

Troubleshooting SySAM

Sybase Software Asset Management

SMP Enterprise Grade Mobility – Webinar Series

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Rapid Innovation Group (RIG)

SAP Mobile Platform: Enterprise Grade Mobility

SCN pages and webinars bring to you technical details on Enterprise Readiness aspects of the SAP Mobile Platform (SMP).

- **Webinars** are done every week Thursday until November. The schedule is published on SCN.
<http://scn.sap.com/docs/DOC-43425>
- **OnTopicPages** presented links to White Papers, How-To Guides, Blogs and other resources.
<http://scn.sap.com/docs/DOC-43424>

The screenshot displays the SAP Community Network (SCN) interface. The top navigation bar includes 'Getting Started', 'Newsletters', and 'Store'. Below this is a search bar and a menu with categories like 'Products', 'Services & Support', 'About SCN', 'Downloads', 'Industries', 'Training & Education', 'Partnership', 'Developer Center', 'Lines of Business', 'University Alliances', and 'Events & Webinars'. There are also icons for 'Activity', 'Communications', and 'Actions'.

The main content area shows two document cards. The first card is titled 'SAP Mobile Platform: Enterprise Grade Mobility' and is created by Jan-G Groeneveld. The second card is titled 'SAP Mobile Platform: Webinars on Enterprise Readiness' and is also created by Jan-G Groeneveld. This card includes a list of topics: Enterprise Scale Mobility, Life Cycle Management, Performance, Security, and Supportability.

Below the topics, there is a section for 'Webinar Series on SMP Enterprise Grade Mobility' which states: 'In addition to published assets on SCN, we - the SAP Mobile Rapid Innovation Group (RIG) - host a series of webinars on the before mentioned topics. The webinars - current schedule below - are presented by mobility experts from SAP: **Every week, every Thursday, until November!** Webinars will be on Thursdays, 4pm CET / 7am PST (with exceptions). All webinars will be recorded, links published here. See below for previously asked questions.'

The 'Webinars on Topic Performance' section includes the following table:

Date	Topic	Links
Jul 11	Introduction to Performance Topics for the SAP Mobile Platform	• Presenter: John Polus • Recording , Presentation
Aug 8	Load Testing mostly Online Applications (HWC, ODP) with LoadRunner	• Presenter: John Polus • Recording , Presentation
Aug 15	Load Testing Native Applications with LoadRunner	• Presenter: Dong Pan • Recording & Presentation : coming soon
Oct 17 New Date	Performance Monitoring & Tuning	• Presenter: Brenda Creaney • Registration link - soon



Troubleshooting SySAM

SMP Enterprise Grade Mobility – Webinar Series



Troubleshooting SySAM: Objectives

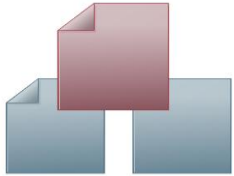


At the end of this course, you will be able to:

- Identify SySAM install profile
- Verify SySAM Installation
- Implement basic troubleshooting steps
- Change SySAM license after install
- SYSAM Cluster at a Glance
- Installing license to Evaluation version
- Identify where to go for assistance

Note: The Sybase Unwired Platform (SUP) has been renamed and as of version 2.3 is referred to as the SAP Mobile Platform (SMP).

Troubleshooting SySAM: Business Example



Windows Server Administrator has been tasked with installing the SAP Mobile Platform. (SMP) for their development team.

They have been provided the SMP installation media and a license file.

When starting the SMP install, they are getting an error that the installation cannot find an appropriate license and cannot proceed.

Troubleshooting SySAM: Agenda

- Identify SySAM installation profile
 - Served versus unserved license
- How to verify SySAM is properly installed
 - Review of command line options/tools to verify proper operation of SySAM
- Identify system issues effecting SySAM
 - How to determine what operating system environment issues/factors could be effecting the license file or server
- How to change SMP server license after installation
 - Reviewing license.bat file and options
- Where to go for help
 - Troubleshooting resources

What is SySAM: SySAM Defined

Sybase Software Asset Management

Sybase Software Asset Management (SySAM) is the Sybase product licensing and asset management system, which is built on FLEXnet technology from Flexera Software. It is the consolidated license management product used by most Sybase products.

SySAM is used in Sybase Unwired Platform 1.0 through 2.2 and SAP Mobile Platform 2.3. It will be replaced in SAP Mobile Platform 3.0.

