IndigoVision

Southwest Microwave INTREPID Integration Module

Administrator's Guide

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TABLE OF CONTENTS

1 ABOUT THIS GUIDE

This document is provided for system administrators integrating the Southwest Microwave INTREPID system with IndigoVision SMS4. The guide details the steps involved in installing and configuring the Southwest Microwave INTREPID Integration Module.

Safety notices

This guide uses the following formats for safety notices:

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

⚠ **Caution**	*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 Centre Help
   Start > IndigoVision > Control Center 4 > Control Center Help
   (located on the Control Center server)
2. IndigoVision SMS4 Installation Guide
   Available on the SMS4 CD

2 OVERVIEW

The IndigoVision Southwest Microwave INTREPID Integration Module allows events from Southwest Microwave INTREPID devices to be integrated into IndigoVision IP video and alarm management systems.

Compatibility

Please ensure you have properly set up and configured the Southwest Microwave INTREPID system.

System requirements

The Southwest Microwave INTREPID Integration Module is compatible with the following operating systems:

- Windows Server 2008 R2
- Windows 7

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

Network Video Recorders

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

Serial to Ethernet

The Southwest Microwave INTREPID Integration Module is compatible with Comtrol's DeviceMaster allowing Southwest Microwave devices to be accessed over a standard Ethernet network.

USB license dongle

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

► For more information about troubleshooting the USB license, see *"License Dongle Issues" on page 20*

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3 INSTALLATION

Ensure the Southwest Microwave INTREPID Integration Module USB License dongle is inserted into the server before the installation phase begins.

1. Insert the IndigoVision Integrations DVD or download the module from the partner extranet site.

2. Run the ***IntegrationModules > Southwest Microwave INTREPID > setup.exe*** file and follow the on screen instructions.

   The Southwest Microwave INTREPID Integration Module is installed to ***C:\Program Files\IndigoVision\Integration\Southwest Microwave INTREPID***.

3. Specify the system configuration parameters in the system configuration file presented during install.

   ► For more information, see *"System Configuration Files" on page 13*

4. Specify the mappings of the Southwest Microwave INTREPID device alarms to the IndigoVision alarm IDs in the ToIV configuration file presented during install.

   ► For more information, see *"Alarms to IV Configuration file (ToIV.conf)" on page 11*

5. Specify the Alarm Servers and their corresponding ToIV mapping files in the ToIV Alarm Server configuration file presented during install.

   ► For more information, see *"To IV Alarm Servers Configuration file (ToIvAlarmServers.conf)" on page 12*

6. Specify the IndigoVision replay output numbers and their corresponding Southwest Microwave INTREPID device relay in the From IV Relays Configuration file presented during install.

   ► For more information, see *"From IV Relays Configuration file (FromIvRelays.conf)" on page 12*

7. Start the Southwest Microwave INTREPID Integration Module service from the service control manager (Services) in the Administrative Tools in ***Control Panel > Administration Tools > Services***.

4   CONFIGURATION

This chapter describes how to configure the IndigoVision Southwest Microwave INTREPID Integration Module.

Integration Module

To integrate Southwest Microwave INTREPID events into SMS4 you must configure the following:

1. Edit the system configuration file (System.conf).
   - ► For more information, see *"System Configuration file (System.conf)" on page 11*
2. Configure the list of ToIv IndigoVision alarm servers that receive Southwest Microwave INTREPID events (ToIvAlarmServers.conf).
   - ► For more information, see *"To IV Alarm Servers Configuration file (ToIvAlarmServers.conf)" on page 12*
3. Configure the events of interest (ToIv.conf).
   - ► For more information, see *"Alarms to IV Configuration file (ToIV.conf)" on page 11*
4. Configure the relays of interest (FromIvRelays.conf).
   - ► For more information, see *"From IV Relays Configuration file (FromIvRelays.conf)" on page 12*
5. Define the Southwest Microwave INTREPID 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 IV Configuration file (ToIV.conf)

This file contains the mapping between the Southwest Microwave INTREPID device event and the IndigoVision external system input. It contains the data that will map the event received from the device to the IndigoVision system.

