



Elk M1/EZ8 Component For Girder 5

Version 1.0.0 Beta

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Introduction

The Girder 5 Elk M1/EZ8 component provides complete control and real-time monitoring of the Elk Security and Automation panels. This plug-in will allow extremely robust integration of the Elk into any home automation solution. When combined with NetRemote the user can create advanced graphical user interfaces that can interact with the Elk Security and Automation system.

Features

- Connects to Elk M1/EZ8 Panel via serial port or Elk-M1XEP Ethernet interface.
- Elk M1 real-time clock updated on startup and at Midnight.
- Automatic detection of configured devices on the Elk panel
- Fully compatible with Girder 5 Device Manager
- Defined areas, keypads, zones, outputs, users, thermostats, keyfobs, tasks, function keys and lights obtained from panel on startup and kept updated in real-time as the plug-in runs.
- Elk functions controllable from Girder Action tree as well as LUA code
- A wide variety of built in Girder events are received from Elk
- Create custom Girder events sent from Elk Rules
- Read and Write Custom Settings
- Set Arm, disarm, bypass with full security code access
- Two way control of Elk supported lighting devices
- Speech support (M1Gold Only)
- Control Elk Outputs
- Activate Elk Automation Tasks
- Two Way Thermostat support
- Monitor temperatures using Elk external probes

Requirements

- Promixis Girder 5.0
- Elk M1 or EZ8 Security and Automation Panel
- RS-232 or Ethernet connection to one of the above panels
- System Trouble trigger requires firmware > 4.5.2, 5.1.2

Installation

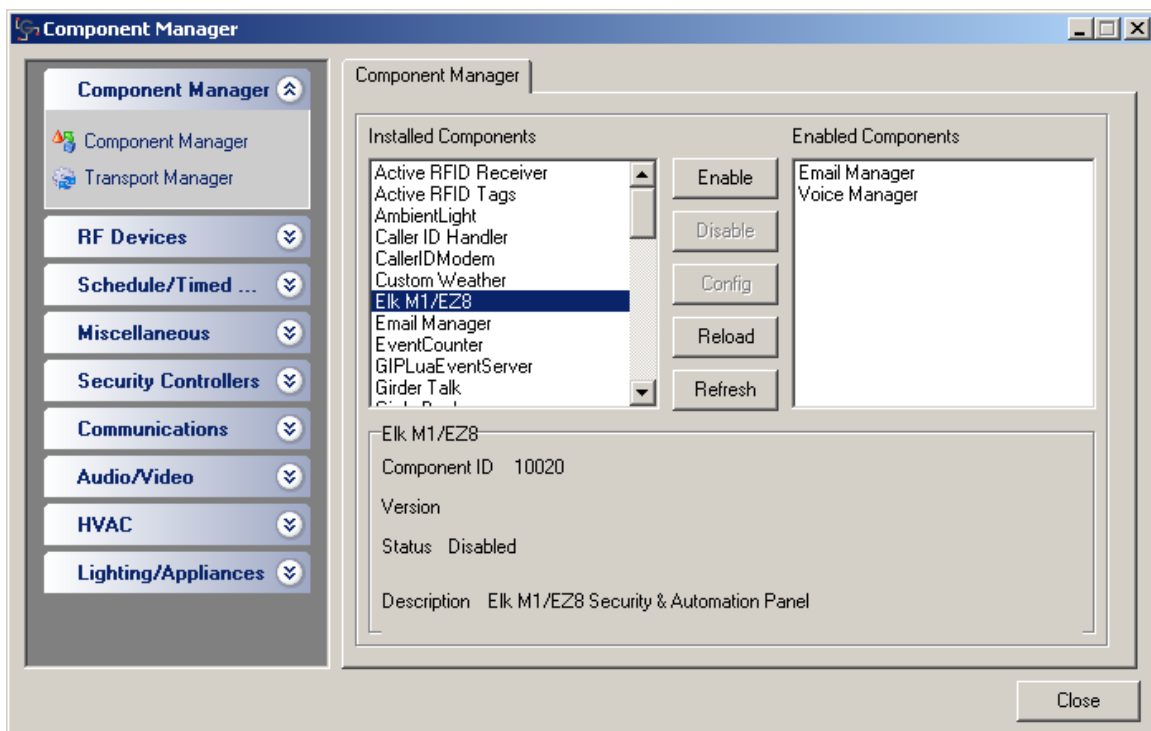
Elk Panel Settings

Set the following Global Settings to yes in ElkRP or keypad programming.

