

Installation of the LDS3000 INFICON EDS-File for the DeviceNet BM1000 Module

An example of configuring an INFICON BM1000 EtherNet/IP Module will be shown using an Allen-Bradley CompactLogix L24ER QB1B PLC controller and the RSLogix5000 and RSNetworx software from Rockwell. This example is written with the understanding that the customer already has an DeviceNet capable controller and a working DeviceNet network.

Before you begin to incorporate the BM1000 Module in the network please check the software versions and settings in the **LDS3000** leak detector.

1. **Settings in LDS3000:** Please check in the **LDS3000** Menu if the correct **software version** is installed

Current MSB SW Version: **at least V2.38 or higher**

Current CU1000 SW Version: **at least V2.34 or higher**

Select the correct **Bus - Module:**

In the **LDS3000** Menu under Main Menu\Settings\Setup\Interfaces\Device Selection please select "**Bus**"

Select the correct **Profile:**

In the **LDS3000** Menu under Main Menu\Settings\Setup\Interfaces\Bus Module\Profile please select "**Inficon**"

Select the correct **Interface Protocol:**

In the **LDS3000** Menu under Main Menu\Settings\Setup\Interfaces\I/O-Module\Protocol please select "**LD**"

The next step in the configuration of the BM1000 module is the installation of the EDS File

2. Installation of INFICON DeviceNet EDS - File

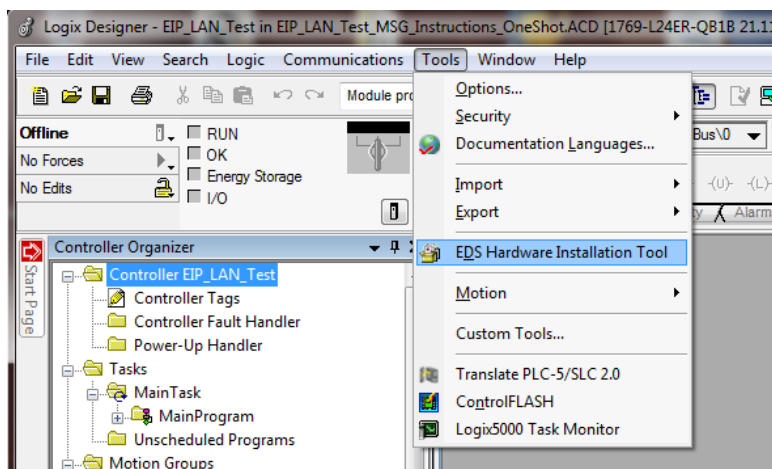
Filename of EDS - File: **INFICON_BM1000_DEV_V1.3.eds**

Filename of the Bitmap – File: **BM1000.bmp**

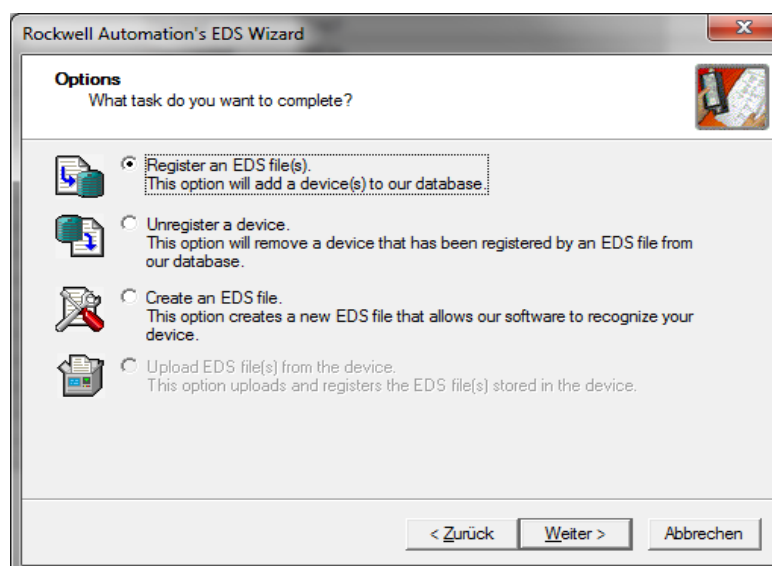
This Bitmap - File for the BM1000 Icon must be in the same directory as the corresponding EDS - File

Open the **RSLogix 5000** software interface

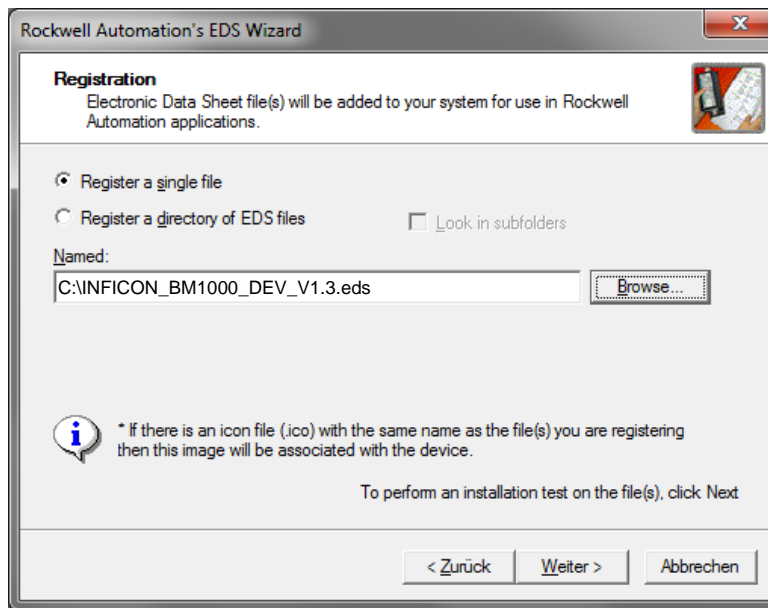
Click on the **Tools** menu and select **EDS Hardware Installation Tool**



