

Purpose

Sometimes, especially when using pre-release software versions, a JACE's platform daemon will fail to start, making it impossible to configure it using Workbench tools such as the Commissioning Wizard or Dist File Installer. This document details how to restore a JACE in this condition to a "clean" state.

Requirements

You will need the following to complete the recovery steps in this document:

- A terminal emulator such as [PuTTY](#)
- A SFTP client such as [FileZilla](#)
- Serial-Shell cable for your JACE hardware model (specified in the .PDFs below)
- The Niagara 4 Clean Dist file for your JACE hardware
- A zip file utility such as 7-Zip
- The hardware documentation for your JACE model. You will need one or more of the following:

docs\MtgWiring\RB-603_645-XX_MtgWiring.pdf

docs\MtgWiring\T-300E_600E_MtgWiring.pdf

docs\MtgWiring\T-600E_MtgWiring.pdf

docs\MtgWiring\T-600_MtgWiring.pdf

docs\MtgWiring\T-603_MtgWiring.pdf

docs\MtgWiring\T-645_MtgWiring.pdf

docs\MtgWiring\T-700_MtgWiring.pdf

Get and Extract Niagara 4 Clean Dist File

The clean dist files can be found in your Niagara4 \$system_home directory, or in your Niagara 4 image file.

The clean dists will be in the `cleanDist` directory or in the `overlay\cleanDist` directory.

Open the .dist file for your JACE's platform using a zip utility like 7-Zip, then extract the **zip/n4clean.tar.gz** file it contains. Also extract the **dev/shmem/n4-xxx.image** file, where *xxx* will be different, depending on the JACE's platform type.

Make a Serial Connection to the JACE

The .PDFs in the N4 documentation set describe how to make a serial connection to a JACE in the "system shell" section(s) of each document.

You will be shown the "login:" prompt. Enter your Platform credentials.

When you successfully log into the JACE, you will see a "#" or "\$" shell prompt. This is desired.

You may also see a configuration menu similar to this...

```
System Shell
-----
hostid: [unique to your JACE]
serial number: [unique to your JACE]
build version: 4.1.25.1.2
build date: built on 2015-10-07 19:04:59
system time: Thu Jan 14 16:33:18 UTC 2016
niagara daemon port: 3011

dm0:  inet 192.168.1.140 netmask 0xffffffff broadcast 192.168.1.255
      inet6 fe80::5272:24ff:fe9c:55ba%dm0 prefixlen 64 scopeid 0x2
dm1:  <disabled>
-----

1. Update System Time
2. Update Network Settings
3. Ping Host
4. Enable/Disable SSH/SFTP
5. Change Current User Password
6. Change System Passphrase
7. Enable Front Panel USB
8. Configure WIFI
9. Reboot

L. Logout

Enter choice:
```

The fourth item in this list allows you to enable SSH/SFTP. Enable it now, using port 22.

Once you have done that, enter another choice, "sh" (without quotes). This will give you the "#" or "\$" prompt that you need.

Enable SFTP

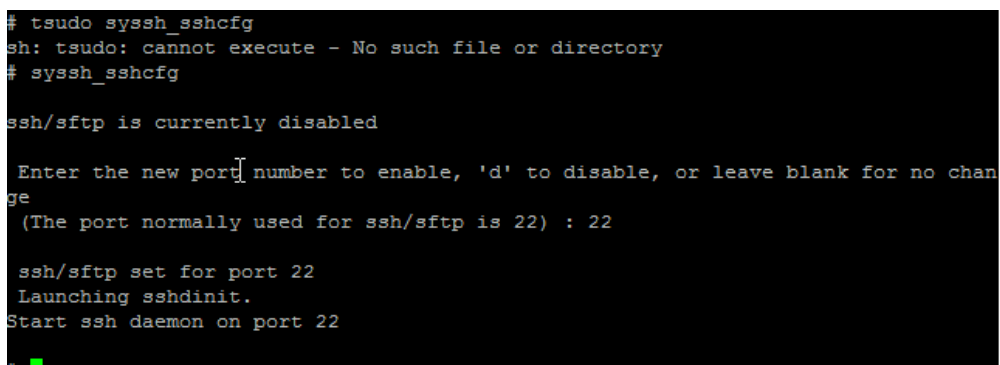
The Secure FTP service is not enabled by default on a JACE. If you did not enable it from the menu in the step above, you will have to start it now. First, try issuing the command **tsudo syssh_sshcfg** at the shell prompt. If the command fails, issue the **syssh_sshcfg** command. If it fails *again*, take these steps...

```
$ cd /sys/bin
```