► For more information, see *"Alarms to IndigoVision Configuration File (ToIv.conf)" on page 14*

To IV Alarm Servers Configuration file (ToIvAlarmServers.conf)

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

► For more information, see *"To IV Alarm Servers Configuration File (ToIvAlarmServers.conf)" on page 16*

From IV Relays Configuration file (FromIvRelays.conf)

This file contains a list of IndigoVision relay output numbers. Each is associated with the corresponding Southwest Microwave INTREPID device relay.

► For more information, see *"From IV Relays Configuration file (FromIvRelays.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. 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.

Create a new external relay

Add a new relay for each Southwest Microwave INTREPID relay that should be controlled by the IndigoVision SMS4. Refer to the Control Center online help about creating external relays.

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

5 SYSTEM CONFIGURATION FILES

This chapter contains examples of the configuration files required by the Southwest Microwave INTREPID Integration Module.

System Configuration File (System.conf)

This file lists the configurable system parameters that are independent of 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

```
[AlarmServer]
#
# The IP address of the primary Alarm Server (NVR) must be specified
# if any SystemEvents are defined
#
#IP=0.0.0.0
[SystemEvents]
#
# SystemEvents are events that may be sent to Control Center
# to report the status of, or problems with, the Integration Module.
#
# 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 Primary 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
[SWM]
#
# Southwest Microwave INTREPID devices are defined here using the following syntax
```

```
# <DeviceName>=<COMPort>,<Address>,<Type>
#
# DeviceName: The name that will be used to reference the device in
# any ToIv files that are configured
#
# COMPort: The COM port the device is connected to
#
# Address: The address of the device in the Southwest Microwave system
#
# Type: The type of device, this can be one of the following:
# PMII, MTPII, MW330, AIMII, ROMII-8, ROMII-16
#
# Examples:
#WestPerimeterA=COM1,0,PMII
#MainGateControl=COM1,1,ROMII-8
[Relays]
#
# If any ROMII-8 or ROMII-16 relays are specified in the FromIv Relays config file,
# FromIvRelay support must be enabled here by setting EnableFromIvRelays to true.
# Disable FromIvRelay support by setting EnableFromIvRelays to false, or removing
# the EnableFromIvRelay line.
#
# EnableFromIvRelays=true
[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 (ToIv.conf)

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

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

Figure 2: Example of an Alarms to IndigoVision Configuration file

```
# This file maps IndigoVision external system input numbers
# to Southwest Microwave device alarms
#
# InputNumber, Alarm Details, OptionalDescription
#
# The first element of each entry is a positive integer
# corresponding to an External Detector input in the Alarm Server.
```

