Restoring An Unreachable JACE

TRIDIUM

Date:	Sep 20, 2014
Product:	All QNX Based JACEs
Revision:	All Ax Revision 3.2 and Later

Problem

It is possible that the JACE can enter a state in which platform and station connections can not be made. This can result from a mismatch between the operating system and NRE version. The mismatch can result from failure to initially commission the JACE prior to installing a station, improper software upgrade/downgrade or inappropriately copying files to the JACE.

Solution

For the following process a physical connection will need to be made to the JACE with a null modem cable. An FTP connection will also need to be made through the Ethernet port.

1.) Locate the appropriate clean.dist file.

Each JACE model has a unique clean.dist file that contains the correct OS image for that model. The directory of clean.dist files is found in the /cleanDist folder of a Niagara installation. The following dist files correspond to the indicated JACE model :

Note

The clean.dist file for the JACE-7 (javelina_booke) is only available in Niagara version 3.4 and later.

The clean.dist file for the JACE-6E is only available in Niagara versions 3.6.47 and later.

Once these JACE models have had the files installed form the clean.dist, the JACE **must** be commissioned using a version of Workbench that contains the clean.dist files.

JACE-200/202-XPR	qnx-jace-npm2xx-etfs512-clean.dist
JACE-3E (qnx-jace-npm3xx-etfs2048-clean.dist
JACE-403	qnx-jace-york-etfs512-clean.dist
JACE-404/545	qnx-jace-james-etfs512-clean.dist
JACE-600/602-XPR	qnx-jace-npm6xx-etfs2048-clean.dist
JACE-6E	qnx-jace-npm6e-etfs2048-clean.dist
JACE-7	qnx-jace-javelina_booke-etfs2048-clean.dist

Note

If the JACE contains the extended memory feature then use the etfs-2048 dist instead of the etfs-512.

2.) Extract the needed OS image file (*.image) and clean.tar.gz file.

Once the correct clean.dist file has been established from the above list it can be unzipped using Winzip or a similar program (it may be necessary to make a copy of the dist file and then change the extension to .zip and extract using Windows Explorer). The .image file and clean.tar.gz file need to be extracted to the computer that will be making the FTP connection to the JACE.

3.) Make a serial shell connection to the JACE.

A serial shell connection can be made to a JACE through the RS-232 COM1 port. The 4 pin jumper will need to be in "Serial Shell" mode, and the JACE must be rebooted with the jumper in the right position before it will communicate. More details can be found on page 26 of the "JACE Niagara Ax Install & Startup Guide" found in the /docs/docJaceStartup folder of a Niagara installation. Type the platform credentials of the JACE when prompted for "login:" type username, when prompted for "password:" type the platform password, characters will not echo. Once successfully logged in, a menu will be displayed and option 4 will allow you to enable FTP. Be sure that FTP is enabled before going to the next Step.

4.) Make an FTP connection to the JACE.

Using an FTP client such as FileZilla or Windows FTP connect to the JACE. The platform credentials should be entered when prompted for a username and password. Once connected to the JACE, transfer the image file that was extracted from the clean.dist file to the /tmp directory of the JACE

