ECS Configuration Change Request

1. Originator	2. Log Date:	3. CCR #:	4. Rev:	5. Tel:	6. Rm #:	7. Dept.
Wenhsing Yang	**10/10/02**	02-0893		301-883-4071	3204C	DEV/DDM

8. CCR Title: To move SDSRV OPS database to new devices in GDAAC's ACG sybase server

9. Originator Signature/Date	10. Class	11. Type:	12. Need Date: 2002-10-16
Wenhsing Yang /s/ 10/10/02	II	CCR	

13. Office Manager Signature/Date	14. Category of Change:	15. Priority: (If "Emergency" fill in Block 27).
Peter MacHarrie /s/ 10/10/02	Update ECS Baseline Doc.	Routine

16. Documentation/Drawings Impacted *(Review and submit checklist):*	17. Schedule Impact:	18. CI(s) Affected:
920-TDG-009	None	ACMHW

19. Release Affected by this Change:	20. Date due to Customer:	21. Estimated Cost:
6A	2002-10-16	None - Under 100K

22. Source Reference: ☐ **NCR (attach)** ☐ **Action Item** ☐ **Tech Ref.** ☐ **GSFC** ☒ **Other:**
To improve I/O performance for EcDsScienceDataServer1 database in GDAAC

23. Problem: (use additional Sheets if necessary)
The sybase monitoring results show that improving I/O performance is needed on g0acg01 sybase ASE in GDAAC

24. Proposed Solution: (use additional sheets if necessary)
Move the EcDsScienceDataServer1 database to recently installed devices on g0acg01 sybase ASE in GDAAC

25. Alternate Solution: (use additional sheets if necessary)
None

26. Consequences if Change(s) are not approved: (use additional sheets if necessary)
The EcDsScienceDataServer1 database I/O perfomance will be continuously slow in GDAAC.

27. Justification for Emergency (If Block 15 is "Emergency"):

28. Site(s) Affected: ☐ EDF ☐ PVC ☐ VATC ☐ EDC ☒ GSFC ☐ LaRC ☐ NSIDC ☐ SMC ☐ AK ☐ JPL ☐ EOC ☐ IDG Test Cell ☐ Other

29. Board Comments:	30. Work Assigned To:	31. CCR Closed Date:

32. EDF/SCDV CCB Chair (Sign/Date):	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
33. M&O CCB Chair (Sign/Date): **Gary Gavigan /s/ 10/15/02**	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
34. ECS CCB Chair (Sign/Date):	**Disposition:** Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ESDIS

ADDITIONAL SHEET

CCR #: **Rev:** **Originator:** Wenhsing Yang

Telephone: 301-883-4071 **Office:** 3204C

Title of Change: To move SDSRV OPS database to new devices in GDAAC's ACG sybase server

To move the EcDsScienceDataServer1 database to new devices in GDAAC's sybase ACG g0acg01_srvr,

Before 10/16/2002 maintenance window create a new database SDSRV_Hold using the new devices, di_dev23 through di_dev28,
with each device fragment matching the current SRSRV OPS database's each device fragment, same size and same sequence.
Test the SDSRV_Hold.

Dump the OPS database and load it to SDSRV_Hold.
Dump and load the transaction log since the db dump.
Then, during a maintenance window, dump and load the last set of transactions from EcDsScienceDataServer1 to SDSRV_Hold.

Run sp_dbcc_configreport and save the output.
Run sp_dbcc_deletedb EcDsScienceDataServer1.

Unbind EcDsScienceDataServer1's objects from its named caches.

Rename EcDsScienceDataServer1 to SDSRV_old.
Rename the database SDSRV_Hold to EcDsScienceDataServer1.

Drop the database SDSRV_old.

Reconfigure EcDsScienceDataServer1 in dbccdb:
sp_dbcc_updateconfig EcDsScienceDataServer1 for

"max worker processes",
"dbcc named cache",
"scan workspace", and
"text workspace".

Bind EcDsScienceDataServer1's objects to its named caches.

Appendix (1):

Subject:
CCR for moving GSF SdSrv OPS DB
Date:
Wed, 09 Oct 2002 11:40:29 -0400
From:
Peter MacHarrie <pmacharr@eos.east.hitc.com>
To:
"wyang@eos.hitc.com" <wyang@eos.east.hitc.com>, fenichel@gsfcsrvr4.gsfcmo.ecs.nasa.gov
CC:

"Miller, Randall" <randallm@eos.east.hitc.com>, "Fox, Steve" <sfox@eos.east.hitc.com>

Wenhsing,

Please write a CCR to move Science Data Server OPS database
to the new RAID.

Lou we determine the final configuration based on a testing the
moving prior to the final implementation.

This is being done to improve the IO performance of the SdSrv
database.

The plan is to dump a load the OPS db. Then dump and load
the transaction log since the db dump. Then, during a maintenance
window, dump and load the last set of transactions, and rename
the database. Lou will verify the process and the db prior to
actual implementation.

