DTAG - Backup Scripts

Version 2.3 - June 5, 2012

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Document Release Notes

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| 2.3 | Steven Sciriha | August 30, 2012 | Added new section that covers Switch backups |

# **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>"** |
|  | ***\*\*OPTIONAL STEP\*\****  The script checks for a user-configurable configuration file that can be used to include custom items to backup that are not part of the default deployment.  To configure this file:   * touch /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * chmod 777 /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * Open the file for editing * Insert any files that need to be backed up. Example:   /tmp/Fetch\_Log.txt  /opt/testfile  /etc/random\_logfile.txt   * The backup script will detect the presence of this user-configurable file and include its contents to be backed up along with the default items |
|  | 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\_v21.tar to a staging directory ex. /stage |
|  | Become the **root** user  # **cd /**  # **tar xvf /stage/DRA\_Backup\_v21.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>"** |
|  | ***\*\*OPTIONAL STEP\*\****  The script checks for a user-configurable configuration file that can be used to include custom items to backup that are not part of the default deployment.  To configure this file:   * touch /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * chmod 777 /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * Open the file for editing * Insert any files that need to be backed up. Example:   /tmp/Fetch\_Log.txt  /opt/testfile  /etc/random\_logfile.txt   * The backup script will detect the presence of this user-configurable file and include its contents to be backed up along with the default items |
|  | 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 |
|  | ***\*\*OPTIONAL STEP\*\****  The script checks for a user-configurable configuration file that can be used to include custom items to backup that are not part of the default deployment.  To configure this file:   * touch /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * chmod 777 /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * Open the file for editing * Insert any files that need to be backed up. Example:   /tmp/Fetch\_Log.txt  /opt/testfile  /etc/random\_logfile.txt   * The backup script will detect the presence of this user-configurable file and include its contents to be backed up along with the default items |
|  | 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\*\***

## *SWITCH*

|  |  |
| --- | --- |
| 1231 | This section describes the process to setup automated backups for the network switches within the deployed system, including the BNT switches BNT 1/10 and BNT 8052. |
|  | The backup script will backup the following items:   1. Switch Configuration 2. Switch Image/s 3. Switch Boot File |
|  | Log in to the BMS server which has the Backup file retrieval script installed, as per section ***2.5.2 Backup file retrieval script***.  Open up the following file for editing: **/opt/Amdocs/backup\_scripts/hosts\_to\_fetch.txt**  Insert the target BNT switches that require backing up into this file following the format:  **HOSTNAME/IP ROOT\_PASSWORD (TYPE of APPLICATION, in this case SWITCH)**  **Ex. BNTswitch01 rootpass SWITCH**  **BNTswitch02 rootpass SWITCH**  **192.168.0.52 rootpass SWITCH**  Save the file and exit. |
|  | The Switch Backup file will be generated everytime the script read\_hosts.sh runs on the central BMS server (refer to section ***2.5.2 Backup file retrieval script*** for detailed info)  The switch backup file will be generated under */doxstore2/backup\_location/SWITCH* |

## *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** |
|  | ***\*\*OPTIONAL STEP\*\****  The script checks for a user-configurable configuration file that can be used to include custom items to backup that are not part of the default deployment.  To configure this file:   * touch /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * chmod 777 /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf * Open the file for editing * Insert any files that need to be backed up. Example:   /tmp/Fetch\_Log.txt  /opt/testfile  /etc/random\_logfile.txt   * The backup script will detect the presence of this user-configurable file and include its contents to be backed up along with the default items |
|  | Add the script 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 attempts to read in 2 configuration files:

1. /opt/Amdocs/backup\_scripts/user\_backup\_filelist.conf

This file is not mandatory and is only used if the user requires to backup items not included in the default list.

1. /opt/Amdocs/backup\_scripts/system\_backup\_filelist.conf

This file is the default list of items to be backed up that is specific to each

system. This configuration file should NOT be changed. If any other files

are required the configuration file user\_backup\_filelist.conf must be used.

