

Getting Started with MultiNode

This quick start guide helps you install and configure your first MultiNode network.

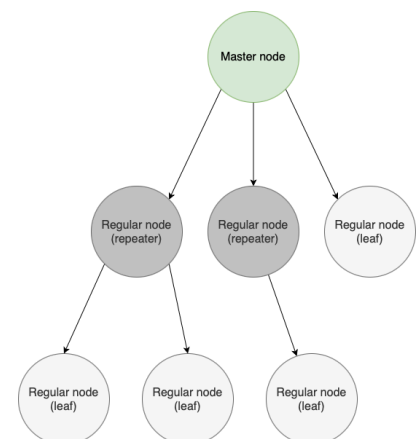
i This guide assumes that your devices have firmware version 7.16.5 or newer. If your devices run an older firmware version, consult the user manual available on the [product website](#).

What you need

- A laptop with a LAN port
- An Ethernet cable
- MultiNode LAN devices (at least two)
- Data sheet (technical specs, included in the package)

How MultiNode works

- MultiNode LAN 4TE is a DIN-rail device that uses powerline communication (PLC) to send data over low-voltage mains.
- **Master node:** The central controller of the network.
- **Regular nodes:** They connect to the master through PLC. A regular node can automatically switch to a repeater role if needed.
- **Isolation:** Regular nodes talk only to the master, not to each other.
→ Application devices (e.g., a charging station) connected to a regular node can only reach application devices connected to the master. Devices on different regular nodes cannot connect directly.
- The master node has a built-in web interface for setup and management; no extra tools are needed.




Step-by-step instructions


1. Plan your network

- **Power supply considerations:** Each power rail needs a circuit breaker. You can use one breaker for both the charging station and MultiNode, or separate breakers. MultiNode is powered by L1/N, e.g., from the charging infrastructure's mains circuit.
- **Distance:** Large networks may need repeaters. Best range is up to 50 m per hop. 50–100 m may work, but over 100 m is not recommended.
- **Circuits:** One three-phase circuit for all devices gives the best results. Multiple circuits cause signal loss and noise. This can be solved with repeaters or by splitting networks via Ethernet.

- **Topology:** The network self-organizes into a tree: master node is at the root, with regular nodes automatically acting as repeaters when needed.
- **Master node placement:** Place it where Ethernet is easy to reach and signal paths are short. It is strongly recommended not to place it in the distribution unit.
- **Load management in EV charging scenarios:** Since regular nodes connect only to the master, EV charging scenarios need careful upfront planning. For guidance, see user manual on the [product website](#).

2. Electrical installation

-  DIN-rail mounting and proper wiring must be carried out by a qualified electrician, in compliance with standards.
- Connect the MultiNode devices to the mains.
- It is recommended to record each device's serial number, MAC address, and installation location (e.g., parking spot, floor number) to support maintenance.

 You can provision the devices either before or after electrical installation, depending on what works best for your workflow.

3. Connect your laptop

- Connect your laptop to the device you want to use as the master node, e.g., device next to the Internet gateway, with an Ethernet cable. By default, all MultiNode LAN 4TE devices start as regular nodes.

4. Open the web interface

- Open a web browser and enter: **http://devolo-xxxxx.local**.
- Replace **xxxxx** with the last 5 digits of the device's serial number.

5. Run the setup wizard

devolo

devolo-28
MultiNode LAN 4TE

Setup

Security risk: no password is set to protect this web interface.
Go to password settings.
Incomplete configuration: One or more powerline network settings are in factory-defaults. We highly recommend configuring them to avoid potential conflicts with other powerline networks.
Go to powerline network settings.

Select how you want to setup this node

Create a new MultiNode network

Select this option if you have multiple nodes in factory-default settings and want to configure them as a new network.

Join an existing MultiNode network

Select this option if you already have an existing MultiNode network and want to add this node to it.

This node will be set as the master node of the new network. Make sure you are not connected via Ethernet to any other nodes in the potential new network.

Create a new network

Join an existing network

When you open the web interface of a factory-default device, it automatically redirects you to the setup wizard.

- Click the button **“Create a new network”**. This sets the connected device as the master.

