**AZURE**

**aztshds30001:db2ds3 72> db2 -stvf increment.sql -z increment.out**

CREATE DATABASE PARTITION GROUP "SAP\_INCREMENT" ON DBPARTITIONNUMS (0)

DB20000I The SQL command completed successfully.

CREATE LARGE TABLESPACE "INCREMENTAL CHECKS" IN DATABASE PARTITION GROUP SAP\_INCREMENT PAGESIZE 16384 MANAGED BY AUTOMATIC STORAGE USING STOGROUP "IBMSTOGROUP" AUTORESIZE YES INITIALSIZE 32 M MAXSIZE NONE EXTENTSIZE 2 PREFETCHSIZE AUTOMATIC BUFFERPOOL "IBMDEFAULTBP" DATA TAG INHERIT OVERHEAD INHERIT TRANSFERRATE INHERIT DROPPED TABLE RECOVERY OFF

DB20000I The SQL command completed successfully.

CREATE LARGE TABLESPACE "EXTRA\_INCREMENT" IN DATABASE PARTITION GROUP SAP\_INCREMENT PAGESIZE 16384 MANAGED BY AUTOMATIC STORAGE USING STOGROUP "IBMSTOGROUP" AUTORESIZE YES INITIALSIZE 32 M MAXSIZE NONE EXTENTSIZE 2 PREFETCHSIZE AUTOMATIC BUFFERPOOL "IBMDEFAULTBP" DATA TAG INHERIT OVERHEAD INHERIT TRANSFERRATE INHERIT DROPPED TABLE RECOVERY OFF

DB20000I The SQL command completed successfully.

CREATE SCHEMA "INCREMENTAL" AUTHORIZATION "SAPAZ9 "

DB20000I The SQL command completed successfully.

CREATE TABLE "INCREMENTAL "."INCREMENT" ( "VERSION" VARCHAR(216 OCTETS) NOT NULL WITH DEFAULT ' ' ) COMPRESS YES ADAPTIVE IN "INCREMENTAL CHECKS" INDEX IN "INCREMENTAL CHECKS" ORGANIZE BY ROW

DB20000I The SQL command completed successfully.

SET SYSIBM.NLS\_STRING\_UNITS = 'SYSTEM'

DB20000I The SQL command completed successfully.

CREATE UNIQUE INDEX "INCREMENTAL "."INCREMENT~0" ON "INCREMENTAL "."INCREMENT" ("VERSION" ASC) PCTFREE 0 COMPRESS YES INCLUDE NULL KEYS ALLOW REVERSE SCANS

DB20000I The SQL command completed successfully.

**aztshds30001:db2ds3 73> db2pd -alldbs -tablespaces|grep -i increment**

0x00007FD392D37BC0 1 DMS Large 16384 2 Yes 2 1 1 Def 1 0 511 Yes INCREMENTAL CHECKS

0x00007FD392D4BA60 2 DMS Large 16384 2 Yes 2 1 1 Def 1 0 511 Yes EXTRA\_INCREMENT

aztshds30001:db2ds3 74>

**aztshds30001:ds3adm 54> /usr/local/platform/bin/iaas.py --version**

\*\* IaasTool Version \*\*

Build:

Version : 2023.9.21-6.33-dev

Base:

IaasTool Base : 2.2.4

IaasTool Logger : 1.0.0

Cloud Provider Base : 1.2.5

Cloud provider:

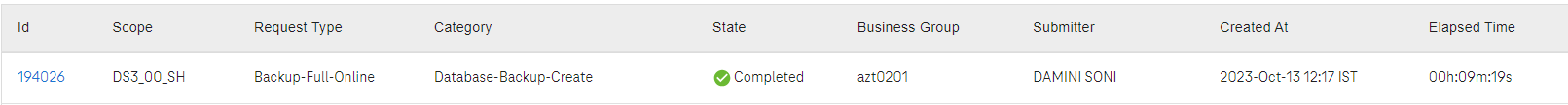
AWS Disk : 1.4.0

AWS NetApp : 1.0.0

Azure Disk : 1.3.0

FCI FaaS : 1.2.2

**BACKUP:**

****

**aztshds30001:~/.IaasTool/logs/2023-10-13T06:48:08.887612 # cat run.log**

2023-10-13 06:48:13,278 - INFO - Authenticate against the Azure API with the stored certificate.

2023-10-13 06:48:14,166 - INFO - Iaas Tool Storage Provider Version (AzureDisk): 1.3.0

2023-10-13 06:48:14,166 - INFO - Preparing phase for a new snapshot

2023-10-13 06:48:45,932 - INFO - Freeze filesystems

2023-10-13 06:48:46,157 - INFO - Prepare create snapshot commands

2023-10-13 06:48:46,158 - INFO - Execute 4 snapshot commands in parallel

2023-10-13 06:48:50,385 - INFO - Unfreeze filesystems

2023-10-13 06:48:50,514 - INFO - Done!

