Short summary		Detailed explanation	Associated logs/error messages	Number of people having this issue
Login/connection issues				
Can't connect to NAF		Can't ssh to naf-cms.desy.de, but can for example to naf-cms12.desy.de. After entering password requests it again (infinitely)		5
↳	Can't connect to specific NAF node	Logging in to most nodes works, but e.g. naf-cms16.desy.de specifically doesn't work.	`$ ssh xxx@naf-cms16.desy.de` `Connection closed by 131.169.168.69 port 22`	1
↳	NAF randomly asks for password despite Kerberos setup	Typically I login to NAF with a Kerberos ticket, so I don't have to type the password. However, sometimes it still randomly asks for a password. Then killing ssh and simply trying again fixes it.		1

"Connection timed out" at login		After connecting to a NAF node, there's a "connection timed out" message, and I end up in / instead of my home directory. Then can't `cd` to home (I get the same message every time). This has been mostly solved, but still happens from time to time.	`Could not chdir to home directory /afs/desy.de/user/x/xxx: Connection timed out`
			`/usr/bin/xauth:  error in locking authority file /afs/desy.de/user/x/xxx/.Xauthority`
			`-bash: /afs/desy.de/user/x/xxx/.bash_profile: Connection timed out`
			`[xxx@naf-cms14 /]$ pwd`
			`/`
				4

↳	NAF home folder mout failed	Time to time, `ls` on home folder is not working. It depends on the node.		1
HTCondor issues				

HTCondor Scheduler failing		Commands like "condor_q" or "condor_submit" fail due to issues with connecting to schedd.	`Extra Info: You probably saw this error because the condor_schedd is not`
			`running on the machine you are trying to query. If the condor_schedd is not`
			`running, the Condor system will not be able to find an address and port to`
			`connect to and satisfy this request. Please make sure the Condor daemons are`
			`running and try again.`
			
			`Extra Info: If the condor_schedd is running on the machine you are trying to`
			`query and you still see the error, the most likely cause is that you have`
			`setup a personal Condor, you have not defined SCHEDD_NAME in your`
			`condor_config file, and something is wrong with your SCHEDD_ADDRESS_FILE`
			`setting. You must define either or both of those settings in your config`
			`file, or you must use the -name option to condor_q. Please see the Condor`
				5

↳	Error when submitting condor jobs	Sometimes, when submitting jobs the following error is printed	`ERROR: Failed to connect to local queue manager`
			`AUTHENTICATE:1006:exceeded 1727094805 deadline during authentication`
			`AUTHENTICATE:1004:Failed to authenticate using KERBEROS`
				1

↳	Quick HTCondor submissions	When submitting many jobs in a loop (e.g. 50 x 100 jobs) the submission freezes after ~10-15 batches).		1

Removed HTCondor jobs still in queue		After "condor_rm" the removed jobs are hanging somewhere, but they are not removed from "condor_q". Workaround: "condor_rm XXX -forcex"	`-- Schedd: bird-htc-sched21.desy.de : <131.169.223.41:9618?... @ 09/11/24 13:41:43`
			`OWNER   BATCH_NAME    SUBMITTED   DONE   RUN   IDLE  TOTAL JOB_IDS`
			`xxx ID: 3577121   9/11 13:25    96     _     _    100 3577121.0-24`
			`xxx ID: 3577123   9/11 13:25   999     _     _   1000 3577123.25`
			
			`Total for query: 5 jobs; 0 completed, 5 removed, 0 idle, 0 running, 0 held, 0 suspended`
			`Total for xxx: 5 jobs; 0 completed, 5 removed, 0 idle, 0 running, 0 held, 0 suspended`
			`Total for all users: 7438 jobs; 1312 completed, 133 removed, 31 idle, 275 running, 5687 held, 0 suspended`
				4

↳	Disconnected condor jobs	jobs are disconnected, but 'RUN' on condor_q	`022 (4369081.000.000) 2024-09-25 17:26:51 Job disconnected, attempting to reconnect`
			`    Socket between submit and execute hosts closed unexpectedly`
			`    Trying to reconnect to slot2_1@batch1066.desy.de <131.169.160.166:39509?addrs=131.169.160.166-39509+[2001-638-700-10a0--1-a6]-39509`
			`&alias=batch1066.desy.de>`
				1