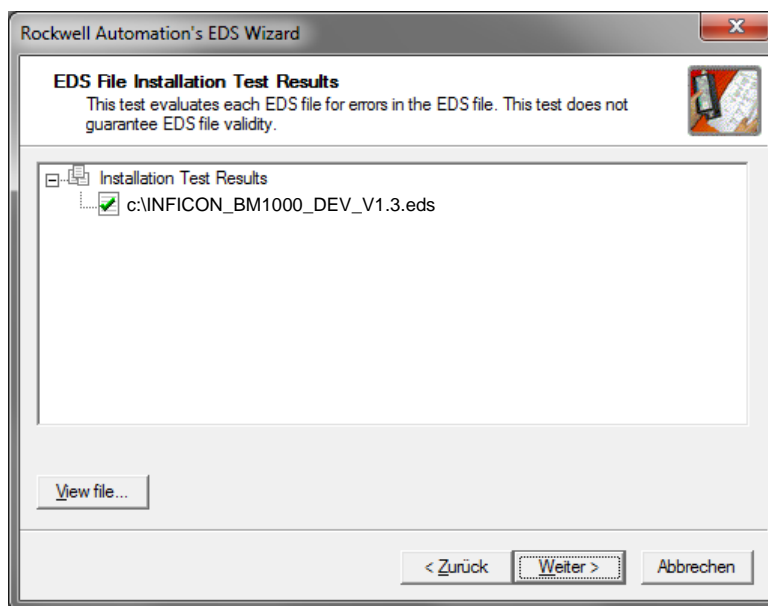
The "EDS Wizard" Window opens , click **Next** , in the "**Options**" window select **Register an EDS file (s)** and click **Next**

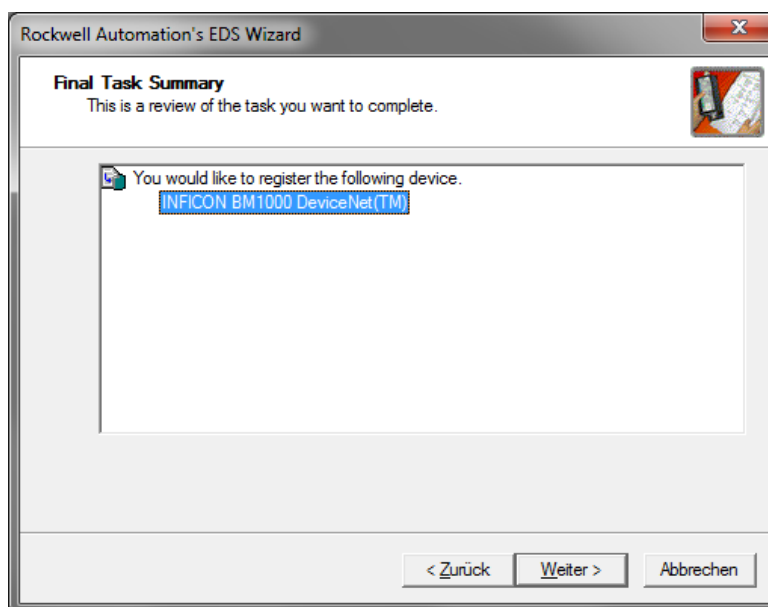
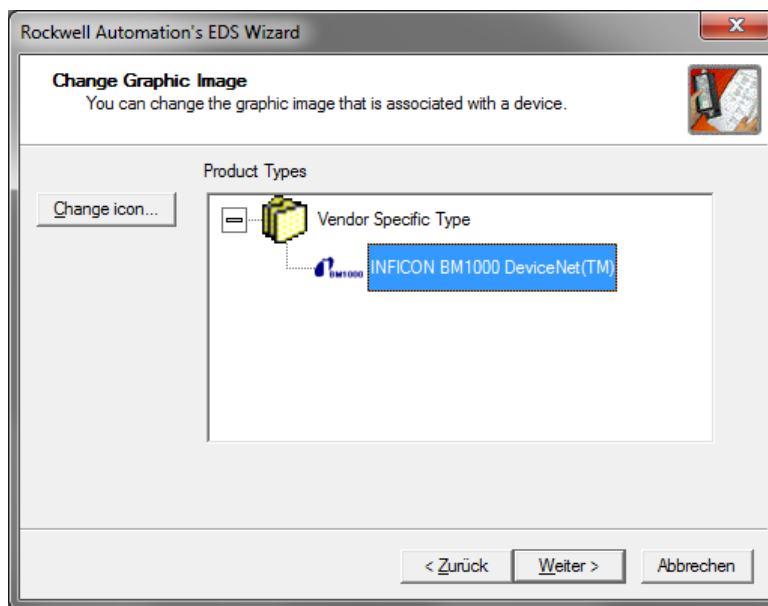


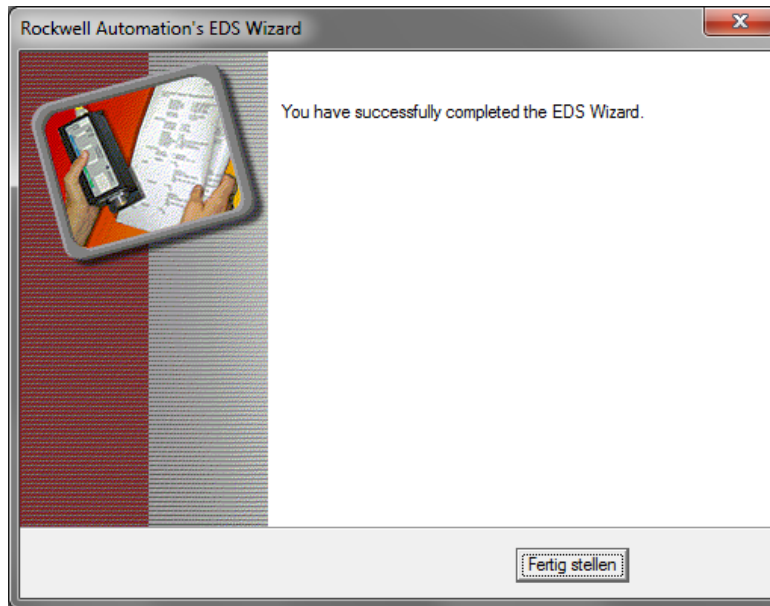
The registration window opens, click **Browse** and select the **EDS file** provided with the module.



