

Legacy Navy Cash Technical Support Troubleshooting Guide (Versions 1471/3/4)

Legacy Cluster Servers Restart Instructions

One of the most effective methods to get Windows systems back online is a power cycle. This is very efficient in getting things back to a correct state and we ask that you do this before requesting a remote session. We find reboots can be up to 80% successful in resolving issues.

Note – If you're waiting on an EOM batch to complete, rebooting will not speed up or correct this process. Please be aware it can take Shore a few hours to fully process an EOM batch.

Instructions for 1471/3 Navy Cash Versions

The following process involves shutting down just the two Navy Cash Servers while leaving the Storage Array online (Snap Server), if you need to power down the Snap server (power outage), you can use steps from 1474 below.

- 1) Login to Node 1
 - a. If you are unable to login to Node 1 using any of the 3 server accounts that you have a password for, perform a hard shutdown by pressing the power button in for that server until it turns off.
- 2) Once logged into Node 1 perform the following:
 - a. Click the Start Button
 - b. Select Shutdown
 - c. If prompted for a reason, enter reason (i.e., power loss upcoming/proactive power cycle).
- 3) Login to Node 2
 - a. If you are unable to login to Node 2 using any of the 3 server accounts that you have a password for, perform a hard shutdown by pressing the power button in for that server until it turns off.
- 4) Once logged into Node 2 perform the following:
 - a. Press the Start Button
 - b. Select Shutdown
 - c. If prompted for a reason, enter reason (i.e., power loss upcoming/proactive power cycle).
- 5) Once **both** Nodes have shutdown, turn on **ONLY** Node 1.
 - a. Note – If Snap Server is down, start it up and wait a few minutes before bringing Node 1 up.
- 6) Once Node 1 is back up, attempt to login to it as normal and then turn on Node 2.
- 7) Once Node 2 is back up, attempt to login to it as normal.
- 8) If you are unable to login to one or both nodes, contact CSU to have a case opened.
- 9) If you can login to at least 1 node, check the Failover Cluster Manager to see if all the services are showing as online. If services are still showing as Offline and/or failed, proceed to Failover Cluster Issues for All Navy Cash Versions below.

Instructions for 1474 Navy Cash Versions

1474 Shutdown instructions:

1. From Physical Server 2 (MS2-Node 2)
 - a. Close all open windows and shut down server from start menu.
2. From Physical Server 1 (MS1-Node 1)
 - a. Open Internet Explorer
 - b. In address bar type 10.10.10.10 and press enter
 - c. Login to SNAP Server
 - d. Maintenance
 - e. Shutdown/Restart
 - f. Shutdown
 - g. Shutdown
 - h. Close all open windows and shut down server from start menu.

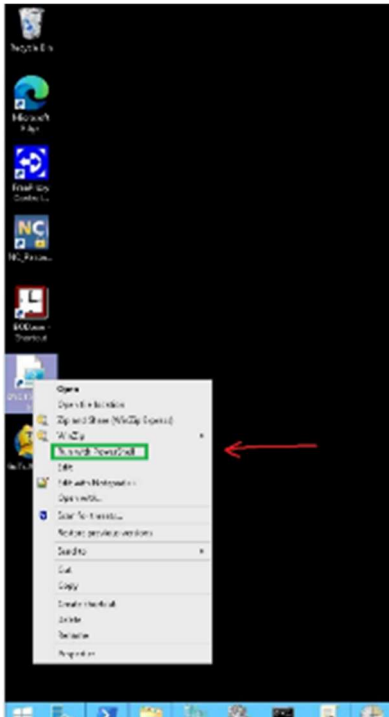
Note if MS 1 is unavailable, do steps 2 a-g on MS2 using 10.10.11.10 in IE.

1474 Power up Instructions:

1. Power up Snap Server by tapping power button on front for no more than 1 second.
 - a. Wait a few minutes for the Snap Server to fully come up before proceeding.
2. Power on Physical Server 1 by tapping power button on front.
 - a. Note – Powering on both servers at the same time will cause issues with Navy Cash as both servers try to take control of the Navy Cash Cluster, only power on Server 1.
3. Power on Physical Server 2 by tapping button on front.
 - a. Login
4. Once everything is powered up completely, open Failover Cluster Manager:
 - a. Check if Cluster came up, otherwise proceed.
 - b. Right click on ncsvr-cl.ncsvr-d.navycash.navy.mil
 - c. More Actions
 - d. Start Cluster

Legacy Navy Cash Health Check

- 1) On the desktop of your servers will be an icon with a name of ONCTS_Checks, you can right click on this and run as PowerShell (if prompted to elevate say yes). This tool will give you some quick troubleshooting automatically.



