

# DeltaV™ Event Chronicle



The DeltaV Event Chronicle stores process alarm and event information.

- Captures events electronically
- Provides complete process event record
- Easy event viewing and filtering
- Uses MS SQL Server technology
- Easy configuration and management

## Introduction

Tired of looking for the cause of a process upset by searching through stacks of paper for each operator workstation? Ever realize the paper log you need has been lost?

The DeltaV™ Event Chronicle collects operational events and stores them on the hard disk, allowing for easy retrieval and analysis.

The Event Chronicle captures all system events, such as operator changes, control module installations, alarms, and changes in device status. For each event, information such as who made a change and when the change occurred is recorded.

## Benefits

**Captures events electronically:** The Event Chronicle stores all events electronically, so that you always have easy, guaranteed access. A single Event Chronicle can capture system events spanning multiple controllers and workstations, so that you can look in one place to find all the event data. Multiple Event Chronicles can reside on the same system for redundant event capturing.

Events such as alarms are captured and timestamped locally in the DeltaV controllers. The Event Chronicle receives and stores these high-resolution and consistent timestamps. You now have a much clearer picture of what happened and when it happened. You can easily see bursts of events to have a complete picture of your process.

**Provides complete process event record:** The events stored in the Event Chronicle can be easily viewed from DeltaV Operate displays, automatically filtering the system alarm and events for the operator's station. The Process History View application displays the events in chronological order and the events are color-coded by event type.

**Easy event viewing and filtering:** The events stored in the Event Chronicle can be easily viewed and filtered using tools provided in the Process History View application. Use the embedded filters to quickly isolate the event. Standard filters can be set based on date/time, event type, category, area, node, or module. There are additional filter setting that allow you to use wild cards to filter events in other columns of the Event Chronicle, including Parameter, State, Level, or Description.

**Uses MS SQL Server technology:** Microsoft SQL Server provides a robust and reliable platform for alarm and event collection. Using SQL Server technology enables the use of multiple Event Chronicle data sets which provides greater on-line storage capacity and easy integration with external alarm analysis applications.

**Easy configuration and management:** The Event Chronicle is easily configured with the DeltaV Explorer. Simply enable the Event Chronicle, configure the data sets, define the export behavior, and select which areas' events should be captured.

Multiple on-line data sets may be configured to provide large amounts of on-line alarm and event data. The Event Chronicle on-line data sets can automatically export on a user defined basis. Management of the Event Chronicle is made easy through the use of an administration utility.

## Product Description

The DeltaV Event Chronicle captures messages such as alarm state changes, user-defined events, operator logon/logoff, operator changing attributes, and configuration installations.

The DeltaV system is designed to capture data values and their associated timestamps at the lowest possible level in the system, providing you with a much more accurate picture of the alarms and events as they occur. The Event Chronicle receives these timestamps and events and makes them easily available to Process History View. Since the events are time stamped in the DeltaV controller, multiple Event Chronicles will always have consistent timestamps. No longer is this critical information varying by differences in the PCs' system clocks.

Getting a paper printout of the events or filtered events is as easy as clicking on the printer icon.

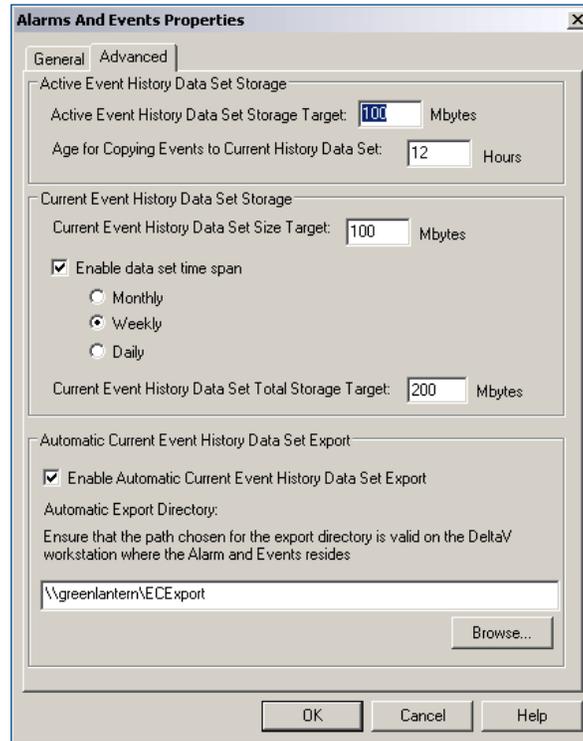
It is easy to filter the events based on intuitive selections. For example, if a control module is performing differently from yesterday, an operator can select the Process History View button on the control module's faceplate, access the Event View, and have it pre-filtered for events from the Event Chronicle relevant only to that module.

