WorkstationST* Historian Instruction Guide

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Document Updates

<table>
<thead>
<tr>
<th>Rev</th>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Throughout document</td>
<td>Replaced E: with X: as an install target directory drive and added a</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Note that X in the target directory indicates a user-selected location</td>
</tr>
<tr>
<td></td>
<td>Archive Backup Management</td>
<td>Removed reference to specific operating systems</td>
</tr>
</tbody>
</table>

Acronyms and Abbreviations

- CMP: Command Message Protocol
- EGD: Ethernet Global Data
- EMT: EGD Management Tool
- GUI: Graphical User Interface
- PI-SMT: PI System Management Tools
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1 Overview

The WorkstationST Historian is a feature of the WorkstationST application that allows users to configure supported third-party Historians to collect long-term data from the system components. The third-party Historian’s OPC® client is configured to read the data from the WorkstationST OPC Data Access (DA) server. The collected data is accessible through the ToolboxST Trender, as well as the third-party Historian’s data access applications. The WorkstationST Historian supports GE’s Proficy*-based Historian and the OSIsoft PI System* products.

The WorkstationST Historian feature allows users to:

• Configure storage of all data available through the WorkstationST OPC DA server
• Automatically configure variables with a defined Historian Deadband
• Override pre-configured variables
• Add non-configured variables
• Configure Historian reports
• Configure Archive Backup Management
2 Configure Historian

A WorkstationST component is required for the computer that has the third-party Historian software installed. The WorkstationST Historian is configured through the Historian tab on the WorkstationST component. Variables that have a Historian Deadband and valid EGD page defined are automatically configured for data collection for each consumed device. For Mark V and local WorkstationST variables, only the Historian Deadband must be defined.

**Note** At least one WorkstationST component must be configured as the EGD Config Server for the system.

**Note** Refer to the ToolboxST User Guide for Mark Controls Platform (GEH-6700), the chapters System Configuration and Mark VIe Component Editor for information on creating and editing components and configuring variables.

➢ To enable the Historian feature: from ToolboxST System Editor, double-click the WorkstationST component.

From the General tab, select Features.

Select Historian and set the Enabled column to True.

Select OPC DA Server and set the Enabled column to True.

The Historian and OPC DA Server tabs display.

![Historian configuration screenshot]
To configure the Historian

*Note* Consumed devices and their Historian variables are added to the Consumed Device List on the Historian tab.

1. Enable data collection for the WorkstationST component.

   - From the **General** tab, select **Consumed Devices**.
   - From the **Referenced** column, select **Yes** to enable data collection from the desired components.

2. From the **OPC DA Server** tab, select **OPC DA Server** and change the **Maximum Client Rate** to a value that divides evenly into 1000 (for example, 250) but is less than 1000 ms.
3. From the toolbar, click **Build**.

4. Click the **Download** button to download the application to the WorkstationST runtime. The **Workstation Download Wizard** displays.

**Note** Refer to the **ToolboxST User Guide for Mark* Controls Platform** (GEH-6700), the chapter **Working Online With WorkstationST** for information on creating measurement systems and using the WorkstationST Download Wizard.
Downloading the workstation configures the third-party Historian and restarts data collection using the new configuration. Data configured for a collection can be viewed by selecting a component from the Consumed Device list in the Historian tab Tree View.

**Note** Data configured for a collection can be viewed by selecting a component from the Consumed Device list in the Historian tab Tree View.

Once the Historian is downloaded, further downloads are only required if configuration changes are made on the Historian Workstation (for example, add a variable for collection on the Historian tab, modify a parameter on the OPC DA Server tab, or add a new Feature such as Alarm Server). When a variable in a ToolboxST component that the Historian consumes has its Historian Deadband defined and the component is saved (the component does not need to be downloaded), the Historian Feature in WorkstationST runtime is notified of the change. The variable is configured in the third-party Historian, and data collection is enabled.
3 Configure Variables for Data Collection

A variable is configured for collection if its Historian Deadband property is defined and its EGD Page property is assigned. For Boolean variables, the deadband property must be changed from Not Logged to Logged on Change. When the data value for a Boolean variable changes, the data value is stored by the Historian. For variables with numeric data types, the deadband property must be changed from Not Logged to a non-negative number. When the data value for a numeric data type variable changes by the defined Historian deadband, the value is written to the Historian. The Historian’s archive algorithm determines when a value is stored.

