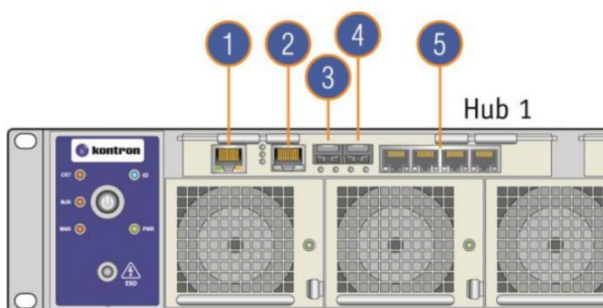


SYMKLOUD MS2900 FIRST STARTUP GUIDE

SYMKLOUD documentation: <http://www.kontron.com/products/systems/cloud-systems/symkcloud-ms2900-media.html>

Step#1: Physical connections

1. Connect appropriate cables from a power source to each power supply on the rear of the unit. The unit will power-on as soon as external power is applied.
2. Connect a serial cable from the Technician PC to the SYMKLOUD serial port (**2** – shown below).
3. Connect a network cable from the Technician PC to the SYMKLOUD management port (**1** – shown below).



I/O	Description
1	Management 1GbE RJ-45 port (Switch/ShMC 1) (Marked "MNGT" on the Hub 1 faceplate)
2	Console RJ-45 port (Switch/ShMC 1)
3	10GbE SFP+ stacking port (Switch/ShMC 1) (Marked "1" on the Hub 1 faceplate)
4	10GbE SFP+ uplink port (Switch/ShMC 1) (Marked "2" on the Hub 1 faceplate)
5	Quad 1GbE RJ-45 ports (Switch/ShMC 1) (Marked "3", "4", "5" and "6" on the Hub 1 faceplate)

Step #2: ShMC IP configuration

There are two ways available to configure the ShMC IP:

A. Using the web GUI:

- The default IP of the ShMC is "192.168.101.1". If the Technician PC can be configured to communicate on that subnet with the SYMKLOUD management port, you can skip this section and go straight to **step #3**.

B. Using the serial port:

1. Open a terminal window and configure the serial port to operate at 115200 baud
2. Press enter to make the login prompt appear and authenticate with login/password: admin/admin
3. View the ShMC management IP configuration with: `ipmitool>lan print`
4. Configure the ShMC management IP:

DHCP

```
ipmitool>lan set 1 ipsrc dhcp
ipmitool>lan print
```

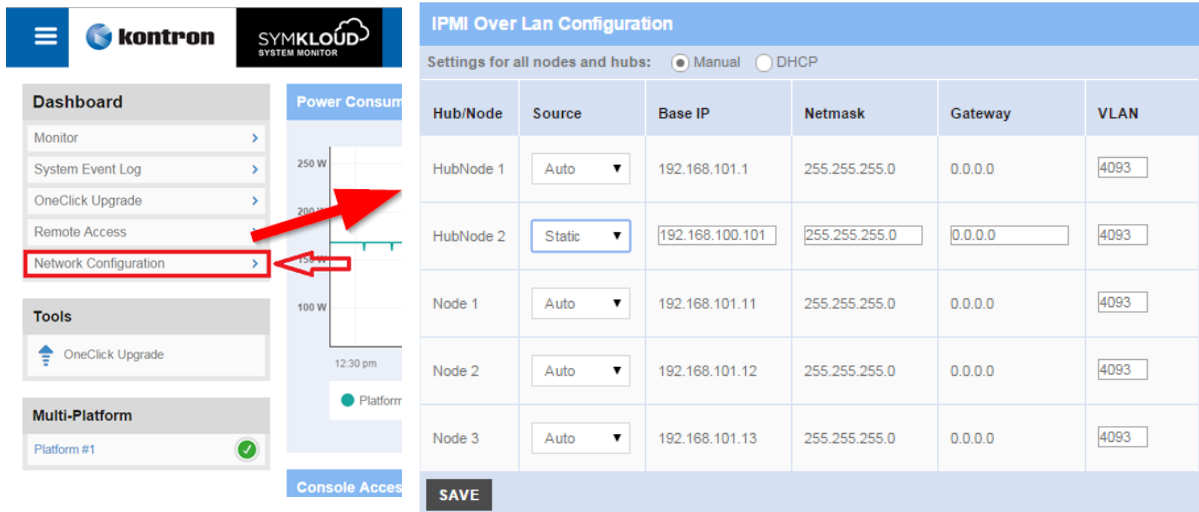
Static IP

```
ipmitool>lan set 1 ipsrc static
ipmitool>lan set 1 ipaddr 192.168.X.X
ipmitool>lan set 1 netmask 255.255.X.X
ipmitool>lan set 1 defgw ipaddr 192.168.X.1
```

(Optional) At that point, the serial connection can be disconnected, since the other steps can be done with the web GUI.

Step #3: Configuration of the 2nd ShMC and node BMC management IPs

1. Primary access to the System Monitor is available via the configured ShMC IP:
 - a. Configure the Technician PC's Ethernet interface with a static IP (e.g.: 192.168.101.201)
 - b. From a web browser access the page with the ShMC IP configured in **Step #2**. (default: <http://192.168.101.1>)
 - c. Wait for the webpage to be ready (it can take up to 2 minutes) & authenticate using: admin/admin
2. In the menu on the left, click on "Network Configuration"



The screenshot shows the SymCloud System Monitor web interface. On the left, the 'Network Configuration' menu item is highlighted with a red box and a red arrow. The main content area is titled 'IPMI Over Lan Configuration' and shows settings for all nodes and hubs. The settings are configured for Manual IP addressing. The table below shows the configuration for Hub/Node 1, Hub/Node 2, Node 1, Node 2, and Node 3.

