Legal Considerations

Laws that can vary from country to country may prohibit camera surveillance. Please ensure that the relevant laws are fully understood for the particular country or region in which you will be operating this equipment. IndigoVision Ltd. accepts no liability for improper or illegal use of this product.

Copyright

Copyright © IndigoVision Limited. All rights reserved.

This manual is protected by national and international copyright and other laws. Unauthorized storage, reproduction, transmission and/or distribution of this manual, or any part of it, may result in civil and/or criminal proceedings.

IndigoVision is a trademark of IndigoVision Limited and is registered in certain countries. IndigoUltra, IndigoPro, IndigoLite and CyberVigilant are registered trademarks of IndigoVision Limited. Camera Gateway and Integra are unregistered trademarks of IndigoVision Limited. All other product names referred to in this manual are trademarks of their respective owners.

Save as otherwise agreed with IndigoVision Limited and/or IndigoVision, Inc., this manual is provided without express representation and/or warranty of any kind. To the fullest extent permitted by applicable laws, IndigoVision Limited and IndigoVision, Inc. disclaim all implied representations, warranties, conditions and/or obligations of every kind in respect of this manual. Accordingly, save as otherwise agreed with IndigoVision Limited and/or IndigoVision, Inc., this manual is provided on an “as is”, “with all faults” and “as available” basis. Please contact IndigoVision Limited (either by post or by e-mail at technical.support@indigovision.com) with any suggested corrections and/or improvements to this manual.

Save as otherwise agreed with IndigoVision Limited and/or IndigoVision, Inc., the liability of IndigoVision Limited and IndigoVision, Inc. for any loss (other than death or personal injury) arising as a result of any negligent act or omission by IndigoVision Limited and/or IndigoVision, Inc. in connection with this manual and/or as a result of any use of or reliance on this manual is excluded to the fullest extent permitted by applicable laws.

Contact address

IndigoVision Limited
Charles Darwin House,
The Edinburgh Technopole,
Edinburgh,
EH26 0PY
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Considerations</td>
<td>2</td>
</tr>
<tr>
<td>Copyright</td>
<td>2</td>
</tr>
<tr>
<td>Contact address</td>
<td>2</td>
</tr>
<tr>
<td><strong>1 About this guide</strong></td>
<td>5</td>
</tr>
<tr>
<td>Safety notices</td>
<td>5</td>
</tr>
<tr>
<td>References</td>
<td>5</td>
</tr>
<tr>
<td><strong>2 Overview</strong></td>
<td>7</td>
</tr>
<tr>
<td>Compatibility</td>
<td>7</td>
</tr>
<tr>
<td>System requirements</td>
<td>7</td>
</tr>
<tr>
<td>TDSi EXgarde requirements</td>
<td>7</td>
</tr>
<tr>
<td>Licensing</td>
<td>8</td>
</tr>
<tr>
<td><strong>3 Installation</strong></td>
<td>9</td>
</tr>
<tr>
<td>License the Integration</td>
<td>9</td>
</tr>
<tr>
<td>Update TDSi EXgarde Application Pool configuration</td>
<td>10</td>
</tr>
<tr>
<td><strong>4 Configuration</strong></td>
<td>11</td>
</tr>
<tr>
<td>Integration Configuration Tool</td>
<td>11</td>
</tr>
<tr>
<td>Tolv configuration files</td>
<td>12</td>
</tr>
<tr>
<td>Configure the TDSi EXgarde credentials</td>
<td>13</td>
</tr>
<tr>
<td>Logging configuration</td>
<td>13</td>
</tr>
<tr>
<td>IndigoVision Control Center configuration</td>
<td>14</td>
</tr>
<tr>
<td>Create a new external system</td>
<td>14</td>
</tr>
<tr>
<td>Create a new zone and external detector for TDSi EXgarde events</td>
<td>14</td>
</tr>
<tr>
<td><strong>5 Troubleshooting</strong></td>
<td>17</td>
</tr>
<tr>
<td>Service does not start</td>
<td>17</td>
</tr>
<tr>
<td>Unable to connect to the TDSi EXgarde SDK Service</td>
<td>17</td>
</tr>
<tr>
<td>Alarms not appearing in Control Center</td>
<td>18</td>
</tr>
<tr>
<td>Cleared or Acknowledged alarms still present in TDSi EXgarde</td>
<td>19</td>
</tr>
<tr>
<td>TDSi EXgarde alarms unexpectedly acknowledged or deleted</td>
<td>20</td>
</tr>
<tr>
<td>TDSi EXgarde Integration is slow to start</td>
<td>21</td>
</tr>
<tr>
<td>Connection to the TDSi EXgarde SDK is lost every 29 hours</td>
<td>21</td>
</tr>
<tr>
<td>License issues</td>
<td>21</td>
</tr>
</tbody>
</table>
1 ABOUT THIS GUIDE

