

**IndigoVision**

**InfoGenesis  
Integration Module**

**Administrator's Guide**



IndigoVision

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# 1 ABOUT THIS GUIDE

This guide is provided for system administrators integrating an InfoGenesis POS System with IndigoVision Control Center.

## Safety notices

This guide uses the following formats for safety notices:



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*Indicates a hazardous situation which, if not avoided, could result in death or serious injury.*

---



---

*Indicates a hazardous situation which, if not avoided, could result in moderate injury, damage the product, or lead to loss of data.*

---

Notice

---

*Indicates a hazardous situation which, if not avoided, may seriously impair operations.*

---



---

*Additional information relating to the current section.*

---

## References

The following documents are referenced in this document. The paths are to the default locations where the documents can be found.

1. Control Center Help  
**Start > IndigoVision > Control Center > Control Center Help**  
Located on the Control Center server.
2. Integration Modules  
<http://www.indigovision.com/integration>
3. Control Center Performance Guide  
[http://www.indigovision.com/documents/consultant/guides/Control-Center\\_Performance-Guide.pdf](http://www.indigovision.com/documents/consultant/guides/Control-Center_Performance-Guide.pdf)
4. InfoGenesis User Guides  
Installing InfoGenesis POS 4.1.2, InfoGenesis 2008



# 2 OVERVIEW

The InfoGenesis Integration Module allows events from an InfoGenesis POS System to be integrated with IndigoVision Control Center using the Revelation Surveillance System Interface.

This document explains how to install and configure the InfoGenesis Integration Module.

## Compatibility

Please ensure you have properly installed, configured and licensed the InfoGenesis POS System terminals and the Revelation Surveillance System.

The InfoGenesis Integration Module is compatible with Control Center 11.2 or greater.

## System requirements

The InfoGenesis Integration Module can be installed on the following Windows® operating systems with latest service packs applied:

- Windows® 7 (64-bit)
- Windows® Server 2008 R2

If a firewall is enabled on your system, ensure that the InfoGenesis Integration Module executable, **infoim.exe**, is added to the list of exceptions.

## USB License Dongle

The InfoGenesis Integration Module is a licensed product. A correctly licensed USB dongle should be present on the platform running the InfoGenesis Integration Module.

---

**Notice** *The InfoGenesis Integration Module should not be run on the same server as any other dongle-licensed IndigoVision software.*

---





# 3

## INSTALLATION

This section describes how to install the IndigoVision InfoGenesis Integration Module.

Ensure the IndigoVision InfoGenesis Integration Module USB license dongle is inserted into the machine that you are installing the software on before beginning the installation.

To install the InfoGenesis Integration Module:

1. Insert the IndigoVision Integrations DVD, or download the Integration Module components from the Support area of the IndigoVision website.
  - ▶ For more information, see "*References*" on page 5
2. Navigate to the **InfoGenesis** folder found in the **Control Center Integration** folder and run **setup.exe**. Follow the on-screen instructions.

By default, the InfoGenesis Integration Module is installed to:  
**C:\Program Files (x86)\IndigoVision\Integration\InfoGenesis** or **C:\Program Files** for 32-bit operating systems.
3. Edit the system configuration file (**System.conf**).
  - ▶ For more information, see "*System Configuration (System.conf)*" on page 11

This file is shown during installation. Edit the system configuration parameters. Save and close the file.
4. Edit the InfoGenesis event rules file (**Eventrules.conf**).
  - ▶ For more information, see "*Event rules Configuration (Eventrules.conf)*" on page 11

This file is shown during installation. Save and close the file.
5. Edit the InfoGenesis terminals file (**Terminals.conf**).
  - ▶ For more information, see "*Terminal Configuration (Terminals.conf)*" on page 11

This file is shown during installation. Save and close the file.
6. Start the IndigoVision InfoGenesis Integration Module service from the Windows® Services Control Panel.



# 4 CONFIGURATION

This chapter describes how to configure the IndigoVision InfoGenesis Integration Module.

