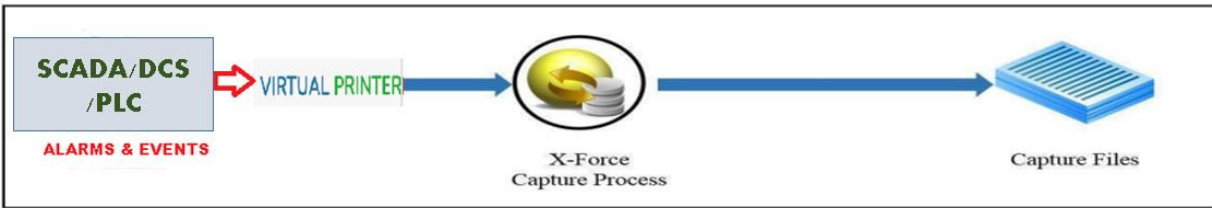
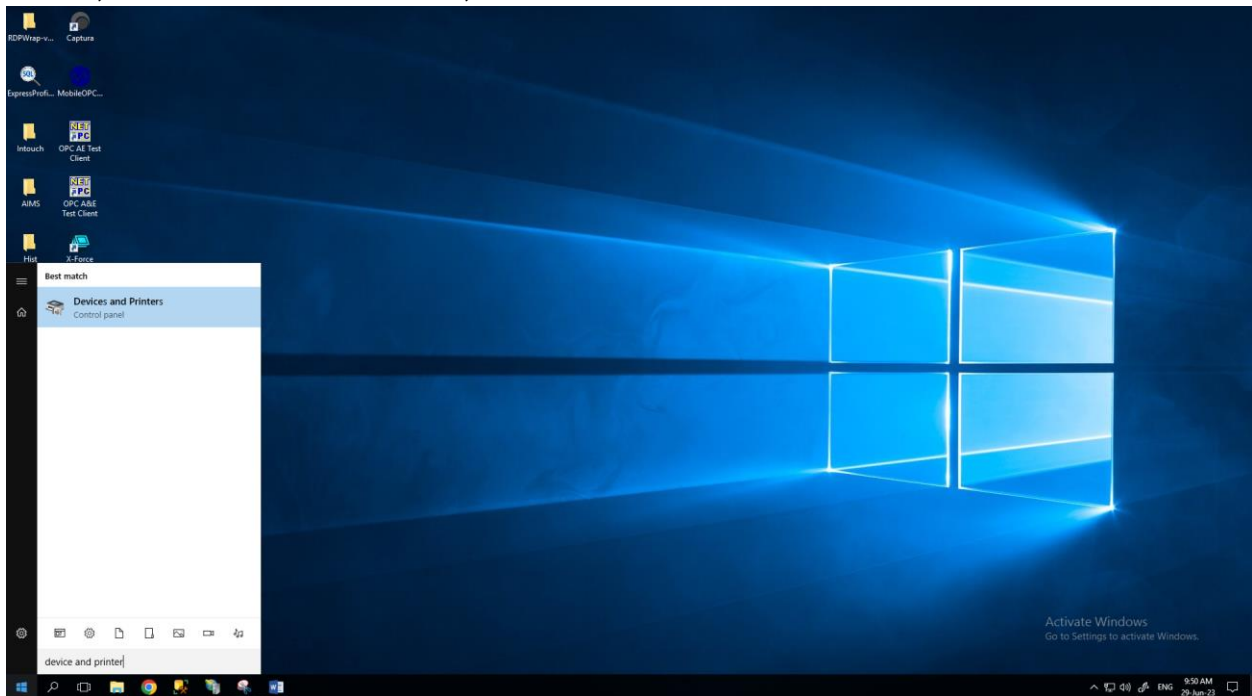


ALARM & EVENTS FROM SCADA/DCS/PLC USING VIRTUAL PRINTER

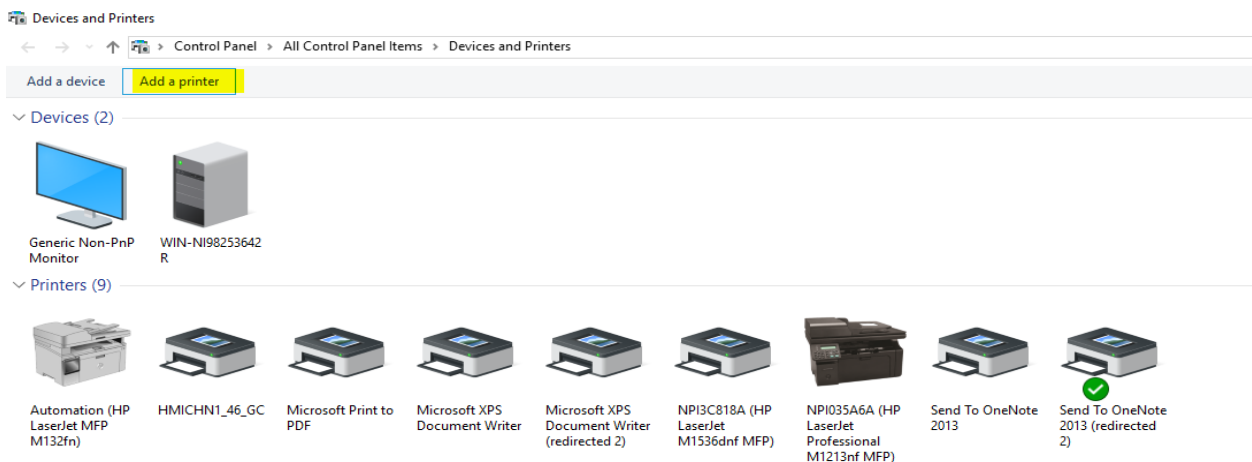


To get Alarms and Events from SCADA InTouch HMI, **First create Virtual Printer**


Search, Write Device and Printers, **Click on Devices and Printers.**



Click on **Add a printer**




Click on The printer that I want isn't listed, As Shown below.

 Add a device

Choose a device or printer to add to this PC

Select a device

	NPI9603BB (HP LaserJet MFP M437-M443) Multi Function Printer
---	---

The printer that I want isn't listed

Next

Cancel

Select Add a printer using a TCP/IP address or hostname and Click on Next

×

←  Add Printer

Find a printer by other options

☐ My printer is a little older. Help me find it.

☐ Select a shared printer by name

Browse...

Example: \\computername\printername or
http://computername/printers/printername/.printer

☒ Add a printer using a TCP/IP address or hostname

☐ Add a Bluetooth, wireless or network discoverable printer

☐ Add a local printer or network printer with manual settings

Next

Cancel

Write Hostname or IP Address where to print the alarm and Events from SCADA/DCS/PLC ,After that **Click on Next**.