This guide is provided for system administrators integrating the TDSi EXgarde with IndigoVision Control Center suite.

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:

- Control Center Help
  
  Start > IndigoVision > Control Center > Control Center Help
  
  Located on the Control Center workstation, by default
- IndigoVision Control Center Installation Guide
  
  Located on the Control Center CD
- TDSi EXgarde SDK User Manual, UM0080_7
  
  Located within the Additional Installations/EXgarde SDK folder of the TDSi EXgarde DVD
2 OVERVIEW

The TDSi EXgarde Integration allows events from a TDSi EXgarde system to integrate into IndigoVision Control Center Suite. Operators can acknowledge and delete TDSi EXgarde alarms by acknowledging or clearing the corresponding zone alarm within IndigoVision Control Center.

This document explains how to install and configure the TDSi EXgarde Integration.

Compatibility

Please ensure you have properly installed, configured, and licensed the TDSi EXgarde system.

System requirements

You can install TDSi EXgarde Integration on the following Windows® operating systems with latest service packs applied:

- Windows® Server 2016
- Windows® Server 2012 R2
- Windows® Server 2012
- Windows® Server 2008 R2
- Windows® 10 (64-bit) version 1607 or later
- Windows® 8.1 (64-bit)
- Windows® 7 (64-bit)

If a firewall is enabled on your system, ensure that you add the TDSi EXgarde Integration executable `IndigoVision.IntegrationCore.exe` to the list of exceptions.

TDSi EXgarde requirements

The TDSi EXgarde Integration is compatible and has been tested with TDSi EXgarde Pro 4.5.2 and TDSi EXgarde SDK 4.8.0.0.

- The TDSi EXgarde SDK must be installed.
- The TDSi EXgarde License Server must be running.
- A valid EXgarde PRO license must be present and contain the Intruder Integration option (4420-2501).

The following TDSi EXgarde event types are supported when configured to generate Operator alarms:

- ACU events
- Door events
- Reader events (including those from Biometric readers)
You can install the TDSi EXgarde Integration on either the same machine as the TDSi EXgarde SDK Service, or on a different machine.

► For more information on installing and configuring the TDSi EXgarde SDK, refer to EXgarde SDK User Manual.

**Licensing**

The TDSi EXgarde Integration is a licensed product, which you can install on a physical or virtual machine.

► For more information, see "License the Integration" on page 9

**Notice**

The TDSi EXgarde Integration must not be run on the same server as any other licensed IndigoVision software.
This section describes how to install the TDSi EXgarde Integration.

Before you install the TDSi EXgarde Integration, you must first configure the TDSi EXgarde system:

1. Ensure that TDSi EXgarde License Server is running on the TDSi EXgarde machine.
2. Install the TDSi EXgarde SDK on the TDSi EXgarde machine.
3. If you are using a corporate SQL server, then you will need to amend the TDSi EXgarde SDK configuration file to point to the correct SQL Server and use the correct SQL username.
   - For more information on installing and configuring the TDSi EXgarde SDK, refer to the EXgarde SDK User Manual.
4. Disable Recycling for the TDSi EXgarde application pool.
   - For more information, see "Update TDSi EXgarde Application Pool configuration" on page 10

To install the TDSi EXgarde Integration:

1. Download the TDSi EXgarde Integration from the support section of the IndigoVision website.
   - For more information, see "References" on page 5.
2. Run the setup.exe file and follow the on-screen instructions.
   The TDSi EXgarde Integration is installed to:
   `C:\Program Files (x86)\IndigoVision\Integration\TDSi_EXgarde` by default.
3. If the Microsoft .NET 4.7.1 Framework or later is not installed, then you are prompted to install it.
4. Once the installation is complete, request and install a software license for the TDSi EXgarde Integration using the License Manager tool.
   - For more information, see "License the Integration" on page 9.
5. Configure the TDSi EXgarde Integration.
   - For more information, see "Configuration" on page 11.
6. Start the IndigoVision TDSi EXgarde Integration service using the Windows® services utility.

