.
5. Select Yes or No from the Value list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## General Site Parameters

### AllowPasswordSave

Set this site parameter to **True** if you want to have the option of saving the current log in name and password as the default. When the user logs in to either the Plant Applications Administrator program or the Plant Applications Client program, the **Save Password** option is added to the **Plant**

**Applications Server Login** dialog box. If you select the **Save Password** option, Plant Applications remembers your password and automatically logs you in to the program.

Even if you return the site parameter to **False**, the user information is stored in a registry. If you want to require users to log in every time they open Plant Applications, you will need to clear the user information. [See below.](#)

---

*If you select the **Save Password** option, then anyone using your computer can start Plant Applications and will have your access level. In other words, they will be logged in as you.*

*This parameter will have no affect for those users who were imported from the Windows domain **IF** you have the **WindowsAuthentication** site parameter set to **True**.*

---



To change the AllowPasswordSave site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the Administrator security group to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click Administer Site Parameters and click Edit Site Parameters. The Site Parameter dialog box appears.
4. Double-click on AllowPasswordSave. The Edit Parameter dialog box appears.
5. Select True or False from the Value drop-down list.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

To clear the user information:

1. Open the Plant Applications Administrator.
2. From the **File** menu, click **Server**. The **Connect Server** dialog box appears.
3. Right-click on the desired server and click **Clear User Info**.
4. Click **Close**.

## ApproverDefaultReasonId

Use this site parameter to specify a default approver-level reason. Before you can specify a default reason, you must first specify a default reason tree in the ApproverReasonTreeId site parameter. For information about reason trees, see [Reason Trees](#).

You can choose to provide a reason for Approver authentication. Whenever an Approver signature is provided, a default reason can be automatically attached to the signature.

To change this site parameter:


1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click ApproverDefaultReasonId. The Edit Parameter dialog box appears.

5. Select the default reason ID from the Value list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## ApproverDefaultReasonTreeld

Use this site parameter to specify a default approver-level reason tree. You must first select a reason tree before you can specify a reason for the [ApproverDefaultReasonId](#) site parameter. For information about reason trees, see [Reason Trees](#).


You can choose to provide a reason for Approver authentication. Whenever an Approver signature is provided, a default reason can be automatically attached to the signature.

To change this site parameter:

1. Log in to the Plant Applications Administrator.  


---

*You must have **Administrator access** to the **Administrator security group** to change site parameters.*


---
2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click ApproverDefaultReasonTreeld. The Edit Parameter dialog box appears.
5. Select the default reason tree ID from the Value list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## CheckSQLConnection


Use this site parameter to test SQL before executing any stored procedure to validate the SQL connection.

To change this site parameter:

1. Log in to the Plant Applications Administrator.  


---

*You must have **Administrator access** to the **Administrator security group** to change site parameters.*


---
2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click CheckSQLConnection. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## CompanyName

The value of this site parameter is displayed on various reports.



To change the CompanyName site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click Administer Site Parameters and click Edit Site Parameters. The Site Parameter dialog box appears.
4. Under General, double-click CompanyName. The Edit Parameter dialog box appears.
5. In the Value box, type the name of your company.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## DatabaseReconnectionMaxSilentRetries

This site parameter determines the maximum number of times the SDK and web services will try to reconnect to the database. After the specified number of retries has been attempted and no connection has been established the program will stop.

This site parameter does not affect the Client or the Excel Add-in.

The amount of time to wait between retries is determined by the DatabaseReconnectionRetryTime site parameter.

## DatabaseReconnectionRetryTime

This site parameter determines the amount of time to wait, in seconds, between attempts to reconnect to the database after the connection has been lost or interrupted.

## DBOPassword

This site parameter contains the Plant Applications MSSQL database owner password. For security, the password is displayed as **<encrypted>**.


To change the DBOPassword site parameter:


1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click Administer Site Parameters and click Edit Site Parameters. The Site Parameter dialog box appears.
4. Under General, double-click DBOPassword. The Edit Parameter dialog box appears.
5. In the Value box, type the new password.
6. Click the OK button to save your changes and to close the dialog box.

7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## DBOUser

This site parameter contains the Plant Applications MSSQL database owner user name.



To change the DBOUser site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click Administer Site Parameters and click Edit Site Parameters. The Site Parameter dialog box appears.
4. Under General, double-click DBOPassword. The Edit Parameter dialog box appears.
5. In the Value box, type the new user name.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## EnableChangePasswordDialog

This site parameter controls whether users will be allowed to change their Windows password when they log in to Plant Applications with their Windows user name and password. If this is set to True, Plant Applications users will be able to change their expiring Windows passwords if they use their Windows user name and password to log in to Plant Applications.

---

*INFORMATION: To use Windows user names and passwords, [WindowsAuthentication](#) must be set to True and the user's properties must be correctly configured.*

---

## Editing EndOfDayHour

The **EndOfDayHour** site parameter is one of two site parameters that are used to define the hour that your production day starts and ends. The **EndOfDayHour** site parameter determines the hour that your production day will start and end. The **EndOfDayMinute** site parameter determines the minute of the hour that your production day will start and end. For example, The default value of the **EndOfDayHour** site parameter is **7** and the default value of the **EndOfDayMinute** is zero, which means that your production day will start at 7:00 a.m. and will end the following day at 7:00 a.m.

[Tell me about the \*\*EndOfDayMinute\*\* site parameter.](#)

To edit this site parameter:

1. Start the Plant Applications Administrator.
2. Open the **Global Settings** folder
3. Right-click on **Site Parameters** and select **Edit Site Parameters** from the pop-up menu.
4. Scroll down and double-click **EndOfDayHour**.
5. In the **Edit Parameter** dialog box, type a new value in the **Value** box.
6. Click **OK** to save your changes and close the **Edit Parameter** dialog box.

7. Close the **Site Parameters** dialog box.

## Editing EndOfDayMinute

The **EndOfDayMinute** site parameter is one of two site parameters that are used to define when your production day starts and ends. The **EndOfDayMinute** site parameter determines the minutes of the hour when your production day will start and end. The default value is **0**, which means that your production day will start at the hour defined by the **EndOfDayHour** site parameter and zero minutes. For example, if the **EndOfDayHour** site parameter value is **7** and the **EndOfDayMinute** site parameter value is **35**, then your production day is defined as starting at 7:35:00 a.m. and ending at 7:35:00 a.m. on the next day.

[Tell me about the \*\*EndOfDayHour\*\* site parameter.](#)

To edit this site parameter:

1. Start the Plant Applications Administrator.
2. Open the **Global Settings** folder
3. Right-click on **Site Parameters** and select **Edit Site Parameters** from the pop-up menu.
4. Scroll down and double-click **EndOfDayHour**.
5. In the **Edit Parameter** dialog box, type a new value in the **Value** box.
6. Click **OK** to save your changes and close the **Edit Parameter** dialog box.
7. Close the **Site Parameters** dialog box.

## HistorianServer

This site parameter is used only if ProcessBook is on the PC and you right-click on a PI-based historian value in AutoLog to trend it. If ProcessBook is there, it will use the HistorianServer parameter as the source for the ProcessBook trend.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click HistorianServer. The Edit Parameter dialog box appears.
5. In the Value box, type the PI-based historian server name.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## LanguageNumber

The regional settings of the Plant Applications client computer determine which language is displayed at runtime by the Plant Applications client container and all displays. Various prompts, messages, common dialog text have been translated into several languages. By default, US-English is used. Any

other languages need to be added by running ConfigurePALanguages.exe and selecting the additional language or languages to be used.

The regional setting determines the language used for all site users who connect to this server. If this site is enabled for [Multi-Lingual Support](#) when installing the Proficy (Plant Applications) Server, the user parameter determines whether a user sees the local description (text entered when an object is created; the language is determined by the regional settings of the user's workstation) or the global description.

The default language in the Language Translation Edit dialog box is determined by the regional site parameter setting.

---

**Note:** *The LocaleID (regional settings) are in the LanguageRef.txt file, which is installed at <Program Files>\Common Files\Proficy\Plant Applications.*

---


To change this parameter for the site:

1. Log in to the Plant Applications Administrator.


---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click on Administer Site Parameters, and click Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the General section, double-click the LanguageNumber parameter. The Edit Parameter dialog box appears.
5. Select a new language value from the Value list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

To change this parameter for a user:

1. Log in to the Plant Applications Administrator program.
2. Expand  **Security Management** and expand the **Site Users** folder.
3. Right-click on the desired site user and click **Edit <user name> Parameters**. The **User Parameters <user name>** dialog box appears.
4. Do one of the following:
  - **To change an existing language setting:**
    - a. Double-click the **LanguageNumber** parameter. The **Edit Parameter** dialog box appears.
    - b. Select a new language from the **Value** list.
    - c. Click the **OK** button to close the dialog box.
  - **To specify a language setting:**



## Global Configuration

- d. Click the **Add** button at the bottom of the screen. The **Add Parameter** dialog box appears.
  - e. Select **LanguageNumber** from the **Parameter Name** .
  - f. Select a language from the **Value** drop-down list.
  - g. Click the **OK** button to save your changes and close the dialog box.
  - h. Click the **Close** button in the **User Parameters <user name>** dialog box.
5. Refresh the server.

## MaxLoginAttempts

The application developer can set an account lockout threshold, which prevents a user from accessing the account after he enters an incorrect user name or password beyond the number of acceptable times.


When a user logs in or enters an electronic signature at run time, he receives an error if the account has been disabled. The application developer can configure the message to display with the error, such as a telephone number or the name of a contact person; otherwise, a general message is displayed.

To determine the number of login attempts:

1. Log in to the Plant Applications Administrator.  


---

*You must have **Administrator access to the Administrator security group to change site parameters.***

---
2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click MaxLoginAttempts. The Edit Parameter dialog box appears.
5. In the Value list, type the maximum number of login attempts.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## PointVerification

If set to **True**, when any changes are made in the Plant Applications Administrator program, the user who made the change will have to verify his or her identity by entering their user name and password.

Additionally, when this site parameter is set to **True**, the **Unauthenticate**  button will be enabled on the Plant Applications Administrator toolbar.

To set the PointVerification site parameter:

1. Log in to the Plant Applications Administrator.
2. Open **Global Configuration**.
3. Right-click on **Administer Site Parameters** and select **Edit Site Parameters** from the pop-up menu.
4. In the **Site Parameters** dialog box, double-click on **PointVerification**.
5. In the **Edit Parameter** dialog box, select **True** from the **Value** drop-down list.

6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## ReportServer

This site parameter defines the HTTP location of the web server, which has the following format:

http://<Servername>/PAReporting

or

https://<Servername>/PAReporting

Another Site Parameter, UseHTTPS, controls whether a secure site is used.

---

**NOTE:** *The name of the virtual directory under the web site is changed in Release 6.2 to PAReporting from ReportServer.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

**NOTE:** *You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click ReportServer. The Edit Parameter dialog box appears.
5. In the Value box, type the location of the web server.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## SerialNumber

This site parameter contains the Plant Applications licensing site-specific serial number. A string that must match the serial number keyed into the license file. This gets set when you install the Proficy Server.

---

**NOTE:** *This is a legacy site parameter used by pre-4.x versions of Plant Applications.*

---

## ShiftInterval

This site parameter defines the default number of minutes per shift.

To change this site parameter:

1. Log in to the Plant Applications Administrator.


---

**NOTE:** *You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.

## Global Configuration

3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click ShiftInterval. The Edit Parameter dialog box appears.
5. In the Value box, type the number of minutes per shift.
6. Click the OK button to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## ShiftOffset

This site parameter defines the default number of minutes after midnight that the first shift starts.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click ShiftOffset. The Edit Parameter dialog box appears.
5. In the Value box, type the number of minutes after midnight the first shift starts.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## SiteName

This site parameter contains the name of the plant site.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click SiteName. The Edit Parameter dialog box appears.
5. In the Value box, type the name of the plant site.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## SpecificationSetting

SpecificationSetting is used by an Autolog display to color code test values by comparing them to specification limits. SpecificationSetting is also used to determine if a value should or should not generate an alarm. Possible options are:

- Test Value greater than (>) Limit Trigger Spec Exceedance
- Test Value greater than or equal to (>=) Limit Trigger Spec Exceedance


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click SpecificationSetting. The Edit Parameter dialog box appears.
5. Choose one of the options from the Value list.
6. Click OK to close the dialog box.
7. Click the  Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Temporary Unit

Creating new events on an input in genealogy allows the event to be created on the unit specified in this site parameter.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click Temporary Unit. The Edit Parameter dialog box appears.
5. Choose a production unit from the Value list.
6. Click OK to close the dialog box.
7. Click the  Close button to close the Site Parameters dialog box.
8. Refresh the server.

## UserDefaultReasonId

Use this site parameter to specify a default User-level reason. Before you can specify a default reason, you must first specify a default reason tree in the UserReasonTreeId site parameter. For information about reason trees, see [Reason Trees](#).

You can choose to provide a reason for User authentication. Whenever a User signature is provided, a default reason can be automatically attached to the signature.

## Global Configuration


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click UserDefaultReasonId. The Edit Parameter dialog box appears.
5. Choose a reason from the Value list.
6. Click OK to close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## UserDefaultReasonTreeld

Use this site parameter to specify a default User-level reason tree. You must first select a reason tree before you can specify a reason for the [UserDefaultReasonId](#) site parameter. For information about reason trees, see [Reason Trees](#).

You can choose to provide a reason for User authentication. Whenever a User signature is provided, a default reason tree can be automatically attached to the signature.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click UserDefaultReasonTreeld. The Edit Parameter dialog box appears.
5. Choose a reason tree from the Value list.
6. Click OK to close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## RSName

This site parameter defines the name and default directory of the web server.

To change this site parameter:


1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access to the Administrator security group** to change site parameters.*

---

2. Expand Global Configuration.

3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Web Server, double-click RSName. The Edit Parameter dialog box appears.
5. In the Value box, type the new name and default directory of the web server.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## History Parameters

### Populate Alarm\_History

Use this site parameter to determine whether a history of changes to the Alarms table will be stored. If you set the value to **True**, *any* changes to the Alarms table will be recorded in the **Alarm\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Alarms table, ALL of those deletions would be recorded in the Alarm\_History table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Alarm\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

### Populate Container\_Location\_History

Use this site parameter to determine whether a history of changes to the Container\_Location table will be stored. If you set the value to **True**, *any* changes to the Container\_Location table will be recorded in the **Container\_Location\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Container\_Location table, **ALL** of those deletions would be recorded in the Container\_Location\_History table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Container\_Location\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Defect\_Details\_History

Use this site parameter to determine whether a history of changes to the Defect\_Details table will be stored. If you set the value to **True**, any changes to the Defect\_Details table will be recorded in the **Defect\_Details\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Defect\_Details table, **ALL** of those deletions would be recorded in the **Defect\_Details\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Defect\_Details\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Event\_Component\_History

Use this site parameter to determine whether a history of changes to the Event\_Components table will be recorded. If you set the value to **True**, any changes to the Event\_Components table will be recorded in the **Event\_Component\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Event\_Components table, ALL of those deletions would be recorded in the **Event\_Component\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open the Global Configuration folder.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Event\_Component\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Event\_Detail\_History

Use this site parameter to determine whether a history of changes to the Event\_Details table will be recorded. If you set the value to **True**, any changes to the Event\_Details table will be recorded in the **Event\_Detail\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Event\_Details table, ALL of those deletions would be recorded in the **Event\_Detail\_History** table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Event\_Detail\_History.
5. In the Edit Parameter dialog box, select a Value from the drop-down list:




## Global Configuration

- Full History – All changes are recorded to the history table and, if the generating time stamp is set to move at some interval (Auto move End Time), history is recorded at those intervals.
- History Based On Event Status – History is recorded for all associated events that have a status for which the Bypass History flag is not set.
- No History – No changes, included History changes for a Complete status, are recorded in the History table.

