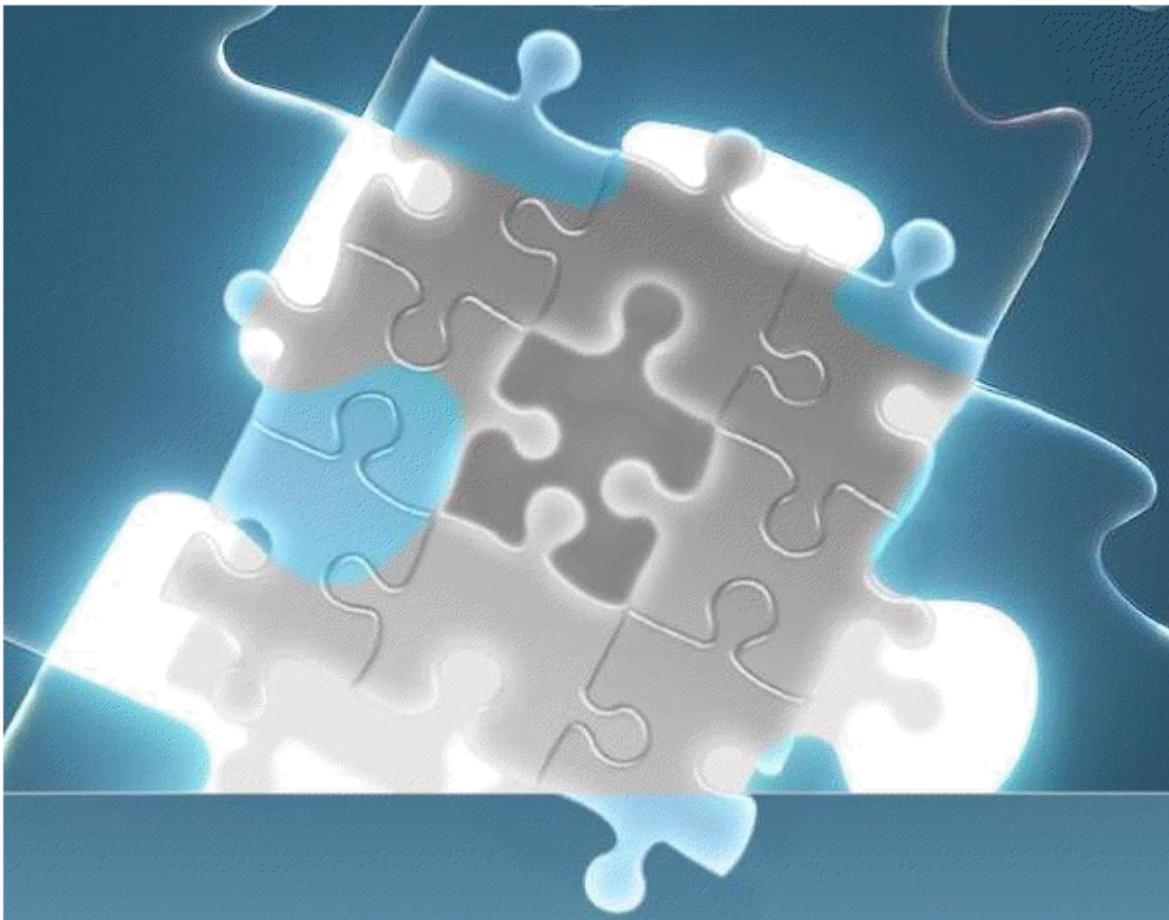


## Application Note

### **Installing LAM and LM as a Windows Service**



By default the LAM bundle runs stand alone versions of MySQL and Tomcat. In this mode Tomcat maintains an open window for its logs and MySQL must be started and stopped every time you start and stop LAM. For some environments this is not desirable. This appnote will detail how to install the components of LAM as services under Windows.

By default the LAM bundle runs stand alone versions of MySQL and Tomcat. In this mode Tomcat maintains an open window for its logs and MySQL must be started and stopped every time you start and stop the LAM. For some environments this is not desirable. This appnote will detail how to install the components of LAM and LM as services under Windows.

This appnote assumes that the LAM LM system has already been installed in the default installation directory (C:\LAMLM\ ) and is in good working order. If you did not install the system in the default installation directory make sure that you follow the directions to reflect the proper paths!

Once this process is completed the two supplied scripts will no longer be responsible or needed to start and stop the LAM LM system! Start\_lamlm.bat and stop\_lamlm.bat should no longer not be used once the LAM LM system has been installed as Windows Services upon the completion of this appnote!