←  Add Printer

Type a printer hostname or IP address

Device type:	Autodetect
Hostname or IP address:	10.2.8.201
Port name:	10.2.8.201_3
<input checked="" type="checkbox"/> Query the printer and automatically select the driver to use	

Next

Cancel

After Clicking on Next below Screen appear,

←  Add Printer

Detecting TCP/IP port

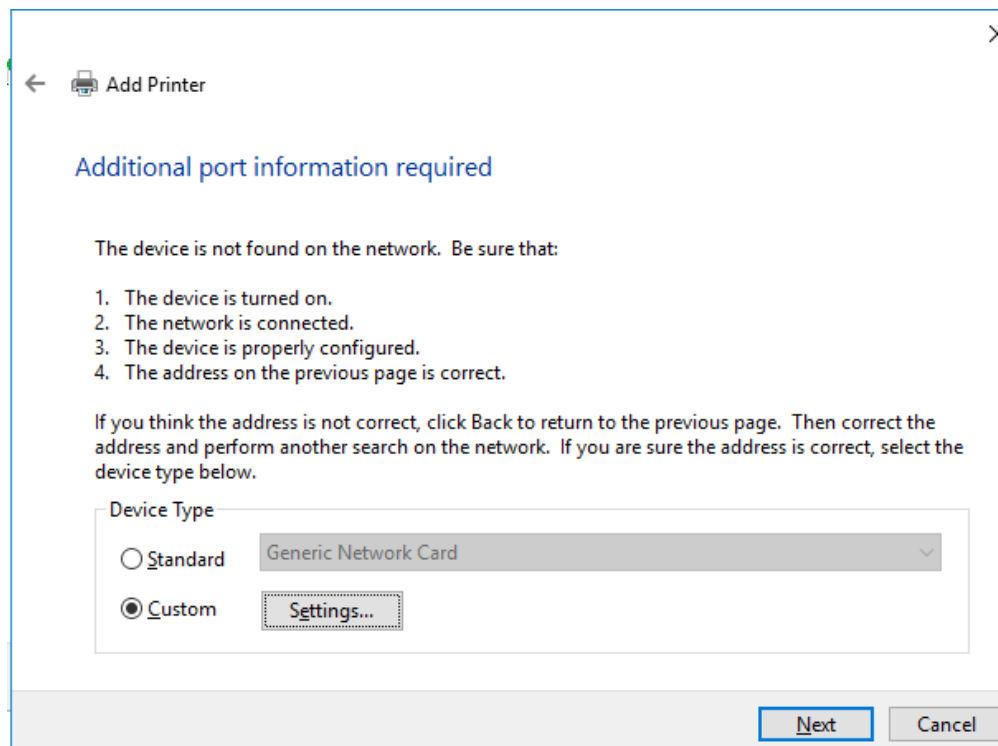
Detecting the TCP/IP port...
Windows will automatically move to the next page when the detection is done.



Next

Cancel

Select Custom and Click on Settings



← Add Printer

Additional port information required

The device is not found on the network. Be sure that:

1. The device is turned on.
2. The network is connected.
3. The device is properly configured.
4. The address on the previous page is correct.

If you think the address is not correct, click Back to return to the previous page. Then correct the address and perform another search on the network. If you are sure the address is correct, select the device type below.

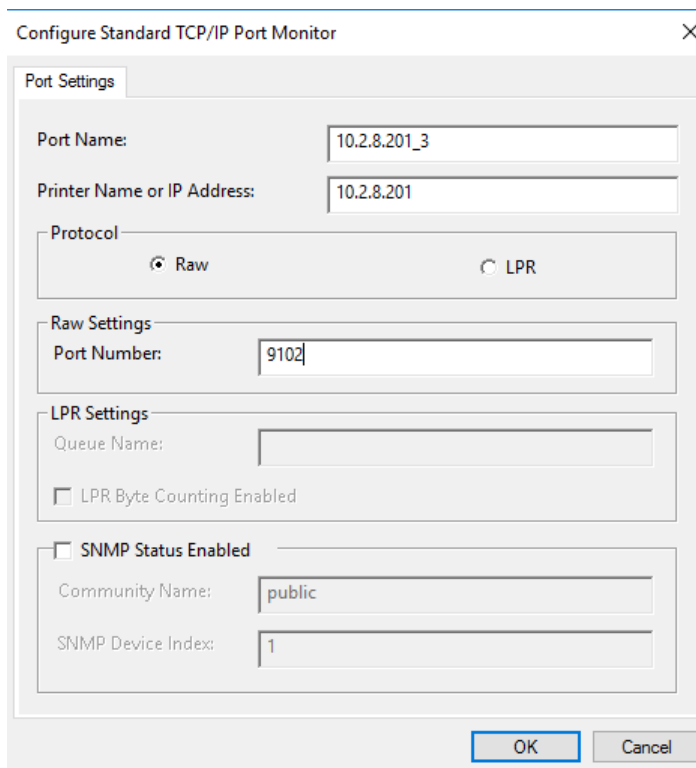
Device Type

☐ Standard Generic Network Card

☒ Custom Settings...

Next Cancel

Now, In Raw Settings Write Port Number and Click on OK



Configure Standard TCP/IP Port Monitor

Port Settings

Port Name: 10.2.8.201_3

Printer Name or IP Address: 10.2.8.201

Protocol

☒ Raw ☐ LPR

Raw Settings

Port Number: 9102

LPR Settings

Queue Name:

☐ LPR Byte Counting Enabled

☐ SNMP Status Enabled

Community Name: public

SNMP Device Index: 1

OK Cancel

Click on Next

←  Add Printer

Additional port information required

The device is not found on the network. Be sure that:

1. The device is turned on.
2. The network is connected.
3. The device is properly configured.
4. The address on the previous page is correct.

If you think the address is not correct, click Back to return to the previous page. Then correct the address and perform another search on the network. If you are sure the address is correct, select the device type below.

Device Type

☐ Standard

Generic Network Card


☒ Custom

Settings...

Next

Cancel

Below Screen Appear after click on Next

←  Add Printer

Detecting the driver model...

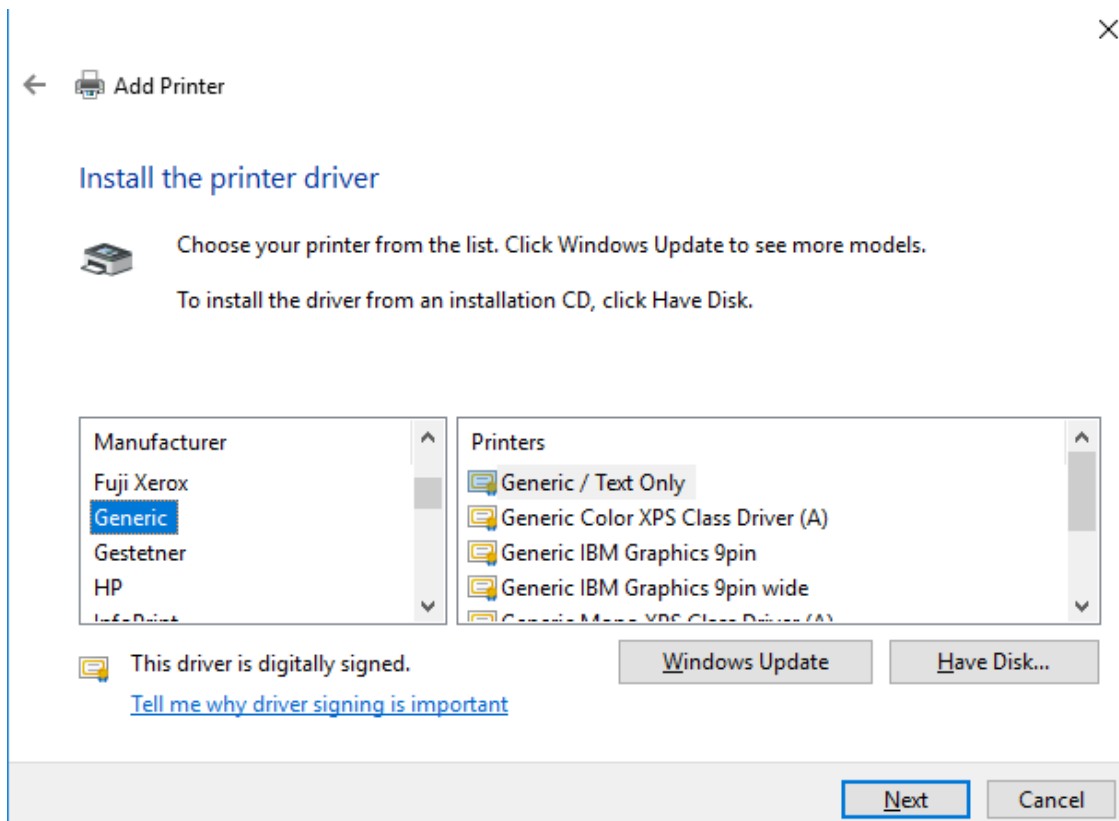
Windows is communicating with the printer and will automatically detect the printer driver to use.



