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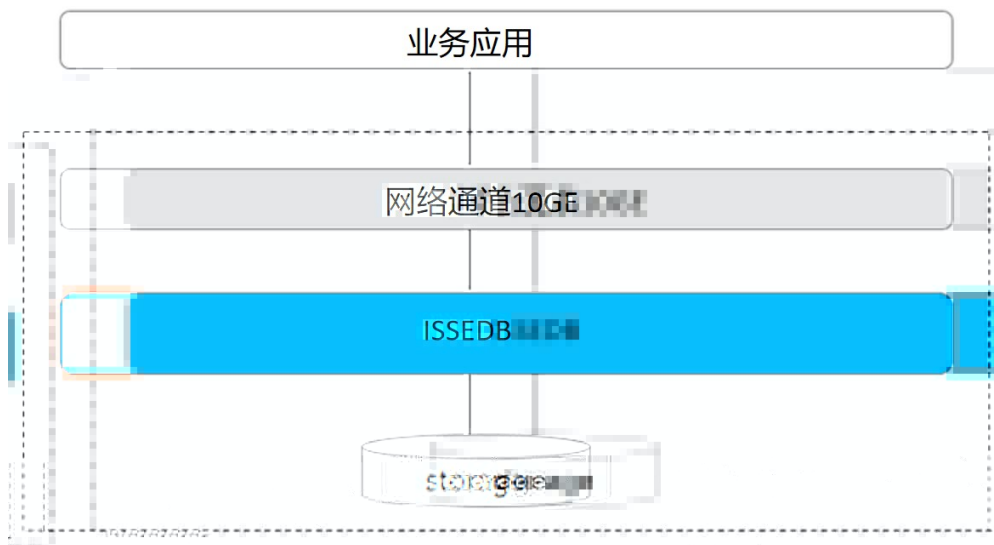
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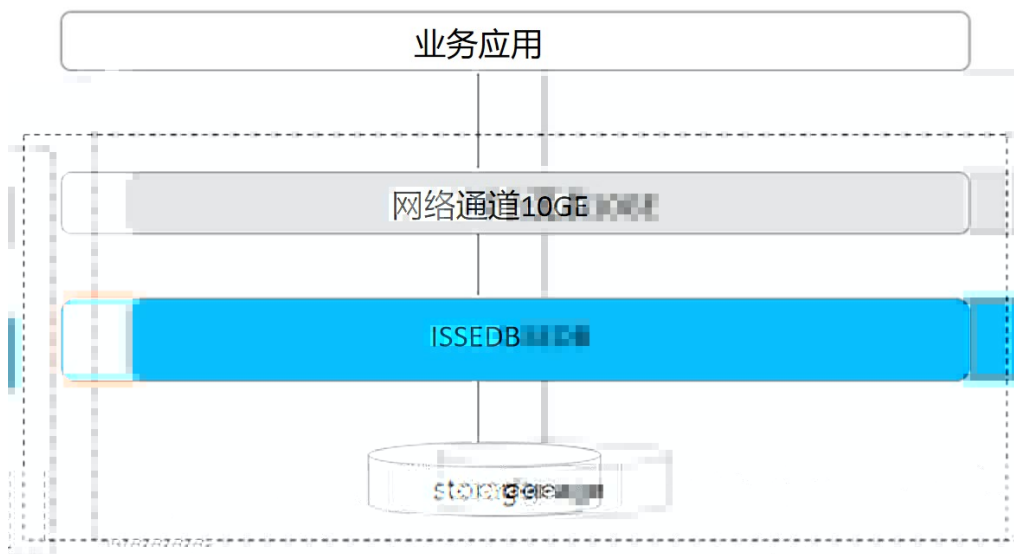
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The diagram illustrates a storage architecture. At the top, a box labeled "业务应用" (Business Application) is connected to a horizontal bar labeled "网络通道" (Network Channel). Below the network channel, there are three vertical paths, each leading to a storage node. The first node is labeled "SSD主" (SSD Main) and is connected to a "storage" unit. The second node is labeled "SSD备" (SSD Backup) and is connected to a "storage" unit. The third node is labeled "HDD备" (HDD Backup) and is connected to a "storage" unit.

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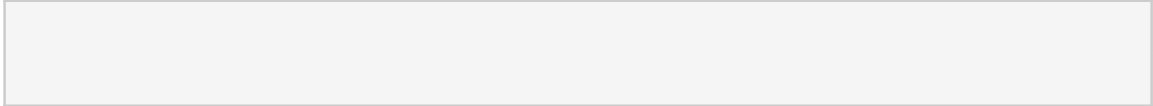
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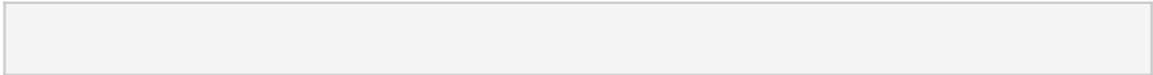
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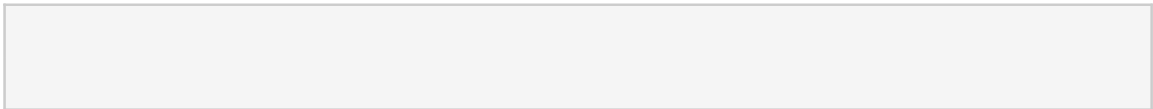