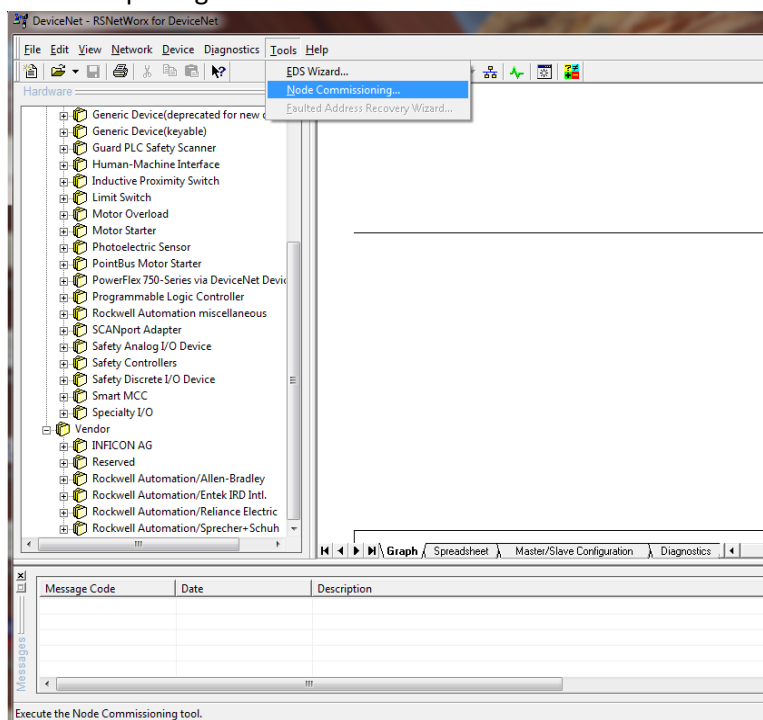
Click **Next** and follow the instructions of the program.



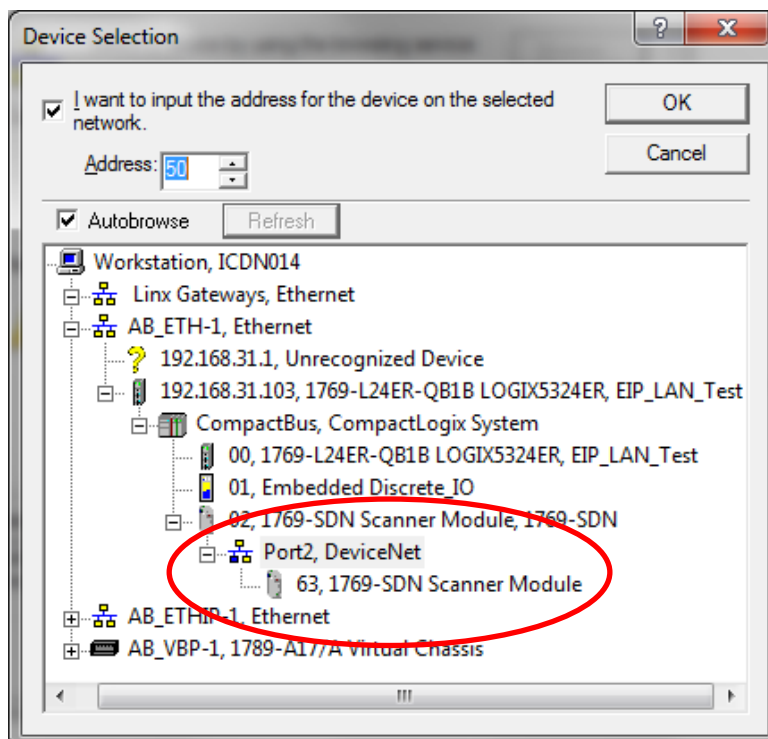
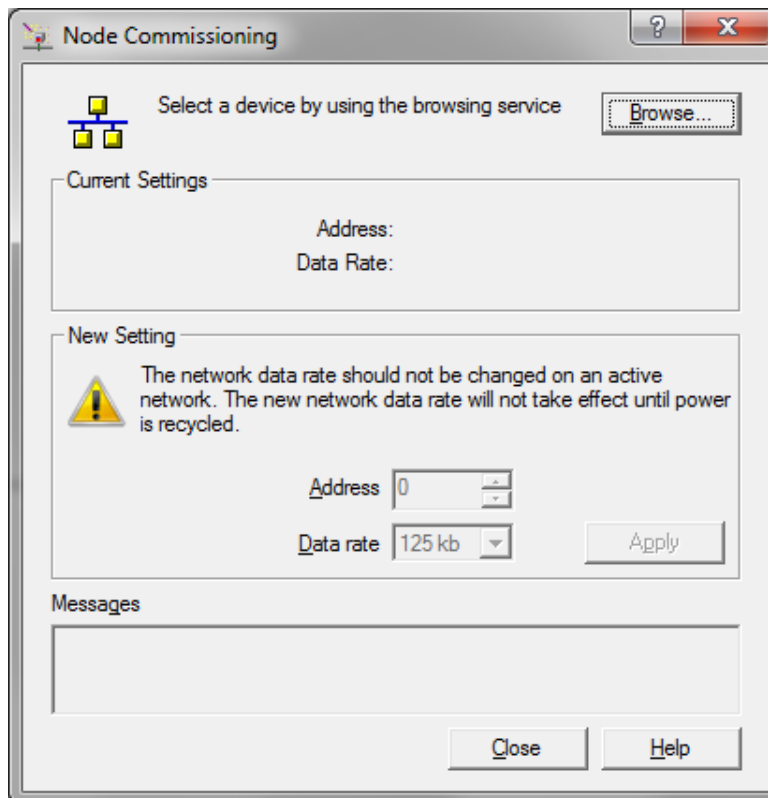