2023-10-13 06:48:50,514 - INFO - Result:

2023-10-13 06:48:50,514 - INFO - Mode: application

2023-10-13 06:48:50,514 - INFO - Result: ok

2023-10-13 06:48:50,514 - INFO - Job ID: XBR\_DS3\_20231013064721

2023-10-13 06:48:50,514 - INFO - Snapshots:

2023-10-13 06:48:50,515 - INFO - Snapshot: aztshds30001-vgadb\_h\_d-0000-XBR\_DS3\_20231013064721

2023-10-13 06:48:50,515 - INFO - Resource group: azt0201-ds3

2023-10-13 06:48:50,515 - INFO - Create date: 2023-10-13T06:48:47.568792+00:00

2023-10-13 06:48:50,515 - INFO - Expiration date: 20231019064814

2023-10-13 06:48:50,515 - INFO - Provisioning state: Succeeded

2023-10-13 06:48:50,515 - INFO - Snapshot: aztshds30001-vgadb\_h\_d-0001-XBR\_DS3\_20231013064721

2023-10-13 06:48:50,515 - INFO - Resource group: azt0201-ds3

2023-10-13 06:48:50,515 - INFO - Create date: 2023-10-13T06:48:47.553106+00:00

2023-10-13 06:48:50,515 - INFO - Expiration date: 20231019064814

2023-10-13 06:48:50,515 - INFO - Provisioning state: Succeeded

2023-10-13 06:48:50,515 - INFO - Snapshot: aztshds30001-vgadb\_h\_d-0002-XBR\_DS3\_20231013064721

2023-10-13 06:48:50,515 - INFO - Resource group: azt0201-ds3

2023-10-13 06:48:50,515 - INFO - Create date: 2023-10-13T06:48:47.584433+00:00

2023-10-13 06:48:50,515 - INFO - Expiration date: 20231019064814

2023-10-13 06:48:50,515 - INFO - Provisioning state: Succeeded

2023-10-13 06:48:50,515 - INFO - Snapshot: aztshds30001-vgadb\_h\_d-0003-XBR\_DS3\_20231013064721

2023-10-13 06:48:50,515 - INFO - Resource group: azt0201-ds3

2023-10-13 06:48:50,515 - INFO - Create date: 2023-10-13T06:48:47.553106+00:00

2023-10-13 06:48:50,515 - INFO - Expiration date: 20231019064814

2023-10-13 06:48:50,515 - INFO - Provisioning state: Succeeded

**aztshds30001:~/.IaasTool/logs/2023-10-13T06:48:08.887612 # cat debug.log |grep 2023-10-13**

..

2023-10-13 06:48:46,157 - INFO - Prepare create snapshot commands

2023-10-13 06:48:46,158 - DEBUG - [

2023-10-13 06:48:46,158 - INFO - Execute 4 snapshot commands in parallel

2023-10-13 06:48:46,174 - DEBUG - exec\_shell\_cmd(cmd=/usr/bin/az snapshot create -g azt0201-ds3 -n aztshds30001-vgadb\_h\_d-0000-XBR\_DS3\_20231013064721 --source aztshds30001-vgadb\_h\_d-0000 --incremental true --tags tsitag=jobid:XBR\_DS3\_20231013064721##expiry\_date:20231019064814##host:aztshds30001 --sku Standard\_ZRS --output json, timeout=600)

2023-10-13 06:48:46,174 - DEBUG - exec\_shell\_cmd(cmd=/usr/bin/az snapshot create -g azt0201-ds3 -n aztshds30001-vgadb\_h\_d-0001-XBR\_DS3\_20231013064721 --source aztshds30001-vgadb\_h\_d-0001 --incremental true --tags tsitag=jobid:XBR\_DS3\_20231013064721##expiry\_date:20231019064814##host:aztshds30001 --sku Standard\_ZRS --output json, timeout=600)

2023-10-13 06:48:46,174 - DEBUG - exec\_shell\_cmd(cmd=/usr/bin/az snapshot create -g azt0201-ds3 -n aztshds30001-vgadb\_h\_d-0002-XBR\_DS3\_20231013064721 --source aztshds30001-vgadb\_h\_d-0002 --incremental true --tags tsitag=jobid:XBR\_DS3\_20231013064721##expiry\_date:20231019064814##host:aztshds30001 --sku Standard\_ZRS --output json, timeout=600)

