

Configuration of IPLC500, IPLC510

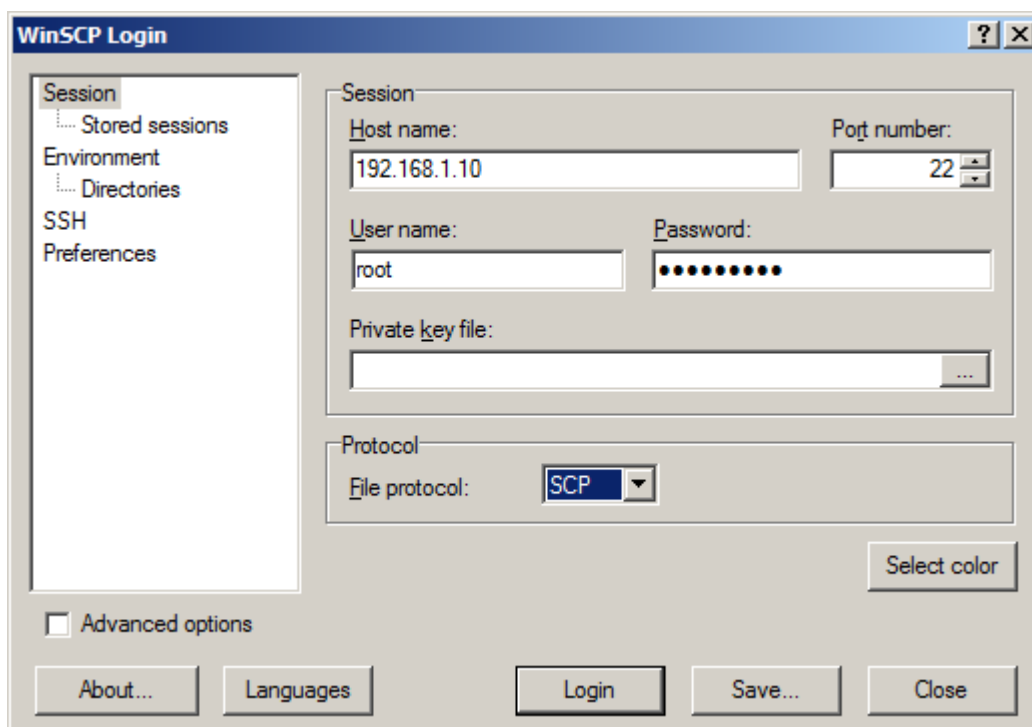
Install and run WinSCP, a program communicating over SCP protocol. The installer can be downloaded here <http://winscp.net/eng/download.php>.

Default IP address of the IPLC510 is 192.168.1.10. Remember to check if your computer is in the same network and the address can be PINGed. To connect over a crossed Ethernet cable, a static IP address on the PC must be set up as well. Recommended setting is :

IP address : 192.168.1.44

Subnet mask : 255.255.255.0

In the WinSCP window, create a new connection.



User name is „root“ by default.

User name / pasword: root / „code“, where default password („code“) is written on the label (on the side of device).

Until S/N 136558:

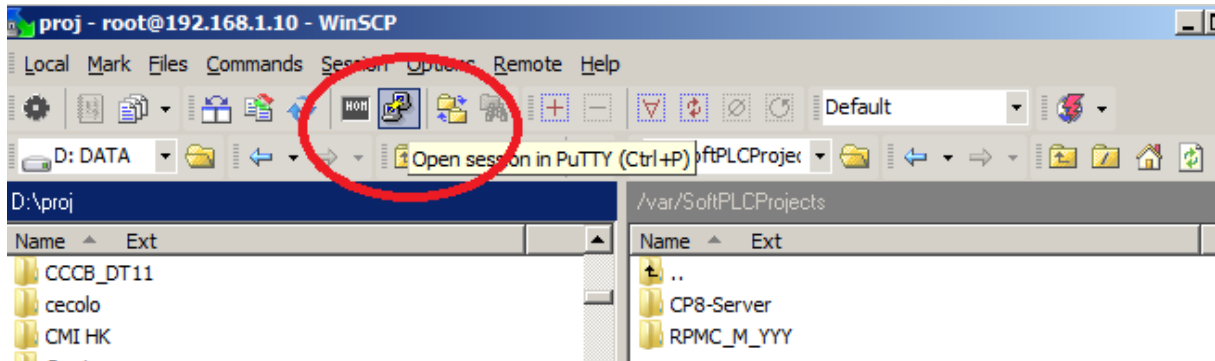
User name / pasword: root / „sharkXXXX“, where XXXX are last four digits of serial number, as stated on the IPLC label. E.g. if the serial number (S/N) of IPLC510 is 028380 then the password is „shark8380“.