- 2)
- 3) After it starts up you will have 7 menu options, note all 6 checks can be ran by typing CSU and hitting enter.

 A screenshot of an Administrator Windows PowerShell window. The window title is 'Administrator: Windows PowerShell'. The terminal output shows a decorative ASCII art header for 'CSU Checks v1'. Below the header, it says 'Welcome to CSU Menu'. The main menu is titled '###CSU Checks###' and lists options: '[CSU] for all basic CSU checks' and '###CSU Individual Checks###'. The individual checks are:

- [1] for ping gateway check
- [2] for ping internal check
- [3] for ping snap storage server check
- [4] for COAF flagged checks
- [5] for last system reboot check
- [6] for ping PDC domain controller check

 At the bottom, it asks 'What NavyCash CSU Check would you like to run:' followed by the text 'CSU'.

- 4)
- 5) This will check 6 items and show if they are good or offer suggestions to fix them.
 - a. Gateway – essential for Navy Cash to get files to shore.
 - b. Snap Server – where Navy Cash Database resides.
 - c. Internal Ping Test – If this node can see the other node.
 - d. COAF test – if logs have gotten too big and caused issues.
 - e. System last reboot – if it's been too long since last reboot, rebooting can clear many issues.
 - f. Primary Domain Controller Tests – Can check if a DC is operating properly and might suggest reboot.

```

Administrator: Windows PowerShell

Gateway Ping Test:
Successfully pinged gateway: [redacted] 117.1

Snap server Test - From Host #1:
SUCCESS

Internal Ping Test - From Host #1:
SUCCESS

COAF Tests:
SUCCESS

System Last Reboot Check:
FAIL

Suggested troubleshooting steps:
- It has been more than 24 hours since your last system reboot
- Rebooting your system may help resolve your issue.

Ping Primary Domain Controller Check
Success
Pingged PDC Domain Controller: n1-[redacted].ncsvr-d.navycash.navy.mil
Press any key to close out CSU Checks.

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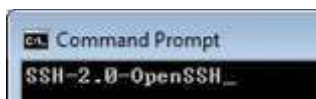
g.

- 6) Follow the suggestions for any failed items, if this doesn't fix your issue proceed to following checks. Note you can re-run a specific check by its number and not run all during follow up troubleshooting.

Port 22 Check for Legacy Navy Cash Legacy Versions

On the Navy Cash Server perform the following steps to verify that port 22 is open.

- 1) Open a command prompt.
- 2) At the 'C:\>' prompt, enter the following line:
 - a. nslookup gppfts.navycash.fiscal.treasury.gov
- 3) You should get a response that indicates 199.169.193.37
- 4) At the 'C:\>' prompt, enter the following line:
 - a. telnet gppfts.navycash.fiscal.treasury.gov 22
- 5) If you get a response back that looks like the following, then port 22 is open for the Navy cash Server:



- 6) If you don't get a response back that looks like one above, then port 22 is not open for the Navy cash Server.
- 7) Repeat the process on the other Navy Cash Server.
- 8) If you don't see the results shown in Step 5 on either node, then you will want to get with the ship ITs to validate the ACL is good on the ship for port 22.
- 9) If the ACL is good, then the ship ITs will need to open a BCR/FSR with the NOC that the ship is connecting to that includes the following information:
 - a. Source IP address – External IP addresses for both Node 1 and Node2
 - b. Destination IP address – 199.169.193.37
 - c. Port – 22
 - d. Protocol – SSH
 - e. Traffic Direction – Two-way (bi-directional)

ACL Check for Legacy Navy Cash Versions

If round trips have not been going through and you are unable to browse the Internet from the Navy Cash server, then the issue may be with the ship/barge ACL entries for the Navy Cash system.

Please have your ITs verify the following entries are in present:

```

access-list 110 permit tcp host <navy-cash node #1 IP> any eq 20
access-list 110 permit tcp host <navy-cash node #1 IP> any eq 21
access-list 110 permit tcp host <navy-cash node #1 IP> any eq 22
access-list 110 permit tcp host <navy-cash node #2 IP> any eq 20
access-list 110 permit tcp host <navy-cash node #2 IP> any eq 21
access-list 110 permit tcp host <navy-cash node #2 IP> any eq 22
access-list 110 permit tcp host <navy-cash node #1 IP> any eq 80
access-list 110 permit tcp host <navy-cash node #2 IP> any eq 80
access-list 110 permit tcp host <navy-cash node #1 IP> any gt 1023
access-list 110 permit tcp host <navy-cash node #2 IP> any gt 1023
access-list 110 permit tcp host <navy-cash node #1 IP> any https 443
access-list 110 permit tcp host <navy-cash node #2 IP> any https 443