For SUP/SMP it is used to manage both Server and Device Client licenses for the product.

Identify SySAM Installation Profile

Served Versus Unserved Licenses

Unserved License

Using a license that is accessed from the local file system

- Good for standalone servers
- Does not require SySAM server
- Does not require changes to the firewall
- Cannot be used for a cluster
- May have issues managing over terminal server with Developer Editions

Served License

Using a SySAM server to host a consolidated license file

- Required for clustered SMP environment
- Required if needed to run a developer edition (ED/PD) via Remote Desktop Connection (RDC)
- Served licenses have a USE_SERVER in the file
- Can have multiple licenses to be used over the network

Unserved License File in SMP Server (Sample)

#Sybase Software Asset Management License File. SS License for Sybase Unwired

#Platform Personal Developer Windows 32/64-bit

**PACKAGE SMP_DEVELOPER SYBASE COMPONENTS=SMP_BASESRVR **

...

**INCREMENT SMP_DEVELOPER SYBASE 2012.08150 15-aug-2012 uncounted **

**VENDOR_STRING=PE=PD;LT=SS HOSTID=999999999999 PLATFORMS="i86_n **

...

Unserved license file will have HOSTID (MAC) of the host it resides on. PE is product edition and LT is license type

Served License File in SMP (Sample)

License file in SMP server points to SySAM server

SERVER myserver 27000

SySAM Server host and port (not required)

VENDOR SYBASE <PORT=nnnn>

Port needed if configured on SySAM server

USE_SERVER

Served license

Demonstrates a license installed in SMP server that 'points' at a Served license.

Served License File in SySAM (Sample)

SERVER myserver 009999999999

Server host and hostid

VENDOR SYBASE <PORT=nnnn>

Port needed if firewall involved

USE_SERVER

Served license

**PACKAGE SMP_ENTSRVR SYBASE COMPONENTS=SMP_BASESRVR **

...

**PACKAGE SMP_ENTCLIENT SYBASE COMPONENTS=SMP_BASECLIENT **

...

Demonstrates a served license that resides in a SySAM Server

Identifying the Type of License from the File

Review of the license file for product edition and license type

Make sure you understand what type of license you have when installing SMP server. Product Edition and License Type must match the installed SMP server.

Example:

```
VENDOR_STRING=PE=PD;LT=SS
```

Product Edition (PE) is personal developer

License Type (LT) is standalone seat

Verifying SYSAM Status

How to verify license server is installed, has valid license, and is running:

- **%SYSAM%\bin> sysam status**

kbates-w64: license server UP (MASTER) v11.6

Vendor daemon status (on kbates-w64):

- **GUI tool “Imtools”**
- **SySAM log default = %SYSAM%/SYSAM-2_0/log/SYBASE.log**