The protocol used is SCP.

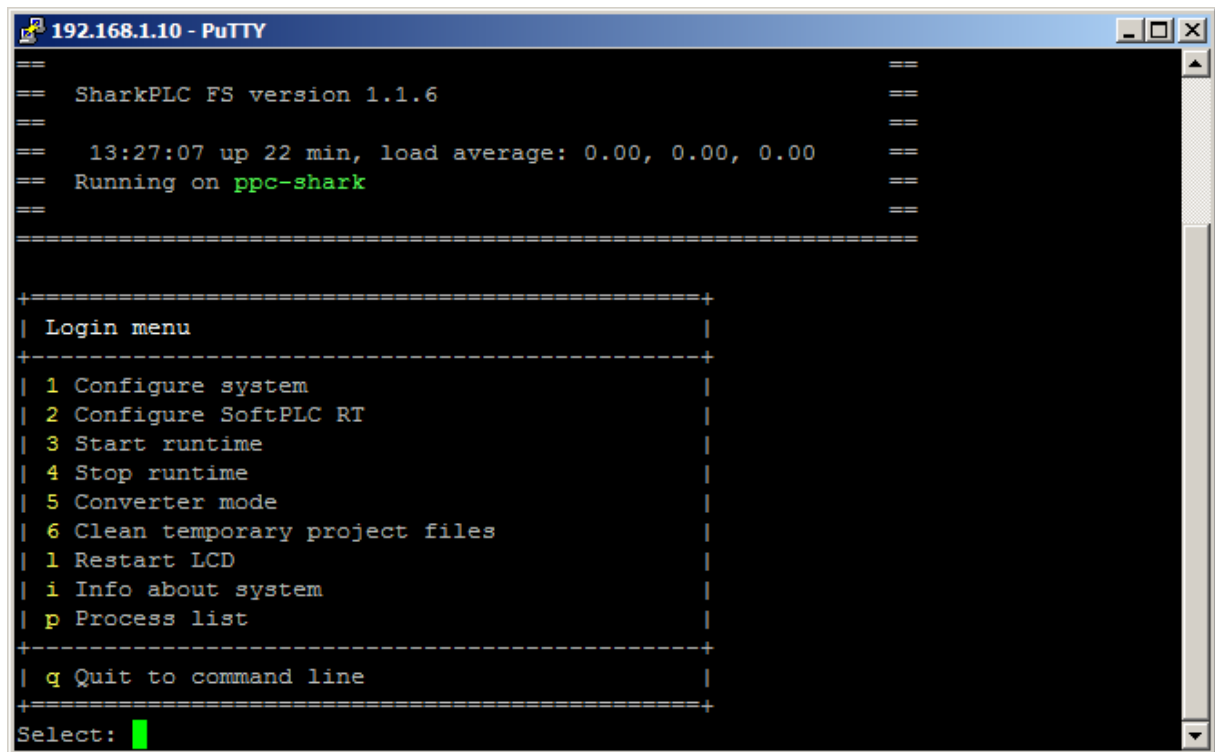
There may be a warning about the server host key which is not in the registry. Add the key to the registry to continue.

To configure the IPLC, a terminal program is needed, e.g. PuTTY.

The executable file putty.exe (for download e.g. at <http://www.putty.org/>) must be placed in C:\Program Files (x86)\PuTTY\putty.exe – then you can run putty directly via icon placed on top bar of the WinSCP main window, or Commands/Open in PuTTY.