- Transmit event log (G35)
- Transmit output changes (G37)
- Transmit lighting changes (G39)
- Transmit zone changes (G36)
- Transmit task changes (G38)
- Transmit keypad changes (40)

Enabling The Component

Before the Elk M1/EZ8 Component can be used, it must first be enabled in Girder's Component Manager. Click the File Menu and select Component Manager. The following screen will be displayed. Locate the Elk M1/EZ8 Component and select the Enable button. The Elk M1/EZ8 Component will now be displayed in the Enabled Components list.



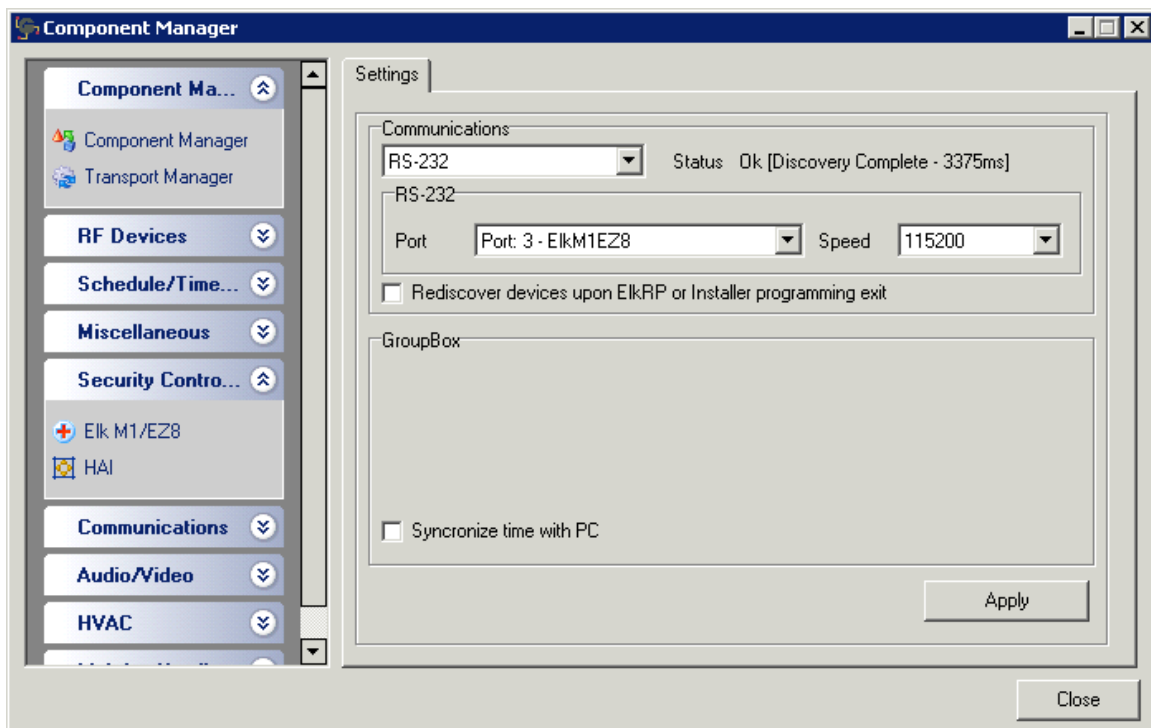
Configuration

The component communicates with the Elk panel either by a RS-232 or Ethernet connection. This connection must be setup to enable collection of device information. From the Component Manager screen, select the Security Controllers tab and select Elk M1/EZ8 to bring up the configuration screen.

Once the communications settings have been configured and a connection to the panel has been established, the component will download all named devices with the Show flag set in ElkRP.