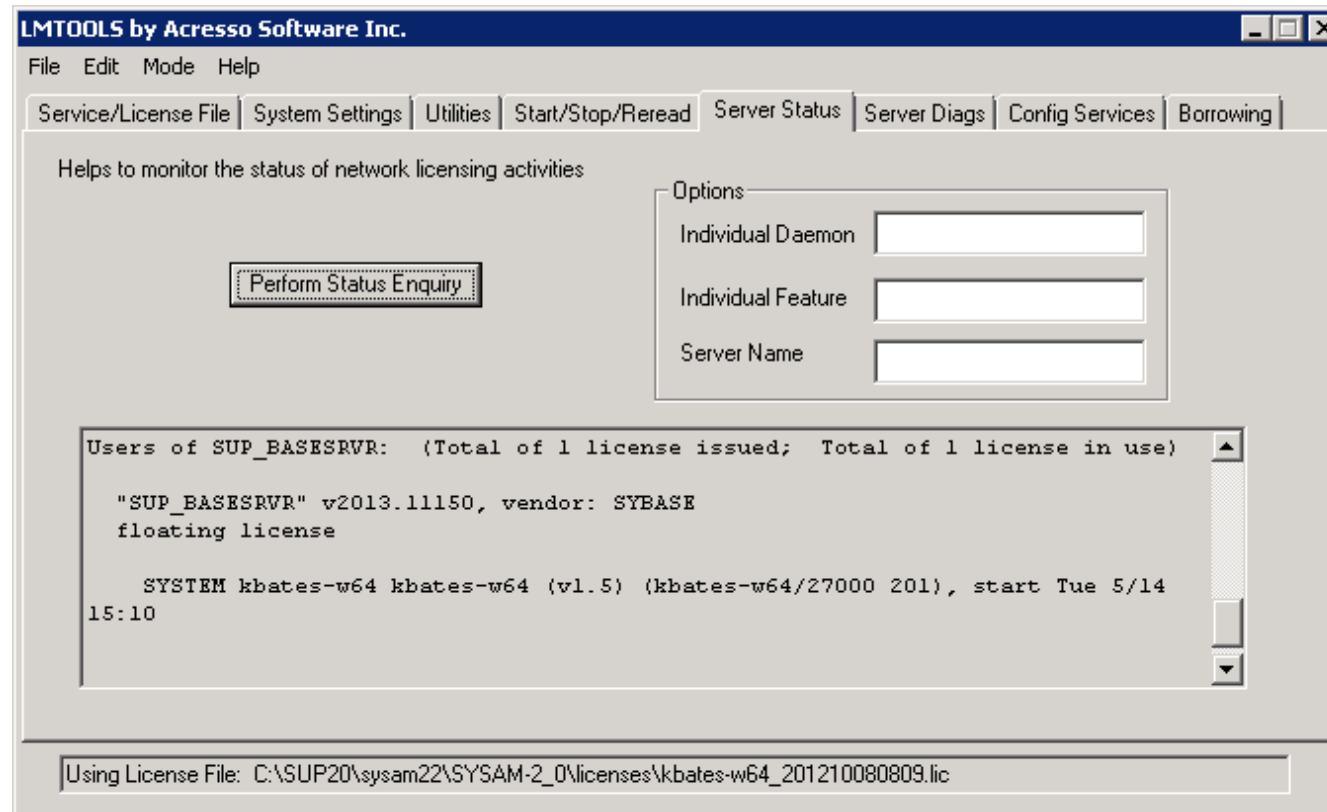
Verify SMP Server is Using a Valid License

SMP server log:

message: Checked out license for 1

SMP_BASESRVR (2012.08150/15-aug-2012/0C77 FD8E 33D6 8686) will expire Thu Aug 16 00:00:00 2012.

Lmtools:



Check Your Understanding (Quiz Question)



If you are installing an Enterprise Developer Edition of SMP on a virtual machine for multiple developers, which license profile should you use?