License the Integration

You must have a valid software license that allows the IndigoVision TDSi EXgarde Integration to run on a specific machine.

You can manage the software license using the License Manager tool, which is installed as part of the TDSi EXgarde Integration standard installation.

1. Create a Client to Vendor file (c2v) that contains a fingerprint of the machine. This is then sent to IndigoVision Order Management.
2. Apply a Vendor to Client file (v2c) provided by IndigoVision.
   You can transfer a license from one machine to another using the License Manager tool.

### Update TDSi EXgarde Application Pool configuration

The IIS web server for the TDSi EXgarde SDK requires a manual change to keep the connection between the TDSi EXgarde SDK and IndigoVision TDSi EXgarde Integration alive. By default the connection has a life time of 1740 minutes (29 hours).

1. On the TDSi EXgarde Server machine, run **Internet Information Services (IIS) Manager**.

   *Start > Administrative Tools > Internet Information Services (IIS) Manager*

2. Expand the tree for the machine on the left and select **Application Pools**.

3. Right-click **Exgarde** from the tree, and select **Recycling**.

4. Deselect the **Regular time intervals (in minutes)** checkbox.

5. Click **Next**.

6. Click **Finish**.
4 CONFIGURATION

To integrate TDSi EXgarde alarm events into the IndigoVision Alarm Server, perform the following steps:

1. Run the Integration Configuration Tool for TDSi EXgarde Integration – see "Integration Configuration Tool" on page 11
2. If you are using a corporate SQL Server, you may need to configure the credentials for the Integration to connect – see "Configure the TDSi EXgarde credentials" on page 13
3. Logging configuration – see "Logging configuration" on page 13
4. IndigoVision Control Center configuration
   a. Create a new external system – see "Create a new external system" on page 14
   b. Create a new zone and external detector for TDSi EXgarde events – see "Create a new zone and external detector for TDSi EXgarde events" on page 14

Integration Configuration Tool

The Integration Configuration Tool can be used to configure the events and system settings for the TDSi EXgarde Integration:

1. Run the Integration Configuration Tool for TDSi EXgarde Integration.
   Start > All Programs > IndigoVision TDSi EXgarde Integration > Configure TDSi EXgarde Integration
2. Optionally provide the Alarm Server IP for System Events.
   • System Events report the status of the TDSi EXgarde Integration and its connection to TDSi EXgarde.
3. Provide the IP address of the TDSi EXgarde Integration.
   • When the IndigoVision TDSi EXgarde Integration is installed on a machine with multiple network adapters or multiple IP addresses, the Integration IP must be specified.
   • This must be the IP of the External System configured in Control Center.
4. If the Alarm Server IP for System Events was provided, configure System Events.
5. Provide the TDSi EXgarde SDK Address.
   • Typically this will be http://MachineName/EXgarde, where MachineName is the host name of the machine running TDSi EXgarde SDK Service.
   • This setting can be omitted if the TDSi EXgarde Integration is installed on the same machine as the TDSi EXgarde SDK.
6. Provide the name of the TDSi EXgarde Operator that the TDSi EXgarde Integration should use to connect to TDSi EXgarde.
7. Specify the IndigoVision Alarm Servers that will receive events.
   • Each Alarm Server supports up to 10,000 detectors.
   • If you require more than 10,000 TDSi EXgarde alarms to be configured, or the Alarm Server has detectors for other sources configured (such as Advanced
Analytics or Digital Input detectors), then you can split the configuration of TDSi EXgarde alarms across multiple Alarm Servers.

8. Configure the event mappings for each Alarm Server. The event mapping file is known as a ToIv configuration file (events to IndigoVision). The ToIv configuration file for the Alarm Server will open in a new window. For more information, see "ToIv configuration files" on page 12

9. Optionally enable Alarm Actions from IndigoVision Control Center if you wish to acknowledge and delete TDSi EXgarde alarms from IndigoVision Control Center.

