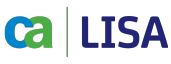
****

**6.0.9 to7.5 UPGRADE GUIDE**

What this document has?

* Pre Requisites before Upgrading Lisa
* LISA SERVER Upgrade Information

**Pre Requisites before Upgrading Lisa**

* **Make sure that existing lisa services are not running!**
  + Run **lisa status** to check the status of the key services - *Registry* and *VirtualServiceEnvironment* services
  + Shutdown all of your LISA 6.9 If the above 2 services are running, then run **lisa stop** command to stop the above 2 services.
  + After this is completed, once again run **lisa status** to ensure that these 2 services are not running
  + Un-install your LISA 6.9 installation.
  + Remove LISA (LISAHOME) and lisatmp\_6.9 folder
  + LISA Locks Folder , the following folder in the user home directory (on UNIX, Linux) requires read/write permissions:
    - lisatmp\_x.x (if it exists)
    - In general, the rest of LISA\_HOME can be restricted with read-only permissions.

**LISA SERVER Upgrade Information**

**in VPMO Linux Environment**

**Step 1:**

Server Details:

Host : [plth240.pedc.sbc.com](http://plth240.pedc.sbc.com)

IP : 130.9.200.254

UserID/PWD : Att id / RSA secureID as Pass word

Port : 22

Protocol : ssh

[plth237.pedc.sbc.com](http://plth237.pedc.sbc.com) sudo su - t1eam4c1

[plth238.pedc.sbc.com](http://plth238.pedc.sbc.com) sudo su - t1eam4c2

[plth239.pedc.sbc.com](http://plth237.pedc.sbc.com) sudo su - t1eam4c3

[plth240.pedc.sbc.com](http://plth238.pedc.sbc.com) sudo su - t1eam4c4

Name : plth239.pedc.sbc.com

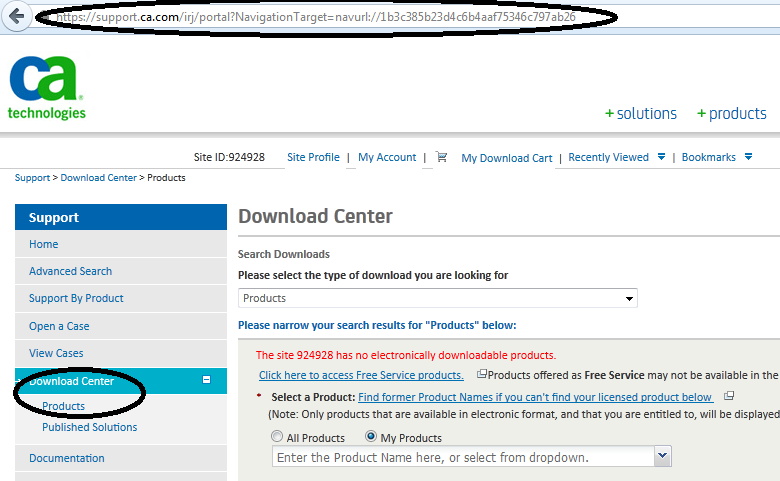
Address : 130.9.200.253

Putty Setting: <http://wiki.web.att.com/display/USH/PuTTY>

<http://wiki.web.att.com/display/USH/PuTTY>

**Step 2:** Download Lisa installable

URL : [**https://www.ca.com/us/register/login.aspx?returnURL=https://support.ca.com/irj/portal**](https://www.ca.com/us/register/login.aspx?returnURL=https://support.ca.com/irj/portal)



**Step 3:** Login

sudo su - t1eam4c4

**Step 4:** Copy Lisa Installable in below software Installable

Mkdir : “/opt/app/t1eam4c4/SoftwareInstallable/”

Copy File -1: lisa\_linux\_x64.sh

Copy File -2: lisa-lgpl.zip

Output:

-rwxrwxr-x 1 t1eam4c4 t1eam4c4 1799596 Mar 6 17:06 lisa -lgpl.zip

-rwxrwxr-x 1 t1eam4c4 t1eam4c4 582427735 Mar 6 17:06 lisa\_linux\_x64.sh

**Step 5:**

**LISA JVM System Requirements**

Recommend a 64-bit Java 7 for LISA Server when requiring heap sizes above 2 GB.