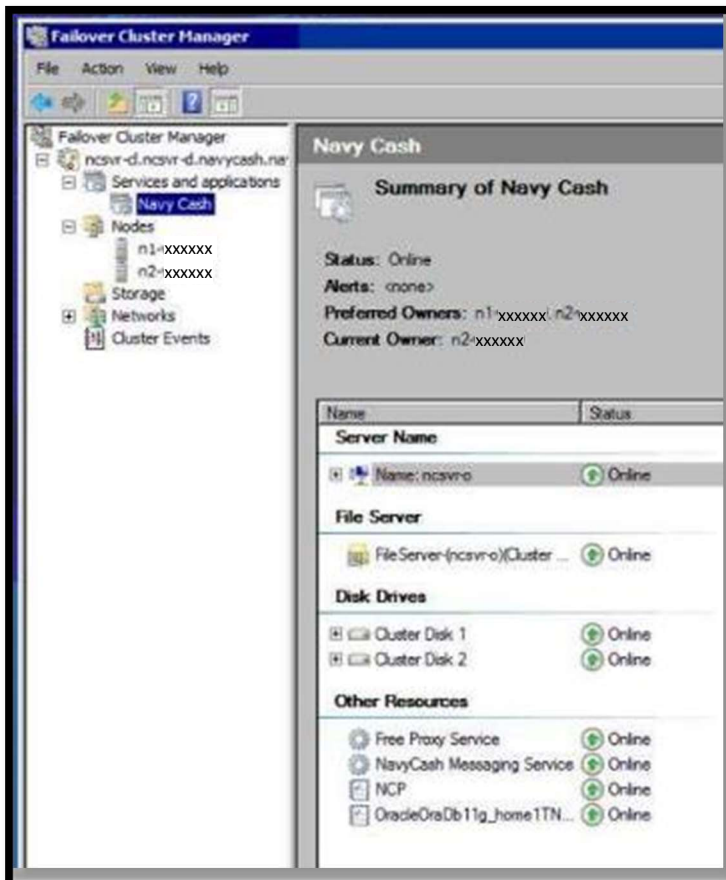
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NOTE: When you apply these statements, be sure that they do not get placed below any deny statements. Also be sure that you use the correct greater than (gt) and equal to (eq) command for each specific line.

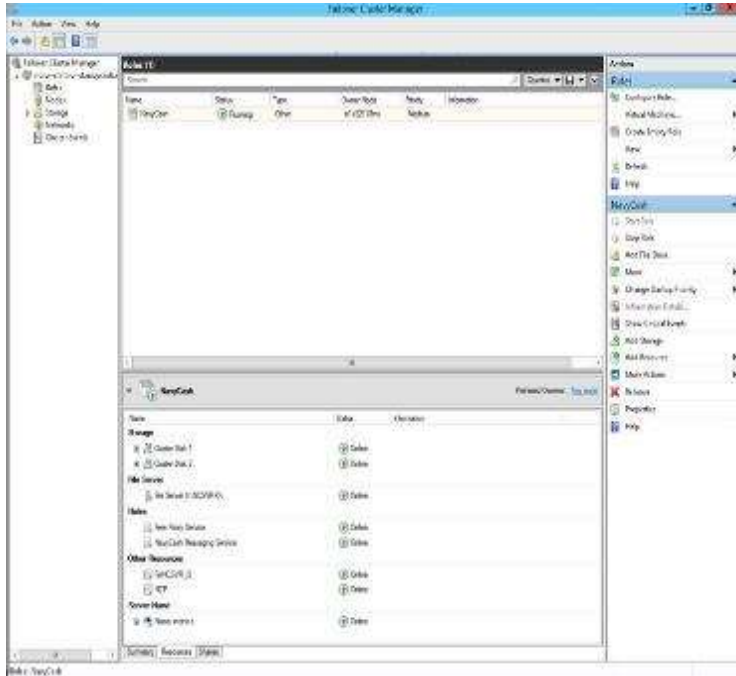
Failover Cluster Issues for Legacy Navy Cash Versions

If the ATMs and POS devices will not come online and the Disbursing Application and IEOD application can't connect, check if all the cluster items are online:

1474/3:



1474:



- 1) If the cluster doesn't show on-line as above examples, execute following.
- 2) Right click on Navy Cash and bring online.
- 3) Wait for Navy Cash cluster to come online, report any errors or which items won't come online to CSU.

