



SEVIO

User Guide to Beckhoff®



Legal Information

The content of this document is provided “as-is”. No warranties of any kind related to the content of this document are provided. Sevio reserves the right to review this document or withdraw it at any time without any notice.

Under no circumstances shall Sevio be responsible for any loss of data or income or any special, incidental, and consequential or indirect damages howsoever caused.

More information about Sevio can be found at the following Internet address: <https://sevio.it/>.

Version History

Revision	Date	Description
21_05	01/05/2021	Emission
21_12	01/12/2021	First Revision

Trademarks

Sevio is a Sevio S.r.l. trademark. Beckhoff®, Visual Studio®, TwinCAT® are a Beckhoff Automation GmbH & Co KG registered trademarks. Other product names and brands are registered brands or trademarks of their respective owners.



Indice

Legal Information.....	2
Version History.....	2
Trademarks.....	2
Preface.....	4
Requirements.....	4
Using Sevio System.....	5
Sevio and Beckhoff®.....	6
Via TwinCAT®.....	7
Add Route Dialog.....	7
Via Config Mode.....	8
Remote Display.....	8

Preface

The Sevio system has been designed to offer Clients a solution for the connection of multiple independent and physically dislocated networks, transforming them into numerous Sevio networks. Each Client is the owner of a Realm which is the set of all Sevio networks and Workstations (PC, tablet, smartphone).

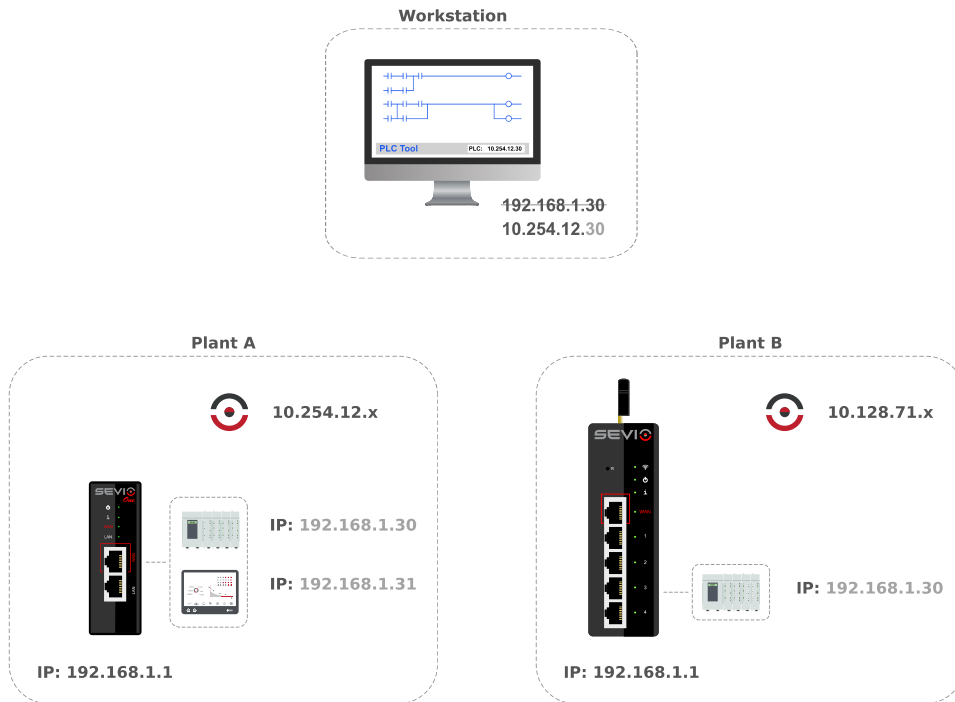
This document explains how to use the Sevio system combined with **Beckhoff®** products.

Requirements

The fundamental requirements for use of the Sevio system combined with **Beckhoff®** products:

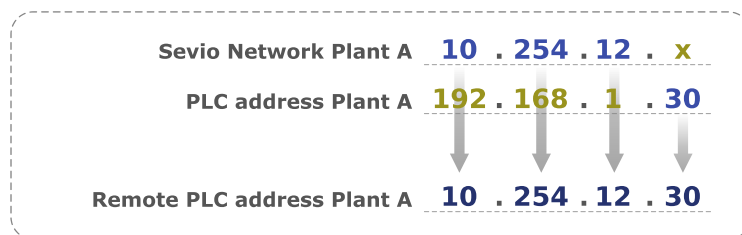
- the Sevio Router;
- the Registration Sheet (supplied along with the Sevio Router);
- a Beckhoff® IPC with Ethernet connectivity;
- a PC with an up-to-date web browser and TwinCAT® and Visual Studio® applications installed;
- a VPN Client configured and connected (see [Workstations Configuration](#));
- an Internet access.

Using Sevio System



Each Sevio Router provides a specific Sevio network. In the above example, Plant A Sevio network is 10.254.12.x, while the Plant B Sevio network is 10.128.71.x.

