Netview

Purpose of this tool

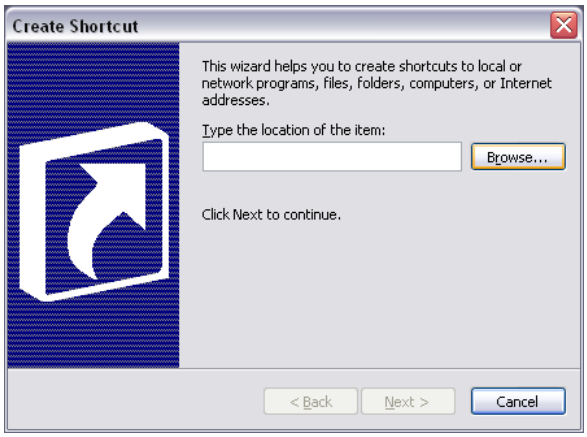
Netview can be used for online monitoring of SIPROTEC devices (at least module-firmware 4.00 needed for Ethernet module, which was released in 08/2007). Also other devices like switches or PCs can be monitored (automatically by the “ping”-command), if they are imported in the SCD – file with their ICD – file description. Comprehensive monitoring values are only available for SIPROTEC – devices.

Netview requires the exported SCD-file of a DIGSI-project. The SCD-file contains the IP-addresses of all participating devices, if they are imported into the System Configurator of DIGSI. The Ethernet modules in the SIPROTEC devices support the SNMP-protocol, which provides the EN100 module information to Netview. Netview shows all necessary communication parameters with Web – pages, which are created and updated automatically when the tool is in operation. So you have an online view to your network. Netview supports you during build up your station bus and troubleshooting in case of communication failures as well.

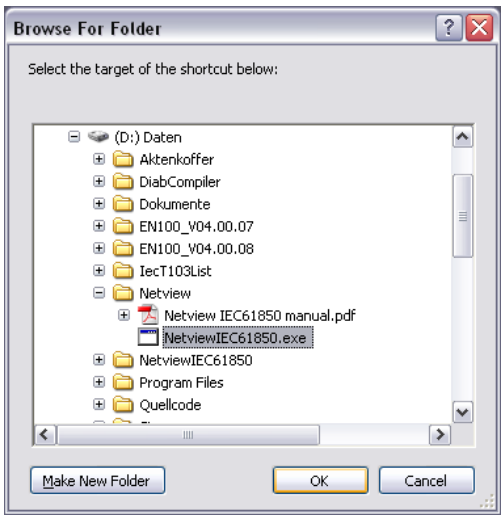
How to use Netview

1.) Start Netview

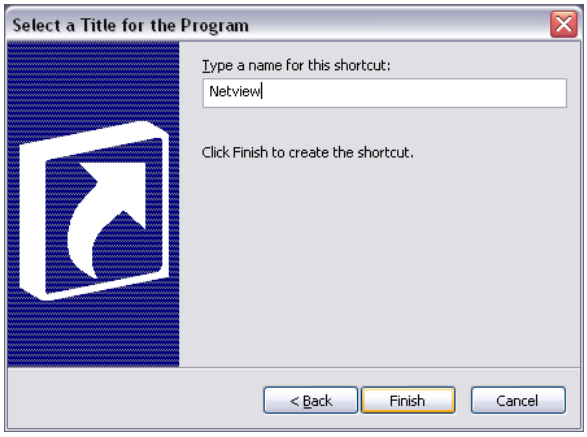
1.1) After extracting the self-extracting Zip-file “NetviewSetup.exe” to any folder on your hard disk (e.g. D:\Netview), you need to create a shortcut for the application. Therefore, right mouse-click on an empty location of your desktop and choose from the menu: New→Shortcut:



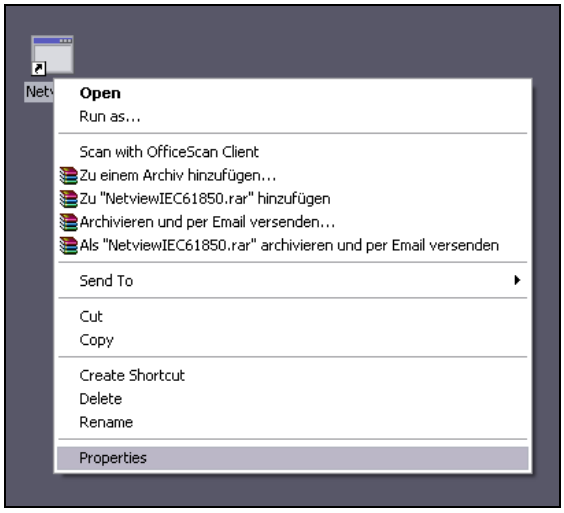
Now, click the “Browse” Button and choose from the destination folder you extracted the “NetviewSetup.exe” archive to, the file “NetviewIEC61850.exe” and click “OK”, then click “Next”:



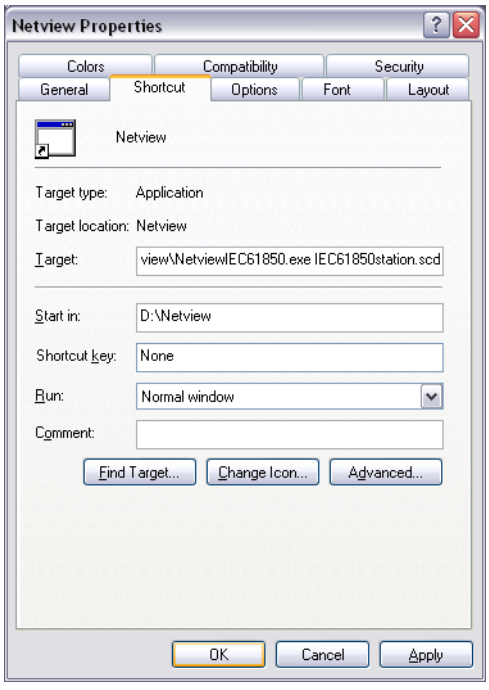
Type a name for the shortcut (e.g. “Netview”) and click “Finish”:



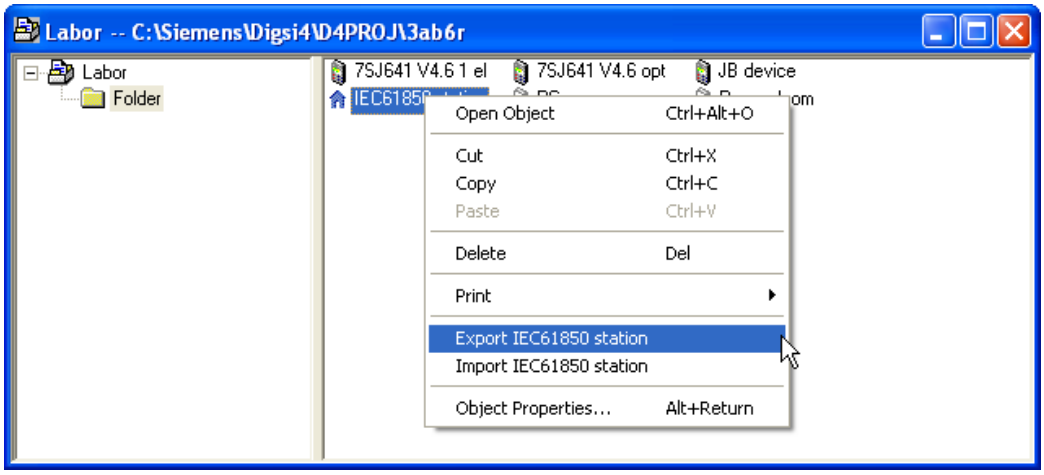
Now, right mouse-click on this created shortcut and choose “Properties” from the menu:



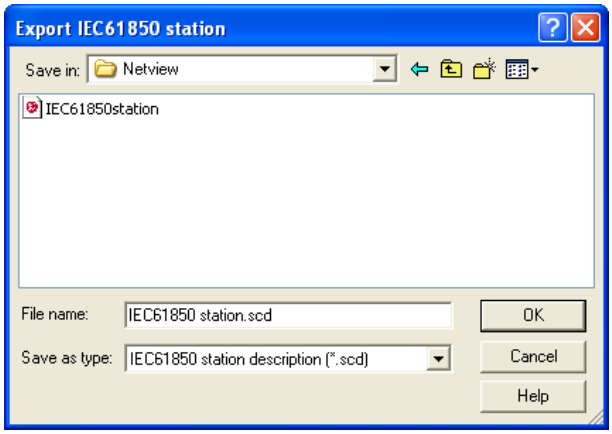
In the “Target” field, add “IEC61850station.scd” after the filename “NetviewIEC61850.exe” (with a blank between the words) and click “OK”:



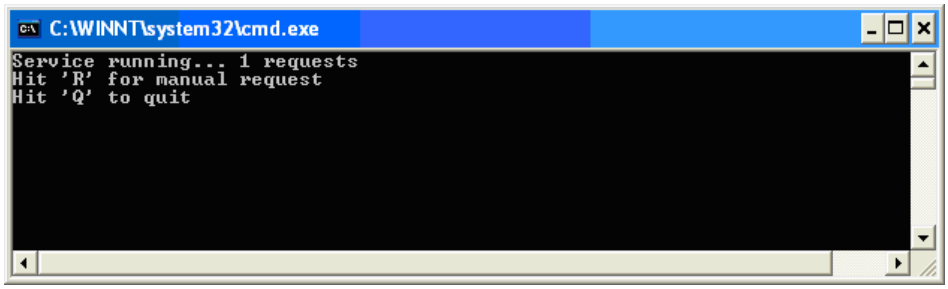
1.2) Choose in DIGSI the project which contains the devices you want to monitor. Right mouse-click on the station configurator and choose “Export IEC61850 station”:



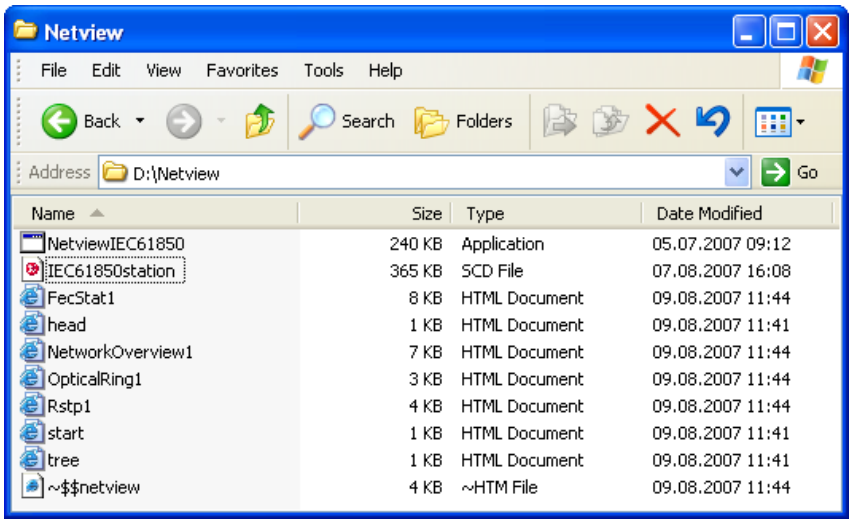
In preparation to Netview save the SCD-file into the folder you extracted the “NetviewSetup.exe” archive to and rename the file to “IEC61850station.scd”. For Netview, the SCD-file shall not contain any blanks or special characters:



1.3) To run Netview, use the created shortcut from 1.1) and the application will start monitoring your devices until you quit by pressing “Q”. With “R” you can request an update of device information manually (normal period is 10 seconds).



In the Netview folder the HTM-files appear automatically, which can by used in a Browser to display the monitoring results.