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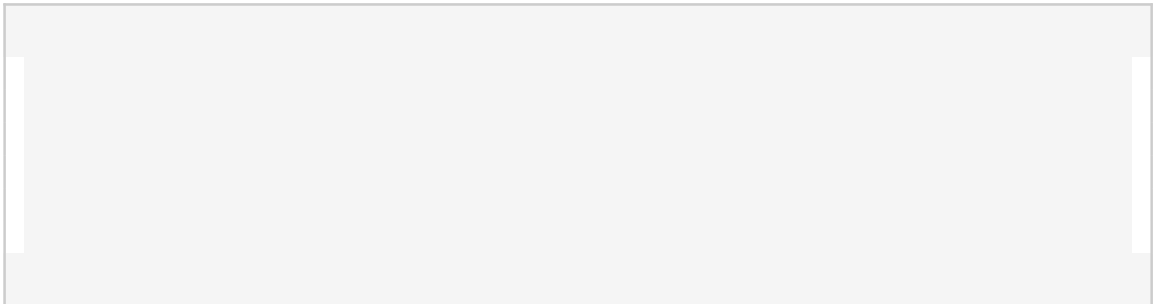
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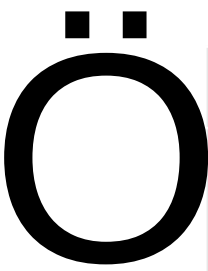
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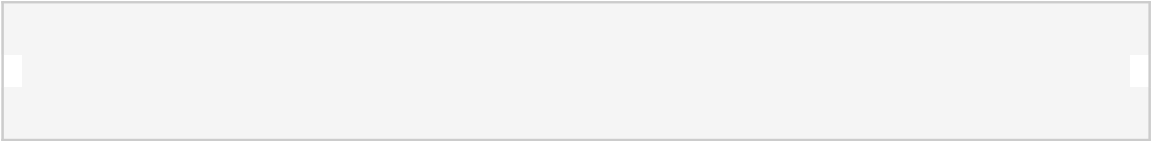
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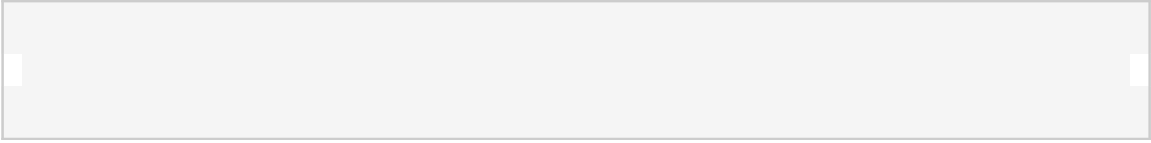
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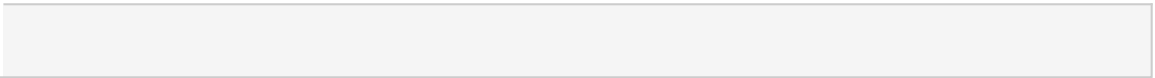
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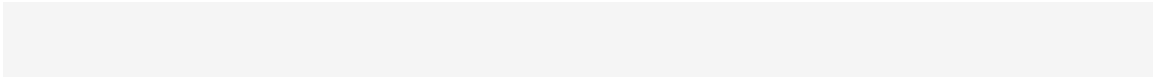
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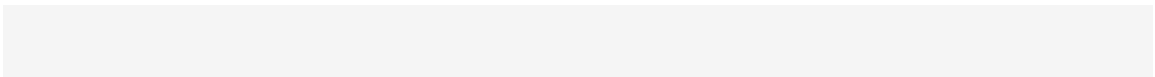
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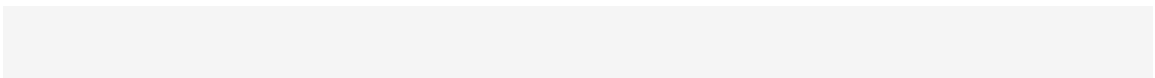


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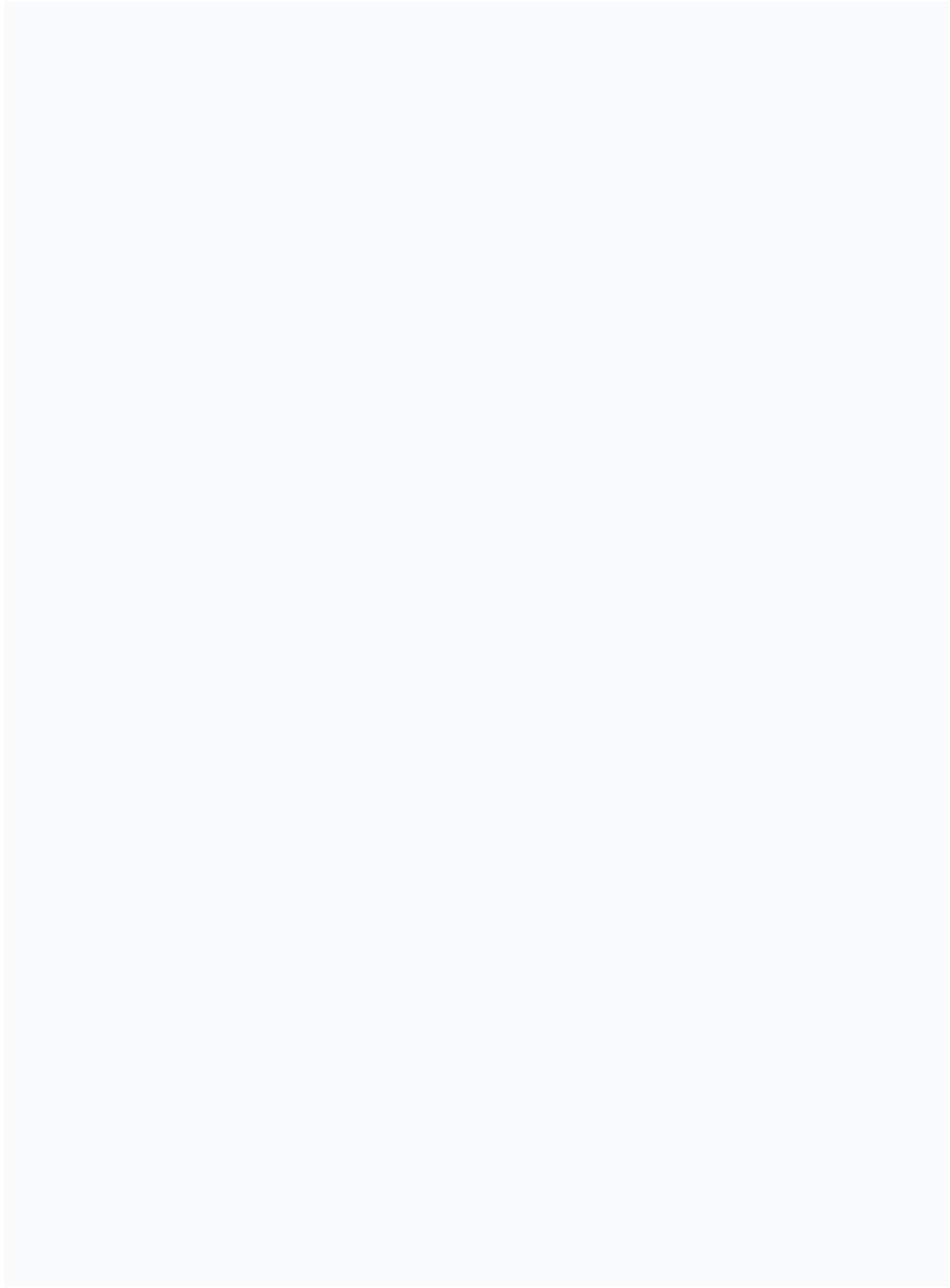
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>>empl!\$%me't_(D H-35G-32(10)B

>>S-L-3: 40 9 *)3(8B2)B

>>56 9 9(SS(64_152 40 9 *)3(4B2)B

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1-32(2(64 *: 3-4 ,) (G(3)_D-2))

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>>>1-32(2(64 G(3)_19950501 H-L0)S L)SS 2G-4 (Y1995705701 00Q00Q00Y)B

>>>1-32(2(64 G(3)_19950502 H-L0)S L)SS 2G-4 (Y1995705702 00Q00Q00Y)B

>>>1-32(2(64 G(3)_maF/a!ue H-L0)S L)SS 2G-4 (9 -KH-L0))

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5!uste# State a

cu##e't_aM Q - . -LL

```
>>>> '$de    '$de_&p    p$#t    &'sta'ce    state
```

```
1  &s$+'$de1 192.168.146.161 5432      6001 <$pt<Issedb1<data<d1  1 1#&ma#%
```

```
2  &s$+'$de4 192.168.146.164 5432      6002 <$pt<Issedb1<data<d4  S Sta'db%
```

• •

St\$pp&' g c!uste#.