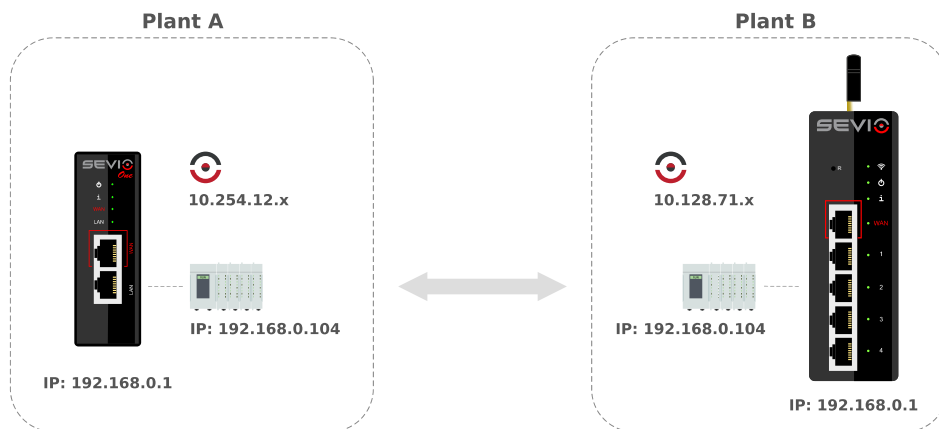
To access Plant A PLC from the Workstation, the Operator should combine first three bytes of Sevio Network with fourth byte assigned to PLC device:



Sevio and Beckhoff®

The Sevio system allows Workstations to communicate with all devices connected to the various Sevio Routers.

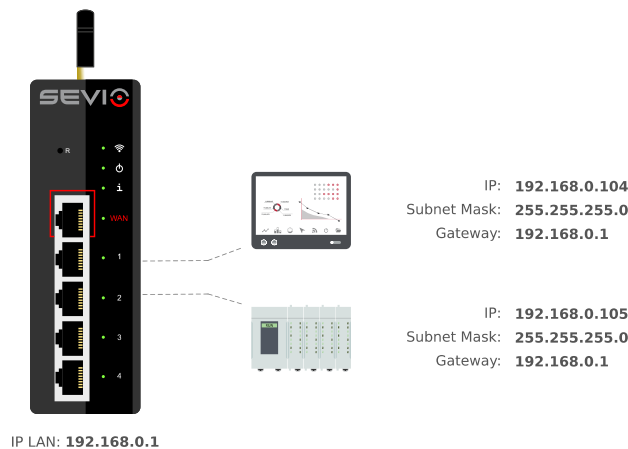
One of the most distinctive features of Sevio System is the routing capability, eg. allowing communication between devices of different Sevio networks/plants, part of the same Realm.



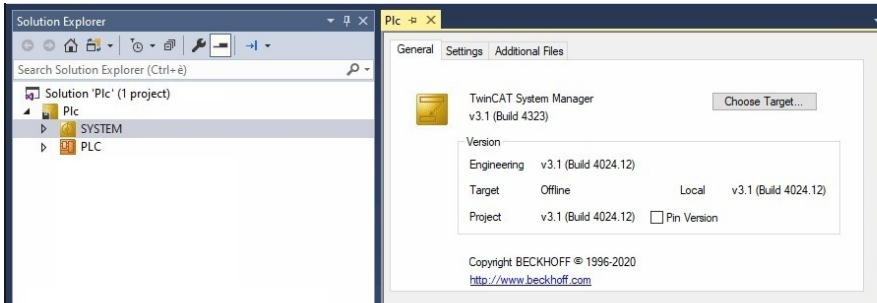
In order to be able to use this feature, it is necessary that all automation devices are configured with IP address and gateway address (LAN address of the Sevio Router to which they are connected). Firewalls on all Sevio Routers must be enabled.

Remote connection will be allowed using Sevio Networks on each site.

Note: Sevio Routers must have the same firmware installed.



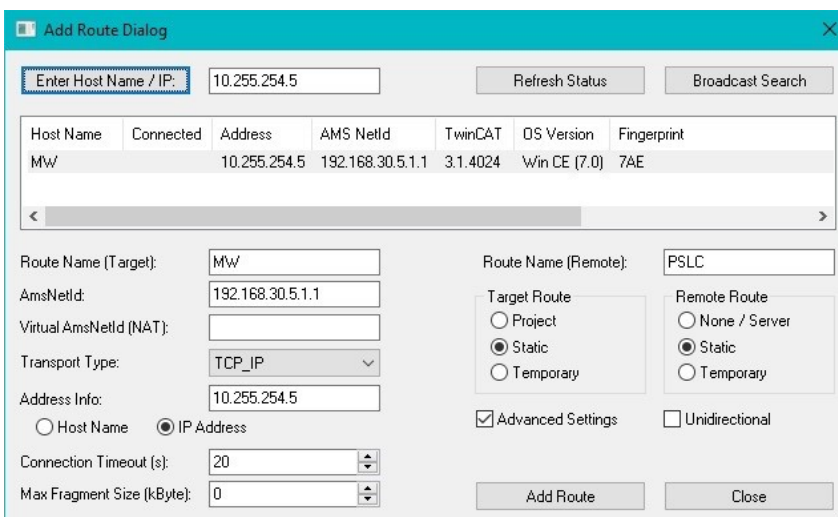
Via TwinCAT®



Go to **System** and select **Choose Target**.

