Tomcat Third Party Monitoring from SCS

Warnings and Caveats	Genesys: Has only been tested on Tomcat 8.5.6 and Tomcat 7.0.69 using Java 1.8 on RHEL 6 but may work on other versions/platforms Thom: I got this bad boy running on the following: Tomcat 7.0.77, Java 1.8, RHEL 7
Preparation	Obtain attached file: TomcatStarter.zip Contents: • TomcatStarter.ini - configuration file for TomcatStarter application • TomcatStarter - binary starter application (renamed version of latest CassandraStarter • tomcatstarter-restart - sample script that can be used as the basis for scripts to restart Tomcat on server reboot (/etc/init.d/) • tomcat_control.sh - sample script to start tomcat via GA/GAX • start_tomcat_grat.sh - another sample script to start tomcat that demonstrates setting environment variables. • TomcatStarterReadme.doc - word document for instructions • TomcatStarterReadme.txt - plain text version of instructions
Considerations	• The TomcatStarter.ini file contains the java parameters so future changes to Tomcat parameters must be made in this .ini file. This includes setting up Java memory, GC settings etc • Ensure there are no spaces at the of each line in the .ini file. This starter program is finicky when it comes to extra spaces in the .ini file • The TomcatStarter binary file can be renamed to suit your situation but the .ini file name must match binary name (TomcatStarter and TomcatStart.ini will not work)
Steps to Implement	## Control Tomcat with Starter application **Update TomcatStarter.ini file** 1. **[Service]** - Update AppTitle to match Application Object 2. Update **[JVMPath]** if needed 3. **[JavaArgs]** - add any additional arguments that need to be passed to Java 1. To determine this value, Tomcat can be started via the regular startup.sh and using ps -ef you can get the full list of arguments needed 4. **[Djava.class.path]** - verify the list of libs matches the libraries used by your particular tomcat distribution To confirm the class paths on your local server, you can run this command from the sample TomcatStarter.ini file (untouched)

```
ThomAr=$(more TomcatStarter.ini | awk 'NR>=19' | awk -F'/' '{ print $3 }'); for i in "${ThomAr[@]}"; do locate $i; done
```

Deploy Files

Copy to your ~tomcat/bin/ directory on the Linux server:

- **TomcatStarter**
  - ensure this is enabled for execution (chmod +x TomcatStarter)
- TomcatStarter.ini

Create/Configure Application

Create a Third Party Server application object (n.b. the object template needs to reflect your configuration server version)

Ensure the following configuration items under the Server Info section are correct

Working Directory: This is the full path to the bin directory for Tomcat (*/opt/GCTI/Tomcat-7.0.77/bin*)

Command Line: The name of the **TomcatStarter** binary (per above) (i.e. *./ORS_TomcatStarter)*

Command Line Arguments: config host/port, Application object name, and the start command (*i.e. -host irdevfwk01 -port 4020 -app "ORS_TomcatStarter" start*)
Note: Command Line and this line have to match what LCA sees in Linux for the command line associated with the Tomcat process
Tip: run the command ps -ef | grep ORS_TomcatStarter in a Linux terminal to see if this matches the above Command Line Argument

Example output (Command Line + Command Line Arguments):

```
[genesys@irdevsip02 bin]$ ps -ef | grep ORS_TomcatStarter
genesys 28636 13944 16 15:17 ? 00:00:08 ./ORS_TomcatStarter -host irdevfwk01 -port 4020 -app ORS_TomcatStarter start
```

Finished - use GAX/SCI to start, monitor, stop Tomcat

Note: this will produce a start up log file each time you start (it will stop writing once executed), so don't go pissing about starting/stopping a dozen times and leaving a messy bin.

Working

	genesys@irdevsip02 bin]$ wget --spider http://irdevsip02:8080/ps_scxml/src-gen /IPD_default_mainWorkflow.scxml *Spider mode enabled. Check if remote file exists.* *--2018-05-02 15:24:26-- http://irdevsip02:8080/ps_scxml/src-gen/IPD_default_mainWorkflow.scxml* *Resolving irdevsip02 (irdevsip02)... 10.97.162.19* *Connecting to irdevsip02 (irdevsip02)|10.97.162.19|:8080... connected.* *HTTP request sent, awaiting response... 200 OK* *Length: 39618 (39K)* *Remote file exists and could contain further links,* *but recursion is disabled -- not retrieving.* **Bad** *[genesys@irdevsip02 bin]$ wget --spider http://irdevsip02:8080/ps_scxml/src-gen /IPD_default_mainWorkflow.scxml* *Spider mode enabled. Check if remote file exists.* *--2018-05-02 15:25:15-- http://irdevsip02:8080/ps_scxml/src-gen/IPD_default_mainWorkflow.scxml* *Resolving irdevsip02 (irdevsip02)... 10.97.162.19* *Connecting to irdevsip02 (irdevsip02)|10.97.162.19|:8080... failed: Connection refused.*