If a variable’s Format Specification property is defined, the Format Specification Engineering Min and Engineering Max are used to configure the Historian’s display and engineering limits, and are used when converting data from one measurement system to another. The Format Specification Units and Precision properties are used to configure the Historian’s engineering units and precision properties.

**Note** Defining the variable’s Display Low Limit, Display High Limit, Units, and/or Precision overrides the Format Specification Engineering Min, Engineering Max, Units, and Precision properties at configuration time.
3.1 Component Configuration

When a device is added as a consumed device, all historian variables from that device are configured in the target historian upon a successful build and download. The default behavior is to use the component's configuration of historian variables. However, this behavior can be modified if the user wants to ignore the default configuration and select the variables to store in the target historian.

➢ To ignore the default configuration for a device

From the Historian tab, select a consumed device (such as G1).

From the Property Editor, select Use Component Configuration and set to False.

All variables defined in the component will be removed. Only variables that have been manually added will display. To manually add variables refer to the section Adding Variables.
3.2 Modify Data Collection

Modifications to variable properties should be done where the variable is defined (for example, at the User Block, Program or Task Definition in a Library). If that is not possible, variable properties related to data collection can be modified under the Consumed Device List on the Historian tab.

➢➢➢ To modify the data collection of a variable

1. Modify the configuration in ToolboxST.

   1. Select the Historian tab.
   2. From the Tree View, expand Consumed Device List and select the consumed device to modify. The defined variables display in the Summary View.

   ![Configuration options display in the Property Editor.]

2. Click the Build and Download buttons.

   **Note** If you delete information from any field that can be edited for a variable marked *Overridden*, the value of the field reverts to its original value.
### Historian Variable Properties

<table>
<thead>
<tr>
<th>Configuration Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overrides</td>
<td>Displays the list of properties that are overridden on the variable</td>
</tr>
<tr>
<td>Source</td>
<td>Represents the current configuration owner</td>
</tr>
<tr>
<td></td>
<td><strong>Component</strong> configured for long-term data storage in the device</td>
</tr>
<tr>
<td></td>
<td><strong>Overridden</strong> configured for long-term data storage in the device but modified locally</td>
</tr>
<tr>
<td></td>
<td><strong>UserDefined</strong> not configured for long-term data storage in the device but added and configured locally</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Format Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display High Limit</td>
<td>Used to calculate Percent of Range. If a Format Spec is specified and this property is not specified, the Format Spec Engineering Max is used.</td>
</tr>
<tr>
<td>Display Low Limit</td>
<td>Used to calculate Percent of Range. If a Format Spec is specified and this property is not specified, the Format Spec Engineering Low is used.</td>
</tr>
<tr>
<td>Format Spec</td>
<td>Assigned to a variable. These are system-owned specifications unique for each measurement system and grouped into sets. Properties of the Format Spec that can be used by the Historian are Engineering Min, Engineering Max, Precision, and Units.</td>
</tr>
<tr>
<td>Precision</td>
<td>The number of digits to display to the right of the decimal point. If a Format Spec has been specified and this is not specified, the Format Spec Precision is used. If neither is specified, 0 is used.</td>
</tr>
<tr>
<td>Units</td>
<td>The variable’s engineering units. If a Format Spec has been specified and this is not specified, the Format Spec Units is used. If neither is specified, it is left blank.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alias</td>
<td>Customer-assigned variable name</td>
</tr>
<tr>
<td>Description</td>
<td>Variable description</td>
</tr>
<tr>
<td>Device</td>
<td>Device to which this variable belongs</td>
</tr>
<tr>
<td>Name</td>
<td>Variable fully qualified name</td>
</tr>
<tr>
<td>Second Language</td>
<td>Description of the variable in a second language</td>
</tr>
<tr>
<td>Type</td>
<td>Variable data type</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Logging Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous Data Storage</td>
<td>Controls whether this variable is configured as part of the Continuous Data Storage option</td>
</tr>
<tr>
<td>Historian Deadband</td>
<td>Used in conjunction with the Historian Deadband Definition, to determine by how much a value must change before it is written to the Historian</td>
</tr>
<tr>
<td>Historian Deadband Definition</td>
<td>Defines the deadband value as either engineering units or percent of range</td>
</tr>
<tr>
<td>Include</td>
<td>Controls whether the variable is configured for data collection in the Historian</td>
</tr>
</tbody>
</table>
3.3 Add Variables

➢ To add a variable(s) not configured for a Consumed Device

1. From the Historian tab, right-click the Consumed Device List or on a consumed device and select Add Variable to display the Select a Variable dialog box.

