DTAG - TMCZ – Log Splitting Script

Version 1.0 - February 25, 2012

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Document Release Notes

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# **INTRODUCTION**

This document is intended to outline the installation and operation process for the Log Splitting script, LogSplitter.sh

# **InstallatioN**

## *Preparing the script on the server*

* Copy the script ***LogSplitter.pl***, included in the project tar package (LogSplit.tar) into a suitable directory such as /stage.
* Apply the correct ownership and permissions to the script

# **chown root:root /stage/LogSplitter.pl**

# **chmod 755 /stage/LogSplitter.pl**

## *Installing the script as a LINUX service*

* The script needs to be installed as a Linux service to allow for proper

startup when the system is rebooted.

* The script will be added to the runtime levels 2, 3, 4 and 5 with a startup priority of 90 and shutdown priority of 20. If any of these settings need to be updated please contact AMDOCS support.
* Place the script ***logsplitterd*** included in the feature package into the directory /etc/init.d on the Linux system.

As the **root** user:

# **chmod 755 /etc/init.d/logsplitterd**

* The script contains 3 important variables that need to be updated according to the intended script operation for the system.

1. *path\_to\_script*: This variable represents the absolute directory location of the log splitting script.
2. *logfile\_to\_read*: This variable represents the PCRF logfile that the script with be reading from.
3. *config*: This variable represents the absolute directory location of the configuration file

Example:

*path\_to\_script="/WideSpan/mon/LogSplitter.pl"*

*logfile\_to\_read="/var/log/messages"*

*config="/WideSpan/mon/SplitConfig.cfg"*

* Install the log splitting startup script as a Linux process

# **chkconfig --add logsplitterd**

* Verify that the process has been installed successfully

# **chkconfig --list | grep -i logsplitterd**

*logsplitterd 0:off 1:off 2:on 3:on 4:on 5:on 6:off*

* Start and stop the process to verify basic operation

# **/etc/init.d/logsplitterd start**

*Starting LogSplitter:*

# **/etc/init.d/logsplitterd stop**

*Stopping LogSplitter:*

*[ OK ]*

## *Installing the log-rotation scripts for the interface logs*

* To ensure proper operation during log-rotation the log-splitting script has been designed to check for logs that have rotated on both the input and output log streams.
* The log-rotation Linux configuration script ***logsplit*** has been included in the project tar package, for the interface logs being written to by the log-splitting script.
* The log-rotation configuration script includes a number of configurable parameters. Items highlighted in green can be adjusted according to typical system settings, but items highlighted in red **MUST** remain as defined in the script provided to ensure proper operation. Please note this configuration script assumes that all logs being written to by the log splitting script are located in “/var/log”, any variation from this needs to be reflected in the first line of the configuration script:

**/var/log/JMSlog /var/log/SOAPlog /var/log/PCPROVlog /var/log/SDBPROVlog /var/log/GXlog{**

**daily**

**size 1k**

**rotate 3**

**postrotate**

**/bin/kill -HUP `cat /tmp/LogSplitter.pid 2> /dev/null` 2> /dev/null || true**

**endscript**

**}**

* Copy the updated log-rotation script **logsplit** into the directory */etc/logrotate.d* and apply the correct ownership and permissions:

# **chown root:root /etc/logrotate.d/logsplit**

# **chmod 644 /etc/logrotate/logsplit**

* The final installation step is the addition of the log-splitting script, /var/log/LogSplitter.log to the system’s log-rotation schedule using typical system settings. Please see “Operations” for further information.

OPERATION

* The log-splitting script takes 2 command-line arguments; The first argument is the main PCRF operational log that the script will be reading in; The second argument is the configuration file that defines what specific logs to match and to which corresponding interface log file the matched log should be appended to.
* The configuration file **MUST** match the following pattern:

/<REGULAR EXPRESSION TO MATCH>/<INTERFACE LOG>/

/<REGULAR EXPRESSION TO MATCH>/<INTERFACE LOG>/

/<REGULAR EXPRESSION TO MATCH>/<INTERFACE LOG>/  
 .

.

.

*<REGULAR EXPRESSION TO MATCH> is* the regex pattern that

the log splitting script will using to determine which logs to match.

*<INTERFACE LOG>* indicates which specific interface log needs to be

appended with any logs matching the previous regex pattern.