**Java JDK**

LISA is a Java application. A JRE is included with each installer (1.7.0\_17 JRE including a tools.jar from the JDK)

**Check Installed Java JDK (it should be Java 1.7 and higher)**

rpm -qa | grep openjdk

rpm -qa | grep i java

java –version

**Step 6:** Make below Directory

Mkdir : “/opt/app/t1eam4c4/Lisa”

Mkdir : “/opt/app/t1eam4c4/sltest”

Mkdir : “/opt/app/t1eam4c4/sltest/branch”

Mkdir : “/opt/app/t1eam4c4/sltest/trunk”

**Step 7:** Install Lisa: (Install in / /opt/app/t1eam4c4/Lisa/)

1. /opt/app/t1eam4c4/SoftwareInstallable/./ lisa\_linux\_x64.sh
2. **Location of external components library file.**

Specify the fully qualified path of the external components library file.

You can download this file from the LISA download site.

Location of external components library file:

[/opt/app/t1eam4c4/setupfile/software/lisa-lgpl.zip]

/opt/app/t1eam4c4/setupfile/software/lisa-lgpl.zip

Installation and Use of CA LISA 7.1 Requires Acceptance of the Following License Agreement:

1. **Which components should be installed?**

1: Workstation

2: Server

Please enter a comma-separated list of the selected values or [Enter] for the default selection: [1,2]

1. **Other option**

Create symlinks?

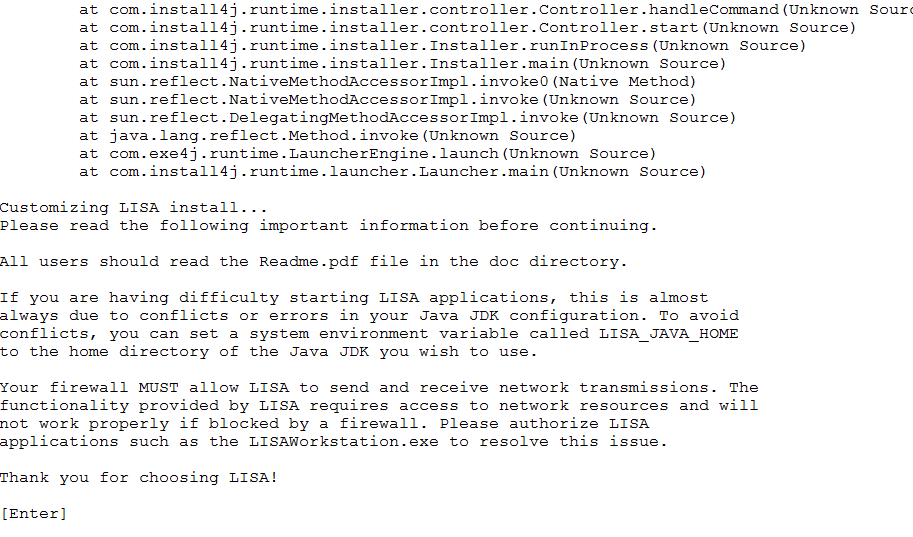
Yes [y, Enter], No [n]

n

Create a desktop icon?

Yes [y, Enter], No [n]

n



**Step 7:** Change, Or if doesn’t exist, then Create the following files

1. Mkdir : “/opt/app/t1eam4c4/Lisa/ att\_properties”
2. Copy "itko.properties” file in "LISA\_HOME/att\_properties/"
3. Copy "LISAWorkstation.exe.vmoptions" file in "LISA\_HOME/bin /"
4. Copy "workstation.local.properties" file in "LISA\_HOME”
5. Change "local.properties" file in "LISA\_HOME”

laf.server.url=https://license.itko.com

laf.domain=iTKO/LISA/ATT

laf.username=CA\_LISA\_Agent

laf.password.encrypt=30c35632e38a396f04fd19e8752906f6

( or )

