ECS Configuration Change Request

1. Originator	2. Log Date:	3. CCR #:	4. Rev:	5. Tel:	6. Rm #:	7. Dept.
Evan Winston	10/10/00	00-0998	-	301.925.0348	2013	DEV/CO

8. CCR Title: Test Executable 5B.05_DDIST.02 to DAACs, VATC, PVC. Removes possibility of infinite loop and Distribution Threads are not working as expected.

9. Originator Signature/Date	10. Class	11. Type:	12. Need Date: 10Oct2000
10/9/00	II	CCR	

13. Office Manager Signature/Date	14. Category of Change:	15. Priority: (If "Emergency" fill in Block 28).
for Tom Orth 10/9/00	Update ECS Baseline Doc.	Emergency

16. Documentation/Drawings Impacted:	17. Schedule Impact:	18. CI(s) Affected:
N/A	N/A	DDIST

19. Release Affected by this Change:	20. Date due to Customer:	21. Estimated Cost:
5B		None - Under 100K

22. Source Reference: ☒NCR (attach) ☐Action Item ☐Tech Ref. ☐GSFC ☐Other:
NCRs ECSed28435, 27584, and 27993.

23. Problem: (use additional Sheets if necessary)
Problem: 27584 Distribution priority threads are not working as expected, high and very high requests are they are ignored for the low and normal threads.
Impact: Requests high and very high priorities have to be changed to low or normal priority to run.
These threads are not processed due to distribution of primary threads, therefore GDAAC cannot process in OPS.
.28435 - Possibility of infinite loop under high loads. - Redeliver the DDIST TE with this additional correction included.

24. Proposed Solution: (use additional sheets if necessary)
Test Executable 5B.05_DDIST.02 will provide fixes to the problem listed above. TE can be loaded on top of DDIST installations of 5B.03.
See page 3 for a detailed description of the resolution.

25. Alternate Solution: (use additional sheets if necessary)
Take no action now and wait until 5B.06 is available at the DAACs.

26. Consequences if Change(s) are not approved: (use additional sheets if necessary)
DAACs must continue to work around the problems and/or modify operating procedures.

27. Justification for Emergency (If Block 15 is "Emergency"):
Resolves DAAC operational problem.

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): 10/10/00	Disposition: Approved App/Com. Disapproved Withdraw Fwd/ESDIS ERB Fwd/ECS
33. M&O CCB Chair (Sign/Date): 10/10/00	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

ORIGINAL

ADDITIONAL SHEET

CCR #: 00-0998 **Rev:** **Originator:** Evan Winston

Telephone: 301.925.0348 **Office:** DEV/CO

Title of Change: Test Executable 5B.05_DDIST.02 to DAACs, VATC, PVC. Removes possibility of infinite loop and Distribution Threads are not working as expected.

CM: PLEASE, build Sun TAR file for the listed files from the current 5B baseline and provide to the SMC.

executable directory
/ecs/formal/DSS/bin/sun5.5/EcDsDistributionServer
lib directory:
/ecs/formal/DSS/lib/sun5.5
libs:
libDsDdSSh.so
libDsDd8mmTapeSh.so
libDsDdFtpPushSh.so
libDsDdFtpPullSh.so
libDsDdBSh.so

SMC: Receive the TAR file(s) and make available to the DAACs, PVC and VATC.

DAAC Install Instructions:
-- problem exists at all DAACs.

TE can be loaded on top of DDIST installations of 5B.03.
It MUST be reloaded over top of TE 5B.05_STMGT.01installations. TE 5B.05_DDIST.01 is now obsolete.

1. Get File from SMC distribution;

2. UNTAR the files and place in staging area.

3. On the DataDistribution Server Platform do the following using the 'cp' from the command line to replace files:

REPLACE all occurrances of the files included with this TE mode-by-mode, using the same permissions levels and ownerships as previous file.

The EcDsDistribution Server is placed in the following dir.:
/usr/ecs/<mode>/CUSTOM/bin/DSS/

The lib files are placed in the following dir.:
/usr/ecs/<mode>/CUSTOM/lib/DSS/

RESOLUTION of the FIX: NCR 27584
1) The function PriorityQueue::AddRequest interface is changed to exactly match that of its virtual parent so that the polymorphic mechanism used in calling the function actually calls the intended function and does not default to calling merely the parent.

2) Checks have been added to make sure that this condition:
(# of worker threads > Sum of priority threads)
exists at server startup time and at runtime when
priority threads are seized.
(The default # of worker threads is changed to 228
in the mkcfg)

3) New debug output includes a summary of the priority queue
as request are being added and removed from the queue.
(This increases debug output by about 20-40 lines per request)

RESOLUTION of the FIX: NCR 27993
The DsStArchive Retrieve( ) function is now called with the request priority as the argument

CM01AJA00