



▶ Polycom® DMA™ 7000 System  
Getting Started Guide

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The EULA is included in the release notes document for your version, which is available on the Polycom Support page for the Polycom DMA 7000 system.

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Polycom, Inc.  
4750 Willow Road  
Pleasanton, CA 94588-2708  
USA

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# Polycom<sup>®</sup> DMA<sup>™</sup> System Server Setup

The sections below describe the steps required to perform the initial setup of a Polycom<sup>®</sup> Distributed Media Application<sup>™</sup> (DMA<sup>™</sup>) video collaboration infrastructure server or two-node server cluster.



The servers in a two-node cluster must be co-located. If possible, use the provided 18" crossover cable to connect them to each other.

If you're installing a new server to expand a single-node system into a two-node cluster, see "Adding a Second Server" in the *Polycom DMA Operations Guide* or online help.

At the end of this procedure, you will have successfully logged into the Polycom DMA system and be ready to finish configuring the system, including setting up users and MCUs, integrating with an enterprise directory, configuring signaling, and completing other configuration tasks.

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## Collect Necessary Materials

Before you install a Polycom DMA system, collect these materials:

- Polycom DMA system server shipment
- Completed First-Time Setup Worksheet
- PC running Microsoft® Windows® (XP Pro, Vista, or Windows 7) with:
  - USB port
  - Java™ 1.6 or newer
  - Microsoft Internet Explorer® 7 or newer, or Mozilla Firefox® 3 or newer
  - Adobe® Flash® Player 9.0.124 or newer
- The Polycom DMA USB Configuration Utility, which you can download from <http://support.polycom.com/>.

## Complete the First-Time Setup Worksheet

Before you begin system setup, fill out the **My System Values** column of this worksheet.

### First-Time Setup Worksheet

System Configuration Information	My System Values	Description
One node or two?		For a single-node system, skip the Node 2 section below.
Separate management and signaling interfaces, or combined?		If the same network will be used for both management (administrative access) and signaling, skip the signaling IP addresses and the Shared Signaling Network Settings section below.
IPv4, IPv6, or both?		Complete the appropriate address fields below for your choice.  Note: Some system features are not supported or not fully tested in an IPv6 environment, including embedded DNS, site topology, and Juniper Networks SRC integration.

System Configuration Information	My System Values	Description
<b>Node 1</b>		
Management host name		Local host name of the first (or only) Polycom DMA system server's management (or combined) interface. Host names may contain only letters, numbers, and internal dashes (hyphens), and may not include a domain. The reserved values appserv* and dmamgk-* may not be used for host names.
Management IPv4		Static, physical IP address(es) for the first (or only) server's management (or combined) interface.
Management IPv6		
Signaling IPv4		Static, physical IP address(es) for the first (or only) server's signaling interface.
Signaling IPv6		
<b>Node 2</b>		
Management host name		Local host name of the second server's management (or combined) interface. Host names may contain only letters, numbers, and internal dashes (hyphens), and may not include a domain. The reserved values appserv* and dmamgk-* may not be used for host names.
Management IPv4		Static, physical IP address(es) for the second server's management (or combined) interface.
Management IPv6		
Signaling IPv4		Static, physical IP address(es) for the second server's signaling interface.
Signaling IPv6		
<b>Shared Management Network Settings</b>		Required even for single-node installation.
Virtual management host name		Local host name of the virtual management host. Host names may contain only letters, numbers, and internal dashes (hyphens), and may not include a domain. The reserved values appserv* and dmamgk-* may not be used for host names.
Virtual management IPv4		IP address(es) of the virtual management host.
Virtual management IPv6		

<b>System Configuration Information</b>	<b>My System Values</b>	<b>Description</b>
Subnet mask		Network mask that defines the subnetwork of the system's management interface.
IPv6 prefix length		IPv6 CIDR value.
IPv4 gateway		IP address of the gateway server used to route network traffic outside the subnet.
Auto-negotiation		Yes or no. If no, indicate speed and full or half duplex.
<b>Shared Signaling Network Settings</b>		Needed only if signaling network is separate. In that case, required even for single-node installation.
Virtual signaling host name		Local host name of the virtual signaling host. Host names may contain only letters, numbers, and internal dashes (hyphens), and may not include a domain. The reserved values appserv* and dmamgk-* may not be used for host names.
Virtual signaling IPv4		IP address(es) of the virtual signaling host.
Virtual signaling IPv6		
Subnet mask		Network mask that defines the subnetwork of the system's signaling interface.
IPv6 prefix length		IPv6 CIDR value.
IPv4 gateway		IP address of the gateway server used to route network traffic outside the subnet.
Auto-negotiation		Yes or no. If no, indicate speed and full or half duplex.
<b>General System Network Settings</b>		
DNS search domains		Space- or comma-separated list of fully qualified domain names to query on the DNS servers to resolve host names (optional). The system domain is added automatically; you don't need to enter it.
DNS 1		IP address of the primary Domain Name System server. Optional, but strongly recommended. At least one DNS server is required in order to import global groups from an enterprise directory and for CMA integration.