* <INTERFACE LOG> **MUST** be match one of the following interface logs:

*GXlog*, *PCPROVlog*, *SDBPROVlog*, *SOAPlog* and *JMSlog*. Each of these logs map to a specific interface as defined in the PSA requirements (see Appendix A)

* The log-splitting script is designed to run continuously as a background process and should startup at boottime if all the steps listed above are executed correctly
* If the script needs to be started or stopped it can be done using the following start/stop commands:

# /etc/init.d/logsplitterd start

# /etc/init.d/logsplitterd stop

* The script produces a log file that which logs the scripts startup/shutdown process and if any issues/errors are encountered by the script. The log is located under /var/log, by default. This location can be changed by updating the LogSplitter script…please contact Amdocs support for assistance
* If any issues or concerns arise please contact Steven Sciriha (email: Steven.Sciriha@amdocs.com)

APPENDIX A

|  |  |  |
| --- | --- | --- |
| *Application* | *Script Name* | *Backup Directory* |
| PCRF | Backup\_PCRF.sh | Backup logfile location: **/$BPC\_HOME/backup**  Backup tarfile location: **/$BPC\_HOME/backup/TARFILE** |
| DRA | Backup\_DRA.sh | Backup logfile location: **/$BPC\_HOME/backup**  Backup tarfile location: **/$BPC\_HOME/backup/TARFILE** |
| BMS | Backup\_BMS.sh | Backup logfile location: **/$BWC\_HOME/backup**  Backup tarfile location: **/$BWC\_HOME/backup/TARFILE** |
| SDB | Database\_backup.sh | Backup logfile location: **/$ORACLE\_HOME/widespan/backups/**  Backup tarfile location: **/$ORACLE\_HOME/widespan/backups/daily** |
| SWITCH | Fetch\_Backups.sh | Backup tarfile location: **[CENTRAL BMS SERVER]/$local\_backup\_dir/SWITCH** |

*Table 1.0 Application-specific backup locations*

*Table 2.0 PCRF backup manifest*

|  |
| --- |
| *Backup file manifest* |
| Parmdb files for all the the configured instances: |
| BPCapps-44REL-hga00a00009063.PCRF.parmdb  BPCsnmp-44REL-hga00a00007248.SNMP.parmdb  BPCttdb-44REL-hga00a00007424.TimesTen.parmdb |
| RMS rules for all configured projects |
| BPCapps-44REL-hga00a00009063.PCRF.RE.NetworkPolicy.zip  BPCapps-44REL-hga00a00009063.PCRF.RE.SessionRights.zip  BPCapps-44REL-hga00a00009063.PCRF.RE.TieredServices.zip |
| The BPC configuration directory /<ACTIVE\_INSTANCE>/config/provserver/ |
| BPC.config.zip |
| Package versions for all the installed packages both at a system and application level |
| PackageVersions.010212.txt |
| Relevant system –level configs |
| /etc/sysconfig/network-scripts/ifcfg-eth0  /etc/sysconfig/network-scripts/ifcfg-eth1  /etc/sysconfig/network-scripts/ifcfg-eth2  /etc/sysconfig/network-scripts/ifcfg-eth3  /etc/sysconfig/network-scripts/ifcfg-lo  /etc/sysconfig/network-scripts/ifcfg-usb0  /etc/sysconfig/network-scripts/ifdown  /etc/sysconfig/network-scripts/ifdown-bnep  /etc/sysconfig/network-scripts/ifdown-eth  /etc/sysconfig/network-scripts/ifdown-ippp  /etc/sysconfig/network-scripts/ifdown-ipsec  /etc/sysconfig/network-scripts/ifdown-ipv6  /etc/sysconfig/network-scripts/ifdown-isdn  /etc/sysconfig/network-scripts/ifdown-post  /etc/sysconfig/network-scripts/ifdown-ppp  /etc/sysconfig/network-scripts/ifdown-routes  /etc/sysconfig/network-scripts/ifdown-sit  /etc/sysconfig/network-scripts/ifdown-sl  /etc/sysconfig/network-scripts/ifdown-tunnel  /etc/sysconfig/network-scripts/ifup  /etc/sysconfig/network-scripts/ifup-aliases  /etc/sysconfig/network-scripts/ifup-bnep  /etc/sysconfig/network-scripts/ifup-eth  /etc/sysconfig/network-scripts/ifup-ippp  /etc/sysconfig/network-scripts/ifup-ipsec  /etc/sysconfig/network-scripts/ifup-ipv6  /etc/sysconfig/network-scripts/ifup-ipx  /etc/sysconfig/network-scripts/ifup-isdn  /etc/sysconfig/network-scripts/ifup-plip  /etc/sysconfig/network-scripts/ifup-plusb  /etc/sysconfig/network-scripts/ifup-post  /etc/sysconfig/network-scripts/ifup-ppp  /etc/sysconfig/network-scripts/ifup-routes  /etc/sysconfig/network-scripts/ifup-sit  /etc/sysconfig/network-scripts/ifup-sl  /etc/sysconfig/network-scripts/ifup-tunnel  /etc/sysconfig/network-scripts/ifup-wireless  /etc/network  /etc/modprobe.conf  /etc/hosts  /etc/syslog.conf  /etc/passwd  /etc/group  /etc/sysconfig/network-scripts/route- \*  /etc/sysctl.conf  /etc/sysconfig/syslog  /etc/ntp.conf  /etc/sysconfig/selinux  /etc/yum.repos.d/rhel-dvd-repo |