---

**TIP:** To monitor event progress for long production events and control history data collection, refer to [Event Dimension Periodic Update](#).

---

6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Populate Event\_History

Use this site parameter to determine whether a history of changes to the Events table will be recorded. If you set the value to **True**, any changes to the Events table will be recorded in the **Event\_History** table.

If you have installed Proficiency DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Events table, ALL of those deletions would be recorded in the **Event\_History** table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the Administrator security group to change site parameters.*


---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Event\_History.
5. In the Edit Parameter dialog box, select a Value from the drop-down list:
  - Full History – All changes are recorded to the history table and, if the generating time stamp is set to move at some interval (Auto move End Time), history is recorded at those intervals.
  - History Based On Event Status – History is recorded for all associated events that have a status for which the Bypass History flag is not set.
  - No History – No changes, included History changes for a Complete status, are recorded in the History table.

---

**TIP:** To monitor event progress for long production events and control history data collection, refer to [Event Dimension Periodic Update](#).

---

6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Populate PrdExec\_Input\_Event\_History

Use this site parameter to determine whether a history of changes to the PrdExec\_Input\_Event table will be recorded. If you set the value to **True**, any changes to the PrdExec\_Input\_Event table will be recorded in the **PrdExec\_Input\_Event\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the PrdExec\_Input\_Event table, ALL of those deletions would be recorded in the **PrdExec\_Input\_Event\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate PrdExec\_Input\_Event\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate PrdExec\_Output\_Event\_History

Use this site parameter to determine whether a history of changes to the PrdExec\_Output\_Event table will be recorded. If you set the value to **True**, any changes to the PrdExec\_Output\_Event table will be recorded in the **PrdExec\_Output\_Event\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the PrdExec\_Output\_Event table, ALL of those deletions would be recorded in the **PrdExec\_Output\_Event\_History** table.*

---

To change this site parameter:


1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate PrdExec\_Output\_Event\_History.

5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate PrdExec\_Path\_Unit\_Starts\_History

Use this site parameter to determine whether a history of changes to the PrdExec\_Path\_Unit\_Starts table will be recorded. If you set the value to **True**, any changes to the PrdExec\_Path\_Unit\_Starts table will be recorded in the **PrdExec\_Path\_Unit\_Starts\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the PrdExec\_Path\_Unit\_Starts table, ALL of those deletions would be recorded in the **PrdExec\_Path\_Unit\_Starts\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate PrdExec\_Path\_Unit\_Starts\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Production\_Plan\_History

Use this site parameter to determine whether a history of changes to the Production\_Plan table will be recorded. If you set the value to **True**, any changes to the Production\_Plan table will be recorded in the **Production\_Plan\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Production\_Plan table, ALL of those deletions would be recorded in the **Production\_Plan\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Production\_Plan\_History.
5. In the **Edit Parameter** dialog box, select **True** or **False** from the **Value** drop-down list.
6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Populate Production\_Plan\_Starts\_History

Use this site parameter to determine whether a history of changes to the Production\_Plan\_Starts table will be recorded. If you set the value to **True**, *any* changes to the Production\_Plan\_Starts table will be recorded in the **Production\_Plan\_Starts\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Production\_Plan\_Starts table, **ALL** of those deletions would be recorded in the **Production\_Plan\_Starts\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Production\_Plan\_Starts\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Production\_Setup\_Detail\_History

Use this site parameter to determine whether a history of changes to the Production\_Setup\_Detail table will be recorded. If you set the value to **True**, *any* changes to the Production\_Setup\_Detail table will be recorded in the **Production\_Setup\_Detail\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Production\_Setup\_Detail table, ALL of those deletions would be recorded in the **Production\_Setup\_Detail\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Production\_Setup\_Detail\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Production\_Setup\_History

Use this site parameter to determine whether a history of changes to the Production\_Setup table will be recorded. If you set the value to **True**, any changes to the Production\_Setup table will be recorded in the **Production\_Setup\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Production\_Setup table, ALL of those deletions would be recorded in the **Production\_Setup\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Production\_Setup\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Production\_Setup\_Starts\_History

Use this site parameter to determine whether a history of changes to the Production\_Setup\_Starts table will be recorded. If you set the value to **True**, any changes to the Production\_Setup\_Starts table will be recorded in the **Production\_Setup\_Starts\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Production\_Setup\_Starts table, ALL of those deletions would be recorded in the **Production\_Setup\_Starts\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Production\_Setup\_Starts\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Production\_Starts\_History

Use this site parameter to determine whether a history of changes to the Production\_Starts table will be recorded. If you set the value to **True**, any changes to the Production\_Starts table will be recorded in the **Production\_Starts\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Production\_Starts table, ALL of those deletions would be recorded in the **Production\_Starts\_History** table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.


---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Production\_Starts\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.

## Global Configuration

6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Sheet\_Column\_History

Use this site parameter to determine whether a history of changes to the Sheet\_Columns table will be recorded. If you set the value to **True**, any changes to the Sheet\_Columns table will be recorded in the **Sheet\_Column\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Sheet\_Columns table, ALL of those deletions would be recorded in the **Sheet\_Column\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Sheet\_Column\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Test\_History

Use this site parameter to determine whether a history of changes to the Tests table will be recorded. If you set the value to **True**, any changes to the Tests table will be recorded in the **Test\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to Full History, changed to a system parameter, and is no longer visible in the Plant Applications Administrator. If you change the site parameter's value to any value other than Full History, you may cause the DataMart to become out of sync with your Plant Applications database.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Tests table, ALL of those deletions would be recorded in the **Test\_History** table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*


---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Test\_History.
5. In the Edit Parameter dialog box, select a Value from the drop-down list:
  - Full History – Any and all changes (result\_on and test value changes) to the Tests table will be recorded in the Test\_History table. If the generating time stamp is set to move at some interval (Auto move End Time), history is recorded at those intervals.
  - History Based On Event Status and Value Change – History is recorded in the Test\_History table for all associated events that have a status for which the Bypass History flag is not set. History records associated with test value changes are also updated.
  - History (Based) On Value Change Only – Only test value changes are recorded in the Test\_History table
  - No History – No changes, included History changes for a Complete status, are recorded in the History table.

---

**TIP:** To monitor event progress for long production events and control history data collection, refer to Event Dimension Periodic Update.

---

6. Click the **OK** button to save your changes, and close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Populate Timed\_Event\_Detail\_History

Use this site parameter to determine whether a history of changes to the Timed\_Event\_Details table will be recorded. If you set the value to **True**, any changes to the Timed\_Event\_Details table will be recorded in the **Timed\_Event\_Detail\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Timed\_Event\_Details table, ALL of those deletions would be recorded in the **Timed\_Event\_Detail\_History** table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---


*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Timed\_Event\_Detail\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.



## Global Configuration

6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate User\_Defined\_Event\_History

Use this site parameter to determine whether a history of changes to the User\_Defined\_Events table will be recorded. If you set the value to **True**, any changes to the User\_Defined\_Events table will be recorded in the **User\_Defined\_Event\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the User\_Defined\_Events table, ALL of those deletions would be recorded in the **User\_Defined\_Event\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate User\_Defined\_Event\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Populate Waste\_Event\_Detail\_History

Use this site parameter to determine whether a history of changes to the Waste\_Event\_Details table will be recorded. If you set the value to **True**, any changes to the Waste\_Event\_Details table will be recorded in the **Waste\_Event\_Detail\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Waste\_Event\_Details table, ALL of those deletions would be recorded in the **Waste\_Event\_Detail\_History** table.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*


---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Waste\_Event\_Detail\_History.
5. In the Edit Parameter dialog box, select a Value from the drop-down list:
  - Full History – All changes are recorded to the history table and, if the generating time stamp is set to move at some interval (Auto move End Time), history is recorded at those intervals.
  - History Based On Event Status – History is recorded for all associated events that have a status for which the Bypass History flag is not set.
  - No History – No changes, included History changes for a Complete status, are recorded in the History table.

---

**TIP:** To monitor event progress for long production events and control history data collection, refer to Event Dimension Periodic Update.

---

6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Populate Web\_Report\_History

Use this site parameter to determine whether a history of changes to the Web\_Report\_Instances table will be recorded. If you set the value to **True**, any changes to the Web\_Report\_Instances table will be recorded in the **Web\_Report\_History** table.

If you have installed Proficy DataMart, as soon as you add the server to the DataMart, this site parameter is set to True, changed to a system parameter, and is no longer visible in the Plant Applications Administrator.

---

*Keep in mind that if there are a lot of changes, this table can become quite large. For example, if you were to delete a number of records in the Web\_Report\_Instances table, ALL of those deletions would be recorded in the **Web\_Report\_History** table.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, scroll down and double-click on Populate Web\_Report\_History.
5. In the Edit Parameter dialog box, select True or False from the Value drop-down list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Rest Service Parameters

### DurationFormat

This site parameter sets the format for the duration of an event, for example, a downtime event. Possible values are as follows:

- HH:TT is hours with two decimal places (display example: 15.25 Hours).
- HH:MM:SS is hours:minutes:seconds (display example: 04:14:35).
- MM.T is minutes with one decimal place (display example: 35.6 Mins).
- MM.TT is minutes with two decimal places (display example: 35.63 Mins).

To set the DurationFormat site parameter:

1. Log on to the Plant Applications Administrator program.
2. Open **Global Configuration**.
3. Right-click on **Administer Site Parameters** and select **Edit Site Parameters**.
4. In the **Site Parameters** dialog box, double-click on **DurationFormat** under Rest Service.
5. In the **Edit Parameter** dialog box, make a selection from the drop-down list.
6. Click the **OK** button to save your changes, and close the **Edit Parameter** dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## S88 Interface Parameters

### Auto Configure Units

This site parameter is used by model 49000 to determine if it will auto-configure your plant model. If set to **True**, model 49000 will create your department, production line, and production units based on how you've configured Model 118. Once your plant model is configured, it is recommended that you set this value to 0 to prevent the creation of an invalid production unit.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the S88 Interface section, double-click Auto Configure Units. The Edit Parameter dialog box appears.
5. Make your selection in the Value list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Default Data Source

This site parameter is used by model 49000 to specify the data source type. The data source type will be used to map various objects (variables, for example) to the batch data. For example, if you have ProductABC in Plant Applications and the same product is called Batch123 in your batch data, you can create a cross reference so that Plant Applications will know that Batch123 is ProductABC and vice versa.

The available data sources are determined by the active data sources listed in [Data Source Types](#).

---

*If you have specified a data source in Model 118, Model 118 takes precedence over Model 49000.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the S88 Interface section, double-click Default Data Source. The Edit Parameter dialog box appears.
5. Select a data source from the Value list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Default Product Family

This site parameter is used by model 49000 to specify the product family your batch product will be associated with. If you leave this blank, your batch product will be associated with the default, "Product Family." (Product family ID = 1).

---

*If you have specified a default product family in Model 118, Model 118 takes precedence over Model 49000.*

---

## Ignore Event Status Changes

This site parameter is used by model 49000. If this site parameter is set to **True** there will be no additional Event\_Status changes performed after the initial event creation.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the S88 Interface section, double-click Ignore Event Status Changes. The Edit Parameter dialog box appears.

## Global Configuration

5. Make your select from the Value list.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

### Purge Orphaned Records (Days)

This site parameter is used by model 49000 to determine how long orphaned records will be kept in the Event Transactions table. Setting this property to **0** means that orphaned records will never be purged.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the S88 Interface section, double-click Purge Orphaned Records (Days). The Edit Parameter dialog box appears.
5. In the Value box, type the number of days to keep orphaned records.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

### Purge Processed Records (Days)

This site parameter is used by model 49000 to determine how long processed records will be kept in the Event Transactions table. The default value of the site parameter is **0** and the processed records will not be purged as long as the site parameter value is 0.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the S88 Interface section, double-click Purge Processed Records (Days). The Edit Parameter dialog box appears.
5. In the Value box, type the number of days to keep processed records.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Wait Time (milliseconds)

This site parameter is used by model 49000 to determine the time, in milliseconds, between processing records in the Event Transactions table. A value of **0** means that all records will be processed with no wait time between.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the **Administrator** security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the S88 Interface section, double-click Wait Time (milliseconds). The Edit Parameter dialog box appears.
5. In the Value box, type the wait time, in milliseconds.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## Services Parameters

### AllowEventMoveOutsideWindow

Use this parameter to allow users to change the timestamp of a production event (column) beyond the timestamp of neighboring production events (columns). For example, there are three production events: one at 1:00, one at 1:30, and one at 2:00. If this parameter is set to **True**, a user with the proper access level could change the timestamp of the 1:30 production event to 12:30 or 2:15.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator** access to the **Administrator** security group to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click Administer Site Parameters and click Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click AllowEventMoveOutsideWindow. The Edit Parameter dialog box appears.
5. Select True or False from the Value drop-down list.
6. Click the OK button to save your changes close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

### ArchiveLogFiles

By making this TRUE, shortly after midnight, Proficy Manager will move the previous day's log files to the directory specified by ArchiveLogFilesPath. In addition, Proficy Manager will turn on the Windows

## Global Configuration

file compression flag for each archived log file to reduce space. Each service will close and reopen their log file shortly after midnight each day so Proficy Manager can move the previous day's log file.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click ArchiveLogFiles. The Edit Parameter dialog box appears.
5. In the Value box, select True or False.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## ArchiveLogFilesPath

The ArchiveLogFilesPath site parameter specifies the directory to archive the log files. Dated sub-directories (for example, . 9\_10\_2007) are created under this directory for a day's log files.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click ArchiveLogFilesPath. The Edit Parameter dialog box appears.
5. In the Value box, type the path where the log files are to be located
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## BackCalcCount

This site parameter is used by the Plant Applications Calculation Manager. It is the maximum number of times a calculation can run when triggered. For example, a calculation is dependent on the "previous value" of some variable. If that variable changes, it could cause the calculation to run at many points in time. That number of times cannot exceed the value specified by this parameter.

To change this site parameter:


1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.