System Configuration Information	My System Values	Description
DNS 2		IP address of a second DNS server (optional).
DNS 3		IP address of a third DNS server (optional).
Domain		Fully qualified domain name for the system (optional).
Signaling DSCP		The DSCP value is used to classify packets for quality of service (QoS) purposes. If you're not sure what value to use, leave the default of 0.
Default IPv6 gateway		The interface to use for accessing the IPv6 gateway, generally eth0. Optionally, the gateway's address and the interface, specified as: <IPv6_address>%eth0
Default IPv4 gateway		In split network configuration, select which of the two networks' gateway servers is the default.  Your choice depends on your network configuration and routing. Typically, unless all the endpoints, MCUs, and other devices that communicate with the system are on the same subnet, you'd select the signaling network.
<b>System Time</b>		
Time zone		Time zone in which the system resides.
NTP server #1		IP address of the primary NTP time server (optional, but strongly recommended).
NTP server #2		IP address of a second NTP time server (optional).
NTP server #3		IP address of a third NTP time server (optional).
<b>Routing Configuration</b>		
		If you know you need to set up a special network routing rule or rules, specify the information below for each rule.  In a split network configuration, routing rules are necessary for proper routing of network traffic.
Destination		The destination network mask for this route.

System Configuration Information	My System Values	Description
Length		The destination CIDR subnet.
Interface		In split network configuration, specify the interface for this route.
Via		IP address of router for this route. Optional, and only needed for non-default routers.

## Unpack and Install the Hardware Components

The Polycom DMA system uses either one or two Polycom-branded Dell servers.

### To unpack and install the hardware

- 1 If you purchased Polycom RMX conference platforms (MCUs) with your Polycom DMA system servers, unpack and install them as described in the *Getting Started Guide* for the model you purchased.
- 2 Examine the Polycom DMA system shipping containers for damage. Polycom is not responsible for damage sustained during shipment of this product.
- 3 Open and review the container packing slips.
- 4 Open the containers and examine the contents. A single-node Polycom DMA system shipment includes:
  - 1 Polycom DMA system server
  - 2 power cords
  - 1 rack-mount kit (four-post)
  - 1 bezel key
  - 1 server documentation set
  - 1 copy of the *Polycom DMA Quick Start Guide* (which contains this procedure)
  - 1 Polycom DMA system installation disk (included for recovery purposes; the software on the disk is already installed on the server)
  - 1 blank USB memory stick
  - 2 crossover Ethernet cables, short and long (not used for single-server system)
  - Your license documents

If you ordered the optional 2-post rack mounting kit, it's in a separate box.

A two-node system shipment contains a second set of the above items.

- 5 Examine the contents for damage.
 

If you find damage, file a claim with the delivery carrier. Polycom is not responsible for damage sustained during shipment.
- 6 Remove all of the components from their containers.
- 7 Install the Polycom DMA server(s) according to the server documentation. To rack-mount a server, refer to the *Rack Installation Guide* and use the brackets provided.
- 8 Connect the Polycom DMA server(s) to the network:
  - a Connect the GB 1 Ethernet port of each server to the enterprise network to be used for management (or combined) traffic.
 

This is the eth0 network interface, which must be used for this purpose.
  - b For a split network configuration, connect the GB 3 Ethernet port of each server to the network to be used for signaling traffic.
 

This is the eth2 network interface, which must be used for this purpose.
  - c For a two-node system, connect one of the provided crossover cables between the GB 2 ports of the two servers.
 

This is the eth1 network interface, which must be used for this purpose.

Don't turn on the server(s) at this time.
- 9 Remove the bezel(s) from the server(s).

## Configure the Polycom DMA System Server(s)

You can configure the Polycom DMA system server(s) using the Polycom DMA USB Configuration Utility you downloaded from the Polycom Support site and the USB memory stick included in the server package.