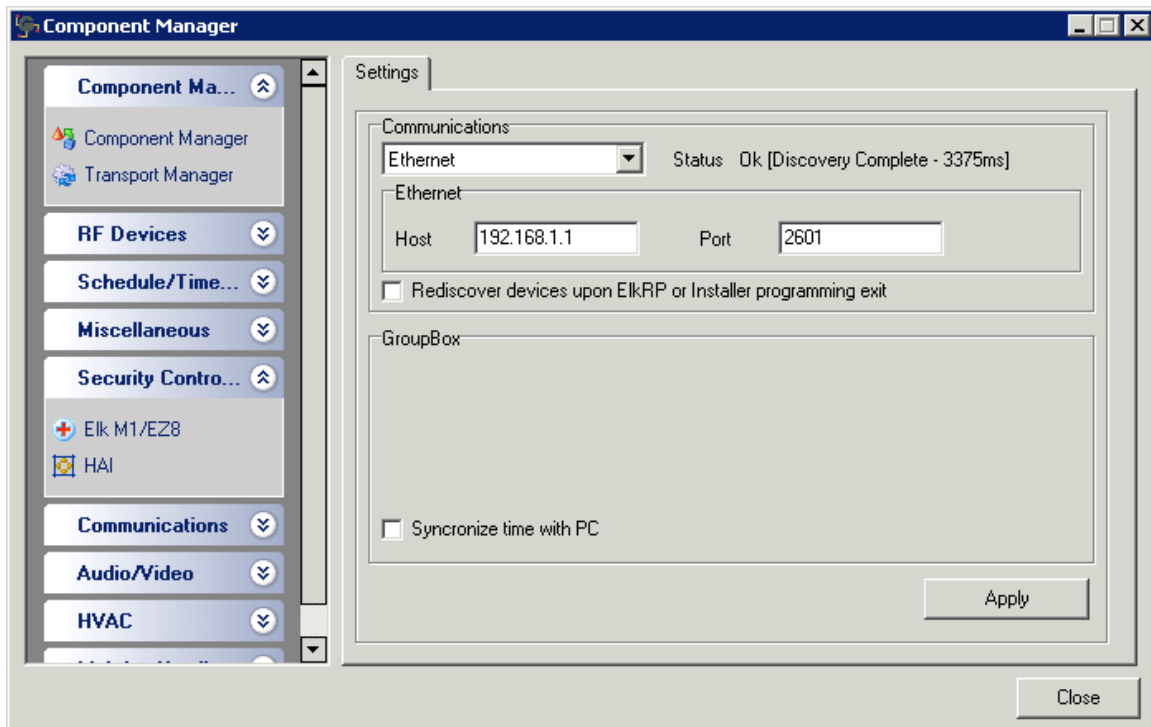
RS-232 Connection

Select RS-232 in the drop down box to configure RS-232 communications. Select the port that the Elk panel is connected to and the correct speed. The remaining options are described in more detail below. After all options are chosen, click the Apply button to save the settings and have Girder connect to the panel.



Ethernet Connection

Select Ethernet in the drop down box to configure Ethernet communications. Enter the IP Address assigned to the Elk panel in ElkRP and the corresponding port. The remaining options are described in more detail below. After all options are chosen, click the Apply button to save the settings and have Girder connect to the panel.