*Table 3.0 DRA backup manifest*

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| *Backup file manifest* |
| Parmdb files for all the the configured instances: |
| BPCdraslf-44REL-hga00a00008958.DRASLF.parmdb  BPCapps-44REL-hga00a00008958.SLF1\_B.parmdb  BPCsnmp-44REL-hga00a00005376.SNMP.parmdb  BPCttdb-44REL-hga00a00007099.TimesTen.parmdb |
| Export of the Active partition configuration using the rgmgr utility |
| Active\_Partition\_Config.txt |
| Export of the CRM configuration using the crm CLI |
| crm\_config.txt |
| DRA/SLF specific configuration files |
| slf-config.xml  corosync.conf  dra-slf-config.xml |
| SDC configuration directory /opt/traffix/sdc/ |
| DRA\_SDC.config.zip |
| Package versions for all the installed packages both at a system and application level |
| PackageVersions.010212.txt |
| Relevant system –level configs |
| /etc/sysconfig/network-scripts/ifcfg-eth0  /etc/sysconfig/network-scripts/ifcfg-eth1  /etc/sysconfig/network-scripts/ifcfg-eth2  /etc/sysconfig/network-scripts/ifcfg-eth3  /etc/sysconfig/network-scripts/ifcfg-lo  /etc/sysconfig/network-scripts/ifcfg-usb0  /etc/sysconfig/network-scripts/ifdown  /etc/sysconfig/network-scripts/ifdown-bnep  /etc/sysconfig/network-scripts/ifdown-eth  /etc/sysconfig/network-scripts/ifdown-ippp  /etc/sysconfig/network-scripts/ifdown-ipsec  /etc/sysconfig/network-scripts/ifdown-ipv6  /etc/sysconfig/network-scripts/ifdown-isdn  /etc/sysconfig/network-scripts/ifdown-post  /etc/sysconfig/network-scripts/ifdown-ppp  /etc/sysconfig/network-scripts/ifdown-routes  /etc/sysconfig/network-scripts/ifdown-sit  /etc/sysconfig/network-scripts/ifdown-sl  /etc/sysconfig/network-scripts/ifdown-tunnel  /etc/sysconfig/network-scripts/ifup  /etc/sysconfig/network-scripts/ifup-aliases  /etc/sysconfig/network-scripts/ifup-bnep  /etc/sysconfig/network-scripts/ifup-eth  /etc/sysconfig/network-scripts/ifup-ippp  /etc/sysconfig/network-scripts/ifup-ipsec  /etc/sysconfig/network-scripts/ifup-ipv6  /etc/sysconfig/network-scripts/ifup-ipx  /etc/sysconfig/network-scripts/ifup-isdn  /etc/sysconfig/network-scripts/ifup-plip  /etc/sysconfig/network-scripts/ifup-plusb  /etc/sysconfig/network-scripts/ifup-post  /etc/sysconfig/network-scripts/ifup-ppp  /etc/sysconfig/network-scripts/ifup-routes  /etc/sysconfig/network-scripts/ifup-sit  /etc/sysconfig/network-scripts/ifup-sl  /etc/sysconfig/network-scripts/ifup-tunnel  /etc/sysconfig/network-scripts/ifup-wireless  /etc/network  /etc/modprobe.conf  /etc/hosts  /etc/syslog.conf  /etc/passwd  /etc/group  /etc/sysconfig/network-scripts/route- \*  /etc/sysctl.conf  /etc/sysconfig/syslog  /etc/ntp.conf  /etc/sysconfig/selinux  /etc/yum.repos.d/rhel-dvd-repo |