10. Click Finish to close the dialog and save your settings.

**ToIv configuration files**

This section covers the configuration for TDSi EXgarde alarms that are sent from the TDSi EXgarde system to the IndigoVision Control Center suite to activate detectors.

ToIv configuration files contain information for mapping each TDSi EXgarde alarm received from the TDSi EXgarde system to the IndigoVision Control Center suite. A ToIv file must be configured for each Alarm Server.

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

**Figure 1: Example of a ToIv Configuration file**

```plaintext
# This file contains the ToIv mapping of TDSi EXgarde alarms to
# IndigoVision external event input numbers.
#
# InputNumber, TDSiEXgardeAlarm, Optional Description
#
# Each entry consists of three comma separated elements:
#
# 1. The first element of each entry is the positive integer
#    corresponding to the External Event input in the Alarm Server.
#
# 2. The second element, TDSiEXgardeAlarm, describes the details of the alarm
#    within TDSi EXgarde.
#
#    EXgarde event or alarm name contains three or four parts in the format:
#    - TYPE:ACU name:Event name
#    - TYPE:ACU name:Equipment name:Event name
#
#    TYPE: The first part indicates the type of alarm. Valid values are:
#    - ACU
#    - DOOR
#    - READER
#
#    ACU name: The second part indicates the name of the ACU that either
#    triggered the alarm, or the ACU for the Door or Reader.
#
#    Equipment name: Only for DOOR or READER alarms.
#    The name of the Door or Reader should be provided as the third part.
#
#    Event name: The last part is name of the Event, as seen within the EXgarde
#    Explorer software's "Alarms" window.
```
# 3. An optional third field, separated by another comma can be added with a description of the event mapping.

# Examples:
# 10, ACU:Entrance ACU:ACU Time-out
# 11, DOOR:Entrance ACU:Front Door:Door forced

# Example of an event with the optional description:
# 12, READER:Entrance ACU:Entry Reader:No PIN, No PIN provided to enter office

# The EventName cannot contain the characters ':', '\', '{', '}' or ','. The following octal escape codes can be used to represent these characters.
# Character ':' => \072
# Character '\': => \134
# Character '{': => \173
# Character '}': => \175
# Character ',': => \054

# Example using octal escape codes when the ACU name is "ACU { 3 }":
# 13, ACU:ACU \173 3 \175:ACU Case Open

Octal escape codes are required to configure TDSi EXgarde alarms with special characters, such as comma, colon, backslash, and leading and trailing spaces.

**Configure the TDSi EXgarde credentials**

If TDSi EXgarde has been configured to use a corporate SQL server then you need to provide a username and password for the database. This is not required if you are using the default TDSi EXgarde installation.

1. Provide the Database Username and Database Password for the TDSi EXgarde SDK using the EXgrade SDK Configuration Tool, which is installed with the TDSi EXgarde SDK.
   
   ▶ For more information on configuring the TDSi EXgarde SDK, refer to "EXgrade SDK User Manual".

2. Provide the same Database Username and Database Password for the TDSi EXgarde Integration using the Configure Credentials Tool.
   
   a. Run the **Configure Credentials Tool** from **Start > IndigoVision TDSi EXgarde Integration**.

   b. Enter the Database Username and Database Password that the TDSi EXgarde SDK is using.

   c. If you are using the default TDSi EXgarde installation and SQL Server, then these fields should be left as default.

   d. Click **Save**.

   e. Click **Yes** to restart the service using the new credentials.

**Logging configuration**

Logging is configured with a separate file, which allows you to customize logging and to manage backup log files.
You need only change this file when you require more detail on events received, or as advised by IndigoVision.

To access this file, navigate to the following location:

Start > All Programs > IndigoVision TDSi EXgarde Integration > Logging Configuration for TDSi EXgarde Integration

To adjust the logging level, modify level in the root section. You can change this to one of the following values:

- **DEBUG**: Verbose logs with comprehensive details on operations.
- **INFO**: Details successful events and behavior as well as all warnings and errors.
- **WARN**: All messages logged are warning or error messages that indicate that the TDSi EXgarde Integration is functioning incorrectly and may require action.
- **ERROR**: Only capture messages where a failure has occurred and may require action.
- **FATAL**: Critical errors where the TDSi EXgarde Integration cannot continue.