#laf.username=CA\_LISA\_VSE\_To\_50K1

#laf.password.encrypt=9a94324a06a5cbd07d7ef8e48cf9f5a3

1. Check and set proxy in local.properties

Configured local.properties:

laf.usehttpproxy.server=true

laf.httpproxy.server=one.proxy.att.com

laf.httpproxy.port=8080

1. Add new property key/value in l ocal.properties “lisa.agent.migrate.properties=false”
2. Copy "cef\_keystore" file in "LISA\_HOME”
3. Recompiled attProtocol.jar with Lisa 6.9 and JDK/JRE 1.6 and Copy "attProtocol.jar" file in "LISA\_HOME/ lib /"

**Step 8:** Modify WEBLogic startup script as below

**From :** LISA\_OPTIONS=-javaagent:/opt/app/q1col2m3/component/LISA\_AGENT/LisaAgent2.jar=name=AgentName,url=tcp:// 130.9.200.254:2009

**To   :** LISA\_OPTIONS=”-javaagent:/opt/app/q1col2m3/component/LISA\_AGENT/LisaAgent2.jar=name=AgentName,url=tcp:// 130.9.200.254:2009 -Dlisa.agent.migrate.properties=false”

LISA\_OPTIONS=-"javaagent:/opt/app/q1col1m7/component/LISA\_AGENT\_CEF12Server1/LisaAgent2.jar=name=cef12Agent,url=tcp://10.243.224.229:2009 -Dlisa.agent.migrate.propertie  
s=false"

**Step 9:** Modify Broker startup command as below

**From :** java -jar /opt/app/t1eam4c4/Lisa /agent/LisaAgent.jar  -b launch

**To   :** java -jar /opt/app/t1eam4c4/Lisa /agent/LisaAgent.jar lisa.agent.migrate.properties=false -b launch

**Step 10:** Edit the versions of jdk and lisa in the below files

$HOME/.bash\_profile

Note:- Make sure you read pre-requisites section for the exact location of .bash\_profile file. $HOME location could be /home/lisa/ or /opt/lisa/ depending on how Linux Admin had set this up

**Step 11:** run and Check the below Lisa Components for status.

1. **Start Broker :**

java -jar /opt/app/t1eam4c4/Lisa7.5/agent/LisaAgent.jar lisa.agent.migrate.properties=false -b launch

or to set Jvm memory

java -jar C:\Lisa7.5\agent\LisaAgent.jar  lisa.agent.migrate.properties=false -b launch **-Xms2048m -Xmx2048m**

java -jar /opt/app/t1eam4c4/CA/Lisa/agent/LisaAgent.jar -b launch &

1. **Start Registry:**

./Registry

or

/opt/app/t1eam4c4/CA/Lisa/bin/./Registry &

1. **Start Server Console :**

<http://plth240.pedc.sbc.com:1505/>

1. **Agent Dev console :**

~~java -jar c:/lisa/agent/LisaAgent.jar -c -u tcp://~~[~~plth240.pedc.sbc.com:2009~~](http://plth240.pedc.sbc.com:2009)

java -jar c:/lisa/agent/DevConsole.jar -c -u tcp://[plth240.pedc.sbc.com:2009](http://plth240.pedc.sbc.com:2009)

1. **Start Recorder:**

/opt/app/t1eam4c4/Lisa/bin/ServiceImageManager --vrs=/opt/app/t1eam4c4/sltest/Project Path/abc.vrs -d -s /opt/app/t1eam4c4/sltest/Project Path/abc.vsi -m /opt/app/t1eam4c4/sltest/Project Path/abc.vsm -G

**Broker / Registry running status:**

ps -ef | egrep -wi 'Agent'

ps -ef | egrep -wi 'Registry'

ps -ef | egrep -wi 'VirtualServiceEnvironment’

ps -ef | egrep -wi 'EJB27'

ps -ef | egrep -wi 'Agent|Registry'

SVN Check out Linux Command:

“svn co <svn://scm.it.att.com:13557/sltest/branches/b1408> “

Add a folder before check-in

“svn add /opt/app/t1eam4c3/sltest/trunk/IST\_Deploy/MYATT\_DSS\_COMBINE/IST\_Stubbing\_Combine/VServices/MERGED/JAVA”  
  
  
Check-In the folder  
“svn up /opt/app/t1eam4c3/sltest/trunk/IST\_Deploy/MYATT\_DSS\_COMBINE/IST\_Stubbing\_Combine/VServices/MERGED/JAVA”

Login :

sudo su - t1eam4c4

MultiRecorder Util in Linux:

java -jar MultipleRecorder.jar

nohup java -jar /opt/app/t1eam4c4/Lisa7.5/agent/LisaAgent.jar lisa.agent.migrate.properties=false -b launch &

nohup /opt/app/t1eam4c4/Lisa7.5/bin/./Registry &

java -jar c:/lisa/agent/LisaAgent.jar -c -u tcp://plth240.pedc.sbc.com:2009

**SSL Key store Issue Solution 1:**

Step-1 : in local.properties file:

ssl.client.cert.path=/opt/app/t1eam4c4/Lisa7.5/cef\_keystore

ssl.client.cert.pass.encrypted=d2ff9c378928b9f3e4c8daf0487c9eaa

ssl.client.key.pass.encrypted=d2ff9c378928b9f3e4c8daf0487c9eaa

ssl.client.alias=ibmwebspheremqm68015q

#ssl.client.cert.path=/opt/app/t1eam4c4/Lisa7.5/cef\_keystore

#ssl.client.cert.pass=weblogic

#ssl.client.key.pass=weblogic

#ssl.client.alias=verisignsecureg3 alias name-1

#ssl.client.alias=verisignpublicg5 alias name-2

#ssl.client.alias=ibmwebspheremqm68015q alias name-3

To turn on ssl debugging add the following line to the .vmoptions file of

the module that has the error:

-Djavax.net.debug=ssl

So if the registry has the ssl error, then add this line to the

Registry.vmoptions and RegistryService.vmoptions files in the bin folder.

If the VSE module has the error then add this line to the

VirtualServiceEnvironment.vmoptions and

VirtualServiceEnvironmentService.vmoptions files.

Also for debugging, change logging.properties:

log4j.rootCategory=INFO,A1

change this line to:

log4j.rootCategory=DEBUG,A1

Include the local.properties as it may have some ssl configuration properties.

Set the tracing back to the way it was after you have finished obtaining the debug logs.

**SSL Key store Issue Solution 2:**

Step-1 : Goto : C:\Lisa7.5\jre\lib\security\java.security

Step-2 : Comment the below line :

jdk.certpath.disabledAlgorithms=MD2, RSA keySize < 1024

**IP/Port Details:**

netstat -nap

netstat -tulpn

netstat -npl

netstat -an | egrep 'LISTEN'

lsof -i tcp:3013

to get the processs id of a Port 🡪 “fuser 8085/tcp”

to get parent PID of child PID : 🡪 “ps -o ppid=50404”

**To Give Different VSE name (in CSE Service .vmoptions file)**

-DLISA\_LOCAL\_PROPERTIES=C:\Lisa7.5\vse.local.properties

-DLISA\_LOG=vse.log

-DVSE\_MATCHES\_LOG=vse\_matches.log

-Xmx8192m

-Xms256m

-Dlisa.vseName=tcp://10.243.224.244:3013/VSE-244

**Unix Command to find all Files:**

List file name : find -name "\*01\_012315\_1035AMCST.xml\*" –ls

Files Count : ls -1 logs | wc -l

**ANT Execution:**

export LISA\_HOME=/opt/app/t1eam4c3/Lisa7.5

export PATH=${PATH}:${LISA\_HOME}/bin:${LISA\_HOME}/lib

export CLASSPATH=${PATH}:${LISA\_HOME}/bin:${LISA\_HOME}/lib

$PATH

ant --execdebug

**Log File Size Issue:**

vse.logs increasing size without hits

Due to this the versions are created of this logs like vse1.log, vse2.log and so on

SOLUTION:

Change following lines from lisa.properties in Lisa home

# Status Log intervals for TestRegistry, Coordinator, Simulator, and VSE. The default value is 30 seconds.

lisa.defaultRegistry.pulseInterval=14400

lisa.coordinator.pulseInterval=14400

lisa.simulator.pulseInterval=14400

lisa.vse.pulseInterval=14400

lisa.registry.metrics.pulseInterval=14400

Change all of these numbers to 14400 = 4 hours & bounce all components of Lisa.

