DTAG - Backup Scripts

Version 1.5 - March 15, 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 4 (four) backup scripts created for the Amdocs Bonn Lab deployment that cover the following main applications: PCRF, DRA/SLF, SDB and BMS. Each backup script is installed in the crontab of the respective server and is configured to run on a periodic basis. The backup scripts produce a log file detailing the backup process. Backup file retention is handled by the scripts and the retention period is configurable. The BMS server has been designated as the central storage for all backup files. A further script was developed for the BMS server that automates the retrieval of the backup files from all the application servers to the local directory on the BMS server. This script also retrieves the switch configurations and images (please refer to section 3. OPERATION and Appendix A for further details)

# **InstallatioN**

## *PCRF*

|  |  |
| --- | --- |
| 1231 | Copy the tar file PCRF\_Backup\_v22.tar to a staging directory ex. /stage |
|  | Become the **root** user  # **cd /**  # **tar xvf /stage/PCRF\_Backup\_v22.tar**  Script and configuration file are extracted to the directory /opt/Amdocs/backup\_scripts |
|  | Verify installation:  # **ls /opt/Amdocs/backup\_scripts/**  PCRF\_Backup.sh system\_backup\_filelist.conf README |
|  | Open the script up for editing and update the following variables with the latest RMA root credentials:  **XPC\_USERNAME="<username>"**  **XPC\_PASSWORD="<password>"**  The retention period needs to be set within the script by updating the following variable accordingly:  **# The age variable represent the retention period**  **age="<age\_in\_days>"** |
|  | Add the script to the ROOT cron. Script need to be set up to run once daily. Example:  **<MINUTE> <HOUR> \* \* \* /opt/Amdocs/backup\_scripts/PCRF\_Backup.sh 2> /dev/null** |
|  | Backup file and backup log will be generated under /doxstore2/backup/  To extract the contents of the tarfile use the following command:  tar xvf <TARFILE> |

## *DRA*

|  |  |
| --- | --- |
| 1231 | Copy the tar file DRA\_Backup\_v20.tar to a staging directory ex. /stage |
|  | Become the **root** user  # **cd /**  # **tar xvf /stage/DRA\_Backup\_v20.tar**  Script and configuration file are extracted to the directory /opt/Amdocs/backup\_scripts |
|  | Verify installation:  # **ls /opt/Amdocs/backup\_scripts/**  DRA\_Backup.sh system\_backup\_filelist.conf README |
|  | The script contains default credentials for the subscriber partition utility (INSTANCE/bin/rgmgr.sh) that need to be updated accordingly for proper operation. Open the script up for editing and update the following variables with the latest rgmgr root credentials:  **XPC\_USERNAME="<username>"**  **XPC\_PASSWORD="<password>"**  The script also contains the following variable that needs to be updated to reflect if the DRA is performing the SLF function.  **# SLF\_NODE determines if the DRA does the SLF function or**  **not - 1: SLF NODE 0: NON-SLF NODE**  **SLF\_NODE=0**  The retention period needs to be set within the script by updating the following variable accordingly:  **# The age variable represent the retention period**  **age="<age\_in\_days>"** |
|  | Add the script to the ROOT cron. Script need to be set up to run once daily. Example:  **<MINUTE> <HOUR> \* \* \* /opt/Amdocs/backup\_scripts/DRA\_Backup.sh 2> /dev/null** |
|  | Backup file and backup log will be generated under /doxstore2/backup/  To extract the contents of the tarfile use the following command:  tar xvf <TARFILE> |