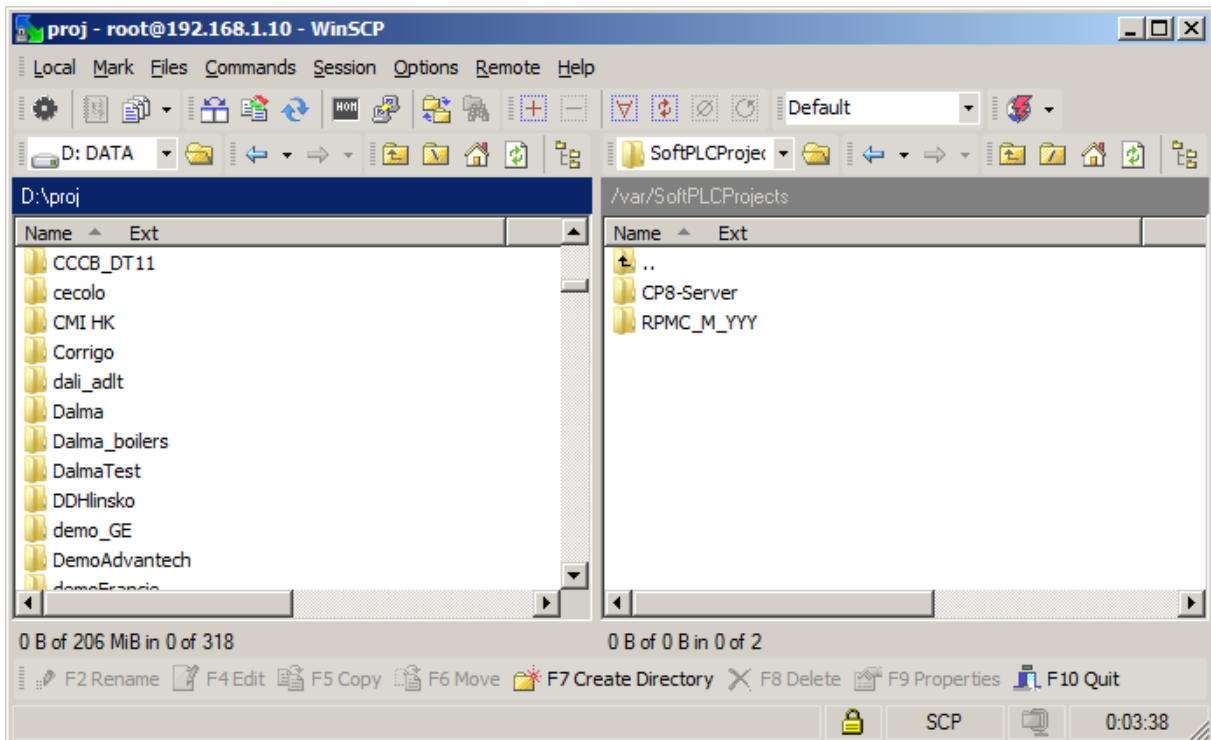


Of course PuTTY can be run separately.



Stop the running SoftPLC project by pressing the „4“ key.

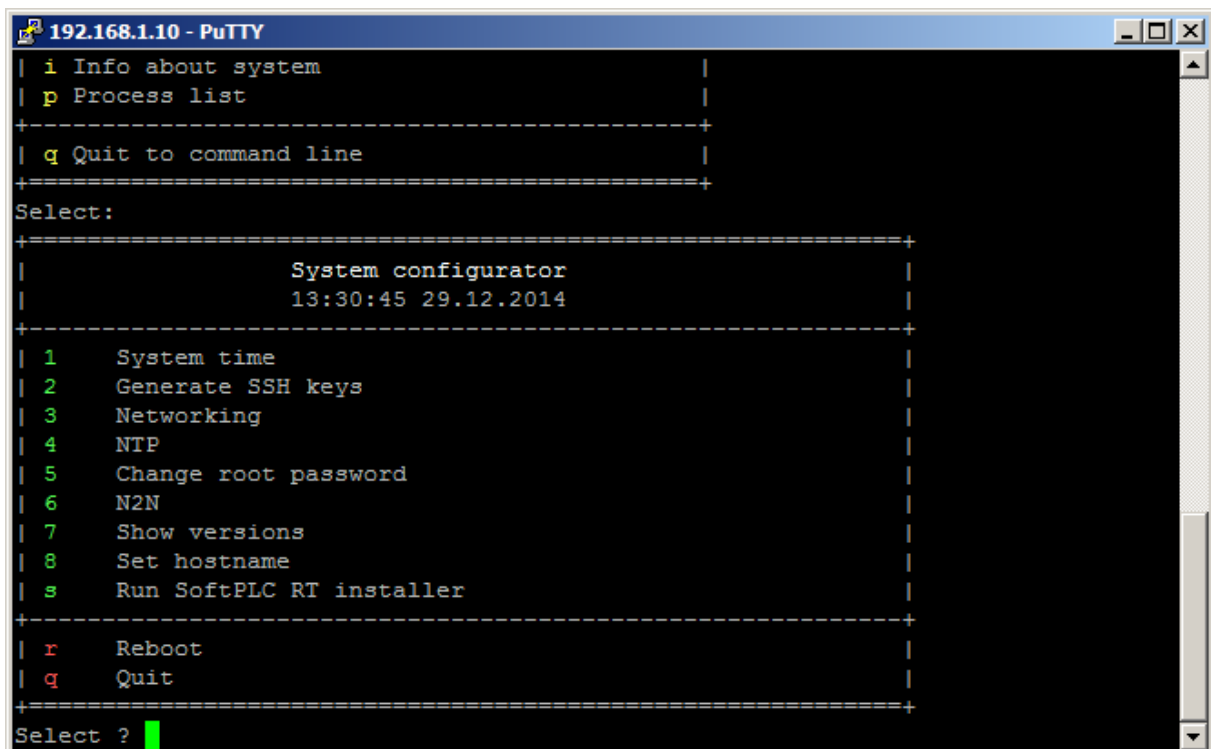
Go to the WinSCP main menu.



