



# Network Mathematica - Delhi University

## Lab Admin Guide

Delhi University has an unlimited campus-wide academic site license of Mathematica where you could get access to your own Mathematica license. A Network Mathematica license with 1000 controlling process and 8000 computing process is available on university server with IP

User/lab computers must be in the same network to access network license.

### How to access Network Mathematica:

- a) Download Mathematica 13.3.0 (Win/Mac/Linux) client software.
- b) Install Mathematica. <http://support.wolfram.com/kb/12440>
- c) Launch Mathematica. Activation window → Other ways to activate → connect to a network license server → **server IP**

A network license permits a specified number of copies of Mathematica to run concurrently on a network, making Mathematica available to multiple users and machines. Mathematica system administration in a network license environment involves setting up two separate components. First, the Mathematica license manager, MathLM, is installed on the license server to handle the details of license activity. Then, Mathematica is installed as a client of MathLM. Network licenses have two very important advantages:

- Network licenses provide a cost-effective way of making the Wolfram System available to multiple client machines in a networked environment. Instead of a separate license for each machine, a network license allows a specified number of copies of the Wolfram System to run concurrently on the network.
- Network licenses provide a convenient way to make parallel computations that use subkernels in a networked environment. Instead of a separate license for each machine hosting one or more of the subkernel processes, a network license allows them to run concurrently on the network from a controlling Wolfram System.

### Launching MathLM (SERVER):

Once installed, [MathLM](#) starts running automatically by default each time the machine is rebooted. To start [MathLM](#) manually, follow these instructions. Server:

- Open terminal with admin rights

```
mathlm -pwfile /usr/local/Wolfram/MathLM/mathpass
```



## Monitoring MathLM:

[MonitorLM](#) gives information on the total number of licenses available and checked out, the fully qualified domain name and username of those who have them checked out, and so on. MonitorLM can send output to the terminal, open a web browser, or write to a file. The output for MonitorLM is customizable by means of a configuration file. MonitorLM automatically supports IPv4 and IPv6 environments.

## Launching MonitorLM:

- On terminal use command - monitorlm. Example

```
Online help is available at
http://reference.wolfram.com/network

MathLM Version 11.2
MathLM Server hostname.domain.com
Date : Thursday, August 29 2017 14:11:59

License Usage Summary:

Program                License Class  Total in Use  Total Authorized
-----
Mathematica            A              2             20
MathKernel             A              4             40

Sub Mathematica        A              0             80
Sub MathKernel         A              0             80

Licenses in Use:

Program      Version      License Class  Username  Hostname  Duration
-----
Mathematica  11.1         A             username  client1.domain.com  08:49
Mathematica  11.2         A             username  client2.domain.com  06:33
MathKernel   11.1         A             username  client1.domain.com  08:44
MathKernel   11.2         A             username  client2.domain.com  06:52
MathKernel   11.2         A             username  client2.domain.com  06:52
MathKernel   11.2         A             username  client2.domain.com  06:30
```

Installation guidelines:

Mathematica Window installation: <http://support.wolfram.com/kb/12440>

Mathematica Mac installation: <http://support.wolfram.com/kb/12449>

Mathematica Linux installation: <http://support.wolfram.com/kb/12453>

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