2023-10-13 06:48:46,174 - DEBUG - exec\_shell\_cmd(cmd=/usr/bin/az snapshot create -g azt0201-ds3 -n aztshds30001-vgadb\_h\_d-0003-XBR\_DS3\_20231013064721 --source aztshds30001-vgadb\_h\_d-0003 --incremental true --tags tsitag=jobid:XBR\_DS3\_20231013064721##expiry\_date:20231019064814##host:aztshds30001 --sku Standard\_ZRS --output json, timeout=600)

2023-10-13 06:48:50,250 - DEBUG - process return code: 0

2023-10-13 06:48:50,251 - DEBUG - stdout: {

"timeCreated": "2023-10-13T06:48:47.553106+00:00",

2023-10-13 06:48:50,251 - DEBUG - stderr:

2023-10-13 06:48:50,251 - DEBUG - process return code: 0

2023-10-13 06:48:50,251 - DEBUG - stdout: {

"timeCreated": "2023-10-13T06:48:47.553106+00:00",

2023-10-13 06:48:50,251 - DEBUG - stderr:

2023-10-13 06:48:50,259 - DEBUG - process return code: 0

2023-10-13 06:48:50,259 - DEBUG - stdout: {

"timeCreated": "2023-10-13T06:48:47.568792+00:00",

2023-10-13 06:48:50,259 - DEBUG - stderr:

2023-10-13 06:48:50,282 - DEBUG - process return code: 0

2023-10-13 06:48:50,282 - DEBUG - stdout: {

"timeCreated": "2023-10-13T06:48:47.584433+00:00",

2023-10-13 06:48:50,282 - DEBUG - stderr:

..

**aztshds30001:~ # cat /db2/DS3/sapbackup/xbrbackDS3.log**

..

gfcivhwj.anf 2023-10-13 06.47.21 2023-10-13 06.55.15 0

Dropped the changes made

**aztshds30001:db2ds3 55> db2pd -alldbs -tablespaces | grep -i increment**

0x00007F0ED68EA900 1 DMS Large 16384 2 Yes 2 1 1 Def 1 0 511 Yes INCREMENTAL CHECKS

0x00007F0ED68F7CC0 2 DMS Large 16384 2 Yes 2 1 1 Def 1 0 511 Yes EXTRA\_INCREMENT

**aztshds30001:db2ds3 56> db2 drop table "INCREMENTAL "."INCREMENT"**

DB20000I The SQL command completed successfully.

**aztshds30001:db2ds3 57> db2 drop SCHEMA "INCREMENTAL" restrict**

DB20000I The SQL command completed successfully.

**aztshds30001:db2ds3 58> db2 drop TABLESPACE \"EXTRA\_INCREMENT\"**

DB20000I The SQL command completed successfully.

**aztshds30001:db2ds3 59> db2 load query table INCREMENTAL.INCREMENT**

SQL2306N The table or index "INCREMENTAL.INCREMENT" does not exist.

**aztshds30001:db2ds3 60> db2 list tables for all | grep -i increment**

**aztshds30001:db2ds3 61> db2pd -alldbs -tablespaces | grep -i increment**

0x00007F0ED68EA900 1 DMS Large 16384 2 Yes 2 1 1 Def 1 0 511 Yes INCREMENTAL CHECKS

aztshds30001:db2ds3 62>

**RESTORE:**

**aztshds30001:ds3adm 60> ./xbrbackup --version**

Xbr\*Tools Wrapper v1.4

Starting /usr/sap/DS3/home/xbrTools/xbrTools/xbrbackup.csh

XBR\*Backup v1.47.0019

**aztshds30001:ds3adm 68> ./xbrbackup -restore -restore\_orig\_dir=/db2/DS3/sapbackup -restore\_to\_dir=/db2/DS3/saptmp1 -restore\_date\_from=20231013064721 -restore\_date\_to=20231013065515**

Xbr\*Tools Wrapper v1.4

Starting /usr/sap/DS3/home/xbrTools/xbrTools/xbrbackup.csh

XBR0001I XBR\*Backup Version 1.47.0019 T-Systems International GmbH

XBR0005I XBR\*Backup log file: '/db2/DS3/sapbackup/gfciwjth.rsb'

XBR0500I Start of data restore for database instance: 'DS3' 2023-10-13 08.03.22

XBR0010I Parameters (Profiles):