Create a new network

This node is now configured as the master node. All other nodes will connect to this node to form a MultiNode network. The process may take longer if multiple nodes are involved.

| Name | MAC address | Parent node | Upstream speed to parent | Downstream speed from parent |
|-----------------------------------|-------------------|-------------|--------------------------|------------------------------|
| devolo-28 <i>(this device)</i> | BB:BE:F4:01:DA:4F | | | |
| devolo-85 | 00:0B:3B:7F:8C:5E | devolo-28 | ↑ 340 Mbps | ↓ 140 Mbps |
| devolo-79 | BB:BE:F4:A4:E3:1E | devolo-28 | ↑ 285 Mbps | ↓ 186 Mbps |
| devolo-64 | BB:BE:F4:06:98:62 | devolo-28 | ↑ 349 Mbps | ↓ 215 Mbps |
| devolo-38 | 88:FC:A6:1D:35:B5 | devolo-28 | ↑ 130 Mbps | ↓ 147 Mbps |
| devolo-53 | BB:BE:F4:EC:5E:0F | devolo-28 | ↑ 153 Mbps | ↓ 171 Mbps |
| devolo-82 | BB:BE:F4:39:AA:6E | devolo-28 | ↑ 120 Mbps | ↓ 139 Mbps |
| devolo-80 | BB:BE:F4:3C:71:D4 | devolo-82 | | |

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Once all nodes are shown above, continue to the next step.
Total nodes: 8

Continue

- On the above screen, wait for all nodes to join the network, then click **“Continue”**. On the next screen shown below, enter the settings and click **“Save and apply to all nodes in the network”**:

Create a new network

Powerline domain name:

Powerline password:

Password strength is medium.

Seed:

Admin password

Enter the admin password:

Strong password

Web interface password

Enter the web interface password:

Strong password

Save and apply to all nodes in the network

- **Powerline domain name:** Choose a clear name for the MultiNode network to help identify it.
- **Powerline password:** Protects the powerline domain.

- **Seed:** A number from 0 to 59 that uniquely identifies a PLC network. It is recommended to leave this on automatic.
 - **Admin password:** Protects the MultiNode network management channel.
 - **Web interface password:** Protects access to the web interface.
- After the configuration is applied to all nodes, you will be automatically redirected to the Overview, which lists all nodes in your MultiNode network as shown below. It is recommended to provide meaningful names to nodes, e.g., include a reference to physical installation location.

devolo

M_P42
MultiNode LAN 4TE

Overview

Powerline

Network Manager

LAN

System

Customization

Information

System

Information

Name: M_P42
Serial number: 1807044980011155
MAC address: B8:BE:F4:01:DA:4F
Firmware version: 7.16.7.35 (2025-11-13)
System uptime: 14d 8h 23m

LAN

Ethernet

Port 1: 1000 Mbps Full duplex

IPv4

DHCP: enabled
Address: 192.168.1.42
Netmask: 255.255.255.0
Default gateway: 192.168.1.1
Name server: 192.168.1.1

IPv6

Link-local address: fe80::babe:f4ff:fe01:da4f
Protocol: SLAAC
Address: fd00::babe:f4ff:fe01:da4f/64
Name server: fd00::3681:c4ff:feff:2460

Powerline

Local Device

Device state: ● Connected, but not secure

Role: Master node

Network

Powerline domain name: ParkingP2Berlin
Seed: 30
Online nodes: 8
Offline nodes: 2

Network overview

Network Status Topology

| <input type="checkbox"/> | Name | MAC address | Preferred parent | Upstream speed | Downstream speed |
|--------------------------|---------------------|-------------------|------------------|----------------|------------------|
| | M_P42 (this device) | B8:BE:F4:01:DA:4F | | | |
| <input type="checkbox"/> | P56 | 00:0B:3B:7F:8C:5E | + | ↑ 340 Mbps | ↓ 140 Mbps |
| <input type="checkbox"/> | P62 | B8:BE:F4:A4:E3:1E | + | ↑ 285 Mbps | ↓ 186 Mbps |
| <input type="checkbox"/> | P68 | B8:BE:F4:06:98:62 | + | ↑ 349 Mbps | ↓ 215 Mbps |
| <input type="checkbox"/> | P74 | 88:FC:A6:1D:35:B5 | + | ↑ 130 Mbps | ↓ 147 Mbps |
| <input type="checkbox"/> | P86 | B8:BE:F4:EC:5E:0F | + | ↑ 153 Mbps | ↓ 171 Mbps |
| <input type="checkbox"/> | P92 | B8:BE:F4:39:AA:6E | + | ↑ 120 Mbps | ↓ 139 Mbps |
| <input type="checkbox"/> | P98 | B8:BE:F4:3C:71:D4 | + | ↑ 295 Mbps | ↓ 164 Mbps |
| | P50 OFFLINE | B8:BE:F4:01:00:11 | | | |
| | P80 OFFLINE | B8:BE:F4:01:00:12 | | | |

Support

For questions or feedback, please contact us at support@devolo.de.