This will resolve the issue.

**Increase memory size in ServiceImageManager.vmoptions**

-Xmx2g

**Increase memory size in CSI.bat**

@echo off

set

LISA\_MORE\_VM\_PROPS=-Xmx2g

setlocal enabledelayedexpansion

C:\Lisa7.5\bin\ServiceImageManager.exe

**add or modify lisa agent property through dev console (example lisa.agent.virtualize.shallow.recording= true can be set as following)**

return com.itko.lisa.remote.instrument.Rules.virtualize\_shallow\_recording.set(true);

**To see the time out setting in Linux box**

cat /proc/sys/net/ipv4/tcp\_fin\_timeout

net.ipv4.tcp\_fin\_timeout

**To see the Port Status in Linux box**

nc -zv 130.9.200.252 8001-8025

**To Generate Technical detailed log in Linux box (the below command will generate an output in Zip file in Lisa home directory)**

./ServiceManager -d tcp://130.9.200.251:2010/Registry

**configure to start LISAWorkstation using Xming + Putty.**

<http://aruljohn.com/info/x11forwarding/>

**Increase Graph size in Rules.properties/ xml**

Custom extension ByPassCustomSerialization written for increasing transaction\_max\_graph\_size and virtualize\_max\_graph\_size from 100000 to 300000 bytes.

Steps to set properties through dev console  
go to code--->scripting  
return

com.itko.lisa.remote.instrument.Rules.virtualize\_shallow\_recording.set(true);

package com.itko.lisa.remote.ext;  
import com.itko.lisa.remote.instrument.Rules;  
import com.itko.lisa.remote.vse.\*;  
import com.itko.lisa.remote.utils.\*;  
public class ByPassCustomSerialization extends AbstractVSEInterceptor {  
public ByPassCustomSerialization() {  
Rules.virtualize\_bypass\_custom\_serialization.set(true);  
com.itko.lisa.remote.instrument.Rules.transaction\_max\_graph\_size.set(300000);  
com.itko.lisa.remote.instrument.Rules.virtualize\_max\_graph\_size.set(300000);

**Step 12:** **Migration**

1. **Service Image Migration**

LISA 6 introduced storing service images in the file system as opposed to the database.

Import the Service Images into LISA 7.

1. **Project Migration**

1. Open the project in LISA Workstation 7.x.

|  |
| --- |
| 1) Timing info for TCP/IP on Linux  <http://kaivanov.blogspot.co.uk/2010/09/linux-tcp-tuning.html?_sm_au_=iVVbqMv>  r2L470n5j  2) Timing info for TCP/IP on Windows  <http://kb.globalscape.com/KnowledgebaseArticle10438.aspx>  ----------------------------------------------------------------  You stated that you currently had to remove the Recorder on your Linux  machine, but you are requesting that the Recorder to put back on the  machine. We ran the following command to find out what the current  setting for your time\_wait cleanup is:  cat /proc/sys/net/ipv4/tcp\_fin\_timeout  The above command returned 60. So it is running the clean up every 60  seconds. We are requesting that you change the setting to 30 seconds.  To change it temporarily on your Linux machine, you will need to have  Admin privileges and here is the command:  echo 30 > /proc/sys/net/ipv4/tcp\_fin\_timeout  NOTE: IF THE LINUX MACHINE GETS RE-BOOTED, THE TIMEOUT SETTING WILL REVERT  BACK TO 60  To change it permanently on your Linux machine, you will need to have  Admin privileges and here are the steps:  1) edit /etc/sysctl.conf  2) add the following line:  net.ipv4.tcp\_fin\_timeout=30 |

Thank You