Name Value

----------------------------------- -------------------------------------------------------------------------------------------------------------------------------------------------------------

archive\_copy\_dir az://azt0201/archivepool/aztshds30001

archive\_dir /db2/DS3/log\_archive

archive\_max\_loop\_count 20

az\_max\_connections 0

backup\_cons\_timeout 600

backup\_dev\_type snapshot

backup\_log\_dir /db2/DS3/sapbackup

backup\_longretention\_dir az://azt0201/backup/aztshds30001/xbrlong

backup\_root\_dir az://azt0201/backup/aztshds30001

backup\_type online

cleanup\_backup\_catalog yes

cleanup\_disk\_archive 37

cleanup\_disk\_archive\_force 1

cleanup\_disk\_backup 37

cleanup\_disk\_backup\_weekly 37

cleanup\_log 60

cmd\_line xbrbackup.pl -restore -restore\_orig\_dir=/db2/DS3/sapbackup -restore\_to\_dir=/db2/DS3/saptmp1 -restore\_date\_from=20231013064721 -restore\_date\_to=20231013065515

compress yes

compress\_cmd pigz -5

compress\_verify yes

compress\_verify\_backup no

compress\_verify\_cmd pigz -t

db2\_compress yes

db2\_databases DS3

db2\_logarchmeth 1, 2

dbhome /db2/DS3

dbsid DS3

dbtype DB2

disk\_backup\_parallel 8

exec\_parallel 1

gsutil\_cmd gsutil -q

history\_table SAPTOOLS.XBRHIST

init\_files /usr/sap/DS3/home/xbrTools/xbrTools\_1.47.0019/init.xbr, /usr/sap/DS3/home/xbrTools/initDS3.xbr

keep\_archive\_count 0

local\_backup\_dir /db2/DS3/localbackup

log\_dir /db2/DS3/sapbackup

logswitch\_interval 3300

mode full

perl\_interpreter /usr/bin/perl

perl\_version v5.26.1

process\_info 11397 db2ds3(32000)/db2ds3(32000) sapsys(200)/sapsys(200)

restore 1

restore\_date\_from 20231013064721

restore\_date\_to 20231013065515

restore\_orig\_dir /db2/DS3/sapbackup

restore\_to\_dir /db2/DS3/saptmp1

retention\_policy daily

snapshot\_interface publiccloud

snapshot\_retention\_primary 6

snapshot\_retention\_primary\_weekly 37

snapshot\_retention\_secondary 3

snapshot\_retention\_secondary\_weekly 3

snapshot\_svunsched yes

snapshot\_timeout 1200

snapshot\_transfer\_daily no

snapshot\_transfer\_project no

snapshot\_transfer\_timeout 46800

snapshot\_verify no

snapshot\_waittime 900

system\_info Linux aztshds30001 5.14.21-150400.24.81-default #1 SMP

temp\_dir /var/tmp

time\_zone UTC +0000

uncompress\_cmd pigz -d

userid\_info uid=32000(db2ds3) gid=200(sapsys) groups=200(sapsys),400(sapinst),31000(dbds3adm),32000(dbds3ctl)

XBR0034I Registered OS-Commands:

Command Path

------------------------------ -----------------------------------------

az /usr/bin/az

azcopy /usr/bin/azcopy

date /usr/bin/date

db2 /home/db2ds3/sqllib/bin/db2

db2cfexp /home/db2ds3/sqllib/bin/db2cfexp

db2dart /home/db2ds3/sqllib/adm/db2dart

db2start /home/db2ds3/sqllib/adm/db2start

db2stop /home/db2ds3/sqllib/adm/db2stop

dd /usr/bin/dd

getent /usr/bin/getent

hostname /usr/bin/hostname

id /usr/bin/id

pigz /usr/bin/pigz

tar /usr/bin/tar

uname /usr/bin/uname

XBR0410I Restore function: restore\_backupfiles

saved\_from\_dir: /db2/DS3/sapbackup/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/xbrbackDS3.log

saved\_from\_dir: /db2/DS3/sapbackup/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/xbrbackstatDS3.log

saved\_from\_dir: /db2/DS3/sapbackup/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/gfcivhwj.anf

saved\_from\_dir: /db2/DS3/sapbackup/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /usr/sap/DS3/home/xbrTools/xbrTools\_1.47.0019/init.xbr

XBR0430I File '/usr/sap/DS3/home/xbrTools/xbrTools\_1.47.0019/init.xbr' (2023-10-09 13.00.04) exists, will be skipped from restore

saved\_from\_dir: /db2/DS3/sapbackup/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/DBM.cfg

saved\_from\_dir: /db2/DS3/sapbackup/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/DS3\_db2\_home.tar.Z

saved\_from\_dir: /db2/DS3/sapbackup/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /usr/sap/DS3/home/xbrTools/initDS3.xbr

XBR0430I File '/usr/sap/DS3/home/xbrTools/initDS3.xbr' (2023-10-09 07.46.10) exists, will be skipped from restore