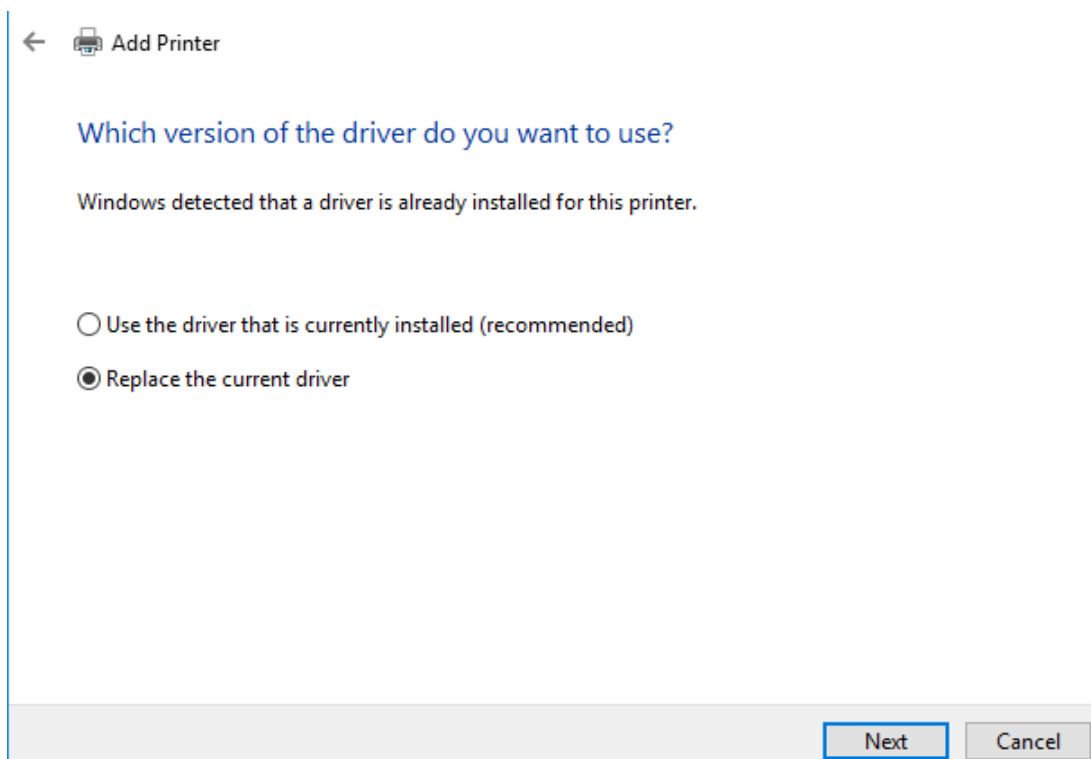
Next

Cancel

Select **Generic** and **Generic/Text only** as Shown Below. After that **Click on Next**.



Select Replace the current Driver and **Click on Next**



Write Printer Name and Click on Next.

←  Add Printer

Type a printer name

Printer name:

This printer will be installed with the Generic / Text Only driver.

Next

Cancel

Select do not share this printer and Click on Next.

←  Add Printer

Printer Sharing

If you want to share this printer, you must provide a share name. You can use the suggested name or type a new one. The share name will be visible to other network users.

☒ Do not share this printer

☐ Share this printer so that others on your network can find and use it

Share name:

Location:

Comment:

Next

Cancel

To check printer working properly or not **Click on Print a Test page.**

← Add Printer

You've successfully added SCADA_ALM

☐ Set as the default printer

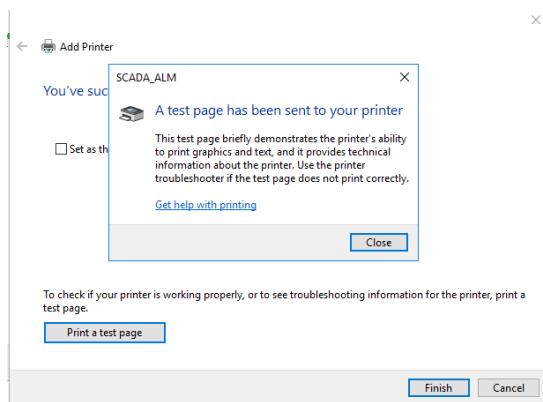
To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page.

Print a test page

Finish

Cancel


After Successful Testing of Test page **Click on Close**



Activate Windows
Go to Settings to activate Windows.



Click on Finish

←  Add Printer

You've successfully added SCADA_ALM

☐ Set as the default printer

To check if your printer is working properly, or to see troubleshooting information for the printer, print a test page.

Print a test page

Finish

Cancel

After Clicking on Finish Virtual Printer SCADA_ALM Appear As shown below.

Devices and Printers

← → ↕ ↗ Control Panel > All Control Panel Items > Devices and Printers

Add a device Add a printer See what's printing Print server properties Remove device

Devices (2)



Generic Non-PnP Monitor



WIN-NI98253642 R

Printers (10)



Automation (HP LaserJet MFP M132fn)



HMI CHN1_46_GC



Microsoft Print to PDF



Microsoft XPS Document Writer



Microsoft XPS Document Writer (redirected 2)



NP13C818A (HP LaserJet M1536dnf MFP)



NP1035A6A (HP LaserJet Professional M1213nf MFP)



Send To OneNote 2013

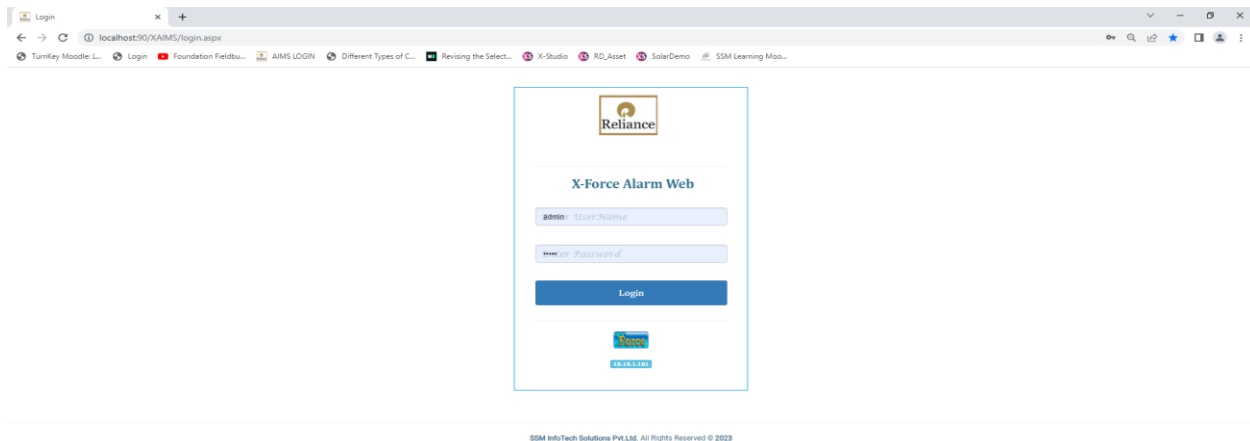


Send To OneNote 2013 (redirected 2)