Round Trip Restart Aid for Legacy Navy Cash Versions

If your ship has not had a round trip in over 24 hours, please perform the following troubleshooting steps after restart above:

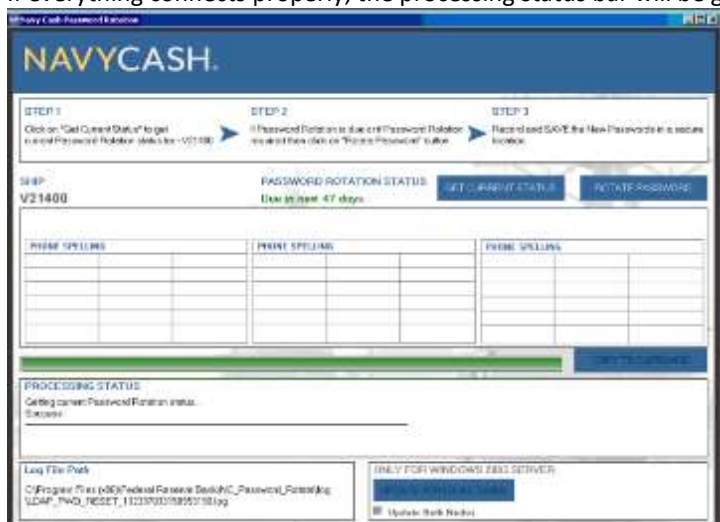
The following needs to be done from the ACTIVE node. Whichever server you see the "F" drive on is the ACTIVE server.

- 1) Check and keep in mind what time the Navy Cash server says it is.
- 2) On the active server, go to the following location in 'My Computer'.
 - A. F:\files\navydata\batproc
- 3) With this folder open, see what files (if any) are present. One of the following scenarios will be what you see (ignore anything that doesn't match the exact file names below, i.e., batch_process.sta.old doesn't count):
 - A. You don't see any files.
 - B. You only see the file named 'batch_process.sta'.
 - C. You see three files named 'batch_process.sta', 'file.pid' and 'sqlnet.output'.
- 4) Open the 'Task Scheduler' program on the desktop and expand the left side out until you can select Navy Cash. Once selected, press the refresh button on the right-hand side of the screen.
- 5) Look for the task called 'Navy Cash Batch' to see what its status is. If the minutes on the server are 00, 20, or 40, then the task should be running. Depending on what step it is on, it could run for a few minutes before it ends.
- 6) Based on what you saw in steps 3 and 5 above will determine what action to take.
 - A. If in step 3 you saw the scenario for 3A or 3B and the Navy Cash Batch was running after refreshing it, then:
 - Click on the 'Navy Cash Batch' then on the right-hand side, press 'End'.
 - Note: Make sure there is no current RT batch file in F:\files\navydata\Work\ folder before ending the job.
 - On the right-hand side, press 'Run'.
 - You should now see the files listed in 3C and the round trips should be good again and will need some time to catch up.
 - B. If in step 3 you saw the scenario for 3C **AND** the date/time for the file.pid and sqlnet.output is close to the servers time **AND** the Navy Cash Batch was running after refreshing it, then:
 - Let it continue to run as it is processing something for the round trip.
 - C. If in step 3 you saw the scenario for 3C **AND** the date/time for the file.pid and sqlnet.output is over an hour old when compared to the servers time **AND** the Navy Cash Batch was running after refreshing it, then:
 - Click on the 'Navy Cash Batch'
 - On the right-hand side, press 'End'
 - Note: Make sure there is no current RT batch file in F:\files\navydata\Work\ folder before ending the job.
 - Switch back to the window where the F:\files\navydata\batproc directory is being displayed.
 - Delete the files (if needed)
 - file.pid & sqlnet.output
 - Switch back to the 'Task Scheduler'.
 - Click on the 'Navy Cash Batch'.
 - On the right-hand side, press 'Run'.
 - Both file.pid and sqlnet.output should re-appear. You should now see all the files listed from 3C and the round trips should be good again and will need some time to catch up.
- 7) Once the 'Navy Cash Batch' task is done, you should either see the scenario for 3A or 3B.
 - A. If you see 3A now, it means that the round trip has completed on the ship and is either between batches or there are no new batches to process.
 - B. If you see 3B now, it means that the round-trip process has started but has not completed yet.

