

EXTERNAL EVENTS – feature in GuardPoint Pro

The 'External Events' feature allows external systems to insert events into GuardPoint Pro Access control system.

This tool equips external system with some GuardPoint Pro features, such as:

- Graphical interface with maps
- Global Reflex
- Supervisor integration with SCADA
- Video Integration
- Powerful Report Engine
- Multi Site
- Unique UI for many systems

In order to implement this feature, you need to set these two GuardPoint Pro .ini entries:

ExternalEvents = 1

ExternalEventsTestMin = X

Where X is the frequency (in minutes) when GuardPoint Pro checks its database to see whether external events have been inserted.

First of all, at the start up of the application, GuardPointPro creates a table Log_TEMP. The Log_TEMP is created using with the following script:

```
CREATE TABLE [dbo].[LOG_TEMP] (  
    [ID] [int] IDENTITY (1, 1) NOT NULL ,  
    [Date] [datetime] NULL ,  
    [Trn_Type] [tinyint] NULL ,  
    [From_Name] [nvarchar] (50) NULL ,  
    [Desc1] [tinyint] NULL ,  
    [Desc2] [nvarchar] (10) NULL ,  
    [Desc3] [nvarchar] (250) NULL ,  
    [Reader] [int] NULL ,  
    [Input] [int] NULL ,  
    [Controller] [int] NULL ,  
    [Cardholder] [int] NULL ,  
    [User] [int] NULL ,  
    [SOC] [int] NULL ,  
    [CH_Trans] [bit] NULL ,  
    [Acknowledged] [bit] NULL ,  
    [Confirmed] [bit] NULL ,  
    [Soc2] [int] NULL ,  
    [CameraID] [int] NULL  
) ON [PRIMARY]
```

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The external system should write its events directly into the Log_TEMP table

Log_TEMP records structure

Columns	Access granted	Access denied	Unknown Card	Start of Alarm	End of Alarm
Date	Date of the event				
Trn_Type	1	2	61	10	11
From_Name	Reader name			Input Name	
Desc1	0	0	255	0 if immediate 1 if delayed	2
Desc2	0	Denied Reasons Link to [Denied_Reasons2].[ID]	0	Null	
Desc3	Cardholder name		Card code	Null	
Reader	Reader ID (Link to [Reader].[ID])			0	
Input	0 (useful only for alarm event)			Input ID (link to [Input].[ID])	
Controller	Controller ID (Link to [Controller].[ID])				
Cardholder	Cardholder ID (Link to [Cardholder].[ID])			0	
User	User ID (Link to [User].[ID])				
SOC	SOC ID (Link to [SOC].[ID])				
CH_Trans	1 (when access events)			0	
Acknowledged	0				
Confirmed	0				
Soc2	0 (useful only for multi company sites)				
CameraID	Camera ID (Link to [Camera].[ID])				

Events examples:

1. Access grant for 'John Smith' in reader 'Reader01 / Controller 001'

```
INSERT INTO [LOG_TEMP]( [Date], [Trn_Type], [From_Name], [Desc1], [Desc2], [Desc3], [Reader], [Input],
[Controller], [Cardholder], [User], [SOC], [CH_Trans], [Acknowledged], [Confirmed], [Soc2], [CameraID])
VALUES('2007-3-13 12:05:05' , 1, 'Reader01 / Controller 001', '0', '0', 'Smith John', 13, 0, 8, 115, 1, 1, 1, 0, 0, 0, 0)
```

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2. 'Start of Alarm' from 'Input 05/ Controller 001'

```
INSERT INTO [LOG_TEMP]([Date], [Trn_Type], [From_Name], [Desc1], [Desc2], [Desc3], [Reader], [Input],  
[Controller], [Cardholder], [User], [SOC], [CH_Trans], [Acknowledged], [Confirmed], [Soc2], [CameraID])  
VALUES('2007-3-13 12:15:45' , 10, 'Input 05 / Controller 001', '0', Null, Null, 0, 24, 8, 0, 1, 1, 0, 0, 0, 0, 0)
```

For each event, the external system should work in two steps:

- a. First, insert the event to GuardPoint Pro database into the LOG_TEMP table
- b. Send the following HTTP request: (Where localhost is the PC name or IP address where GuardPoint Pro is running)

```
http://localhost/Gpp/AM5WWW.dll?xmlcommand?<a><cmd>CheckExternalEvents</cmd><param><t/></  
param></a>
```

Once GuardPointPro receives this HTTP command it immediately checks for new external events in the LOG_TEMP table

Note that GuardPoint Pro checks the LOG_TEMP each X minutes regardless of the HTTP command. Where X is the value of 'ExternalEventsTestMin' in the GuardPointPro .ini.

When a new event is found in the LOG_TEMP table, the event is treated as standard event and therefore GuardPoint Pro will:

1. Display it on the real time log on its main screen
2. Send it to be displayed on all workstations
3. Save it in the events history (e.g., for reports)
4. On installation where GuardPointPro was set to support OPC Servers – it would send the event through OPC.