Choose the correct answer.

- Unserved License Model
- Served License Model
- Neither, virtual machines are not Supported with the SMP product

Check Your Understanding (Quiz Question)



If you are installing an Enterprise Developer Edition of SMP on a virtual machine for multiple developers, which license profile should you use?

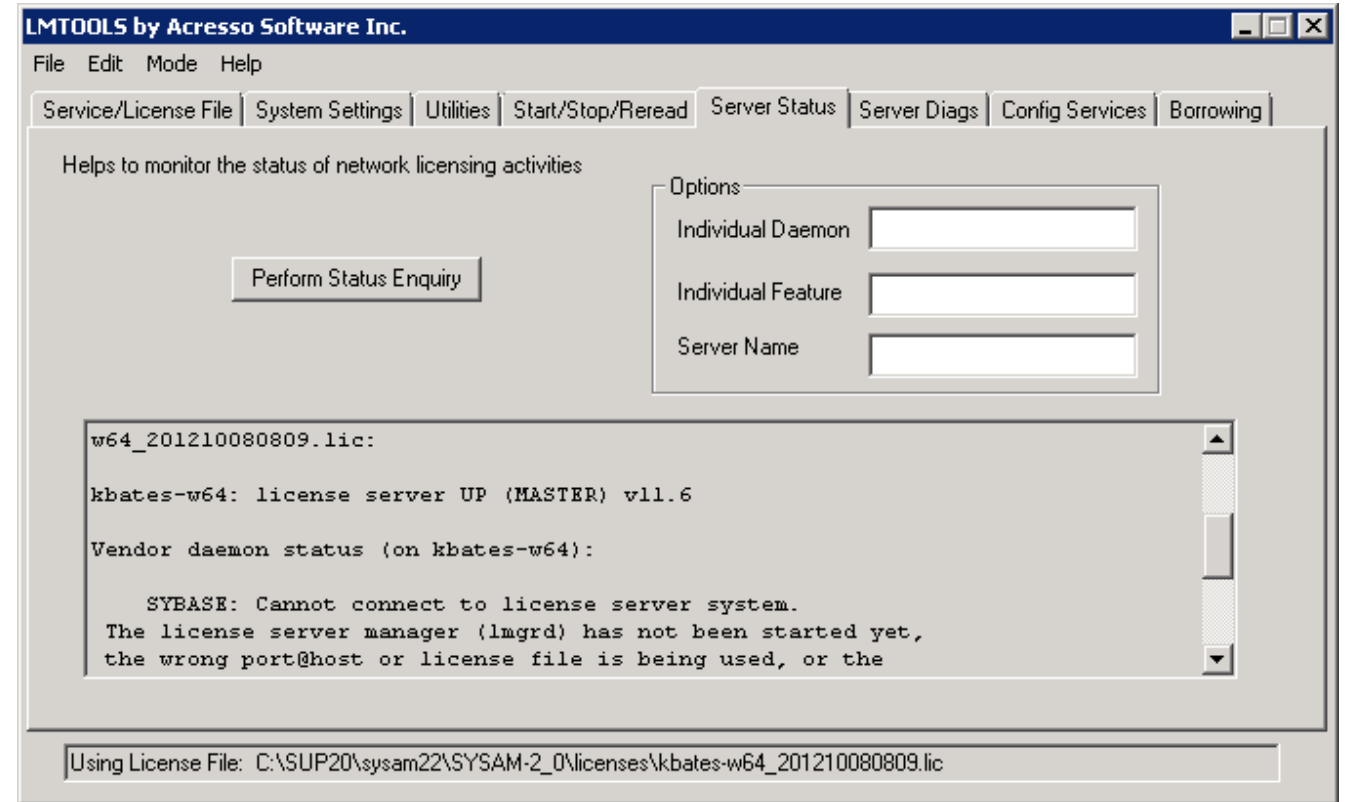
Choose the correct answer.

