

MANUAL DUCOP-100 WITH COMMUNICATION FUNCTION

Version 1.0

Notice:

No liability or guarantee can be given for any errors.

User Manual Web Interface

Controller with limiter function, DuCoP100 with communication functions



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1 Web Interface

1.1 Measured Values

The system has a web browser which displays the current measured values of the controller at intervals of one second. The web interface is called up via the system using a static IP address.

A loss of connection of the measurement of 10 seconds is displayed as an error message on the web interface..

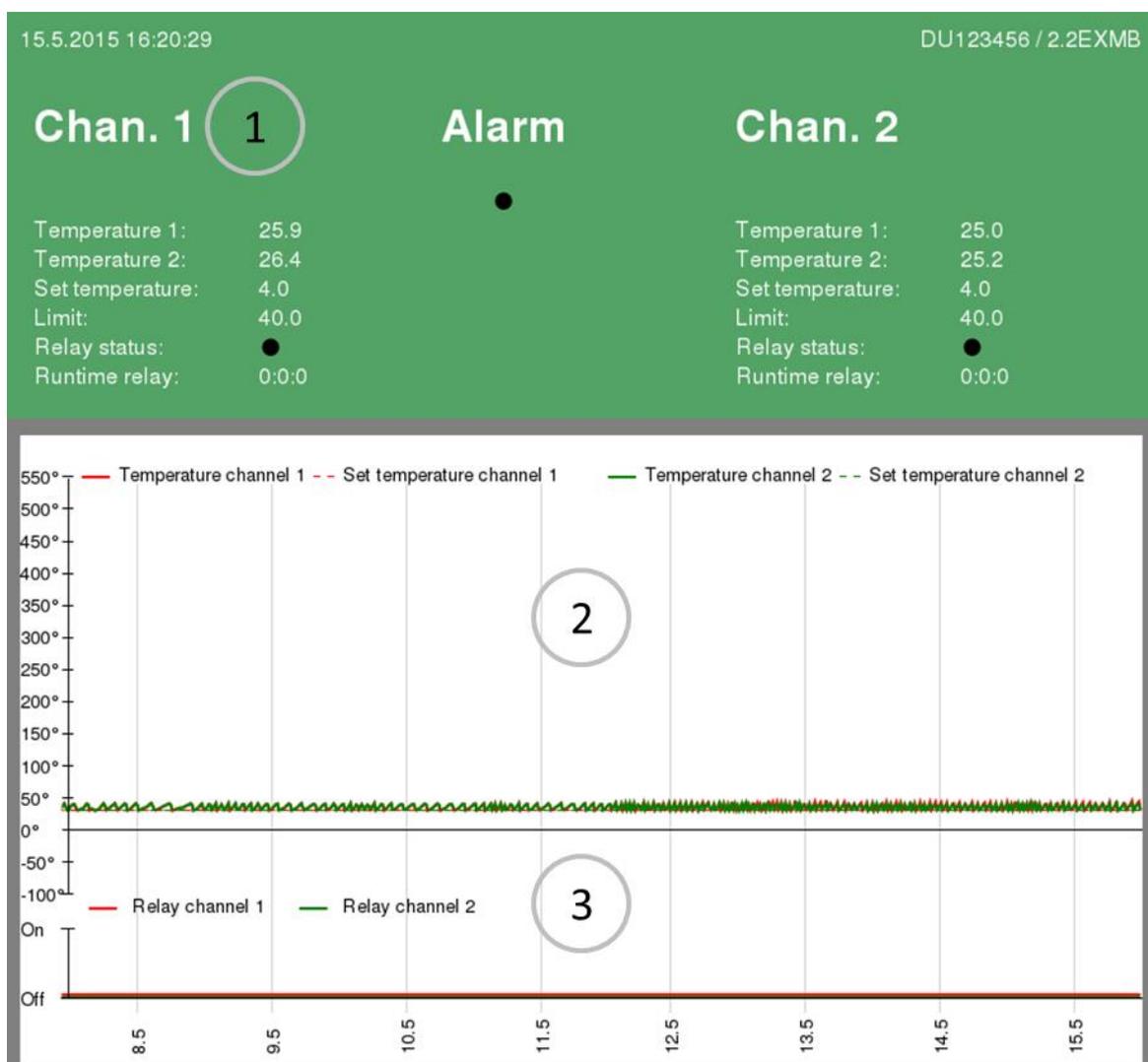


Abbildung 1: Weboberfläche

The web interface consists of 3 areas.

- 1 System status
- 2 History of temperature measurement as graph
- 3 History of relay behavior as graph

1.2 Network Configuration

When delivered, the web interface can be reached via web browser under the following IP address. (IP address: **192.168.1.1** Netmask: **255.255.255.0**)

The IP address can also be read via the rotary control of the DuCoP-100 in the menu **Network-Cfg -> IP**.

To access the web interface of the DuCoP-100 it is necessary that it is in the same subnet as the system accessing it. (e.g. IP address: 192.168.1.2 Netmask: 255.255.255.0)

The network configuration of the DuCoP-100 can be accessed at <http://<IP address>/config.htm> (e.g. <http://192.168.1.1/config.htm>). The configuration is protected by user authentication, which is requested when the configuration page is called up. The username is **DuCoP100** and the password is **Admin**.

Settings	Description
IP Address	Address that is assigned to the DuCoP-100.
IP Mask	Subnet mask of DuCoP-100
IP Gateway	IP address of the gateway. (The entry IP gateway must only be stored if the DuCoP-100 is to be accessed from other subnets or an external NTP server is used).
WOL-MAC	The MAC address of a computer to be started in case of alarm.
NTP Server	IP address of an NTP server for synchronization of the time
PIN Code	PIN code for reactivation of the limiter

1.3 Manufacturer Specific Configuration

The configuration page is opened with this address <http://<IP address>/mac.htm> (<http://192.168.1.1/mac.htm>) here the manufacturer-specific settings can be made.