Success!!% stopped cluster#.

```
) 'd st$p c!uste#.
```

. .

_ \$mm ` &s\$+ '\$de1 sc#&ptaS gs_ \$m 7t sta#tC

Sta#8 'g cluste#.

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_S055)SSa &s\$+ '\$de1

2023707728 14056033.308 64c366a1.1 _u''''\$D'a 140593643417856 _u''''\$D'a 0
d'_6001_6002 01000 0 _*-5=)4Da ; -34(4,Q c\$u!d '\$t c#eate a'% G- 251<(1
s\$c"ets

2023707728 14056033.309 64c366a1.1 _u''''\$D'a 140593643417856 _u''''\$D'a 0
d'_6001_6002 01000 0 _*-5=)4Da ; -34(4,Q >a!ed t\$ &'&8a!&Me the mem\$#%
p#\$tect U\$# g_&'sta'ce.aN#aN#_st\$#age.cst\$#e_buXe#s (16 9 b%tes) \$# sha#ed
mem\$#% (1188 9 b%tes) &s !a#ge#.

_S055)SSa &s\$+ '\$de4

2023707728 14056034.716 64c366a2.1 _u''''\$D'a 140365746151680 _u''''\$D'a 0
d'_6001_6002 01000 0 _*-5=)4Da ; -34(4,Q c\$u!d '\$t c#eate a'% G- 251<(1
s\$c"ets

2023707728 14056034.717 64c366a2.1 _u''''\$D'a 140365746151680 _u''''\$D'a 0
d'_6001_6002 01000 0 _*-5=)4Da ; -34(4,Q >a!ed t\$ &'&8a!&Me the mem\$#%
p#\$tect U\$# g_&'sta'ce.aN#aN#_st\$#age.cst\$#e_buXe#s (16 9 b%tes) \$# sha#ed
mem\$#% (1188 9 b%tes) &s !a#ge#.

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SuccessUu!!% sta#ted.

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_ \$mm ` &s\$+ '\$de4 d4aS gs_ \$m 7t st\$P 7D <\$pt<&ssedb1<data<d4

St\$pp&'g cluste#.

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_, -0SS753606aQ 5a' '\$t st\$P the databaseB the cmd &s s\$u#ce
<h\$me<\$mm<.bash#cC p%th\$'3 Y<\$pt<&ssedb1<t\$!<sc#&pt<!\$cal<St\$P('sta'ce.p%Y 70
\$mm 73 <\$pt<&ssedb1<app 7t 300 7D <\$pt<&ssedb1<data<d4 7m UastB)##\$#Q

4 f — 9 : l m g ,
_ \$mm ` & s\$ + ' \$de1 sc#& ptaS gs_ \$m 7t status 77 deta&!
_ 5!uste# State a

_Data '\$de State a

```
>Se 'de#s &' 'U$Q
4$ &' 'U$#ma8$'
>3ece&/e# &' 'U$Q
>>>>>>>#ece&/e#_p&d Q 18494
>>>>>>>!$ca! $!e Q Sta 'db%
```

>>>>>>pee#_#\$!e Q 1##ma#%
>>>>>>pee#_state Q 4\$#ma!
>>>>>>state Q 4\$#ma!
>>>>>>se'de#_se't_!\$ca8\$' Q 0<4001*58
>>>>>>se'de#_D##te_!\$ca8\$' Q 0<4001*58
>>>>>>se'de#_bush_!\$ca8\$' Q 0<4001*58
>>>>>>se'de#_#ep!a%_!\$ca8\$' Q 0<4001*58
>>>>>>#ece#/e#_#ece#/ed_!\$ca8\$' Q 0<4001*58
>>>>>>#ece#/e#_D##te_!\$ca8\$' Q 0<4001*58
>>>>>>#ece#/e#_bush_!\$ca8\$' Q 0<4001*58
>>>>>>#ece#/e#_#ep!a%_!\$ca8\$' Q 0<4001*28
>>>>>>s%'c_pe#ce't Q 100 J
>>>>>>cha' 'e! Q 192.168.146.164Q47386@77192.168.146.161Q5433
m 6 (§ î n P
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_ \$mm ` \$s\$+ '\$de4 d4aS gs_ct! sD&tch\$/e# 7D <\$pt<ssedb1<data<d4
_2023707728 15Q16Q55.469a_19198a_a_gs_ct!aQ gs_ct! sD&tch\$/e# bdatad&# &s
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_2023707728 15Q16Q55.469a_19198a_a_gs_ct!aQ sD&tch\$/e# te#m (1)
_2023707728 15Q16Q55.474a_19198a_a_gs_ct!aQ Da&8' g U\$# se#/e# t\$ sD&tch\$/e#.....
_2023707728 15Q17Q00.592a_19198a_a_gs_ct!aQ d\$'e
_2023707728 15Q17Q00.592a_19198a_a_gs_ct!aQ sD&tch\$/e# c\$mp!eted
(<\$pt<ssedb1<data<d4)

4 f 9 : g ,
_ \$mm ` \$s\$+ '\$de1 dataaS gs_\$m 7t status 77deta&!
_ 5!uste# State a

c!uste#_state Q Deg#aded
#ed&st#&bu8'g Q 4\$
cu##e't_aM Q - ._-LL

[illegible]

Data ' \$de State a

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[illegible]

```
<$pt<bac"up<bac"up.s ! 7p 26000 testdb 7> p
gs_dump_p$#tA\26000\%a_testdba_2023707727 19053031a0 2he t$ta! $b\lects 'umbe# &s
432.
gs_dump_p$#tA\26000\%a_testdba_2023707727 19053031a0 _100.00Ja 432 $b\lects ha/e
bee' dumped.
gs_dump_p$#tA\26000\%a_testdba_2023707727 19053031a0 dump database testdb
successuu!!%
gs_dump_p$#tA\26000\%a_testdba_2023707727 19053031a0 t$ta! 8me0 1563 ms
```

y z p q

>

77 • » test v Å , gs_dump © s ! / v p q å template1

_ \$mm ` &s\$+ '\$de2 bac"upaS gs ! 7d template1 70 test 7 ; huaDe& ` 1234 7p 26000