- Unserved License Model
- Served License Model (Correct answer)
- Neither, virtual machines are not Supported with the product

Developer Editions do not Support Terminal Services over Remote Desktop Connections (RDC)

Identify System Issues Affecting SySAM, Symptoms

- SySAM utilities state there is no lmgrd process running
- SMP server installation license screen complains it cannot find a license file
- SMP server starts with graced license or fails to start and log indicates there is no license



Example:

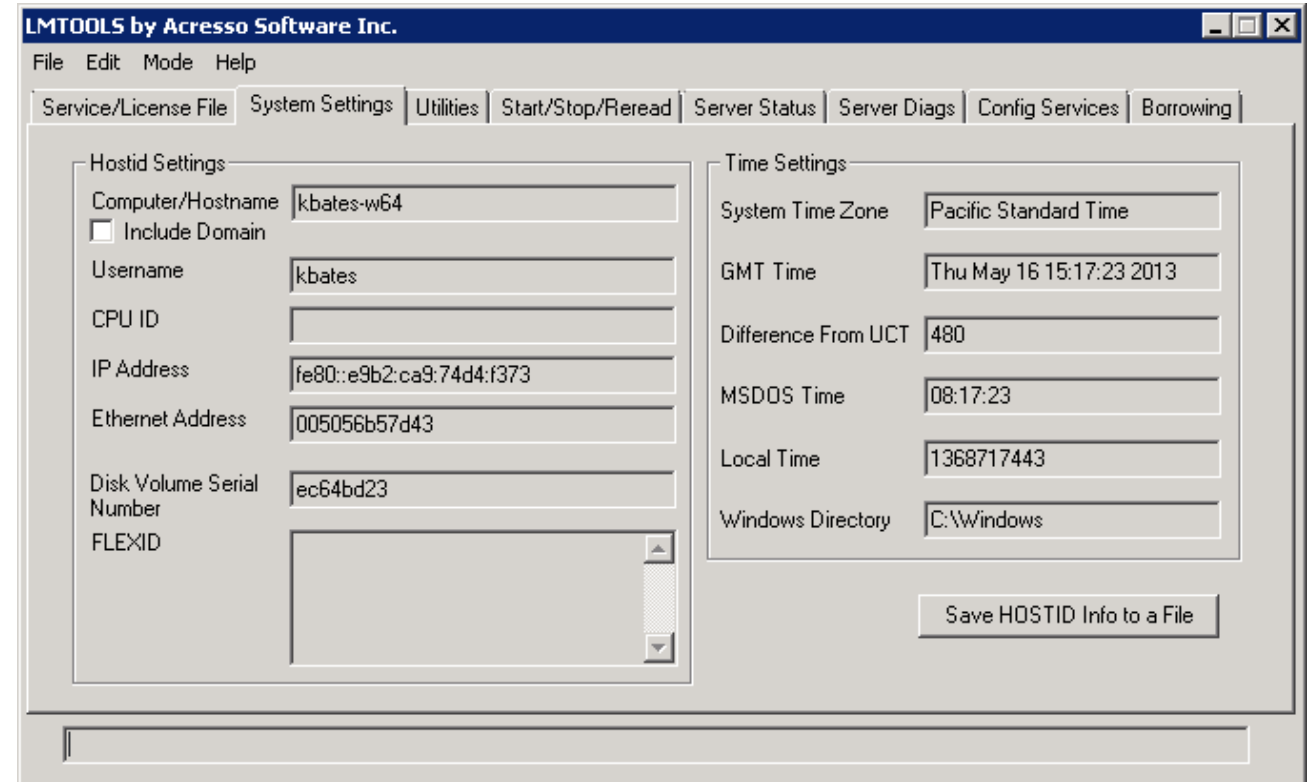
```
C:\SYSAM\bin> sysam status
```

lmgrd is not running: Cannot connect to license server system. (-15,570:10035 "WinSock: Operation would block")

Identify Issues Affecting SySAM, Common Problems

System uses ipv6

- Identify host is IPV6 with windows command “ipconfig /all”
- Identify with system settings tab in Imtools



- Set SySAM to use ipv6 with command “sysam configure ipv6”
- Set SySAM to use ipv4 with command “sysam configure ipv4”

Identify Issues Affecting SySAM, Common Problems

System uses firewall

- **Test port access with Windows Portqry (<http://www.microsoft.com/en-us/download/details.aspx?id=24009>):**

```
C:\PortQryUI>portqry.exe -n kbates-w64.sybase.com -e 27000 -p TCP
```

```
Querying target system called:
```

```
kbates-w64.sybase.com
```

```
Attempting to resolve name to IP address...
```

```
Name resolved to 10.172.156.187
```

```
querying...
```

```
TCP port 27000 (unknown service): LISTENING
```

- **Turn off firewall**
- **Open firewall for SySAM and sybase vendor daemon (2 ports)**
Configure SySAM and daemon for specific ports

```
SERVER myhostname 999999999999 27000
```

```
VENDOR SYBASE PORT=5565
```

Use unserved license

Identify Issues Affecting SySAM, License Problem

Installer complains license isn't present or incorrect type

Incorrect License edition or type

- Review if using served or unserved
- Verify PE and LT in license and installation
- Verify license server is running or license file present