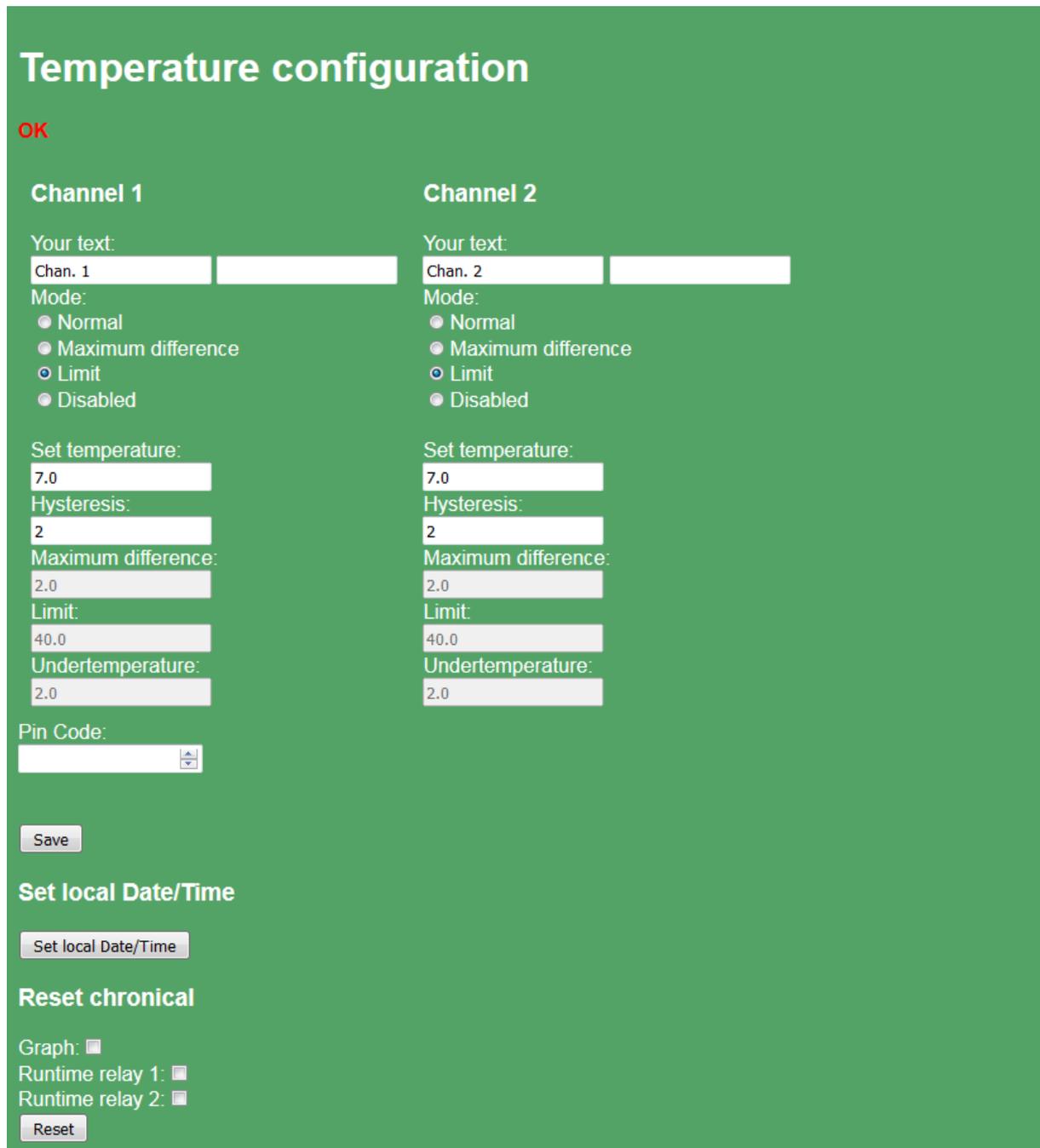
The username for the manufacturer-specific configuration page is **AN** and the password is **AnTeCoS**. The distributor must assign a unique MAC address for each device.

Settings	Description
Internal MAC	Internal MAC address of the controller.
Serial Number	Serial number of the controller

1.4 Temperature Configuration

At http://<IP address>/config_temp.htm (e.g. http://192.168.1.1/config_temp.htm) the current temperature configuration can be changed.

The username for the temperature configuration page is **DuCoP100** and the password is **Admin**. Various settings of the DuCoP-100 can be made here.



The screenshot shows a web interface for temperature configuration. The title is "Temperature configuration" in white text on a green background. Below the title, there is a red "OK" button. The interface is divided into two columns for "Channel 1" and "Channel 2". Each channel has a "Your text:" label followed by a text input field. Below each text field is a "Mode:" label with four radio button options: "Normal", "Maximum difference", "Limit" (which is selected), and "Disabled". Underneath the mode options are several numerical input fields: "Set temperature:" (7.0), "Hysteresis:" (2), "Maximum difference:" (2.0), "Limit:" (40.0), and "Undertemperature:" (2.0). At the bottom of each channel's settings is a "Pin Code:" label with a small dropdown menu. A "Save" button is located below the channel settings. Below the "Save" button are three sections: "Set local Date/Time" with a "Set local Date/Time" button, "Reset chronical" with a "Reset" button, and "Graph:" with three checkboxes for "Runtime relay 1:", "Runtime relay 2:", and "Runtime relay 3:".

Figure 2: Temperature Configuration

Settings	Description
Your text	Two free text fields are available for each channel. These are displayed on the status page for the corresponding channel.
Mode	Sets the mode of the channel
Set temperature	The set temperature of the controller (in °C)
Hysteresis	The hysteresis of the temperature controller (in °C).
Maximum difference	Is only available in the "Difference" mode.
Limit	Can only be changed directly on the device.
Pin Code	When changing the operating mode, the currently valid pin code must be entered.

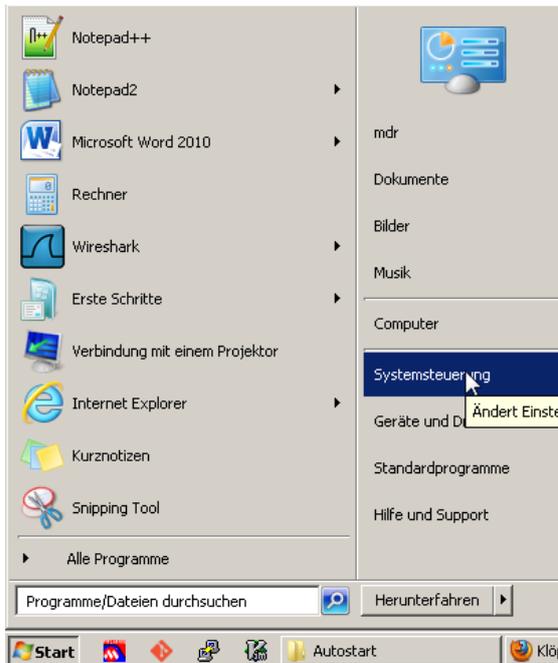
A detailed description of the modes as well as their parameters can be found in the manual of the respective controller.