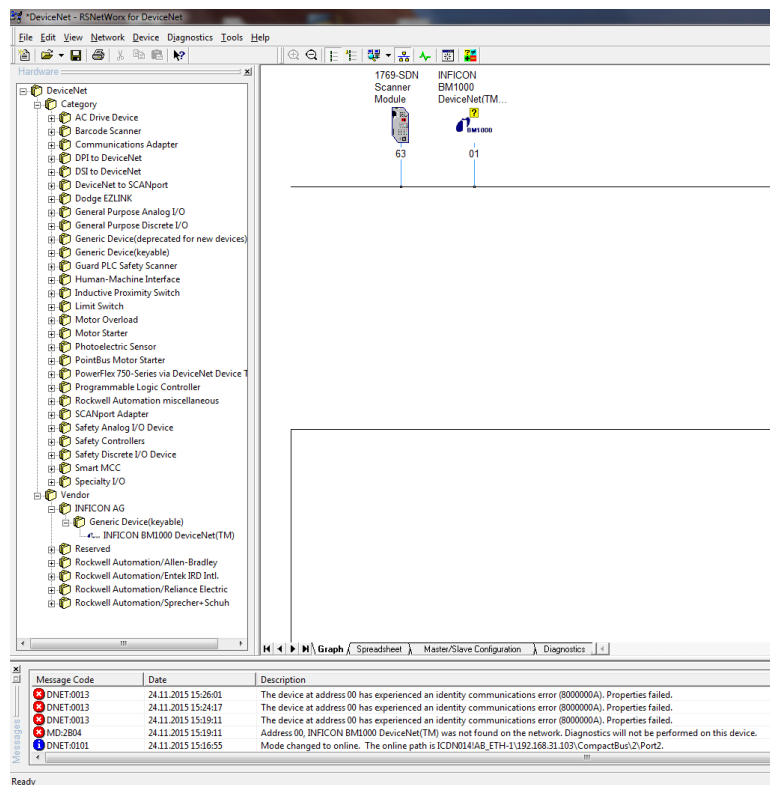
After completing the EDS wizard return to the main window of RSLogix5000.



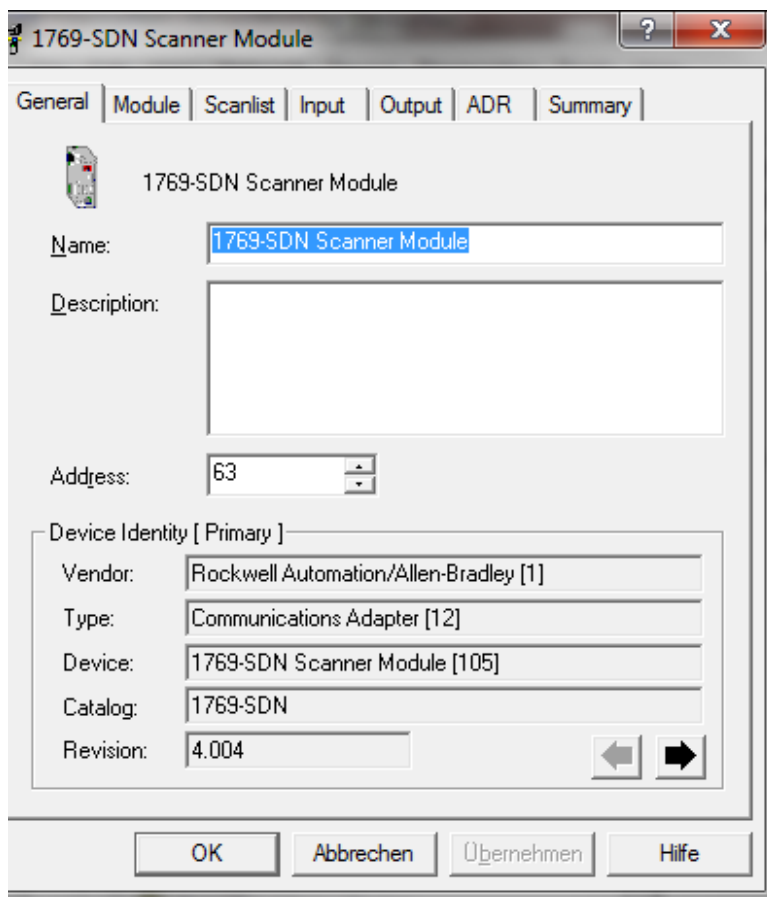
Start "RSNetworx" program. Click on "Tools\Node Commissioning"



In the **Device Selection** window, choose "Port2 DeviceNet, 63, 1769 -SDN Scanner Module" and click **Ok**




Right click on "Scanner module" and click properties.