## *SDB*

### Oracle RMAN Database backup setup

|  |  |
| --- | --- |
| 1231 | The following instructions will configure the following backup:   * Full, Online Database backup * Daily * Retention of 1 day |
|  | Create the following configuration file:    **touch /u01/app/oracle/widespan/backups/database\_backup.cf** |
|  | As the ***ORACLE*** user ensure the database backup directory exists if not create it:  Example:  **mkdir /doxstore1/backup** |
|  | Insert the following lines into the file database\_backup.cf, adjusting values as required:    ***targetuser=r6***  ***targetpass=r6***  ***destination=disk***  ***directory=/doxstore1/backup***  ***retention=1***  ***mailto=oracle***  The considerations here are the following:      i). Backup directory (***directory*** above) needs to be big enough to store at least 3 days worth of FULL backups which are estimated at around 6-8Gb each.            ii). Retention period (***retention*** above) directly affects space usage…Recommendation is for 3 days worth of full backups           iii). ***Targetuser/targetpass*** need to be update according to the schema credentials |
|  | Add the following lines to the ***ORACLE*** crontab:  **# Pre-defined option 1 (daily full backup) <minute> <hour> \* \* \* /u01/app/oracle/widespan/backups/database\_backup.sh /u01/app/oracle/widespan/backups/database\_backup.cf full > /dev/null 2>&1**  **#cron entry added for backup\_purge\_07.sh script**  **<minute> <hour> \* \* \* /u01/app/oracle/widespan/backups/backup\_purge\_07.sh /u01/app/oracle/widespan/backups/database\_backup.cf > /dev/null 2>&1**  Where **<minute> <hour>** is the daily time to run the script. Ex 23 15 \* \*  \* would make the script run at 15:23 GMT everyday. |

### SDB system backup script setup

|  |  |
| --- | --- |
| 1231 | Copy the tar file SDB\_Backup\_v23.tar to a staging directory ex. /stage |
|  | Become the root user:  # **cd /**  # **tar xvf /stage/SDB\_Backup\_v23.tar**  Script and configuration file are extracted to the directory /opt/Amdocs/backup\_scripts  # **ls /opt/Amdocs/backup\_scripts/**    SDB\_Backup.sh system\_backup\_filelist.conf README |
|  | Ensure that the standard database\_backup.sh script has been configured to run daily from the oracle crontab, as per section 2.3.1. |
|  | Add the script SDB\_Backup.sh to the ROOT cron. Script need to be set up to run once daily. Example:  **<MINUTE> <HOUR> \* \* \* /opt/Amdocs/backup\_scripts/SDB\_Backup.sh 2> /dev/null**  Backup file and backup log will be generated under /doxstore2/backup/  To extract the contents of the tarfile use the following command:  tar xvf <TARFILE> |

**\*\* IT IS RECOMMENDED THAT THE TIME SETTING SELECTED FOR THE CRONJOB (IN SECTION 2.3.2) TO RUN TO BE AT LEAST 1HR LATER THEN THE CRONJOB TIME SET FOR THE DATABASE BACKUP SCRIPT (IN SECTION 2.3.1) TO ALLOW THE SCRIPT TO INCLUDE LATEST DB BACKUP WHEN EXECUTED\*\***

## *BMS*

### Backup Script

|  |  |
| --- | --- |
| 1231 | Copy the tar file BMS\_Backup\_v24.tar to a staging directory ex. /stage |
|  | Become the root user:  # **cd /**  # **tar xvf /stage/BMS\_Backup\_v24.tar**  Script and configuration file are extracted to the directory /opt/Amdocs/backup\_scripts  # **ls /opt/Amdocs/backup\_scripts/**    BMS\_Backup.sh system\_backup\_filelist.conf README |
|  | PLEASE NOTE -- POSTGRES DB BACKUP/RESTORE IS NOT CURRENTLY SUPPORTED BUT IF BACKUP STILL REQUIRED PLEASE UPDATE THE FOLLOWING VARIABLES ACCORDINGLY:  #Update the following variable with the latest postgres user password  **export PGPASSWORD="postgres"**  # Postgres backup flag -- 1: Run postgres backup 0: Do NOT run postgres backup  **run\_postgres\_backup=0** |
|  | Add the script BMS\_Backup.sh to the ROOT cron. Script need to be set up to run once daily. Example:  **<MINUTE> <HOUR> \* \* \* /opt/Amdocs/backup\_scripts/BMS\_Backup.sh 2> /dev/null** |
|  | Backup file and backup log will be generated under /doxstore2/backup/  To extract the contents of the tarfile use the following command:  **tar xvf <TARFILE>** |