The chronicle of the temperature measurement as well as the running times of the relays can be reset by selecting the corresponding entry.

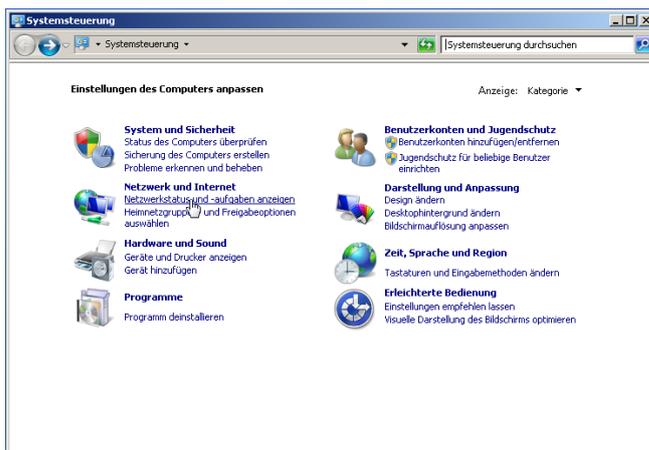
If no NTP server is available, the time can be transmitted to the system via the "Set Date/Time" switch.

2 Installation

Configure a computer so that it is on the same subnet as the controller.
(e.g. IP address: 192.168.1.2 Netmask: 255.255.255.0)

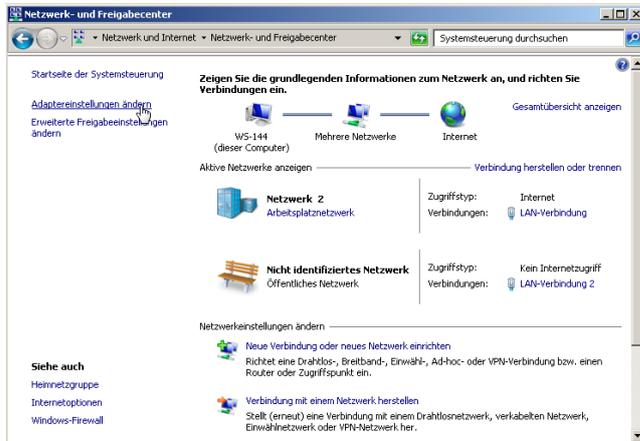


Click on Start → Control Panel

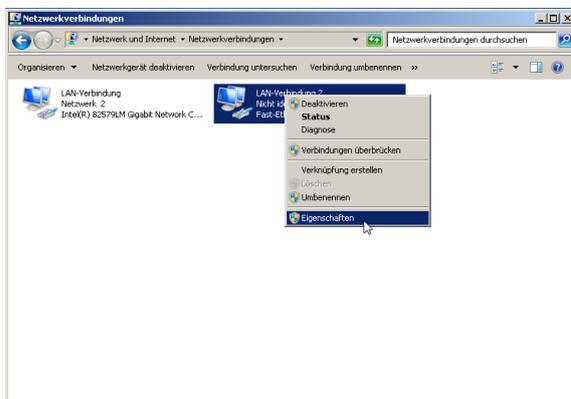


Under the "Network and Internet" item, select the "Show network status and tasks" option

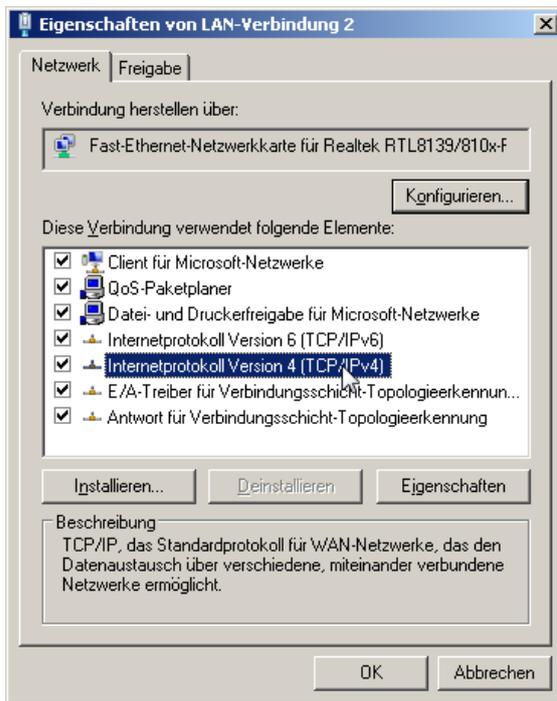
Datasheet DuCoP-100



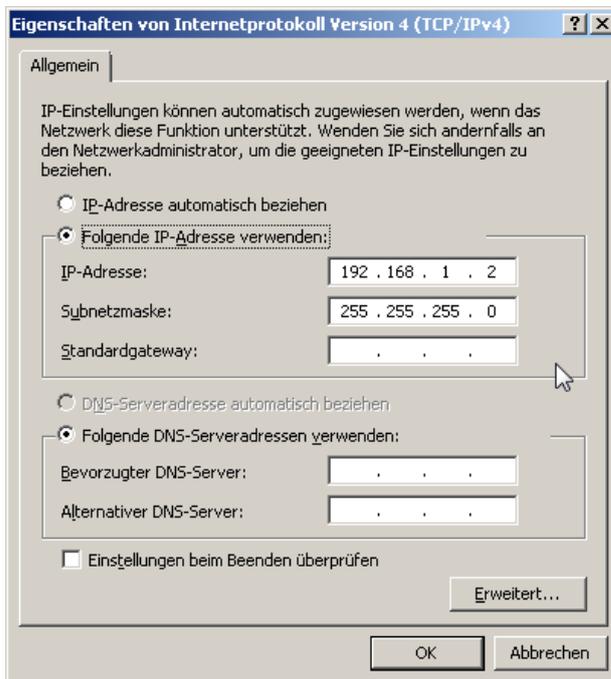
Click on "Change adapter settings" on the left side



Select the LAN connection that is connected to the controller. Click Properties in the context menu of the connection.