## Integration module

To integrate InfoGenesis POS System into IndigoVision Control Center you must configure the following:

1. Edit the system configuration file (**System.conf**).
2. Configure the rules for filtering events of interest (**Eventrules.conf**).
3. Configure the list of Terminals (**Terminals.conf**).
4. Define the InfoGenesis alarms and events of interest within Control Center.

---

**Notice** *The Integration Module service must be manually restarted for configuration file changes to have an effect.*

---

## System Configuration (System.conf)

This file contains all the system configuration parameters, and the Revelation Surveillance System configuration.

- ▶ For more information, see "*System configuration file (System.conf)*" on page 13

## Event rules Configuration (Eventrules.conf)

This file contains the rules to filter incoming events from InfoGenesis POS System and the format for the data records to send to the IndigoVision Control Center suite.

- ▶ For more information, see "*Event rules configuration file (Eventrules.conf)*" on page 14

## Terminal Configuration (Terminals.conf)

This file contains the map of InfoGenesis POS System terminals to IndigoVision Control Center external data sources. There must be one section for each NVR-AS and a data source for each terminal.

- ▶ For more information, see "*Terminal configuration file (Terminals.conf)*" on page 16

## IndigoVision Control Center configuration

If the IMOnline, IMOffline, 3rdPartyOffline or 3rdPartyOnline external system inputs are defined in the system configuration file and are of interest, then they must be configured in Control Center.

### Create a new external system

The IP address entered is the IP address of the host running the Integration Module.

### Create a new zone and external detector

Add a new zone for each unique alarm that must be reported in Control Center.

Within the zone create a new external detector for the external system above with the external event ID of the event configured in the Tolv file of the Integration Module.

It is recommended that the zone name description configured in Control Center closely matches the InfoGenesis POS System event name. This will help to ensure there is no confusion in correlating events.

### Create a new data source

Add a data source for each terminal configured in the Terminal Configuration File.

External Data Sources belong to sites, not to zones. It is recommended that the data source name description configured in Control Center closely matches the terminal you want to monitor. This will help to ensure there is no confusion in correlating events.

# 5

## SYSTEM CONFIGURATION FILES

This chapter contains examples of the configuration files required by the InfoGenesis Integration Module.

### System configuration file (System.conf)

This file lists the configurable system parameters that are independent of alarms and events. The usage of the parameters listed in the sample configuration file below is explained in their comments:

**Figure 1:** Example of a System configuration file

---

```
#
# Parameters for Alarm Server
#
[AlarmServer]
#
# The IP address of the primary Alarm Server (NVR) must be specified if any
# SystemEvents are defined
#
# IP=0.0.0.0
#
# SystemEvents are events that may be sent to Control Center to report the
# status of, or problems with, the Indigo Vision Integration Module.
#
# The number assigned to a system event is a user-defined event number which
# corresponds to an external system input number of an alarm source in
# Control Center.
#
[SystemEvents]
#
# If IMOnline is defined, an event with this number will be sent
# to the NVR/Alarm Server whenever the IndigoVision Integration Module has
# successfully started up.
#
# IMOnline=1
#
# If IMOffline is defined, an event with this number will be sent
# to the NVR/Alarm Server whenever the IndigoVision Integration Module is about
# to go offline. Reasons for going offline include a manual service stop request,
# the host pc shutting down, or when the USB license dongle is removed.
#
# IMOffline=2
#
# If the 3rdPartyOnline property is defined, an event with this
```

```

# number will be sent to the NVR/Alarm Server whenever the connection
# with the InfoGenesis system is established.
#
# 3rdPartyOnline=3
#
# If the 3rdPartyOffline property is defined, an event with this
# number will be sent to the NVR/Alarm Server whenever the connection
# with the InfoGenesis system is lost.
#
# 3rdPartyOffline=4
#
# Parameters used in TCP communication with InfoGenesis Revelation system.
#
[Revelation]
#
# MANDATORY:
# The IP Address of the Revelation system must be specified.
#
Address=0.0.0.0
#
# The port number of the InfoGenesis POS system.
# The default port number is 7004.
# Port=7004
#
# The log level.
# The default log level is "info", which will log each alarm sent to the
# NVR/Alarm Server and all errors.
#
[Log]
# Change to "err" to minimize the log output to just errors.
# Change to "debug" to maximize log output.
#
# Logging level
# err (minimize output, log errors only)
# info (log alarms and errors)
# debug (maximize output, log all information)
#
# Level=info