```
# The second element is defined using the following details:
# <DeviceName>:<AlarmType>:<AlarmNumber>:<State>
#
# DeviceName: The name of the device (configured in System.conf)
#
# AlarmType: The type of alarm. Each device type supports different
# alarms, refer to the Admin Guide for detailed information
# on these
#
# AlarmNumber: The number of the alarm, there can be multiple alarms for each
# AlarmType on a device, and this number specifies which one to use.
# This value can also be a range of alarms, as shown in the examples.
#
# State: The alarm state that triggers the event - Active/Inactive
# If the AlarmNumber specifies a range of alarms, they will be considered
# to be Active if any of the alarms are active, and Inactive only if none
# of the alarms are active.
#
# An optional third field, separated by another comma can be added
# with a description of the event mapping.
#
# Examples:
# 100,WestPerimeterA:CableA:0-15:Active
# 101,WestPerimeterA:CableB:0-15:Inactive
# 102,WestPerimeterA:Tamper:0:Active
# 103,WestPerimeterA:Tamper:0:Inactive
```

Table 1:   Alarms and supporting device types

Alarm	Description	Device types (alarm value)
CableA	Monitors the status of a cell from the A cable of a PMII or MTPII module	PMII (0-215), MTPII (0-143)
CableB	Monitors the status of a cell from the B cable of a PMII or MTPII module	PMII (0-215), MTPII (0-143)
Auxiliary	Monitors the status of an auxiliary input on a PMII or MW330 module	PMII (0-3), MW330 (0)
Fault	Monitors cable faults on PMII and MTPII modules (0 = CableA, 1 = CableB)	PMII (0, 1), MTPII (0, 1)
Tamper	Monitors tampering on all modules	PMII (0), MTPII (0), MW330 (0), AIMII (0), ROMII-8 (0), ROMII-16 (0)
SoftwareTrap	Monitors software crashes on the PMII, and MTPII modules	PMII (0), MTPII (0)
ServiceStatus	Monitors access by the UIST on the PMII, MTPII, and MW330 modules	PMII (0), MTPII (0), MW330 (0)
Offline	Monitors the availability of all modules	PMII (0), MTPII (0), MW330 (0), AIMII (0), ROMII-8 (0), ROMII-16 (0)
Alarm	Monitors the triggering of alarms on the MW330 and AIMII modules	MW330 (0), AIMII (0-7)
PathAlarm	Monitors detection interference on the MW330 module	MW330 (0)

Alarm	Description	Device types (alarm value)
LineStatus	Monitors the availability of individual inputs on the AIMII module	AIMII (0-7)
Relay	Monitors the status of relays on the ROMII-8 and ROMII-16 modules	ROMII-8 (0-7), ROMII-16 (0-15)

To IV Alarm Servers Configuration File (TolvAlarmServers.conf)

This file contains a list of IndigoVision ToIv Alarm Server IP addresses that receive Southwest Microwave INTREPID events. Each Alarm Server IP address is associated with an Alarms To IndigoVision configuration file.

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
```

All the entries should include a valid IP addresses.

Anything written after # is considered as a comment.

From IV Relays Configuration file (FromIvRelays.conf)

This file contains a list of IndigoVision relay output numbers. Each is associated with the corresponding Southwest Microwave INTREPID device relay.

Figure 4: Example of a From IV Relays Configuration file

```
# This file maps IndigoVision external relay output numbers
# to Southwest Microwave device relays
#
# OutputNumber, Relay Details
#
```

```
# The first element of each entry is a positive integer
# corresponding to an External Relay output in the IndigoVision
# SMS4 System
#
# The second element is defined using the following details:
# <DeviceName>:<RelayNumber>
#
# DeviceName: The name of the device (configured in System.conf)
#
# RelayNumber: The number of the relay. This defines which relay on
# the device should be controlled by the external relay
#
# Example:
# 1,MainGateControl:0
```

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 Southwest Microwave INTREPID 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 SMS4 Installation Guide. See *"References" on page 1*

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. For example:

   ```
   ToIv stateless event 'WestPerimeterA:CableA:0:Active' is not configured to
   send to Alarm Server '10.1.167.7'.
   ```

   If the event is in the log file then the Alarms To IV configuration file (ToIv.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 Southwest Microwave INTREPID 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 (ToIvAlarmServers.conf) file for the Southwest Microwave INTREPID Integration Module.

5. Verify that the System user is authorized to write to the log file regardless of the current login user's authorization.

Relays not triggering in Southwest Microwave INTREPID

If relays are not triggering in Southwest Microwave INTREPID 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 Southwest Microwave INTREPID 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 SMS4 Installation Guide. See *"References" on page 1*

3. Verify that the Integration Module is receiving relay commands.

   Open the most recent Integration Module log file, and check for messages stating that the relay command has been received. For example:

   ```
   FromIv relay output '2' is not configured to send to Southwest Microwave
   INTREPID
   ```

   If the command is in the log file then the From IV Relay configuration file FromIvRelays.conf) is not correctly configured to forward this relay command to the Southwest Microwave INTREPID system.

4. Verify that the corresponding external relay is connected correctly in the Southwest Microwave INTREPID system.

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 Southwest Microwave INTREPID 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 Southwest Microwave INTREPID 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 Southwest Microwave INTREPID 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 v5.0 of the Aladdin HASP Driver Software.

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

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

Notice *This is the registry location for version 6.56. 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