### Backup file retrieval script

|  |  |
| --- | --- |
| 1231 | This script will reach out to all the servers currently running backups within the network and will retrieve the daily backup for safe storage on the central BMS server. |
| 1231 | Install the expect package on the BMS server  # **yum install expect** |
|  | Become the root user:  # **cd /**  # **tar xvf /stage/Fetch\_Backups\_v20.tar**  Script and configuration file are extracted to the directory /opt/Amdocs/backup\_scripts  # **ls /opt/Amdocs/backup\_scripts/ | egrep "fetch|read"**  fetch\_backups.exp  hosts\_to\_fetch.txt  read\_hosts.sh |
|  | Open the configuration file hosts\_to\_fetch.txt for editing and insert all the target servers that need to be backed up. The format MUST match the following pattern:  **# HOSTNAME/IP ROOT\_PASSWORD APPLICATION(DRA, SDB, SWITCH, BMS)**  **#**  **# Example:**  **#**  **# 192.168.10.5 rootpass DRA**  **# houstonPCRF root PCRF**  Please Note: The values referenced in the above config are all related to the *target* servers which have backups that need to be retrieved. |
|  | The two fetch scripts are configured with default values. They can be updated to reflect any changes:  fetch\_backups.exp  **set remote\_backup\_dir "/doxstore2/backup/"**  **set local\_backup\_dir "/doxstore1/backup\_location/"**  read\_hosts.sh  **host\_file="/opt/Amdocs/backup\_scripts/hosts\_to\_fetch.txt"**  **fetch\_script="/opt/Amdocs/backup\_scripts/fetch\_backups.exp"**  **BMS\_backup\_dir="/doxstore1/backup\_location/"**  PLEASE NOTE: The read\_hosts.sh script will automatically create the application specific backup directories (DRA, BMS, SDB, PCRF, SWITCH) under “/doxstore1/backup\_location/” |
|  | Install the script into the ***ROOT*** crontab in the following manner:  **<minute> <hour>** \* \* \* /opt/Amdocs/backup\_scripts/read\_hosts.sh > /tmp/Fetch\_Log.txt 2> /dev/null |

**\*\* IT IS MANDATORY THAT THE TIME SETTING SELECTED FOR THE CRONJOB TO RUN TO BE AT LEAST 1 HR LATER THEN THE CRONJOB TIME FOR THE BACKUP SCRIPTS TO ALLOW THE FETCH\_BACKUPS SCRIPT TO TRANSFER OVER THE LATEST BACKUP\*\***

OPERATION

* During the initial run of every backup script, on the respective nodes, the backup directory structure is created. The location of the backup directory varies according to application/user. Please see Appendix A for details.
* Each script reads
* A backup log is generated after every run. This backup log called *backup.log* is located in the backup directory
* The backup script will perform a number of backup functions dependent on the application. Please see Appendix A for details.
* The backup script is designed to output logs indicating which backup process it is currently performing as well as check for any WARNINGS or ERRORS encountered during execution. Once the script is complete it will display a log with the number of warnings/errors encountered as follows:

Backup Complete with 5 warnings...

!!Backup Complete with ERRORS!! Check logs above for further information...

**It is HIGHLY RECOMMENDED to add the *ERROR* log to the Amdocs monitoring framework to be able to identify any daily issues encountered.**

* The backup script will perform a cleanup of any backup files based on the retention period configured in the script.
* All backup file names follow the following convention:

**BACKUP\_<HOSTNAME>\_<APPLICATION>\_<ddmmyy>.tar.gz**

* Once the backup is complete the result will be displayed in the backup log file together with the absolute path to the backup file

Example:

*Complete. The archive can be found at /opt/bwc/backup/TARFILE/BACKUP\_kll5033.bridgewatersys.com\_BMS.01.02.12.tar.gz*

* The Fetch\_Backups.exp script, when executed, will attempt to reach out to all the application servers it has configured
* The output log for the Fetch\_Backups.exp script is called Fetch\_Log.txt is located in /tmp. This log will show the logs resulting from the each of the scripts attempt at transferring over the backup files
* The Fetch\_Backups.exp script has an additional use which is SWITCH configuration and image backup, which are retrieved directly from the switch and placed into the local switch backup directory on the BMS server.
* If any issues or concerns arise please contact Steven Sciriha (email: Steven.Sciriha@amdocs.com)