* 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 read\_hosts.sh script, when executed, will read in all the target hosts configured in hosts\_to\_fetch.txt. It will then attempt to reach out to all the servers and retrieve the daily backups.
* The output log for the read\_hosts.sh 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 read\_hosts.sh 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: **/doxstore2/backup/**  Backup tarfile location: **/doxstore2/backup/** |
| DRA | DRA\_Backup.sh | Backup logfile location: **/doxstore2/backup/**  Backup tarfile location: **/doxstore2/backup/** |
| BMS | BMS\_Backup.sh | Backup logfile location: **/doxstore2/backup**  Backup tarfile location: **/doxstore2/backup/** |
| SDB | SDB\_Backup.sh | Backup logfile location: **/doxstore2/backup**  Backup tarfile location: **/doxstore2/backup/** |
| SWITCH | Read\_hosts.sh | Backup tarfile location: **/doxstore2/backup\_location/[APPLICATION\_TYPE]** |

*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-44RELv1\_4-hga00a00015703.rtpc2a.parmdb  BPCsnmp-44RELv1-hga00a00012277.SNMP.parmdb  BPCttdb-44RELv1\_2-hga00a00014310.TimesTen.parmdb |
| Parmdb file for CTA instance |
| BWCcta-1.3.5-OAM00002667.CTA.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.tar |
| Package versions for all the installed packages both at a system and application level |
| PackageVersions.010212.txt |
| Relevant system –level configs |
| etc/cron.hourly/  etc/cron.hourly/mcelog.cron  etc/group  etc/hosts  etc/localtime  etc/logrotate.conf  etc/logrotate.d/  etc/logrotate.d/acpid  etc/logrotate.d/mgetty  etc/logrotate.d/httpd  etc/logrotate.d/cups  etc/logrotate.d/bwc\_debug  etc/logrotate.d/syslog  etc/logrotate.d/iscsiuiolog  etc/logrotate.d/yum  etc/logrotate.d/snmpd  etc/logrotate.d/conman  etc/logrotate.d/rpm  etc/logrotate.d/psacct  etc/logrotate.d/bwc\_mwserver  etc/logrotate.d/setroubleshoot  etc/logrotate.d/bwc\_snmp  etc/logrotate.d/wpa\_supplicant  etc/logrotate.d/ppp  etc/logrotate.d/up2date  etc/logrotate.d/bwc\_oplog  etc/modprobe.conf  etc/ntp.conf  etc/passwd  etc/shadow  etc/snmp/snmpd.conf  etc/ssh/sshd\_config  etc/sysconfig/clock  etc/sysconfig/ip6tables-config  etc/sysconfig/iptables-config  etc/sysconfig/network  etc/sysconfig/selinux  etc/sysconfig/syslog  etc/sysctl.conf  etc/syslog.conf  etc/yum.repos.d/  etc/yum.repos.d/amdocs\_bms.repo  etc/yum.repos.d/rhel-debuginfo.repo  etc/yum.repos.d/redhat\_5.7\_bms.repo  etc/yum.repos.d/rhel-kanlinux51141.repo  WideSpan/config/mon/  WideSpan/config/mon/repltestMonitor.cfg  WideSpan/config/mon/oplogMonitor.cfg  WideSpan/config/mon/syslogMonitor.cfg  WideSpan/config/mon/oraclelogMonitor.cfg  WideSpan/config/mon/rmslogMonitor.cfg  WideSpan/config/mon/alert.cfg  WideSpan/config/mon/monitor.cfg  WideSpan/config/kpi/kpi.config  WideSpan/config/kpi/polls  WideSpan/config/kpi/reports  var/spool/cron/  var/spool/cron/root  var/spool/cron/bpc  var/spool/cron/bwc  opt/Amdocs/backup\_scripts/  opt/Amdocs/backup\_scripts/PCRF\_Backup.sh  opt/Amdocs/backup\_scripts/opt/  opt/Amdocs/backup\_scripts/opt/Amdocs/  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/PCRF\_Backup.sh  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/system\_backup\_filelist.conf  opt/Amdocs/backup\_scripts/system\_backup\_filelist.conf  opt/Amdocs/backup\_scripts/PCRF\_Backup\_v22.tar  opt/Amdocs/backup\_scripts/README  etc/sysconfig/network-scripts/ifcfg-lo  etc/sysconfig/network-scripts/ifcfg-eth1  etc/sysconfig/network-scripts/ifcfg-eth0:pr  etc/sysconfig/network-scripts/ifcfg-eth0:br  etc/sysconfig/network-scripts/ifcfg-eth0:bws  etc/sysconfig/network-scripts/ifcfg-usb0  etc/sysconfig/network-scripts/ifcfg-eth0 |
| Export of the Active partition configuration using the partmgr utility |
| Active\_Partition\_Config.txt |
| Export of the /WideSpan/snmp configuration directory |
| snmp.config.tar |
| Export of the params configuration files directory /stage/params |
| params.config.tar |