To configure the system server(s) without using the USB Configuration Utility, see [“Alternate Procedure: Configure the Polycom DMA System Server\(s\) Without Using the USB Stick”](#) on page 11.

### To configure the Polycom DMA system server(s)

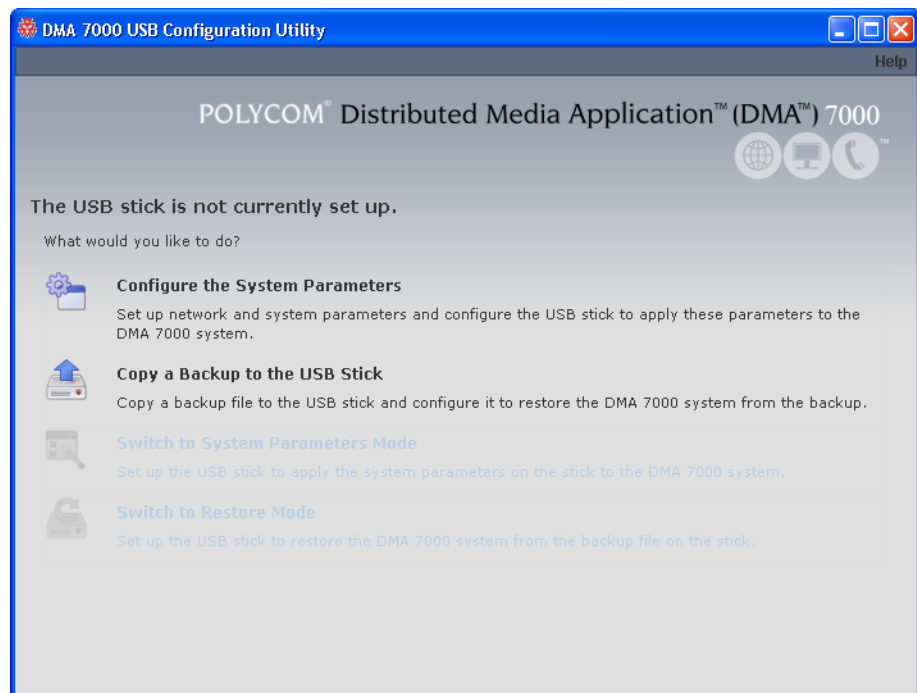
- 1 Connect the USB memory stick to the Windows PC to which you downloaded the ZIP file containing the Polycom DMA USB Configuration Utility.

- 2 Unzip the Polycom DMA USB Configuration Utility files to the USB memory stick.



The USB Configuration Utility files must be at the root of the drive, not in a folder. One of the files is autorun.inf, which enables the USB Configuration Utility to start automatically when the USB stick is inserted into a PC that supports autorun. In a highly secure environment, this file may not be allowed.

- 3 Start the USB Configuration Utility by double-clicking dma7000-usb-gui.exe.
- 4 In the DMA USB Configuration Utility window, click **Configure the System Parameters**.