3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameter dialog box, under Services double-click on BackCalcCount.
5. In the Edit Parameter dialog box, click in the Value box and type the number of times a calculation can run when triggered.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## BufferFilePath

Each of the Plant Applications services has a buffer file. The location of the buffer files is determined by the site parameter BufferFilePath. The buffer files store queued actions for the Plant Applications service to execute. If missing, the files and directories located in the BufferFilePath are automatically created.

Deletion of the buffer files can be a potentially helpful option when troubleshooting a problem as it will effectively reset the server. The Plant Applications services must be shut down for the buffer files to be deleted. By removing the buffer files, you are removing any queued actions so when the services are restarted there is no historical processing and Plant Applications will only process new events. It must be noted that, for the same reason, it will also result in some lost data as any recently queued actions will be lost.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click BufferFilePath. The Edit Parameter dialog box appears.
5. In the Value box, type the full path where the buffer files should be created.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## ClearAppliedProductIfSame

By default, the applied product of a production event will be reset to NULL if the product running for the time range of the event is the same as the applied product. Set to **False** to leave the applied product to the explicitly set value.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---


*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.



## Global Configuration

3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, under Services, double-click ClearAppliedProductIfSame.
5. In the Edit Parameter dialog box, select either True or False from the Value drop-down list.
6. Click the OK button to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Critical Email Group

This site parameter specifies the email group to be used for critical level email messages from the server. The available values are determined by the groups in the E-mail Engine Configuration.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click Critical Email Group. The Edit Parameter dialog box appears.
5. In the Value box, select the email group.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Debug for Database Manager Sps

This site parameter is used to activate debug for Database Manager stored procedures.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Under Services, double-click Debug for Database Manager Sps. The Edit Parameter dialog box appears.
5. Select either True or False from the Value drop-down list.
6. Click the OK button to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## DebugMode

This site parameter is used to enable debug mode for **all** services. Therefore, it should be changed only by someone with advanced knowledge of Plant Applications and SQL Server. To enable debug mode for individual services, see Service Debugging.

The default is **0**. An 8-bit mask is used to determine integer values up to 255.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click DebugMode. The Edit Parameter dialog box appears.
5. In the Value box, type the value that corresponds to the desired debug mode.
  - 0 = Off
  - 1 = Low
  - 15 = Medium
  - 255 = High
6. Click the **OK** button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Default Time Zone

The Default time zone site parameter enables you to choose to use [Coordinated Universal Time \(UTC\)](#) or the time zone of the Proficy Server for timestamps the Plant Applications services. **The default value is the time zone of the Proficy Server.**

---

**IMPORTANT:** *You must have the latest Microsoft Windows updates installed to use UTC.*

---

If you select UTC, a Time Zone option is added to the department properties, which will enable you to assign a time zone for each department in your plant model so that each department can be treated as an individual site.

---

**IMPORTANT:** *If you select UTC, you must Proficy DataMart for your reporting solution. The Plant Applications Web Reporting is not supported. To contact a sales representative, please see the [Contacting GE](#) topic.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*


---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click Default time zone. The Edit Parameter dialog box appears.

---

**NOTE:** *If you see the message, "[Coordinated Universal Time] not found in registry," you must install the latest Microsoft Windows updates.*

---

5. Select Coordinated Universal Time or the desired time zone from the **Value** list.
6. Click the **OK** button to save your changes and to close the dialog box.
7. Click the  **Close** button to close the **Site Parameters** dialog box.
8. After changing this parameter, *on the Proficy Server*, you must:
  - a. Stop Proficy Server Manager
  - b. Stop Proficy Server License Manager
  - c. Start Proficy Server License Manager
  - d. Start Proficy Server Manager

### Coordinated Universal Time (UTC) Considerations

Plant Applications 5.x supports Coordinated Universal Time (UTC) as an option on a new installation of the Proficy Server. When you install a new Proficy Server, you can use the time zone of the server to store your data as you would in versions earlier than 5.0 or you can use the UTC option. The UTC option is required to support a Regional Server where plants span time zones. It is also required to support storage of time across the Daylight Saving Time (DST) boundary. UTC is similar to using GMT +0:00 as your time zone, with the exception that UTC does not acknowledge Daylight Saving Time. For example, GMT -6:00 is minus five hours from UTC, when adjusting for Daylight Saving Time. When you choose the UTC option, all the data is stored on your server in UTC time regardless of the time zone of the server.

### Reporting and UTC

Plant Applications displays, such as Autolog, support UTC including displaying data across the DST boundary. When data comes into a display, the timestamp is converted to the time zone of the client. For example, a test value with a UTC timestamp of 07:00:00 would be displayed with a timestamp of 02:00:00 on a client with a time zone of GMT -6:00 (assuming Daylight Saving Time). For data that crosses the Fall DST boundary, you will see multiple rows/columns, depending on the display, in the same time range. The rows/columns will be in order of UTC. For example, consider a time based Autolog display with columns every 30 minutes. Assuming your DST boundary is at 2:00 AM, the first 1:30 AM column in Autolog will be from before 2:00 AM and the second 1:30 AM column will be from after the DST boundary.

UTC-enabled standard reports are scheduled to be supported as part of the first SIM for this version of Plant Applications. The SIM is expected to be out within few months of the initial release of Plant Applications 5.0, and a UTC-enabled Excel Add-in is expected to follow soon after. For the initial release of Plant Applications 5.0, our standard reports, including the Add-in for Excel, do not support UTC.

---

**NOTE:** *If you have custom reports, they will need to be rewritten if you wish to use UTC.*

---

### Upgrading Plant Applications to use UTC

There is no automated upgrade path to use UTC on an existing Plant Applications installation. Therefore, we are providing the following manual options for you to consider, if you decide to upgrade to using UTC on an existing database. We are unable to go through all the scenarios or provide the technical details of how to implement them; these are just options to consider. With both options you must first make a copy of your production database.

---

**IMPORTANT:** *Before proceeding, it is important to understand that these options require advanced knowledge of both SQL Server and Plant Applications.*

---

**IMPORTANT:** *Either option must be fully tested before implementing in a production environment.*

---

### Option 1: Create a gap in your data

You must create a gap in your data between the last timestamp recorded at local server time and the first timestamp recorded when you switch to UTC.

1. Create a copy of your production database. After you have tested this option, you can use the copy of your production database as a backup or for reporting, while you wait for the new UTC database to be populated.
2. Do one of the following:
  - If your server time is -GMT, you can simply switch to UTC because the gap is created automatically when you switch to UTC time.

#### **Example**

*If you are at GMT -5:00 and your last data was recorded at 14:22, when you switch to UTC (GMT) the data is stored at 19:22, creating a gap in your data of five hours.*

- If you are +GMT, wait until the UTC time is newer than your last time stamp in the database. This is to prevent data from being overwritten.

#### **Example**

*If you are at GMT +3:00 and your last data was recorded at 11:00:00, you can shut down the server, wait for four hours and switch to UTC. Your data will be stored at 12:00:00, providing a one hour gap.*

3. Perform the Move Server procedure. See Knowledgebase article [KB5427](https://digitalsupport.ge.com) on our Web site: <https://digitalsupport.ge.com>.

### Option 2: Eliminate the runtime data from the copy of your database

1. Create a copy of your production database. After you have tested this option, you can use the copy of your production database as a backup or for reporting, while you wait for the new UTC database to be populated.
2. Perform the Move Server procedure, along with the optional truncate runtime data procedure. See Knowledgebase article [KB5427](https://digitalsupport.ge.com) on our Web site: <https://digitalsupport.ge.com>.

---

**NOTE:** *The Move Server document will be updated to include the truncate runtime data procedure by Q4 2010.*

---

## DefaultPrinter

This site parameter is used to set the default printer for Proficy Server for table-driven prints (Printer\_Id from Report\_Printers table). A value of 1 indicates no printer defined.

## Informational Email Group

This site parameter specifies the email group to be used for informational level email messages from the server. The available values are determined by the groups in the E-mail Engine Configuration.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under **Services**, double-click **Informational Email Group**. The **Edit Parameter** dialog box appears.
5. In the **Value** box, select the email group.
6. Click the **OK** button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## IsAlive

When the parameter is set to **True** it immediately activates a heartbeat signal for all the Proficy services. In each services log file the text "Alive..." is written once per minute. If the frequency is significantly great than a minute or not being written at all then there is a problem with the service and a restart should be attempted.

---

**NOTE:** *This flag should not be left on for a long period of time as it will generate large log files.*

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click IsAlive. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## LogFilePath

Each of the Proficy services has a log file. The location of all the log files on the server is set by the site parameter LogFilePath (the default path is C:\Program Files\Proficy\Proficy Server\LogFiles). The log files report reload times, execution messages and errors and, when debug is turned on, debugging information. Log files should be check periodically and any error messages should be resolved. Every time a service is restarted, a new log file is created.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click LogFilePath. The Edit Parameter dialog box appears.
5. In the Value box, type the full path for the location of the log files.
6. Click the **OK** button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## MaxEventTimeSpan

This site parameter defines the maximum time span (in minutes) to retrieve data (process an event and to data) from the historian for an event. If event start time is further back in time than the specified value, then no data is retrieved beyond the time span, only for the period.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click MaxEventTimeSpan. The Edit Parameter dialog box appears.
5. In the Value box, type the maximum number of minutes.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## MaxMegLogFileSize

The MaxMegLogFileSize parameter specifies the maximum size a service log file can be (in megabytes). When this size is reached the log file is closed and a new one opened. (0 = no limit).


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click MaxMegLogFileSize. The Edit Parameter dialog box appears.
5. In the Value box, type the number of megabytes log files are allowed to be
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.

8. Refresh the server.

## MaxPSTimeSpan

This site parameter defines the maximum time span (in minutes) to retrieve data (process an event and to data) from the historian for a product change. If product change start time is further back in time than the defined value, then no data is retrieved beyond the time span, only for the period.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click MaxPSTimeSpan. The Edit Parameter dialog box appears.
5. In the Value box, type the maximum number of minutes.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## MinEventTimeSpan

This site parameter defines the minimum event time span (in minutes) to skip processing an event and gathering to data from the historian.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click MinEventTimeSpan. The Edit Parameter dialog box appears.
5. In the Value box, type the minimum number of minutes.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## MinPSTimeSpan

This site parameter defines the minimum product change time span (in minutes) to skip processing an event and gathering to data from the historian.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click MinPSTimeSpan. The Edit Parameter dialog box appears.
5. In the **Value** box, type the minimum number of minutes.
6. Click the **OK** button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## MultiThreaded

The MultiThreaded site parameter enables or disables multithreading for the Proficy Server services. For more information, see the Multithreading topic.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click MultiThreaded. The Edit Parameter dialog box appears.
5. In the Value box, select True to enable multithreading or False to disable multithreading.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Perform Automatic Service Reloads

This site parameter determines whether Plant Applications services automatically reload after a configuration change. If set to **True**, the Plant Applications services will automatically reload. If set to **False**, you will be prompted to [reload the services](#).

---

*Setting this parameter to **False** will allow you to control when you want to reload the services because you'll be prompted after every configuration change.*

---

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---


*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.



## Global Configuration

4. In the Site Parameters dialog box, under Services, double-click on Perform automatic service reloads.
5. In the Edit Parameter dialog box, select either True or False from the Value drop-down list.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

## Product Summarization Sigma

Use this site parameter to change the multiplier used in Cpu, Cpl, Ppu, and Ppl calculations (these are used for Cpk and Ppk calculations). The default value is 3, which reflects the standard multiplier used in "6 sigma" calculations. For example, if the value is changed to 2, then rather than having  $3\sigma$  as the divisor for the Cpu calculation, you would have a divisor of  $2\sigma$ .


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters.
4. The Site Parameters dialog box appears.
5. Scroll down and double-click Product Summarization Sigma.
6. The Edit Parameter dialog box appears.
7. Enter a number from 1 to 4 in the Value box. The following formula shows how this number will be used:
8. 
$$Ppk = \min( (USL - \bar{x}) / (\text{ProductSummarizationSigma} * StDev), (\bar{x} - LSL) / (\text{ProductSummarizationSigma} * StDev) )$$
9. 
$$Cpk = \min( (USL - \bar{x}) / (\text{ProductSummarizationSigma} * \text{Sigma}), (\bar{x} - LSL) / (\text{ProductSummarizationSigma} * \text{Sigma}) )$$
10. Click OK to save your changes and close the dialog box.
11. Click **Close**  to close the Site Parameters dialog box.
12. Refresh the server.

For more information on Cp, Cpk, Pp, and Ppk calculations, see Variable Property Definitions.

## TriggerOlderEvents

The TriggerOlderEvents site parameter defines the cutoff time in which the Plant Applications Services no longer process events. The parameter is defined as number of months and by default is set to 6 months. If your site needs to process changes to events that are older than 6 months, you can modify the TriggerOlderEvents site parameter to increase the time window.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters, and then select Edit Site Parameters. The Site Parameter window appears.
4. Under Services, double-click TriggerOlderEvents. The Edit Parameter window appears.
5. In the Value box, enter the number of months.
6. Select OK to save your changes.
7. Select **Close**  to close the **Site Parameters** window.
8. Refresh the server.

## ReadLagTime

This site parameter defines the default value for determining how long to wait after scheduled time before processing a time-based variable.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click ReadLagTime. The Edit Parameter dialog box appears.
5. In the Value box, type the number of seconds to wait.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Recognize Crew Schedule

In order to have Plant Applications use your crew schedule, you must set the Recognize Crew Schedule site parameter to **True**. The default is **False**. Setting this site parameter to True will override the following site parameters:

- ShiftOffset
- ShiftInterval
- EndOfDayHour
- EndOfDayMinute

To change this site parameter:

1. Log in to the Plant Applications Administrator.


---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.

## Global Configuration

3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click Recognize Crew Schedule. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Reload Interval (Minutes)

This site parameter defines an integer value which sets the frequency (in minutes) when the Plant Applications services will automatically reload their configuration to pick up changes.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click Reload Interval (Minutes). The Edit Parameter dialog box appears.
5. In the Value box, type the number of minutes.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## UnicodeTextFiles

This site parameter determines whether text files created by Plant Applications will be output as ANSI or Unicode. If the parameter is set to True, the output will be Unicode. Text files are created by models or by using Result set 50 in a stored procedure that is called by Event Manager or CalcManager. The following models create text files:

Model Number	Model Description
78	Qupid interface
77	Production event data from a stored procedure
92	Reel data
99	Event status and comment
93	Export events (Autoline) (table driven)
97	Specification exports
94	Event export (Autoline)

96	Specification exports (Acquidata)
95	Event exports (Acquidata)

---

**NOTE:** *.log* and *.shw* files are not controlled by this parameter. They are output in Unicode.

---


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click UnicodeTextFiles. The Edit Parameter dialog box appears.
5. In the Value box, select True to output text files in Unicode.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## Warning Email Group

This site parameter specifies the email group to be used for warning level email messages from the server. The available values are determined by the groups in the E-mail Engine Configuration.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Services, double-click Warning Email Group. The Edit Parameter dialog box appears.
5. In the Value box, select the email group.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## System Parameters

### Ad hoc Content Generator Port

This is the port number that the Content Generator receives requests on. This is a system parameter and should not be changed.