/db2/DS3/saptmp1/xbrbackstatDS3.log 2023-10-09 07.58.21 21934

/db2/DS3/saptmp1/xbrbackDS3.log 2023-10-13 06.47.24 232

/db2/DS3/saptmp1/DBM.cfg 2023-10-13 06.47.51 2726

/db2/DS3/saptmp1/DS3\_db2\_home.tar.Z 2023-10-13 06.48.50 100354

/db2/DS3/saptmp1/gfcivhwj.anf 2023-10-13 06.55.13 63350

XBR0414I 5 files found for restore, total size 0.180 MB 2023-10-13 08.03.26

XBR0144I Restoring '/db2/DS3/saptmp1/xbrbackstatDS3.log'

XBR0145I from 'az://azt0201/backup/aztshds30001/xbrback/20231013064721/xbrbackstatDS3.log'... 2023-10-13 08.03.29

XBR0144I Restoring '/db2/DS3/saptmp1/xbrbackDS3.log'

XBR0145I from 'az://azt0201/backup/aztshds30001/xbrback/20231013064721/xbrbackDS3.log'... 2023-10-13 08.03.30

XBR0144I Restoring '/db2/DS3/saptmp1/DBM.cfg'

XBR0145I from 'az://azt0201/backup/aztshds30001/xbrback/20231013064721/DBM.cfg'... 2023-10-13 08.03.30

XBR0109I Decompressing '/db2/DS3/saptmp1/DS3\_db2\_home.tar.Z'

XBR0110I from 'az://azt0201/backup/aztshds30001/xbrback/20231013064721/DS3\_db2\_home.tar.Z'... 2023-10-13 08.03.30

XBR0144I Restoring '/db2/DS3/saptmp1/gfcivhwj.anf'

XBR0145I from 'az://azt0201/backup/aztshds30001/xbrback/20231013064721/gfcivhwj.anf'... 2023-10-13 08.03.30

XBR0660I #RESTORED..... 20231013064721\_xbrbackDS3.log /db2/DS3/saptmp1/xbrbackDS3.log 2023-10-13 06.47.24 232 1.00

XBR0215I 1 of 5 backup files processed - 0.000 of 0.180 MB done

XBR0056I Percentage done: 0.12%, estimated end time: 2023-10-13 08.57.37

XBR0660I #RESTORED..... 20231013064721\_xbrbackstatDS3.log /db2/DS3/saptmp1/xbrbackstatDS3.log 2023-10-09 07.58.21 21934 1.00

XBR0215I 2 of 5 backup files processed - 0.021 of 0.180 MB done

XBR0056I Percentage done: 11.75%, estimated end time: 2023-10-13 08.04.00

XBR0660I #RESTORED..... 20231013064721\_DS3\_db2\_home.tar.Z /db2/DS3/saptmp1/DS3\_db2\_home.tar.Z 2023-10-13 06.48.50 100354 1.00

XBR0215I 3 of 5 backup files processed - 0.117 of 0.180 MB done

XBR0056I Percentage done: 64.96%, estimated end time: 2023-10-13 08.03.32

XBR0660I #RESTORED..... 20231013064721\_DBM.cfg /db2/DS3/saptmp1/DBM.cfg 2023-10-13 06.47.51 2726 1.00

XBR0215I 4 of 5 backup files processed - 0.119 of 0.180 MB done

XBR0056I Percentage done: 66.41%, estimated end time: 2023-10-13 08.03.33

XBR0660I #RESTORED..... 20231013064721\_gfcivhwj.anf /db2/DS3/saptmp1/gfcivhwj.anf 2023-10-13 06.55.13 63350 1.00

XBR0215I 5 of 5 backup files processed - 0.180 of 0.180 MB done

XBR0056I Percentage done: 100.00%, estimated end time: 2023-10-13 08.03.31

XBR0420I 5 backup files in 5 seconds processed: Compression 184.44kB->184.18kB ratio 99.855% 2023-10-13 08.03.31

XBR0999I XBR\*Backup completed successfully at 2023-10-13 08.03.31, return code 0

**aztshds30001:ds3adm 69> ./xbrarchive -restore -restore\_date\_from=20231013064721 -restore\_date\_to=20231013065515 -restore\_to\_dir=/db2/DS3/saptmp1 -restore\_orig\_dir=/db2/DS3/log\_archive**

Xbr\*Tools Wrapper v1.4

Starting /usr/sap/DS3/home/xbrTools/xbrTools/xbrarchive.csh

XBR0001I XBR\*Archive Version 1.47.0019 T-Systems International GmbH

XBR0005I XBR\*Archive log file: '/db2/DS3/sapbackup/gfciwjwv.rsa'

XBR0400I Start of transaction log restore for database instance: 'DS3' 2023-10-13 08.04.17

XBR0010I Parameters (Profiles):

