



DDM Quick Start Guide

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1. Network Configuration

DDM supports automatic device discovery using DNS or mDNS, and also manual device enrollment via IP address.

DNS and DHCP addressing is recommended for multi-subnet systems.

mDNS and link-local addressing is recommended for single-subnet systems.

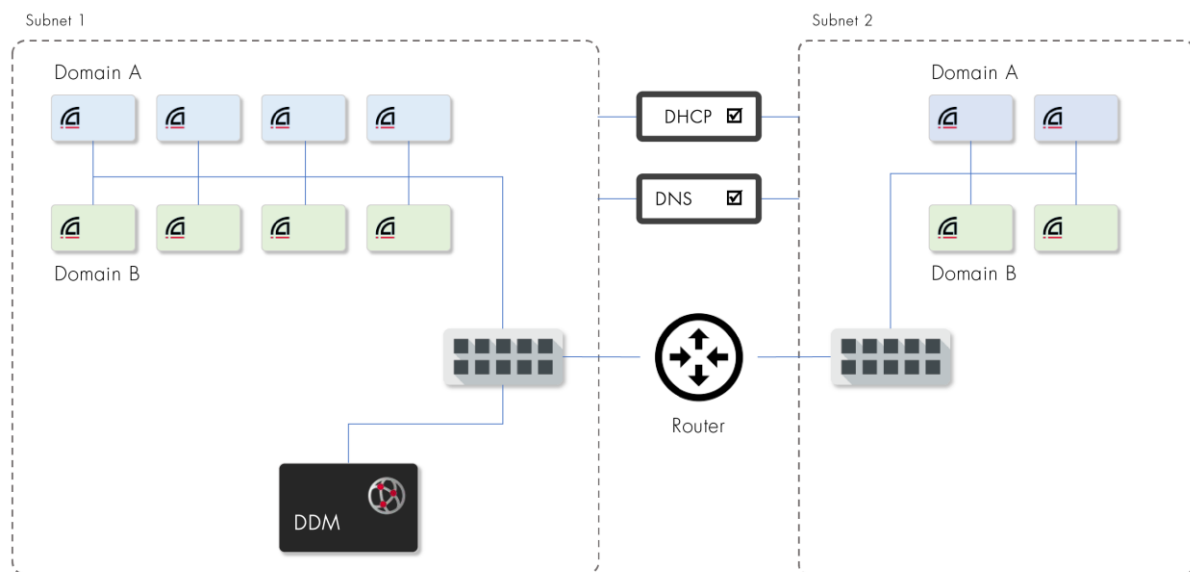
Device enrollment via IP address can be used for multi-subnet systems that require static addressing (for example, to support third-party network control software).

Note: When using static addressing, the devices *and* the DDM server must be assigned static addresses, either locally (where DHCP is not used) or via static address mapping in DHCP.

1.1. Multi-subnet systems

If your network spans multiple IP subnets, you can use a DNS server to resolve the DDM server address for your Dante devices and controllers, and a DHCP server to automatically configure your Dante devices.

Static addressing and manual device enrollment via IP address can also be used, but it is not practical for networks with large device counts.



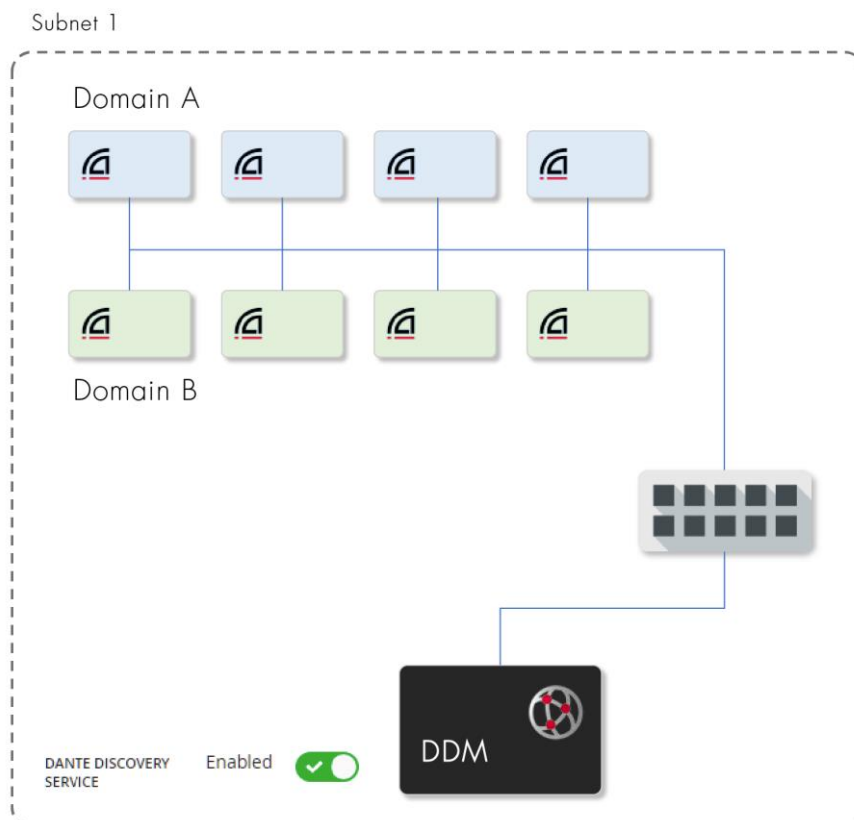
DISCOVERY OPTIONS FOR MULTI-SUBNET SYSTEMS

- DHCP + DNS (recommended)
- Static addressing + manual enrollment (not suitable for large device counts)

Refer to the DDM user guide for more information about bootstrapping Dante devices and controllers, including DNS and DHCP setup.