APPENDIX A

|  |  |  |
| --- | --- | --- |
| *Application* | *Script Name* | *Backup Directory* |
| PCRF | PCRF\_Backup.sh | Backup logfile location: **/$BPC\_HOME/backup**  Backup tarfile location: **/$BPC\_HOME/backup/TARFILE** |
| DRA | DRA\_Backup.sh | Backup logfile location: **/opt/backup**  Backup tarfile location: **/opt/backup/TARFILE** |
| BMS | BMS\_Backup.sh | Backup logfile location: **/doxstore1/backup**  Backup tarfile location: **/doxstore1/backup/TARFILE** |
| SDB | SDB\_Backup.sh | Backup logfile location: **/doxstore1/backup/TARFILE**  Backup tarfile location: **/doxstore1/backup/TARFILE** |
| SWITCH | Fetch\_Backups.exp | Backup tarfile location: **[CENTRAL BMS SERVER]/$local\_backup\_dir/SWITCH** |

*Table 1.0 Default application-specific backup locations*

*Table 2.0 PCRF backup manifest*

|  |
| --- |
| *Backup file manifest* |
| Parmdb files for all the configured instances: |
| BPCapps-44REL-hga00a00009063.PCRF.parmdb  BPCsnmp-44REL-hga00a00007248.SNMP.parmdb  BPCttdb-44REL-hga00a00007424.TimesTen.parmdb |
| RMA 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*

|  |
| --- |
| *Backup file manifest* |
| *[\*\*N/A for non-SLF nodes\*\*]*  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 |
| *[\*\*N/A for non-SLF nodes\*\*]*  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 |
| *[\*\*N/A for non-SLF nodes\*\*]*  DRA/SLF specific configuration files |
| slf-config.xml  corosync.conf  dra-slf-config.xml |
| SDC configuration directories “/opt/traffix/sdc/config” “/opt/traffix/sdc/data/backup” “/etc/corosync” |
| 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/logrotate-traffix.conf  /etc/rsyslog.conf  /etc/snmp/snmpd.conf  /etc/ssh/sshd\_config  /etc/sysconfig/ip6tables  /etc/sysconfig/iptables  /opt/traffix/config/fep\*.xml  /opt/traffix/config/defaultLBConfiguration.xml  /opt/traffix/config/\*  /etc/keepalived/keepalived.conf  /etc/ipsec\*  /etc/sysconfig/network-scripts/ifcfg-eth0  /etc/sysconfig/network-scripts/ifcfg-eth0.bak  /etc/sysconfig/network-scripts/ifcfg-lo  /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-ib  /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/sysconfig/network  /etc/modprobe.conf  /etc/hosts  /etc/syslog.conf  /etc/passwd  /etc/group  /etc/shadow  /etc/sysconfig/network-scripts/route-\*  /etc/sysctl.conf  /etc/sysconfig/syslog  /etc/ntp.conf  /etc/sysconfig/selinux  /etc/yum.repos.d/rhel-debuginfo.repo  /etc/yum.repos.d/rhel-kls0005.repo  /etc/yum.repos.d/rhel-source.repo |

*Table 4.0 BMS backup manifest*

|  |
| --- |
| *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 |
| Export of the params configuration files directory /stage/params |
| params.config.zip |

*Table 5.0 SDB backup manifest*

|  |
| --- |
| *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 |
| 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 |
| Package versions for all the installed packages both at a system and application level |
| PackageVersions.010212.txt |
| Oracle Network configuration directory /u01/app/oracle/product/11.2server/network/admin |
| SDB.config.zip |
| Export of the /WideSpan/snmp configuration directory |
| snmp.config.zip |
| Export of the Provisioning Server directory /WideSpan/config/provserver |
| provserver.config.zip |
| Export of the params configuration files directory /stage/params |
| params.config.zip |

*Table 6.0 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 |