Name Value

----------------------------------- ----------------------------------------------------------------------------------------------------------------------------------------------------------------

archive\_copy\_dir az://azt0201/archivepool/aztshds30001

archive\_dir /db2/DS3/log\_archive

archive\_max\_loop\_count 20

az\_max\_connections 0

backup\_cons\_timeout 600

backup\_dev\_type disk

backup\_log\_dir /db2/DS3/sapbackup

backup\_longretention\_dir az://azt0201/backup/aztshds30001/xbrlong

backup\_root\_dir az://azt0201/backup/aztshds30001

backup\_type online

cleanup\_backup\_catalog yes

cleanup\_disk\_archive 37

cleanup\_disk\_archive\_force 1

cleanup\_disk\_backup 37

cleanup\_disk\_backup\_weekly 37

cleanup\_log 60

cmd\_line xbrarchive.pl -restore -restore\_date\_from=20231013064721 -restore\_date\_to=20231013065515 -restore\_to\_dir=/db2/DS3/saptmp1 -restore\_orig\_dir=/db2/DS3/log\_archive

compress yes

compress\_cmd pigz -5

compress\_verify yes

compress\_verify\_backup no

compress\_verify\_cmd pigz -t

db2\_compress yes

db2\_databases DS3

db2\_logarchmeth 1, 2

dbhome /db2/DS3

dbsid DS3

dbtype DB2

disk\_backup\_parallel 8

exec\_parallel 1

gsutil\_cmd gsutil -q

history\_table SAPTOOLS.XBRHIST

init\_files /usr/sap/DS3/home/xbrTools/xbrTools\_1.47.0019/init.xbr, /usr/sap/DS3/home/xbrTools/initDS3.xbr

keep\_archive\_count 0

local\_backup\_dir /db2/DS3/localbackup

log\_dir /db2/DS3/sapbackup

logswitch\_interval 3300

mode full

perl\_interpreter /usr/bin/perl

perl\_version v5.26.1

process\_info 12133 db2ds3(32000)/db2ds3(32000) sapsys(200)/sapsys(200)

restore 1

restore\_date\_from 20231013064721

restore\_date\_to 20231013065515

restore\_orig\_dir /db2/DS3/log\_archive

restore\_to\_dir /db2/DS3/saptmp1

retention\_policy daily

snapshot\_interface publiccloud

snapshot\_retention\_primary 6

snapshot\_retention\_primary\_weekly 37

snapshot\_retention\_secondary 3

snapshot\_retention\_secondary\_weekly 3

snapshot\_svunsched yes

snapshot\_timeout 1200

snapshot\_transfer\_daily no

snapshot\_transfer\_project no

snapshot\_transfer\_timeout 46800

snapshot\_verify no

snapshot\_waittime 900

system\_info Linux aztshds30001 5.14.21-150400.24.81-default #1 SMP

temp\_dir /var/tmp

time\_zone UTC +0000

uncompress\_cmd pigz -d

userid\_info uid=32000(db2ds3) gid=200(sapsys) groups=200(sapsys),400(sapinst),31000(dbds3adm),32000(dbds3ctl)

XBR0034I Registered OS-Commands:

Command Path

------------------------------ -----------------------------------------

az /usr/bin/az

azcopy /usr/bin/azcopy

date /usr/bin/date

db2 /home/db2ds3/sqllib/bin/db2

db2cfexp /home/db2ds3/sqllib/bin/db2cfexp

db2dart /home/db2ds3/sqllib/adm/db2dart

db2start /home/db2ds3/sqllib/adm/db2start

db2stop /home/db2ds3/sqllib/adm/db2stop

dd /usr/bin/dd

getent /usr/bin/getent

hostname /usr/bin/hostname

id /usr/bin/id

pigz /usr/bin/pigz

tar /usr/bin/tar

uname /usr/bin/uname

XBR0410I Restore function: restore\_transactionlogs

saved\_from\_dir: /db2/DS3/log\_archive/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000043.LOG

saved\_from\_dir: /db2/DS3/log\_archive/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000044.LOG

saved\_from\_dir: /db2/DS3/log\_archive/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000046.LOG

saved\_from\_dir: /db2/DS3/log\_archive/

restore\_to\_dir: /db2/DS3/saptmp1/

dst\_path: /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000045.LOG

/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000043.LOG 2023-10-13 06.47.33 12288

/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000044.LOG 2023-10-13 06.47.57 12288

/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000045.LOG 2023-10-13 06.49.06 12288

/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000046.LOG 2023-10-13 06.54.36 32768

XBR0414I 4 files found for restore, total size 0.066 MB 2023-10-13 08.04.19

XBR0109I Decompressing '/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000043.LOG'