To start Tomcat7 with Windows Services, you will have to install the Java Development Kit (JDK). The JDK is available from Java Downloads – Sun Developer Network (SDN)

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

The latest version of the JDK is recommended

**\*Important\***

You must start and stop the LAM LM system one time, using the “start\_lamlm.bat” and “stop\_lamlm.bat” files, before installing it as a Windows Service!

Before starting make sure no part of LAM or LM is running by executing a “stop\_LAMLM.bat” from the command prompt!

### **IMPORTANT: WINDOWS SERVICES**

DO NOT USE THE “**SYSTEM**” ACCOUNT TO START LAM & LM WITH WINDOWS SERVICES. See page six for more info.

## **MySQL**

Installing MySQL as a service is easy. All you need to do is run the command:

**C:\LAMLM\mysql-5.1.49\bin\mysqld.exe --install**

MySQL will automatically install itself as a service that is named “mysqld” that can be started and stopped using the “net” command or using the services.msc client in

Windows.

## Configuring LAM LM

In the directory **C:\LAMLM\apache-tomcat-X.X.X\bin** you'll see a file called "**service.bat**", open this file for editing.

Here you will need to set the following environment variables.

**PORT\_RO\_FTLM**

**CATALINA\_HOME**

**JRE\_HOME**

**JAVA\_HOME**

and **VOV\_LICMON** variables.

**Find the lines in the screenshot below (in "service.bat"):**

```
rem LAM: MODIFY the path variable to reflect your installation
rem To run LAM 570 Release: Tomcat7 with Windows Services remove rem for the next 4 lines

rem set PORT_RO_FTLM=8182
rem set CATALINA_HOME=c:\lamlm\apache-tomcat-7.0.2
rem set JRE_HOME=C:\Program Files\Java\jdk1.6.0_22
rem set JAVA_HOME=C:\Program Files\Java\jdk1.6.0_22
rem set VOV_LICMON=adminpc:%PORT_RO_FTLM%
```

First you will need to remove the "rem" from each line to uncomment it in the bat file, start with the line "rem set PORT\_RO\_FTLM=8182"; do not remove "rem" from the first two lines in the screenshot! Next you will need to modify the **CATALINA\_HOME** environment variable to match the full path and you'll need to modify the **VOV\_LICMON** environment variable inserting your hostname or host IP address where **%VOV\_HOST\_NAME%** is:

For example, if your **hostname** is, "**server01.company.net**" your lines would be:

```
set VOV_LICMON=server01.company.net:%PORT_RO_FTLM%
set PORT_RO_FTLM=8182
set CATALINA_HOME=c:\lamlm\apache-tomcat-7.0.2
set JRE_HOME=C:\Program Files\Java\jdk1.6.0_22
set JAVA_HOME=C:\Program Files\Java\jdk1.6.0_22
set VOV_LICMON= server01.company.net:%PORT_RO_FTLM%
```

To start the License Manager [LM] tool to execute with Windows Services, In the same file **services.bat**, set **VOVDIR** to point to your **LAMLM** installation folder. Once again remove the "rem" for this line to become active and modify the path to your installation path.

```
rem For LM 201009 Release use two lines below after removing rem and setting your installation paths
rem set VOVDIR=C:/LMLM/rtda/2010.09/winNT
rem set PATH=PATH=%VOVDIR%/bin
```

rem For LM 201009 Release use two lines below after **removing rem and setting your installation paths**

```
set VOVDIR=C:/LMLM/rtda/2010.09/winNT
set PATH=PATH=%VOVDIR%/bin
```

Or you could use the IP address instead:

```
set VOV_LICMON=192.168.2.82:%PORT_RO_FTLM%
```

Find the lines at the end of the “service.bat” file and specify your installation path for the VOVDIR variable. Do not insert line breaks.

```
rem Modified %EXECUTABLE% -for LMLM 2010. 09 Windows Services Release
"%EXECUTABLE%" //US//%SERVICE_NAME% --JvmOptions "-
Dcatalina.base=%CATALINA_BASE%;-Dcatalina.home=%CATALINA_HOME%;-
Djava.endorsed.dirs=%CATALINA_HOME%\endorsed" --StartMode jvm --StopMode jvm -
-Environment
"VOV_HOST_NAME=localhost;VOV_PORT_NUMBER=8182;VOV_PROJECT_NAME=lic
mon;VOVDIR=C:/LMLM/rtda/2010.09/winNT;VOVARCH=winNT;VOV_LICMON=localh
ost:8182;PATH=%VOVDIR%/bin;%VOVDIR%/bat;%PATH%
rem end LMLM 2010.09 Windows Services Release
```

Once that is completed you can then run the following command:

```
"C:\LMLM\apache-tomcat-7.0.2\bin\service.bat install tomcat7"
```

This will install Tomcat as a service called “Apache Tomcat tomcat7” that can be started and stopped via the “net” command in Windows or via services.msc.