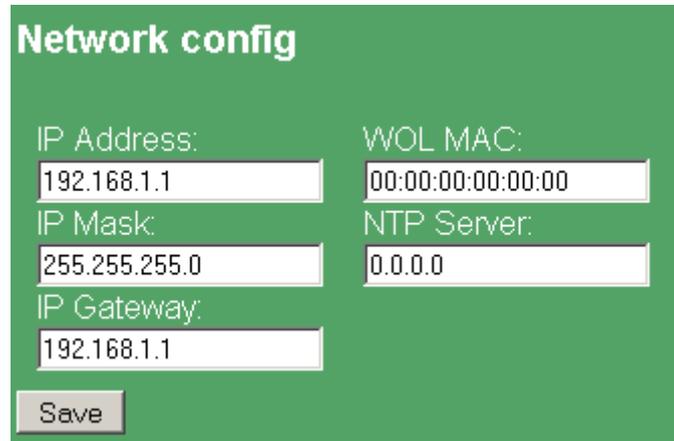


Double click on "Internet Protocol Version 4".



- (1) Open the following configuration page in a web browser.
(<http://<IP address>/config.htm> (e.g. <http://192.168.1.1/config.htm>)
- (2) You will now be requested to enter username and password as follows.
Username: **DuCoP100** Password: **Admin**

- (3) Configure the "IP Address", "IP Mask" and "IP Gateway" fields according to your local network environment. The configuration of the "WOL MAC" field is described in section 3. The meaning of the individual fields is described in section 1.2.



Network config

IP Address:	WOL MAC:
<input type="text" value="192.168.1.1"/>	<input type="text" value="00:00:00:00:00:00"/>
IP Mask:	NTP Server:
<input type="text" value="255.255.255.0"/>	<input type="text" value="0.0.0.0"/>
IP Gateway:	
<input type="text" value="192.168.1.1"/>	
<input type="button" value="Save"/>	

- (4) Accept your configuration by clicking the "Save" button.
(5) The controller now restarts automatically.
(6) Now check your configuration again.
(7) Reset the network configuration of your computer.
(8) Enter the IP address assigned in step four into your browser. You will now see the status page of the controller.

3 Installing the Wake on LAN computer

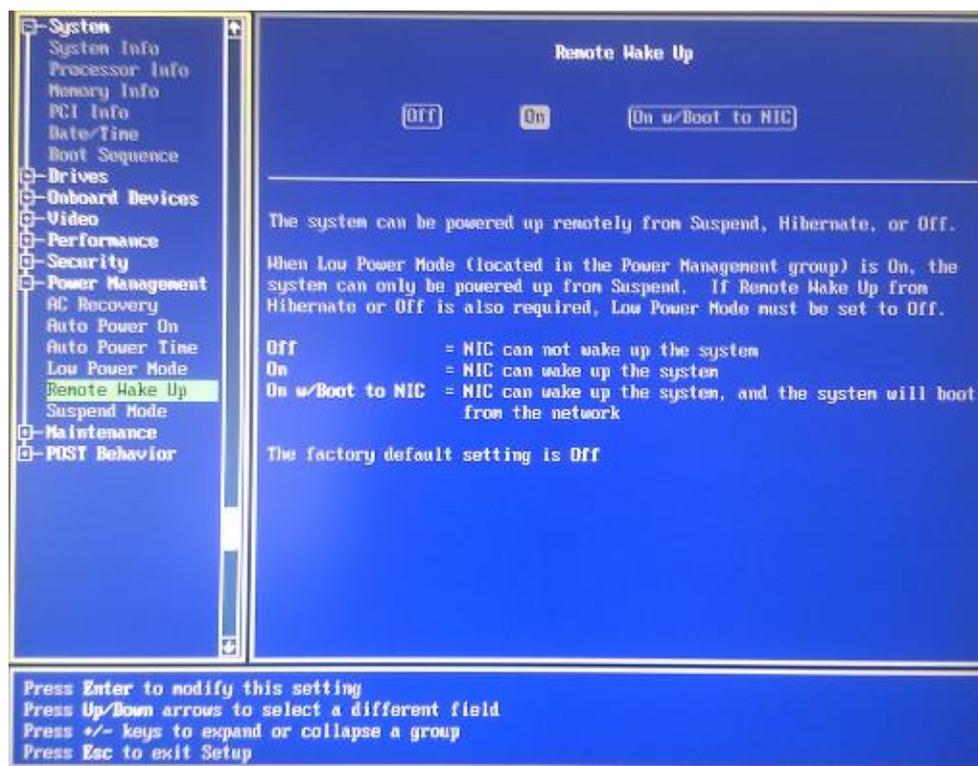
The following steps must be performed on the computer that is to be started in the event of an alarm.

3.1 Activating the Wake on LAN Function in the BIOS

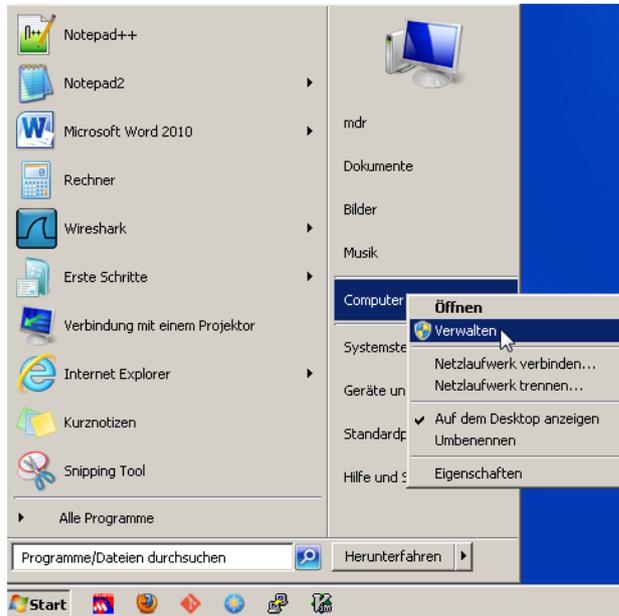
Start the BIOS on the computer (e.g. press the F2 key after switching on the computer). The settings and names vary greatly between different manufacturers. In this example, activate the Wake on LAN option under

„Power Management“ → „Remote Wake Up“ → „On“.