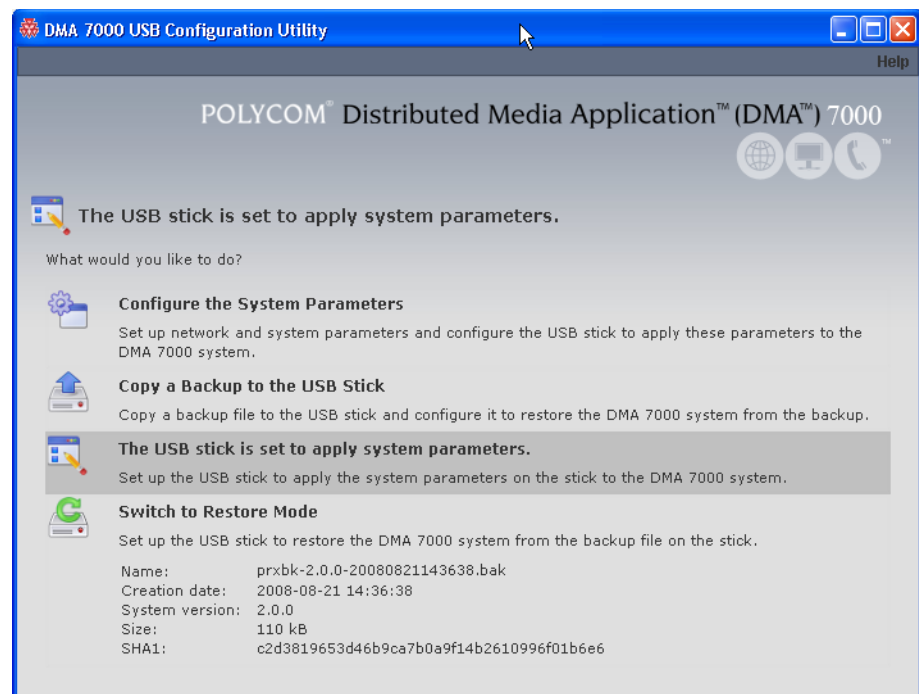


- 5 On the **Network** page, select the correct **System node configuration** and **System split network setting**.
- 6 Enter the network values from the [First-Time Setup Worksheet](#).
- 7 If you need to set up a special network routing rule or rules, click **Routing Configuration**, create the rule(s), and click **OK**.



In a split network configuration, routing rules are necessary for proper routing of network traffic. If you aren't sure what rule or rules you need, consult the appropriate IT staff or network administrator for your organization.

- 8 Click **Next**.
- 9 On the **System Time** page:
  - a Select the correct **System time zone** for your location.  
We strongly recommend selecting the best location-specific setting, not one of the generic GMT offset settings.
  - b Leave **Auto Adjust For Daylight Savings** checked (deselecting this may cause problems, especially with NTP servers).
  - c Under **NTP servers**, enter the IP addresses (or domain names) for the time servers from the [First-Time Setup Worksheet](#).  
We strongly recommend specifying at least one and preferably three time servers. Use NTP stratum 3 quality time servers, if possible.
- 10 Click **Done**.  
The utility confirms that the configuration file was created and returns you to the initial menu.
- 11 Verify that the initial menu now states that **The USB stick is set to apply system parameters**.



- 12 Close the program.
- 13 In your system tray, click **Safely Remove Hardware** and select **Safely Remove USB Mass Storage Device**. When a message tells you it's safe to do so, disconnect the USB memory stick from the PC.



The Polycom DMA system software is already installed on the server(s), so the system installation disk isn't needed to set up a new system. Using it overwrites the same software already on the server and needlessly lengthens the setup process. Put the disk away in a safe place in case it's ever needed to restore the system.

- 14** Make sure that both servers are off.
- 15** If you need to replace the system software on the server(s) with a different version, turn on the first (or only) server (the one you want configured as Node 1) and insert the system installation disk for that version. Otherwise, continue with the next step.
- 16** On the first (or only) server (the one you want configured as Node 1), insert the USB stick into a USB port and boot (or reboot) the server. Leave the second server off.
- If you're replacing the system software, the server boots from the DVD, and the installation commences. About 15-20 minutes later, the DVD ejects and the server reboots.
- If you're not replacing the system software (or if you are, after the reboot), the server reads its network and system parameters from the USB stick and applies them.
- 17** Wait for the front panel LCD to display **DMA Ready**. Then disconnect the USB stick and if applicable, remove the disk. If you're installing a single-node system, skip to step [19](#).

#### Note

If the LCD displays **DMA Installed**, the system software is installed, but not configured. Make sure the USB stick is set to apply system parameters and inserted into a functioning USB port, and then reboot the server.

- 18** If you're installing a two-node cluster, turn on the second server (Node 2). If you're replacing the system software, insert the Polycom DMA system installation disk into the DVD drive, turn off the server, and turn it back on.
- If you're replacing the system software, the server boots from the DVD, and the installation commences. About 15-20 minutes later, the DVD ejects and the server reboots.
- If you're not replacing the system software (or if you are, after the reboot), the server detects and gets its configuration settings from Node 1, and joins the cluster. When done, both servers' LCDs display **DMA Clustered**.
- 19** On a PC with network access to the Polycom DMA system, point your browser to the system's virtual host name or IP address and log in with user ID **admin** and password **admin**.

The Polycom DMA system's management interface appears, displaying the **Dashboard**. From its menus, you can complete your system setup:

- Install your license(s).
- Set up signaling and configure the Call Server.
- Check security configuration settings and change if necessary.
- Set up MCUs, add conference templates for the MCUs, and set conference defaults.
- Install security certificates.
- Manage system access, either by adding local users or by integrating the Polycom DMA system with Microsoft Active Directory, and remove the default admin login.
- Make other desired configuration changes.

Refer to the online help or the *Polycom DMA Operations Guide* for the relevant descriptions and procedures.