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53) -2) 2- *L)

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t\$ta! 8meQ 14 ms

```
omm@isoftnode2 script$ issql -d testdb -p 26000 -r
issql ((isoftDB 5.0.0 build 4ec82cbe) compiled at 2023-07-27 09:58:20 commit 0 last mr )
non-SSL connection (SSL connection is recommended when requiring high-security)
type "help" for help.

testdb=# \d

```

Schema	Name	Type	Owner	List of relations	Storage
public	test1	table	omm	{orientation=row,compression=no}	
public	test2	table	omm	{orientation=row,compression=no}	

```

testdb=# \d
issql ((isoftDB 5.0.0 build 4ec82cbe) compiled at 2023-07-27 09:58:20 commit 0 last mr )
non-SSL connection (SSL connection is recommended when requiring high-security)
type "help" for help.

testdb=# \d test1

```

Schema	Table	Type	Owner	Storage
public	test1	table	omm	{orientation=row,compression=no}
public	test2	table	omm	{orientation=row,compression=no}

(2 rows)

Success!!!% backed up cluster Res.

7#D7777777. 1 \$mm dbg#p 61440 ?u! 28 09016 pa#amete#.ta#

p q < !

_#\$\$t `&s\$+'\$de2 db1ad !! <\$pt<issedb1<data<db1<pg_hba.c\$'U
<\$pt<issedb1<data<db1<p\$stg#es !.c\$'U
7#D777777. 1 \$mm dbg#p 4587 ?u! 27 16Q23 <\$pt<issedb1<data<db1<pg_hba.c\$'U
7#D777777. 1 \$mm dbg#p 36085 ?u! 27 16Q23 <\$pt<issedb1<data<db1<p\$stg#es !.c\$'U
_#\$\$t `&s\$+'\$de2 db1ad m/ <\$pt<issedb1<data<db1<pg_hba.c\$'U
<\$pt<issedb1<data<db1<pg_hba.c\$'U_ba"
_#\$\$t `&s\$+'\$de2 db1ad m/ <\$pt<issedb1<data<db1<p\$stg#es !.c\$'U
<\$pt<issedb1<data<db1<p\$stg#es !.c\$'U_ba"
_#\$\$t `&s\$+'\$de2 db1ad !! <\$pt<issedb1<data<db1<pg_hba.c\$'U
<\$pt<issedb1<data<db1<p\$stg#es !.c\$'U
!sQ ca' '\$t access <\$pt<issedb1<data<db1<pg_hba.c\$'UQ 4\$ such R!e \$# d&#ect\$#%
!sQ ca' '\$t access <\$pt<issedb1<data<db1<p\$stg#es !.c\$'UQ 4\$ such R!e \$# d&#ect\$#%
_ \$mm `&s\$+'\$de2 bac"upaS gs_bac"up 7t #est\$#e 77bac"up7d&# <\$pt<bac"up< 7h
&s\$+'\$de2 77pa#amete# 7! <\$pt<bac"up<bac"up.!\$g
1a#s&'g c\$'Rgu#a8\$' R!es.
SuccessUu!!% pa#sed the c\$'Rgu#a8\$' R!e.
1e#U\$#m&'g #em\$te #est\$#a8\$'.
SuccessUu!!% #est\$#ed c!uste# R!es.

_#\$\$t `&s\$+'\$de2 db1ad !! <\$pt<issedb1<data<db1<pg_hba.c\$'U
<\$pt<issedb1<data<db1<p\$stg#es !.c\$'U
7#D777777. 1 \$mm dbg#p 4587 ?u! 27 16Q23 <\$pt<issedb1<data<db1<pg_hba.c\$'U
7#D777777. 1 \$mm dbg#p 36085 ?u! 27 16Q23 <\$pt<issedb1<data<db1<p\$stg#es !.c\$'U

→ . → . . .

_ \$mm `&s\$+'\$de2 bac"aS gs_basebac"up 7D <\$pt<bac" 7p 26000
(4>6Q 2he sta#8'\$g p\$&8\$' \$U the F!\$g c\$p% \$U the Uu!! bu&!d &sQ 0<7000028. 2he s!\$t
m&'&mum LS4 &sQ 0<0. 2he d&saste# s!\$t m&'&mum LS4 &sQ 0<0. 2he !\$g!ca! s!\$t

m&'&mum LS4 &sQ 0<0.

_2023707728 09Q43Q59aQbeg&' bu&!d tab!espace !&st

_2023707728 09Q43Q59aQR '&sh bu&!d tab!espace !&st

_2023707728 09Q43Q59aQbeg&' get F!\$g b% F!\$&st#eam

_2023707728 09Q43Q59aQ chec" &de' 8U% s%stem success

_2023707728 09Q43Q59aQ se' d S2-32_3)1L(5-2(64 0<7000000 success

_2023707728 09Q43Q59aQ "eepa!&/e message &s #ece&/ed

_2023707728 09Q43Q59aQ "eepa!&/e message &s #ece&/ed

_2023707728 09Q44Q04aQgs_basebac"upQ base bac"up successUu!!%

```
[omm@isofnode2 back]$ ll
total 5008
-rw-----. 1 omm dbgrp      206 Jul 28 09:43 backup_label
drwx-----. 5 omm dbgrp       41 Jul 28 09:44 base
-rw-----. 1 omm dbgrp    4399 Jul 28 09:44 cacert.pem
drwx-----. 2 omm dbgrp    4096 Jul 28 09:44 global
-rw-----. 1 omm dbgrp 4915200 Jul 28 09:44 gswlm_userinfo.cfg
-rw-----. 1 omm dbgrp    21012 Jul 28 09:44 mot.conf
drwx-----. 2 omm dbgrp       26 Jul 28 09:43 pg_clog
drwx-----. 2 omm dbgrp       26 Jul 28 09:43 pg_csnlog
-rw-----. 1 omm dbgrp        0 Jul 28 09:44 pg_ctl.lock
drwx-----. 2 omm dbgrp        6 Jul 28 09:44 pg_errorinfo
-rw-----. 1 omm dbgrp    4587 Jul 28 09:44 pg_hba.conf
-rw-----. 1 omm dbgrp    4587 Jul 28 09:44 pg_hba.conf_bak
-rw-----. 1 omm dbgrp    4587 Jul 28 09:44 pg_hba.conf.bak
-rw-----. 1 omm dbgrp    1024 Jul 28 09:44 pg_hba.conf.lock
-rw-----. 1 omm dbgrp    1636 Jul 28 09:44 pg_ident.conf
drwx-----. 4 omm dbgrp       39 Jul 28 09:44 pg_llog
drwx-----. 3 omm dbgrp       24 Jul 28 09:43 pg_location
drwx-----. 2 omm dbgrp       35 Jul 28 09:44 pg_logical
drwx-----. 4 omm dbgrp       36 Jul 28 09:43 pg_multixact
drwx-----. 2 omm dbgrp       26 Jul 28 09:43 pg_notify
drwx-----. 2 omm dbgrp        6 Jul 28 09:44 pg_repslot
drwx-----. 2 omm dbgrp        6 Jul 28 09:43 pg_serial
drwx-----. 2 omm dbgrp        6 Jul 28 09:43 pg_snapshots
drwx-----. 2 omm dbgrp       25 Jul 28 09:44 pg_stat_tmp
drwx-----. 2 omm dbgrp       58 Jul 28 09:44 pg_tblspc
drwx-----. 2 omm dbgrp        6 Jul 28 09:43 pg_twophase
-rw-----. 1 omm dbgrp        4 Jul 28 09:44 PG_VERSION
drwx-----. 2 omm dbgrp        6 Jul 28 09:44 pg_xlog
[omm@isofnode2 back]$
```

