

IndigoVision

**S2
Integration Module**

Administrator's Guide



IndigoVision

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1 ABOUT THIS GUIDE

This guide is provided for system administrators integrating an S2 NetBox with IndigoVision Control Center.

Safety notices

This guide uses the following formats for safety notices:



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. IndigoVision Control Center Installation Guide
Available on the Control Center CD

2 OVERVIEW

The S2 Integration Module allows events from an S2 NetBox to be integrated with IndigoVision Control Center.

This document explains how to install and configure the S2 Integration Module.

Compatibility

Please ensure you have properly installed, configured, and licensed the S2 NetBox.

System requirements

The S2 Integration Module can be installed on the following Windows® operating systems with latest service packs applied:

- Windows® 7
- Windows® 8
- Windows® Server 2008 R2

If a firewall is enabled on your system, ensure that the Integration Module executable **s2im.exe** is added to the list of exceptions.

Network Video Recorders

The S2 Integration Module cannot be run on the same machine as an IndigoVision Network Video Recorder – Alarm Server (NVR-AS).

USB license dongle

The S2 Integration Module is a licensed product. A correctly licensed USB dongle must be present on the system running the S2 Integration Module.

- ▶ For more information, see *"License Dongle Issues"* on page 18

3

INSTALLATION

To install the S2 Integration Module:

1. Insert the IndigoVision Integrations DVD, or download the module from a partner extranet site
 - ▶ For more information, see *"References" on page 5*If you are using the Integrations DVD, navigate to **IntegrationModules\S2**
2. Run **setup.exe** and follow the on screen instructions
 - By default, the S2 Integration Module is installed to:
C:\Program Files\IndigoVision\Integration\S2 Integration Module
3. Edit the system configuration file (**System.conf**)
 - ▶ For more information, see *"System configuration file (System.conf)" on page 13*This file is shown during installation. Edit the system configuration parameters. Save and close the file.
4. Edit the To IV Alarm Server list configuration file (**TolvAlarmServers.conf**)
 - ▶ For more information, see *"To IV alarm servers configuration file (TolvAlarmServers.conf)" on page 16*This file is shown during installation. Specify the To IV Alarm Servers and their corresponding Tolv mapping files. Save and close the file.
5. Edit the S2 event configuration file (**Tolv.conf**)
 - ▶ For more information, see *"Alarms to IndigoVision configuration file (Tolv.conf)" on page 15*This file is shown during installation. Specify the mappings of the S2 NetBox alarm and event names to the IndigoVision alarm IDs. Save and close the file.
6. Start the S2 Integration Module service from the Windows® services

4 CONFIGURATION

This chapter describes how to configure the S2 Integration Module.

Integration module

To integrate S2 NetBox events into IndigoVision Control Center you must configure the following:

1. Edit the system configuration file (**System.conf**).
 - ▶ For more information, see "*System configuration file (System.conf)*" on page 13
2. Configure the list of Tolv IndigoVision alarm servers that receive S2 NetBox events (**TolvAlarmServers.conf**).
 - ▶ For more information, see "*To IV alarm servers configuration file (TolvAlarmServers.conf)*" on page 16
3. Configure the events of interest (**Tolv.conf**).
 - ▶ For more information, see "*Alarms to IndigoVision configuration file (Tolv.conf)*" on page 15
4. Define the S2 NetBox events of interest within Control Center.
 - ▶ For more information, see "*IndigoVision Control Center configuration*" on page 12

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

System configuration file (System.conf)

This file contains all the system configuration parameters.

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

Alarms to IndigoVision configuration file (Tolv.conf)

This file contains the mapping between the S2 NetBox event and the IndigoVision external system input. It contains the data that will map the event received from the S2 NetBox system to the IndigoVision system.

- ▶ For more information, see "*Alarms to IndigoVision configuration file (Tolv.conf)*" on page 15

To IndigoVision alarm servers configuration file (TolvAlarmServers.conf)

This file contains a list of Alarm Server IP addresses. Each Alarm Server has a mapping to an Alarms to IndigoVision configuration file. This can be the default **Tolv.conf** configuration file.

- ▶ For more information, see *"To IV alarm servers configuration file (TolvAlarmServers.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.

- ▶ For more information, see *"References" on page 5*

Create a new external system

The IP address entered is the IP address of the host running the Integration Module. Refer to the Control Center online help about creating a new external system.

- ▶ For more information, see *"References" on page 5*

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.

- ▶ For more information, see *"References" on page 5*

It is recommended that the zone name description configured in Control Center closely matches the event of interest. 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 S2 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 the comments.