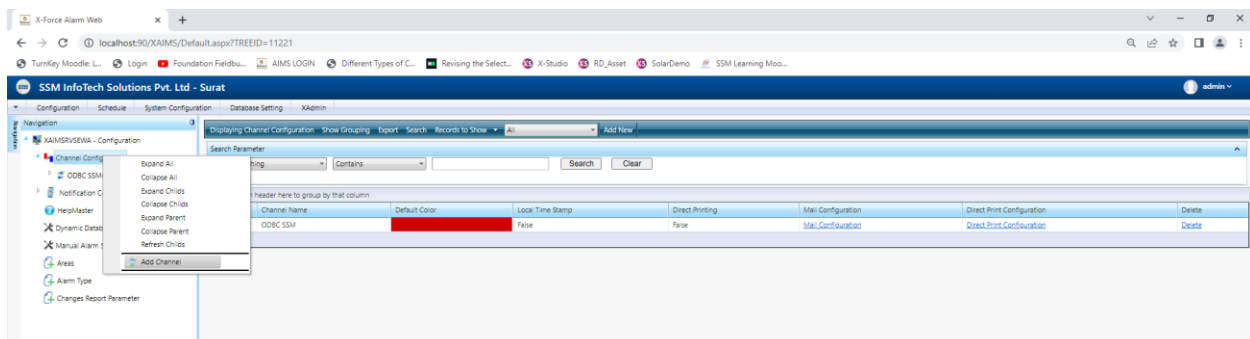


SCADA_ALM

To create new Channel, In X-Force Alarm Web Configuration. Login with credential (User Name and Password)



Click on Configuration, Expand configuration click on channel configuration and right click on it and select ADD channel.



Add Details like communication type (Network Communication), Channel name, Plant Name, Set Default Color Then click on save

The screenshot shows the 'Add Channel : New record' form in the X-Force Alarm Web application. The form is titled 'Add Channel : New record' and has 'Save' and 'Cancel' buttons at the top. The form fields are as follows:

Field	Value
Communication Type :	Network Communication
Channel Name :	SCADA_ALM
Plant Name :	SSM
Default Color :	Blue
AlarmTimeOut :	0
Priority File Processing :	<input type="checkbox"/>
Enable Graphics Printing :	<input type="checkbox"/>
Enable OPR bit Configuration :	<input type="checkbox"/>
Enable SOE Configuration :	<input type="checkbox"/>

At the bottom of the form, there are 'Save' and 'Cancel' buttons, and the text 'Ready'.

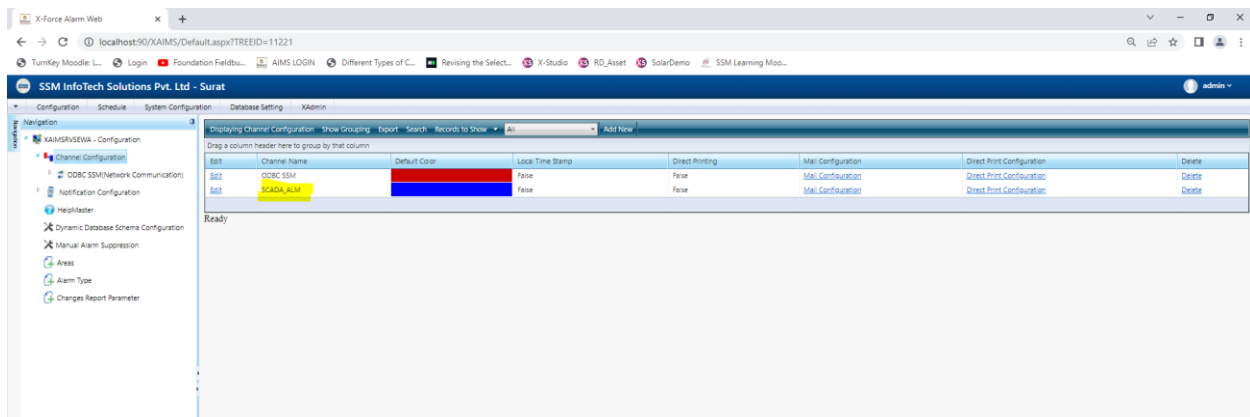
As Shown Below write local IP, Remote IP, Backup IP, Port No, Select Terminator 1 and 2, Set Minimum Length Data accordingly. And click on save.

The screenshot shows the 'Network Channel Configuration : New record' form in the X-Force Alarm Web application. The form is titled 'Network Channel Configuration : New record' and has 'Save' and 'Cancel' buttons at the top. The form fields are as follows:

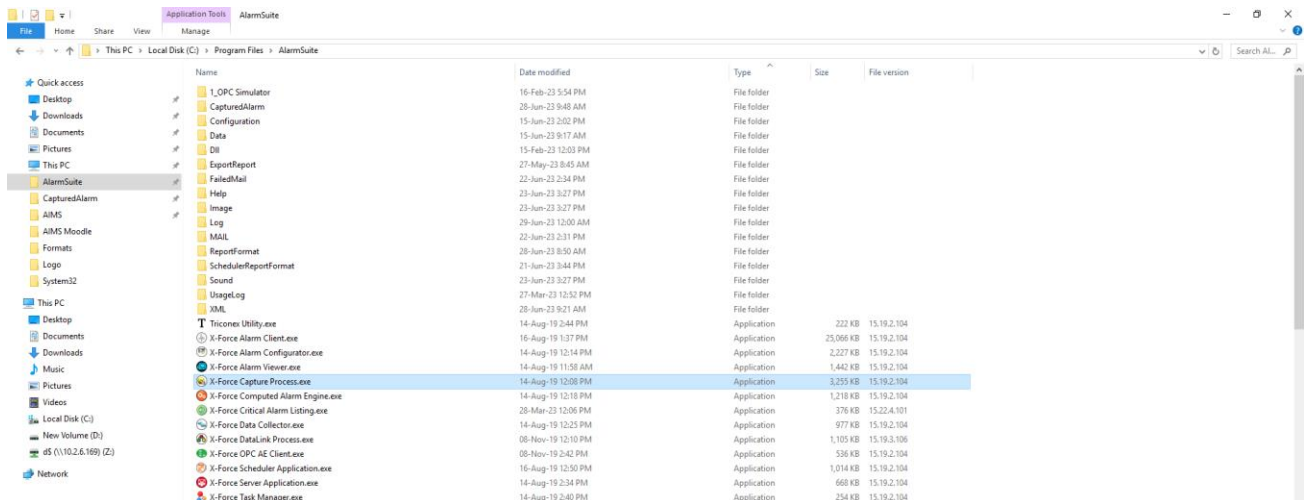
Field	Value
Channel Name :	scada_alm
Local IP Address :	10.2.8.201
Remote IP Address :	10.2.8.201
Backup IP Address :	10.2.8.201
PortNo :	9102
Terminator 1 :	CRLF
Terminator 2 :	CRLF
Minimum Length :	20

At the bottom of the form, there are 'Save' and 'Cancel' buttons, and the text 'Please configure Network Communication parameters to complete channel configuration, Saved successfully, continue editing'.

Channel is Appear here as shown below.