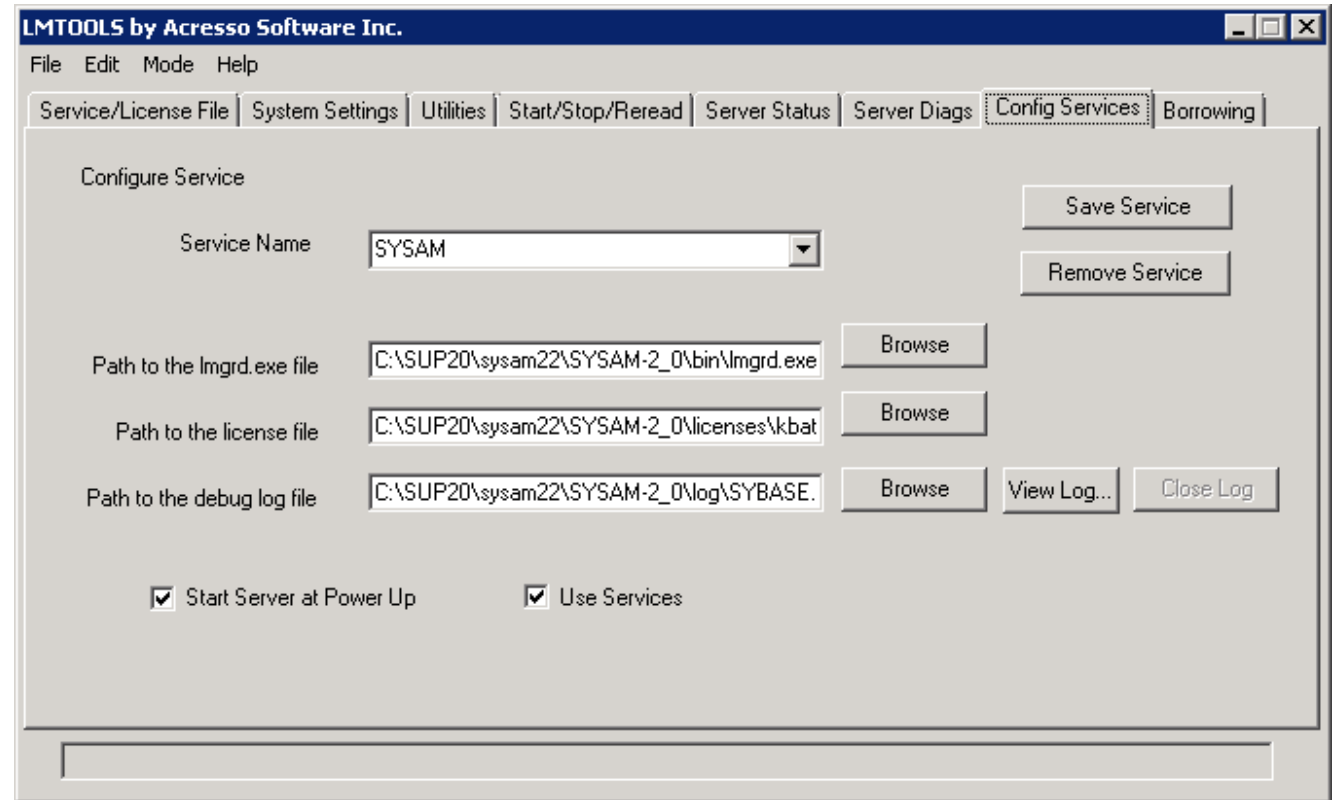
Changing the License

Unserviced License

- Replace license file, restart the server

Served License

- Use Imtool utility to change license file and reread license file (save configuration).



Both Require

1. Use license.bat in SMP %UNWIRED_PLATFORM%\servers\UnwiredServer\bin to update new license type, example: license.bat EE CP 500
2. Restart of SMP server required

Check Your Understanding (Quiz Question Example)



I have a Personal Developer Edition License Standalone Seat and need to change it to an Enterprise Developer Development and Test, what is the command line for the license.bat:

Choose the correct answer.

1. License.bat PD ED SS DT
2. License.bat ED PD ST
3. License.bat ED DT 20
4. License.bat ED DT

Quiz question template

Check Your Understanding (Quiz Question Example)



I have a Personal Developer Edition License Standalone Seat and need to change it to an Enterprise Developer Development and Test, what is the command line for the license.bat:

Choose the correct answer.

1. License.bat PD ED SS DT
2. License.bat ED PD ST
3. License.bat ED DT 20 (Correct answer)
4. License.bat ED DT (Correct answer)

Correct! Developer licenses have a fixed number of client licenses and you do not have to specify the client licenses.

SYSAM Cluster at a Glance

- Requires three different machines each with it's own SYSAM server
- Requires a high availability generated license (not manually modified)
- Minimum of three SYSAM servers started initially
- All have to be configured for the same port(s)

Client/Server Example (all Servers):

SERVER kbatesxp5 00FF68C4698A

SERVER kbatesxp6 00DD67C4698B

SERVER kbatesxp7 00CC69C4698C

VENDOR SYBASE

USE_SERVER

Adding a License to “Grace” Server

Customer installed SMP as Evaluation and now what?