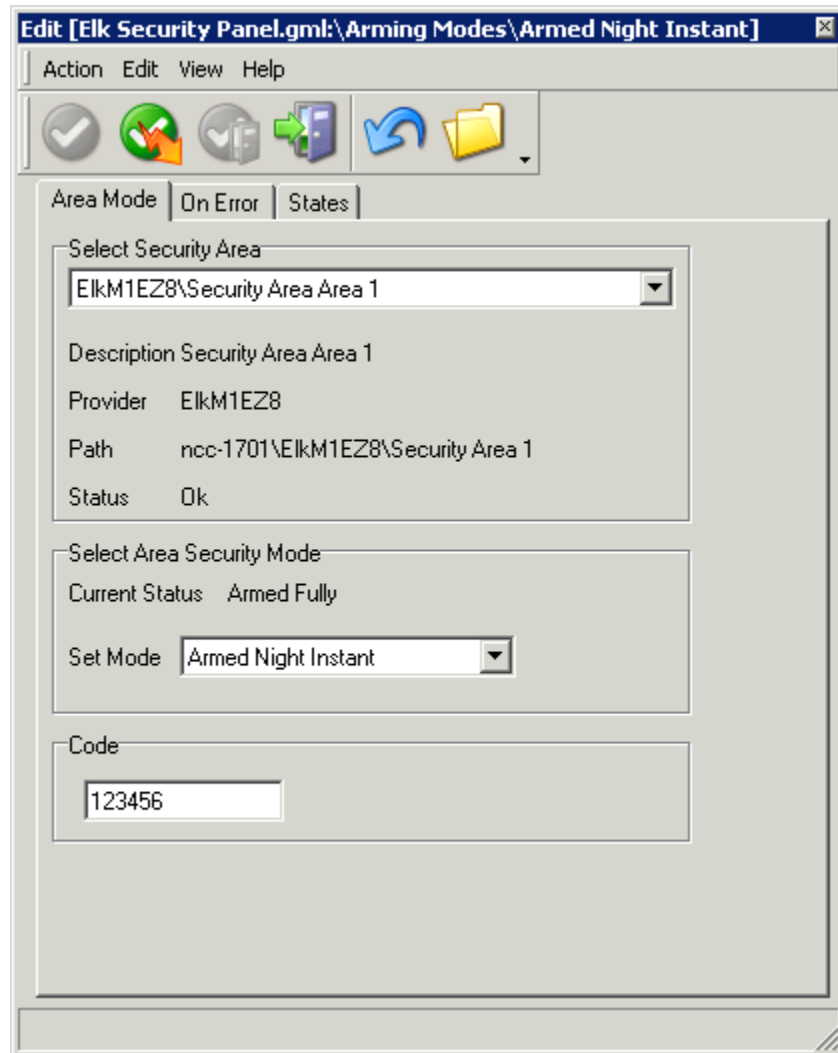
Other Settings

- Rediscover devices upon ElkRP or Installer programming exit – The component is notified when programming mode is entered. When programming mode is exited, the component will reconnect to the Elk panel and reacquire all devices.
- Synchronize time with PC – Select this option to have the component set the time on the Elk panel at each start and every night at Midnight.

Component Actions

Area Mode Action

The Area Mode action provides a method to set the Elk panel to a specific security mode. A valid Elk user code is required to perform this action.



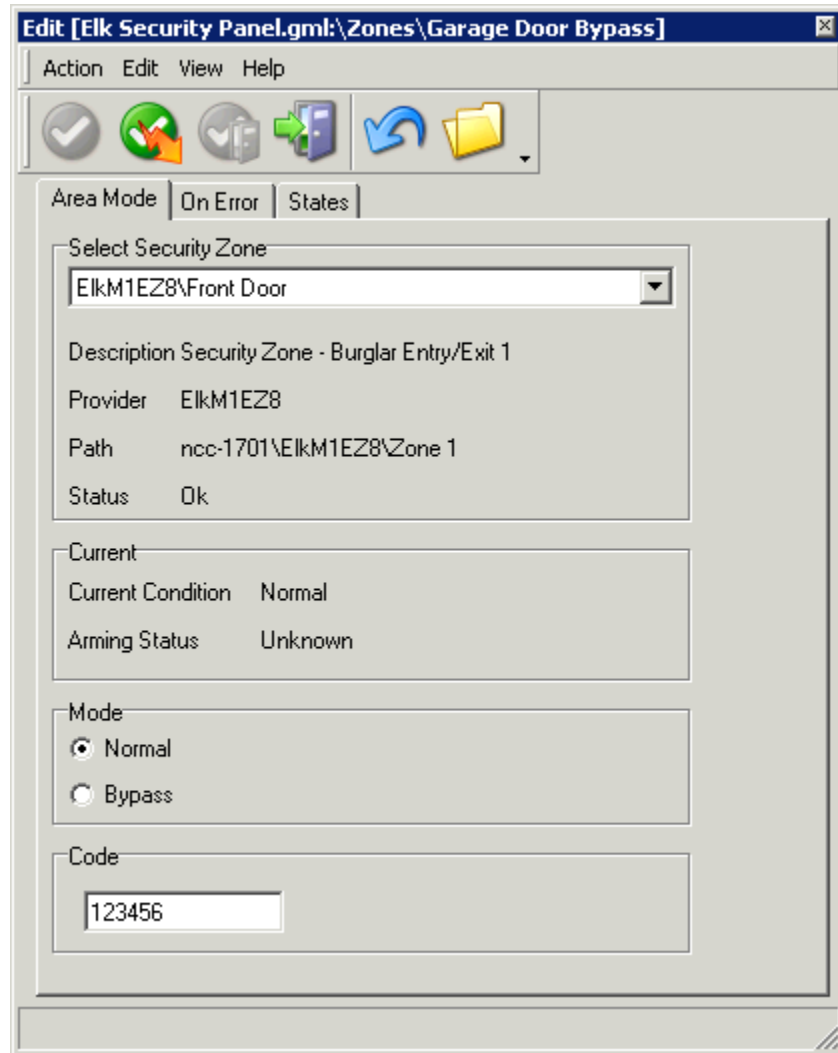
Location: Action Tree\Device Manager\Security\Area Mode

Security Modes Available

- Armed Away
- Armed Stay
- Armed Stay Instant
- Armed to Night
- Armed to Night Instant
- Armed to Vacation
- Arm to next Away mode
- Arm to next Stay mode
- Disarmed

Zone Action

The Zone action provides a method to set a specific zone on the Elk panel to Normal or Bypassed. A valid Elk user code is required to perform this action.