...and...

```
$ ./syssh_sshcfg
```

...to accomplish the desired result.



```
# tsudo syssh_sshcfg
sh: tsudo: cannot execute - No such file or directory
# syssh_sshcfg

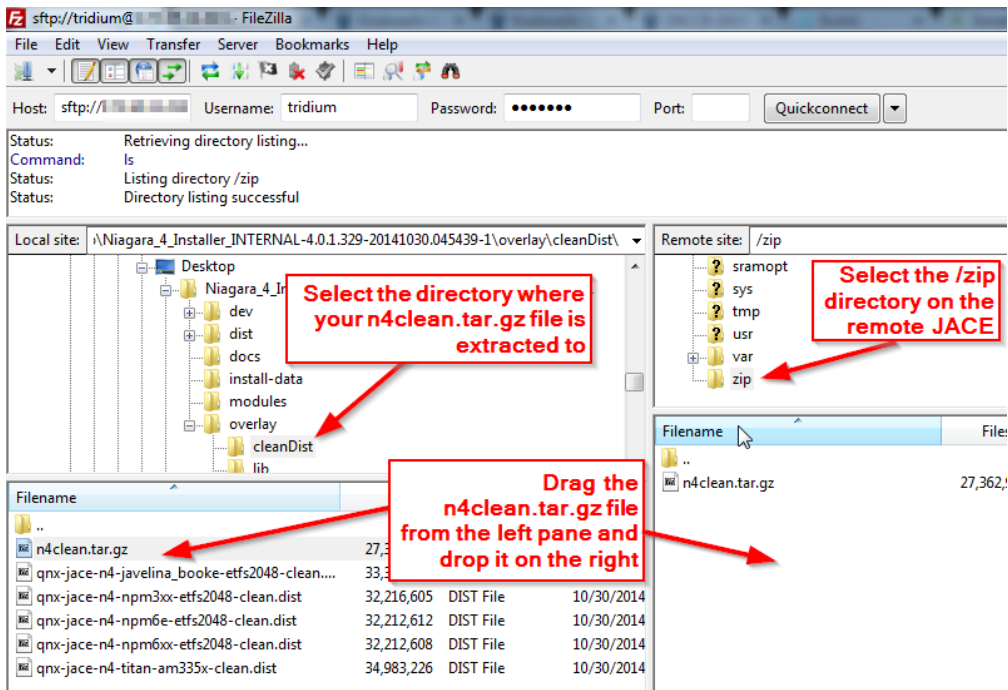
ssh/sftp is currently disabled

Enter the new port number to enable, 'd' to disable, or leave blank for no change
(The port normally used for ssh/sftp is 22) : 22

ssh/sftp set for port 22
Launching sshdinit.
Start ssh daemon on port 22
```

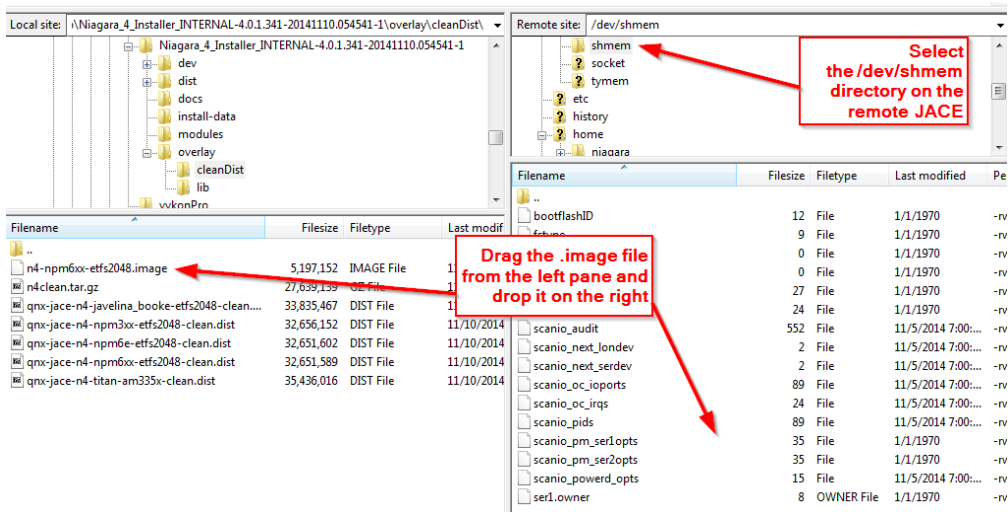
Transfer the n4clean.tar.gz and OS Image Files using SFTP Client

Using an SFTP client such as FileZilla, transfer the **n4clean.tar.gz** file that you extracted from the clean dist file to the JACE's **/zip** directory.



If the transfer fails with a permissions error, issue the command **tsudo chmod 777 /zip** at the shell prompt and try it again.

Next, transfer the **.image** file you extracted from the clean dist file to the JACE's **/dev/shmem** directory.



Run osupdate

At the `#` or `$` shell prompt, issue the command **osupdate**.

Reboot the JACE

Finally, reboot the JACE. You can do this by issuing the command **shutdown hf 0** at the shell prompt. When the JACE restarts, it will automatically process the clean dist file.