2. Select the variable(s) and click OK to return to the WorkstationST Component Editor. The variable(s) is added to the Summary View.

3. From the Property Editor, select Historian Deadband and enter the appropriate value for the variable.

Note  If the Historian Deadband Definition is set to Percent of Range, either the Format Specification or the Display Low Limit and Display High Limit must be defined.

4. Override or define the Units, Precision, and Display Low/High Limits properties if the variable does not have a format specification defined.

5. After adding or modifying the variables, click the Build and Download buttons.
3.4  Delete User-defined Variables

Note Only a user-defined variable can be deleted from the Summary View of the WorkstationST Historian tab. It is removed from the configuration, and after the next Build and Download, the data for the variable is no longer stored. However, deleting the variable from the Historian tab does not delete it in the Historian System, so previously stored data for the variable remains.

➢➢  To delete a user-defined variable

1. From the WorkstationST Component Editor, select the Historian tab.
2. From the Summary View, right-click the user-defined variable you want to delete and select Delete Selected Row(s).
4 Configure Historian Reports

**Note** GE Historian Reports is an option when the ControlST® Software Suite is installed.

The report configuration tools allows you to produce periodic reports using the archived data in the Historian system. Reports are scheduled to run each hour using the Windows® Task Scheduler. A report can also be run interactively, using the Historian’s web browser. A configuration file, `reports.dat`, is used as the source for all report definitions. Each defined report references a tag file that contains a list of variables to use in the report. The `reports.dat` and `*.tag` files are configured on the WorkstationST Historian tab, and created after a download has been completed.
4.1 Variable List

A variable list contains the Historian variables used in a report. Several reports can reference a variable list. In the WorkstationST runtime, the Historian feature uses the defined variable lists to create the tag files, <variable_list_name>.tag.

➢➢ To add a variable list

1. From the Historian tab Tree View, expand Report Configuration, right-click Variable Lists, and select Add Variable List. The Add a Variable List dialog box displays.

   Note The variable list name must be a valid file name but cannot have any spaces. Invalid characters are: /\<|\:*?; and <space>.

2. Enter the Name and select OK.

   ![Add a Variable List dialog box](image)

   Note A variable list is limited to 65 variables.

➢➢ To add a variable to a variable list

   ![Control Panel](image)

   From the Historian tab Tree View, expand Report Configuration, expand Variable Lists, right-click the variable list, and select Add Variable. The Select a Variable dialog box displays.

   Select the variable(s) and click OK. The variable(s) is added to the Summary View.
➢ To modify a variable list

From the Historian tab
Tree View, expand
Report Configuration,
expand Variable Lists,
and select the variable list.

From the Summary
View, right-click the
row(s) and select
the desired option.
4.2 Define Default Report Properties

Default values can be assigned to a subset of the report properties. With the exception of Shift Start Times, these properties can be overridden on an individual report. If a property’s default value is changed, each report that has not overridden that property is automatically updated with the new value.
<table>
<thead>
<tr>
<th>Section</th>
<th>Default</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Page</td>
<td>Image/Picture</td>
<td>File name of the image to display on the cover page next to the Name.</td>
</tr>
<tr>
<td></td>
<td>Image Alignment</td>
<td>Used to align the image relative to the Name.</td>
</tr>
<tr>
<td></td>
<td>Image Height</td>
<td>Image height in pixels. To display image using default height, enter zero.</td>
</tr>
<tr>
<td></td>
<td>Image Width</td>
<td>Image width in pixels. To display image using default width, enter zero.</td>
</tr>
<tr>
<td></td>
<td>Name</td>
<td>Name to display on the cover page.</td>
</tr>
<tr>
<td>Data</td>
<td>Data Columns / Page</td>
<td>Number of variables to display on one page. To display all variables on one page enter zero.</td>
</tr>
<tr>
<td></td>
<td>Data Time Interval</td>
<td>Number of time slices to divide the report period into. Combined with Data Time Interval Units to create the time_step in reports.dat.</td>
</tr>
<tr>
<td></td>
<td>Data Time Interval Units</td>
<td>Time units to apply to the Data Time Interval. Combined with Data Time Interval to create the time_step in reports.dat.</td>
</tr>
<tr>
<td></td>
<td>Data Values</td>
<td>Type of data values to display: Average, Interpolated, Maximum, Minimum, Standard Deviation, or Total.</td>
</tr>
<tr>
<td>Generation</td>
<td>Print On Creation</td>
<td>Controls whether the report is sent to the web browser’s defined printer when the report is automatically generated.</td>
</tr>
<tr>
<td></td>
<td>Shift Start Times</td>
<td>Start time for each shift. Used as boundaries for the shift report.</td>
</tr>
<tr>
<td>Retention</td>
<td>Storage Time</td>
<td>Number of days to store the report before deleting it. To disable automatic deletion enter zero.</td>
</tr>
<tr>
<td>Style</td>
<td>Lines / Page</td>
<td>Number of lines displayed in the report before inserting a page break. The minimum value is 10.</td>
</tr>
<tr>
<td></td>
<td>Style Sheet</td>
<td>Filename of the cascading style sheet to use with reports.</td>
</tr>
</tbody>
</table>
4.3 Configure a Group