1769-SDN Scanner Module

General | Module | Scanlist | Input | Output | ADR | Summary

 1769-SDN Scanner Module

Name: 1769-SDN Scanner Module

Description:

Address: 63

Device Identity [Primary]

Vendor: Rockwell Automation/Allen-Bradley [1]

Type: Communications Adapter [12]

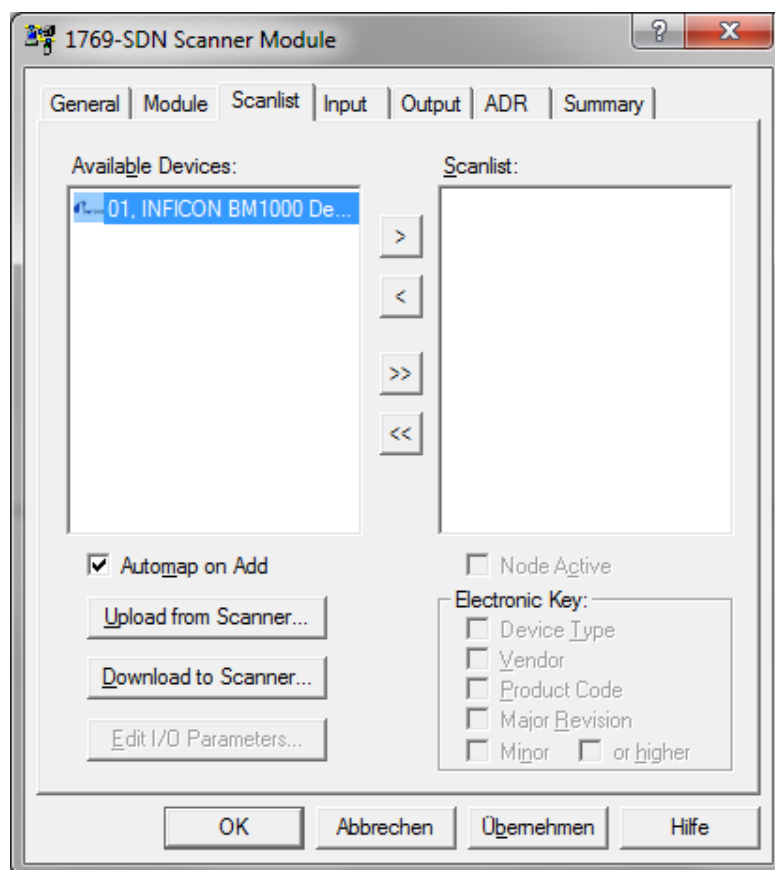
Device: 1769-SDN Scanner Module [105]

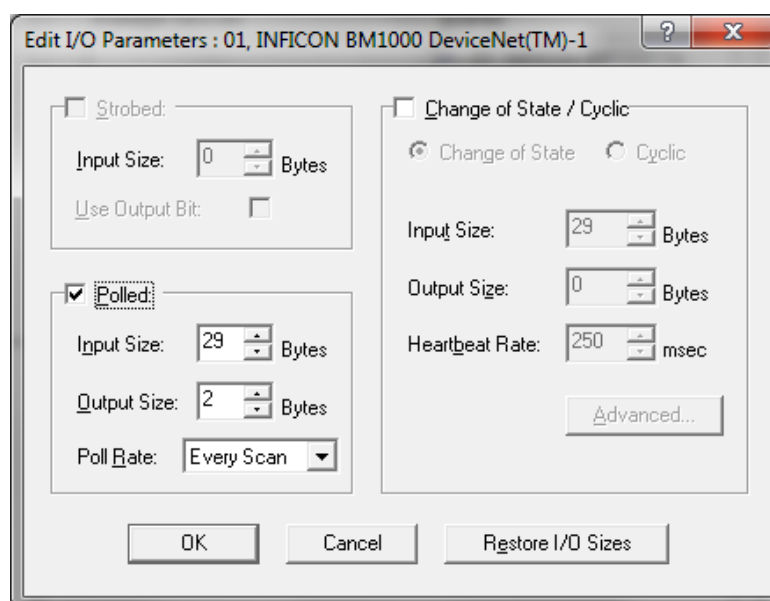
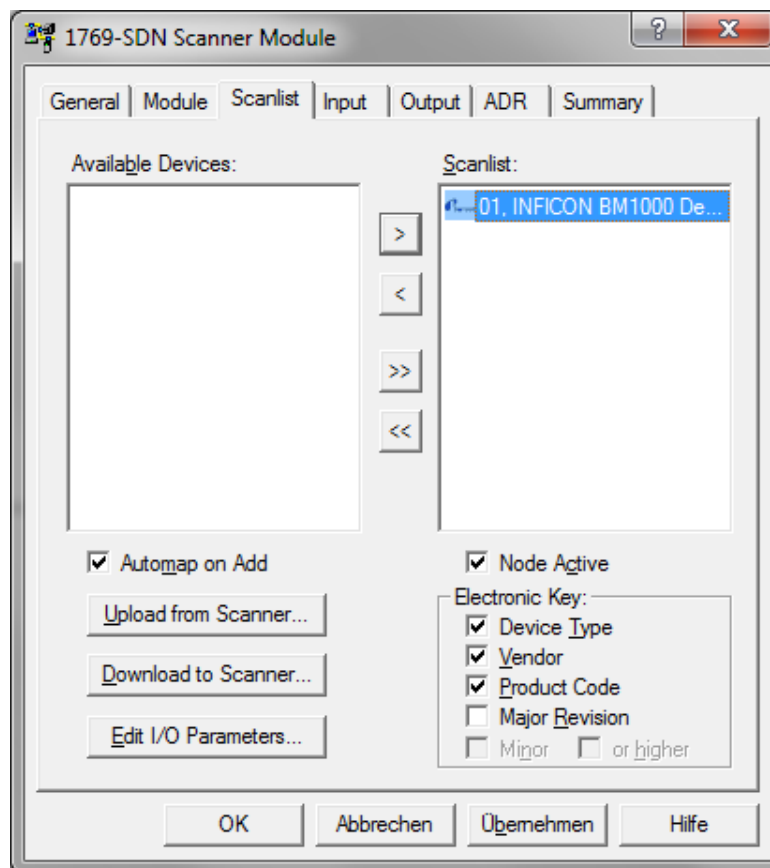
Catalog: 1769-SDN