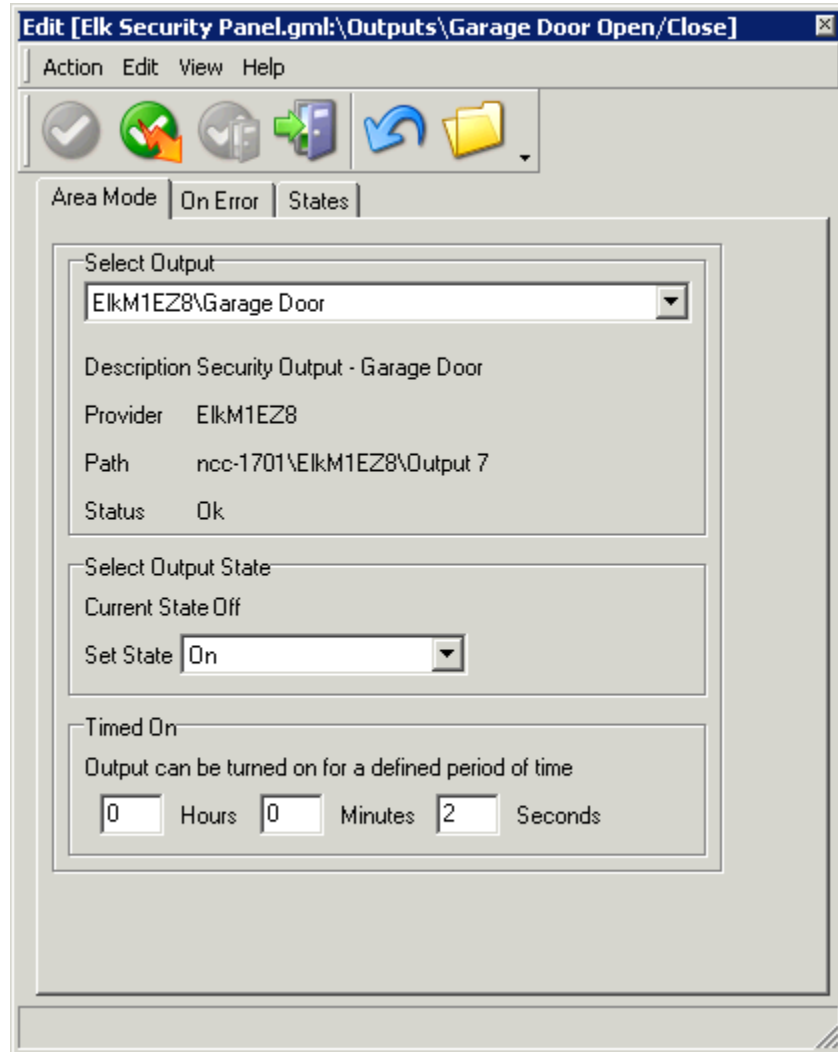
Location: Action Tree\Device Manager\Security\Zone

Zone Modes Available

- Normal
- Bypass

Control Output Action

This action provides a method to set a specific output on the Elk panel to the desired state.



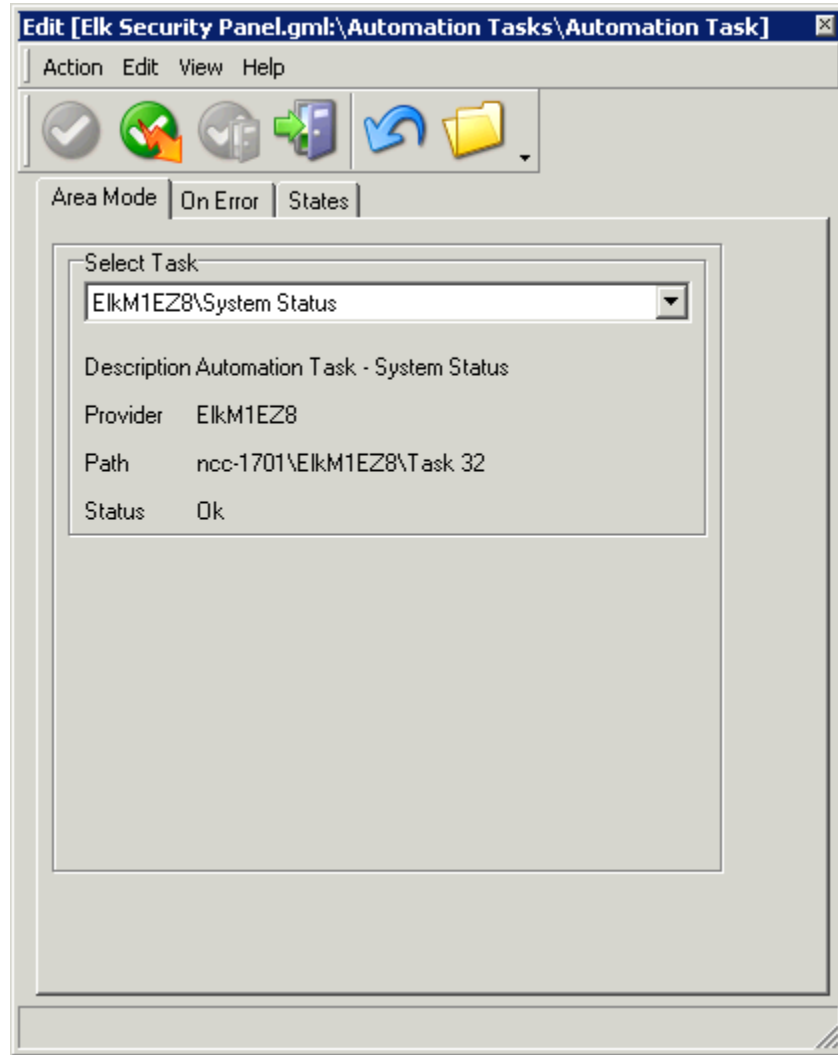
Location: Action Tree\Elk Automation\Control Output