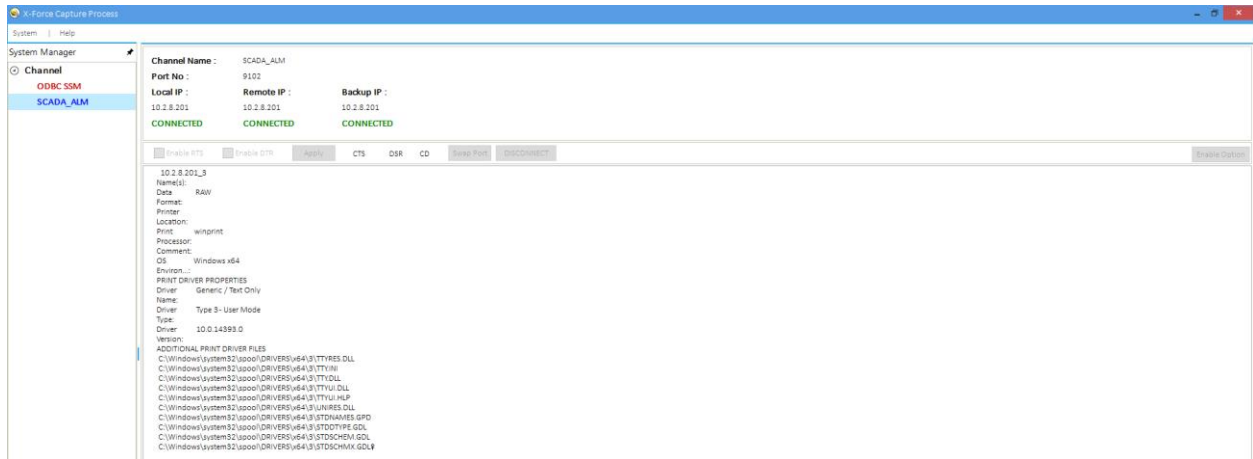


Now Open X-Force Capture Process and Restore it.



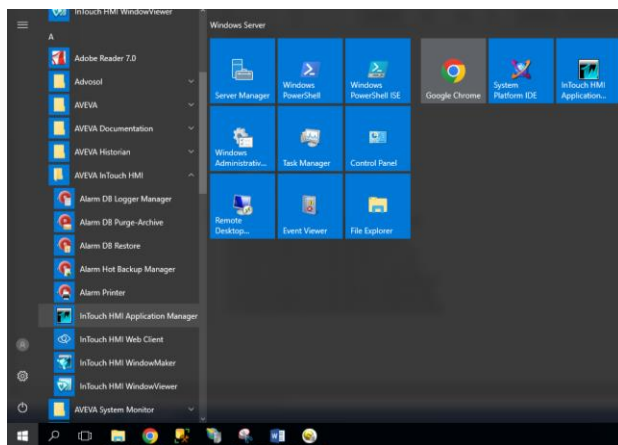
After Restore X-Force Capture Process, SCADA_ALM Channel appear, Check Port No, local IP, Remote IP and Backup IP connected or not.

(On Channel SCADA_ALM, Printer Test page Appear)

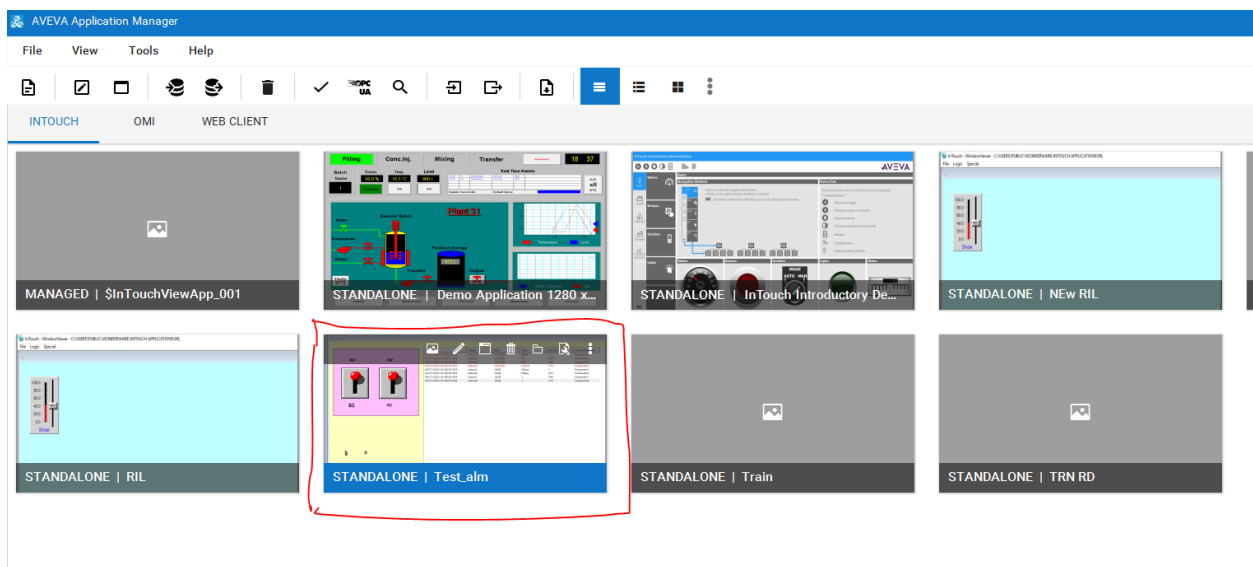


Now to start Alarms from SCADA AVEVA InTouch HMI,

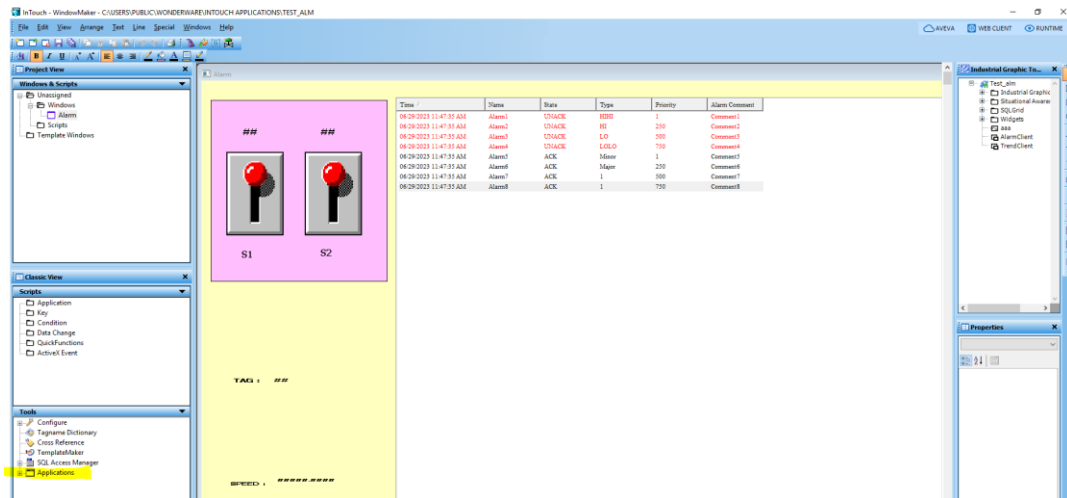
Open InTouch HMI Application Manager,



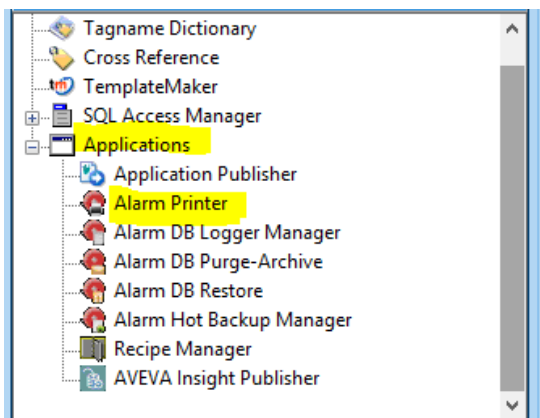
Double click on Test_alm



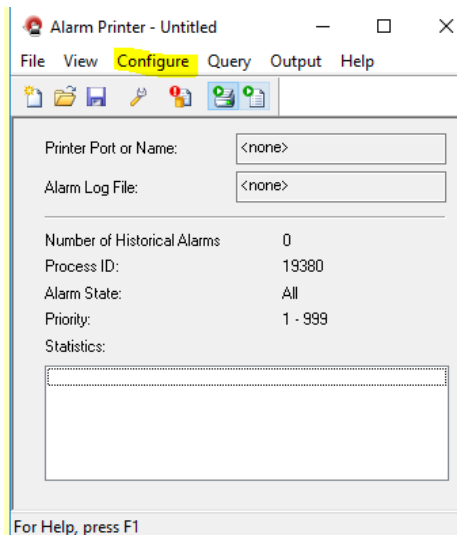
As Shown Below InTouch WindowMaker >> Expand Application



