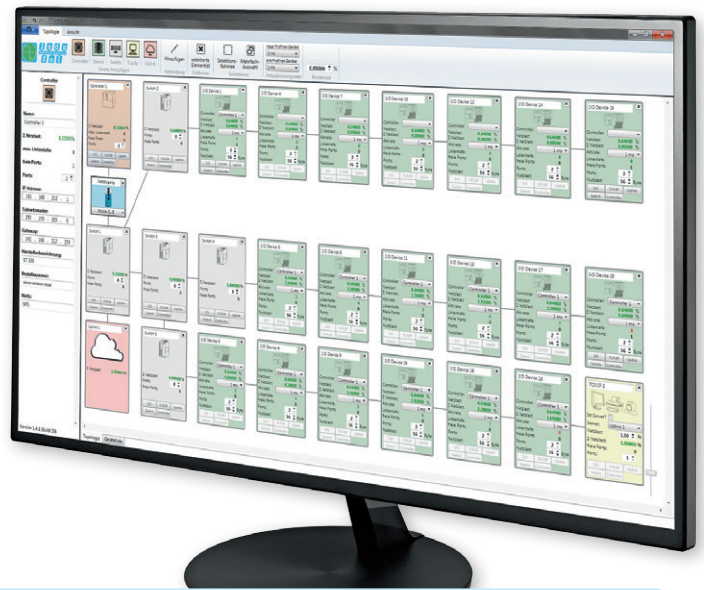
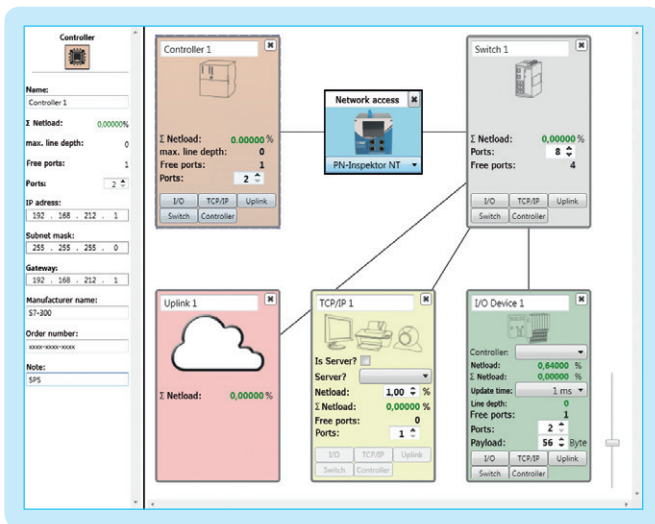


## PROnetplan network planning software

**PROnetplan** is a software for the preliminary planning of industrial networks. The network can be assembled intuitively on a graphic interface. Important parameters like the net load at the controller are calculated and displayed automatically based on the line depth and the preset update rate. With a simple simulation of the communication parameters or changes in the network structure, potential bottlenecks can be identified and eliminated during the planning stage. All devices and the predicted net load for each interface are listed in a clear overview. Free switch or device ports as well as the line depth are shown for each device. A special feature is the automated notification

about the impact on net load when integrating components with TCP/IP communication. As in real hardware configuration the update rate can be set uniformly for all devices or separately for each device. Security pop-ups show the locations in a network where the use of a firewall would be advisable.

In addition to network optimization, the topology created with **PROnetplan** may serve both as a platform for discussion with the customer and as a document for network installation.