A group organizes reports. Group names and report names within a group must be unique. The group name is combined with the report title (for example `<group name> - <report name>`).

➢➢ To add a group

1. From the Historian tab Tree View, expand Report Configuration, right-click Reports, and select Add Group. The Add a Group dialog box displays.

![Add Group dialog box](image)

Note The group name must be a valid file name. Invalid characters are: /"<>|:*?;.

2. Enter the Name and click OK.

➢➢ To edit a group

![Edit Group dialog box](image)

From the Historian tab, expand Report Configuration and Reports.

Right-click the appropriate Group and select the option to perform.

Complete any dialog boxes that display.
4.4 Configure a Report

Each report definition is added as a separate report to the reports.dat file. With the exception of Shift Start Times, report default properties can be overridden on an individual report.

➢➢ To add a report

1. From the Historian tab Tree View, expand Report Configuration, right-click the Reports item, or right-click a group under Reports, and select Add Report. The Add a Report dialog box displays.

   ![Add Report dialog box](image)

   **Note** The report name must be a valid file name. Invalid characters are: /\<\>\:*?:.

2. Enter the Name and click OK.

➢➢ To edit a report

   ![History tab](image)

   From the Historian tab, expand Report Configuration and Reports (expand a group if necessary).

   Right-click the appropriate Report and select the option to perform.

   Complete any dialog boxes that display.
4.5 Define Report Properties

The properties that typically differ from one report to another are found at the top of the report form.

Report Properties Example
## Report Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>The name of the report displayed at the top of each page and on the Reports web page.</td>
</tr>
<tr>
<td>Variable List</td>
<td>The name of the list of Historian variables to use in the report. Variable lists are defined under Variable Lists in the tree view.</td>
</tr>
<tr>
<td>Frequency / Units</td>
<td>How often the report is automatically generated and saved to disk. To disable the report from being automatically generated, enter zero for the frequency. Frequency Units: Hours, Days, Months, Shift, Daily</td>
</tr>
<tr>
<td></td>
<td>If Frequency Units is Shift or Daily the reports.dat frequency parameter is ignored and the type parameter is used. Shift and Daily reports are automatically generated and saved to disk.</td>
</tr>
<tr>
<td>Data Time Interval / Units</td>
<td>The number of time slices to divide the report period into. One row of data is displayed for each time slice. Data Time Interval Units: Days, Hours, Minutes, Seconds</td>
</tr>
<tr>
<td>Data Values</td>
<td>The type of data values to display: Average, Interpolated, Maximum, Minimum, Standard Deviation, Total</td>
</tr>
<tr>
<td>Storage Time</td>
<td>The number of days to store the report before deleting it. To disable automatic deletion, enter zero.</td>
</tr>
<tr>
<td>Send To Printer</td>
<td>Controls whether the report is sent to the web browser’s defined printer when the report is automatically generated.</td>
</tr>
<tr>
<td>Event-based</td>
<td>When selected, it enables configuration of the report as an event report.</td>
</tr>
</tbody>
</table>

### Condition #1

For the time period that the report is run, search for each trigger condition ANDed with an optional level condition. If True, generate a report using the Before Event and After Event times as report boundaries.

#### Condition #1 - Trigger

Search for this event / SOE variable in the alarm history to transition from False to True (+) or True to False (-). This transition is called the trigger edge.

The ... button starts the variable browser and displays all the defined event and SOE variables from the consumed devices.

Adding a variable name to the Trigger enables the Level properties and Condition #2 properties.

#### Condition #1 - Level

Lookup the value of this Boolean variable at the time of the event transition to determine its state: True (1) or False (0).

The ... button starts the variable browser and displays all the Historian Boolean variables from the consumed devices.
### Condition #2
The Trigger and optionally the Level can be configured. The result of Condition #2 is ORed with Condition #1 to generate a report.