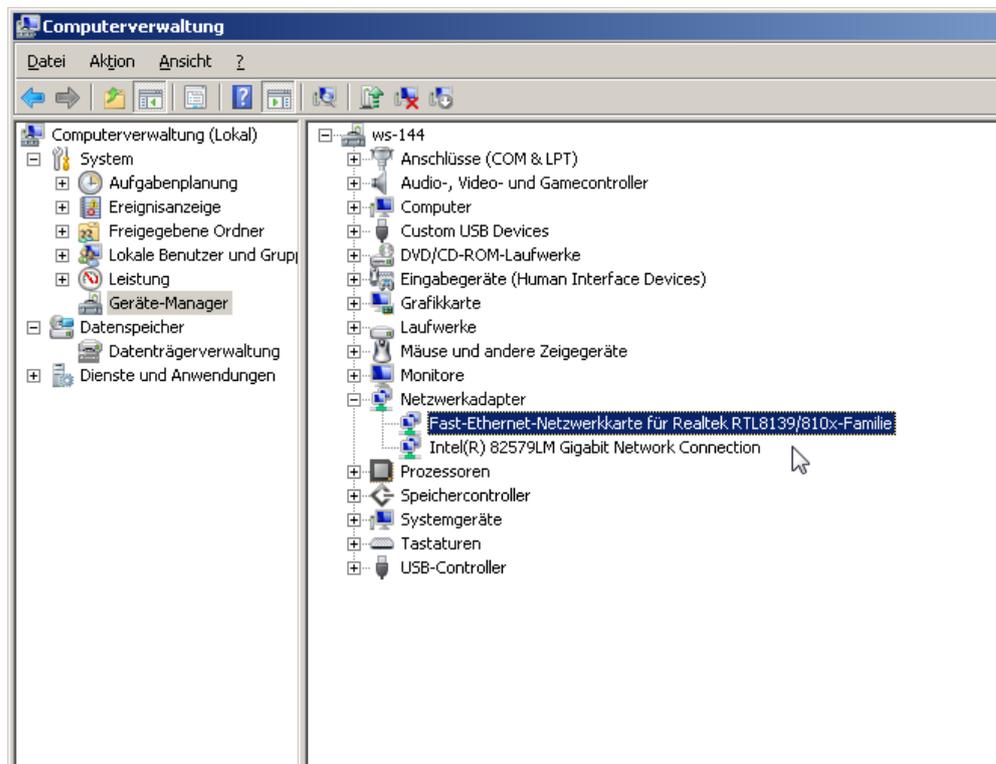
If your computer does not have an option to enable the Wake on LAN option, it may not support it. Therefore, you cannot use this computer for automatic startup in case of alarm.



3.2 Activating the Wake on LAN Option in Windows 7



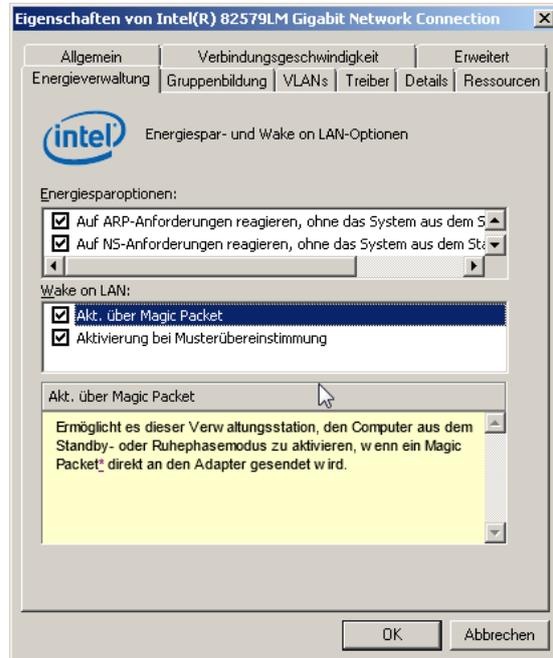
Click Start → Computer (right mouse button) → Admin



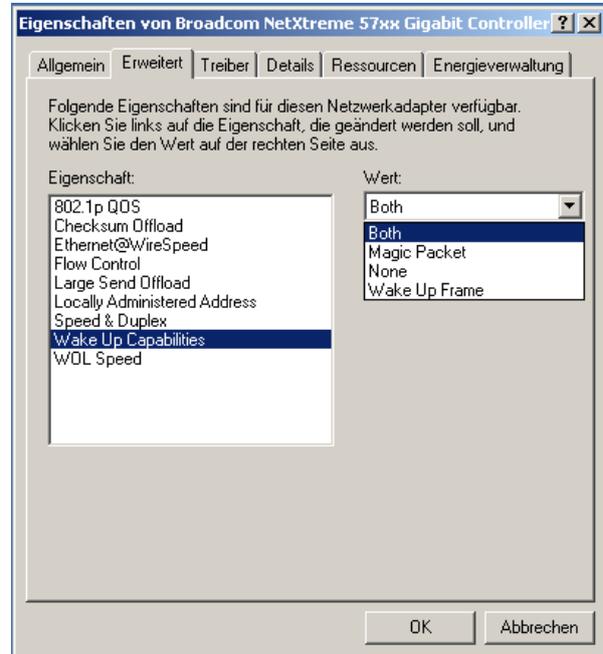
In the left window, select "Computer Management (Local)" → „System“ → „Device Manager“.

Click (double-click) in the right window under the item "Network adapter" on the network card that is connected to the controller.

Intel 82579 Network Cards



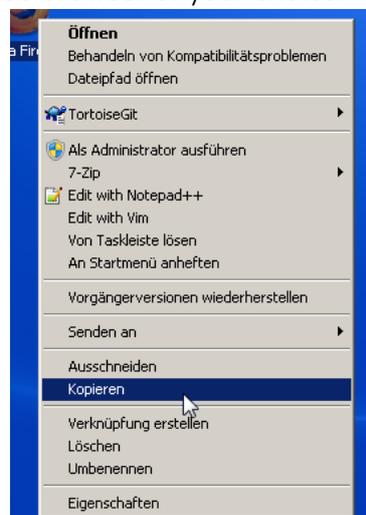
Broadcom NetXtreme 57xx Network Cards



Activate the Wake on LAN option of the network adapter. These settings and designations vary greatly between different manufacturers.