A few condor jobs lagging behind		Often out of e.g. 1000 submitted jobs, just 5 never finish (or lag behind all other jobs by a lot)		4
↳	HTCondor workers die suddenly	Sometimes, some condor workers die for no specific reason. Submitting the same exact code can go smoothly or several resubmissions may be needed due to the death of condor workers.		1
↳	Empty condor_tail and not running	`condor_tail` prints out nothing, the job uses all allocated time and fails. This issue is reported and turned out there were nfs issues on some nodes. Those nodes were rebooted, but there can be further issues from the others	ticket: https://rt-system.desy.de/Ticket/Display.html?id=1425438	1

Condor job failing with unusual errors		When running bunch of condor jobs scheduler seems to have internal problems and throws out unexpected behavior. Usually manually killing the jobs and resubmitting with less jobs (which results in more computing time) solves the issue, but not every time	`local variable 'result' referenced before assignment`
			`Traceback (most recent call last):`
			`  File "/nfs/dust/cms/user/xxx/pepper/pepper/htcondor.py", line 267, in _dask_map`
			`    result = task.result(timeout=1)`
			`  File "/afs/desy.de/user/x/xxx/.local/lib/python3.9/site-packages/distributed/client.py", line 392, in result`
			`    return self.client.sync(self._result, callback_timeout=timeout)`
			`  File "/afs/desy.de/user/x/xxx/.local/lib/python3.9/site-packages/distributed/utils.py", line 442, in sync`
			`    return result`
			`UnboundLocalError: local variable 'result' referenced before assignment`
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			`Traceback (most recent call last):`
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			`    return self.client.sync(self._result, callback_timeout=timeout)`
			`  File "/afs/desy.de/user/x/xxx/.local/lib/python3.9/site-packages/distributed/utils.py", line 442, in sync`
			`    return result`
			`UnboundLocalError: local variable 'result' referenced before assignment`
				3

General issues				
Slow scripts execution		Sometimes a script/application that otherwise starts and runs quickly takes a very long time to execute (or freezes somewhere in the middle of the execution). Some examples would be "cmsenv", but also just running super simple, fast scripts in python. Also checked with `htop` that there's nothing heavy running on this node, so it seems to be for "no good reason".		5
↳	NAF freezing	Sometimes a node just freezes - can't type commands, can't remove, can't CTRL+C nor CTRL+Z. Sometimes it "unfreezes" after some time, sometimes I have to close the terminal window and open a new one.		1
cmssw-el7 failing		The `cmssw-el7` command fails randomly and as soon as it happens, it will keep happening on a given node. The workaround is to login to a different node (where it may or may not work)	`FATAL:  container creation failed: mount hook function failure: mount /afs/desy.de/user/x/xxx->/var/lib/apptainer/mnt/session/afs/desy.de/user/x/xxx error: while mounting /afs/desy.de/user/x/xxx: destination /var/lib/apptainer/mnt/session/afs/desy.de/user/x/xxx doesn't exist in container`	3
Other issues				
`voms-proxy-init` failing		`voms-proxy-init --rfc --voms cms -valid 192:00` is not working, because the certificate directory is missing (not mounted?)	`sslutils.c:2494:error:400003F7:lib(128)::unable to access trusted certificates in:x509_cert_dir=/etc/grid-security/certificates`	1
VSCode disconnects and cannot connect again		Despite having the VSCode server installed on DUST (according to recommendations, and it works much better than when I had it on AFS), sometimes the VSCode client disconnects and then cannot connect again. It throws some messages about not being able to save files, etc. The workaround: disconnect the window from the remote, kill vscode processes on the NAF node, and connect again.	`Failed to save 'XXX.py': Unable to write file 'vscode-remote://ssh-remote+naf-cms16.desy.de/afs/desy.de/user/x/xxx/XXX.py' (NoPermissions (FileSystemError): Error: EACCES: permission denied, open '/afs/desy.de/user/x/xxx/XXX.py')`	1
Naf-jupyter often fails to spawn or timeout		I can't use naf-jupyter for a while, and similar things happen from time to time.	`ticket was created, but not fixed yet.`	1