Output Modes Available

- On
- Off
- Toggle

Task Activation

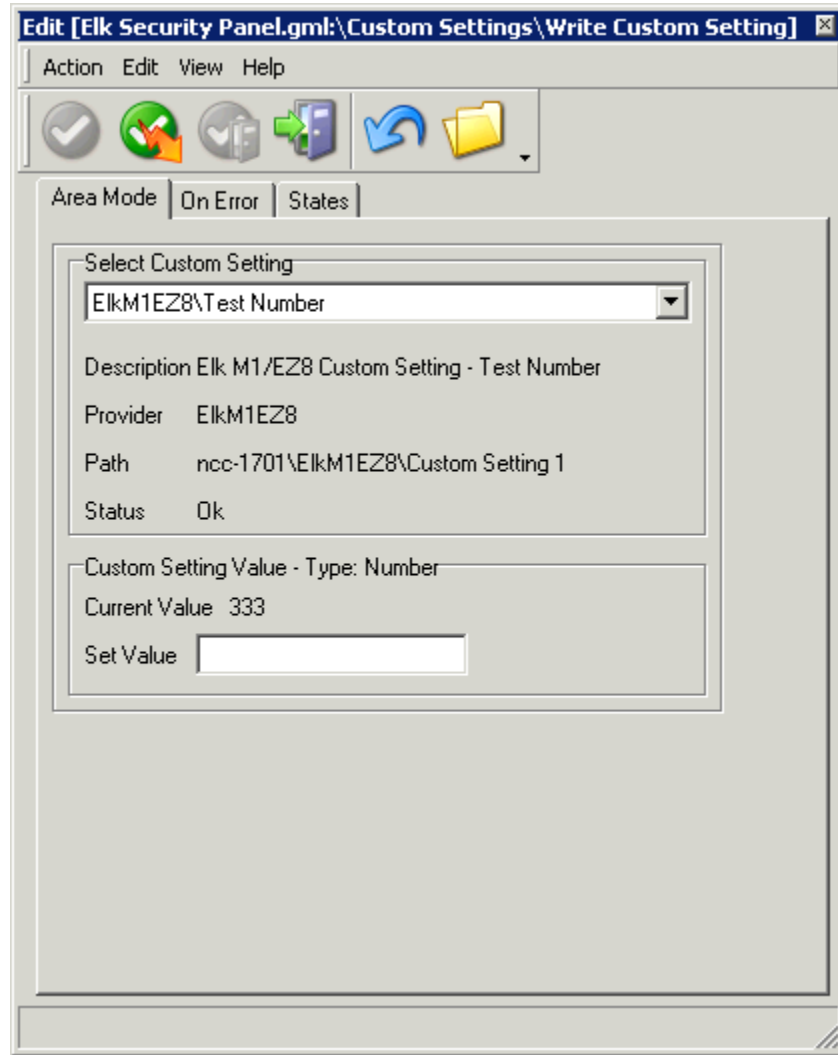
This action provides a method to activate an Automation Task programmed in the Elk panel.



Location: Action Tree\Elk Automation\Automation Task

Write Custom Settings

This action provides a method to modify a Custom Setting value programmed in the Elk panel.



Location: Action Tree\Elk Automation\Write Custom Setting

LCD Message Action

This action provides a method to send LCD Messages to supported keypads on the Elk panel.