## **STARTING License Monitor with Windows Services:**

Open up the file “XYNTService.ini” for editing which is located in the C:\LMLM\rtda\2010.09\winNT\startup folder.

\*Note \*

It is important to keep the “\” escape char notation when making these edits!

Locate the

```
"[Process0]
```

```
CommandLine = C:\\vov\\2010.09\\winNT\\startup\\startlm.bat"Line and edit it to reflect the
```

full path to startlm.bat; for example “C:\\LMLM\\rtda\\2010.09\\winNT\\startup\\startlm.bat”

```
[Process0]
CommandLine = C:\\LMLM\\rtda\\2010.09\\winNT\\startup\\startlm.bat
workingDir= c:\\
PauseStart= 5000
PauseEnd= 5000
UserInterface = No
Restart = Yes
```

Now, open the file “startlamlm.bat” located in C:\\LMLM\\rtda\\2010.09\\winNT\\startup for editing.

Locate the line “call C:\\vov\\2010.09\\winNT\\bat\\vovinit.bat” and replace it with your local path to the file vovinit.bat. For

example, “C:\\LMLM\\rtda\\2010.09\\winNT\\bat\\vovinit.bat”

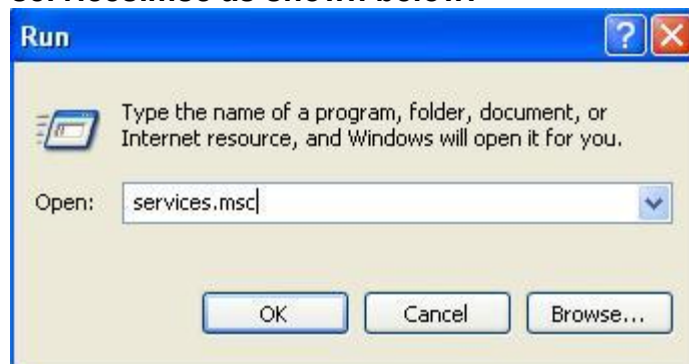
```
@echo off
rem -- Created by install.tcl on wed Nov 17 1:11:46 PM Eastern Standard Time 2010
rem --
rem --
call C:\\LMLM\\rtda\\2010.09\\winNT\\bat\\vovinit.bat
Immgr start
```

## Starting LM with Windows Services...

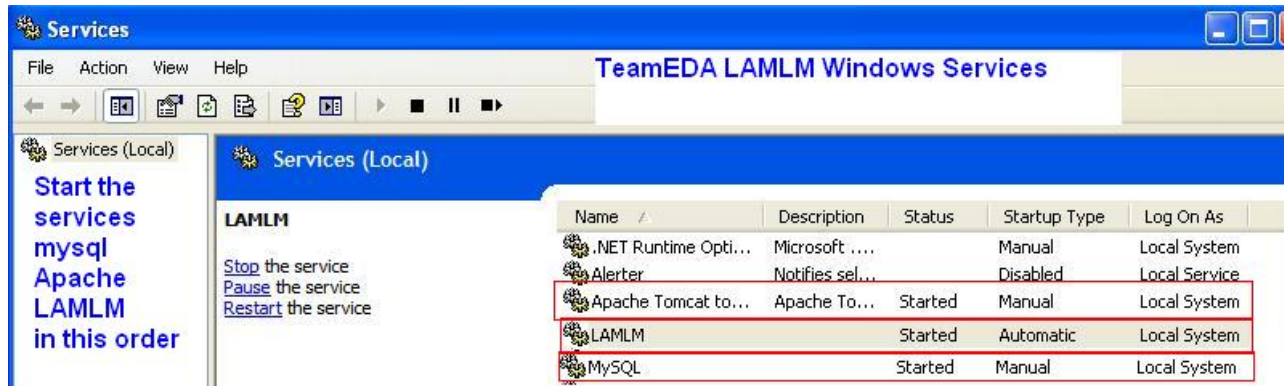
From Command Prompt, execute the command

C:\\lamlm\\rtda\\2010.09\\winNT\\startup\\XYNTService.exe -i

Use Windows run command to open up Windows Services GUI by typing services.msc as shown below:



You will see a Window open up with the services you just installed:

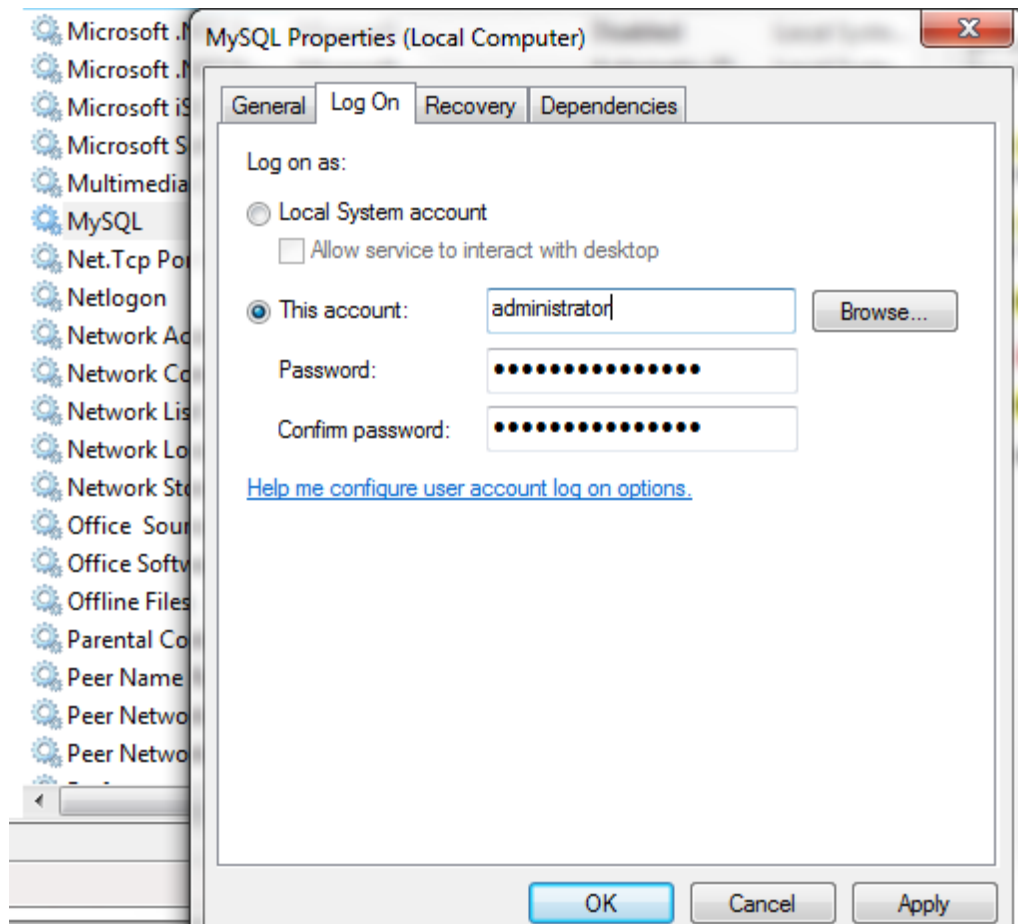


**Start the services and set up as per your operational requirements.**

**It is recommended to start “Mysql”, “Apache Tomcat tomcat7” followed by “LAMLM”.**

**\*IMPORTANT!\***

If you are having issues with accessing LAM and LM from your browser even though the services appear to be running check the names of the user who is running the services! This can be accomplished typing windows key + R -> “services.msc” then right clicking on the individual services and Properties tab -> log on. Make sure the user running the service has administrative rights. The default “local system” account will not be sufficient in most cases!



### **Quick Summary:**

### **LAMLM 570 Release Windows Services**

#### **Step 1: Start MySql**

#### **MySQL**

Installing MySQL as a service is easy. All you need to do is run the below command:

```
C:\570\LAMLM\mysql-5.1.49\bin\mysqld.exe --install
```

MySQL will automatically install itself as a service that is named "mysqld" that can be started and stopped using the "net" command or using the services.msc client in Windows.

#### **Step 2: Start TomcatX**

```
C:\LAMLM\apache-tomcat-7.0.2\bin\service.bat install tomcat7
```

#### **Step 3: Start LM with XYNTService**

**C:\lam\lm\rt\da\2010.09\winNT\startup\XYNTService.exe -i**

**Step 4: Open a browser <http://<hostname>:8181/lam>**

Login with Username: "admin and Password: "admin"

**Step 5: Open a browser <http://<hostname>:8183>**

login with your **Windows account User Name and Password**

**If you would like to delete the services created in this appnote:**

From a windows command prompt execute the following commands...

"sc delete mysql"

"sc delete lam\lm"

"sc delete tomcat7"

[The contents of this Application Note have been tested with Windows XP and Windows Server 2003.](#)

If you have any questions with this process or need help, as **always**, you can contact TeamEDA for information at **[support@teameda.com](mailto:support@teameda.com)**