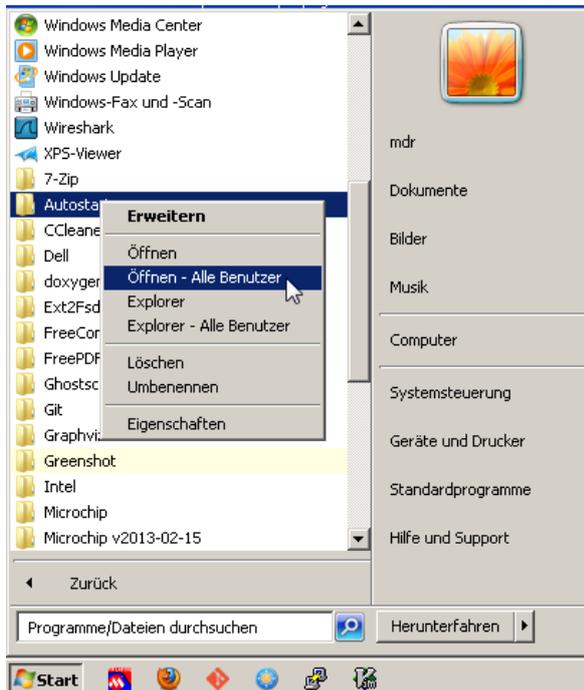
3.3 Automatic Start of Status Display Of The Ducop-100

The following steps are performed in this tutorial using the Mozilla Firefox web browser. You can also use this with another web browser of your choice.

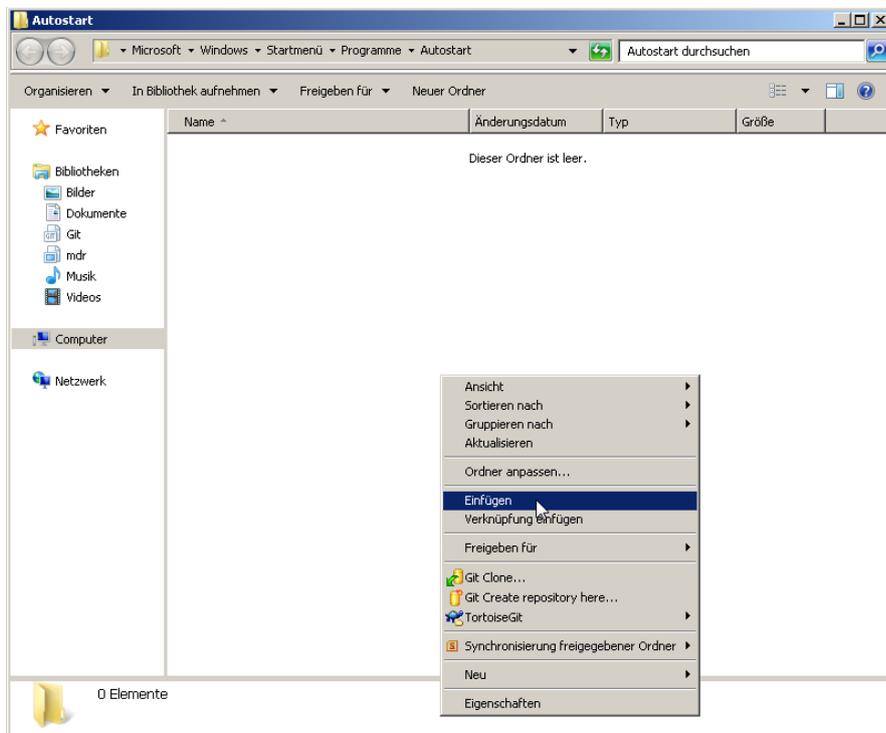


Copy the shortcut of the web browser. (e.g. from your desktop)

Datasheet DuCoP-100

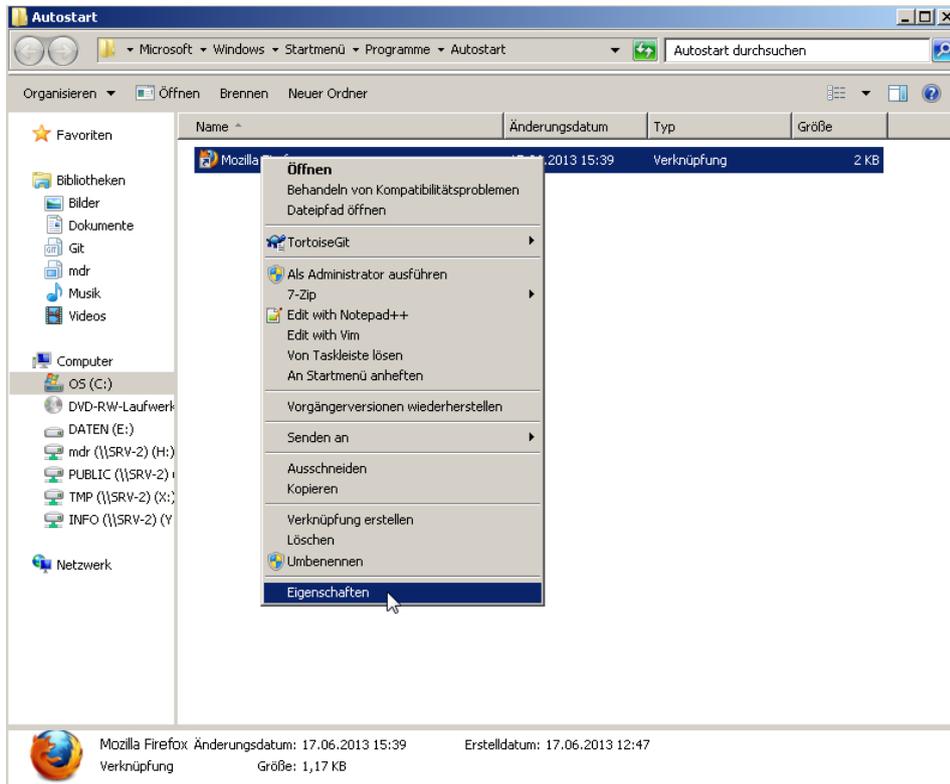


Click on "Start" → "All Programs" → "Autostart" (right mouse button) → "Open - All users"



Paste the link to your web browser.