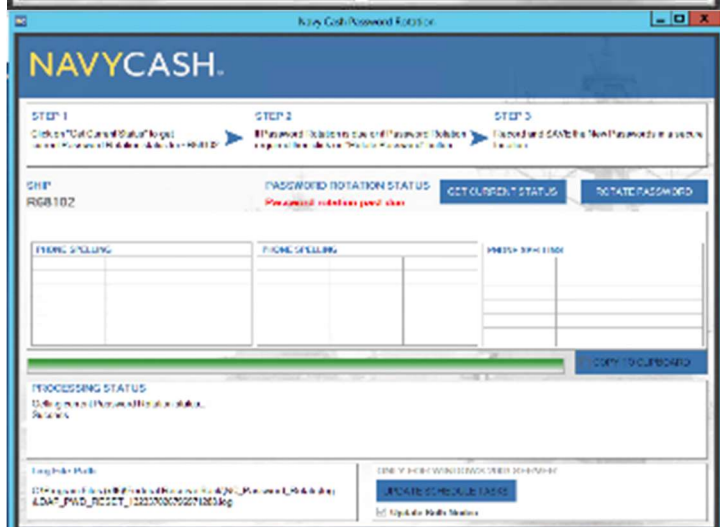
Password Rotation Aid for Legacy Navy Cash Versions (NEVER use Ctrl-Alt-Del through Windows)

Follow these steps to rotate server/node passwords. NOTE: You need Internet access for password rotation to work, if Ship has an internet outage that will need to be resolved first. See if you can reach NavyCash.com from Node 1 to verify.

- 1) Login to Node 1.
- 2) Check Cluster Manager that Node 1 is in control of the cluster.
- 3) Ensure Node 2 is up, but not in control of the cluster (note if you are only running 1 Node due to a hardware/software issue, you will not be able to rotate your passwords).
- 4) Open Password Rotation Tool using icon on Node 1 desktop.
- 5) Click on Get Current Status button.
- 6) If the Processing bar is red, this alerts you that something needs addressed before rotation can take place. (Some examples are SSL errors or a notice that Node 2 is not online).
 - a. Open a case with CSU if an error occurs. Please include error message in your communication to CSU.
- 7) If everything connects properly, the processing status bar will be green which lets you know you can proceed to rotate PW.



a.



b.

- 8) Click Rotate Password button. This process can take a minute or so.
- 9) Write down and securely store new passwords.

Case Opening Guidance

When opening a case, please include as much information as possible:

-Any conditions leading up to Issue (power outage, network outage or upgrade etc.)

-Results of CSU health check above

-What device or devices are affected (1 CAD, All POS, Workstation1, Node 2 etc.)

Note: To find out what the device name for Windows devices, type cmd in start menu, once the Command prompt window opens, type: 'hostname'.

-If account issue, what account:

Server Account – nc-admin, ncinstall, ncship-admin

Workstation account to login to Windows

Disbursing application account

NavyCash.com website account

Contact CSU @ navycashcenter@frb.org or call 1-866-662-8922 with as much details as you can.

Note some Ship IT's are not familiar with Navy Cash and may be hesitant to assist, the following official message was sent out for guidance and still in effect, a snippet is shown below:

FROM SPAWARSYSCEN ATLANTIC CHARLESTON SC
R 231102Z FEB 16 NAVY CASH SHIPBOARD TECHNICAL SUPPORT UPDATE

B. WHEN NAVY CASH ENCOUNTERS TECHNICAL ISSUES, COORDINATED SHIP-WIDE EFFORT AMONG DISBURSING OFFICERS, NAVY CASH DEPUTIES, ELECTRONIC TECHNICIANS, AND INFORMATION TECHNICIANS IS REQUIRED TO TROUBLESHOOT, ISOLATE, AND CORRECT ANY PROBLEMS. IF UNABLE TO ISOLATE PROBLEMS OR EFFECT REPAIR, SHIP IS RESPONSIBLE FOR INITIATING A TROUBLE CALL TO NAVY CASH CENTRAL SUPPORT AT 866-662-8922 OR EMAIL NAVYCASHCENTER(AT)FRB.ORG. TECHNICAL SUPPORT PERSONNEL ASHORE PROVIDE TROUBLESHOOTING AND REPAIR GUIDANCE BY PHONE OR E-MAIL. DISBURSING OFFICER AND ELECTRONIC TECHNICIAN AND INFORMATION TECHNICIAN PERSONNEL SHOULD BE AVAILABLE TO DISCUSS PROBLEM AND TROUBLESHOOTING AND REPAIR GUIDANCE WITH TECHNICAL SUPPORT PERSONNEL. ON-SITE TECHNICAL ASSISTANCE IS AVAILABLE AS NEEDED, BUT ONLY AFTER DISTANCE SUPPORT EFFORTS OVER PHONE OR E-MAIL HAVE BEEN EXHAUSTED, OR TO SUPPORT EMERGENCY REQUIREMENTS FOR SYSTEMS THAT ARE AT OR NEAR COMPLETE MISSION FAILURE.