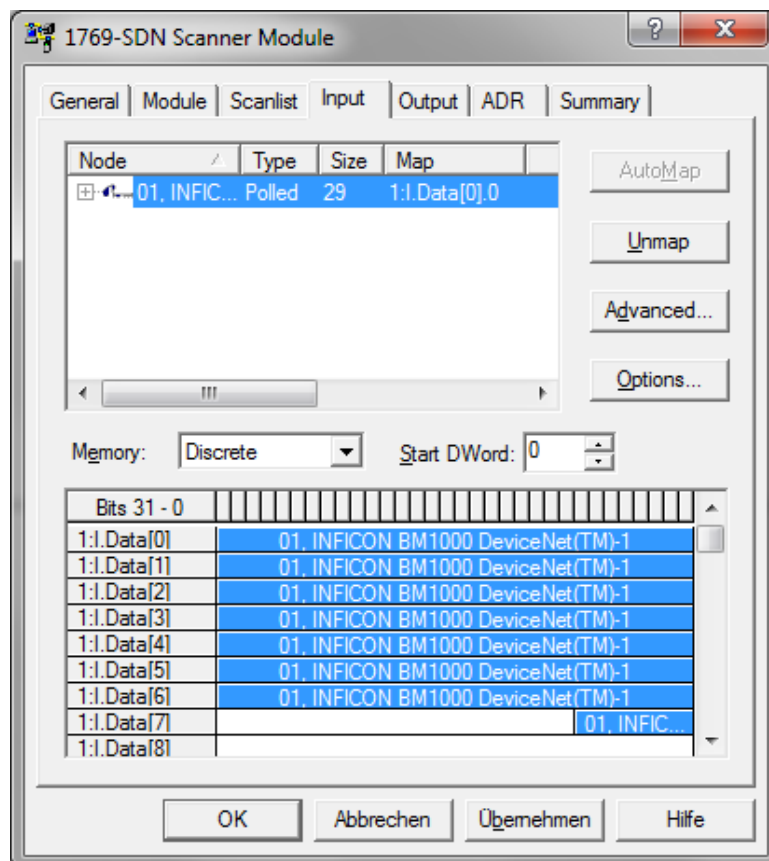
Revision: 4.004

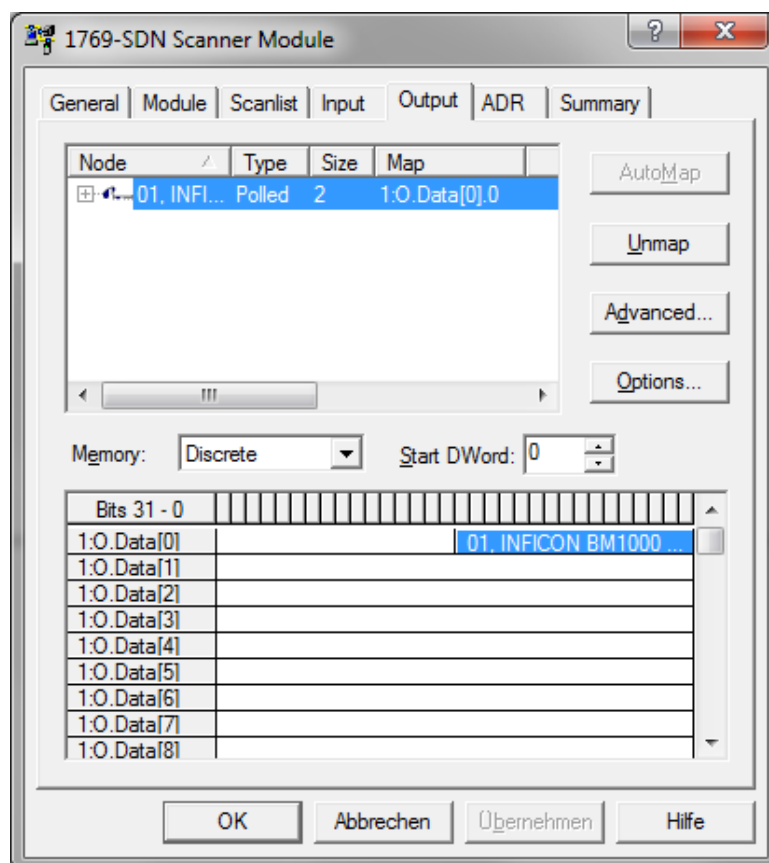
OK Abbrechen Übernehmen Hilfe

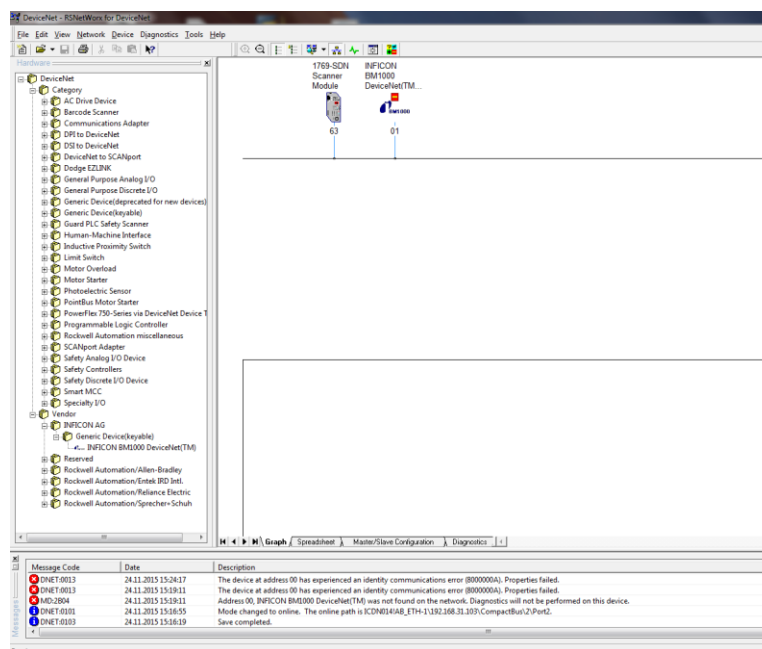