Datasheet DuCoP-100



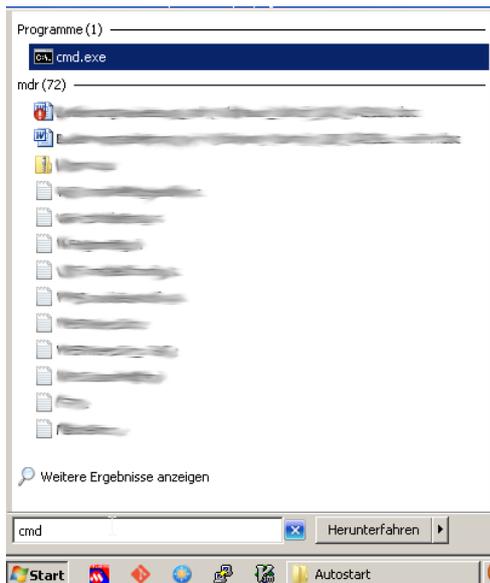
Open the properties of shortcut.



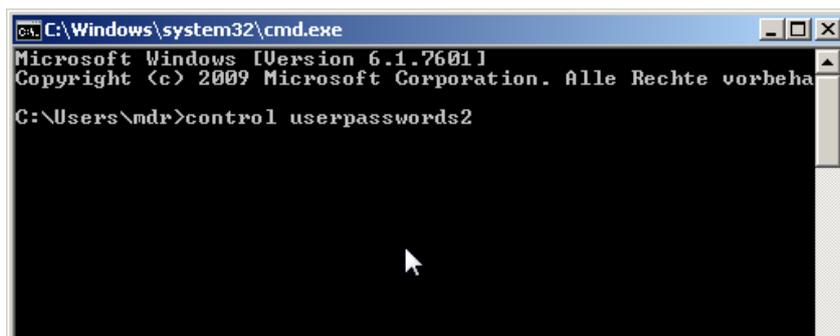
In the "Destination" field, add the address of the controller separated by a space. Click on "Apply" and "OK".

3.4 Automatic Login

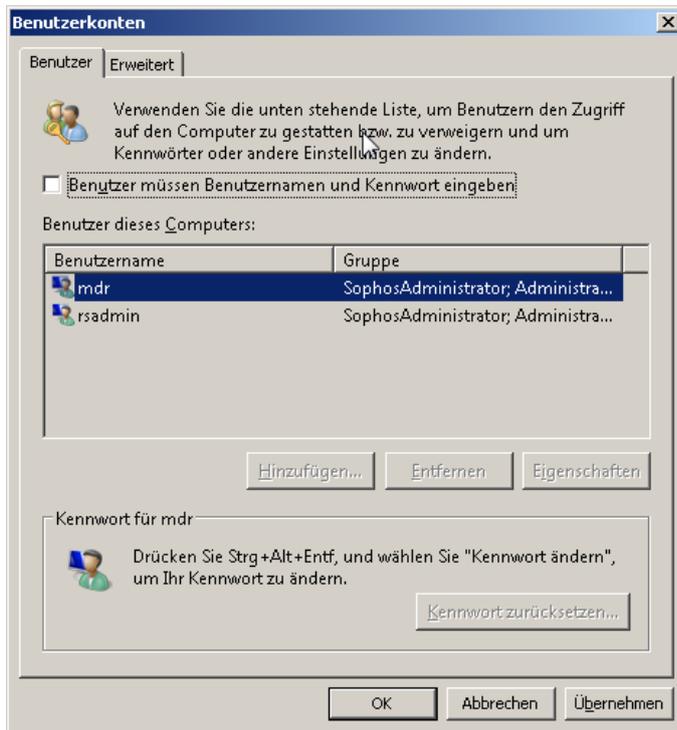
In order for the computer to be started in the event of an alarm and the status display of the controller to be shown automatically, the password query from Windows must be deactivated.



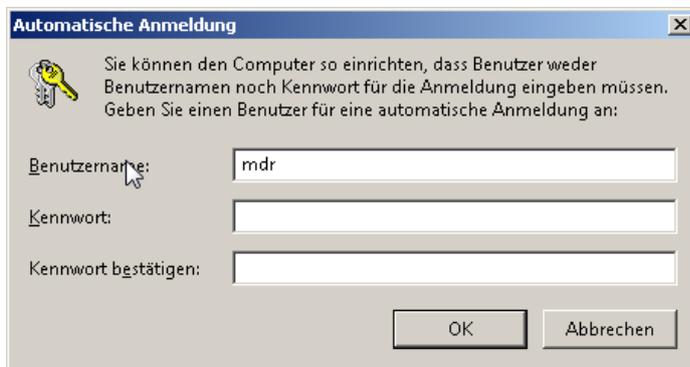
Click on Start. Enter "cmd" in the "Search programs/files" field and confirm this by pressing the Return key.



Enter "control userpasswords2" in the command prompt and confirm this command with the return key.

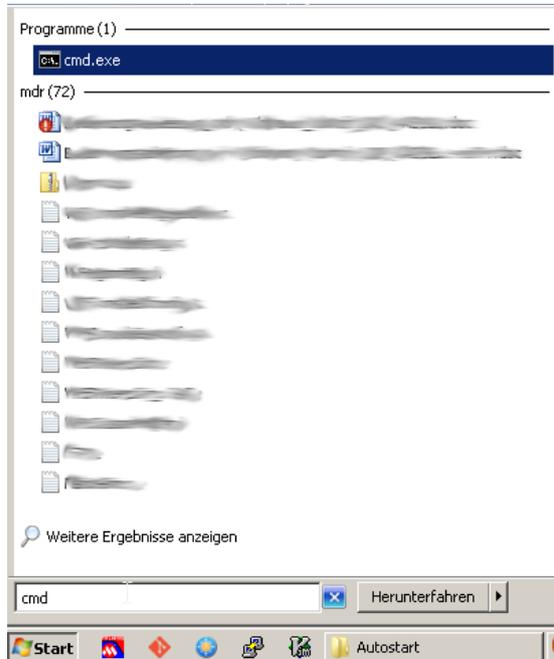


Mark your user in the field "User of this computer".
Then uncheck "Users must enter user name and password". Click on "Apply".