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Ù X m o ! K ; -L ! B > w x · <\$pt<p#\$bac"up<

_ \$mm ` &s\$+ '\$de2 \$ptaS gs_p#\$bac"up &' &t 7* <\$pt<p#\$bac"up
(4>6Q *ac"up cata!\$g Y<\$pt<p#\$bac"upY successUu!!% &' &ted
_ \$mm ` &s\$+ '\$de2 p#\$bac"upaS !!
t\$ta! 0
d#DF777777. 2 \$mm dbg#p 6 ?u! 28 10Q37 bac"ups
d#DF777777. 2 \$mm dbg#p 6 ?u! 28 10Q37 Da!

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Ý ý ú © m o Ë Â gs_p#\$bac"up § î è Ò ý ú m o w x X ¯ ú
Ë © m o Â w x · <\$pt<ssedb1<data<db1 Â
_ \$mm ` &s\$+ '\$de2 p#\$bac"upaS gs_p#\$bac"up add7&' sta'ce 7* <\$pt<p#\$bac"up< 7
D<\$pt<ssedb1<data<db1< 77&' sta'ce &' sta'ce_!\$ca!
(4>6Q (' sta'ce Y&' sta'ce_!\$ca!Y successUu!!% &' &ted
_ \$mm ` &s\$+ '\$de2 bac"upsaS !!
t\$ta! 0
d#DF777777. 3 \$mm dbg#p 45 ?u! 28 11Q44 &' sta'ce_!\$ca!

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_ \$mm ` &s\$+ '\$de2 &' sta'ce_!\$ca!aS gs_p#\$bac"up bac"up 7* <\$pt<p#\$bac"up< 7' ce_!\$s!\$3p!\$ca!

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_ \$mm ` &s\$+ '\$de2 &'sta'ce_!\$ca!aS gs_p#\$bac"up set7c\$'Rg 7* <\$pt<p#\$bac"up< 77

&'sta'ceA&'sta'ce_!\$ca! 7d testdb 7p 26000

_ \$mm ` &s\$+ '\$de2 &'sta'ce_!\$ca!aS cat pg_p#\$bac"up.c\$'U

d *ac"up &'sta'ce &'U\$#ma8\$'

pgdata A <\$pt<&ssedb1<data<db1

s%stem7&de '8Re# A 3423299692713438

d 5\$' 'ec8\$' pa#amete#s

pgdatabase A testdb

pgp\$#t A 26000

_ \$mm ` &s\$+ '\$de2 &'sta'ce_!\$ca!aS gs_p#\$bac"up bac"up 7* <\$pt<p#\$bac"up< 77

&'sta'ce &'sta'ce_!\$ca! 7d testdb 7b >OLL

(4>6Q *ac"up sta#tb gs_p#\$bac"up /e#s!\$'Q 2.4.2B &'sta'ceQ &'sta'ce_!\$ca!B bac"up (DQ

3:G 9) ;B bac"up m\$deQ >OLLB Da! m\$deQ S23) - 9B #em\$teQ Ua!seB c\$mp#ess7

a!g\$#&thmQ '\$'eB c\$mp#ess7!e/e!Q 1

L6 , Q *ac"up des8 'a8\$' &s &'&8a!&Med

L6 , Q 2h&s &ssedb &'sta'ce Das &'&8a!&Med D&th data b!\$c" chec"sums. Data b!\$c"

c\$##up8\$' D&!! be detected

L6 , Q Database bac"up sta#t

L6 , Q sta#ted st#eam&'g ; -L at 0<9000000 (8me!&'e 1)

_2023707728 11Q44Q57aQ chec" &de '8U% s%stem success

_2023707728 11Q44Q57aQ se'd S2- 32_3) 1L(5-2(64 0<9000000 success

_2023707728 11Q44Q57aQ "eepa!&/e message &s #ece&/ed

(4>6Q 1 , D-2- s&MeQ 620 9 *

(4>6Q Sta#t t#a' sle###'g data R!es

_2023707728 11Q44Q58aQ "eepa!&/e message &s #ece&/ed

L6 , Q 5#ea8'g page heade# map

h<\$pt<p#\$bac"up<bac"ups<&'sta'ce_!\$ca!<3:G 9) ; <page_heade#_maph

_2023707728 11Q45Q03aQ "eepa!&/e message &s #ece&/ed

_2023707728 11Q45Q08aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q13aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q18aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q23aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q28aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q33aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q38aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q44aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q49aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q45Q55aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q46Q01aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q46Q06aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q46Q11aQ "eepa!%/e message &s #ece%/ed
_2023707728 11Q46Q17aQ "eepa!%/e message &s #ece%/ed
(4>6Q Data R!es a#e t#a 's!e##edB 8me e!apsedQ 1mQ20s
(4>6Q Da!t U\$# pg_st\$P_bac"up()
(4>6Q pg_st\$P bac"up() success!u!!% eFecuted
L6 , Q st\$P_!s'Q 0<9000308
L6 , Q L\$"\$&'g U\$# LS4 0<9000308 &' segme'tQ 000000010000000000000009
(4>6Q ; a!t U\$# LS4 0<9000308 &' st#eamed ; -L segme't
<\$pt<p#\$bac"up<bac"ups<&'sta'ce_!\$ca!<3:G 9) ; <database<pg_F!\$g<00000001000
00000000000009
L6 , Q >\$u'd ; -L segme'tQ
<\$pt<p#\$bac"up<bac"ups<&'sta'ce_!\$ca!<3:G 9) ; <database<pg_F!\$g<00000001000
00000000000009
L6 , Q 2h#ead _0aQ 6pe'&'g ; -L segme't
h<\$pt<p#\$bac"up<bac"ups<&'sta'ce_!\$ca!<3:G 9) ; <database<pg_F!\$g<00000001000
00000000000009h
L6 , Q >\$u'd LS4Q 0<9000308
L6 , Q R'&shed st#eam&'g ; -L at 0<- 000000 (8me!&'e 1)
L6 , Q , eg 'g the 3ec\$/e#% 2&me U#\$m ; -L