Area Mode | On Error | States

Select Area
ElkM1EZ8\Security Area Area 1

Description Security Area Area 1
Provider ElkM1EZ8
Path ncc-1701\ElkM1EZ8\Security Area 1
Status Ok

Message
Line 1 Who let the
Line 2 dogs out

Clear Message
 Clear Message With Star Key
 Display Until Timeout

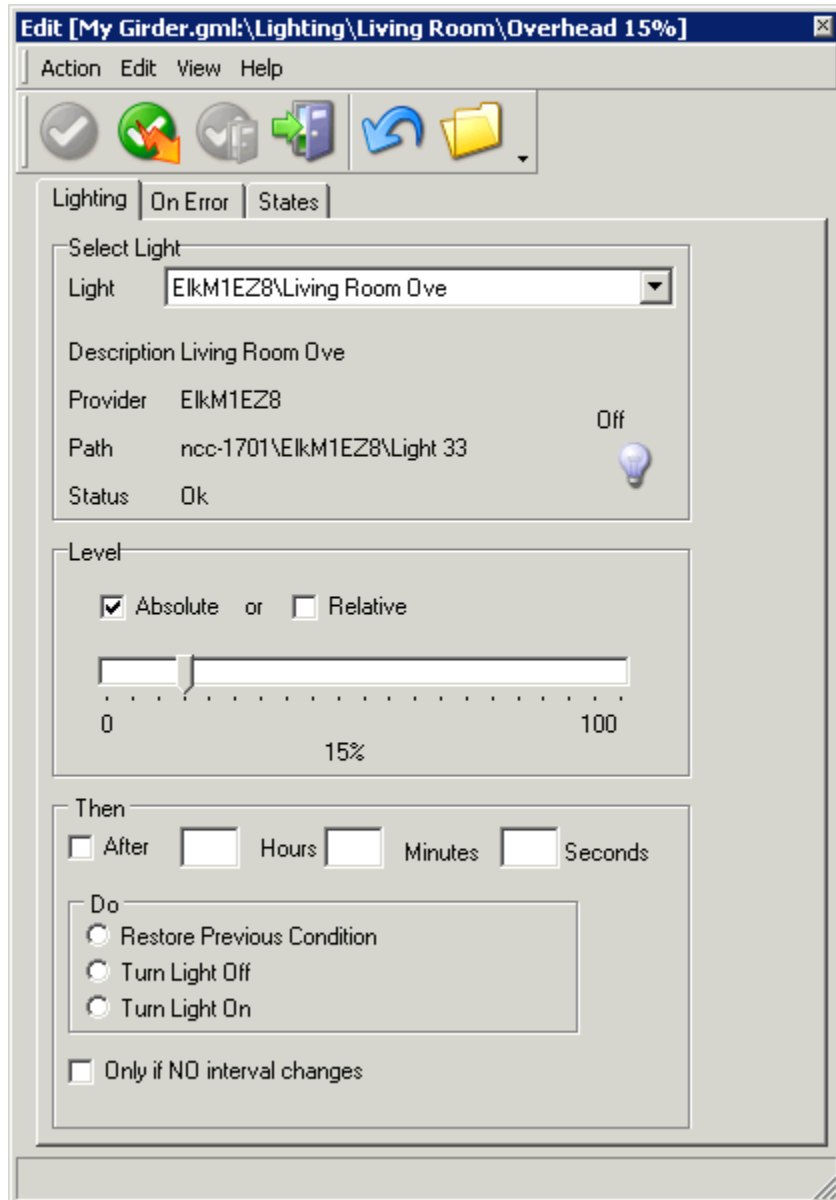
Beep Keypad

Timed On
Message will be displayed per the time below
Hours Minutes Seconds

Location: Action Tree\Elk Automation\LCD Message

Lighting Action

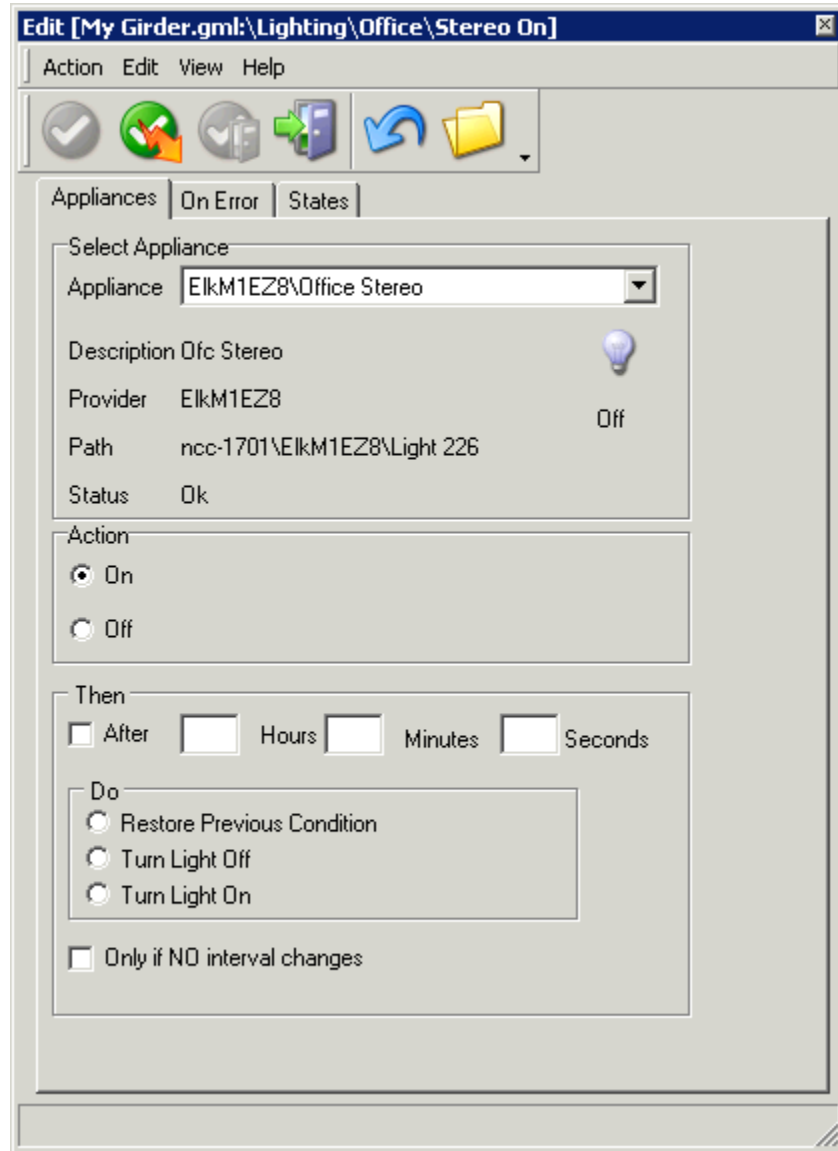
This action provides a method to manage lighting that is controlled by the Elk panel.



Location: Action Tree\Device Manager\Lighting\Lighting

Appliance Action

This action provides a method to manage lighting that is controlled by the Elk panel.



Location: Action Tree\Device Manager\Appliances\Appliances

Component Generated Events

Alarm Events

- No Alarm Active
- Entrance Delay is Active
- Alarm Abort Delay Active
- Fire Alarm
- Medical Alarm
- Police Alarm
- Burglar Alarm
- Aux1 Alarm
- Aux2 Alarm
- Aux3 Alarm
- Aux4 Alarm
- Carbon Monoxide Alarm
- Emergency Alarm
- Freeze Alarm
- Gas Alarm
- Heat Alarm
- Water Alarm
- Fire Supervisory
- Verify Fire

Arming State Events

- Disarmed
- Armed Away
- Armed Stay
- Armed Stay Instant
- Armed to Night
- Armed to Night Instant
- Armed to Vacation

System Status Events