Figure 1: Example of a System configuration file

```
[AlarmServer]
#
# The IP address of the primary Alarm
# Server (NVR) must be specified if any SystemEvents
# are defined
#
#IP=0.0.0.0
[S2NetBox]
#
# MANDATORY: NetBox Ip Address
# The IP address of the NetBox to connect to.
#
S2NetBoxIp=0.0.0.0
#
# MANDATORY: Encoded NetBox Username
# Please use the encode utility to determine this value. This
# utility is found in the Integration Module installation
# directory.
#
# The encoded username must be kept on the same line as shown below.
#
# This value must be a hexadecimal string - eg 0123456789ABCDEF
#
Username=00111222333444AAABBBCCC
#
# MANDATORY: Encoded NetBox Password
# Please use the encode utility to determine this value. This
# utility is found in the Integration Module installation
# directory.
#
# The encoded password must be kept on the same line as shown below.
#
# This value must be a hexadecimal string - eg 0123456789ABCDEF
```

```
#
Password=00111222333444AAABBBCCC
[SystemEvents]
#
# SystemEvents are events that may be sent to Control Center
# to report the status of, or problems with, the Integration Module
# or 3rd Party System.
#
# The number assigned to a system event is a user-defined event number
# that corresponds to an external system input number of an alarm source
# in Control Center.
#
#
# If IMOffline is defined, an event with this number will be sent
# to the NVR/Alarm Server whenever the 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
# or expires
# (trial dongles only).
#
# IMOffline=1
#
# If IMOnline is defined, an event with this number will be sent
# to the NVR/Alarm Server whenever the Integration Module
# has successfully started up.
#
# IMOnline=2
#
# If the 3rdPartyOffline property is defined, an event with this
# number will be sent to the NVR/Alarm Server whenever the S2 Systems
# NetBox is is disconnected.
#
# 3rdPartyOffline=3
#
# If the 3rdPartyOnline property is defined, an event with this
# number will be sent to the NVR/Alarm Server whenever the S2 Systems
# NetBox is connected
#
# 3rdPartyOnline=4
[Log]
#
# The log level.
# The default log level is "info", which will log each alarm sent to the
# NVR/Alarm Server and all errors.
#
# 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
```

Alarms to IndigoVision configuration file (Tolv.conf)

The installation provides one default alarm to the IndigoVision configuration file located in the Tolv folder. The file is called **Tolv.conf**.

There is one mapping entry per line in the mapping file. Each entry is a comma-separated pair.

Figure 2: Example of an Alarms to IndigoVision Configuration file

```
# This file maps IndigoVision external system input numbers
# to S2 Systems NetBox events
#
# InputNumber, Event Details, comment
#
# The first element of each entry is a positive integer
# corresponding to an External Detector input in the Alarm Server.
# The second element is a string representing the event sent from the NetBox.
# The third element is an optional comment field which is used by the Alarm Import
# tool as the detector name.
# There are 3 ways that the event name can be defined depending on the
# configuration of the S2 NetBox. Both event name and event source are limited by
# the NetBox to 65 characters long.
# User defined event name only:
# Event Name
# Event source(Alarm Active, Alarm Normal) and user defined event name:
# Event Source:Event Name
# Event source(PortalName, AlarmPanelName, IPanelName) and system event
# name (Access Denied, Access Granted):
# Event Source:System Event Name
# The examples below show the way in which a user event "Unauthorised Access"
# can be configured. In the NetBox the user event Unauthorised Access is configured
# to trigger
# whenever an invalid system event is raised on the portal "SF Main Entrance Door".
# User defined event name only
# 100, Unauthorised Access
# Event source and user defined event name.
# 101, Alarm Active:Unauthorised Access
# 102, Alarm Normal:Unauthorised Access
# The example below describes how to configure a system event. This
# example uses the Access Denied system event generated whenever an Invalid system
# event
# is raised on the portal "SF Main Entrance Door"
# 103, SF Main Entrance Door:Access Denied
# The following is a non-exhaustive list of supported system events
#
# Portal Events:
#
# Access denied
# Access granted
# Access not completed
# Request temp. unlock
# Request persistent unlock
# Request persistent lock
```

```
# Temp. unlock
# unlock
# lock
# Forced Open
# Restored
# Held Open
# Alarm Panel Events:
#
# Alarm panel armed
# Alarm panel disarmed
```

To IV alarm servers configuration file (TolVAlarmServers.conf)

This file contains a list of IndigoVision TolV Alarm Server IP addresses that receive S2 NetBox events. Each Alarm Server IP address is associated with an Alarms To IndigoVision configuration file.

