Indu-Sol INspektor® → MaintainX Integration

Setup and Troubleshooting Guide

How to connect your Indu-Sol INspektor® network monitoring to MaintainX, so that network faults become work orders automatically.

What this integration does

INspektor® devices watch your PROFIBUS, PROFINET, and EtherNet/IP networks and record problems: a device dropping off the network, a bad cable, a device that keeps re-sending messages, and so on.

This integration connects your INspektor® to MaintainX. A small program reads the INspektor®, decides what each problem means, and automatically creates a MaintainX work order describing the fault and the recommended action. Your maintenance team sees the work order the same way they see any other — with the affected asset, a priority, and a description of what to check.

The result: a network problem becomes a work order in your CMMS without anyone having to notice it first.

How it works, in one picture

```
Your INspektor  →  Connector program  →  MaintainX
(watches the       (reads the INspektor,   (work order
 network)           creates work orders)    appears)
```

The connector program runs on a computer inside your own network. It reads your INspektor® locally and sends work orders out to MaintainX. It never lets anyone reach into your network from outside, and Indu-Sol never receives or stores your data, the data goes only to your own MaintainX account.

A few things worth knowing before you start

- The connector runs continuously. It checks your INspektor® every 30 seconds, around the clock. It needs to run on a computer that stays on, not someone's laptop.
- You connect your MaintainX records yourself. The connector attaches each work order to a MaintainX asset that you have already created. You will set this up in Step 1.
- It only creates work orders. The connector never changes or closes anything in MaintainX. Closing a work order is done by your team, the normal way.
- Duplicate faults are held back. If the same fault keeps happening, the connector will not flood you with tickets, it waits (12 hours by default) before raising the same fault again.

Before you begin

Make sure you have all of the following. The setup will not work if any are missing.

You need	Details
A MaintainX account with API access	You must be able to reach Settings > API in MaintainX to get an API key.
An INspektor® on the network	Your Indu-Sol INspektor® must already be installed and working on the network you want to monitor.
A computer that stays on	A PC, server, or virtual machine on the same network as the INspektor®. It must stay powered on so monitoring is continuous. Windows, Linux, and macOS all work.

You need	Details
Network access from that computer	The computer must be able to reach the INspektor® (local network) and the internet to contact MaintainX.
Python 3.8 or newer	Installed on that computer. If you are not sure whether you have it, your IT team can check.
The connector files from Indu-Sol	We will send you the program files and a settings file (config.txt)

Setup

There are five steps. Steps 1 and 2 are done in MaintainX. Steps 3 to 5 are done on the computer that will run the connector. Set aside about 30 minutes and involve your IT team for Step 5 if you are not comfortable running programs on a server.

Step 1 — Create your records in MaintainX

The connector attaches each work order to things that already exist in MaintainX. Create these first, then note their ID numbers. You will need them in Step 4.

- Asset — the machine or line the INspektor is monitoring. This is what the work order will be attached to. **Required.**
- Location — where that asset is, if you use locations. **Optional.**
- Team and users — who should be assigned the work orders, if you want them assigned automatically. **Optional.**

To find an ID number, open the record in MaintainX and look at its details or its web address. If you are not sure where to find these, MaintainX support can point you to them.

If you are monitoring several networks or devices, decide now how you want them grouped into assets. One INspektor® connects to one asset. It is much easier to decide this before you start than to change it later.

Step 2 — Get your MaintainX API key

1. In MaintainX, go to Settings > API.
2. Create or copy your API key.
3. Keep it somewhere safe for Step 4. Treat it like a password: anyone who has it can create work orders in your account.

Step 3 — Put the files on the computer

1. Copy the connector files from Indu-Sol onto the computer that will run them.
2. If Python is not already installed, install Python 3.8 or newer, then install the one add-on the connector needs by running: pip install requests

Step 4 — Fill in the settings file (config.txt)

Everything the connector needs lives in one file called config.txt. Open it in any plain text editor and fill in your details. The settings are explained in the reference table near the end of this guide.

At minimum you will enter:

- Your MaintainX API key.

- For each INspektor®: its IP address, its type (PN for PROFINET, EIP for EtherNet/IP, or PB for PROFIBUS), and the MaintainX asset ID from Step 1.

Step 5 — Start monitoring

1. Start a measurement on your INspektor®(s). The INspektor® only produces data while a measurement is running.
2. Start the connector so that it runs as a service, meaning it starts automatically and keeps running, including after the computer restarts. This is important: if the connector is not running, no work orders are created. Your IT team can set this up as a Windows service or a Linux service.
3. That's it. From now on, qualifying network faults become MaintainX work orders automatically.

Check that it is working

Do a quick test after setup so you know work orders are flowing.

1. Cause or wait for a real event on the network: for example, briefly disconnect a monitored device (only if it is safe to do so on your process).
2. Within a minute or two, check MaintainX for a new work order.
3. Confirm the work order is attached to the right asset, has a sensible priority, and describes the fault.