*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 |
| Parmdb file for CTA instance |
| BWCcta-1.3.5-OAM00002667.CTA.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 directory /opt/traffix/sdc/config |
| DRA\_SDC.config.tar |
| SDC backup directory /opt/traffix/sdc/data/backup |
| DRA\_SDC.backup.tar |
| COROSYNC configuration directory /etc/corosync |
| DRA\_COROSYNC.config.tar |
| Package versions for all the installed packages both at a system and application level |
| PackageVersions.010212.txt |
| Export of the params configuration files directory /stage/params |
| params.config.tar |
| Relevant system –level configs |
| etc/cron.hourly/  etc/cron.hourly/mcelog.cron  etc/group  etc/hosts  etc/localtime  etc/logrotate.conf  etc/logrotate.d/  etc/logrotate.d/subscription-manager  etc/logrotate.d/yum  etc/logrotate.d/up2date  etc/logrotate.d/snmpd  etc/logrotate.d/ppp  etc/logrotate.d/syslog  etc/logrotate.d/rpm  etc/logrotate.d/bwc\_debug  etc/logrotate.d/cups  etc/logrotate.d/mgetty  etc/logrotate.d/acpid  etc/logrotate.d/bwc\_mwserver  etc/logrotate.d/bwc\_oplog  etc/logrotate.d/psacct  etc/logrotate.d/conman  etc/logrotate.d/wpa\_supplicant  etc/logrotate.d/setroubleshoot  etc/modprobe.conf  etc/ntp.conf  etc/passwd  etc/shadow  etc/snmp/snmpd.conf  etc/ssh/sshd\_config  etc/sysconfig/clock  etc/sysconfig/ip6tables-config  etc/sysconfig/iptables-config  etc/sysconfig/network  etc/sysconfig/selinux  etc/sysconfig/syslog  etc/sysctl.conf  etc/syslog.conf  etc/yum.repos.d/  etc/yum.repos.d/amdocs\_bms.repo  etc/yum.repos.d/rhel-kanlinux53201.repo  etc/yum.repos.d/rhel-debuginfo.repo  etc/yum.repos.d/redhat.repo  etc/yum.repos.d/rhel-source.repo  WideSpan/config/mon/  WideSpan/config/kpi/kpi.config  WideSpan/config/kpi/polls  WideSpan/config/kpi/reports  var/spool/cron/  var/spool/cron/bwc  var/spool/cron/root  opt/Amdocs/backup\_scripts/  opt/Amdocs/backup\_scripts/README  opt/Amdocs/backup\_scripts/DRA\_Backup\_v20.tar  opt/Amdocs/backup\_scripts/system\_backup\_filelist.conf  opt/Amdocs/backup\_scripts/DRA\_Backup.sh  opt/Amdocs/backup\_scripts/.DRA\_Backup.sh.swp  opt/Amdocs/backup\_scripts/.DRA\_Backup.sh.swo  etc/inittab  etc/sysconfig/network-scripts/ifcfg-eth1  etc/sysconfig/network-scripts/ifcfg-eth0:br  etc/sysconfig/network-scripts/ifcfg-eth0  etc/sysconfig/network-scripts/ifcfg-eth0:bws  etc/sysconfig/network-scripts/ifcfg-usb0  etc/sysconfig/network-scripts/ifcfg-lo  etc/sysconfig/network-scripts/ifcfg-eth0:pr |