Enter the current password of the selected user twice. And confirm this with "OK". Close the other windows.

3.5 Reading The Physical Address



Click on Start. Enter "cmd" in the "Search programs/files" field and confirm this by pressing the Return key.

```

C:\Windows\system32\cmd.exe
Copyright (c) 2009 Microsoft Corporation. Alle Rechte vorbehalten.
C:\Users\ndr>ipconfig /all

Windows-IP-Konfiguration

    Hostname . . . . . : 
    Primäres DNS-Suffix . . . . . : 
    Knotentyp . . . . . : Hybrid
    IP-Routing aktiviert . . . . . : Nein
    WINS-Proxy aktiviert . . . . . : Nein
    DNS-Suffixsuchliste . . . . . : 

Ethernet-Adapter LAN-Verbindung 2:

    Verbindungsspezifisches DNS-Suffix:
    Beschreibung . . . . . : Fast-Ethernet-Netzwerkkarte für Realtek RTL8139/810x
    Physikalische Adresse . . . . . : 00-E0-7D-AB-59-8B
    DHCP aktiviert . . . . . : Nein
    Autokonfiguration aktiviert . . . . . : Ja
    Verbindungslokale IPv6-Adresse . . . . . : fe80::1088:5505:3fa7:7d0b::15(Bevorzugt)
    IPv4-Adresse . . . . . : 192.168.1.2(Bevorzugt)
    Subnetzmaske . . . . . : 255.255.255.0
    Standardgateway . . . . . : 
    DHCPv6-IAID . . . . . : 335601789
    DHCPv6-Client-DUID . . . . . : 00-01-00-01-18-C1-8A-71-90-B1-1C-96-CF-3D
    DNS-Server . . . . . : fec0:0:0:ffff::1%1
    . . . . . : fec0:0:0:ffff::2%1
    . . . . . : fec0:0:0:ffff::3%1

    NetBIOS über TCP/IP . . . . . : Aktiviert

Ethernet-Adapter LAN-Verbindung:

    Verbindungsspezifisches DNS-Suffix:
    Beschreibung . . . . . : Intel(R) 82579LM Gigabit Network Connection
    Physikalische Adresse . . . . . : 90-B1-1C-96-CF-3D
    DHCP aktiviert . . . . . : Ja
    Autokonfiguration aktiviert . . . . . : Ja
    Verbindungslokale IPv6-Adresse . . . . . : fe80::6969:6a11:70ee:2518::11(Bevorzugt)
    IPv4-Adresse . . . . . : 192.168.101.144(Bevorzugt)
    Subnetzmaske . . . . . : 255.255.252.0
    Lease erhalten . . . . . : Montag, 17. Juni 2013 12:33:38
    Lease läuft ab . . . . . : Montag, 17. Juni 2013 13:33:38
    Standardgateway . . . . . : 192.168.100.1
    DHCP-Server . . . . . : 192.168.100.1
    DHCPv6-IAID . . . . . : 244363540
    DHCPv6-Client-DUID . . . . . : 00-01-00-01-18-C1-8A-71-90-B1-1C-96-CF-3D
    DNS-Server . . . . . : 192.168.100.1

    Primärer WINS-Server . . . . . : 192.168.100.16
    Sekundärer WINS-Server . . . . . : 192.168.100.3
    NetBIOS über TCP/IP . . . . . : Aktiviert

Tunneladapter isatap.{3A9E40A7-2EDF-4FA1-897F-921859F8000C}:

    Medienstatus . . . . . : Medium getrennt
    Verbindungsspezifisches DNS-Suffix:
    Beschreibung . . . . . : Microsoft-Isatap-Adapter
    Physikalische Adresse . . . . . : 00-00-00-00-00-00-E0
    DHCP aktiviert . . . . . : Nein
    Autokonfiguration aktiviert . . . . . : Ja

Tunneladapter LAN-Verbindung* 4:

    Medienstatus . . . . . : Medium getrennt
    Verbindungsspezifisches DNS-Suffix:
    Beschreibung . . . . . : Teredo Tunneling Pseudo-Interface
    Physikalische Adresse . . . . . : 00-00-00-00-00-00-E0
    DHCP aktiviert . . . . . : Nein
    Autokonfiguration aktiviert . . . . . : Ja
  
```

Enter "ipconfig /all" in the command prompt and confirm this command by pressing the Return key. Make a note of the physical address of the network adapter connected to the controller. Close the window.

3.6 Deposit The Physical Address

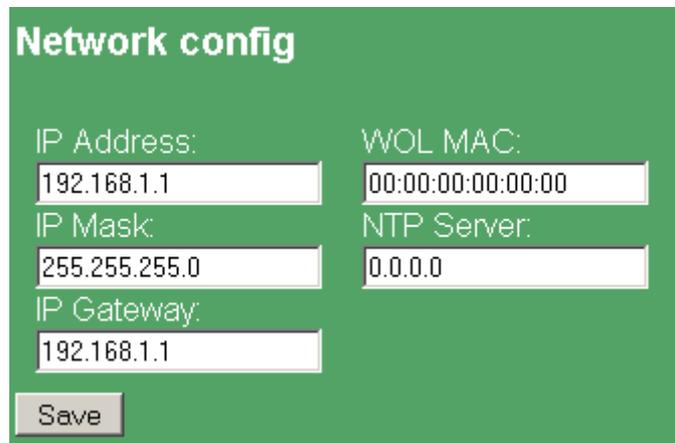
Start a web browser. Enter the IP address of the DuCoP-100 and "/config.htm" in the address line. (e.g. <http://192.168.1.1/config.htm>)

You will now be prompted to enter your username and password.

Enter the data as follows:

- Username: **DuCoP100**
- Password: **Admin**

Confirm this by clicking "OK"



The screenshot shows a web interface titled "Network config" with a green background. It contains several input fields for network configuration:

IP Address:	192.168.1.1	WOL MAC:	00:00:00:00:00:00
IP Mask:	255.255.255.0	NTP Server:	0.0.0.0
IP Gateway:	192.168.1.1		

At the bottom left of the form is a "Save" button.

Enter the physical address from the previous step in the "WOL MAC" field. Click on "Save". The controller will now restart automatically.