For example, to increase the default logging level to include confirmation of events sent successfully:

```xml
<level value="INFO"/>
```

You can customize the retention of log files by editing the following values:

- **maximumFileSize**: The size of individual log files before a new file is created.
- **maxSizeRollBackups**: The number of backup files kept. Older files are removed when this limit is reached and new files are required.

IndigoVision recommends that you do not change any other settings unless advised to by IndigoVision.

### IndigoVision Control Center configuration

If the Integration Online, Integration Offline, Third Party Offline or Third Party Online system events have been configured, 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 TDSi EXgarde Integration. Refer to the Control Center online help about creating a new external system.

### Create a new zone and external detector for TDSi EXgarde events

You must create zones and detectors for the configured TDSi EXgarde events using one of the following methods:

1. Manually create the zones and external detectors within Control Center.
   - Add a new zone for each unique alarm you want to report in Control Center.
   - Within the zone, create a new external detector for the external system. Specify the Input Number as the Activation Input Number configured for the event in the Tolv configuration file of the TDSi EXgarde Integration.
   - IndigoVision recommends that you configure the zone name description in Control Center to closely match the TDSi EXgarde alarm name. This will help to ensure there is no confusion in correlating events.

2. Use the IndigoVision Import Alarm Sources tool to automatically create zones and detectors for each event within a Tolv configuration file.
• After you have edited the ToIv configuration file, accessible through the Integration Configuration Tool, with all the supported events, configure an IndigoVision Alarm Server using the IndigoVision Import Alarm Sources tool.

• You can download the Import Alarm Servers tool from the IndigoVision website.

• Every time an event is added to ToIv configuration file, run the tool again to create new zones and detectors.
5 TROUBLESHOOTING

This chapter provides troubleshooting information for the TDSi EXgarde Integration.

Service does not start

If the IndigoVision TDSi EXgarde Integration does not start properly from Windows Services, then open the most recent log file and look at the latest two messages marked as FATAL.

If no FATAL level log messages are available:
1. Open Windows Event Viewer
2. Navigate to Windows Logs > Application
3. Find one or more events logged at ERROR level and with Source IndigoVision IntegrationCore Service

The General field describes why the service is not starting.

Unable to connect to the TDSi EXgarde SDK Service

If you are unable to connect to the TDSi EXgarde SDK Service, check the following:
1. Check the log file for ERROR level messages and follow the advice in the error message.
2. If you see the following message:
   
   [ERROR][TdsiExgardeIntegration.Connection.ExgardeConnection]: Connection failed:
   The credentials provided are invalid.

   • The Operator may be incorrect and must be configured using the Integration Configuration Tool.
   ▶ For more information, see "Configure the TDSi EXgarde credentials" on page 13.
   • The TDSi EXgarde SDK database credentials may require configuring using the Configure Credentials Tool.
   ▶ For more information, see "Configure the TDSi EXgarde credentials" on page 13.
3. If you see the following message, the TDSi EXgarde Integration has not received a response from the TDSi EXgarde SDK Service.
   
   [ERROR][TdsiExgardeIntegration.Connection.ConnectionManager]: The connection to TDSi EXgarde SDK Service has not been established. Attempting to create a new connection.

   • Ensure that the TDSi EXgarde SDK Address has been correctly configured.
   • Ensure that the TDSi EXgarde License Server is running on the TDSi EXgarde server.
   • Open the Windows® services utility on the TDSi EXgarde server and restart the service EXgarde SDK.
   • Enable logging on the TDSi EXgarde SDK to identify any issues encountered by the TDSi EXgarde SDK Service.
For more information, refer to the “EXgarde SDK User Manual”.
4. If no error messages are seen, enable INFO level logging and check for messages stating that the connection is made successfully.
   ▶ For more information, see "Logging configuration" on page 13.

   [INFO]{TdsiExgardeIntegration.Connection.ExgardeConnection}: Successfully connected to TDSi EXgarde SDK service.

Alarms not appearing in Control Center

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

1. Verify that the TDSi EXgarde Integration is running.
2. Enable INFO level logging.
   ▶ For more information, see "Logging configuration" on page 13.
   