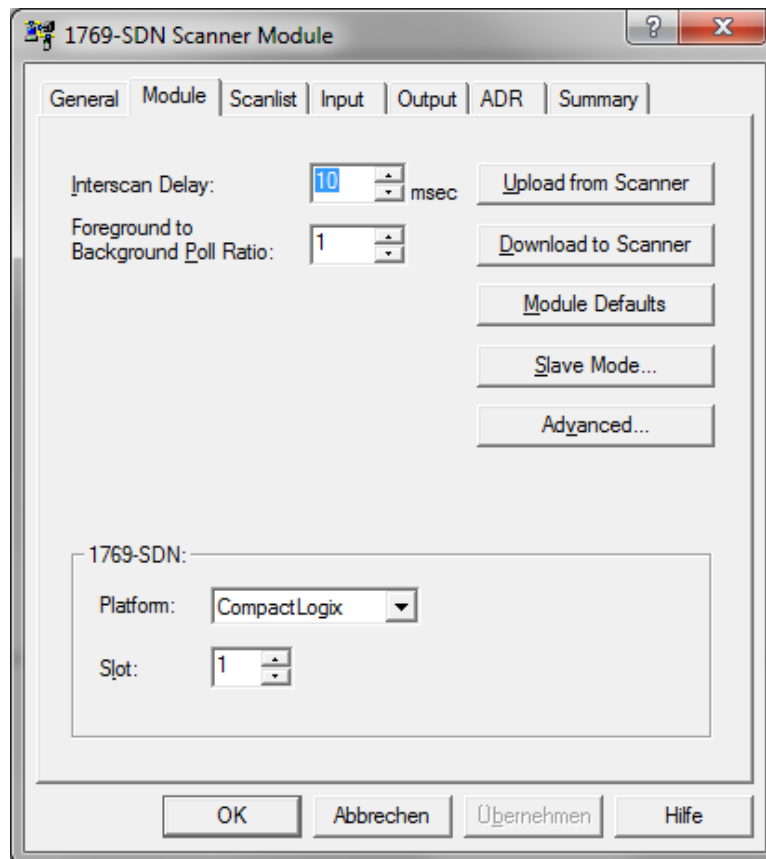
Open Scanlist

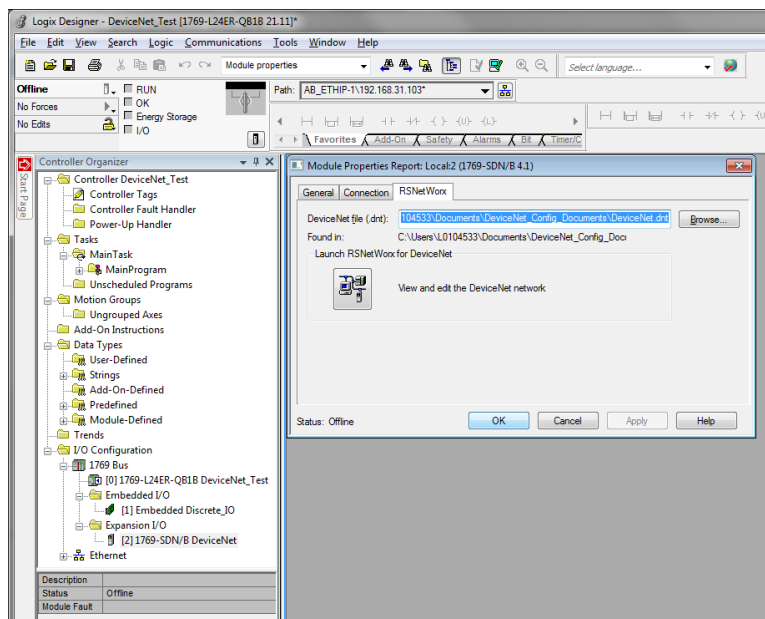
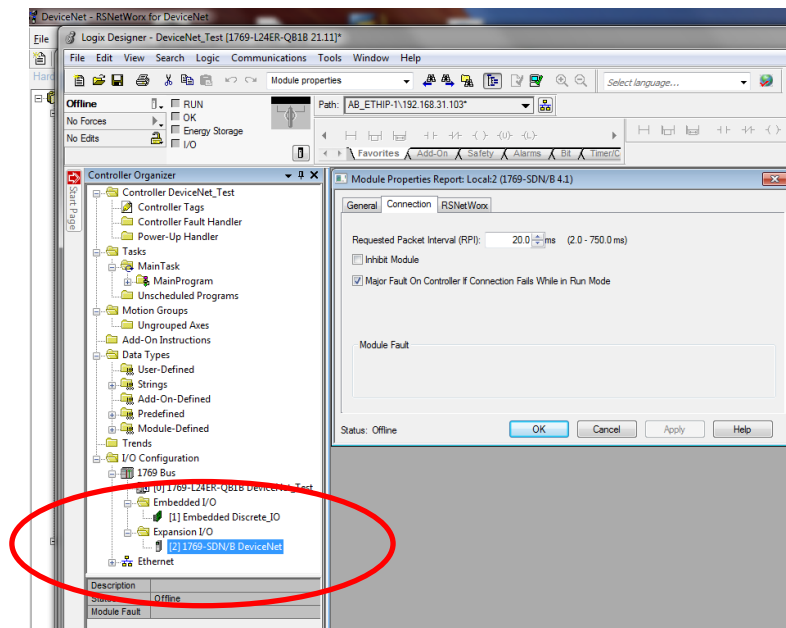












