Getting Started with MultiNode

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

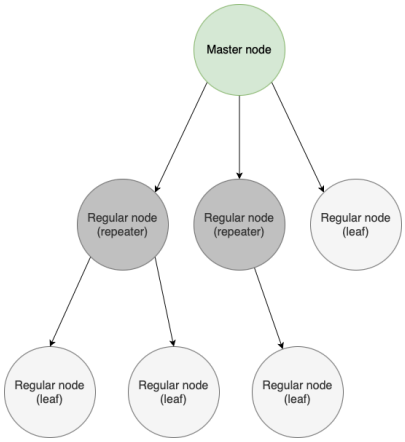
ℹ️ This guide assumes that your devices have firmware version 7.16.5 or newer. If your devices run an older firmware version, consult the user manual available on the **product website**.

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.

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- **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.

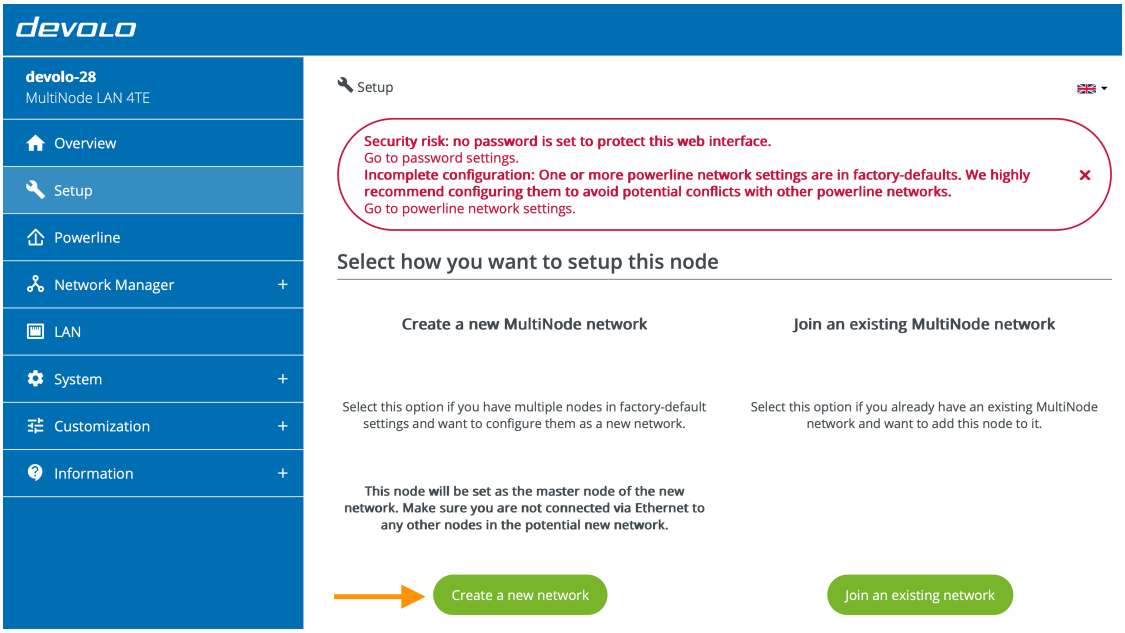
3. Connect your laptop

- 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



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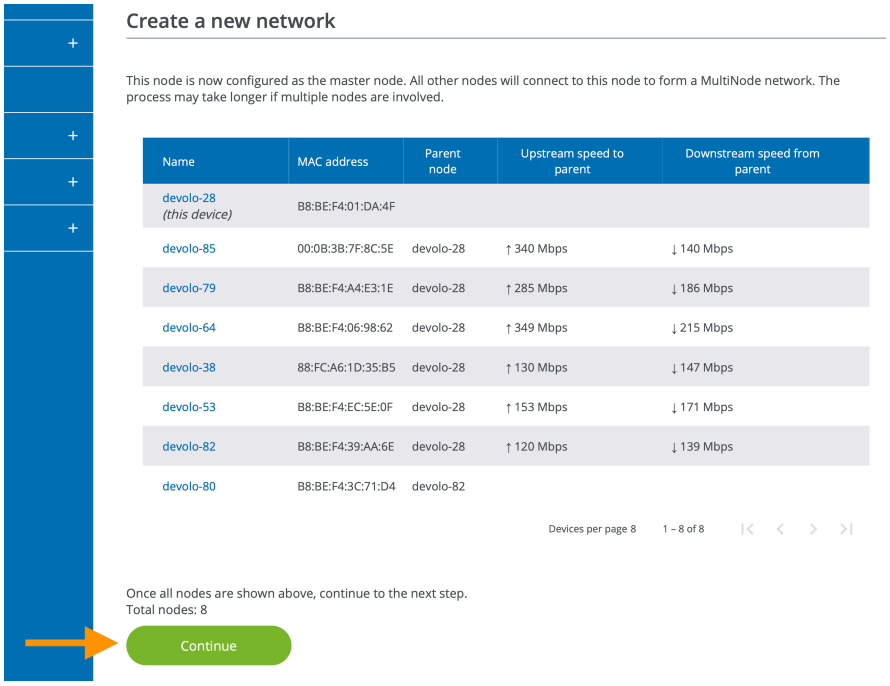
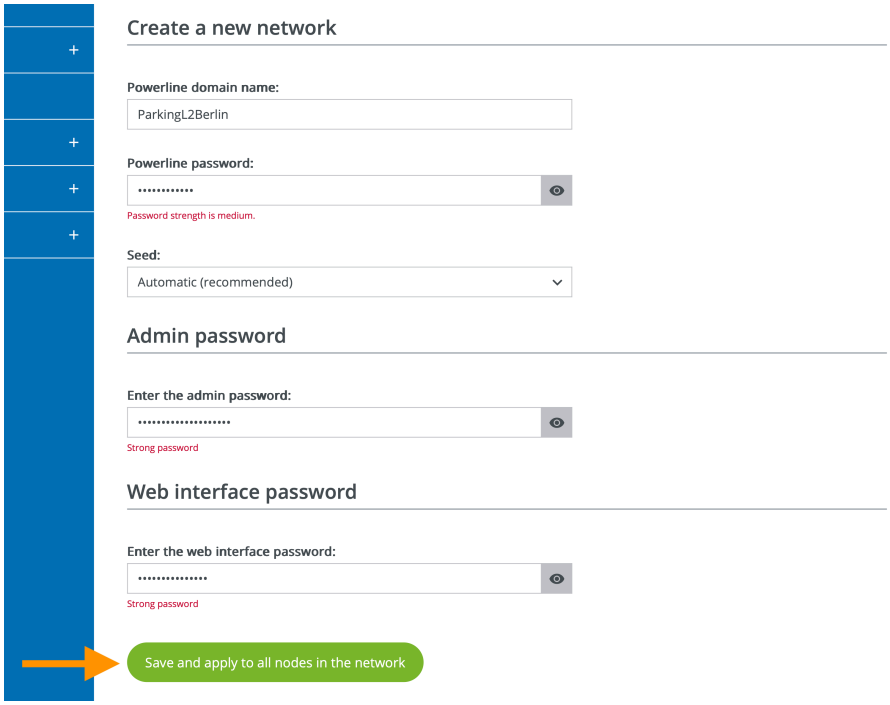
When you open the web interface of a factory-default device, it automatically redirects you to the setup wizard.