XBR0110I from 'az://azt0201/archivepool/aztshds30001/20231013065001\_DS3N0000L0000C0000000S0000043.LOG.Z'... 2023-10-13 08.04.22

XBR0109I Decompressing '/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000044.LOG'

XBR0110I from 'az://azt0201/archivepool/aztshds30001/20231013065001\_DS3N0000L0000C0000000S0000044.LOG.Z'... 2023-10-13 08.04.22

XBR0109I Decompressing '/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000045.LOG'

XBR0110I from 'az://azt0201/archivepool/aztshds30001/20231013065001\_DS3N0000L0000C0000000S0000045.LOG.Z'... 2023-10-13 08.04.22

XBR0109I Decompressing '/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000046.LOG'

XBR0110I from 'az://azt0201/archivepool/aztshds30001/20231013070502\_DS3N0000L0000C0000000S0000046.LOG.Z'... 2023-10-13 08.04.22

XBR0660I #RESTORED..... DS3N0000L0000C0000000S0000045.LOG /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000045.LOG 2023-10-13 06.49.06 12288 0.07

XBR0215I 1 of 4 backup files processed - 0.012 of 0.066 MB done

XBR0056I Percentage done: 17.65%, estimated end time: 2023-10-13 08.04.41

XBR0660I #RESTORED..... DS3N0000L0000C0000000S0000044.LOG /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000044.LOG 2023-10-13 06.47.57 12288 0.05

XBR0215I 2 of 4 backup files processed - 0.023 of 0.066 MB done

XBR0056I Percentage done: 35.29%, estimated end time: 2023-10-13 08.04.30

XBR0660I #RESTORED..... DS3N0000L0000C0000000S0000046.LOG /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000046.LOG 2023-10-13 06.54.36 32768 0.25

XBR0215I 3 of 4 backup files processed - 0.055 of 0.066 MB done

XBR0056I Percentage done: 82.35%, estimated end time: 2023-10-13 08.04.23

XBR0660I #RESTORED..... DS3N0000L0000C0000000S0000043.LOG /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/S0000043.LOG 2023-10-13 06.47.33 12288 0.10

XBR0215I 4 of 4 backup files processed - 0.066 of 0.066 MB done

XBR0056I Percentage done: 100.00%, estimated end time: 2023-10-13 08.04.23

XBR0420I 4 backup files in 4 seconds processed: Compression 10.70kB->68.00kB ratio 635.735% 2023-10-13 08.04.23

XBR0999I XBR\*Archive completed successfully at 2023-10-13 08.04.23, return code 0

**aztshds30001:ds3adm 71> ls -ltr /db2/DS3/saptmp1**

total 38048

-rw-r--r-- 1 db2ds3 sapsys 21934 Oct 9 07:58 xbrbackstatDS3.log

-rw-r--r-- 1 db2ds3 sapsys 232 Oct 13 06:47 xbrbackDS3.log

-rw-r--r-- 1 db2ds3 sapsys 2726 Oct 13 06:47 DBM.cfg

-rw-r--r-- 1 db2ds3 sapsys 38860800 Oct 13 06:48 DS3\_db2\_home.tar.Z

-rw-r--r-- 1 db2ds3 sapsys 63623 Oct 13 06:55 gfcivhwj.anf

drwxr-xr-x 4 db2ds3 dbds3adm 52 Oct 13 08:04 db2ds3

**aztshds30001:ds3adm 72> ls -ltr /db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/**

total 68

-rw-r--r-- 1 db2ds3 sapsys 12288 Oct 13 06:47 S0000043.LOG

-rw-r--r-- 1 db2ds3 sapsys 12288 Oct 13 06:47 S0000044.LOG

-rw-r--r-- 1 db2ds3 sapsys 12288 Oct 13 06:49 S0000045.LOG

-rw-r--r-- 1 db2ds3 sapsys 32768 Oct 13 06:54 S0000046.LOG

aztshds30001:ds3adm 73>

**aztshds30001:ds3adm 73> sudo /usr/local/platform/bin/iaas.py --cfg ~/DS3 --mode application --action restore\_snapshot --jobid XBR\_DS3\_20231013064721**

2023-10-13 08:09:51,030 - INFO - Authenticate against the Azure API with the stored certificate.