*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 (if configured) |
| 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/cron.hourly/  etc/cron.hourly/mcelog.cron  etc/group  etc/hosts  etc/localtime  etc/logrotate.conf  etc/logrotate.d/  etc/logrotate.d/acpid  etc/logrotate.d/mgetty  etc/logrotate.d/httpd  etc/logrotate.d/cups  etc/logrotate.d/bwc\_debug  etc/logrotate.d/syslog  etc/logrotate.d/iscsiuiolog  etc/logrotate.d/yum  etc/logrotate.d/snmpd  etc/logrotate.d/conman  etc/logrotate.d/rpm  etc/logrotate.d/psacct  etc/logrotate.d/bwc\_mwserver  etc/logrotate.d/setroubleshoot  etc/logrotate.d/bwc\_snmp  etc/logrotate.d/wpa\_supplicant  etc/logrotate.d/ppp  etc/logrotate.d/up2date  etc/logrotate.d/bwc\_oplog  etc/modprobe.conf  etc/ntp.conf  etc/passwd  etc/shadow  etc/snmp/snmpd.conf  etc/ssh/sshd\_config  etc/sysconfig/clock  etc/sysconfig/ip6tables-config  etc/sysconfig/iptables-config  etc/sysconfig/network  etc/sysconfig/selinux  etc/sysconfig/syslog  etc/sysctl.conf  etc/syslog.conf  etc/yum.repos.d/  etc/yum.repos.d/amdocs\_bms.repo  etc/yum.repos.d/rhel-debuginfo.repo  etc/yum.repos.d/redhat\_5.7\_bms.repo  etc/yum.repos.d/rhel-kanlinux51141.repo  WideSpan/config/mon/  WideSpan/config/mon/repltestMonitor.cfg  WideSpan/config/mon/oplogMonitor.cfg  WideSpan/config/mon/syslogMonitor.cfg  WideSpan/config/mon/oraclelogMonitor.cfg  WideSpan/config/mon/rmslogMonitor.cfg  WideSpan/config/mon/alert.cfg  WideSpan/config/mon/monitor.cfg  WideSpan/config/kpi/kpi.config  WideSpan/config/kpi/polls  WideSpan/config/kpi/reports  var/spool/cron/  var/spool/cron/root  var/spool/cron/bpc  var/spool/cron/bwc  opt/Amdocs/backup\_scripts/  opt/Amdocs/backup\_scripts/opt/  opt/Amdocs/backup\_scripts/opt/Amdocs/  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/BMS\_Backup.sh  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/system\_backup\_filelist.conf  opt/Amdocs/backup\_scripts/README  etc/sysconfig/network-scripts/ifcfg-lo  etc/sysconfig/network-scripts/ifcfg-eth1  etc/sysconfig/network-scripts/ifcfg-eth0:pr  etc/sysconfig/network-scripts/ifcfg-eth0:br  etc/sysconfig/network-scripts/ifcfg-eth0:bws  etc/sysconfig/network-scripts/ifcfg-usb0  etc/sysconfig/network-scripts/ifcfg-eth0 |
| 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 |
| Parmdb file for CTA instance |
| BWCcta-1.3.5-OAM00002667.CTA.parmdb |
| Relevant system –level configs |