#### Condition #2 - Trigger
Search for this event / SOE variable in the alarm history to transition from False to True (+) or True to False (-).

#### Condition #2 - Level
Lookup the value of this Boolean variable at the time of the event transition to determine its state: True (1) or False (0).

### Time Range - Before Event
The time boundary before the event to start the report.

### Time Range - After Event
The time boundary after the event to stop the report.

### Data Columns / Page
The number of variables to display on one page. If the Reports default value is zero, All Variables is selected, unless overridden.

### Lines / Page
The number of lines displayed in the report before inserting a page break. The minimum value is 10.

### Style Sheet
The filename of the cascading style sheet to use with reports.

### Name
The name to display on the cover page.

### Image / Picture
The filename of the image to display on the cover page next to the Name.

### Image Height
Image height in pixels. To display using default height, enter zero.

### Image Width
Image width in pixels. To display using default width, enter zero.

### Image Alignment
Used to align the image relative to the Name.
4.6 Import Reports

When upgrading from a Control Systems Solutions (toolbox) Historian to a ControlST Historian, the existing reports configuration must be imported into the Historian’s WorkstationST component through an Import wizard.

**Note** When the Historian feature runs, it creates the backup folder $X:\site\reports\original$ (if it does not exist) and copies the existing `reports.dat` file and all tag files to this folder when it is created. This ensures that the original files are not accidentally overwritten before an import can take place. If you are upgrading and the $X:\site\reports\original$ folder exists, select this as the source folder.

$X$ in the target directory indicates a user-selected location (user can select the target directory during installation).

As a result of the import, reports and variable lists are created. Any existing report or variable list is overwritten. If a report in the `reports.dat` file is associated with a tag file that does not exist, the report is created, a warning is issued, and an empty variable list is created. When creating a variable list, each variable from the tag file is added to the list. If the variable does not exist in the system, the variable’s device is not consumed by the Historian. If the variable is not defined as a Historian variable, an error is generated.

➢➢ To import existing reports: from the Historian tab Tree View, right-click Report Configuration, and select Import Reports. Follow the instructions provided by the Import Existing Reports Wizard.
5 Configure Continuous Data Storage

The Continuous Data Storage option allows you to specify a subset of variables to be stored at a defined update rate whether or not the variable’s data value has changed.

**Attention**

Enabling this option and adding variables to it can drastically reduce the capacity of the Historian as this option overrides the compression algorithm of the third-party Historian.

**Note** If the Historian does not require this data, it is recommended that you create a Live Data Collection in the Recorder feature, add the required variables, and set the Recorder Deadband to 0 for analog variables and to Log Continuous for Boolean variables.

➢➢ To enable Continuous Data Storage

From the Historian tab, select the Historian Server item.

From the Property Editor, select Enable and select True from the drop-down list.

Select Update Rate and enter the number of seconds (such as 10) at which you want the data stored.

Override the Historian’s compression algorithm and forces the storage of data values at the specified update rate for variables that are selected for this option. WARNING: Using this option can drastically reduce the storage capacity of the Historian.
➢ To add a variable to Continuous Data Storage

1. From the **Tree View**, select **Consumed Device List** or the consumed device. In the **Summary View** select the variable that you want to configure for this option.

2. After configuring the variables for this option, click **Build** and **Download**.
6 Archive Backup Management

The Archive Backup Management option allows you to specify configuration parameters for the HistorianArchiveBackupManager application.

The supported third-party Historian products use fixed-length archives to store data. A set number of archive files are created during factory setup. When these archives are filled, the third-party Historian software reuses the oldest, writeable archive.

The HistorianArchiveBackupManager application runs the third-party Historian's backup utility, backing up the Number of Archives specified to the Archive Backup Path, starting with the current archive. Once the backup is complete, the amount of disk space used by all files under the Archive Backup Path is calculated. If greater than the Maximum Disk Space, the oldest archives are deleted until the disk space used falls below the limit.

**Note** This feature is disabled if the Maximum Disk Space parameter is set to zero.

It then checks the amount of free disk space on the Archive Backup Path drive. If less than that specified in the Desired Free Space, the oldest archives are deleted until the free disk space is above the limit unless the Minimum Disk Space limit is reached. It does not allow the amount of disk space used by all files under the Archive Backup Path to fall below the Minimum Disk Space.
To configure Archive Backup Management properties

After adding or modifying the variables, click the **Build** and **Download** buttons to enable the changes in the Historian.