*Table 4.0 BMS backup manifest*

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| *Backup file manifest* |
| Parmdb files for all the the configured instances: |
| BWCbms-1.3.1-OAM00001396.BMSPrimary.parmdb  BWCcta-1.3.1-OAM00001396.CTAPrimary.parmdb |
| Export of the BMS and CTA configuration directory $INSTANCE/config |
| BMSPrimary.config.zip  CTAPrimary.config.zip |
| Export of the POSTGRES database |
| pg\_backup.tar |
| Package versions for all the installed packages both at a system and application level |
| PackageVersions.010212.txt |
| Relevant system –level configs |
| /etc/sysconfig/network-scripts/ifcfg-eth0  /etc/sysconfig/network-scripts/ifcfg-eth1  /etc/sysconfig/network-scripts/ifcfg-eth2  /etc/sysconfig/network-scripts/ifcfg-eth3  /etc/sysconfig/network-scripts/ifcfg-lo  /etc/sysconfig/network-scripts/ifcfg-usb0  /etc/sysconfig/network-scripts/ifdown  /etc/sysconfig/network-scripts/ifdown-bnep  /etc/sysconfig/network-scripts/ifdown-eth  /etc/sysconfig/network-scripts/ifdown-ippp  /etc/sysconfig/network-scripts/ifdown-ipsec  /etc/sysconfig/network-scripts/ifdown-ipv6  /etc/sysconfig/network-scripts/ifdown-isdn  /etc/sysconfig/network-scripts/ifdown-post  /etc/sysconfig/network-scripts/ifdown-ppp  /etc/sysconfig/network-scripts/ifdown-routes  /etc/sysconfig/network-scripts/ifdown-sit  /etc/sysconfig/network-scripts/ifdown-sl  /etc/sysconfig/network-scripts/ifdown-tunnel  /etc/sysconfig/network-scripts/ifup  /etc/sysconfig/network-scripts/ifup-aliases  /etc/sysconfig/network-scripts/ifup-bnep  /etc/sysconfig/network-scripts/ifup-eth  /etc/sysconfig/network-scripts/ifup-ippp  /etc/sysconfig/network-scripts/ifup-ipsec  /etc/sysconfig/network-scripts/ifup-ipv6  /etc/sysconfig/network-scripts/ifup-ipx  /etc/sysconfig/network-scripts/ifup-isdn  /etc/sysconfig/network-scripts/ifup-plip  /etc/sysconfig/network-scripts/ifup-plusb  /etc/sysconfig/network-scripts/ifup-post  /etc/sysconfig/network-scripts/ifup-ppp  /etc/sysconfig/network-scripts/ifup-routes  /etc/sysconfig/network-scripts/ifup-sit  /etc/sysconfig/network-scripts/ifup-sl  /etc/sysconfig/network-scripts/ifup-tunnel  /etc/sysconfig/network-scripts/ifup-wireless  /etc/network  /etc/modprobe.conf  /etc/hosts  /etc/syslog.conf  /etc/passwd  /etc/group  /etc/sysconfig/network-scripts/route- \*  /etc/sysctl.conf  /etc/sysconfig/syslog  /etc/ntp.conf  /etc/sysconfig/selinux  /etc/yum.repos.d/rhel-dvd-repo |
| Export of the /WideSpan/snmp configuration directory |
| snmp.config.zip |

*Table 5.0 SDB backup manifest*

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| --- |
| *Backup file manifest* |
| FULL ONLINE BACKUP |
| fulldb\_0ln23hkm\_1\_1  fulldb\_0mn23hkm\_1\_1  fulldb\_ctl\_c-3775664486-20120130-00  arch\_0on23hl1\_1\_1  arch\_0pn23hl1\_1\_1  arch\_0qn23hl9\_1\_1  arch\_0rn23hle\_1\_1  arch\_0sn23hlk\_1\_1  arch\_ctl\_c-3775664486-20120130-01 |

*Table 5.0 SWITCH backup manifest*

|  |
| --- |
| *Backup file manifest* |
| Switch configuration |
| getcfg.020112.192.168.155.48 |
| Switch images |
| getimg1.020112.192.168.155.48  getimg2.020112.192.168.155.48 |
| Switch boot file |
| getboot.020112.192.168.155.48 |