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



- 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"**:



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

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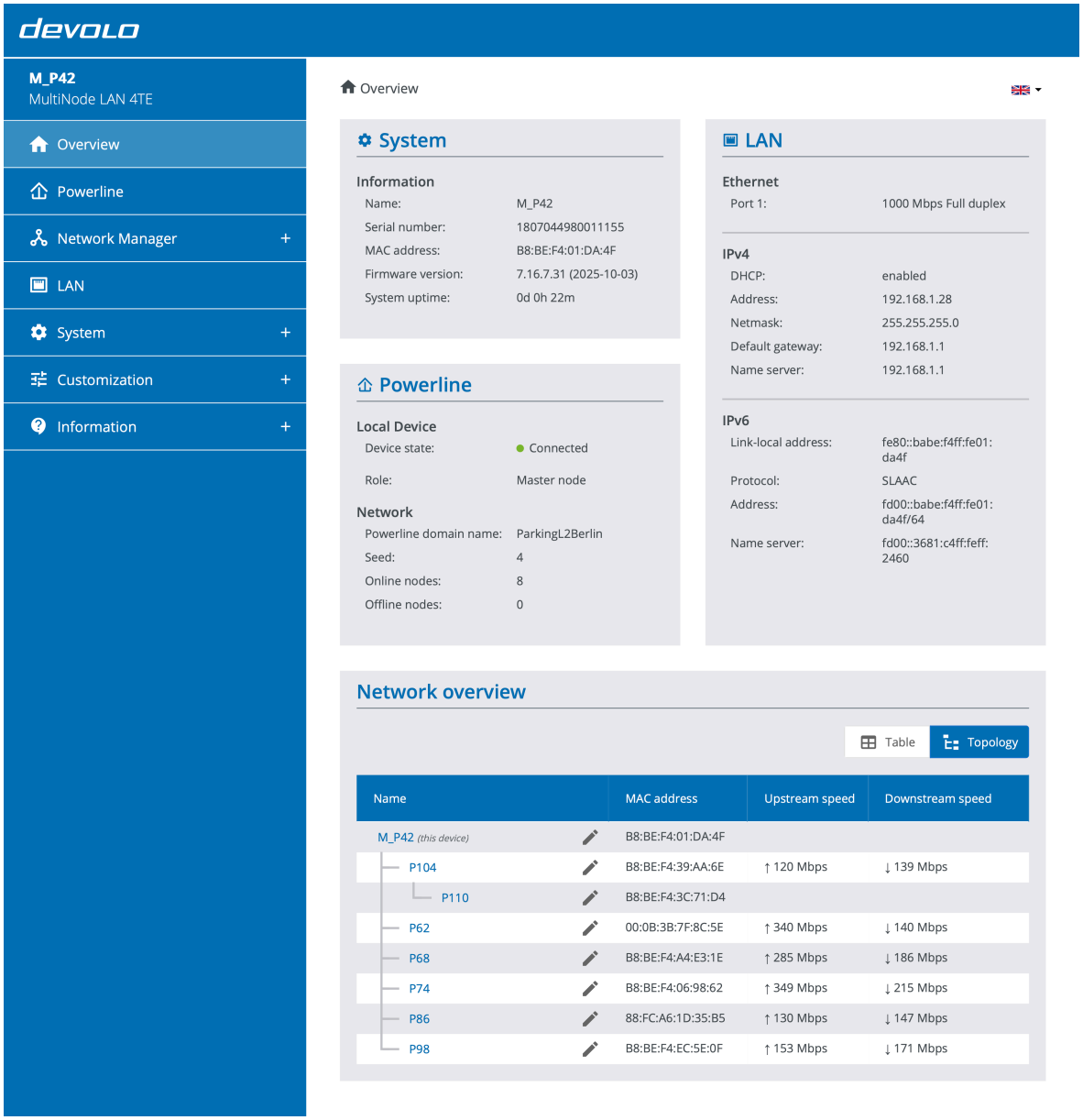
- **Seed:** A number from 0 to 59 that uniquely identifies a PLC network. It is recommended to leave this on automatic.
- **Admin password:** Protects the MultiNode network management channel.
- **Web interface password:** Protects access to the web interface.

- 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.



Support

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

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