You can also start Netview directly out of the “DOS-box”:

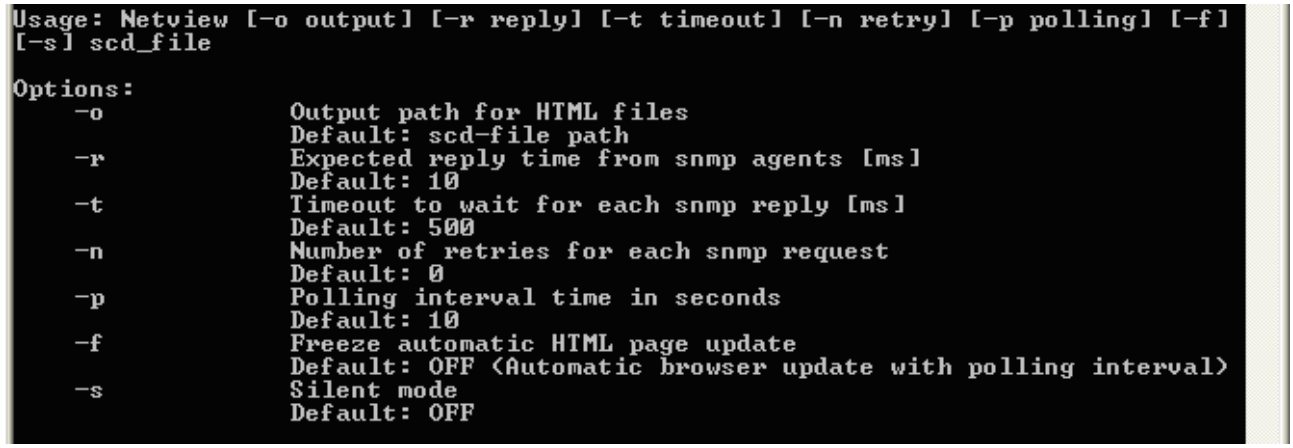
a.) Extract the self-extracting Zip-file “NetviewSetup.exe” to a new folder (Here: “1Netview”).

b.) Save the corresponding SCD-file in the same folder.

c.) Open the “DOS-box” and change to directory “1Netview”.

d.) Start NetviewIEC61850 by inserting the name of the tool, followed by the name of the SCD-filename. For NetviewIEC61850, the SCD-file shall not contain any blanks or special characters.

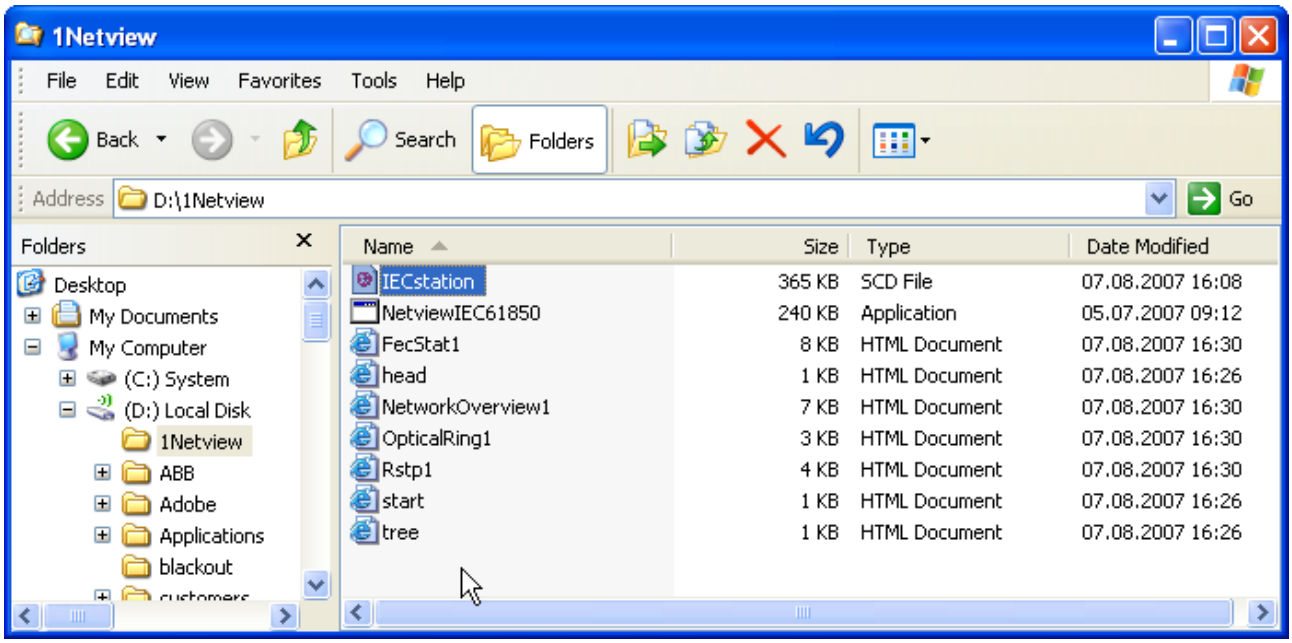
For special needs you can enter optional parameters, see following picture.