## ClusteredSystem

This is a system parameter and should be changed only by someone with advanced knowledge. Select 1 to use Plant Applications in a clustered setup. Contact GE Intelligent Platforms support if you need to enable this. Valid values are:

- 0 = False
- 1 = True

## License Manager - Support Old Client

This is a system parameter and should not be changed. This True/False flag controls whether the license manager will support old (pre-4.0) clients. These clients require license information to be written to the database. If the site does not have old clients, then it would be better for performance the set this to False, but it will not hurt to leave it True.

## License Manager - Write Stats to Database

This is a system parameter and should not be changed. There is a table in the database (License\_Mgr\_Stats) which has license usage statistics by month. This setting controls if the License Manager will update the table or not.

## Local Connection Pool

This is a system parameter and should be changed only by someone with advanced knowledge. This system parameter determines the number of threads available for use by the ODBC Models (604, 605, 607).

## WebApps Log Level

The level of logging to use for the .NET Web applications. This should never be changed directly. It should only be changed by the WebApps administration page (<http://<your server name>/apps/administration/main.aspx>).

To change this parameter:

1. Open your browser.
2. In the address bar, type **http://<your server name>/apps/administration/main.aspx** and press ENTER.
3. If necessary, enter your user name and password to log on to the Web Server.
4. From the **Administration Options** drop-down list, select **Log Writer Settings**.
5. On the **Log Writer Settings** tabbed page, select the logging level from the drop-down list.

## WebAppServer

This system parameter stores the server name where the web server is installed. It uses this to connect to the authentication services. This should not be changed.

## WebAppsLoadURLService

The partial address (URL) of the web service that is used to generate URLs for the .NET reports. This is a system parameter and should never be changed.

## WebAppsLoginServer

The partial address (URL) of the authentication web service. This is a system parameter and should not be changed.

## Web Server Parameters

### ASP Print Que Max Attempts

---

**IMPORTANT:** *This site parameter should be changed only by someone with advanced knowledge of Plant Applications or when instructed by Customer Support.*

---

This Web Server site parameter determines the number of attempts the ASP engine will make to print a report.



To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

**NOTE:** *You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click Administer Site Parameters and click Edit Site Parameters. The Site Parameter dialog box appears.
4. Double-click on ASP Print Que Max Attempts. The Edit Parameter dialog box appears.
5. Enter the maximum number of attempts in the Value field.
6. Click the OK button to close the dialog box.
7. Click the Close  button to close the Site Parameters dialog box.
8. Refresh the server.

### AutoStartAccess

This site parameter determines whether Microsoft Access will be loaded when the Report Engine is started or when Access is actually needed to generate a report.

- If you set the parameter to **1** (one), Access will start when the Report Engine starts.
- If you set the parameter to **0** (zero), Access will not start until it is needed to generate a report.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the **Administrator security group** to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on AutoStartAccess.
5. In the Edit Parameter dialog box, type **1** (*Access will start when the Report Engine starts*) or **0** (*Access will not start until it is needed to generate a report*) in the Value field.

## Global Configuration

6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## AutoStartExcel

This site parameter determines whether Microsoft Excel will be loaded when the Report Engine is started or when Excel is actually needed to generate a report.

- If you set the parameter to **1** (one), Excel will start when the Report Engine starts.
- If you set the parameter to **0** (zero), Excel will not start until it is needed to generate a report.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on AutoStartExcel.
5. In the Edit Parameter dialog box, type 1 (*Excel will start when the Report Engine starts*) or 0 (*Excel will not start until it is needed to generate a report*) in the Value field.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## EndOfWeekDay

This site parameter is used to set the day that signifies the end of the week (Range=1-7 with Day 1 = Monday (US English Default DATEFIRST SQL setting)). This is used for reporting.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and choose Edit Site Parameters. The Site Parameters dialog box appears.
4. Under the Web Server section, double-click EndOfWeekDay. The Edit Parameter dialog box appears.
5. In the Value box, type the value that corresponds to the day your work week ends.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## EngineLoggingLevel

**IMPORTANT:** This site parameter should be changed only by someone with advanced knowledge of Plant Applications or when instructed by Customer Support.

This site parameter determines the level of error messages that will be recorded by the report engine. The number of days error messages are kept are determined by the site parameter, **LogFilePurgeDays**.

## Error Message Levels

**Level 0:** Level 0 messages are messages that are always recorded. Typical messages included information about services starting and stopping; problems with the system, such as lack of disk space; or initialization information. If you select level 0, no other messages will be logged.

**Level 1:** Level 1 messages are critical messages and generate an email. Typically, a level 1 message means that the engine will shut down. If you select level 1, all level 1 and level 0 messages will be recorded.

**Level 2:** Level 2 messages record known, specific errors that have occurred within a report. If you select level 2, all messages with a level 2 and below (2, 1, 0) will be recorded.

**Level 3:** Level 3 messages record general errors within the report engine. If you select level 3, all messages with a level 3 and below (3, 2, 1, and 0) will be recorded.

**Level 4:** Level 4 messages record all general activity. If you select level 4, all messages with a level 4 and below (4, 3, 2, 1, and 0) will be recorded.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on EngineLoggingLevel.
5. In the Edit Parameter dialog box, in the Value field, enter the maximum level of error messages you want to record.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

To view the Report Engine log files:

1. Log in to the Plant Applications Administrator

---

*You must have **Manager access** or greater to the Administrator security group to start the Web Administrator.*

---

2. Open Server Management.
3. Right-click on the Administer Web Server folder and select Administer Web Server from the pop-up menu.



## Global Configuration

4. In the Proficy Server Login dialog box, enter your Plant Applications user name and password and click OK.
5. Open the Web Server folder, and then open the Engines folder.
6. Select an engine to view its log file.

## EngineRestartHours

**IMPORTANT:** This site parameter should be changed only by someone with advanced knowledge of Plant Applications or when instructed by Customer Support.

This site parameter determines the number of hours the report engine will run before shutting itself down. The default is four hours.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on EngineRestartHours.
5. In the Edit Parameter dialog box, enter the number of hours in the Value field.
6. Setting the Value to 0 (zero) causes the engine to never intentionally shut down.
7. Click the OK button to save your changes and close the dialog box.
8. Click the Close button to close the Site Parameters dialog box.
9. Refresh the server.

## ExcelAddIns

Use this site parameter to specify the **add-ins** (*Add-ins are programs that add optional commands and features to Microsoft Excel*) that you want to load automatically into Microsoft Excel.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on ExcelAddIns.
5. In the Edit Parameter dialog box, enter the add-ins you want to load into Excel in the Value field.
6. Separate each add-in with a comma and no spaces.
7. Click the OK button to save your changes and close the dialog box.

8. Click the Close button to close the Site Parameters dialog box.
9. Refresh the server.

## FTPPW

This site parameter contains the password for the FTP engine to use for logins.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Web Server, double-click FTPPW. The Edit Parameter dialog box appears.
5. In the Value box, type the new password.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## FTPSiteName

This site parameter defines the default directory for the FTP engine to use for transfers. This site parameter is used along with [RSName](#) to define the FTP location.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Web Server, double-click FTPSiteName. The Edit Parameter dialog box appears.
5. In the Value box, type the web server name.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## FTPUid

This site parameter defines the user ID for the FTP engine to use for logins.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Web Server, double-click FTPUID. The Edit Parameter dialog box appears.
5. In the Value box, type the new user ID.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## LogFilePurgeDays

This site parameter specifies the number of days error messages are kept


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Web Server, double-click LogFilePurgeDays. The Edit Parameter dialog box appears.
5. In the Value box, type the number of days to keep error messages.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## MaxEngineFails

**IMPORTANT:** This site parameter should be changed only by someone with advanced knowledge of Plant Applications or when instructed by Customer Support.

Use this parameter to specify the number of times a report engine is allowed to fail before the report engine shuts down.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on the Administer Site Parameters folder and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on MaxEngineFails.
5. In the Edit Parameter dialog box, enter the number of engine fails allowed in the Value field.

6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## MaxReportFails

**IMPORTANT:** This site parameter should be changed only by someone with advanced knowledge of Plant Applications or when instructed by Customer Support.

Use this parameter to determine the number of times a report is allowed to fail before its status is set to **Failed**. Once the report's status is **Failed**, the report will not run again until someone with **Administrator access** in the Administrator security group manually starts the report and it runs successfully.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on the Administer Site Parameters folder and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on MaxReportFails.
5. In the Edit Parameter dialog box, enter the number of report fails allowed in the Value field.
6. Click the OK button to save your changes and close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## MaxSQLLoginAttempts

**IMPORTANT:** This site parameter should be changed only by someone with advanced knowledge of Plant Applications or when instructed by Customer Support.

Use this site parameter to specify the number of times the report engine and scheduler will attempt to reconnect to SQL after a lost connection.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters from the pop-up menu.
4. In the Site Parameters dialog box, double-click on MaxSQLLoginAttempts.
5. In the Edit Parameter dialog box, enter the number of report fails allowed in the Value field.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## NPTCharacterFlag

Use this site parameter to determine the text that is displayed on reports that include events that occurred during non-productive time. You can enter a maximum of 64 characters, which can include letters, numbers, and special characters, such as @#\$\$%^.

The default value is **(NPT)**.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand  Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Double-click NPTCharacterFlag. The Edit Parameter dialog box appears.
5. Enter the text in the Value field.
6. Click the OK button to save your changes and close the dialog box.
7. Click the Close button to close the Site Parameters dialog box.
8. Refresh the server.

## OEE Max Limit Override

If set to **True**, this site parameter allows availability, performance, quality and OEE to exceed 100 percent. The default is **False**.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Web Server, double-click OEE Max Limit Override. The Edit Parameter dialog box appears.
5. Select True or False from the Value list.
6. Click the OK button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the Site Parameters dialog box.
8. Refresh the server.

## ReportTimerInterval

This site parameter controls how often, in seconds, the report engine queries the Plant Applications database. The default value is 5 seconds. Under most circumstances, this parameter should not be changed.

To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Open Global Configuration.
3. Right-click on Administer Site Parameters and select Edit Site Parameters. The Site Parameters dialog box appears.
4. Under Web Server double-click on ReportTimeInterval. The Edit Parameter dialog box appears.
5. Click in the **Value** field and type the number of seconds, which specifies how often the report engine will query the Plant Applications database.
6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close** button to close the **Site Parameters** dialog box.
8. Refresh the server.

## SQL Reporting Services

Developers can create reports using Microsoft Visual Studio. Once reports have been deployed to Internet Information Services, they can be executed and viewed from the Plant Applications Web Report Server.

After the report and been created and deployed, there are five site parameters that must first be configured.

- SQL Reporting Services Database Name
- SQL Reporting Services http Location
- SQL Reporting Services Password
- SQL Reporting Services Server Name
- SQL Reporting Services Username

After you have configured the site parameters, there are steps required to create a Plant Applications report type that acts as a shell pointing to the SQL report.

To change this site parameter:

1. Log in to the Plant Applications Administrator.


---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click Administer Site Parameters and select Edit Site Parameters. The Site Parameter dialog box appears.
4. Under Web Server, double-click each of the following five site parameters. The Edit Parameter dialog box appears.
5. In the value field, type the appropriate information for each parameter.
  - **SQL Reporting Services Database Name:** Type the name of SQL Server database for Reporting Services
  - **SQL Reporting Services http Location:** Type the default URL For Microsoft SQL Server Reporting Services (for example, http://<ServerName>/SQLReportServer)

## Global Configuration

- **SQL Reporting Services Password:** Type the password for accessing Reporting Services database
  - **SQL Reporting Services Server Name:** Type the name of SQL Server that hosts Reporting Services database
  - **SQL Reporting Services Username:** Type the username for accessing Reporting Services database
6. Click the **OK** button to save your changes and to close the dialog box.
  7. Click the **Close**  button to close the **Site Parameters** dialog box.
  8. Refresh the server.

## WA\_HistorianForceLocal

This parameter should not be changed. If set to **True**, it forces any Historian to bypass the RDS.

## WA\_PreCompilePages

If this site parameter is set to True, Web applications will preload all pages. Initially, this will affect performance, but the result will be faster loading Web applications. If this site parameter is set to False, the initial page will load faster, but subsequent pages will load slower.


To change this site parameter:

1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand Global Configuration.
3. Right-click **Administer Site Parameters** and select **Edit Site Parameters**. The **Site Parameter** dialog box appears.
4. Under **Web Server**, double-click **WA\_PreCompilePages**. The **Edit Parameter** dialog box appears.
5. Select **True** or **False** from the **Value** list.
6. Click the **OK** button to save your changes and to close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## WebSiteTimeoutMin

---

**IMPORTANT:** *This site parameter should be changed only by someone with advanced knowledge of Plant Applications or when instructed by Customer Support.*

---

Use this site parameter to specify the number of minutes the Web client can remain inactive before **IIS** (*Internet Information Server is the Microsoft web and FTP server*) drops the session.

To change this site parameter:


1. Log in to the Plant Applications Administrator.

---

*You must have **Administrator access** to the Administrator security group to change site parameters.*

---

2. Expand  Global Configuration.

3. Right-click Administer Site Parameters and click Edit Site Parameters. The Site Parameters dialog box appears.
4. Scroll down and double-click **WebSiteTimeoutMin**. The **Edit Parameter** dialog box appears.
5. In the **Value** field, enter the number of minutes of inactivity before timing out.
6. Click the **OK** button to save your changes and close the dialog box.
7. Click the **Close**  button to close the **Site Parameters** dialog box.
8. Refresh the server.

## Restart Services in Tomcat Server

These are the list of services to be restarted in Tomcat Server when the relevant Site parameters or Sheet options are modified.

Display Option ID	Display Option Name	Cached in Service
445	Create Activities for each title in the display	activities-app-service, activities-service
446	Unit to associate activities to	mymachine-service-impl, downtime-app-service, mes-service-impl, FaultInfo, productionmetrics-app-service
458	Displays the chosen option instead of var_desc	activities-app-service, activities-service

Site Parameter ID	Site Parameter Name	Site Parameter Long Description	Cached in Service
8	LanguageNumber	Language Setting	productionmetrics-app-service
12	SiteName	Set Site Name	processanalyzer-service-impl
14	EndOfDayHour	Set end of production day hour value (Range = 0-23)	activities-app-service, activities-service, productionmetrics-app-service
15	EndOfDayMinute	Set end of production day minute value (Range = 0-59)	activities-app-service, activities-service, productionmetrics-app-service
16	ShiftInterval	Shift interval value is number of minutes per shift	activities-app-service, activities-service, productionmetrics-app-service
17	ShiftOffset	Shift offset value is first shift starts x minutes after midnight	activities-app-service, activities-service, productionmetrics-app-service
301	EndOfWeekDay	Set the day that signifies the end of the week [Range=1-7 with Day 1 = Monday (US English Default DATEFIRST SQL setting)]. Used for reports.	activities-app-service, activities-service, productionmetrics-app-service
317	OEE Max Limit Override	Allow Availability, Performance, Quality and OEE to exceed 100 percent.	productionmetrics-app-service



607	Populate OEE Aggregation	Populate OEE Aggregation table for all units	productionmetrics-app-service
609	Comparison Type	To identify comparison mode for Analysis	processanalyzer-service-impl
612	BorderDuration	Duration (in minutes) of trending of values before and after the Alarm. Default is 240.	alarm-app-service

## Enterprise Connector Service

The Enterprise Connector service provides various functions in support of the interface to Microsoft BizTalk® server as described in the following.