L6 , Q 2h#ead _0aQ 6pe ' & ' g ; -L segme't
h<\$pt<p#\$bac"up<bac"ups<&'sta'ce_!\$ca!<3:G9) ; <database<pg_F!\$g<00000001000
0000000000009h

(4>6Q S% ' c& ' g bac"up R!es t\$ d&s"

(4>6Q *ac"up R!es a#e s% ' ced 8me e!apsedQ 0

(4>6Q Ha!da8 ' g bac"up 3:G9) ;

(4>6Q *ac"up 3:G9) ; data R!es a#e /a!&d

(4>6Q *ac"up 3:G9) ; #es&de't s&MeQ 6369 *

(4>6Q *ac"up 3:G9) ; c\$mp!eted

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_ \$mm ` &s\$+ '\$de2 &'sta'ce_!\$ca!aS gs_p#\$bac"up sh\$D 7* <\$pt<p#\$bac"up< 77
&'sta'ce &'sta'ce_!\$ca!

AA
AA
AAAAAA

>('sta'ce He#s&\$' (D 3ec\$/e#% 2&me 9\$de ; -L 9\$de 2L(2&me Data
; -L .#a8\$ Sta#t LS4 St\$p LS4 2%pe Status

AA
AA
AAAAAA

>&'sta'ce_!\$ca! 9.2 3:G4G7 2023707728 12Q07Q58E08 >OLL S23) - 9 1<0 6s
6209 * 169 * 1.00 0<D000028 0<D0001)8 >(L) 6=

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_ \$mm ` &s\$+ '\$de2 caS gs !7d testdb 7p 26000 7#

gs ! ((&ssedb 5.0.0 bu!d 4ec82cbe) c\$mp!ed at 2023707727 09Q58Q20 c\$mm&t 0 !ast
m#)

4\$'7SSL c\$' 'ec8\$' (SSL c\$' 'ec8\$' &s #ec\$mmme'ded Dhe' #e u&#&'g h&gh7secu#&t%)

2%pe hhe!ph U\$# he!p.

[illegible]

```
>>>>2ab!e hpub!&c.test1h
>5$!um' ^ 2%pe ^ 9 $d&Re#s
77777777E77777777E7777777777
>c$! ^ &' tege# ^
```

¥ , f m o

\$mm `&s\$+ '\$de2 & 'sta'ce!\$calaS gs_p#\$bac"up bac"up 7* <\$pt<p#\$bac"up< 77
 &'sta'ce &'sta'ce_!\$ca! 7d testdb 7b 123 -5=
 (4>6Q *ac"up sta#tB gs_p#\$bac"up /e#s!\$'Q 2.4.2B &'sta'ceQ &'sta'ce_!\$ca!B bac"up (DQ
 3:G402B bac"up m\$deQ 123 -5=B Da! m\$deQ S23) - 9B #em\$teQ Ua!seB c\$mp#ess7
 alg\$#&thmQ '\$'eB c\$mp#ess7!e/e!Q 1
 L6 ,Q *ac"up des8'a8\$' &s &'&8a!&Med
 L6 ,Q 2h&s &ssedb &'sta'ce Das &'&8a!&Med D&th data b!\$c" chec"sums. Data b!\$c"
 c\$##up8\$' D&!! be detected
 L6 ,Q Database bac"up sta#t
 L6 ,Q Latest /a!&d >OLL bac"upQ 3:G 9) ;
 (4>6Q 1a#e't bac"upQ 3:G 9) ;
 L6 ,Q sta#ted st#eam&'g ; -L at 0<*000000 (8me!&'e 1)

_2023707728 11Q58Q06aQ chec" &de '8U% s%stem success
_2023707728 11Q58Q06aQ se 'd S2-32_3)1L(5-2(64 0<*000000 success
_2023707728 11Q58Q06aQ "eepa!&/e message &s #ece&/ed
(4>6Q 1, D-2- s&MeQ 620 9 *
L6 , Q 5u##e 't t!&Q 1
L6 , Q 1a#e 't sta#t_!s' Q 0<9000028
L6 , Q sta#t_!s' Q 0<*000028
(4>6Q)Ft#ac8 'g pagemap \$U cha 'ged b!\$c"s
(4>6Q cha 'ge b&tmap sta#t !s' !\$ca8\$' &s 0<9000028
(4>6Q cha 'ge b&tmap e 'd !s' !\$ca8\$' &s 00000000<0*000028
(4>6Q 1agemap successUu!!% eFt#acted& 8me e!apsedQ 0 sec
_2023707728 11Q58Q06aQ "eepa!&/e message &s #ece&/ed
(4>6Q Sta#t t#a 's!e##&' g data R!es
_2023707728 11Q58Q11aQ "eepa!&/e message &s #ece&/ed
_2023707728 11Q58Q16aQ "eepa!&/e message &s #ece&/ed
(4>6Q Data R!es a#e t#a 's!e##ed& 8me e!apsedQ 13s
(4>6Q Da&t U\$# pg_st\$P_bac"up()
(4>6Q pg_st\$P bac"up() successUu!!% eFecuted
L6 , Q st\$P_!s' Q 0<*0001)8
L6 , Q L\$"\$&' g U\$# LS4 0<*0001)8 &' segme 'tQ 000000010000000000000000*
(4>6Q ; a&t U\$# LS4 0<*0001)8 &' st#eamed ; -L segme 't
<\$pt<p#\$bac"up<bac"ups<&' sta 'ce_!\$ca!<3:G402<database<pg_F!\$g<0000000100000
0000000000*
_2023707728 11Q58Q24aQ "eepa!&/e message &s #ece&/ed
L6 , Q ` LS4 0PPPPD PP\$ptd ac" h00S4 0 U0Pfa 'ce_!\$ca!<3:G402<