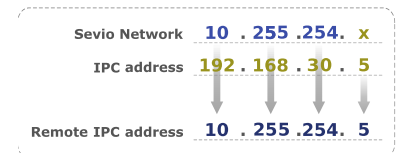
Next step, select **Search Ethernet**.

Add Route Dialog

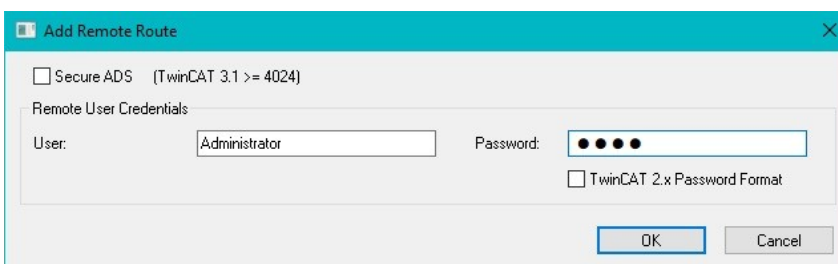


Select **IP Address** in **Address info** section.

Set up the remote IPC IP address in **Enter Host Name/IP** field, e.g. **10.255.254.5**:



Select **Enter Host Name/IP** function, then **Add Route**.



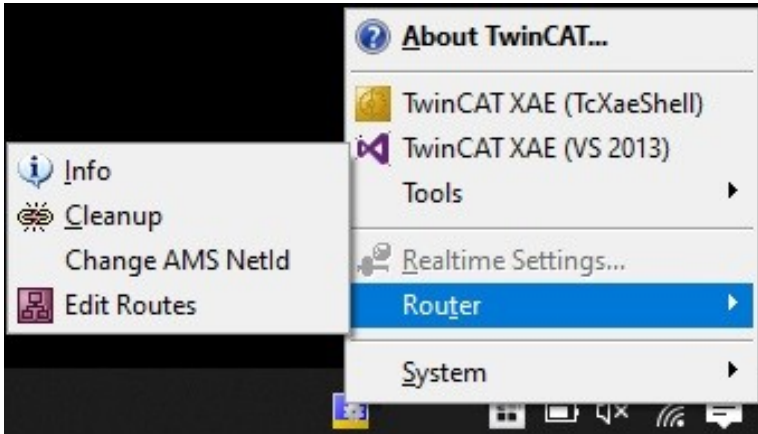
Fill in the Password.

Click **OK**.

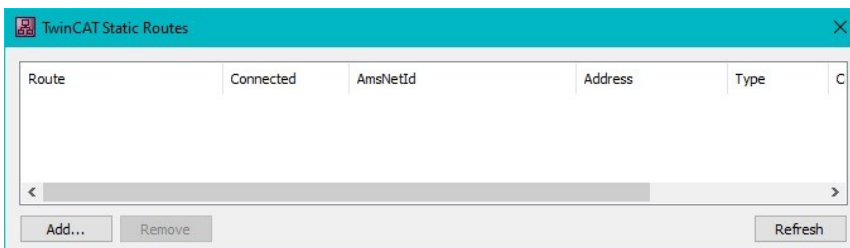
The remote IPC is connected



Via Config Mode



In the taskbar, select **TwinCAT® Configuration Mode, Router, Edit Routes.**

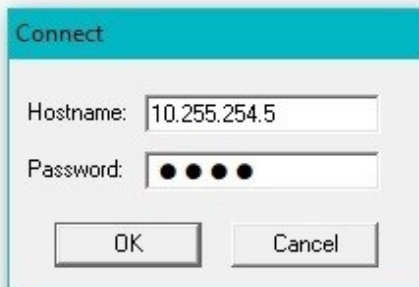


Select **Add...**, then proceed with [Add Route Dialog](#) procedure.

Remote Display



To access to IPC Remote Display:



Execute , **File, Connect** and fill in, in **Hostname** field, the remote IPC IP Address, e.g. **10.255.254.5**.

Click **OK**.



Sevio Srl - Via Dei Caniana, 6/A, Bergamo - IT

Ph. +39 0350514333

Customer service: support@sevio.it

Sales Department: sales@sevio.it

<https://sevio.it/>