

## APPLICATION NOTE

Converge Console (Version 1.0.4)  
Converge Pro Firmware (Version 1.0.4)

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## CONVERGE PRO EVENT SCHEDULER

### Purpose

This document explains setup issues related to the Event Scheduler for Converge Pro devices.

### Introduction

The Converge Pro Event Scheduler allows actions to be scheduled and executed at predefined times. The actions can be one-time occurrences or a series of occurrences. Actions that can be scheduled and executed are Macro, Preset, Reset, Safety Mute, Strings, and System Checks. Events can only be set to run from the local Converge Pro device. Up to ten different events can be scheduled on a Converge Pro device.

### Clock Setup

Converge Pro devices have an internal real-time clock that must be set to ensure scheduled events execute at the appropriate time. The clock can be synchronized with time on the connected PC, or to the time on a network time server. To set the time, use the Site Properties dialog in Console (shown below) and follow this procedure:

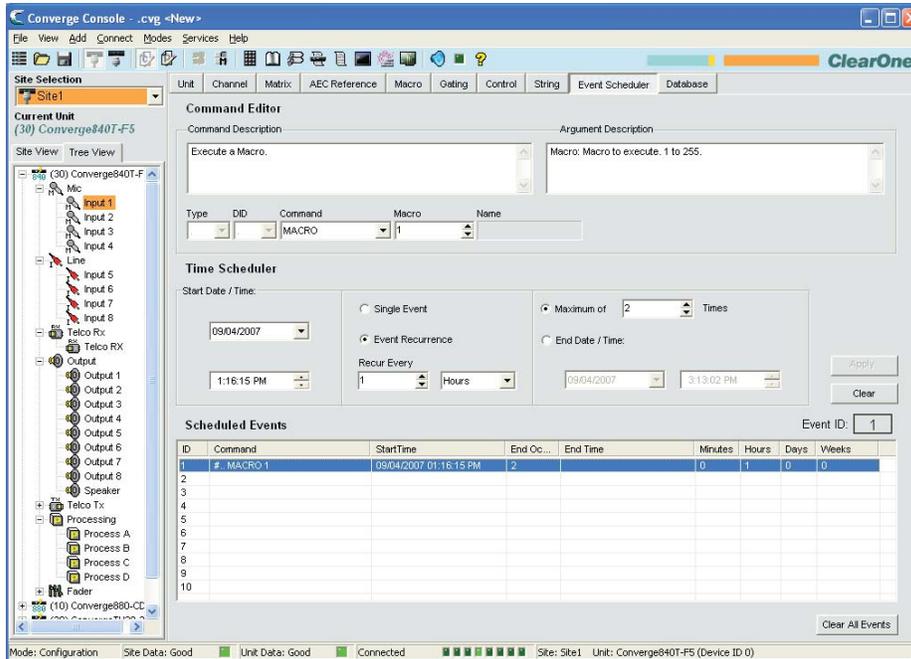


1. Select **Site Properties** from the **File** menu in Console, or right-click anywhere in the **Site View** or **Tree View** panes and

- select **Site Properties** from the shortcut menu that appears.
- In the Site Properties dialog that appears, select the **Time/Local** tab.
- In the **Time** section of the tab, select **Local Time** or **Network Time** for the clock synchronization source.
- When **Local Time** is selected, the **Apply** button is activated; pressing it updates the date and time on all units in the current site.
- When **Network Time** is selected, you must enter the IP address(es) for the time synchronization server(s). The date and time is updated for all units in the site when you press the **OK** button, and it is automatically synchronized with the specified server(s).
- Enter location information in the **Location** section of the tab (optional).
- Press **OK** to save the changes, then close the Site Properties dialog to synchronize the time.

## Using Event Scheduler

After the clock is set, open the Event Scheduler (shown below) and use the following procedure to schedule events:

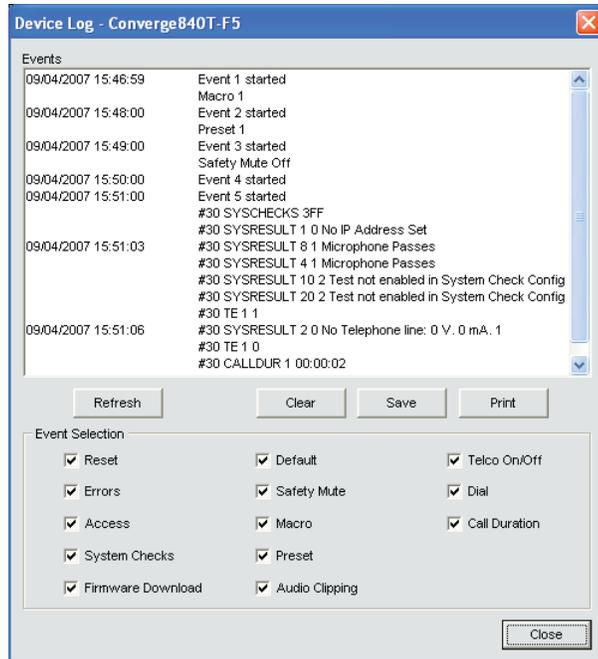


- Press the **Event Scheduler Tab** on the **Tab Bar** in Console.
- Select the **Command** to run.
- Select the **Start Date** and **Time**.
- Select the **Occurrence** (a single event or a series of events). The series can be set from as little as every minute to every 12 weeks.
- If a series is created, a series end must be set. The series ends after specified number of times or on a specific date.
- Once the desired event has been setup press **Apply** to apply the event to the Converse Pro device.
- If another event is desired repeat the above setup, for up to 10 scheduled events total.
- Double clicking the event in the **Scheduled Event** list will populate the **Time Scheduler**, which allows the event to be edited.
- Pressing the **Clear** button clears the highlighted event.
- Pressing the **Clear All Events** button clears all events listed in the **Scheduled Events** list.

To prevent unexpected event execution and event execution failure when using Event Scheduler, follow these important recommendations:

- The real-time clock must be set before an event is scheduled. A timer is created for all programmed events based on the clock's current time, and once the timer is set, Converse Pro devices do not use the real-time clock for event execution.
- If the clock is set after an event is scheduled, the event's timer is not updated. The event will run based on elapsed time from the last time the event ran. When another event is scheduled, the timer will be updated to keep track of the new event and the existing event.
- If the real-time clock is set after an event is scheduled, either a new event will need to be scheduled or the existing event will need to be rescheduled for the event to run at the proper time.

- Events need to be spaced a minimum of one minute apart. If events are scheduled too closely together, some events may not run, and some events may run multiple times. Assume that Event 1 is scheduled to run every night at 12:00:00 am, and Event 2 is scheduled to run every Sunday at 12:00:02 am. On Sunday night, there may be a problem executing one or both events. On all other nights, Event 1 will execute properly. However, events that are scheduled to run at precisely the same time (hour, minute, and second) will execute properly. ClearOne recommends using at least a one-minute interval between all scheduled events.



- To confirm that an event executed at the expected time, use the device log. When an event executes, the device log automatically records the event (as shown in the example above). The log includes a date and time stamp created from the real-time clock on the Converge Pro Device upon which the event executed.