```

In particular, the following parameters from the [Revelation] section are related to the InfoGenesis POS System:

- **Address** - This parameter is the IP address of the Revelation Surveillance System.
- **Port** - This optional parameter is the port number of the Revelation Surveillance System.

## Event rules configuration file (Eventrules.conf)

This file lists the rules to filter events coming from the InfoGenesis POS System and the format of the data records to send to the IndigoVision Control Center system.

The usage of the parameters listed in the sample configuration file below is explained in their comments:

**Figure 2:** Example of an Event rules configuration file

```

# This file contains rules for matching events coming from the InfoGenesis

```

```
# Revelation Surveillance System.
# Each line is in the form:
#
# <expression> : <details>
#
# where <expression> is a condition that can be evaluated against each incoming
# event, from the InfoGenesis Revelation Surveillance System, and <details>
# specifies which details the InfoGenesis Integration Module will send to the
# IndigoVision system.
# For the expression field you can use logical operators & and | (AND and OR)
# or the character ~ to specify a regular expression.
# The field expression is in the form: variable = value.
# It is also possible to use the expression: variable != value ( not equal ).
#
# Possible variables are:
# - TerminalId
# - ProfitCenterId
# - EmployeeId
# - LineDisplayData
# - LineNumber
# For string variables, please specify the value between double quotation
# marks.
#
# Details are comma separated in the form:
# "text detail1 $(variable1), ..., text detailN $(variableN) : event description"
# where:
# - 'text detail #' is a comment
# - $(variable) means that when an event occurs, the Integration Module will
# replace that field with the value.
# - 'event description' is a free text field.
#
# Symbol '\' can be used to split a rule on two lines.
#
# Example 1: simple filter
#
# LineDisplayData="DIS REGISTER IS OPEN" : "Terminal $(TerminalId), \
# Employee $(EmployeeId) : Register Open"
#
# This matches events where LineDisplayData field is strictly equal to
# "DIS REGISTER IS OPEN" and sends as details the terminal ID and the
# EmployeeId substituting with the details of the terminal and the employee,
# and the description "Register Open".
# So if the event comes from the terminal 4 and the employee 27, the text
# sent to the IndigoVision System will be:
#"Terminal 4, Employee 27: Register Open"
#
# Example 2: using regular expressions
# LineDisplayData=~".*PIC tender: Cash.*" & TerminalId="1" : \
# "Terminal $(TerminalId), Employee $(EmployeeId): Cash drawer is open."
#
# In this case, the operator ~ specifies that is a regular expression to be
# evaluated. You use the wildcard character '.' at the beginning and at the
# end of the expression to use as a filter.
# In this example all the events containing "PIC tender: Cash" in the
```

```

# LineDisplayData are valid.
#
# Example 3: combine events
#
# LineDisplayData=~"(Chk:\d{5} DIS.*\d+\.\d{2}.*)|DIS" : "DIS event"
#
# Using the operators & or | you can specify to evaluate more than one
# condition:
# cond1 & cond2 & ... & condN
# cond1 | cond2
#
# In the above example, two types of events are filtered:
# - all events containing DIS in the LineDisplayData
# - all events with the description starting with 'Chk:' immediately followed
# by 5 ciphers, which is followed by 'DIS' and then containing a price in the
# format of 'xxx.yy' where xxx can be any number and yy has to contain 2
# ciphers exactly
# Example 4: advanced filter
#
# ProfitCenterId="ProfitCen" & LineNumber="002" : "$(LineDisplayData)"
#
# In this case, events are filtered by the fields ProfitCenterId and LineNumber
# and only for events that match exactly the two conditions
# the text data LineDisplayData, without manipulation, will be forwarded.
#
# Example 5: pass through
#
# LineDisplayData=~".*" : "Terminal: $(TerminalId), Profit Center: $(ProfitCenterId),
\
# Employee: $(EmployeeId), Line Number: $(LineNumber), Data: $(LineDisplayData)"
#
# In this case all events from all terminals are sent to the IndigoVision
# system and the text will have full details.