1.2. Single-subnet systems

For networks that reside on a single subnet, link-local addressing and mDNS-based discovery is recommended. The mDNS discovery feature (Dante Discovery Service) is on by default, and does not need to be activated or configured.



DISCOVERY OPTIONS FOR SINGLE-SUBNET SYSTEMS

- Link-local addressing + Dante Discovery Service (mDNS) (recommended)
- Static addressing + manual enrollment
- DHCP is convenient, but not required

2. The DDM Package

DDM is packaged as virtual appliances for two hypervisors: Oracle® VirtualBox® and VMware® ESXi®. VirtualBox is the recommended platform, unless you have a specific requirements for ESXi.

The virtual appliances include streamlined Linux distributions which are already properly configured for the DDM application.

3. System Requirements

The licensing model for DDM includes three editions: Silver, Gold, and Platinum. Each edition supports a different number of devices and domains, and the hypervisor must be configured to provide sufficient system resources for the virtual appliance based on the product edition.

- For the Silver and Gold editions, the virtual appliances require a minimum of 2 CPUs and 4GB of RAM.
- For the Platinum edition, the virtual appliances require a minimum of 2 CPUs and 8GB of RAM. For systems that include more than 200 devices, 16GB of RAM is recommended.

The physical host machine on which the hypervisor is installed must also meet the above specifications (with additional capacity for any other applications).

4. Installation

1. Download and install Oracle VirtualBox (from <https://www.virtualbox.org/wiki/Downloads>) or VMware ESXi (from <https://www.vmware.com/products/esxi-and-esx.html>).
2. Download the Audinate Dante Domain Manager Developer virtual appliance, from the DDM Support Portal (link will be provided via email).
3. Import the appliance into your hypervisor.
4. Ensure that:
 - a) The MAC address for the network card is reinitialized
 - b) The network is attached to a bridged adaptor
 - c) The selected host interface is connected to the Dante network
5. Select the Virtual Machine and click the Start button to power on the Virtual Machine. The start menu will be displayed.
6. Record the IP address shown in the start menu – this is the address of your DDM server.

5. Start Menu

The startup script displays a dialog showing the IP address of the VM, plus a configuration menu.

5.1. Display System Information

This function displays the IP address and hostname of the DDM server (which defaults to `ddm.audinate.com`).

5.2. Set Hostname

Use this option if you specifically need to change the hostname (for example, if you are running two DDM servers on the same subnet).

5.3. Set NTP Servers

This feature allows you to specify up to four NTP (Network Time Protocol) servers.

By default, the virtual machine on which DDM is installed will derive its time from a public NTP server on the Internet, unless one or more alternative NTP servers are specified here.

Note: If your DDM system is configured to use HA and your network is not connected to the Internet, specifying an alternative NTP server is a requirement to ensure accurate database replication.

5.4. Set Update Key

Use this function only if instructed to by Audinate technical support.

5.5. Set Static IP Address

This feature allows you to add, edit and delete a static IP address for your DDM. if required. Use the arrow and Enter keys to navigate the menu system.

5.6. License Server Reachability Test

Use this feature to test your connection to the Audinate DDM license server.

The license server is at <https://software-license-ddm.audinate.com> on port 443.

It is advised to run this test prior to logging in to the DDM web interface, to ensure that your VM has an uninterrupted connection to Audinate's license server.

If the script returns 'Error: cannot resolve DDM license server host', it is likely there is a problem with your DNS configuration.

If the script returns 'Error: cannot reach https://software-license-ddm.audinate.com', it is possible that a web proxy or firewall is interfering with communication between the DDM server and the license server.

If you see either of these errors, and the network settings for the VM are correct (the selected adapter must be a bridged adapter that is connected to the Internet), contact your network administrator.

If the script returns 'DDM license server hostname resolved', your connection is good and you should be able to activate DDM with no problems. If however you find you can't activate DDM, please contact Audinate technical support.


5.7. Fix LMX Time Gone Backwards

Use this function only if instructed to by Audinate technical support.

5.8. Quit

Closes the start menu and returns you to the VM main console.

6. Licensing and Setup

1. Open up a web browser on a device connected to the virtual machine and navigate to `http://<Virtual Machine IP address>`
2. The initial screen presents the End User License Agreement (EULA). Read the EULA and click "I Accept" to proceed.
3. The following screen allows you to select between starting with a fresh installation, or restoring your configuration from a backup of an existing system. Choose the 'Fresh Installation' option (unless you have a saved configuration that you want to restore).
4. Step 1 of the installation wizard allows you to upload and use your own TLS certificate to secure the Dante Domain Manager. This configuration can be skipped for now and accessed later under Settings. If you want to use a TLS Certificate, refer to the DDM User Guide for more information.
5. Step 2 of the wizard allows you to set the administrator user's password. Enter and confirm the password, generate and record the recovery code, and click *Submit* to proceed to the next step.
6. Step 3 of the wizard prompts you to enter your Dante Domain Manager product key to license the product. Enter your product key and click *Activate* to proceed.
Note: This step requires the DDM to have an active internet connection.
7. Step 4 of the wizard allows you to create your first Dante Domain. Enter the name of the Domain and click *Submit* to complete the wizard. You can easily delete this domain and add new domains later.
8. You are now ready to begin enrolling devices in your newly created domain via the devices page.
9. After enrolling devices, launch Dante Controller and click on the Domains icon on the far right of the toolbar. 
10. Enter the host details and login details for your Dante Domain Manager in the domain connection dialog, and click *Connect* to view and configure the domain-connected devices. Use the drop-down menu to select different domains.