---

*There are registry settings that must be manually created to configure the service. For more information, see [Registry Settings](#).*

---

### Download

Used to download schedules from ERP to Plant Applications. ERP sends a message which BizTalk picks up (Schedule Download Template in Enterprise Connector), transforms and sends to this service. This service then calls the stored procedure setup for subscription group 'ScheduleDownload'. If the stored procedure returns result set 15 & 16 then these are published to the message bus. Any errors / warnings the stored procedure return are then passed back BizTalk for email and logging. This is all done through the XML schema B2MML-V02-ProductionSchedule.xsd.

### Upload

Used to upload performance data to ERP. The service polls the SP spS95\_UploadGateKeeper for which data needs to be uploaded. It then calls the SPs returned by the gate keeper and uploads that data to BizTalk (Production Performance Template in Enterprise Connector) which then transforms that data and uploads it to ERP. This is done through the schema B2MML-V02-ProductionPerformance.xsd.

### Execute Stored Procedure

Used by BizTalk orchestrations to execute stored procedures that exist in the Plant Applications database. (ExecuteStoredProcedure sample in Enterprise Connector)

### Get / Set UDP

Used by Biztalk orchestrations to set / get UDPs. (UDP sample in Enterprise Connector)

### Registry Settings

These keys don't already exist in the registry and have to be created manually. The location is: HKEY\_LOCAL\_MACHINE\SOFTWARE\Proficy\Proficy Enterprise Connector

**IMPORTANT:** There is potential to cause systemic disruptions when editing the Windows Registry. Do not attempt to perform such editing if you are not familiar with the registry.

**UploadPollInterval:** How often the upload polls the gatekeeper for data to upload to ERP. Default is 30000 or 30 seconds.

**OneResponsePerUploadMessage:** If set to 0 then each message for upload can contain multiple process orders. Otherwise only one process order is sent per message. Default is 1.

**PublishDirectB2MML:** If set to 0, TestConformance, OrderConfirmation, ConsumptionPerformance, and so on are placed into one schema (PublishedData) and sent to Biztalk. Otherwise they are

separated into their own schemas. Default is 0 because Biztalk only listens for one message type at a time when we can send 1 of 4.

**SqlTimeout:** How long the service will wait before timing out on SQL statements and throw an exception. Default is 300 (5.0 minutes).

**LoggingLevel:** The level of errors to log. [1 (Critical), 2 (Critical & Warning), 3 (All)] Default value is 3.

## Production Performance (Order Confirmation)

This section defines the production performance order confirmation schema used by the Enterprise Connector.

### ProductionPerformance

The top-level element. Contains a definition of a report on production performance, including the location of the performance, the publication data of the performance report, the ID of the associated production schedule, the duration of the production performance, and the list of production responses making up the production performance report. May include application specific defined elements.

### ProductionResponse

Contains a definition of a production response report, including the identification of an associated production request, the product produced, the duration of the report, and the segments making up the production response. May include application specific defined elements. May be a top level element for defined locations.

### SegmentResponse

Contains a definition of a report on a segment. Includes the duration, production data, personnel, equipment, material produced, material consumed, and consumables used.

### MaterialProducedActual

Contains a report on actual material resources produced. May define the quantity of the resource produced, or may contain a list of property definitions and quantities for each property subset.

## Production Performance (Production/Consumption Confirmation)

This chapter defines the production performance production/consumption confirmation schema that is used by the Enterprise Connector.

### ProductionPerformance

The top-level element. Contains a definition of a report on production performance, including the location of the performance, the publication data of the performance report, the ID of the associated production schedule, the duration of the production performance, and the list of production responses making up the production performance report. May include application specific defined elements.

### ProductionResponse

Contains a definition of a production response report, including the identification of an associated production request, the product produced, the duration of the report, and the segments making up the production response. May include application specific defined elements. May be a top level element for defined locations.

### SegmentResponse

Contains a definition of a report on a segment. Includes the duration, production data, personnel, equipment, material produced, material consumed, and consumables used.

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### MaterialProducedActual

Contains a report on actual material resources produced. May define the quantity of the resource produced, or may contain a list of property definitions and quantities for each property subset.

### MaterialProducedActualProperty

Contains a definition of actual materials produced, for a subset of the materials identified by a property value. Includes the quantity of the resource produced.

### MaterialConsumedActual

Contains a report on actual material resources consumed. May define the quantity of the resource consumed, or may contain a list of property definitions and quantities for each property subset.

### MaterialConsumedActuaProperty

Contains a definition of actual material resources consumed, for a subset of the resource identified by a property value. Includes the quantity of the resource consumed.

## Production Statuses and Events

Production Statuses are used to indicate the current status of a Production Event. Statuses are used as follows:

- Indicate the statuses that a batch cycles through.
- Indicate the status or disposition of a Production Event or User-Defined Event.
- Indicate the Inventory or Work In Progress of an event on a Production Unit.

---

**NOTE:** Starting with Plant Applications 8.1, users can create more than 255 production status.

---

### Production Event Status Changes

Production Statuses are defined to indicate if the Event is counted for production and/or inventory. Production Event output that has not yet been consumed by a Production Unit is considered inventory or work-in-progress. When the output from a Production Event is consumed or rejected (or wasted), the event is no longer available in inventory. Output that is completely built by a Production Event on a Production Unit but that has not yet been released to the next processing step is considered inventory.

When a status change occurs, the status of the Production Event changes and is automatically updated on any displays where that Production Event is shown. In addition, the status change may trigger alarms and calculations. These alarms and calculations may be on the unit where the change occurred or may be on upstream or downstream units. This provides a variety of ways to highlight an issue with a product that may need to be dealt with upstream or downstream in the production process.

Changing the status may also affect how Production Events can be routed through the process. Each Production Unit has one or more Raw Material Inputs defined. For each input, the valid statuses available to move upstream product into the next Input are defined. Through this configuration, rejected statuses can be prevented from moving further in the process.

Changing the status of a Production Event can affect its potential paths through the process. The case that is potentially most important to consider is what should happen when the status is changed after a Production Event has already moved forward in the process. Sometimes the output of the next unit in line needs to be automatically rejected, other times the process may need to be shut down. Both can be achieved through Alarms and Calculations. Specifically, a genealogy calculation can be employed.

Genealogy calculations are triggered by additions or updates to the genealogy of events across Units. Through a genealogy calculation, changes in the data or the status of a Production Event can fire calculations upstream and downstream in the process, which can in-turn provide alarming or automatic disposition at that point in the process.

### Production Status Attributes

**Production Status (Name):** Assigns a unique name to each Production Status in the system.

**Description:** Describes the Production Status.

**Status:** Indicates whether the status is *Good* or *Bad* to determine whether the Production Event should be counted as Good Production.

**Production:** Determines whether a Production Status should be considered a Valid Status for Production Counting. Set to *Yes* to include the status.

**Inventory:** Determines whether a Production Status should be considered an Inventory status. Set to *Yes* to include the status.


**Bypass History:** Stops history recording when periodic event dimension updating is set to monitor event progress during the course of long production events. Refer to Periodic Event Dimension Update.

**Lock Event Data:** Places a permanent lock on the particular Production Event or User-Defined Event status to lock all associated data and prevent data changes. Only transitions from one locked status to another locked status are allowed. Locking is enforced by the database update procedures. Once an event is locked, the update procedures will not allow changes to the data. Refer to [Locking Production Statuses](#).

**Icon:** In Genealogy View, the icon is shown in the Inventory Load list and the flag is shown while dragging and dropping Production Events into a Raw Material Input.


**Color:** In Genealogy View, the status color is the fill color of the Production Event when it is on a Raw Material Input position or is the color of the Production Event in the family tree view.

## Adding and Defining Production Statuses

1. In the Plant Applications Administrator, expand  **Global Configuration**
2. Right-click **Administer Production Statuses** and select **Edit Production Status**. The **Production Status Editor** dialog box appears.
3. Click **New**. The boxes become editable.
4. In the **Description** box, type the name of the new production status.
5. In the **Status** box, select the status that will indicate if this production status will be considered a state of **Good** or **Bad** production.
6. In the **Production** box, select **Yes** if this is a status that will allow this event to be counted as production on this unit or select **No** if this status will not allow this event to be counted as production on this unit.
7. In the **Inventory** box, select **Yes** if this is a status that will allow this event to be counted as production on this unit or select **No** if this status will not allow this event to be counted as production on this unit.
8. Under **Icon**, select the desired flag color for this status.
9. Under **Color**, select the desired color for this status.
10. Click the check box to select the **Bypass History** flag to not record history for the chosen event status. Refer to Periodic Event Dimension Update.

11. Click **Save** to complete the addition of the new production status.

## Editing Production Statuses

1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Right-click **Administer Production Statuses** and select **Edit Production Status**. The Production Status Editor dialog box appears.
3. Select the production status to be edited from the drop down list and click **Update**. The boxes become editable.

---

**NOTE: Nold-Staged, Nold-Running, Staged, and Running** are used for genealogy to define events in the running or staged positions and do not get processed until the production status has changed to a different status. Therefore, it is recommended that the names of these four production statuses **not** be changed.

---

4. Make the desired changes and click **Update** to save the changes.

## Locking Production Statuses

Production Statuses are used to indicate the current status of a Production Event and are set up through the Production Status Editor. Refer to Setting Up a User-Defined Event.

In cases where Production Event data is placed into other systems, it may be desirable to lock data related to Production Events in certain status states from any changes. For example, locking a Production Event status means that changes can no longer be manually entered in an Autolog display.

To lock a production status, follow these steps:

1. Right-click **Administer Production Statuses** under **Global Configuration** in the Plant Applications Administrator, and choose **Edit Production Status**.
2. In the Production Status Editor, select a Production Status.
3. Click the **Update** button.
4. Select the **Lock Event Data** check box. A warning is displayed to let you know that the action PERMANENTLY locks all data for Production Events with this status. Once locked, a status cannot be unlocked.
5. Click **Yes** in the message dialog box to continue.
6. Click the **Update** button again. Another warning is displayed to let you know that selecting **Yes** will DELETE transitions to any unlocked statuses on ALL units that have the status you are about to lock. Only transitions to other locked statuses are allowed once a status is locked. Changes apply across the Enterprise.

After a Production Status is locked, open the Unit Properties Configuration screen for a unit, and click the Production Statuses tab. You will see that only other locked statuses can serve as a valid transition for the status you locked.

## Exporting Production Statuses

Exporting production statuses creates an Excel worksheet containing the configuration from the Production Status Editor dialog box for each production status.

To export production statuses:

1. In the Plant Applications Administrator, expand  **Global Configuration**.

2. Right-click **Production Statuses** and select **Export Production Statuses**. The **Configuration Export** dialog box appears.
  3. Ensure **Production Statuses** is selected and click **OK**. Excel automatically starts and a worksheet is created containing production status configuration.
- Importing Configurations


## Importing Production Statuses

After you have exported your production status configurations, you can edit the information in the worksheet and import those changes into a Plant Application server. If you edit the **Status Desc**, a new production status is created. If any of the other information for a specific production status is edited, the existing production status is updated.

To import production statuses:

1. Ensure the workbook containing the production statuses configuration worksheet is open and the configurations you want to import are selected.
2. In the Plant Applications Administrator, expand  **Global Configuration**.
3. Right-click **Production Statuses** and select **Import Configuration**. Your selected configurations are imported.
4. Click **OK** and refresh the server.

## Administer Calculations


*To manage calculations:* In the Plant Applications **Server Manager** tree, expand  **Global Configuration** and expand **Administer Calculations**.

Administer Calculations is where you create and manage calculations that are available for use with all variables in the plant model. You can also create and manage calculations at the variable level in the plant model.

You can create three types of calculations:

- [Equation](#)
- [VB Script](#)
- [Stored Procedure](#)

### How to Create Simple Equation Calculations?

*To access the Calculation Configuration dialog box:* In the Plant Applications **Server Manager** tree, expand  **Global Configuration** and double-click on  **Administer Calculations**.

To create a simple equation calculation:

1. From the Calculation Configuration dialog box, click **New**. The Define Calculation tab is opened.
2. Select a calculation Type of "Equation."
3. Type in the number of inputs the calculation will have.
4. Type the Equation within the Equation window. Variables names A-Z are used as "aliases" to inputs, with "A" being the first input, "B" being the second input, and so on.
5. Select the "Identify Input Variables" tab.

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6. Select the first Calculation Input and select identify the variable attached to the calculation by selecting the "... " button at the bottom of the screen.
7. From the Search Variables dialog, optionally select a Production Line, Production Unit, and all or part of a variable description to limit the variable search.
8. Select the "Search" button.
9. Select a variable from the search results to attach to the calculation and select "OK" to return to the calculation configuration window.
10. Select "Save" to save the calculation.
11. Set up the calculation interval. By default, the calculation will trigger each time one of the input variables change. You may also force calculation on a time or event basis by modifying the attributes of the variable the calculation is attached to.
12. Select the Variable; right-click and select "Variable Sheet."
13. In the Variable Sheet window, select "Production Event" for the Event Type. This will cause the calculation to fire whenever the input variables change, or whenever a Production Event is created or modified.
14. When finished in the Variable Sheet, select the "Save" icon in the toolbar to make the current changes active.

## How to Create Custom Logic (VBScript) Calculations?

All calculations that are configured and saved are stored in a library so you can reuse them on other variables. Keep in mind that when a calculation from the library is applied to another variable, the calculation should be renamed and saved as a new calculation if any changes are made to the calculation template.

VBScript functions are ideal for intermediate type calculations if you know how to write in Microsoft VBScript. (For more information on VBScript, click [here to go to Microsoft's site](#)). These calculations support program flow logic, such as **If**, **While**, and **For** statements. All inputs must be defined, whether they originated from a variable or a constant. Only one result can be obtained from an equation calculation.

All scripts must set a variable called "Result" equal to the value that should be returned for the calculation. Variables names A - Z are used as aliases to inputs, with "A" being the first input, "B" being the second input, and so on.