Adding license to SMP server

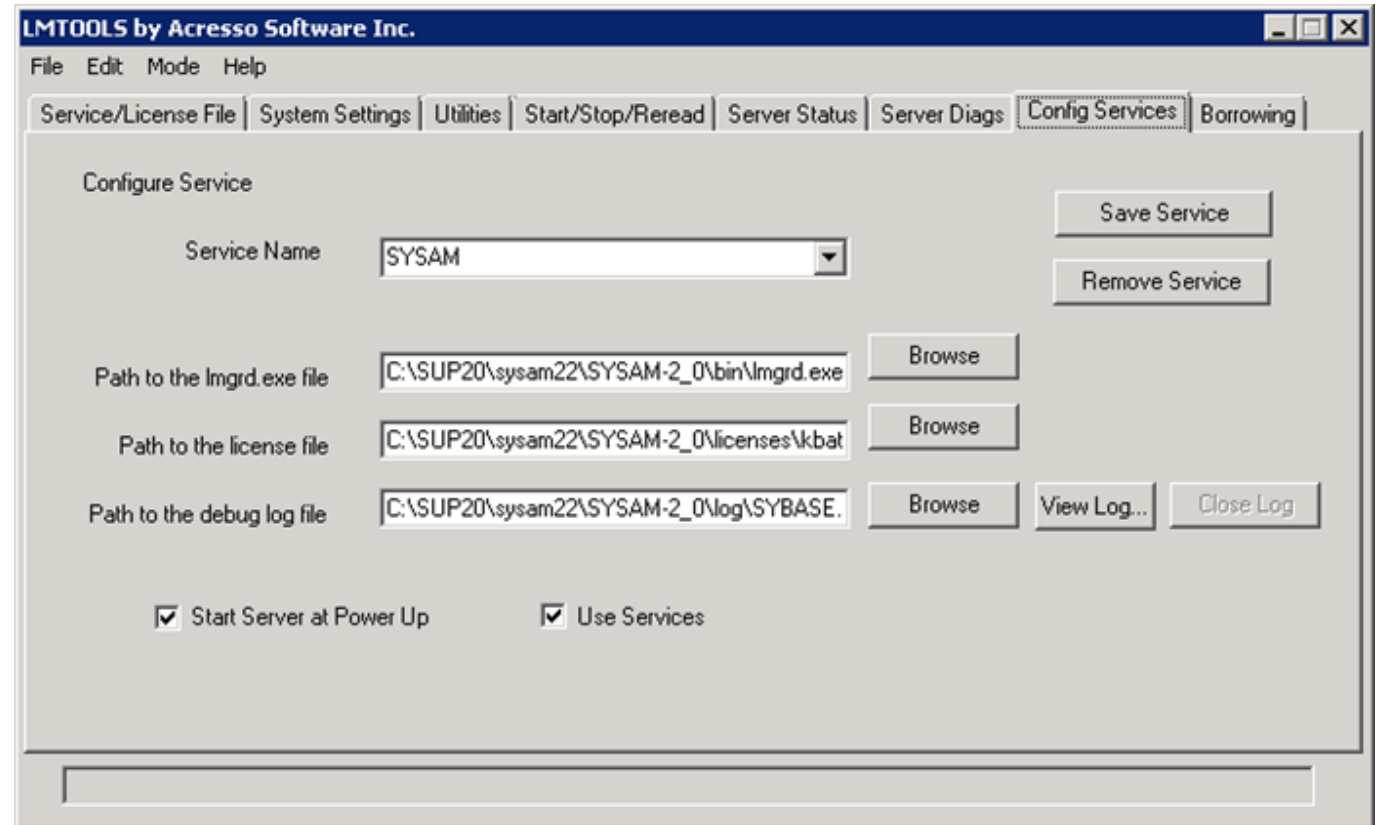
Unservd:

- Create UnwiredServer/licenses folder manually
- Place new unserved license file in new folder
- Run license.bat and restart SMP Server

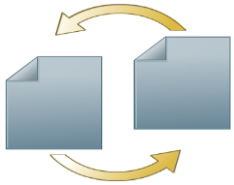
Adding a License to “Grace” Server (continued)

Served:

- SMP comes with complete SYSAM in UnwiredServer/sysam-2.2
- Place served license in UnwiredServer/sysam-2.2/licenses
- Configure SYSAM with UnwiredServer/sysam-2.2/bin/lmtools.exe
- Complete same steps as unserved with new .lic, but using correct lines for pointing to new SYSAM:
SERVER kbatesxp5 ANY
VENDOR SYBASE
USE_SERVER



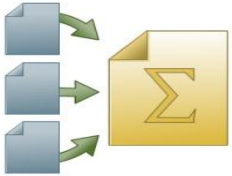
Where to Go for Help



For more information on topics discussed in this course and get additional help, see the following references:

- SySAM Documentation Online
 - *SySAM Documentation* → *Users Guide* → *Troubleshooting SySAM Errors*
(<http://infocenter.sybase.com/help/index.jsp?topic=/com.sybase.infocenter.help.sysam/title.htm>)
- Sybase.com solved cases (<http://search.sybase.com/search/simple.do?mode=sc>)
- Open an incident with SAP solution manager

Troubleshooting SySAM: Course Summary



You should now be able to

- Identify SySAM install profile
- Verify SySAM Installation
- Implement basic troubleshooting steps
- Change SySAM license after install
- Identify where to go for assistance



Thank You!

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