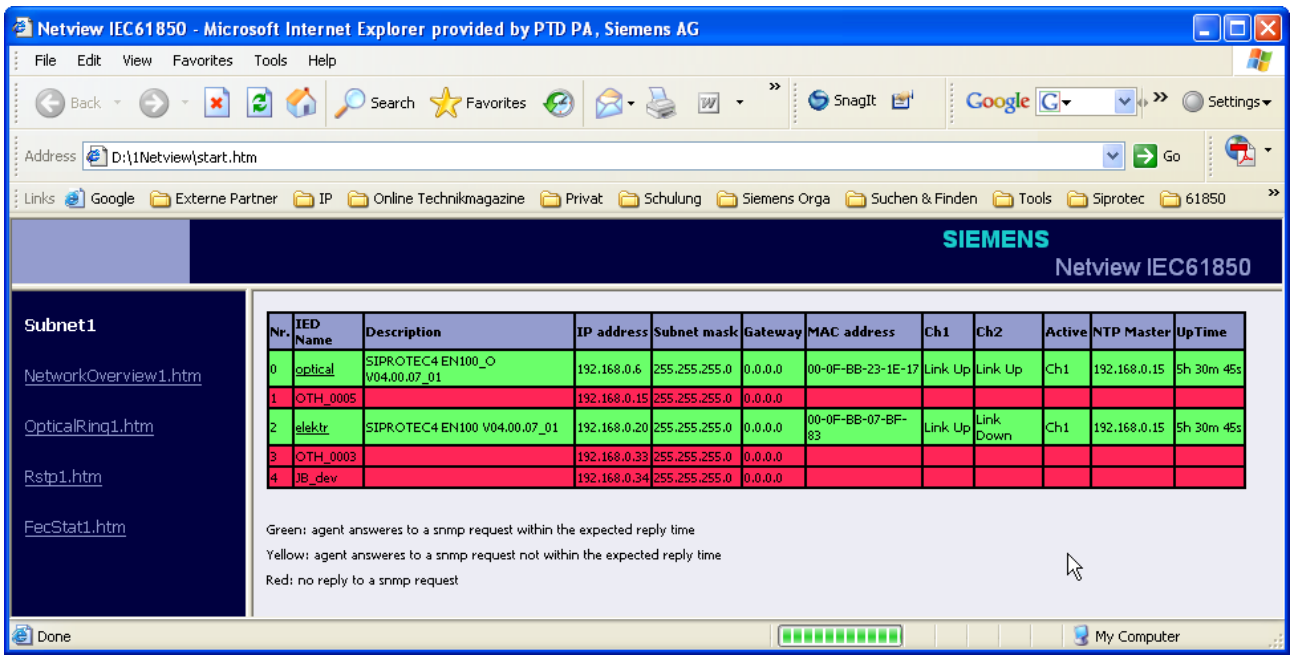
If you see the line “Service running…. X requests”, you know Netview is working.

2.) Monitoring the devices

If Netview is running, the Output files will be created automatically and also periodically updated as well in the same Netview folder.



