

## **Application Note**

Router configuration for TCP/IP protocols

## Revisioni del documento

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## 1. Introduction

**Winlog Pro** is able to communicate with field devices using networks with TCP / IP support, sampling can be done through corporate networks (*INTRANET*) or via the Web (*INTERNET*)

With **Winlog Pro** is also possible, using the TCP/IP protocol, to build supervision Client / Server structures (see the guide "Getting started - Create a client application on TCP/IP), even in this case, the information may travel via *INTRANET* or *INTERNET*.

In these notes we will focus on setting up an ADSL router to allow the exchange of information on TCP/IP connection between devices belonging to a corporate *INTRANET* and equipment directly connected to the *INTERNET*.

## 2. Routers configuration

When you want to use Internet to communicate with field devices or with a Winlog server, you must have the TCP/IP network transparent for **Winlog Pro**; it is necessary that routers that provide Internet access, redirect it communication protocols packets to the correct IP addresses.

Each protocol uses a special TCP/IP port and in somecases you can configure an alternate port in the device. Here is an example of the TCP / IP standard ports for certain types of protocols:

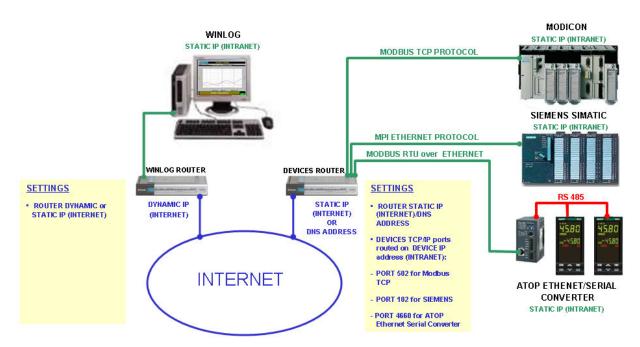
- MPI over ethernet (SIEMENS SIMATIC) PORT 102
- MODBUS TCP (MODICON) PORT 502
- MODBUS RTU over ethernet (ATOP Ethernet/Serial Converter) PORT 4660
- TCP/IP Client/Server (Winlog Pro) PORT 46823 46824

Each device on a TCP/IP network must have a STATIC IP address on its INTRANET (eg 192.168.1.10) to be identified uniquely.

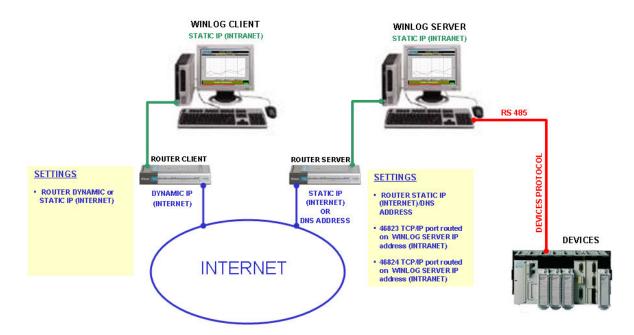
The ROUTER connected to the devices or to a **Winlog Pro** Server station should have an INTERNET static IP address or a DNS address (obtained via free services such as **DynDNS** and **NoIp**). Router must be configured so that packets received on ports used by the devices protocols, are redirected directly to the proper devices, it is therefore necessary to configure ROUTERS **Virtual Server** or **Port Forwarding** correctly.

It is not necessary to assign to the router connected to Winlog Pro Client a STATIC IP address on INTERNET. In order to let packets to pass through transparently, you must also correctly configure your FIREWALL

Here are two examples of supervision over INTERNET



Supervision of field devices via INTERNET



Supervision with Client/Server structure via INTERNET