For the backups to occur, the HistorianArchiveBackupManager application must be scheduled to run. Only schedule the HistorianArchiveBackupManager application to run nightly. Do not schedule the third-party Historian backup utilities to run. The HistorianArchiveBackupManager application runs the third-party Historian backup utility.
### Archive Backup Management Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archive Backup Path</td>
<td>The location where the backup files are saved.</td>
</tr>
<tr>
<td>Desired Free Space</td>
<td>Amount of disk space in gigabytes to keep free on the archive backup disk drive. If the amount of free disk space drops below this value, the oldest archives in the Archive Backup Path are deleted until the total bytes are more than this value.</td>
</tr>
<tr>
<td>Maximum Disk Space</td>
<td>The maximum size in gigabytes the archive backups are allowed to use. If the total size of all archive backups exceeds this value, the oldest backed-up archive files are deleted until the total bytes used is less than this value. A value of 0 disables this feature.</td>
</tr>
<tr>
<td>Minimum Disk Space</td>
<td>The minimum size in gigabytes of archive backup files to keep on the backup disk. This value overrides the Desired Freed Space value.</td>
</tr>
<tr>
<td>Number of Archives</td>
<td>The number of archives to back up each time the backup application runs.</td>
</tr>
</tbody>
</table>

➢➢ To enable backups at regular intervals: open a Command Prompt and run the following command:

```
AT 03:15 /EVERY:M,T,W,Th,F,S,Su "C:\Program Files\GE Energy\WorkstationST Features\HistorianArchiveBackupManager.exe"
```

**Note** If the Windows operating system is an x64 operating system, the Program Files part of the command is Program Files (x86).

The Task Scheduler is now configured to run HistorianArchiveBackupManager.exe every day at 03:15 AM. It uses the Archive Backup Management parameters configured on the Historian tab and downloaded to the Historian workstation.

➢➢ To view or edit the task in the Task Scheduler

1. From the Control Panel, double-click Scheduled Tasks (The task is named at# where # is a number.)
2. Right-click on the name and select Properties to view the task's details.
3. Right-click on the name and select Rename. Rename the task to Historian Archive Backup Management.

---

**Attention**

The customer should maintain a regular schedule of archiving the backed up archives to an offline storage medium.
7 Glossary of Terms

**Build** – Create downloadable application software for a controller or workstation that includes all validated functions and features defined in the current product editor.

**Component** – Any part of ToolboxST or WorkstationST that represents a physical machine

**Consume** – To receive an EGD data message (exchange)

**Consumer** – An EGD node configured to receive an EGD data message

**Device** – Own device

**Download** – Transfers the current product editor downloadable application software to a controller or workstation runtime.

**EGD** – A mechanism that provides access to global data between nodes supporting the EGD protocol

**Exchange** – An EGD data message consisting of a header and a body of data. The header contains the producer ID and the exchange ID that uniquely identifies the message. The body of data is a block of bytes in a format agreed upon by the producer and all consumers.

**Include** – Property that controls whether or not a variable is configured for collection in the Historian

**OPC** – A standard for data exchange in the industrial environment. The OPC foundation provides specifications for various OPC standards such as OPC DA (Data Access) and OPC AE (Alarm and Event). (http://www.opcfoundation.org)

**Override** – Locally modify variable properties

**Produce** – To send an EGD data message (exchange)

**Producer** – The EGD device configured to send data messages. The source of the data samples for an exchange.

**Refresh** – To bind the configuration for each consumed exchange for a particular consumed device

**Runtime** – Software stored in the controller’s Flash memory that converts application code (pcode) to executable code, and executes that code

**Second Language Description** – Description of the variable in a second language. This is used in applications where more than one language is used.

**Source** – Configuration source for the variable. If any changes are made to a component defined variable, the Source is shown as Overriden.

**Type** – The following EGD Data Types are supported:

- Boolean (BOOL)
- Byte (BYTE)
- Double Word (DWORD)
- Integer (INT)
- Long Integer (LINT)
- Long Real (LREAL)
- Real (REAL)
- Short Integer (SINT)
- Unsigned Double Integer (UDINT)
- Unsigned Integer (UINT)
- Unsigned Long Integer (ULINT)
- Unsigned Short Integer (USINT)
- Word (WORD)
**Unbound Variables** – Variables required by a consumer that were not found in the producer configuration during the bind.

**Upload** – Transfers a controller or workstation current runtime application software to the computer running the product editor.