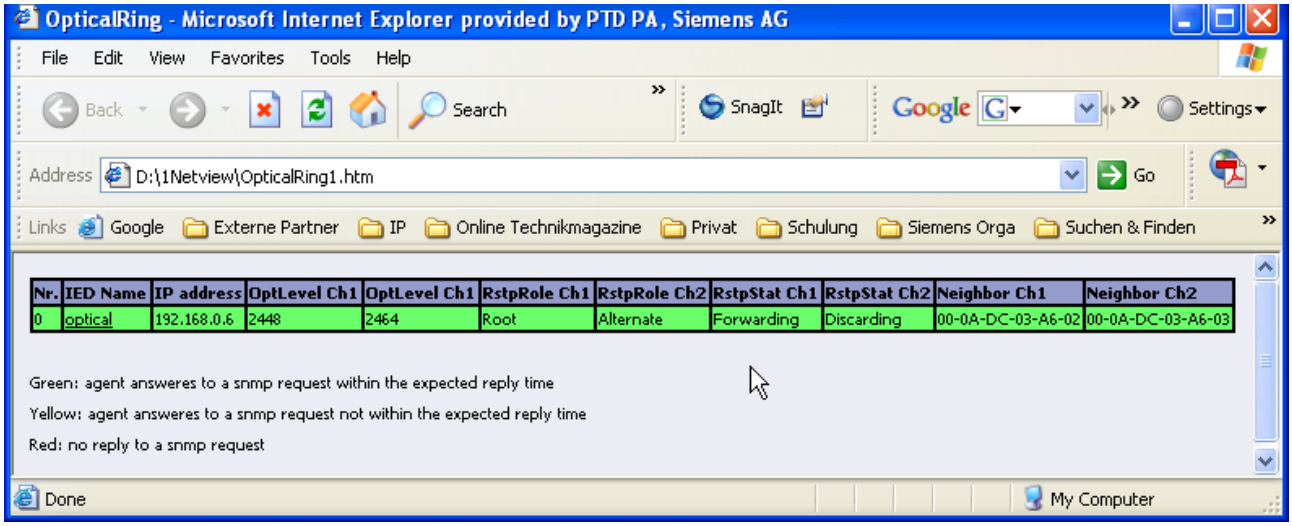
For online monitoring of the devices open the start.htm with a Browser. Normally by double clicking on start.htm the Browser window will be opened.