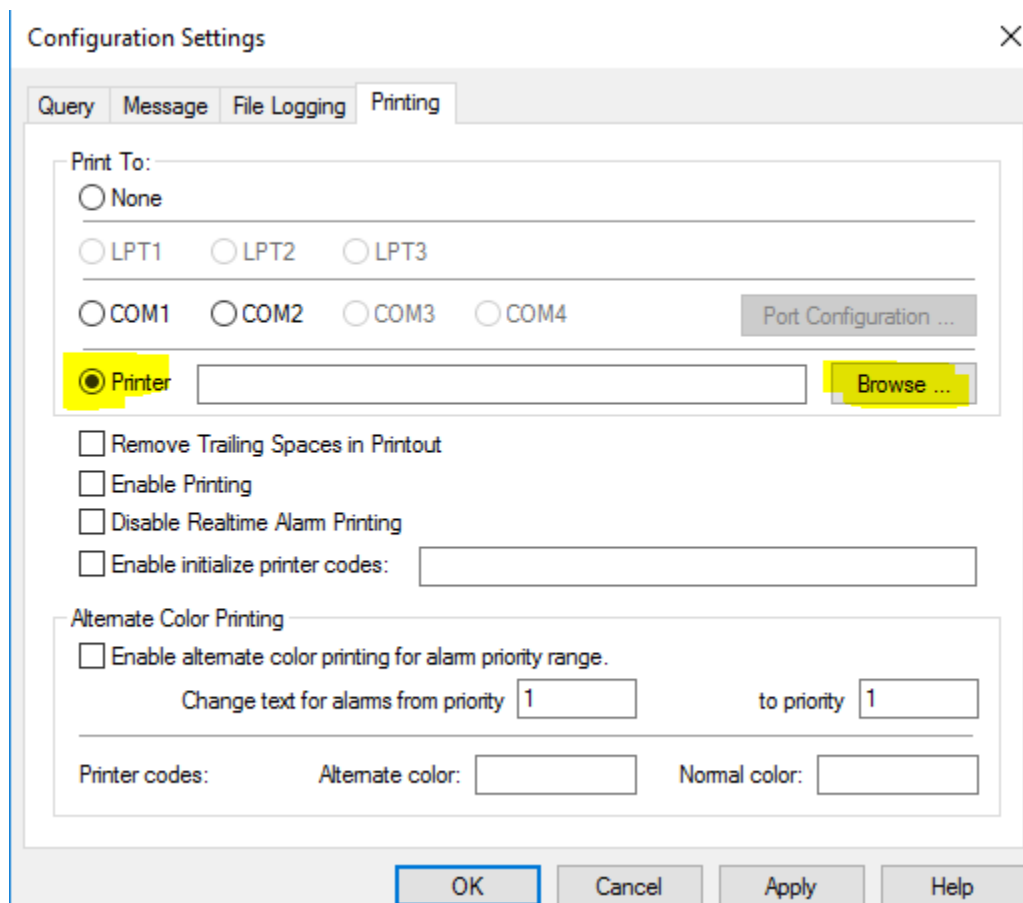
After Expand of Applications Double click on Alarm Printer.



Click on Configure



In Printing, Select Printer and Browse Printer



The image shows the 'Configuration Settings' dialog box with the 'Printing' tab selected. The 'Print To:' section has several radio button options: 'None', 'LPT1', 'LPT2', 'LPT3', 'COM1', 'COM2', 'COM3', and 'COM4'. The 'Printer' radio button is selected and highlighted with a yellow box. To its right is a text field and a 'Browse ...' button, also highlighted with a yellow box. Below these are four unchecked checkboxes: 'Remove Trailing Spaces in Printout', 'Enable Printing', 'Disable Realtime Alarm Printing', and 'Enable initialize printer codes:'. The 'Alternate Color Printing' section contains an unchecked checkbox 'Enable alternate color printing for alarm priority range.' and a label 'Change text for alarms from priority' followed by a text field containing '1', then 'to priority' followed by another text field containing '1'. At the bottom of this section are three text fields labeled 'Printer codes:', 'Alternate color:', and 'Normal color:'. The dialog has 'OK', 'Cancel', 'Apply', and 'Help' buttons at the bottom.

Configuration Settings

Query Message File Logging **Printing**

Print To:

☐ None

☐ LPT1 ☐ LPT2 ☐ LPT3

☐ COM1 ☐ COM2 ☐ COM3 ☐ COM4 Port Configuration ...

☒ **Printer** **Browse ...**

☐ Remove Trailing Spaces in Printout

☐ Enable Printing

☐ Disable Realtime Alarm Printing

☐ Enable initialize printer codes:

Alternate Color Printing

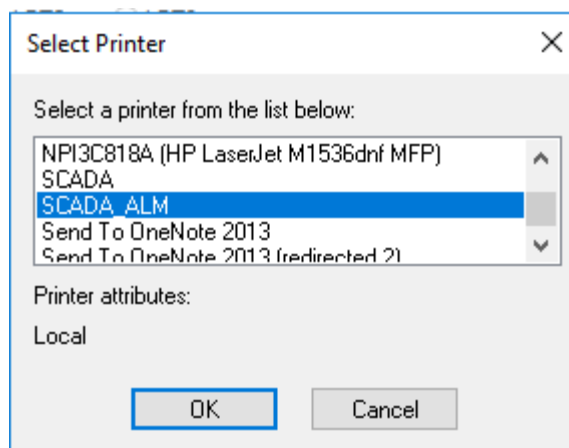
☐ Enable alternate color printing for alarm priority range.

Change text for alarms from priority to priority

Printer codes: Alternate color: Normal color:

OK Cancel Apply Help

Select Virtual Printer Which already Created.(SCADA_ALM) and Click on OK



The image shows the 'Select Printer' dialog box. It has a title bar 'Select Printer' and a close button. The main text says 'Select a printer from the list below:'. Below this is a list box containing four items: 'NPI3C818A (HP LaserJet M1536dnf MFP)', 'SCADA', 'SCADA_ALM' (which is highlighted with a blue background), 'Send To OneNote 2013', and 'Send To OneNote 2013 (redirected 2)'. Below the list box is the text 'Printer attributes:' followed by 'Local'. At the bottom are 'OK' and 'Cancel' buttons.