| etc/cron.hourly/  etc/cron.hourly/mcelog.cron  etc/group  etc/hosts  etc/localtime  etc/logrotate.conf  etc/logrotate.d/  etc/logrotate.d/bwc\_oplog  etc/logrotate.d/bwc\_debug  etc/logrotate.d/yum  etc/logrotate.d/acpid  etc/logrotate.d/bwc\_mwserver  etc/logrotate.d/psacct  etc/logrotate.d/wpa\_supplicant  etc/logrotate.d/rpm  etc/logrotate.d/mgetty  etc/logrotate.d/up2date  etc/logrotate.d/cups  etc/logrotate.d/conman  etc/logrotate.d/syslog  etc/logrotate.d/setroubleshoot  etc/logrotate.d/bwc\_snmp  etc/logrotate.d/ppp  etc/modprobe.conf  etc/ntp.conf  etc/passwd  etc/shadow  etc/ssh/sshd\_config  etc/sysconfig/clock  etc/sysconfig/ip6tables-config  etc/sysconfig/iptables-config  etc/sysconfig/network  etc/sysconfig/selinux  etc/sysconfig/syslog  etc/sysctl.conf  etc/syslog.conf  etc/yum.repos.d/  etc/yum.repos.d/redhat\_5.7\_bms.repo  etc/yum.repos.d/amdocs\_bms.repo  etc/yum.repos.d/rhel-debuginfo.repo  etc/yum.repos.d/rhel-kanlinux51141.repo  etc/yum.repos.d/rhel-source.repo  WideSpan/config/mon/  WideSpan/config/mon/monitor.cfg  WideSpan/config/mon/.rmslogMonitor.cfg.installed.BWSmon  WideSpan/config/mon/.monitor.cfg.installed.BWSmon  WideSpan/config/mon/.oraclelogMonitor.cfg.installed.BWSmon  WideSpan/config/mon/.repltestMonitor.cfg.installed.BWSmon  WideSpan/config/mon/.oplogMonitor.cfg.installed.BWSmon  WideSpan/config/mon/syslogMonitor.cfg  WideSpan/config/mon/repltestMonitor.cfg  WideSpan/config/mon/.alert.cfg.installed.BWSmon  WideSpan/config/mon/alert.cfg  WideSpan/config/mon/oplogMonitor.cfg  WideSpan/config/mon/rmslogMonitor.cfg  WideSpan/config/mon/.syslogMonitor.cfg.installed.BWSmon  WideSpan/config/mon/oraclelogMonitor.cfg  WideSpan/config/kpi/kpi.config  WideSpan/config/kpi/polls  WideSpan/config/kpi/reports  var/spool/cron/  var/spool/cron/root  var/spool/cron/oracle  var/spool/cron/bwc  opt/Amdocs/backup\_scripts/  opt/Amdocs/backup\_scripts/SDB\_Backup\_v23.tar  opt/Amdocs/backup\_scripts/system\_backup\_filelist.conf  opt/Amdocs/backup\_scripts/.SDB\_Backup.sh.swo  opt/Amdocs/backup\_scripts/SDB\_Backup.v20.tar  opt/Amdocs/backup\_scripts/SDB\_Backup.sh  opt/Amdocs/backup\_scripts/README  opt/Amdocs/backup\_scripts/opt/  opt/Amdocs/backup\_scripts/opt/Amdocs/  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/system\_backup\_fileli  opt/Amdocs/backup\_scripts/opt/Amdocs/backup\_scripts/SDB\_Backup.sh  etc/inittab  etc/sysconfig/network-scripts/ifcfg-lo  etc/sysconfig/network-scripts/ifcfg-eth1  etc/sysconfig/network-scripts/ifcfg-eth0  etc/sysconfig/network-scripts/ifcfg-usb0 |
| 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.tar |
| Export of the /WideSpan/snmp configuration directory |
| snmp.config.tar |
| Export of the Provisioning Server directory /WideSpan/config/provserver |
| provserver.config.tar |
| Export of the params configuration files directory /stage/params |
| params.config.tar |

*Table 6.0 SWITCH backup manifest*

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| *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 |