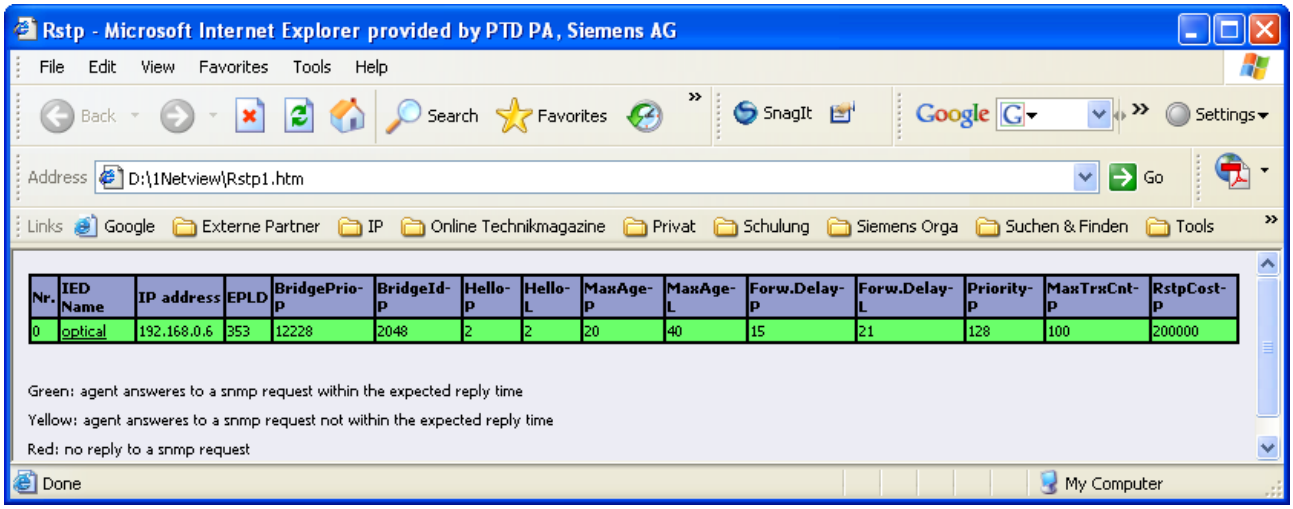


Here you have an overview of all devices which are included in the SCD-file. The network parameters of these devices have been configured in the System Configurator. Before the devices must be configured with the device specific configuration tool, e.g. with DIGSI 4 for SIPROTEC 4 devices. If a device can not be pinged, it's displayed in red color. Reason may be a wrong IP – setting or a network failure. With green colors you can see all devices which can be pinged. Yellow color show devices which do not reply to a ping within 20 ms. SIPROTEC – devices listed with the IEC61850 IED-name are hyperlinked to the module homepage of the Ethernet module, which show additional monitoring values. These values are described in the Ethernet module manual which is available for download in the Internet under www.siprotec.com.

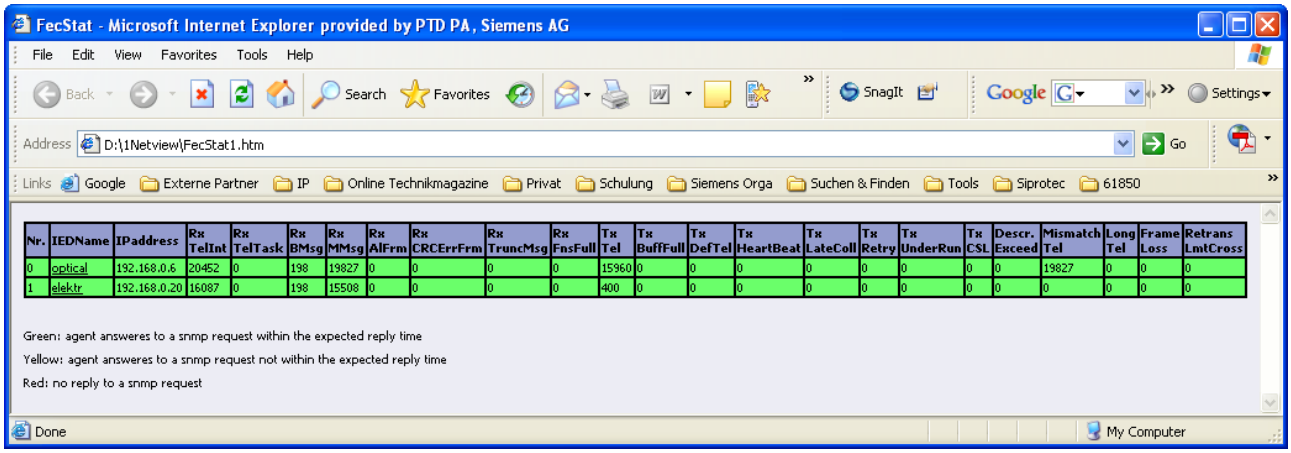
There are three additional pages available. You can navigate to these pages at the left side.

The pages “OpticalRing1.htm” and “RSTP1.htm” show you information about the IEDs with optical Ethernet module which are working in an optical Ethernet ring (switch mode). With these values the optical ring can be checked in two tables within a few seconds. For further information, please use the Ethernet module manual for firmware version 4.





The page “FecStat1.htm” shows you information about Received/Transmitted Ethernet telegrams:



All Web – pages can work in parallel, if necessary. The pages will be updated periodically (default 10 seconds).

Preconditions:

NetviewIEC61850.exe needs at least EN100 Firmware Version 4.0 and higher to get the monitoring values. Internet Explorer V6 or higher is required. The tool is running under Windows XP and admin rights are required for the PC.