You can use the following operators in your equations:

+ (addition)

- (subtraction)

\* (multiplication)

/ (division)

The following VBScript functions are available for use within equations:



Function	Description
Abs	Returns the absolute value of a specified number
Atn	Returns the arc tangent of a specified number
Cos	Returns the cosine of a specified number (angle)
Exp	Returns e raised to a power
Hex	Returns the hexadecimal value of a specified number
Int	Returns the integer part of a specified number

Fix	Returns the integer part of a specified number
Log	Returns the natural logarithm of a specified number
Oct	Returns the octal value of a specified number
Rnd	Returns a random number less than 1 but greater or equal to 0
Sgn	Returns an integer that indicates the sign of a specified number
Sin	Returns the sine of a specified number (angle)
Sqr	Returns the square root of a specified number
Tan	Returns the tangent of a specified number (angle)

To create a VBScript calculation: (Interface accessed from the Proficy Client has slight differences.)

1. Create a new variable or select an existing variable.
2. Right-click on the variable and select **Create Standard Calculation**.
3. In the **Calculation Configuration** dialog box, choose **VBScript** from the **Type** list.
4. Choose the appropriate trigger from the **Trigger** list.
5. In **# of inputs**, type the number of inputs the calculation will have.
6. On the **Script** tab, type the VBScript calculation.
7. Click the **Inputs** tab, and click **New** to add the first input.
8. Select the first input with alias of 'r;a." The attributes of this input will be displayed under **Selected Input**.
9. Edit the **Name**, **Entity**, and **Attributes** to be associated with the Input.
10. Repeat steps 6 - 8 for the remaining calculation inputs.
11. Click **Save** to save the calculation and close the **Calculation Configuration** dialog box.

## How to Create Stored Procedure Calculations?

*To access the Calculation Configuration dialog box:* In the Plant Applications **Server Manager** tree, expand  **Global Configuration** and double-click on  **Administer Calculations**.

1. From the Calculation Configuration dialog box, click **New**. The Define Calculation tab is opened.
2. Select a Calculation Type of "Stored Procedure."
3. Search for a Stored Procedure to attach to the calculation by selecting the "..." button on the "Stored Procedure" sub-tab.
4. Select the "OK" when finished and return to the Calculation Configuration window.
5. This example stored procedure has 3 inputs. A prototype of the stored procedure is provided in the window below the Stored Procedure selection. The first parameter of every Stored Procedure calculation is the OUTPUT parameter. The remainder of parameters are expected to be supplied by the calculation.
6. Type in the number of inputs in the "Inputs" field.
7. Select the "Inputs" sub-tab.
8. Select the first Input with alias of "a" The attributes of this input will be displayed within the "Selected Input" frame.



9. Select the "Modify" button, and identify the Name, Entity, and Attribute to be associated with the Input. In this example, the first parameter is expected to be a Unit Id, so select "This Variable" for the entity, "Master PUIId" for the Attribute, then select "Apply."
10. Select the second Input, select "Modify" and specify "This Event" for the Entity, and "Start Time" for the Attribute. Select "Apply" when finished. This will pass in the start time of the calculation time period as the second parameter. The calculation time period will be identified later when editing the configuration of the variable this calculation is attached to.
11. Select the third Input, select "Modify" and specify "This Event" for the Entity, and "End Time" for the Attribute. Select "Apply" when finished. This will pass in the end time of the calculation time period as the third parameter.
12. Select "Save" to save the calculation and close the Calculation Configuration window.
13. Set up the calculation interval. Select the Variable; right-click and select "Variable Sheet."
14. In the Variable Sheet window, select "Time" for the Event Type, enter "440" for the Sampling Interval, and enter "80" for the Sampling Offset. This will create a daily calculation that will produce the total waste amount for the day at 8:00 am each day.
15. When finished in the Variable Sheet, select the "Save" icon in the toolbar to make the current changes active.

## Optimizing Calculations

Calculation optimization prevents redundant calculations from being re-fired and speeds up results processing by the Proficy server. Optimization adds a delay of 500 milliseconds between inputs. For example, if the calculation has multiple inputs, there will be a delay of 500 milliseconds between input changes before the calculation fires. To select optimization, do one of the following:

- If running Plant Applications as a standalone implementation, access the Calculations Manager interface from the Plant Applications Administrator. Select the **Optimize Calculation Runs** check box in the **Calculation Configuration** dialog box to optimize calculations.
- If running Plant Applications as an implementation merged with Proficy SOA, access the Calculations Manager interface from the Proficy Client. Select the **Optimized** check box in the Definition tab to optimize calculations.

If your calculation code requires the calculation to fire after every change in input, then you must clear the **Optimize Calculation Runs** check box.

## Troubleshooting

If you experience the following, you may need to clear the "optimize" check box.

- Calculations having a trigger of Event/Variable are fired in the CalculationMgr log file, but the results are not processed into the Plant Applications database. Results are very sporadic and inconsistent.
- The stored procedure returns an output value regardless of what happens in the stored procedure, but there is no value in the Tests table.

## How to Create Calculations Based on Process Data?

1. Browse into the Plant Model.
2. Right-click on a Group and select "New Variable"
3. Type in the name of the new Variable. Variable names must be unique within a given Production Unit.
4. Select the new variable; right-click and select "Variable Sheet"

5. Make sure the "Data Source," "Event Type," "Sampling Interval," "Sampling Offset," "Sampling Type," and "Input Tag" are visible. Select the "Column/Row Visibility" icon in the Variable Sheet window toolbar to change column visibility.
6. Select the appropriate columns in the "Hidden" list and move them into the "Visible" list by selecting the ">" button.
7. Close the "Column/Row Visibility" Dialog To Return To the Variable Sheet window.
8. Select a Data Source of "PI," an Event Type of "Delay," and a Sampling Type of "Average."
9. If the Input Tag that will drive the calculation is known, then type it into the Input Tag column. To search for a Tag, select the Input Tag column, right-click, and select "Tag Search."
10. Search for an appropriate Tag, select a Tag from the search results, and select "OK."
11. The selected tag will appear in the Input Tag column.
12. To save the variable, select the "Save" icon in the Variable Sheet window toolbar.

## User-Defined Properties

You can think of user-defined properties (UDP) as a way to add a "virtual" column to a table in the Plant Applications database. User-defined properties can map the values to a specific table. There are three tables in the Plant Applications database used to map the UDP value to the appropriate item in the appropriate table.

- **Tables:** This table lists all of the tables in the Plant Applications database. Each table name has a unique ID (TableId).
- **Table\_Fields:** This table lists all of the user-defined properties. Each user-defined property is assigned a field type (ED\_Field\_Type\_Id), which specifies the data type, and a unique ID (Table\_Field\_Id). The table contains the following columns:
  - **TableId:** This maps the UDP value to the correct table.
  - **Table\_Field\_Id:** This defines the UDP.
  - **ED\_Field\_Type\_Id:** This defines the type of field, such as text or numeric or TRUE/FALSE.
  - **Table\_Field\_Desc:** This is a description of the table fields.
- **Table\_Fields\_Values:** This table maps the value for a UDP to the appropriate row in the appropriate table. The table contains the following columns:
  - **TableId:** This maps the UDP value to the correct table.
  - **Table\_Field\_Id:** This defines the UDP.
  - **KeyId:** This defines the row in the table specified by the value in the TableId field.
  - **Value:** This is the value of the UDP.

User-defined properties are managed using the Administer User-defined Properties dialog box. For more information on creating user-defined properties, see the topic, [Adding User-defined Properties](#).

You can create user-defined properties for several tables. The following is a list of tables for which you can create user-defined properties.

- |                                     |                            |
|-------------------------------------|----------------------------|
| • Bill_Of_Material_Formulation      | • Product_Family           |
| • Bill_Of_Material_Formulation_Item | • Product_Groups           |
| • Characteristics                   | • Production_Plan          |
| • Customer                          | • Production_Plan_Statuses |
| • Customer_Order_Line_Details       | • Production_Setup         |

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- Customer\_Order\_Line\_Items
- Customer\_Orders
- Departments
- Email\_Message\_Data
- Event\_Reason\_Catagories
- Event\_Reasons
- Event\_Subtypes
- Phrase
- PrdExec\_Inputs
- PrdExec\_Path\_Units
- PrdExec\_Paths
- Prod\_Lines
- Prod\_Units
- Production\_Setup\_Detail
- Production\_Status
- Products
- PU\_Groups
- Report\_Definitions
- Report\_Types
- Shipment
- Shipment\_Line\_Items
- Specifications
- Subscription
- Subscription\_Group
- Users
- Variables

## Deleting User-Defined Properties

You can delete an assigned value or a column. Before you can delete a column, you must first delete all values assigned to the column.

To delete an assigned value:

1. Expand Global Configuration, right-click on Administer User Defined Properties and click **Administer User Defined Properties**. The **User Defined Properties** dialog box appears.
2. From the Tables drop-down list, select the table from which you want to delete the user-defined property.
3. From the list of assigned values, select the value(s) you want to delete.
4. Click the **Delete Field** button. The selected items are marked with a red asterisk (\*) and the assigned values are displayed in **red**.
5. Click the **Save** button. The marked items are deleted.

To delete a column:

1. Expand Global Configuration, right-click on Administer User Defined Properties and click **Administer User Defined Properties**. The **User Defined Properties** dialog box appears.
2. From the Tables drop-down list, select the table from which you want to delete the user-defined property.
3. From the list of assigned values, delete all values.
4. From the list of columns, select the column you want to delete.
5. Click the Delete column button. "Are you sure you want to DELETE the Field [*column name*]?" appears.
6. Click Yes to delete the column.
7. If you have not deleted all assigned values, "Cannot delete column - Value(s) exist for it." appears. Click OK. and delete all the values.

## User-Defined Property Field Types

The field type specifies the data type of the user-defined property.

Although you can select a variety of field types in the Add User Defined Property dialog box, each default user-defined property has a pre-assigned field type.

Field Type	User-defined Property
Numeric	Email Action
Numeric	BTSched - NoMcrProductOption
Numeric	BTSched - DefPPStatusId
Numeric	BTSched - ErrPPStatusId
Text	BTSched - NoBOMFormulationOption
Numeric	BTSched - RemoveLeadingZeros
Product	BTSched - DefMPRProdId
Product	BTSched - DefMCRProdId
Text	BTSched - DefPathLineId
Text	BTSched - RepeatedProcessOrder
Numeric	BTSched - IgnoreBOMInfo
Numeric	Flag Email
Product Family	BTSched - DefRawMatProdFamId
Numeric	BTSched - ReportCorrections
Numeric	BTSched - AutoConfirmMpaMca
Numeric	BTSched - ReportDeletions
Numeric	BTSched - OnlySendMpaMcaSinceLastProcessedDt
Text	BTSched - NoUpdateProcessOrderStatuses
Numeric	BTSched - ProdCodeInDescription
Text	BTSched - DelimiterProdCode
Numeric	BTSched - UpdateMPRDescription
Numeric	BTSched - UpdateMCRDescription
Data Source	BTSched - DataSourceId
Text	TP - SegmentName
Text	TP - TestName
Text	BT - TestPerformanceHeader
Text	BT - MaterialProducedActualPropertyHeader
Text	BT - MaterialConsumedActualPropertyHeader
Numeric	PP - TriggerStatusId000
Numeric	PP - TriggerStatusId001
Numeric	PP - TriggerStatusId010
Numeric	PP - TriggerStatusId011
Numeric	PP - TriggerStatusId100
Product Family	BTSched - DefProductFamilyId
Numeric	PP - TriggerStatusId101
Numeric	PP - TriggerStatusId110
Numeric	PP - TriggerStatusId111
Text	PP - MPASStorageZone
Text	PP - TestWarningVarAlias
Text	PP - ConfirmProcessSegId
Text	PP - ProduceProcessSegId
Text	PP - ConsumeProcessSegId
Numeric	PP - PadZeros
Numeric	PP - MPAAEventIdentifybyProcessOrder

## Global Configuration

Numeric	BTSched - DefBOMFamilyId
Text	PP - StatusToTriggerUpload
Text	PS - MaterialReservID
Text	PS - MaterialReservSeq
Text	PS - ScrapPercent
Text	PS - InspectionLotID
Text	PS - StorageZone
Numeric	SAP - TECO
Numeric	SAP - Complete
Numeric	SAP - Confirm
Text	BTSched - MaterialSeqMCRPDesc
Numeric	BTSched - UserId
Text	BTSched - ScrapPercentMCRPDesc
Text	AutoCompToConfirmToSAP
Text	ECUnitType
Data Source	EventNumDSId
Text	SentToSapFlg
Numeric	Time Modifier
Numeric	BTSched - NoProdOnPathOption
Numeric	MC - Convert MCA UOM to BOM UOM
Text	Original Engineering Unit
Numeric	MP - Convert MPA UOM to Production Setup UOM
Numeric	PA S88 Interface implemented
Numeric	PS - PlantId
Numeric	BTSched - NoPathOption
Numeric	BTSched - NoMprProductOption

## User-Defined Properties for Subscriptions

<b>Id</b>	<b>Name</b>	<b>Values</b>	<b>Result</b>
-8	BTSched - NoPathOption	1	SP generates message -144 and quits. The email_message_data table does not have message -144. The SP should be changed to generate message -142, instead
		2	SP generates message -141 and leaves the process order unbound.
		3	SP generates message -142 and quits.
-9	BTSched - NoMprProductOption	1	If the MPR product does not exist, SP creates the product, sets the process order to the 'r;Error' status and generates message -171. If the SP can not successfully create the new product it generates message -169 and quits.
		2	If the MPR product does not exist, SP uses the default MPR Product and generates message -160.
		3	SP generates message -161 and quits.
-3	BTSched - DataSourceId		Parameter should point to the 'r;SAP' data source (18). The SP should be changed to use 18 as the default value instead 50001.

User-Defined Properties for Subscriptions

- 10	BTSched - NoMcrProductOption	<b>1</b>	If the MCR product does not exist, SP creates the product. If the SP can not successfully create the new product it generates message -170 and quits. If the new MCR product could be associated with any production unit (passed on the XML file) or production path, then the interface set the process order to the 'r;Error' status.
		2	If the MCR product does not exist, SP uses the default MCR Product and generates message -167.
		3	SP generates message -168 and quits
-7	BTSched - NoProdOnPathOption	<b>2</b>	If the MPR product is not associated with the production path, the SP will make the process order unbound and will generate message -163.
		3	If the MPR product is not associated with the production path, the SP generates message -164 and quits.
- 15	BTSched – DefMPRProdId		Default Product Id to be used when the MPR Product does not exist and and UDP -9 is set to 2. The Default value for this UDP is 1.
- 16	BTSched - DefMCRProdId		Default Product Id to be used when the MCR Product does not exist and and UDP -10 is set to 2. The Default value for this UDP is 1.
- 19	BTSched - IgnoreBOMInfo	<b>0</b>	Interface does not update the Bill Of Material-related tables.
		<>0	Interface updates the Bill Of Material-related tables using the information provided in the XML file.
- 13	BTSched – NoBOMFormulationOption	<b>1</b>	If interface cannot find the Bill Of Material for this process order, it creates a new Bill Of Material and generates message -120.
		2	If interface cannot find the Bill Of Material for this process order, it generates message -121 and quits.
- 18	BTSched - RepeatedProcessOrder		Removed on the latest SP release.
- 26	BTSched – ProdCodeInDescription	<b>0</b>	<b>The SP always sets this UDP to 0.</b>  Interface uses the passed Product Description when searching MPR and MCR products in the database by description.
		1	Interface uses the concatenation of the passed Product Code and description when searching MPR and MCR products in the database by description.
- 28	BTSched – UpdateMPRDescription	<b>0</b>	It does not update the MPR product description.
		1	The interface updates the description for the MPR products if their descriptions do not match their description on the XML file.
- 29	BTSched - UpdateMCRDescription	<b>0</b>	It does not update the MPR product description.
		1	The interface updates the description for the MCR products if their descriptions do not match their description on the XML file.