Select Printer

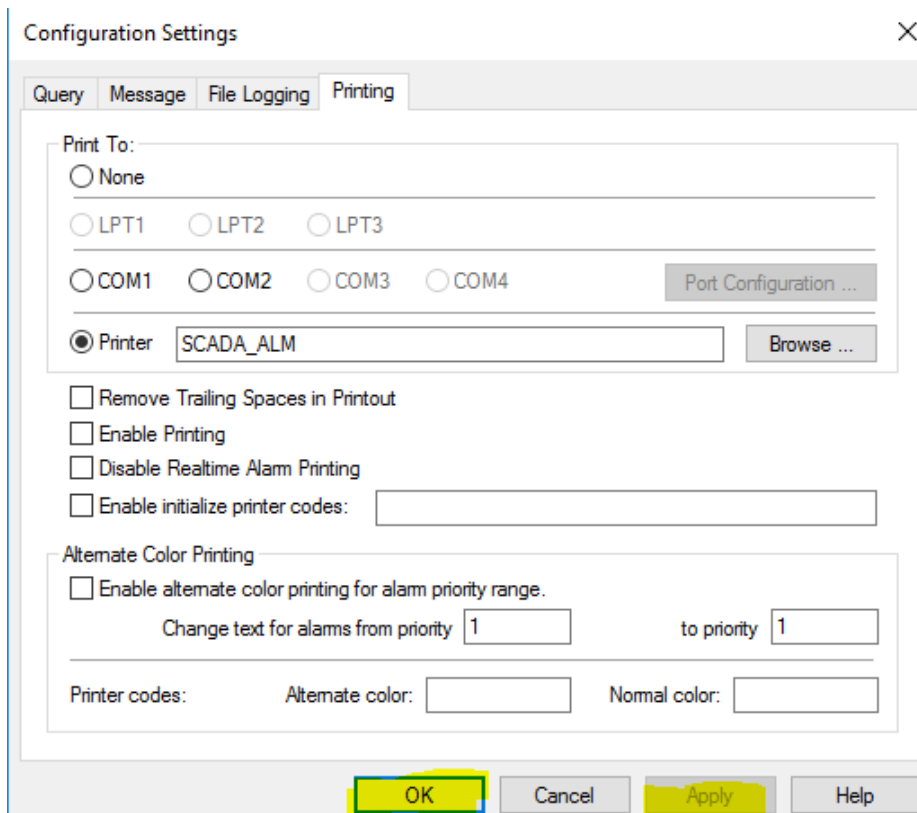
Select a printer from the list below:

NPI3C818A (HP LaserJet M1536dnf MFP)
SCADA
SCADA_ALM
Send To OneNote 2013
Send To OneNote 2013 (redirected 2)