2023-10-13 08:09:51,836 - INFO - Iaas Tool Storage Provider Version (AzureDisk): 1.3.0

2023-10-13 08:09:51,836 - INFO - Restore snapshot

2023-10-13 08:09:51,836 - INFO - .. Snapshot ID: XBR\_DS3\_20231013064721

2023-10-13 08:13:22,147 - INFO - .. Perform rescan scsi bus

2023-10-13 08:13:22,691 - INFO - .. Check if all attached disks are available on os level

2023-10-13 08:13:28,369 - INFO - .. Done

**aztshds30001:~ # su - db2ds3**

**aztshds30001:db2ds3 53> cd /**

**aztshds30001:db2ds3 54> tar -xvf /db2/DS3/saptmp1/DS3\_db2\_home.tar.Z**

db2/DS3/db2ds3/NODE0000/SQL00001/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/db2detaildeadlock/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/db2detaildeadlock/db2event.ctl

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/db2detaildeadlock/00000000.evt

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/HADR/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/HADR/LOGSPOOL/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/HADR/TAKEOVER/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLDBCONF

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLOGCTL.LFH.1

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLOGCTL.LFH.2

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLOGMIR.LFH

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLBP.1

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLBP.2

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLINSLK

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLTMPLK

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLWLMADMDAT

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/DB2TSCHG.HIS

db2/DS3/db2ds3/NODE0000/SQL00001/db2rhist.asc

db2/DS3/db2ds3/NODE0000/SQL00001/db2rhist.bak

db2/DS3/db2ds3/NODE0000/SQL00001/HADR/

db2/DS3/db2ds3/NODE0000/SQL00001/HADR/LOGSPOOL/

db2/DS3/db2ds3/NODE0000/SQL00001/HADR/TAKEOVER/

db2/DS3/db2ds3/NODE0000/SQL00001/SQLDBCONF

db2/DS3/db2ds3/NODE0000/SQL00001/SQLOGCTL.GLFH.1

db2/DS3/db2ds3/NODE0000/SQL00001/SQLOGCTL.GLFH.2

db2/DS3/db2ds3/NODE0000/SQL00001/LOGSTREAM0000/

db2/DS3/db2ds3/NODE0000/SQL00001/SQLSGF.1

db2/DS3/db2ds3/NODE0000/SQL00001/SQLSGF.2

db2/DS3/db2ds3/NODE0000/SQL00001/SQLSPCS.1

db2/DS3/db2ds3/NODE0000/SQL00001/SQLSPCS.2

db2/DS3/db2ds3/NODE0000/SQL00001/db2rhist.lock

db2/DS3/db2ds3/NODE0000/SQL00001/load/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/db2detaildeadlock/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/db2detaildeadlock/db2event.ctl

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/db2event/db2detaildeadlock/00000000.evt

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/HADR/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/HADR/LOGSPOOL/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/HADR/TAKEOVER/

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLDBCONF

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLOGCTL.LFH.1

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLOGCTL.LFH.2

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLOGMIR.LFH

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLBP.1

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLBP.2

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLINSLK

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLTMPLK

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/SQLWLMADMDAT

db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/DB2TSCHG.HIS

db2/DS3/db2ds3/NODE0000/sqldbdir/

db2/DS3/db2ds3/NODE0000/sqldbdir/sqldbdir

db2/DS3/db2ds3/NODE0000/sqldbdir/sqldbbak

db2/DS3/db2ds3/NODE0000/sqldbdir/sqldbins

**aztshds30001:db2ds3 55>**

**aztshds30001:db2ds3 55> db2start**

10/13/2023 08:18:24 0 0 SQL1063N DB2START processing was successful.

SQL1063N DB2START processing was successful.

**aztshds30001:db2ds3 56> db2inidb DS3 as standby**

DBT1000I The tool completed successfully.

**aztshds30001:db2ds3 57> db2 rollforward db ds3 query status**

Rollforward Status

Input database alias = ds3

Number of members have returned status = 1

Member ID = 0

Rollforward status = DB pending

Next log file to be read = S0000044.LOG

Log files processed = -

Last committed transaction = 2023-10-13-06.47.56.000000 UTC

**aztshds30001:db2ds3 58> db2 rollforward db DS3 to end of logs and complete overflow log path "(/db2/DS3/saptmp1/db2ds3/DS3/NODE0000/LOGSTREAM0000/C0000000/)"**

Rollforward Status

Input database alias = DS3

Number of members have returned status = 1

Member ID = 0

Rollforward status = not pending

Next log file to be read =

Log files processed = S0000044.LOG - S0000045.LOG

Last committed transaction = 2023-10-13-06.54.35.000000 UTC

DB20000I The ROLLFORWARD command completed successfully.

**aztshds30001:db2ds3 59> db2 connect**

Database Connection Information

Database server = DB2/LINUXX8664 11.5.8.0

SQL authorization ID = DB2DS3

Local database alias = DS3

**aztshds30001:db2ds3 60> db2 list active databases**

Active Databases

Database name = DS3

Applications connected currently = 20

Database path = /db2/DS3/db2ds3/NODE0000/SQL00001/MEMBER0000/

**aztshds30001:db2ds3 61>**