If the work order appears and looks right, you are done. If nothing appears, see Troubleshooting below.

What the work orders look like

Each work order the connector creates carries:

On the work order	Where it comes from
Title and description	Decided by the fault type — it names the problem and the recommended action to check
Priority	Decided by the fault type — more serious faults come in higher
Asset	The MaintainX asset you linked in config.txt
Location, assignee, team	Whatever you linked in config.txt (optional)

The connector recognizes many fault types across the three network standards: devices dropping off the network, restarts, configuration problems, physical and cabling faults, timing problems, and network overload. Each maps to a work order with plain-language guidance on what to check.

Troubleshooting

Start here if work orders are not appearing or not looking the way you expect. Work down the list. The most common causes are first.

No work orders are appearing at all

Check	What to do
Is the connector running?	This is the most common cause. The connector must be running for anything to happen, and it does not restart itself if the computer was

Check	What to do
	rebooted or the program was closed. Confirm the service is running; start it if not.
Is a measurement running on the INspektor®?	The INspektor® only produces data during an active measurement. If the measurement was stopped, no data reaches the connector. Start a new measurement.
Can the computer reach the INspektor?	From the connector computer, confirm it can reach each INspektor's IP address. If not, this is a network, cabling, or IP problem for your IT team.
Can the computer reach MaintainX?	The computer needs internet access to api.getmaintainx.com. If it is blocked by a firewall, work orders cannot be sent.
Is the API key still valid?	If the key was changed or removed in MaintainX, the connector cannot post work orders. The connector log will show an "Error 401". Create a new key in MaintainX > Settings > API and update config.txt.
Has there simply been no fault?	If the network is healthy, there is nothing to report. This is normal. Use the test in "Check that it is working" to confirm the connection is live.

Work orders appear, but on the wrong asset or with no asset

Check	What to do
Is the asset ID correct in config.txt?	The work order attaches to whatever asset ID you entered. If it is wrong or blank, the work order lands on the wrong asset or none. Check the ID against MaintainX and correct config.txt.
Does the asset still exist in MaintainX?	If the asset was deleted or changed in MaintainX, the link breaks. Recreate it or update the ID in config.txt.

One INspektor® is not producing any work orders

Check	What to do
Is its type set correctly?	Each INspektor® needs a type in config.txt — PN, EIP, or PB. If the type is missing or misspelled, the connector skips that device entirely. Check the spelling.
Is its IP address correct?	Confirm the IP address in config.txt matches the device, and that the computer can reach it.
Is a measurement running on that device?	Each INspektor® needs its own active measurement.

The same fault made a second work order

The connector waits before repeating the same fault (12 hours by default). If you restart the connector, that memory resets, so a fault that already has an open work order can create a new one. This is expected after a restart. Close whichever duplicate you do not need.

A fault cleared but the work order is still open

The connector does not close work orders, only your team does. When a network fault fixes itself, the connector simply stops reporting it, but the work order it already created stays open until someone closes it in MaintainX. Close it the normal way.

Still stuck?

If you have worked through the checks above and work orders are still not flowing, contact InduSol America support with: which INspektor®(s) are affected, what the connector log shows, and what you have already tried.

support@indusolamerica.com *or +1 (678) 880-6910, M-F 9-5 EST*

Settings reference (config.txt)

Every setting the connector uses. The defaults suit most site. Change the thresholds only if you have a reason to.

Setting	Applies to	What it controls	Default
`API key`	Whole file	Your MaintainX API key. Required.	None — you provide it
`IP address`	Each INspektor®	The address the connector reads. Required.	None
`TYPE`	Each INspektor®	PN, EIP, or PB. Chooses how faults are interpreted. Required.	None
`ASSET_ID`	Each INspektor®	The MaintainX asset the work orders attach to. Required.	None
`LOCATION_ID`	Each INspektor®	The MaintainX location, if you use one.	None
`ASSIGNEE_IDS`	Each INspektor®	MaintainX users to assign the work orders to.	None
`TEAM_IDS`	Each INspektor®	MaintainX teams to assign the work orders to.	None
`CHECK_INTERVAL`	Whole file	How often the connector checks the INspektor®, in seconds.	30
`COOLDOWN_HOURS`	Whole file	How long to wait before raising the same fault again.	12
`JITTER_WARN_PCT`	Whole file	Timing-variation level that triggers a work order.	50
`NETLOAD_WARN_PCT`	Whole file	Network-load level that triggers a work order.	20

Glossary

Term	Plain meaning
INspektor®	The Indu-Sol device that watches your network and records faults.
Connector	The small program that reads the INspektor® and creates MaintainX work orders.
Measurement	A monitoring session on the INspektor®. It only collects data while running.
PROFIBUS / PROFINET / EtherNet-IP	The three industrial network standards this integration supports.
API key	A secret code that lets the connector create work orders in your MaintainX account.
Asset	A machine or line in MaintainX that work orders are attached to.
Jitter	Unsteady timing on the network.
Netload	How busy the network is, how much of its capacity is in use.