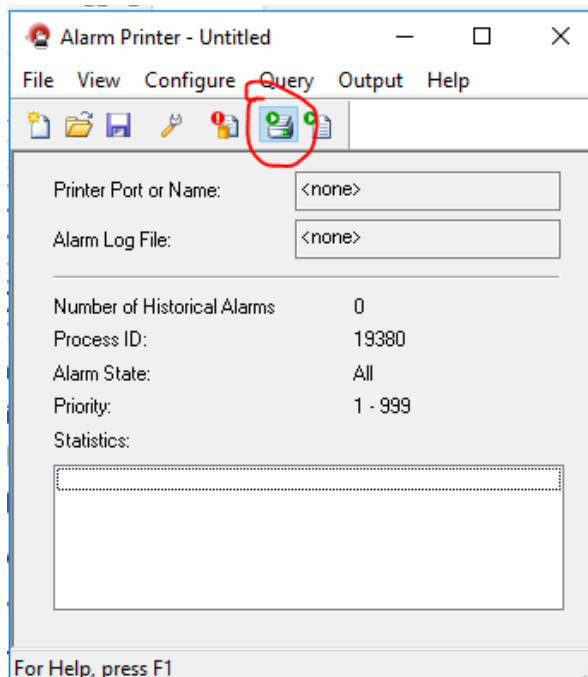
Printer attributes:
Local

OK Cancel

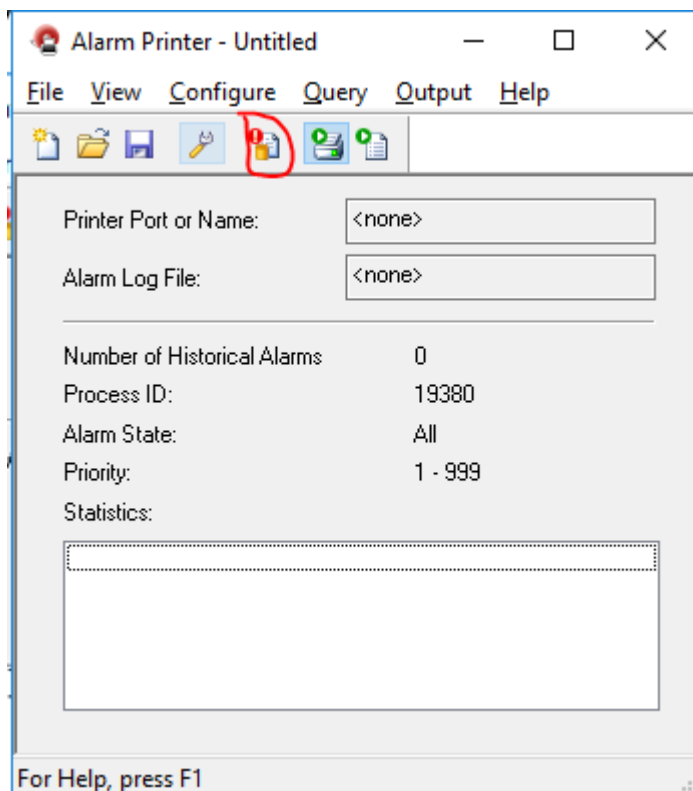
Click on Apply and then Click on OK



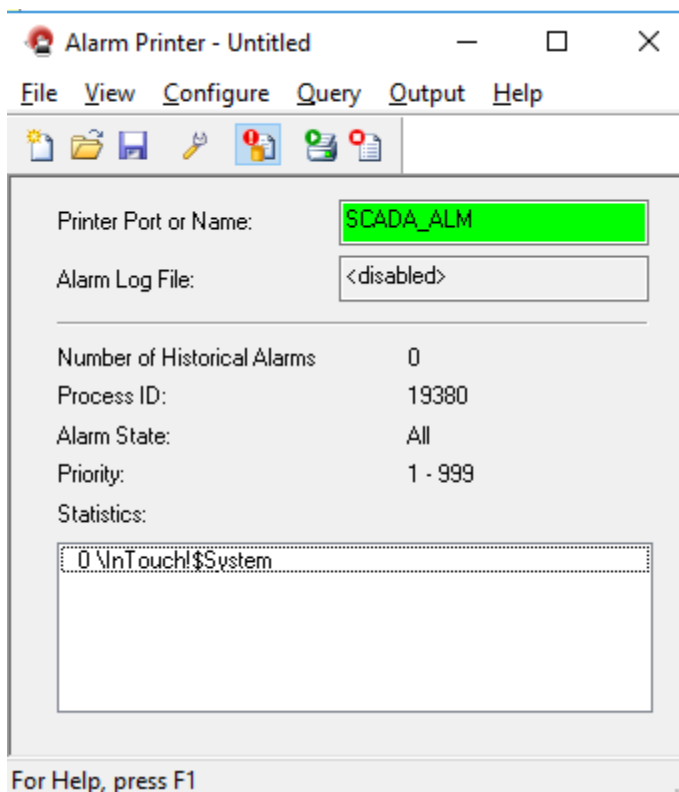
Click on Enable/Disable button printing



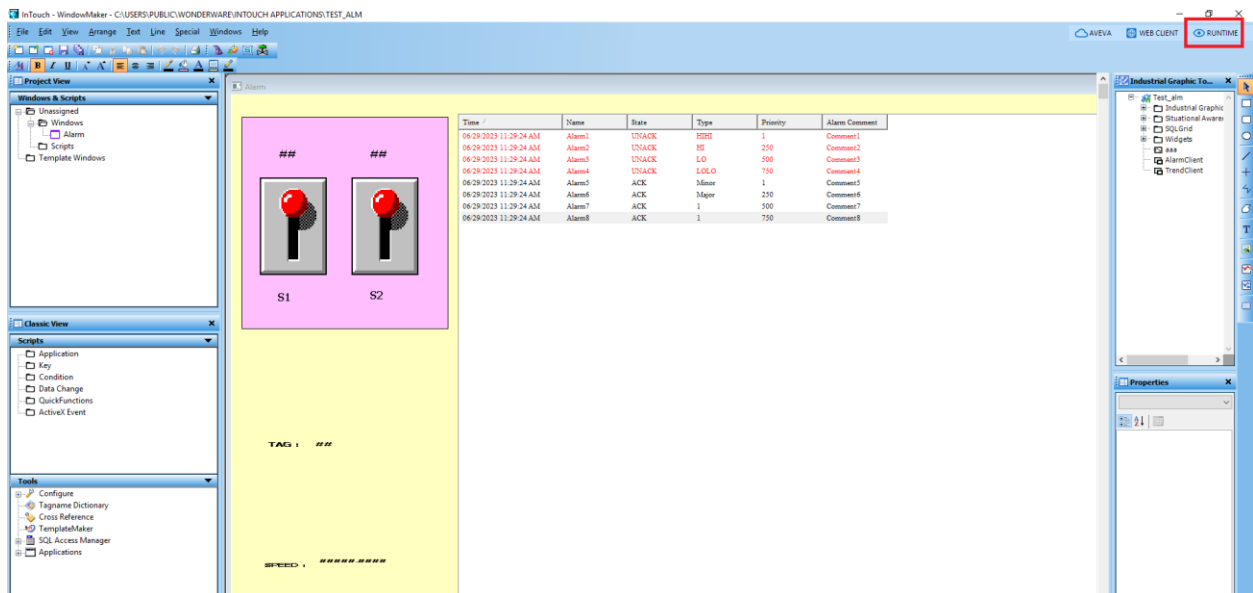
Click on Start/Stop as Shown Below



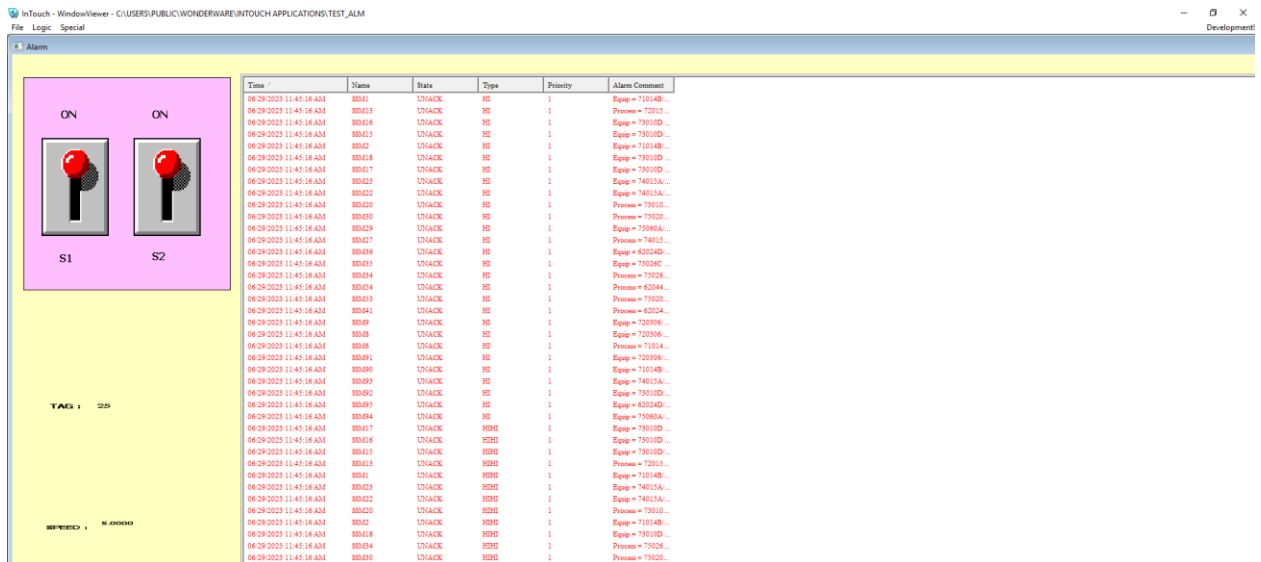
After Clicking on Start, Printer Name Appear here as shown below.



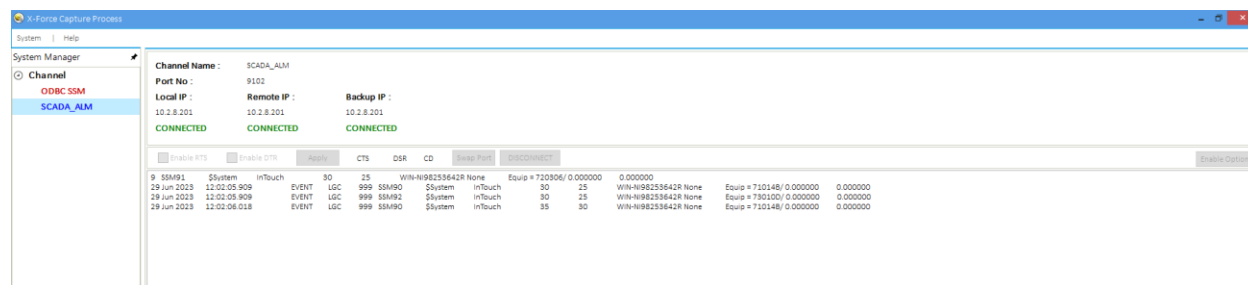
Now, Click on RUNTIME



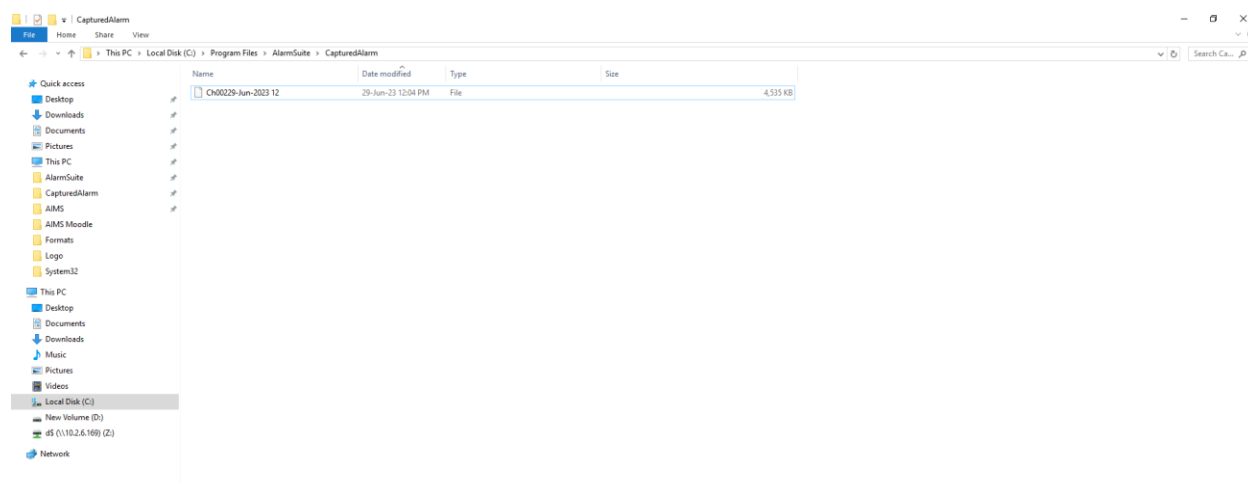
Start the alarms (Do Not Closed WindowViewer)



Restore the X - Force Capture Process Application and Check Alarms are Coming or not.



Now Check Capture file Created or not.



Restore the X - Force DataLink Application and Click on channel **SCADA_ALM** Check Alarms are Coming or not.