- Not Ready To Arm
- Ready To Arm
- Ready to Arm, but a zone is violated and can be Forced Armed
- Armed with Exit Timer working
- Armed Fully
- Force Armed with a force arm zone violated
- Armed with a bypass

Zone Status Events

- Normal
- Trouble
- Violated
- Bypassed

Output Status Events

- On
- Off

Component Conditions Supported

Alarm Types

- No Alarm Active
- Entrance Delay is Active
- Alarm Abort Delay Active
- Fire Alarm
- Medical Alarm
- Police Alarm
- Burglar Alarm
- Aux1 Alarm
- Aux2 Alarm
- Aux3 Alarm
- Aux4 Alarm
- Carbon Monoxide Alarm
- Emergency Alarm
- Freeze Alarm
- Gas Alarm
- Heat Alarm
- Water Alarm
- Fire Supervisory
- Verify Fire

ArmUp State

- Not Ready To Arm
- Ready To Arm
- Ready to Arm, but a zone is violated and can be Forced Armed
- Armed with Exit Timer working
- Armed Fully
- Force Armed with a force arm zone violated
- Armed with a bypass

Current Security Mode

- Disarmed
- Armed Away
- Armed Stay
- Armed Stay Instant
- Armed to Night
- Armed to Night Instant
- Armed to Vacation

Zone Status

- Normal
- Trouble
- Violated
- Bypassed

Output Status

- On
- Off

Future Development Considerations

- Function Key Press
- Speak Words
- Speak Phrase
- Email Trigger
- Custom Codes (trigger on non-defined user codes or Weigand data codes).
- Keypad Key Change
- Event Trigger (supports events 1000-1386)
- Watchdog Trigger