**Process History View** shows you any events for that module at the correct time, right in the graph. All events are also shown in a tabular format below the graph, in the event area.

All events collected in the Event Chronicle can be displayed. Operational events include operator changes, tuning parameter changes, control module installations, alarms (new, acknowledged, and cleared) and device status.

Events are displayed in chronological order and are color-coded by event type. You can easily analyze operational events by filtering the list of events— simply double-click an item and the view is filtered for just that selection. For example, if you want to see all the changes that Joe made, just double click on his name.

Event filters are easily enabled, and users may define or pre-set filters for querying capability based on time, event, user and an individual module, among others.



*Easy and flexible configuration of the Event Chronicle SQL database from DeltaV Explorer.*

The Event Chronicle is configured in DeltaV Explorer. Simply drag and drop plant areas onto any Alarm and Events subsystem to choose where event collection for those areas will occur.

In DeltaV v9.3 and later releases, the Event Chronicle uses SQL Server database technology, increasing on-line storage capacity by allowing multiple on-line data sets. The user defines the size of the individual data sets, the overall event storage capacity, the frequency of copying events to the current archive, and the automatic data set export behavior. When the event storage capacity reaches its maximum size, the automatic export feature transfers the oldest data set to a user defined storage location.

Once the workstation is downloaded, communications and event collection will begin automatically.

Multiple Event Chronicles are supported in a single DeltaV system. Event history for a specific parameter can be collected on multiple workstations, providing historical backup capability.

Data Set Name	Type	Backup Status	Size	Start Time	End Time
EJournal	Active		100.00 MB	8/26/2009 10:10:15 AM	
GREENLANTERN#20090830120028	Current	Modified	15.81 MB	8/30/2009 12:00:05 AM	9/1/2009 2:59:48 AM
GREENLANTERN#20090823014753	Current	Backed Up	44.06 MB	8/26/2009 10:39:44 AM	8/29/2009 11:59:35 PM
GREENLANTERN#20090823014752	Current	Backed Up	96.69 MB	8/26/2009 8:26:12 AM	8/26/2009 10:39:44 AM
SPACEGHOST#20081228052401#20090103144437	Extended	Backed Up	1.31 MB	12/28/2008 5:24:01 AM	1/3/2009 2:44:37 PM
GREENLANTERN#20081111141544#20081115233907	Extended	Backed Up	1.56 MB	11/11/2008 2:15:44 PM	11/15/2008 11:39:07 PM

Event Chronicle Extended data sets can be created from other Event Chronicle databases and do not have to include contiguous time ranges.

*Easy data set management with Event Chronicle Administration utility.*

The Event Chronicle Administration utility makes it easy to manage the Event Chronicle data sets. An Administration utility is provided with each Event Chronicle. The Administration utility enables you to backup and restore the data sets, export the historical data sets, and create Extended data sets.

The Event Chronicle includes three types of historical data sets: Active, Current, and Extended. The Active and Current data sets represent the on-line data that is resident in Event Chronicle. There is one Active data set, called EJournal, that is the data set currently receiving new event data, but there can be multiple Current data sets depending on the configured data set size and total storage capacity. Current data sets are created by transferring events from the EJournal at user configured internal. When the Current data set reaches its configured size or time limit, a new Current data set is created. When the Event Chronicle reaches its configured capacity, the oldest Current data set is either exported or over written, depending on the configured export behavior.

An Extended data set is a data set that has been exported from Event Chronicle and then brought back on-line. The data in the Extended data set can be viewed by any of the Event Chronicle client applications, but the Extended data set does not count against the maximum storage capacity. There can be any number of Extended data sets in the Event Chronicle, limited only by the physical space available on the DeltaV workstation's hard disk drive.

Programmatic administration of the Event Chronicle is available through the automated backup utility. The automated backup utility enables you to backup the Current and Extended data sets, and delete off-line data sets that are no longer required. The automated backup utility also provides an intelligent backup feature which allows you to only backup the data sets which have been modified or created since the last backup.

## Ordering Information

Description	Model Number
Event Chronicle	VE2143

## Related Products

- **History View Suite:** Monitor your plant's continuous, event and batch data—historically and in real time.
- **DeltaV Continuous Historian:** Captures up to 250 analog, discrete and text parameters along with their status and stores them for future analysis. Optionally scalable up to 30,250 parameters on the Application Station.
- **DeltaV Analyze:** Provides Web-based analysis of all alarms and events in the Event Chronicle.
- **History Analysis:** Provides Web based analysis of alarms and events in either the Event Chronicle or Plantwide Event Historian.
- **Backup and Recovery:** Provides data backup and disaster recovery for DeltaV system and associated process control data.

## Prerequisites

- The Event Chronicle requires Process History View (part of the History View Suite) to view the collected alarms and events.
- The Event Chronicle is included in the ProfessionalPLUS Station and Professional Station Software Suite(s).

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