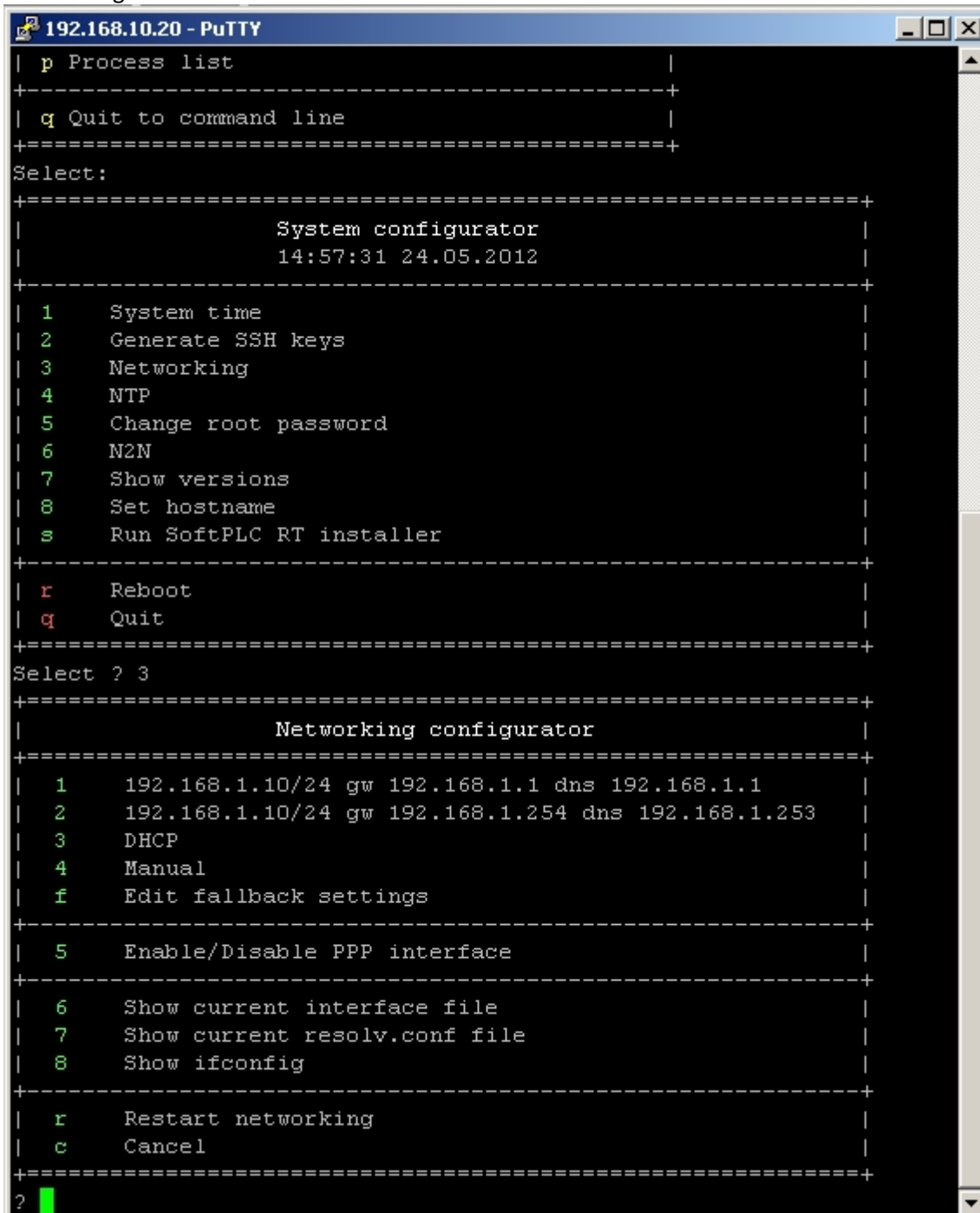
Copy your SoftPLC project folder to the /var/SoftPLCProjects folder of the IPLC. There may be more projects in the folder, although only one project will be selected to run.