L6 , Q R ' & shed st#eam&' g ; -L at 0<5000000 (8me!&' e 1)
L6 , Q , e g ' g the 3ec\$/e#% 2&me U#&m ; -L
L6 , Q 2h#ead _0aQ 6pe '&' g ; -L segme't
h<\$pt<p#&bac"up<bac"ups<&' sta' ce_!\$ca!<3:G402<database<pg_F!\$g<000000010000
000000000000*h
(4>6Q S% ' c&' g bac"up R!es t\$ d&s"
(4>6Q *ac"up R!es a#e s% ' ced& 8me e!apsedQ 0
(4>6Q Ha!&da8 ' g bac"up 3:G402
(4>6Q *ac"up 3:G402 data R!es a#e /a!&d
(4>6Q *ac"up 3:G402 #es&de ' t s&MeQ 273 9 *
(4>6Q *ac"up 3:G402 c\$mp!eted
4 f m o g ,
_ \$mm ` &s\$+ '\$de2 &' sta' ce_!\$ca!aS gs_p#&bac"up sh\$D 7* <\$pt<p#&bac"up< 77
&' sta' ce &' sta' ce_!\$ca!
AA
AA
AAAAAA
>(' sta' ce He#s&\$' (D 3ec\$/e#% 2&me 9\$de ; -L 9\$de 2L(2&me Data
; -L .#a8\$ Sta#t LS4 St\$p LS4 2%pe Status
AA
AA
AAAAAA
>&' sta' ce_!\$ca! 9.2 3:G4(7 2023707728 12Q08Q32E08 123-5= S23)- 9 1<1 6s
257 9 * 16 9 * 1.00 0<>000028 0<>0001)8 >(L) 6=
>&' sta' ce_!\$ca! 9.2 3:G4G7 2023707728 12Q07Q58E08 >OLL S23)- 9 1<0 6s
620 9 * 16 9 * 1.00 0<D000028 0<D0001)8 >(L) 6=

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_ \$mm ` &s\$+ '\$de2 &' sta' ce_!\$ca!aS gs_p#\$bac"up me#ge 7* <\$pt<p#\$bac"up< 77
&' sta' ce &' sta' ce_!\$ca! 7& 3:G4(7
(4>6Q 9e#ge sta#ted
(4>6Q 9e#g&' g bac"up 3:G4(7 D&th pa#e' t cha&'
(4>6Q Ha!&date pa#e' t cha&' U\$# bac"up 3:G4(7
(4>6Q Ha!&da8' g bac"up 3:G4G7
(4>6Q *ac"up 3:G4G7 data R!es a#e /a!&d
(4>6Q Ha!&da8' g bac"up 3:G4(7
(4>6Q *ac"up 3:G4(7 data R!es a#e /a!&d
L6 , Q 3est\$#e d&#ect\$#&es a' d s% m!&' "s... &'
<\$pt<p#\$bac"up<bac"ups<&' sta' ce_!\$ca!<3:G4G7<database
(4>6Q Sta#t me#g&' g bac"up R!es
L6 , Q 5#ea8' g page heade# map
h<\$pt<p#\$bac"up<bac"ups<&' sta' ce_!\$ca!<3:G4G7<page_heade#_map_tmph
(4>6Q *ac"up R!es a#e successUu!!% me#ged& 8me elapsedQ 8s
(4>6Q De!eteQ 3:G4(7 2023707728 12Q08Q32E08
L6 , Q 3e' ame <\$pt<p#\$bac"up<bac"ups<&' sta' ce_!\$ca!<3:G4G7 t\$
<\$pt<p#\$bac"up<bac"ups<&' sta' ce_!\$ca!<3:G4(7
(4>6Q 3e' ame me#ged Uu!! bac"up 3:G4G7 t\$ 3:G4(7
(4>6Q Ha!&da8' g bac"up 3:G4(7
(4>6Q *ac"up 3:G4(7 data R!es a#e /a!&d
(4>6Q 9e#ge \$U bac"up 3:G4(7 c\$mp!eted
_ \$mm ` &s\$+ '\$de2 &' sta' ce_!\$ca!aS !!
t\$ta! 4
7#D777777. 1 \$mm dbg#p 159 ?u! 28 11Q44 pg_p#\$bac"up.c\$' U
d#DF777777. 3 \$mm dbg#p 97 ?u! 28 12Q10 3:G4(7

¥ û p q

_ \$mm ` &s\$+ '\$de2 caS gs !7d p\$stg#es 7p 26000 7#
gs ! ((&ssedb 5.0.0 bu!d 4ec82cbe) c\$mp!ed at 2023707727 09Q58Q20 c\$mm&t 0 !ast
m#)

4\$'7SSL c\$' ' ec8\$' (SSL c\$' ' ec8\$' &s #ec\$mme' ded Dhe' #e u&#&'g h&gh7secu#&t%)
2%pe hhe!ph U\$# help.

&ssedbAd d#\$p database testdbC

D361 D-2- * -S)

_ \$mm ` &s\$+ '\$de2 caS gs !7d testdb 7p 26000 7#

gs !Q>-2-LQ database htestdbh d\$es '\$t eF&st

- #est\$#e %Š — v h i (SS)D* v û db1 w x

_ \$mm ` &s\$+ '\$de2 caS gs_ct! st\$p 7D <\$pt<&ssedb1<data<db1

_2023707728 12Q18Q57.916a_79294a_a_gs_ct!aQ gs_ct! st\$pped Bdatad&# &s

<\$pt<&ssedb1<data<db1

Da&8'g U\$# se#/e# t\$ shut d\$D' d\$'e

se#/e# st\$pped

_#\$St ` &s\$+ '\$de2 cad cd <\$pt<&ssedb1<data

_#\$St ` &s\$+ '\$de2 dataad m/ db1 db1_ba"

Å , #est\$#e p q å ë —© g ,

_ \$mm ` &s\$+ '\$de2 &'sta'ce_!\$ca!aS gs_p#\$bac"up #est\$#e 7* <\$pt<p#\$bac"up< 77

&'sta'ce &'sta'ce_!\$ca! 7D <\$pt<&ssedb1<data<db1 7& 3:G4(7

L6 , Q 3est\$#e beg&'.

L6 , Q chec" tab!espace d&#ect\$#&es \$U bac"up 3:G4(7

L6 , Q chec" eFte# 'a! d&#ect\$#&es \$U bac"up 3:G4(7

(4>6Q Ha!&da8'g bac"up 3:G4(7

(4>6Q *ac"up 3:G4(7 data R!es a#e /a!&d

L6 , Q 2h#ead _1aQ 6pe'&'g ; -L segme't

h<\$pt<p#\$bac"up<bac"ups<&'sta'ce_!\$ca!<3:G4(7<database<pg_F!\$g<000000010000

00000000000>h

(4>6Q *ac"up 3:G4(7 ; -L segme'ts a#e /a!&d

(4>6Q *ac"up 3:G4(7 &s /a!&d.