- 76	BTSched – PerformConcurrencyCheckFlag	<b>0</b>	Process order will be created or updated regardless of the value of the <ProductionSchedule>/<ID> element. New process order will be created <b>without any reference</b> to the document that created them. Updateable process orders will be updated, but the document ID reference, which is a UDP on the Production_Plan table, <b>will not be updated</b> for the process order.
		1	A concurrency check will be performed when a process order is created or updated. For new process orders, the process order will be created and a reference added that shows the document ID in the form of a UDP on the Production_Plan table. The Value of the UDP will be the value of <ProductionSchedule>/<ID> element from the S95 message that created it. Updateable process orders will be updated only if the existing document ID reference is alpha-numerically greater than the document ID in the message trying to update the process order. If the update is successful on the process order, the UDP will value for the document ID will be updated as well.

The **bold** values identify the default values for the UDP.

## Administer Alarms

Alarms are used for the following purposes:

- Document alarm conditions, including reasons and actions
- Provide real-time and historical analysis
- Expose exception-based operating procedures
- Provide quality control and disposition

Alarm conditions are based on alarm rules, which compare data to product-based specification limits in real time and are used to alarm critical variables where acknowledgement of a violation is required.

Alarms capture key events requiring immediate operator action. They can also automatically capture cause reasons, based on alarm location, and the corrective action taken, which is entered by an operator. They can be recognized by pop-up messages, audible alarms, and color coding of cells in displays. Standard operating procedures and other documentation can be attached to alarms.

Email notifications can be set up for variables, products, or equipment and assigned to email groups.

---

**NOTE:** *Specifications must be assigned to a variable before the variable can be included in an alarm template.*

---


To use alarms, you must:

- Create your plant model, including variables. For more information, see the topics, The Plant Model and Configuring Variables.
- Create a product family. For more information, see the topic, Creating a Product Family.
- Add products to the product family. For more information, see the topic, Adding Products.

- Assign specification limits to variables. For more information, see the topic, Building a Unit-level Recipe or Production Specification or Building a Central-level Recipe or Product Specification.
- Create an alarm template. For more information, see the topic, [Configuring Alarms](#),
- Create an alarm display. For more information, see the topic, Configuring an Alarm View Display.
- Set up email notifications. For more information, refer to [Configuring Alarms](#) and [Setting Up Email Notifications for Alarms](#).

## Configuring Alarms

To configure an alarm:

1. In the Server Manager tree, expand  **Global Configuration**.
2. Right-click **Administer Alarms** and choose **Administer Alarms**. The **Alarm Configuration** dialog box appears.
3. Click the **Search Template** tab to search for a template to edit, or click **Add Template**.
4. Click the **General** tab, and do the following:

---

**NOTE:** Before selecting an SPC Rule to configure alarms, read [Implementing Auto-Calculated SPC Limits](#) to review options.


---

- a. In the **Template Description** box, type the name of the template.
  - b. From the **Alarm Triggers** list, select the type of alarm triggers. You can select:
    - **Variable Limits:** An alarm event will trigger if the variable value is outside the chosen specification limits, which are defined directly on a variable.
    - **SPC or SPC Group.** An alarm will trigger when any one of the defined SPC rules for the configured variables have been satisfied. Some SPC rules can be set to have either a minimum number of points reached out of maximum (**n** out of **m** points) and be greater than or less than a specified limit. Other rules use a trend with **n** number of points in a row moving in an upward or downward direction. Plant Applications provides for setting a sampling size for a variable as greater than 0 to automatically calculate the mean, sigma, and control limits to evaluate alarms.

SPC rules are also prioritized by their order in the SPC list. When a new rule is created, it is appended to the list. Each rule can be moved up or down in the priority sequence.

    - **Variable Limits String - [Equal Spec]:** An alarm event will trigger if the variable value is equal to the specification limits. For more information, see the topic, [Using String Values for Alarms](#).
    - **Variable Limits String - [Not Equal Spec]:** An alarm event will trigger if the variable value is not equal to the target specification limit. For example, if the target value is "Good," then any other value that is entered will trigger an alarm. For more information, see the topic, [Using String Values for Alarms](#).
    - **Variable Limits String - [Use Phrase Order]:** An alarm event will trigger if the variable value is equal to the value of the phrase order. For example, For more information, see the topic, [Using String Values for Alarms](#).
  - c. Select the trigger(s), and then click **Edit** to edit the values.
  - d. Add a general comment or attach any documents the general alarm template should carry (as opposed to comments for individual variable alarms).
5. Click the **Details** tab and do the following:



- a. In the **Custom Text** box, type the text that should be added to the description of each alarm generated from this Alarm Template.
- b. Select one or more of the following options to include in the alarm description:
  - Include Variable Description
  - Include Template Description
  - Include Trigger Description
- c. To require an electronic signature on any alarm updates or acknowledgements, select **User** or **Approver** from the **Electronic Signature Configuration** list.
- d. Choose the **Alarm Cutout** variable and comparison value. Alarms from this template will be closed or disabled when the variable identified satisfies the comparison condition.
- e. Under **Custom Stored Procedure Call**, click the  **Browse** button to select the spLocal that will be called when the alarm is created, updated, or closed. Click here to view required inputs.
- f. Under **Email Group Notification**, click the drop-down arrow to select a product or equipment item to send a notification based on product or equipment. Complete the setup for the group as described in [Setting Up Email Notifications for Alarms](#).

6. Click the **Reasons** tab and do the following:

---

**NOTE:** For information on creating reason trees, click here.

---

- a. Under **Cause Reasons**, select **Require Cause Reason Entry** to require a cause reason when acknowledging the alarm.
- b. Under **Reason Tree**, select the Cause reason tree that should be used to classify alarms reasons.
- c. Under **Default Cause Reason**, select the default Cause reasons that should be supplied for alarms generated from this template.
- d. Under **Action Reasons**, select **Require Action Reason Entry** to require an action reason when acknowledging the alarm.
- e. Under **Reason Tree**, select the Action reason tree that should be used to classify alarms reasons.
- f. Under **Default Action Reason**, select the default Action reasons that should be supplied for alarms generated from this template.

7. Click the **Attached Variables** tab and do the following:

---

**NOTE:** The variables you add will be assigned to this alarm template and will be bound by the variable limits or SPC rules. Only the variables configured within the template will be available in an Alarm View display.

---

- a. Click **Add** to search for variables to add to the template. The **Search Variables** dialog box appears.
- b. Select one or more variables from the Search Results list.
- c. Click **OK** to return to the **Alarm Configuration** dialog box.
- d. Under **Email Group**, select the email group you want to receive alarm notifications for variables. To set up alarm notifications for products and equipment, refer to [Setting Up Email Notifications for Alarms](#).
- e. Set a Sampling Size if you want to use an auto-generated mean and sigma for control limits. Refer to [Implementing Auto-Calculated SPC Limits](#).
- f. **Variable/Template Comments** displays documentation or comments associated with the alarm template.

- g. **Variable Specific Comments** displays documentation or comments associated with a specific variable.
  - h. **Alarm Description** displays the variable name and additional information, based on the alarm trigger type.
  - i. **Other Templates Configured for Variable** displays any other template for which the selected variable is configured.
8. Close the **Alarm Configuration** dialog box.
  9. Set the `SpecificationSetting` site parameter, which determines if alarm exceedance is based on a value being greater than the specification or greater than or equal to the specification.

---

**NOTE:** *The `SpecificationSetting` Site Parameter applies to values derived from a calculated sigma for existing rules and all new rules except "n consecutive points alternating up or down."*

---

## Implementing Auto-Calculated SPC Limits

Plant Applications offers an option to automatically calculate control limits based on a configurable sample size. The implementation affects four existing SPC-based alarm rules and adds these five additional SPC rules:

- n out of m points beyond two sigmas from the mean
- n consecutive points alternating up or down
- n out of m points beyond one sigma from the mean
- n consecutive points within +/- one sigma from the mean
- n consecutive points outside +/- one sigma from the mean

---

**NOTE:** *The `SpecificationSetting` Site Parameter applies to values derived from a calculated sigma for existing rules and all new rules except "n consecutive points alternating up or down."*

---

Rules are selected at the General tab in the Alarm Configuration screen as described at Configuring Alarms. For each attached variable, a sampling size can be specified at the Attached Variables tab.

The sampling size is the number of data points desired to calculate the mean, standard deviation (sigma), and control limits for the data set. When the sample size is zero, control limits from a specification are used to evaluate alarms. In this case, a delta of six sigma between the lower control limit (LCL) and upper control limit (UCL) is assumed. The mean is calculated as  $(LCL + UCL) / 2$ , and sigma calculation is based on an assumed normal data distribution.

When the sample size is greater than zero (a maximum sample size of 100 is permitted), the mean and sigma are calculated according to three scenarios. In these, control limits are set as three standard deviations (3 sigma) from the mean for process control assuming normally distributed data. The scenarios are:

- A new or existing product has fewer data points than the specified sampling size. Specification control limits are used if defined to derive the mean and sigma for evaluating alarms.
- Data collection for a product reaches the sampling size. The mean and sigma are automatically calculated and stored when the sample size is reached and control limits are derived. The mean and sigma are recalculated for each additional data point and based on the sample size. This approach generates a rolling mean and sigma to evaluate alarms.
- Control limits are manually set by an override action during production. The mean and sigma are derived from the new control limits for alarm evaluation. Once the specified number of data points are collected with a new specification in effect, the rolling calculation of the mean

and sigma automatically starts based on sampling size to derive control limits and evaluate alarms.

The General tab in the Alarm Configuration screen provides a Disabled Products feature to specify one or more products for which you wish to disable alarms.

## Setting Up Email Notifications for Alarms

Email notifications can be set up for variables, products, or equipment and assigned to email groups. Recipients are associated with a group. When an alarm is triggered and email notifications have been defined for products or equipment, recipients from email groups that are associated with the products or equipment are sent notices. Email can also be sent for alarms triggered by variables.

To set up email notification for a variable, use the Attached Variables tab in the Alarm Configuration screen. To set up email notification for product or equipment items, use the Details tab. Follow the instructions given in [Configuring Alarms](#).

To associate products or equipment with an email group, follow these steps:

1. Create an email group in the Email Engine Configuration folder in the Server Management section of the Plant Applications Administrator.
2. Right-click on the group to display the Alarm Notification screen.
3. Select the group, item, and items within the group.

## Using String Values for Alarms

You can create string values for variables using custom data types (phrases). These phrases are then available from drop-down lists for manual entry in an Autolog display where they can be compared against specifications and used to trigger alarms.

To use string values for variables:

1. Create data types and then create phrases for those data types. When entering specifications, the phrases will be available from drop-down lists. When configuring the variable, the user-created data type will be available in the data type variable property. For more information on creating data types and phrase, see the topic, [Creating Custom Data Types](#).
2. Select your user-created data type and string specification setting in the variable sheet for the variable(s). (Use the Column/Row Visibility feature to show fields as needed.) The data type determines which phrases are available for the variable and which specifications are available. The string specification setting determines how the alarm will be triggered and controls which variables are available for the alarm template. For more information on the data type variable property and the string specification setting property, see the topic, Variable Property Definitions.

---

**NOTE:** When configuring variables having a Data Types of "String" or a custom Data Type with a string phrase, you need to set the String Specification Setting on the Variables sheet for the variable to evaluate properly in alarms. Refer to "String Specification Setting" in the "Variable Property Definitions Topic" under "Plant Model."

---

3. Enter specifications for the variable(s). The available specifications are determined by the data type you selected in step 2. For more information on entering specifications, see the topic Building a Unit-level Recipe or Production Specification.
4. Create alarm templates. The variables that are available will depend on the alarm trigger you select and on the variables string specification setting (see step 2). For more information on alarms and creating alarm templates, see the topic [Configuring Alarms](#).

5. Create the Autolog and Alarm displays. For more information, see the topics, Autolog Display and Alarm View Display.

## Importing Alarm Configuration

You can import alarm configuration information into Plant Applications, either on the same server or on a different server. Importing can help minimize or eliminate tedious data entry of information that may already exist in Plant Applications. Additionally, you can create export "templates," edit the worksheets and then import the edited configurations into Plant Applications.

Keep in mind that you can change the information in your worksheet, and the changed information will be imported.


You must have **Administrator access** to the **Administrator security group** to import or export objects.

---

**IMPORTANT:** *You must have the Excel workbook open that contains the alarm configuration information.*

---

To import alarm configuration:

1. Open the Excel workbook that contains the exported alarm configuration.
2. In the workbook, under the **Selected** column, place an **X** in the cell that corresponds to the information you want to import.
3. In the Plant Applications Administrator, expand  **Global Configuration**.
4. Right-click **Administer Alarms** and select **Import Configuration**.
5. If there were errors during the import, **Import Finished – WITH ERRORS** will be displayed. Click **OK** and return to the worksheet and correct the errors.

If the import was successful, **Import Finished – refresh server to see data** will be displayed. Click **OK** and refresh the server.

If you forgot to select information, **No data selected for import – Use an x to select data to Import** will be displayed. Click **OK** and select the data in your Excel worksheet

## Exporting Alarm Configuration

When you export alarms, Plant Applications automatically launches Excel and creates the necessary worksheets within the Excel workbook, based on the items you select. After the workbook has been created, you can edit the information within the workbook. Then, you can import the data into Plant Applications either on the same server or on a different server. For more information, see [Importing Alarm Configuration](#).

You must have **Administrator access** to the **Administrator security group** to export alarm configuration information.

Before you begin the export, you should close all instances of Excel, unless you want the information added to the open Excel workbook.

When you export the alarms, you can export the following information.

- **Alarm Templates:** This spreadsheet contains the template information from the alarm configuration.
- **Alarm Template Variables:** This spreadsheet contains the variables and the associated production units and production lines for each template.

## Global Configuration

- **Alarm Rules:** For SPC or SPC Group alarms, this spreadsheet contains the configuration information for each SPC rule. This spreadsheet will not contain data if no SPC or SPC Group alarms have been configured.