```

## Terminal configuration file (Terminals.conf)

This file contains the mapping between the terminals you want to receive events from and the external data sources in the IndigoVision Control Center system.

The file is organized in sections, named by the IPs of the IndigoVision Alarm Servers.

In each section, there is one mapping entry per line in the file. The first element is the ID of the terminal, the second element is the ID of the external data source.

The usage of the parameters listed in the sample configuration file below is explained in their comments:

**Figure 3:** Example of a Terminal configuration file

```

# This file contains the mapping between InfoGenesis Point of Sale Terminals
# and data sources in the IndigoVision system.
# Each section in this file should be named using the IndigoVision Alarm
# Server IP address (i.e. [Alarm Server IP]).
# The Alarm Servers addresses should be unique, there cannot be two sections
# named after the same Alarm server.

```



```
# When a terminal triggers an event, the Integration Module will send data
# to the Alarm Server address from the section the terminal belong to.
# One terminal may be assigned to several Alarm Servers.
# For each Alarm Server, the configuration is
# <terminal>:<data source>
# where <terminal> is the number of the InfoGenesis POS and <data source>
# is the External Data Source number that has to be configured in the
# IndigoVision System to receive data.
# Example
# [10.0.0.1]
# 1:101
# 2:102
# 3:103
# Example for the next Alarm Server, just add next sections if you need to
# handle more Alarm Servers
# [10.0.0.2]
# 4:104
# 5:105
# 6:106
# Example for the next Alarm Server, just add next sections if you need to
# handle more Alarm Servers
# [10.0.0.3]
# 1:107
# 3:108
# 5:109
```



# 6 TROUBLESHOOTING

This chapter provides troubleshooting information to resolve common issues.

## Data records not appearing in Control Center

If data records are not appearing in Control Center then the following end-to-end check for a single event may help to determine the source of the problem.

1. Enable debug level logging.

Do this by setting `Level=debug` in the [Log] section of the System Configuration File, then restart the **IndigoVision InfoGenesis Integration Module** service. This will allow the Integration Module to log all events received from the InfoGenesis POS System.

2. Verify that the Integration Module is connected to the Revelation Surveillance System by opening the most recent Integration Module log file and check for the response message confirming terminal subscription, for example:

```
2014-05-13 14:43:38 [system] Received success response for terminal 1
```

If there are problems with the connection to the Revelation Surveillance System, make sure that the firewall is correctly set up. The Revelation Surveillance System uses TCP port 7004 by default.

3. Verify that the Integration Module is receiving events from the InfoGenesis Revelation Surveillance System by opening the most recent Integration Module log file and check for received packet messages, for example:

```
2014-05-13 14:56:13 [system] Received
packet: PEM1 201405131456130000000012          000000001DIS
REGISTER IS OPEN                                001
```

4. Verify that the event matches one of the rules set up in the Event rules configuration file by opening the most recent Integration Module log file and check for matched rule messages, for example:

```
2014-05-13 14:56:13 [system] Event matched rule with
expression "LineDisplayData=" DIS REGISTER IS OPEN"
```

If the event is matched as expected go to step 5.

If the incoming event does not match any rules, you should see a different message, for example:

```
2014-05-13 14:56:13 [system] Event: [ LineDisplayData: DIS
REGISTER CLOSED, LineNumber: 1, ProfitCenterId: AK3,
EmployeeId: 57 ] coming from terminal 1 does not match any
rules.
```

In this case, you should change the rules specified in the Event rules configuration file to match the incoming events.