   This enables the TDSi EXgarde Integration to log all alarms and events received from the monitored system, not only those that are mapped in the event configuration file.
3. If the TDSi EXgarde Integration cannot contact the Alarm Server, you will see a log message similar to the following:

4. Ensure that the Alarm Server is online, and that the firewall is not blocking communication. Refer to the IndigoVision Control Center Installation Guide for more information about IndigoVision Firewall Requirements.
   ▶ For more information, see "References" on page 5

5. Verify that the TDSi EXgarde Integration is sending events to the nominated Alarm Server by opening the most recent TDSi EXgarde Integration log file.

   Check for messages stating that the alarm has been sent, for example:
   2018-03-31 11:16:23,838 [INFO]{IntegrationCore.Core.Event.BindingKit}: ToIv stateless event sent to Alarm Server '10.1.219.11' with external input number '104' from IP '10.1.219.1'. UTC time of the event was '31/03/2018 11:16:23'.

   If the event is not in the log file, then the event may not have been raised as an alarm in TDSi EXgarde:
   a. Open TDSi EXgarde Explorer and view the Alarms window and check whether the alarm is present.
   b. If the alarm is not present, then it must be enabled as an Operator alarm:
      i. Within the Equipment window, navigate to the ACU, Door or Reader of interest.
      ii. Enable the Properties panel.
      iii. Select the equipment item of interest so that its properties are shown.
      iv. Expand Additional Configuration and view the Events tab.
      v. Identify the Event message of interest and right-click, then select Properties.
      vi. Tick Generate Operator Alarm and optionally select an Alarm procedure.
      vii. Click OK.

   This type of event will then be detected by the IndigoVision TDSi EXgarde Integration and if mapped, forwarded to the appropriate Alarm Server.
   c. If the alarm is present, then the TDSi EXgarde SDK Service may have encountered a problem.
      • Open the Windows® services on the TDSi EXgarde server and restart the service EXgarde SDK.
• Restart the TDSi EXgarde License Server and then restart the service **EXgarde SDK**.

• Restart the machine running TDSi EXgarde.

If the event is in the log file, then the ToIv configuration file is not correctly configured to forward this event to the IndigoVision system, in which case you will see a log message similar to the following:

```
2018-08-30 10:42:08,335 [INFO ][IntegrationCore.Core.EventManager]: ToIv event 'DOOR:Entrance ACU:Main Door:Door forced' is not configured to send to any Alarm Server.
```

6. Verify that you have:
   • created corresponding zones and external detectors
   • set the zones
   • enabled external detectors in Control Center

In **Setup**, select the relevant site in the **Alarms** tab of the Site Explorer, then:

a. Select the **External Systems** tab. Ensure that you have created an External System with the IP address of the PC running the TDSi EXgarde Integration.

b. Select the **Zones** tab. Ensure that you have created a zone containing an external detector with the Input Number as the external input number configured for the event.

c. Ensure that the zone belongs to the nominated Alarm Server.

   Right-click the zone, then select **Properties > Zone**.

7. Ensure that the Alarm Server containing the zones and detectors for TDSi EXgarde alarms is the same Alarm Server that is configured using the Integration Configuration Tool.

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

### Cleared or Acknowledged alarms still present in TDSi EXgarde

When Alarm Actions from Control Center are enabled, then acknowledging an alarm within Control Center should acknowledge all alarms for TDSi EXgarde alarms mapped to detectors within the zone. Similarly clearing an alarm within Control Center will delete alarms within TDSi EXgarde.

Should acknowledging or clearing an alarm in Control Center fail to acknowledge or delete the corresponding alarm(s) in TDSi EXgarde, then the following steps may help you to determine the source of the problem:

1. Verify that the TDSi EXgarde Integration is running and connected to TDSi EXgarde.

2. Ensure that Alarm Actions from Control Center have been enabled.

   ▶ For more information on enabling this feature, see "Integration Configuration Tool" on page 11

3. Enable **INFO** level logging.

   ▶ For more information on enabling this feature, see "Logging configuration" on page 13

   This enables the TDSi EXgarde Integration to log all alarms alarm actions received from Control Center as well as alarm events from TDSi EXgarde.

4. Check the log file to see if the alarm was acknowledged or deleted within TDSi EXgarde.
When an alarm is acknowledged within TDSi EXgarde, you will see a log message similar to the following:

INFO |TdsiExgardeIntegration.Alarms.AlarmManager]: Alarm Door:Door forced [38286] is now acknowledged.