Thanks,

Peter

Appendix (2):

Subject:
sdsrv script
Date:
Thu, 10 Oct 2002 10:24:42 -0400
From:
Lou Fenichel <fenichel@gsfcsrvr4.gsfcmo.ecs.nasa.gov>
To:
<wyang@eos.east.hitc.com>

```
#!/bin/ksh

#
# name: create_NewSDSRVOPS.ksh
# purpose: use the new space to create SDSRV_Hold
#     1. After/during creation, run a full database dump on OPS
#     2. Load SDSRV_Hold from dump, make sure dump script for OPS is off
#     3. Bring system down, dump transaction log from OPS
#     4. Load transaction log to SDSRV_Hold
#     5. Rename EcDsScienceDataServer1->OldEcDsScienceDataServer1
#     6. Rename SDSRV_Hold->EcDsScienceDataServer1
#     7. Bring system up
#     8. After approximately 1 week, drop SDSRV_Hold
# revised: 10/07/2002 lhf, creation

# get password
printf "sa passwd: "
stty -echo
read PASSWORD
stty echo
printf "\n"
```

```
YMD=`date -u +%y%m%d%H%M%S`

isql -w350 -Usa -P$PASSWORD -Sg0acg01_srvr -oNewSDSRVOPS.out.$YMD << EOF
-- data=400      log=100
create database SDSRV_Hold on
 di_dev23=300,di_dev23=100
 log on log_dev35=100 for load
go
-- data=2100     log=400
alter database SDSRV_Hold on di_dev23=1700 log on log_dev35=300 for load
go
-- data=4100     log=1000
alter database SDSRV_Hold on di_dev23=2000 log on log_dev35=600 for load
go
-- data=5100     log=1000
alter database SDSRV_Hold on di_dev23=1000    for load
go
-- data=6100     log=1000
alter database SDSRV_Hold on di_dev23=1000    for load
go
-- data=8100     log=1000
alter database SDSRV_Hold on di_dev23=2000    for load
go
-- data=12100    log=1000
alter database SDSRV_Hold on di_dev23=4000    for load
go
-- data=16430    log=1000
alter database SDSRV_Hold on di_dev23=4330    for load
go
-- data=20430    log=1000
alter database SDSRV_Hold on di_dev23=4000    for load
go
-- data=24430    log=1000 -- at this point di_dev23 is 24430 of 32000 or
76% used
alter database SDSRV_Hold on di_dev23=4000    for load
go
-- data=28760    log=1000 (di_dev24=4330)
alter database SDSRV_Hold on di_dev24=4330    for load
go
-- data=32760    log=1000 (di_dev24=8330)
alter database SDSRV_Hold on di_dev24=4000    for load
go
-- data=37090    log=1000 (di_dev24=12660)
alter database SDSRV_Hold on di_dev24=4330    for load
go
-- data=41090    log=1000 (di_dev24=16660)
alter database SDSRV_Hold on di_dev24=4000    for load
go
-- data=45090    log=1000 (di_dev24=20990) -- at this point di_dev24 is
20990 or 65% used
alter database SDSRV_Hold on di_dev24=4000    for load
go
-- data=49090    log=1000 (di_dev25=4000)
alter database SDSRV_Hold on di_dev24=4000    for load
go
-- data=53090    log=1000 (di_dev25=8000)
alter database SDSRV_Hold on di_dev24=4000    for load
go
-- data=57090    log=1000 (di_dev25=12000)
alter database SDSRV_Hold on di_dev25=4000    for load
```

```
go
-- data=61090    log=1000 (di_dev25=16000)
alter database SDSRV_Hold on di_dev25=4000    for load
go
-- data=65090    log=1000 (di_dev25=20000)
alter database SDSRV_Hold on di_dev25=4000    for load
go
-- data=69090    log=1000 (di_dev25=24000) -- at this point di_dev25 is
24000 or 75% used
alter database SDSRV_Hold on di_dev25=4000    for load
go
-- data=73090    log=1000 (di_dev26=4000)
alter database SDSRV_Hold on di_dev26=4000    for load
go
-- data=77090    log=1000 (di_dev26=8000)
alter database SDSRV_Hold on di_dev26=4000    for load
go
-- data=81090    log=1000 (di_dev26=12000)
alter database SDSRV_Hold on di_dev26=4000    for load
go
-- data=85090    log=1000 (di_dev26=16000)
alter database SDSRV_Hold on di_dev26=4000    for load
go
-- data=89090    log=1000 (di_dev26=20000)
alter database SDSRV_Hold on di_dev26=4000    for load
go
-- data=89590    log=1000 (di_dev26=20500)
alter database SDSRV_Hold on di_dev26=500     for load
go
-- data=90590    log=1000 (di_dev26=21000) -- at this point di_dev26 is
21000 or 65% used
alter database SDSRV_Hold on di_dev26=1000    for load
go
-- data=94590    log=1000 (di_dev27=4000)
alter database SDSRV_Hold on di_dev27=4000    for load
go
-- data=98590    log=1000 (di_dev27=8000)
alter database SDSRV_Hold on di_dev27=4000    for load
go
-- data=102590   log=1000 (di_dev27=12000)
alter database SDSRV_Hold on di_dev27=4000    for load
go
-- data=106590   log=1000 (di_dev27=16000)
alter database SDSRV_Hold on di_dev27=4000    for load
go
-- data=108590   log=1000 (di_dev27=18000)
alter database SDSRV_Hold on di_dev27=2000    for load
go
-- data=111590   log=1000 (di_dev27=21000) -- at this point di_dev27 is
21000 or 65% used
alter database SDSRV_Hold on di_dev27=3000    for load
go
-- data=115590   log=1000 (di_dev28=4000)
alter database SDSRV_Hold on di_dev28=4000    for load
go
-- data=119590   log=1930 (di_dev28=8000)
alter database SDSRV_Hold on di_dev28=4000    log on log_dev35=930
for load
go
-- data=123590   log=1930 (di_dev28=12000)
alter database SDSRV_Hold on di_dev28=4000    for load
```

```
go
-- data=127590   log=1930 (di_dev28=16000)
alter database SDSRV_Hold on di_dev28=4000    for load
go
-- data=131590   log=1930 (di_dev28=20000)
alter database SDSRV_Hold on di_dev28=4000    for load
go
-- data=135590   log=1930 (di_dev28=24000)
alter database SDSRV_Hold on di_dev28=4000    for load
go
sp_spaceleft EcDsScienceDataServer1
go
sp_spaceleft SDSRV_Hold
go
EOF
```