All entries should include a valid IP address. Anything written after # is treated as a comment.

Figure 3: Example of a To IV Alarm Servers Configuration file

```
#
# List of each Alarm Server (NVR) and its ToIv file (without .conf extension)
#
# Each entry consists of up to three comma separated fields
#
# The first field is the IP address of the Alarm Server (mandatory).
#
# The second field is the Alarms To IV configuration file excluding file
# extension of ".conf" (mandatory). All Alarms To IV configuration files
# are located in the "ToIv" folder.
# For example an entry of "ToIv" indicates that the
# Alarms From Iv configuration file is .\ToIv\ToIv.conf
#
# The optional third field can be used to provide a description.
#
# Note that it is possible to set up all Alarm Servers to use the one default
# Alarms To Iv configuration file by entering "ToIv" as the second field
# for all entries.
# IP address, ToIv file, Description (optional)
# Example using all three fields:
#
# 0.0.0.0, ToIv, Default ToIv\ToIv.conf
# Example using two fields:
# 0.0.0.0, ToIv
```


6 TROUBLESHOOTING

This chapter provides troubleshooting information to resolve common issues.

Alarms not appearing in Control Center

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

1. Enable debug level logging.
Set `Level=debug` in the **[Log]** section of the system configuration file, then restart the S2 Integration Module service.
This allows the Integration Module to log all alarms received from the monitored system, not just those that have been mapped in the event configuration file.
2. Verify that the Integration Module service is running.
If there are problems with the connection to the codec, make sure that firewall is correctly set up.
 - ▶ For more information about the IndigoVision firewall requirements, refer to the "IndigoVision Control Center Installation Guide".
3. Verify that the Integration Module is sending events to the nominated Alarm Server.
Open the most recent Integration Module log file, and check for messages stating that the alarm has been sent.
If the event is in the log file then the Alarms To IV configuration file (`Tolv.conf`) is not correctly configured to forward this event to the IndigoVision system.
4. Verify that the corresponding zones and external detectors have been created, that the zones have been set, and the external detectors have been enabled in Control Center.
In Setup, select the appropriate site in the **Alarms** tab of the Site Explorer then:
 - a. Select the **External Systems** tab and ensure that an External System with the IP address of the PC running the S2 Integration Module has been created.
 - b. Select the **Zones** tab and ensure that a zone has been created containing an external detector with the **Input Number** being the external input number configured for the event.
 - c. Ensure that the zone belongs to the nominated Alarm Server.
Right-click the zone and select **Properties > Zone**. Ensure that the Alarm Server is the same as that configured in the ToIV Alarm Servers configuration (`TolvAlarmServers.conf`) file for the S2 Integration Module.
5. Verify that the System user is authorized to write to the log file regardless of the current login user's authorization.

License Dongle Issues

If the S2 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.

Possible Issues

Occasionally there can be issues arising with the use of the Aladdin HASP license dongle on machines that currently have, or have been in the past, installed with the Aladdin HASP software.

This manifests itself as:

- The inability to install the Aladdin HASP software driver correctly during the installation process of the S2 Integration Module .
- Being unable to correctly check and validate the USB licence dongle, as it is inactive after the installation process.

Aladdin HASP Driver Software Version

The S2 Integration Module installation will attempt to install version 6.56 of the Aladdin HASP Driver Software as a merge module install.

There are known incompatible-uninstall issues with versions previous to v6.56 of the Aladdin HASP Driver Software.

To determine the version of the HASP driver used, check the registry entry for:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Aladdin Knowledge Systems\HASP\Driver\Installer\Version
```

Notice *This is the registry location for version 5.95. Other versions may differ.*

How to Check for Aladdin HASP Software

To ascertain whether Aladdin HASP software is installed then check the windows registry for an entry of:

```
HKEY_LOCAL_MACHINE\SOFTWARE\Aladdin Knowledge Systems
```

To ascertain whether Aladdin HASP software has been installed at some point regardless of whether a registry entry exists then check for the existence of Aladdin common files in the directory:

[Program Files]\Common Files\Aladdin Shared

Where **[Program Files]** refers to your Windows program files directory, normally **C:\Program Files**.

How to Check that the Aladdin HASP Dongle is Active

If the Aladdin 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:
 - Aladdin HASP HL Key
 - Aladdin HASP Key
 - Aladdin USB Key