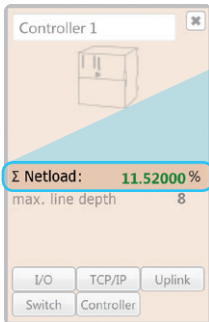


Device type	Device name	Number of ports	Free ports	Netload (Byte)	Netload generated (%)	Local netload (%)	Allocated controller
Controller	Controller 1	2	1		0	7,4	
Switch	Switch 1	8	4		0	7,4	
Switch	Switch 2	8	6		0	2,56	
Switch	Switch 3	8	5		0	4,84	
Uplink	Uplink 1	1	0		0	0	
IO Device	IO Device 1	2	0	56	0,64	2,56	Controller 1
IO Device	IO Device 2	2	0	56	0,64	1,92	Controller 1
IO Device	IO Device 3	2	0	56	0,64	1,28	Controller 1
Switch	Switch 4	8	6		0	1,92	
IO Device	IO Device 5	2	0	56	0,64	1,92	Controller 1
IO Device	IO Device 6	2	0	56	0,64	1,28	Controller 1
Switch	Switch 5	8	6		0	2,92	
IO Device	IO Device 8	2	0	56	0,64	2,92	Controller 1
IO Device	IO Device 9	2	0	56	0,64	2,28	Controller 1
IO Device	IO Device 4	2	1	56	0,64	0,64	Controller 1
IO Device	IO Device 7	2	1	56	0,64	0,64	Controller 1

Fig. 12: All devices are shown in a clear device list (including all relevant parameters)



## Automatically generated detail information:



### Netload

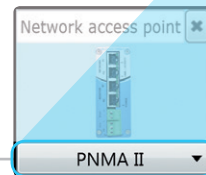
Σ Netload: **11.52000 %**

**PRONetplan** dynamically shows the resulting load for every connection in the network. This also applies with complex network structures or networks with multiple controllers.

### Network access

PNMA II

All net access devices are shown in the software and can be considered in the planning phase.



### Update time

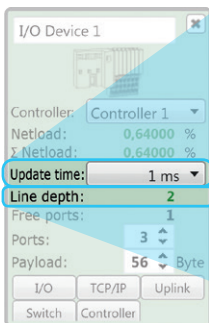
Update time: **1 ms**

The update rate can be set uniformly for all devices or separately for each device.

### Free ports

Free ports: **4**

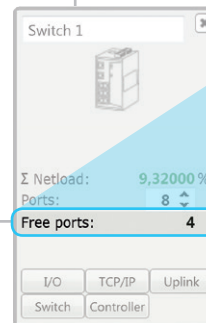
Displays remaining free ports on switches and devices.



### Line depth

Line depth: **2**

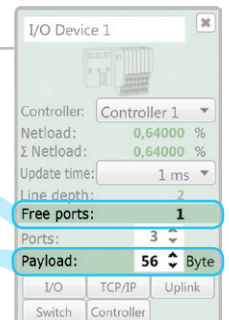
**PRONetplan** shows the line depth dynamically for each device. The communication partner can be assigned for every device in the network.



### Payload

Payload: **56** Byte

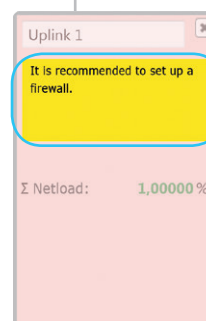
For a more accurate calculation of the netload the real payload can be set for each device in the expanded view.



### Security information

It is recommended to set up a firewall.

The user-friendly pop-ups with security information show immediately which devices have free ports that may need to be blocked and where the use of a firewall might be advisable.



## Highlights

- Display of the netload for every connection in the network
- Update rate setting
- Indication of line depth for every device
- Separate netload settings for each device
- Definition of different network access devices, e.g. **PROFINET-INSPEKTOR® NT** or the measuring points **iPNMA**, **PNMA II**, **PNMX**
- Clear device list for all devices
- Pop-ups with security information
- Display of remaining free ports on switches and devices
- Full-featured printer functionality
- PDF export with numerous functions

## PRONetplan in conjunction with PROscan® Active V2

The topologies scanned with the **PROscan® Active V2** analysis software (see page 13) can easily be fed into **PRONetplan**. This enables a comparison between the plan and reality. This procedure is very useful during planning an expansion or optimization of the network.