(4>6Q 3est\$#&'g the database U#\$m bac"up at 2023707728 12Q08Q31E08

L6 , Q 3est\$#e d&#ect\$#&es a'd s%mi!&' "s... &' <\$pt<&ssedb1<data<db1

(4>6Q Sta#t #est\$# 'g bac"up R!es. 1 , D-2- s!MeQ 636 9 *
L6 , Q Sta#t th#ead 1
(4>6Q *ac"up R!es a#e #est\$#ed. 2#a 's!e#ed b%tesQ 1000 9 *B 8me e!apsedQ 28s
(4>6Q 3est\$#e & 'c#eme 'ta! #a8\$ (!ess &s beNe#)Q 157 J (1000 9 *<636 9 *)
(4>6Q S%'c& 'g #est\$#ed R!es t\$ d&s"
(4>6Q 3est\$#ed bac"up R!es a#e s%'cedB 8me e!apsedQ 1s
(4>6Q 3est\$#e \$U bac"up 3:G4(7 c\$mp!eted.

j k û t u ž p q
_ \$mm ` &s\$+ '\$de2 caS gs_ct! sta#t 7D <\$pt<&ssedb1<data<db1
_2023707728 12Q22Q08.206a_79316a_a_gs_ct!aQ gs_ct! sta#tedBdatad&# &s
<\$pt<&ssedb1<data<db1
_2023707728 12Q22Q12.404a_79316a_a_gs_ct!aQ Da&8 'g U\$# se#/e# t\$ sta#t...
.0 L6 , Q _-!a#m 9 \$du!eaca' ' \$t #ead , -OSS_ ; -34(4 , _2:1) e' /.

0 L6 , Q _-!a#m 9 \$du!eaG\$st 4ameQ &s\$+ '\$de2

0 L6 , Q _-!a#m 9 \$du!eaG\$st (1Q &s\$+ '\$de2. 5\$P% h\$st 'ame d!#ect!% &' case \$U ta"&'g
10s t\$ use \geth\$stb%' ameY Dhe ' <etc<h\$sts d\$es ' \$t c\$' ta&' @G6S2 (10

0 L6 , Q _-!a#m 9 \$du!ea5!uste# 4ameQ db5!uste#

0 L6 , Q _-!a#m 9 \$du!ea('/a!&d data &' -!a#m(tem R!ei 3ead ala#m) 'g!&sh 'ame
Ua&!edi !&'eQ 57

0 ; -34(4 , Q Ua&!ed t\$ \$pe' Ueatu#e c\$' t#\$! R!eB please chec" Dhethe# &t eF!stsQ
>!e4ameA(SS)D*./e#s!\$'B)##' \$A2B)##messageA4\$ such R!e \$# d!#ect\$#%.

0 ; -34(4 , Q Ua&!ed t\$ pa#se Ueatu#e c\$' t#\$! R!eQ &ssedb./e#s!\$'.

0 ; -34(4 , Q >a&!ed t\$!\$ad the p#\$duct c\$' t#\$! R!eB s\$ &ssedb ca' ' \$t d&s8 'gu!sh
p#\$duct /e#s!\$'.

0 L6 , Q bb\$F_dump_path &s set t\$ <\$pt<&ssedb1<c\$#eR!e<

2023707728 12Q22Q13.187 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 D*010 0_3)D6a L6 ,Q 3ec\$/e#% pa#a!!e!&smB cpu c\$u't A 2B maF A 4B actual
A 2

2023707728 12Q22Q13.187 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 D*010 0_3)D6a L6 ,Q 5\$'Rg3ec\$/e#%1a#a!!e!&smB
t#ue_maF_#ec\$/e#%_pa#a!!e!&smQ4B maF_#ec\$/e#%_pa#a!!e!&smQ4

2023707728 12Q22Q13.399 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0_*-5=)4Da L6 ,Q _-!a#m 9\$du!eaca' '\$t #ead
, -0SS_ ; -34(4 ,_2:1) e' /.

2023707728 12Q22Q13.399 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0_*-5=)4Da L6 ,Q _-!a#m 9\$du!eaG\$st 4ameQ &s\$+ '\$de2

2023707728 12Q22Q13.399 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0_*-5=)4Da L6 ,Q _-!a#m 9\$du!eaG\$st (1Q &s\$+ '\$de2. 5\$P%
h\$st'ame d&#ect!% &' case \$U ta"&'g 10s t\$ use Ygeth\$stb%'ameY Dhe' <etc<h\$sts d\$es
'\$t c\$'ta&' @G6S2 (10

2023707728 12Q22Q13.399 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0_*-5=)4Da L6 ,Q _-!a#m 9\$du!ea5!uste# 4ameQ db5!uste#

2023707728 12Q22Q13.399 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0_*-5=)4Da L6 ,Q _-!a#m 9\$du!ea('/a!&d data &' -!a#m(tem R!ei
3ead a!a#m) 'g!&sh 'ame Ua&!edi !&'eQ 57

.2023707728 12Q22Q13.416 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0_*-5=)4Da L6 ,Q !\$aded !&b#a#% hsecu#&t%_p!ug&'h

2023707728 12Q22Q13.418 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 01000 0_*-5=)4Da ; -34(4 ,Q c\$u!d '\$t c#eate a'% G- 251<(1 s\$c"ets

2023707728 12Q22Q13.418 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 01000 0_*-5=)4Da ; -34(4 ,Q c\$u!d '\$t c#eate a'% G- 251<(1 s\$c"ets

2023707728 12022013.421 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0 _*-5=)4Da L6 ,Q ('&t4uma 'uma4\$de4umQ 1
'uma_d&st#bute_m\$deQ '\$'e &'he#&t2h#ead1\$\$!Q 0.

2023707728 12022013.421 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 01000 0 _*-5=)4Da ; -34(4 ,Q >a&led t\$ &'&8a!&Me the mem\$#% p#\$tect U\$#
g_&'sta'ce.aN#aN#_st\$#age.cst\$#e_buXe#s (16 9b%tes) \$# sha#ed mem\$#% (1188
9b%tes) &s !a#ge#.

2023707728 12022014.278 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0 _5-5G)a L6 ,Q set data cache s&Me(12582912)

2023707728 12022017.650 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0 _S) , 9)42_1- ,)a L6 ,Q Segme't7page c\$'sta'tsQ D>_9 -1_S(.)Q
8156B D>_9 -1_*(2_542Q 65248B D>_9 -1_ ,3601_)K2)42SQ 4175872B
(1*L65=_S(.)Q 8168B)K2)42S_1)3_(1*L65=Q 1021B (1*L65=_ ,3601_S(.)Q 4090B
*92_G)-D)3_L)H)L0_262-L_1- ,)SQ 8323072B *'t9 ap)'t#%4umbe#1e#!\$c"Q
2038B *'t9 ap*!\$c"4umbe#Q 25B *'t* &t9 aF9 ap5' tQ 512

2023707728 12022018.419 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0 _*-5=)4Da L6 ,Q &ssedbQ Us%'c R!e
h<\$pt<&ssedb1<data<db1<&ssedb.state.temph success

2023707728 12022018.419 64c34274.1 _u''''\$D'a 139730238255360 _u''''\$D'a 0
d'_6001 00000 0 _*-5=)4Da L6 ,Q c#eate &ssedb state R!e successQ db
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