When an alarm is deleted within TDSi EXgarde, you will see a log message similar to the following:

INFO |TdsiExgardeIntegration.Alarms.AlarmManager]: The alarm 'ACU:Dummy ACU:ACU Time-out [38311]' has been deleted in TDSi EXgarde.

5. Check the log file to see if the TDSi EXgarde Integration performed the alarm action.

When an alarm acknowledgment is processed, you will see a log message similar to the following:


The equivalent for when an alarm is cleared in Control Center would be:


6. If the above log messages are not seen:

a. The Control Center zone did not contain any detectors mapped to TDSi EXgarde alarms.

► For more information on the mapping of Control Center detectors to TDSi EXgarde events, see "Tolv configuration files" on page 12

b. The alarm was already acknowledged within TDSi EXgarde (applies to acknowledgements only), in which case the following log message will be present:


c. The alarm was already deleted within TDSi EXgarde, in which case the following log message will be present:

INFO |TdsiExgardeIntegration.Alarms.AlarmActionService]: There are no active alarms to delete for 'DOOR:Entrance ACU:Alarming Door:Door forced'

TDSi EXgarde alarms unexpectedly acknowledged or deleted

When Alarm Actions from Control Center are enabled, then acknowledging an alarm within Control Center should acknowledge all alarms for TDSi EXgarde alarms mapped to detectors within the zone. Similarly clearing an alarm within Control Center will delete alarms within TDSi EXgarde.

If this behavior is not desired, then Alarm Actions from Control Center should be disabled.

► For more information on disabling this feature, see "Integration Configuration Tool" on page 11

Should acknowledging or clearing an alarm in Control Center acknowledge or delete more alarms than expected:

• The alarm may be for a zone containing multiple detectors mapped to TDSi EXgarde alarms. In this case you should create one zone per TDSi EXgarde alarm.

• If there are multiple active TDSi EXgarde alarms for the same hardware and event, acknowledging or clearing an alarm within Control Center will acknowledge or delete all matching alarms within TDSi EXgarde. When there are multiple active TDSi
EXgarde alarms that are mapped to a detector belonging to a Control Center alarm, the log file will contain a log message similar to:

[INFO ][TdsiExgardeIntegration.Alarms.AlarmActionService]: There are 2 active alarms for 'DOOR:Entrance ACU:Front Door:Door forced'. All alarms will be acknowledged.

**TDSi EXgarde Integration is slow to start**

If no internet access is available, a standard security check causes the TDSi EXgarde Integration service to start slowly, taking up to one minute.

To resolve this, disable **Check for publisher's certificate revocation**, which is typically found in the Advanced tab of Internet Options. However, this must be disabled for the Windows user running the service, which by default is Local System.

To disable *Check for publisher's certificate revocation* for the Local System user, edit the registry key:

1. Start the Windows Registry Editor (*Regedit.exe*).
2. Navigate to `HKEY_USERS\S-1-5-18\Software\Microsoft\Windows\CurrentVersion\WinTrust\TrustProviders\Software Publishing`.
3. Double-click State.
4. Set the Value data to 23e00 for hexadecimal or 146944 in decimal.
5. Click OK.
6. Quit Registry Editor.

Optionally, perform the same steps for the default registry key: `HKEY_USERS\DEFAULT\Software\Microsoft\Windows\CurrentVersion\WinTrust\TrustProviders\Software Publishing`.

If you have configured a different user to run the service, disable **Check for publisher's certificate revocation** for that user.

If you are able to log into Windows with this user account, use the method described to disable the option.

**Connection to the TDSi EXgarde SDK is lost every 29 hours**

The default behaviour of the IIS web server used by the TDSi EXgarde SDK is to recycle every 29 hours. This causes a connection failure between the TDSi EXgarde Integration and the TDSi EXgarde SDK. The TDSi EXgarde Integration automatically reconnects but to avoid regular connection loss you must disable recycling for the TDSi EXgarde application pool.

▶ For more information, see "Update TDSi EXgarde Application Pool configuration" on page 10

**License issues**

You should not encounter license issues if the TDSi EXgarde Integration is installed on a machine that has not had Sentinel HASP software installed previously.

However, possible issues may occur if the machine to be installed on has previously had Sentinel HASP software installed on it.
Before installing the TDSi EXgarde Integration, uninstall IndigoVision software that is licensed with a software license.