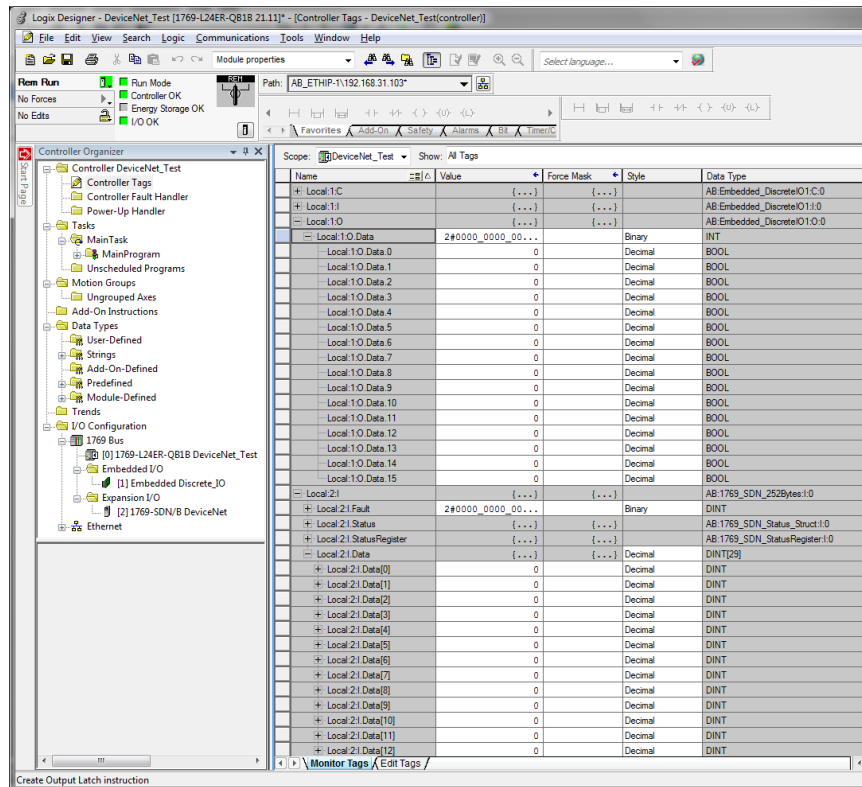
Verify that the new module is listed in the I/O Configuration tree

The BM1000 Gateway is now added to the network, connected and ready to use.

3. Configuring the BM1000 Controller Tags

I/O Tags

The I/O for the added device is automatically added to the Controller Tags (global scope). Inficon BM1000 Tags are shown below. These tags represent the I/O data which are periodically exchanged between the PLC and the BM1000 Module.



Controller Tags display for configured device

BM1000 Module I/O Process Data Mapping for Cyclic Data Transfer

Write Process Data (PLC => Leak Detector)

This data word (BM1000_EIP:O.Data, 2 Bytes) is sent periodically from the programmable logic controller to the leak detector.

Byte 1 is high byte, byte 2 is low byte.

Read Process Data (Leak Detector => PLC)

These 29 data bytes (BM1000_EIP:I.Data) are send periodically from the leak detector to the programmable logic controller.

Controller Tag Name	Byte	Description
BM1000_EIP:O.Data[0] BM1000_EIP:O.Data[1]	1...2	Output 1 word Meaning: Control word
BM1000_EIP:I.Data[0] BM1000_EIP:I.Data[1]	1...2	Input 1 word Meaning: Status word
BM1000_EIP:I.Data[2] BM1000_EIP:I.Data[3] BM1000_EIP:I.Data[4] BM1000_EIP:I.Data[5]	3...6	Input 2 words Meaning: Leak rate
BM1000_EIP:I.Data[6] BM1000_EIP:I.Data[7] BM1000_EIP:I.Data[8] BM1000_EIP:I.Data[9]	7...10	Input 2 words Meaning: Pressure
BM1000_EIP:I.Data[10] BM1000_EIP:I.Data[11]	11...12	Input 1 word Meaning: Error code
BM1000_EIP:I.Data[12]	13	Input 1 Byte Meaning: Trigger status 1, 2, 3, 4
BM1000_EIP:I.Data[13]	14	Input 1 Byte Meaning: Cal Status
BM1000_EIP:I.Data[14]	15	Input 1 Byte Meaning: DeviceID

BM1000_EIP:I.Data[15] BM1000_EIP:I.Data[16] BM1000_EIP:I.Data[17] BM1000_EIP:I.Data[18]	16...19	Input 2 words Meaning: Pressure p2
BM1000_EIP:I.Data[19] BM1000_EIP:I.Data[20] BM1000_EIP:I.Data[21] BM1000_EIP:I.Data[22]	20...23	Input 2 words Meaning: Pressure p3
BM1000_EIP:I.Data[23] BM1000_EIP:I.Data[24] BM1000_EIP:I.Data[25] BM1000_EIP:I.Data[26]	24...27	Input 2 words Meaning: Pressure p4
BM1000_EIP:I.Data[27] BM1000_EIP:I.Data[28]	28...29	Input 1 word Meaning: Device_specific_word