## Alternate Procedure: Configure the Polycom DMA System Server(s) Without Using the USB Stick

If for some reason you don't have or can't use the Polycom DMA USB Configuration Utility on the USB memory stick, the following procedure enables you to complete the initial setup using only a laptop PC and an Ethernet cable.

This is possible because Polycom DMA system servers are shipped with default network settings that you can use to connect to the system. The settings are:

IP address: 192.168.1.101

Subnet mask: 255.255.255.0

Default gateway: 192.168.1.1

### To configure the Polycom DMA system server(s) using a laptop PC

- 1 Follow the unpack and install procedure ([page 6](#)) through step 7. *Do not* connect the server(s) to the enterprise network.
- 2 Configure the network settings on your laptop to put it on the same network segment as the Polycom DMA system server(s) (see the server's default settings above). For instance, you can use the following settings:

IP address: 192.168.1.20

Subnet mask: 255.255.255.0

Default gateway: 192.168.1.1

- 3 Connect an Ethernet cable between your laptop and the GB 1 interface of the first (or only) server (the one you want configured as Node 1), and boot the server.

You can use the cable that will later connect the server to the switch (enterprise network). Be sure you connect to the server's GB 1 interface, not the GB 2 or GB 3 interface.

- 4 Wait for the front panel LCD to display **DMA Installed**. Then on the laptop, point your browser to `http://192.168.1.101` (if a security certificate warning appears, ignore it) and log in with user ID **admin** and password **admin**.

The Polycom DMA system's management interface appears, displaying the **Dashboard**.

- 5 Go to **Configuration > System > Network**, enter the network values (and routing configuration, if necessary) from the [First-Time Setup Worksheet](#),
- 6 If you need to set up a special network routing rule or rules, click **Routing Configuration**, create the rule(s), and click **OK**.



In a split network configuration, routing rules are necessary for proper routing of network traffic. If you aren't sure what rule or rules you need, consult the appropriate IT staff or network administrator for your organization.

- 7 Click **Update**. When asked to confirm restarting the system, click **Yes**.  
The system begins to reboot.
- 8 While the server is rebooting, disconnect the Ethernet cable from the laptop and connect the server's GB 1 port to the enterprise network to be used for management (or combined) traffic. For a split network configuration, connect the GB 3 port to the network to be used for signaling traffic.  
  
The reboot process takes several minutes. When it's finished, the front panel LCD displays **DMA Ready**.
- 9 From a PC with network access to the Polycom DMA system, point your browser to the system's virtual host name or IP address and log in with user ID **admin** and password **admin**.
- 10 Go to **Configuration > System > System Time** and do the following:
  - a Select the correct **System time zone** for your location.  
We strongly recommend selecting the best location-specific setting, not one of the generic GMT offset settings.
  - b Leave **Auto Adjust For Daylight Savings** checked (deselecting this may cause problems, especially with NTP servers).



- c Under **NTP servers**, enter the IP addresses (or domain names) for the time servers from the [First-Time Setup Worksheet](#).

We strongly recommend specifying at least one and preferably three time servers. Use NTP stratum 3 quality time servers, if possible.

- d Click **Update**. When asked to confirm restarting the system, click **Yes**.

The system begins to reboot. The process takes several minutes. When it's finished, the front panel LCD displays **DMA Ready**.

- 11 If you're installing a two-node cluster, verify that Node 2 is off and do the following:

- a Connect the GB 1 Ethernet port of the second server (Node 2) to the enterprise network to be used for management (or combined) traffic. For a split network configuration, connect the GB 3 port to the network to be used for signaling traffic.

- b Connect one of the provided crossover cables between the GB 2 ports of the two servers.

- c Verify that the first server (Node 1) is running and its front panel LCD displays **DMA Ready**. Then turn on the second server (Node 2).

After the second server boots, it detects and gets its configuration settings from Node 1 and joins the cluster. When done, both servers' LCDs display **DMA Clustered**.

- 12 Log back into the system and complete your system setup:

- Install your license(s).
- Set up signaling and configure the Call Server.
- Check security configuration settings and change if necessary.
- Set up MCUs, add conference templates for the MCUs, and set conference defaults.
- Install security certificates.
- Manage system access, either by adding local users or by integrating the Polycom DMA system with Microsoft Active Directory, and remove the default admin login.
- Make other desired configuration changes.

Refer to the online help or the *Polycom DMA Operations Guide* for the relevant descriptions and procedures.