To export alarm template configurations:

1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Right-click **Administer Alarms** and select **Export Alarms**. The **Configuration Export** dialog box appears.
3. Select the information you want to export. Clear the information you do not want to export.
4. Click **OK**. Excel automatically opens with the specified alarm template information. Each option you selected in the **Configuration Export** dialog box will be on a separate worksheet.

After the export is complete, you edit any of the information and then import the changes back into the same server or import the information into a different server. If you change the name of an existing alarm template and then import the information back into the same server, a new alarm template is created. The existing alarm template is not changed or deleted.

## Creating a User-Defined Event


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*You must have an Efficiency Management module license to configure User-Defined Events.*

---

A User-Defined Event (UDE) is a generic, manually recorded event used to document important occurrences related to process operations. Refer to Setting Up User-Defined Events for other, related steps to configuring a UDE.

Follow these steps:

1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Double-click **Administer Events**, or select **Administer Events / Event Subtypes** from the right-click menu. The **Master Event List** dialog box appears.

---

**TIP:** User-Defined Events use Event Subtypes to create events with a unique configuration. Refer to [Adding Subtypes for Production Events](#).

---

3. Select **User-Defined Event** from the **Type To Add** list.
4. Click **Add Event**. The **User-Defined Event Configuration** dialog box appears.
5. Do the following:
  - a. On the **General** tab, type a name for the user-defined event in the **Name** box.
  - b. Under **Flags**, select one or more of the following options:
    - **Require Selection Of Event Duration:** Select this option to allow editing of the start and end times of the event in the display. If this option is not selected, you can edit only the start time.
    - **Require Cause Reason Selection:** Select this option to allow the operator to select a Cause Reason for the event. If you select this option, you can specify a default Reason Tree on the **Reason Trees** tab.
    - **Require Acknowledgement:** Select this option to allow the operator to acknowledge the event.
    - **Require Action Reason Selection:** Select this option to allow the operator to select an Action Reason for the event. If you select this option, you can specify a default Reason Tree on the **Reason Trees** tab.

- c. Under Electronic Signature Level, select either User Level or Approver Level from the list.
- d. If you are setting up UDE status locking, select a default status in the **Default Production Status** field. Selecting a default status enables production statuses for User-Defined Events.

---

**TIP:** Select *True* for the DisplayStatus setting in the Display Options screen to add a status field to Autolog UDE displays. Refer to Autolog Display Options Settings.

---

- e. Under **Comment**, type any comments that you want to appear in the display.
  - f. If you selected either **Require Action Reason Selection** or **Require Cause Reason Selection** or both options, click the **Reason Trees** tab to select the Cause Reason Tree and the Action Reason Tree.
  - g. Click the **Icon** tab to select a different icon used to identify user-defined events in the Sequence of Events display.
6. Click **OK** to save your changes, and close the **User Defined Event Configuration** dialog box.

## Adding Subtypes for Production Events

This topic describes adding product events as subtypes with a unique configuration using Administer Event function under Global Configuration. The event by subtype is selectable when adding events to a unit.


A production unit can have only one associated production event. You must have the license for the Quality Management module to configure production event detection.

Event subtypes describe:

- The type of product being made on a production unit for a specific event type.
- The names and engineering units for the product produced on that unit.
- The assignment of action and cause reason trees and their initial values.

Examples of event subtypes include reels, rolls, batches, lotion batches, mash, fermented beer, and clothing changes.

Adding a subtype for a production event:

1. In the Plant Applications Administrator, expand  Global Configuration.
2. Double-click Administer Events. The Master Event List dialog box appears.
3. Select Production Event from the Type To Add list.
4. Click Add Event. The Production Event Configuration dialog box appears.
5. Complete the information in the dialog box:
  - **Name** - name for the production event occurrence, which is the subtype
  - **Dimension X, Y, Z, A** - dimensions of the event such as weight, width, length (Dimension X is the primary dimension used to measure production. Dimensions Y, Z, and A are commonly used as length in multi-dimensional products such as paper and steel.)
  - **Comment** - applicable comments that you want to appear in the display
6. Click **OK** to save your changes.

## Locking Production Statuses

## Global Configuration

Production Statuses are used to indicate the current status of a Production Event and are set up through the Production Status Editor. Refer to [Setting Up a User-Defined Event](#).

In cases where Production Event data is placed into other systems, it may be desirable to lock data related to Production Events in certain status states from any changes. For example, locking a Production Event status means that changes can no longer be manually entered in an Autolog display.

To lock a production status, follow these steps:


1. Right-click **Administer Production Statuses** under **Global Configuration** in the Plant Applications Administrator, and choose **Edit Production Status**.
2. In the Production Status Editor, select a Production Status.
3. Click the **Update** button.
4. Select the **Lock Event Data** check box. A warning is displayed to let you know that the action PERMANENTLY locks all data for Production Events with this status. Once locked, a status cannot be unlocked.
5. Click **Yes** in the message dialog box to continue.
6. Click the **Update** button again. Another warning is displayed to let you know that selecting **Yes** will DELETE transitions to any unlocked statuses on ALL units that have the status you are about to lock. Only transitions to other locked statuses are allowed once a status is locked. Changes apply across the Enterprise.

After a Production Status is locked, open the Unit Properties Configuration screen for a unit, and click the Production Statuses tab. You will see that only other locked statuses can serve as a valid transition for the status you locked.

## Exporting Event Subtypes

Exporting event subtypes for UDEs or Production Events creates an Excel workbook containing a worksheet with event subtype configurations for export and import to use on another server.


To export event subtypes:

1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Right-click **Administer Events** and select **Export Events / Event Subtypes**. The **Configuration Export** dialog box appears.
3. Ensure **Event Subtypes** is selected, and click **OK**. Excel automatically creates a workbook containing a worksheet with the event subtype configurations.

## Importing Event Subtypes

You can import event subtypes that are exported from an Excel workbook to use on another server.

To import event subtypes:

1. Ensure the workbook containing the event subtype configurations worksheet is open and the configurations you want to import are selected.
2. In the Plant Applications Administrator, expand  **Global Configuration**.
3. Right-click **Administer Events**, and select **Import Configuration**. Your selected configurations are imported.
4. Click **OK**, and refresh the server.

## Administer Models

*To manage models:* In the Plant Applications **Server Manager** tree, expand  **Global Configuration** and expand **Administer Models**.

Plant Applications models describe what to watch and what to do in the context of system events. An important aspect of administration is to set up models for event collection. The models and approaches are described elsewhere in this help system.

### Creating Models for User-Defined Events


Follow these steps to create a new model for a User-Defined Event (UDE). Also refer to [Adding Subtypes for User-Defined Events](#).

1. Click Global Configuration.
2. Double-click Administer Models.
3. In the Event Detection Model Manager dialog box, select the desired model that you want to use as a template and click New. This will automatically open the Model General tabbed page.
4. Click the Model General tab and do the following:
  - a. In the **Name** box, type a name for your new Model.
  - b. From the **Event Type** drop-down list, select **User-Defined Event**.
  - c. A new model number is automatically created for you. If you want to change this model number, type the new model number in the **Number** box.

---

**NOTE:** *User-created models are given a model number greater than 50000.*

---

- d. If necessary, type a new version number in the **Version** box.
  - e. Under **Model Comments**, type any additional information you want in this box.
5. Click the **Model Properties** tab and do the following:
  - a. Click **New** to add a new property.
  - b. To specify a default value for a property, select the property and then click the **Browse** button . In the **Assign Property Value** dialog box, choose or type the default value and click **OK**.

---

**NOTE:** *Your stored procedure will need to issue a result set of type 8.*

---

- c. Select **Property Is Locked at Configuration Time** to prevent the property from being edited when the event is configured on the production unit.
  - d. Select **Property Is Optional** to make the property optional, rather than required.
  - e. Under **Property Comments**, type any additional information you want in this box.
6. On the **User-defined Properties** tab, add any other properties you want for this model.
7. Close the **Event Detection Model Manager** dialog box.

## Customizing the User Interface

You can customize the Plant Applications Client's user interface by editing prompts. These prompts can be changed to suit the needs of your users or your company. Along with English, these prompts



## Global Configuration

are available in a number of languages, which you can also change. To view the prompts in a different language, your user profile must have the language parameter set to the specific language.

---

*If a site has users viewing displays in more than one language, careful consideration should be made when making translations. When alternative text is created, it is saved to the tables in the database. The changes are **server specific** rather than user-specific. Therefore, any changes made will be available to all users who log in to this specific server.*

---


To edit the user interface:

1. Log in to the Plant Applications Administrator program.

---

*You must have **Administrator access** to the Administrator security group to perform this function.*

---

2. Open the Global Configuration folder.
3. Right-click on Administer Language Translations and select Administer Language Translations from the pop-up menu.
4. In the Language Translations Edit dialog box, do one of the following:
  - To search for prompts by application, click **Search by Application** and select the desired application from the drop-down list.
  - To search for prompts by prompt number, click **Search by Prompt Number Range** and enter the beginning prompt number in the first field and the ending prompt number in the second field. If you are searching for a specific prompt number, enter the same number in both fields.
5. Click the **Search** button.
6. In the **Prompt Override** column, click the cell next to the prompt(s) you want to edit and type your new prompt(s).
7. Click the **Close** button .

## Editing Language Translations

Display headings, labels, comments and messages within Plant Applications are identified by prompts in the Plant Applications database. Plant Applications has these prompts translated into a variety of languages. However, local dialects, corporate terms, different terminology etc. may be a reason to create alternative text instead of what is displayed within the defaulted language. The prompts can be edited to use alternative text by creating a translation.

The **LogPromptNumbers** parameter which can be applied to any System or Site User is used to discover the prompt numbers for any display the User views through the Client. When **LogPromptNumbers** is equal to True(1), the prompt numbers are written to the **C:\Program Files\Common Files\ProficySDKErrors.log** file. The numbers can then be used within the Language Translations setup in the Plant Applications Administrator.

---


**IMPORTANT:** *When alternative text is created, it is saved to the tables in the database. All users will see the changes because it is not specific to each user. Therefore, if a site has users viewing displays in more than one language, careful consideration should be made when making translations as all changes will be viewed by all users.*

---

## Exporting Language Prompts

Exporting language prompts creates an Excel workbook containing a worksheet with the selected language and application prompts and any prompt overrides.


To export language prompts:

1. In the Plant Applications Administrator, expand  **Global Configuration**.
2. Right-click Administer Language Prompts and select Export Configuration. The Configuration Export dialog box appears.
3. Do the following:
  - a. Ensure **Prompt Overrides** is selected.
  - b. Select a language from the **Language** list. The worksheet will contain the U.S. English text and the translated text in the selected language.
  - c. Select an application from the **Application** list.
4. Click **OK**. Excel automatically creates a worksheet containing the language prompts configuration.

## Importing Language Prompts

After you have exported your language prompts, you can edit the information in the **Override** column and import the changes into a Plant Applications server.

To import language prompts:

1. Ensure the worksheet with your language prompt configurations is open and the configurations you want to import are selected.
2. In the Plant Applications Administrator, expand  **Global Configuration**.
3. Right-click **Administer Language Prompts** and select **Import Configuration**. Your selected configurations will be imported.
4. Click **OK** and refresh the server.

## Multi-Lingual Support

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*This functionality is available only if you selected the **Install Multi-Lingual Support** option when installing the Proficy Server.*

**IMPORTANT:** *If you make any regional changes in the Windows Control Panel, shut down **all** instances of the Client and the Administrator on that machine before making those changes. If the Client and/or Administrator were running when you made changes, stop the applications and restart them. Any results gathered before you do may be invalid.*

---

The local description is the text that was entered when the various objects were created. The language used for this text is determined by the regional settings of the user's computer.

As an alternate to the local description, you can create a global description. This global description can be in a different language or just an alternate description.

By default, the [LanguageNumber](#) site parameter is set to US-English. If you want to use a different language, you must change this site parameter.

---

**NOTE:** The site parameter, **LanguageNumber**, has no effect on what's displayed as the local description. It simply determines which description a user will see.

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Multi-lingual support allows you to create a second description for the following objects:

- Reasons
- Production Status
- Waste Event Type
- Reason Trees
- Displays
- Display Groups
- Views
- Product Family
- Product Group
- Products
- Product Property
- Characteristics
- Characteristic Groups
- Specification Variables
- Production Lines
- Production Units
- variable groups
- Variables
- Departments
- Waste Conversions
- Reason Shortcuts
- Timed Event Statuses
- Waste Event Faults
- Timed Event Faults

## Adding Global Descriptions


To add a global description:

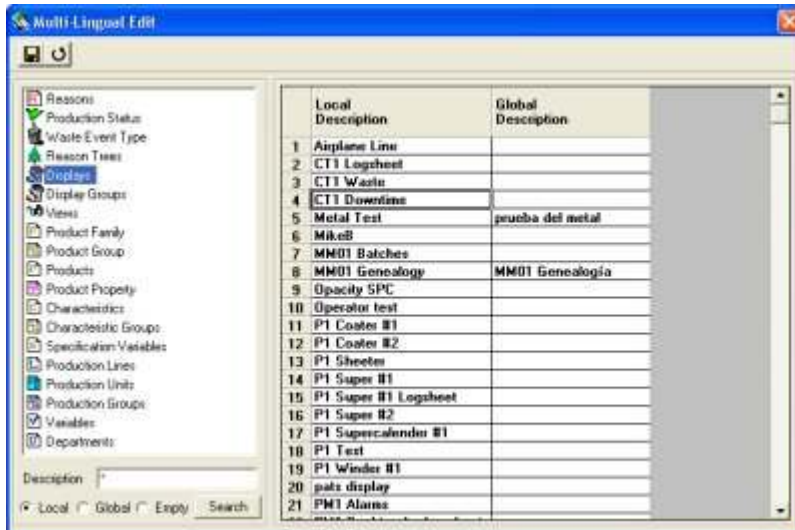
1. Log in to the Plant Applications Administrator program.

---

*You must have at least **Manager** rights to the **Administrator** security group.*

---

2. Expand  Global Configuration.
3. Right-click on Administer Multi Lingual Translations and click Administer Multi Lingual Translations. The **Multi-Lingual Edit** dialog box appears.



4. Select one of the objects in the left-hand pane.
5. To search for specific text, enter the text in the **Description** field; otherwise, leave the asterisk (\*) in the field.
6. Do one of the following:
  - To search for local descriptions, select **Local**.
  - To search for global descriptions, select **Global**.
  - To search for any empty descriptions, select **Empty**.
7. Click the **Search** button.
8. In the right-hand pane, under the **Global Description** column, click the cell adjacent to the text you want to create a global description for and enter the global description.
9. After you have entered all of your global descriptions, click the **Save** button.
10. Click the **Close** button.

## Multi-Lingual Enabled

This is a system parameter and should not be changed. Its value is determined during installation of the Proficy Server, based on whether the option, **Install Multi-Lingual Support**, is selected during installation.