Hub/Node	Source	Base IP	Netmask	Gateway	VLAN
HubNode 1	Auto	192.168.101.1	255.255.255.0	0.0.0.0	4093
HubNode 2	Static	192.168.100.101	255.255.255.0	0.0.0.0	4093
Node 1	Auto	192.168.101.11	255.255.255.0	0.0.0.0	4093
Node 2	Auto	192.168.101.12	255.255.255.0	0.0.0.0	4093
Node 3	Auto	192.168.101.13	255.255.255.0	0.0.0.0	4093

A 'SAVE' button is located at the bottom of the configuration table.

3. In the "IPMI Over Lan Configuration" section, edit all fields required to suit the target management network's topology and IP-addressing practices
**** Avoid changing VLAN value 4093 ****
4. Click the save button at the bottom (WebGUI connectivity may be interrupted for up to 2 minutes)

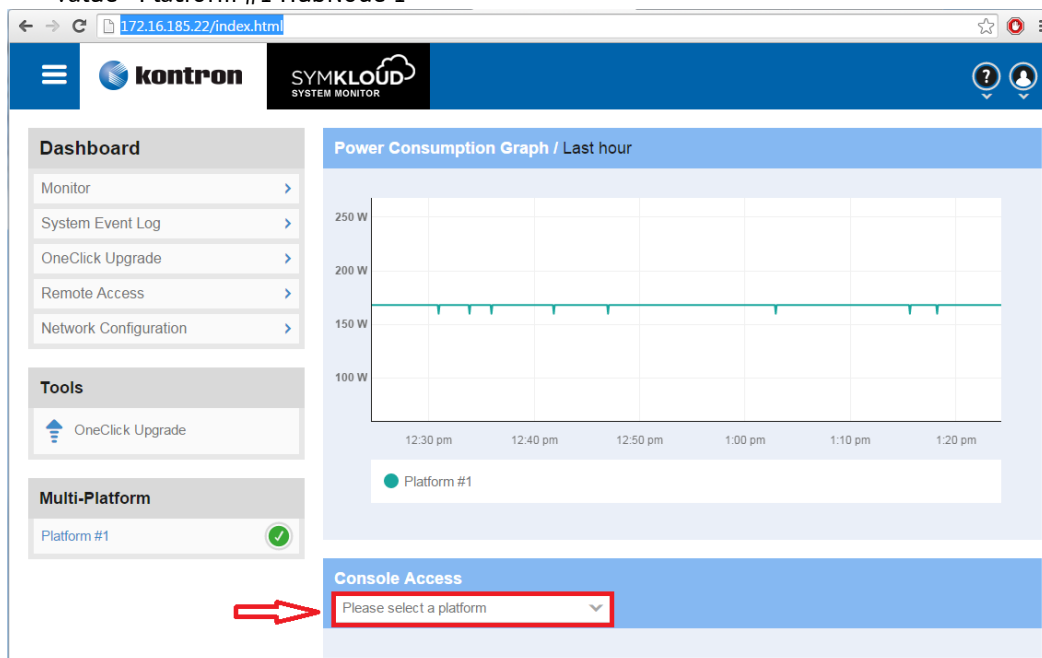
Step #4: Configuration of the switch management IP

1. Open a "Serial over LAN" session with method a) or b):
 - a) In the URL enter the IP of the ShMC + the string "/shell/".
The '/' at the end is mandatory. (e.g.: <http://192.168.101.1/shell/>)

```
← → ↻ 172.16.185.22/shell/
MSH8900 login: console
Password:
Please enter the Node number [1-9] or Switch [S]:s
Please enter payload number [1-2]:1
Selected Payload 1.
Info: HPM.2 extension for SOL not supported
Info: HPM.2 extension for SOL not supported
[SOL Session operational. Use ~? for help]

Username: admin
Password:
#
```

- b) Go back on the System Monitor home page.
Under the box named "Console Access" select in the dropdown the value "Platform #1 HubNode 1"



2. Login using: console/admin
3. Type 'S' when prompted for the node number
4. Type '1' when prompted for the payload number
5. Press enter to make the login prompt appear and login using: admin/admin
6. Use the following command to show the switch's management IP configuration:
show ip interface brief
7. Or set a custom switch management IP:

DHCP	Static IP
<pre># configure terminal (config)# interface vlan 4093 (config-if-vlan)# ip address dhcp (config-if-vlan)# end # copy running-config startup-config</pre>	<pre># configure terminal (config)# interface vlan 4093 (config-if-vlan)# ip address <ip_addr> <netmask> (config-if-vlan)# end # copy running-config startup-config</pre>

8. It's now possible to access the switch configuration WebGUI (SMBStAX) from your browser
(e.g.: <http://192.168.101.10>)

Step #5: Final, access node OS for configuration

1. Open a "Serial over LAN" session as described in **step #4**
2. When prompted, enter the target node number (1-9)
3. When prompted, enter the target payload number (1-2)
4. Default password for OS installed by Kontron is: root/kontron

You are now ready to configure the switches and nodes OS and to connect the SYMKLOUD uplinks to your data network.
For more information, access the SYMKLOUD documentation: <http://www.kontron.com/products/systems/cloud-systems/symkloud-ms2900-media.html>