Note that it is advisable to upload whole solution directory for service and administration purposes, however the runtime itself needs only to access directory which contains the .splproj file.

Go to the PuTTY terminal window and press „1“ to enter the system configuration menu.



Here, the IP address and other network parameters of the IPLC can be set. Press „3“ to enter the Networking menu.



```
192.168.10.20 - PuTTY
| p Process list |
+-----+
| q Quit to command line |
+=====+
Select:
+-----+
|                System configurator                |
|                14:57:31 24.05.2012                |
+-----+
| 1 System time |
| 2 Generate SSH keys |
| 3 Networking |
| 4 NTP |
| 5 Change root password |
| 6 N2N |
| 7 Show versions |
| 8 Set hostname |
| s Run SoftPLC RT installer |
+-----+
| r Reboot |
| q Quit |
+=====+
Select ? 3
+-----+
|                Networking configurator                |
+-----+
| 1 192.168.1.10/24 gw 192.168.1.1 dns 192.168.1.1 |
| 2 192.168.1.10/24 gw 192.168.1.254 dns 192.168.1.253 |
| 3 DHCP |
| 4 Manual |
| f Edit fallback settings |
+-----+
| 5 Enable/Disable PPP interface |
+-----+
| 6 Show current interface file |
| 7 Show current resolv.conf file |
| 8 Show ifconfig |
+-----+
| r Restart networking |
| c Cancel |
+=====+
? █
```

Select one of the options available, e.g. „4“ for manual IP configuration.

Enter all network settings and confirm by „a“ or „y“ when prompted. The settings below are for illustration only, in case of doubt consult your IT department.

```
192.168.1.10 - PuTTY
| 7 Show current resolv.conf file
| 8 Show ifconfig
+-----+
| r Restart networking
| c Cancel
+-----+
? 4

Enter IPv4 address (default 192.168.1.10): 192.168.1.10
Entered value '192.168.1.10'. Use this (ano yes/retry/no-skip) ?a

Enter subnet mask (default 255.255.255.0): 255.255.255.0
Entered value '255.255.255.0'. Use this (ano yes/retry/no-skip) ?a

Enter default gateway: 192.168.1.1
Entered value '192.168.1.1'. Use this (ano yes/retry/no-skip) ?a

Enter DNS server (separate by space): 8.8.8.8
Entered value '8.8.8.8'. Use this (ano yes/retry/no-skip) ?a

Activate firewall after boot (ano yes/no) ?a
Processing device eth0
+-----+
```

Press „r“ to restart networking. Remember that your computer’s IP settings may need changing so as to communicate with the IPLC again.

Press „c“ to cancel the Networking menu.

Press „q“ to quit the System configuration menu.

Before running the runtime process we need to set at least basic runtime setting – path to ladder diagram project. These settings are stored in runtime configuration file at `/var/opt/rcware/WinServiceRT/soft_plc.config` and can be edited manually, but it is recommended to access these settings via PuTTY using configuration utility.

Press „2“ to configure the runtime.

```
192.168.1.10 - PuTTY
Autostart SoftPLC RT (ano yes/no) ?a

Edit soft_plc.config (ano yes/no) ?a
Actual project path: '/var/SoftPLCProjects/CP8-Server/CP8-Server/CP8-Server.splcproj'
Write name of selected project (case sensitive)
.
..
CP8-Server
RPMC_M_YYY
CP8-Server
Setting project to '/var/SoftPLCProjects/CP8-Server/CP8-Server/CP8-Server.splcproj'

Change RT connection details (ano yes/no) ?n

Change RT performance values (ano yes/no) ?n

Change RT Proxy settings (ano yes/no) ?n

Change RT RcWare DB settings (ano yes/no) ?n

Make additional changes to soft_plc.config by hand (ano yes/no) ?n

Configure LCD menu (ano yes/no) ?a
```

Note that the project name must be entered exactly as it is inclusive caps.

After the SoftPLC configuration is ready, press „3“ in the Login menu to start runtime.

```
192.168.1.10 - PuTTY
====

+-----+
| Login menu |
+-----+
| 1 Configure system |
| 2 Configure SoftPLC RT |
| 3 Start runtime |
| 4 Stop runtime |
| 5 Converter mode |
| 6 Clean temporary project files |
| 1 Restart LCD |
| i Info about system |
| p Process list |
+-----+
| q Quit to command line |
+-----+

Select:
Starting SoftPLC runtime ... Waiting ( 58s) done
Starting LCD menu handler ... done
    Loading required modules ...
        LCD Driver done
        I/O expander done
```

The IPLC is now ready for connection from IDE over TCP port 12345 (Remote Connection).