

Installing the CopyMinder Network Server (CMServer.exe)

Installation Procedure

The general procedure for setting up the CopyMinder Network Server is as follows:

1. Put CMServer.exe and the .cm file in a directory on the server. Exactly where this directory is located is left up to you. CMServer must have write access to the folder the .cm file is located in.
2. Run CMServer. It will display the configuration window. You should see an entry in the products list for each .cm file that you provided CMServer with. You will now need to decide whether you want to run CMServer as an application or a service. Some things to consider regarding this choice:
 - An application requires there to be a user logged in on the machine for it to run. This may not always be the case on server machines. If you choose to run CMServer as an application and want to have it start automatically when the user logs in, then you must create a shortcut to CMServer in that user's Startup start menu folder which gives the appropriate [command-line parameters](#) to make CMServer start automatically.
 - A service starts automatically when the machine starts and does not require a user to be logged in for it to run. This is now the most common way of running a background task on Windows.
 - Which method is chosen depends on a particular user's needs and requirements. Running CMServer as an application may be the ideal choice initially, while setting up the system, switching to running it as a service when the user has everything set up correctly.

When you have decided how you want to run CMServer select the appropriate option from the *Startup Modes* section.

3. In the Advanced section, you will need to choose the IP address that CMServer will accept connections on. If your machine has only one IP address then this will be pre-selected for you and cannot be changed. You will also need to choose a port number which the server will listen for connections on. Choose one from the list and keep a note of it in case you need to configure your [firewall\(s\)](#) later on.
4. You are now ready to hit the *Start* button! When you do so, CMServer will perform a protection check for each product (.cm file) that you provided. Any un-activated .cm files will require activation now using a product key configured to allow network installation. When all protection checks are complete the server will become operational either as an application or as a service depending on the mode of operation that you chose.

Things to note

- The machine you choose to install CMServer on must have internet access unless manually activated installations are permitted.

Using the CopyMinder Network Server

The CMServer Viewer

When CMServer is running as an application, it will display the CMServer Viewer. This utility displays the status of the CopyMinder Network Server, the products it is serving and the network users currently connected to it. A CMServer icon will appear in the notification area of the taskbar on the computer running CMServer.

The utility can also be used to force a particular product to access the CopyMinder server in order to update any settings you may have changed. This is generally a more convenient way of getting an update than restarting the CopyMinder Network Server. To force a protection update, select the product to update from the list of products being served and select *Server > Update Product*.

You can also open the server's logfile from this utility by going to *Server > Show Logfile*. The logfile records important events during the running of the server and may need to be used from time to time to help diagnose problems.

When CMServer is running as a service, it will not display the CMServer Viewer because services cannot display Graphical User Interfaces (GUIs). However, you can still use the CMServer Viewer by running CMServer.exe with the /viewer command-line parameter (see below).

Command-Line Parameters

CMServer can accept several command-line parameters which control its behaviour. These are as follows:

/s	Configures CMServer to install/run as a service.
/a	Configures CMServer to run as an application.
/q	Quiet mode. Only displays errors.
/u	Uninstalls the CMServer service.
/viewer	Just display the CMServer Viewer.
/logfile	Just open CMServer's logfile.
/listen=IPADDRESS	Sets the IP adress on which CMServer accepts connections (replace IPADDRESS with your chosen IP address).
/port=PORT	Sets the port on which CMServer listens for connections (replace PORT with your chosen port number).
/?	Displays a help window documenting these command-line parameters.

Firewalls

Like most server software, CMServer accepts incoming connections by "listening" on a given IP address and port. If the machine running CMServer also has a firewall (including Windows firewall as well as third party firewall software), then the firewall software will need to be explicitly told to allow the incoming connections to get through to CMServer.

Likewise, if a firewall exists on a machine between the server machine (the one running CMServer) and the client machines then this will need to be configured too.

Important

Failure to correctly configure your firewall(s) could result in the CopyMinder Server being inaccessible by client machines.

Firewall Checklist

- Your firewall(s) must allow both TCP and UDP traffic through to CMServer.
- Your firewall(s) must allow CMServer to accept incoming connections on the IP address and port that you chose when setting up CMServer.
- Clients auto-detect CMServer by performing a **multicast** broadcast to **239.255.219.184** and whichever port you configured CMServer to listen on. Your firewall(s) must not block traffic destined for this address/port, or auto-detection will not work.

Logfile

CMServer maintains its own logfile in which it records various important events during its execution. While the server is running, all events are recorded to this file rather than being displayed on-screen. The most common reason for needing to view the logfile is to begin diagnosing a problem.

You can view the logfile by running CMServer.exe with the /logfile command-line parameter. Alternatively, you can access it from the CMServer Viewer's menu.

The logfile is actually stored on disk in the 'All Users' profile under the CMServer/<DID> directory (where <DID> is your Developer ID).

Managing the CMServer Service

If CMServer is installed as a service, it can be controlled through Windows Services Management like any other service. To uninstall the service, run CMServer.exe with the /u command-line parameter.

Client Installation

Once CMServer is running, your protected software must be installed on the workstation computers. The first time each installation of your software is run, the user will be prompted (depending on any [CopyMinder INI file](#) settings you may have set) to specify what type of installation they want. They should choose *Configure as a Network Client*. In most cases the software will automatically detect the presence of the CopyMinder Network Server and the details will be filled in for them - all they need to do is click *OK*.

If the server details do not appear in the text field then it may be that the server is not running or that a [firewall](#) is blocking communication between the client and server machines. It will usually be preferable to find and resolve the problem that caused the auto-detection to fail, as

this problem could also affect the server and client's ability to communicate with each other during protection checks. However, it is possible to manually specify the server details to use, in the form SERVER:PORT, where the SERVER part can either be a hostname or an IP address. For example, OFFICESERVER:10589 or 192.168.1.10:10589.