5. Verify that the data is sent to the Alarm Server:

```
2014-05-13 14:56:13 [system] Sent data to Alarm Server
10.1.20.28: Data Source 105, text "Terminal: 5 : REGISTER
OPEN"
```

If the data is sent as expected go to step 6.

If the data is not sent you should see one of the following messages:

- a. 2014-05-13 14:56:13 [system] Unable to send data to Alarm Server 10.1.20.1: Data Source 102, text "Terminal: 2 : REGISTER OPEN" : The destination host rejected the event.

In this case the Alarm Server may be offline, so check in Control Center if you can see that Alarm Server as online.

The IndigoVision InfoGenesis Integration Module supports NVR-AS 11.2 or later.

If the Alarm Server is online then the rate of events may have exceeded the limit.

► For more information, see "*References*" on page 5

- b. 2014-05-13 14:56:13 [system] Unable to send data to Alarm Server 10.1.20.1: Data Source 102, text "Terminal: 2 : REGISTER OPEN" : Invalid parameter.

You may have specified a data text which is too long in the Event rules configuration file, exceeding 320 characters.

You may have specified an invalid IP address for the Alarm Server in the Terminal configuration file.

6. Verify that the corresponding data source has been created in Control Center Client. In the Site Setup mode, select the relevant Site in **Alarms Explorer**, then complete the following:
  - a. Select the **External Systems** tab. Ensure that an External System with the IP address of the PC running the InfoGenesis Integration Module has been created.
  - b. For each Data Source, verify that the Alarm Server and the Source Number are correct. The Source Number must match the Data Source specified in the Terminal configuration file.

## License Dongle Issues

If the InfoGenesis Integration Module is installed on a machine that has not had Aladdin HASP software installed previously then no license dongle issues should be encountered.

However, possible issues may occur if the machine to be installed on has previously had Aladdin HASP software installed on it.

### How to Check that the Sentinel HASP Dongle is Active

If the Sentinel dongle is working correctly then a red LED is illuminated on the dongle.

Check that the device drivers are listed in Device Manager:

1. Navigate to **Control Panel > System**.
2. Select the **Hardware** tab.
3. Select **Device Manager**.
4. Navigate to **Universal Serial Bus Controllers**, and expand the list.
5. Check that the following are listed:
  - SafeNet Inc. Sentinel HL Key
  - SafeNet Inc. HASP Key
  - SafeNet Inc. USB Key

# 7 UPGRADING

If you have an existing InfoGenesis Integration Module installation, an upgrade is required. When upgrading from version 1.0 or 1.1 to 2.0, the following configuration files are different and need to be updated:

1. ***Terminals.conf***
2. ***Eventrules.conf***
3. ***System.conf***

## **Terminals.conf**

For version 2.0, the format of the ***Terminals.conf*** file is changed to support integrated data. If you have an existing ***Terminals.conf*** file, you should update each Camera IP with a Data Source.

## **Eventrules.conf**

For version 2.0, the ***Bookmarks.conf*** file has been replaced with the ***EventRules.conf*** file, and requires update.

Each entry is still in the following form:

```
<expression> : <details>
```

However, within these entries, the `$(Camera)` field within `<details>` has been removed.

All other references to `$(Camera)` have also been removed, for example in the following entry:

```
LineDisplayData="DIS REGISTER IS OPEN" : $(Camera), "Terminal $(TerminalId), Employee  
$(EmployeeId), Camera $(Camera): Register Open"
```

This becomes:

```
LineDisplayData="DIS REGISTER IS OPEN" : "Terminal $(TerminalId), Employee  
$(EmployeeId) : Register Open"
```

## **System.conf**

For version 2.0, in the ***System.conf*** file, the `BMOnline` and `BMOffline` entries have been renamed to `IMOnline` and `IMOffline`.

