



## Application Note

# LAMUM Windows Server/VM and Browser Requirements



LAMUM is not a data and network intensive application. However, if you have more than 25 daemons, or more than 4 LAMUM concurrent Users, it can be. When designing the server/VM that will run LAMUM, the # of daemons (Port@Host) and number of LAMUM concurrent Users should be taken into consideration.

When in doubt allocate more resource, not less.

## Server Hardware Requirements Guide

Server administrators can use this guide to evaluate their server hardware requirements. Peak visitors or Peak concurrent Users are the maximum number of browsers simultaneously making requests to access or run reports on LAMUM. Visitors are counted from their first page request until the connection is closed. Storage requirements will vary depending on how many daemons are being monitored, number of engineers using the various licenses and how often cron is run to gather data.

We recommend that your LAMUM server (or VM) be dedicated to the single task of running LAMUM.

*We also recommend installing LAMUM on a clean server/VM with no prior application running on it since it can interfere with Apache Tomcat ports and JDK/JRE environment. LAMUM installs MariaDB which is MySQL RDBMS so we highly recommend there should not be another instance of MySQL running before the installation. There must be no conflict with Apache.*

Network speed and volume of data are the two biggest contributing factors to LAMUM performance. Volume of data has to do with the number of daemons and the data collection (lmstat) cron interval. Allowing LAMUM the resources needed to collect usable and timely data is paramount to a good LAMUM experience.

### **All servers need:**

Ports available	8181, 8182, 3407
Account with Administration Rights	Yes
Dedicated email address	If using email Alerts or Batch Reports
Access to Active Directory	If drawing user information from AD
Network access to license servers	Yes
Static IP address	Yes

### **Here are server/VM requirements if you have less than fifty (50) daemons:**

**Server OS:** Windows Server 2008 R2 or newer

**CPU/Processors (minimum): single socket is adequate**

**If 1-2 LAMUM ‘Concurrent’ Users: 2 cores** Dual Core Intel i5, Xeon or AMD 3000

**If 2-4 LAMUM ‘Concurrent’ Users: 4 cores**

**If 5+ LAMUM ‘Concurrent’ Users: 8 cores**

### **RAM (minimum)**

**If less than 10 daemons: 4GB**

**If greater than 10 daemons: 8GB**

**Server HD Space (minimum available):**

100GB

**Server Type:**

Virtual Machine or  
Physical Server

**Server Network Connection (minimum):**

100Mbps

**Physical Server hardware recommendation for fifty (50) or more daemons:**

<b>Server OS:</b>	Windows Server 2008 R2 or newer
<b>Server Processor (minimum):</b>	Quad Core Intel i5, i7, Xeon or AMD 6000
<b>Server RAM (minimum):</b>	8GB
<b>Server HD Space (minimum available):</b>	500GB
<b>Server Type:</b>	Dedicated Physical Server
<b>Server Network Connection (minimum):</b>	1000Mbps

**VM hardware recommendation for fifty (50) or more daemons:**

<b>Server OS:</b>	Windows Server 2008 R2 or newer
<b>Server Processor (minimum):</b>	Quad Core Intel i5, i7, Xeon or AMD 6000
<b>Server RAM (minimum):</b>	4GB
<b>Server HD Space (minimum available):</b>	200GB
<b>Server Type:</b>	Virtual Machine
<b>Server Network Connection (minimum):</b>	1000Mbps

**\*\* Single Socket, 4 cores**

**Network Connection and Latency**

In networking, a **hop count** is the total number of intermediate devices such as routers through which a given piece of data must pass between the source and destination, instead of flowing directly over a single wire. LAMUM issues a command at each cron interval to gather data through these hops. The more hops the more likely the network will suffer from latency

**network hop between LAMUM and license server: 15 (max) recommended**

**Browser Compatibility-**

<b>Internet Explorer*</b>	Version 11 and above
<b>Chrome</b>	Version 30 and above
<b>Firefox</b>	Version 2.0 and above
<b>iOS (iPAD)</b>	Version 6.1 and above
<b>Android</b>	Version 4.0 and above

\*For Internet Explorer:

1. Set the LAMUM server as a "Trusted Site"

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2. Active X and Javascript controls should be enabled
3. Do not run in “Compatibility Mode”
4. To see images properly, check the box “Show Pictures” under Multimedia, in Internet Options tab
5. if “submit buttons” are not working- go to the developer page (F12) and select 9 on the lower right corner which says Edge(Default). This will reload your page and the button will work.

If you see performance issues on the UM side, please download and read the UM Performance Enhancement white paper at [www.teameda.com/support/documentation](http://www.teameda.com/support/documentation) .

## **Professional assistance**

For large instances, it may be worthwhile contacting TeamEDA Inc for expertise on hardware sizing, testing and performance tuning.

If any questions:

Contact TeamEDA for help:  
603-656-5200  
[support@teameda.com](mailto:support@teameda.com)