Local site: C:\Extract	edFiles\				Remote site: /tmp
🖨 🥪 C:					🔺 🛛 🖓 dev
🙃 💼 cma	cons				- 🕜 etc
- 🗀 del					🕢 🕀 💼 ffs0
🕀 🧰 DR	v			-	- 🕜 history
🕀 🗀 edi	pse				- 🕜 ive
🗀 Ext	ractedFiles				🕜 niagara
🕀 🗀 Lon	Works				- 🕜 proc
😟 🗀 mig					- 🕜 production
🕀 🚞 MSI	DERelA				🕜 ram0
🕀 🗀 Pro	gram Files				🕜 sys
🛅 pro	gs				🗁 tmp
- 🗀 Qu	arantine				🕜 usr
🗄 🗀 RE(CYCLER				- 🕜 var
🕀 🔂 Rot	0				🗀 zip
🗄 🛄 so4					
	L _L ¥_E				Piename /
Eilename (and a second	Et al a la seconda de la se	I THE INTER INCOME.	
		Filesize	несуре	Last modified	_
		Filesize	несуре	Last modified	aram.pid
Cean.tar.gz		911,446	WinZip File	4/15/2009 2:31:16	ptv aram.pid
dean.tar.gz		911,446	WinZip File	4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid BootflashID
ine	⇒ Upload	911,446	WinZip File	4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid bootflashID ddns fstype
nerraine 2 dean.tar.gz npm2xx-etfs2048.in	 Upload Add files to queue 	911,446	WinZip File	4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid bootflashID ddns fstype inted.conf
nerraine / dean.tar.gz npm2xx-etfs2048.in	 Upload Add files to queue 	911,446	WinZip File	4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid abootflashID addns afstype intetd.conf jumper0
nerraine / dean.tar.gz npm2xx-etfs2048.in	Upload Add files to queue Open	911,446	WinZip File	4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid aram.pid bootflashID ddns fstype intetd.conf jumper0 andio
npm2xx-etfs2048.in	Upload Add files to queue Open Edit	911,446	WinZip File	Last modified 4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid bootflashID ddns fstype inetd.conf jumper0 ndio
nerraine 2 dean.tar.gz npm2xx-etfs2048.iii	Upload Add files to queue Open Edit Create directory	911,446	Hiecype WinZip File IMAGE File	Last modified 4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid aram.pid abootflashID addns afstype ainetd.conf jumper0 andio
Alean.tar.gz Alean.tar.gz Alean.tar.gz Alean.tar.gz Selected 1 file. Total siz	Upload Add files to queue Open Edit Create directory	911,446	Hiecype WinZip File IMAGE File	Last modified 4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid aram.pid abootflashID addns afstype ainetd.conf jumper0 andio 13 files. Total size: At least 180 by
	Upload Add files to queue Open Edit Create directory Delete	911,446	Piecype WinZip File IMAGE File	Last modified 4/15/2009 2:31:16 4/15/2009 2:31:14	aram.pid abootflashID addns fstype inetd.conf jumper0 ndio 13 files. Total size: At least 180 by

Transfer OS Image

and transfer the clean.tar.gz file to the /ffs0/zip directory of the JACE.

Transfer clean.tar.gz

Local dito:	C//EvtractedEflec/				Remote site: //ffc0/pip
LOCAI SILE:	C:(EXtractedFiles)			<u> </u>	Kemote ske: //rso/2p
- P	See C:			~	dev
	🗄 🛅 cmdcons				🗠 🕜 etc
	🛅 dell			=	🖨 🧰 ffs0
	🖻 🧰 DRV				- 🕜 etc
	🕫 🛅 eclipse				- 🕐 ive
	- C ExtractedFiles				🖓 niagara
	🗄 🛅 LonWorks				- 🕜 var
	🗴 🦳 mig				- Co zio
	MSDERelA				2 history
	Program Files				2 ive
	- progs				niagara
	Ouarantine				20 proc
					2 production
					2 ram0
	Custom University Toferman			~	Filename /
Filename	1	Filesize	Filetype	Last modified	<u> </u>
	~	180520	Theorype	Edst modified	_
.			the second		
, clean.ta		911,446	Winziphile	4/15/2009 2:31:16 PM	
🔤 npm2xx	Upload	2,342,640	IMAGE File	4/15/2009 2:31:14 PM	
	為 Add files to queue				
	Open				
	Edit				
<	Create directory	Ш		>	<
Selected 1.6					Empty directory.
Junction 11	Delete				Jempty directory.
Server/Loc	Rename		Direction	Remote file	Size Pri

5.) Run osupdate in the serial shell.

Return to the serial shell connection and type "sh" at the prompt of the menu screen and hit enter. This should produce a # prompt. Type "osupdate" and hit enter. There will be no confirmation message, but another # prompt should appear on the next line. Type "exit", and then reboot the JACE with option 7.

Run OS Update

🔁 gjh - HyperTerminal	
File Edit View Call Transfer Help	
D 📽 🕫 💲 🛍	
hostid: Qnx-NPM6-0000-11E1-0798 serial number: 320483 build version: 2.4.21 build date: built on 2010-11-11 15:35:32 system time: Thu Aug 18 16:36:54 DST 2011 niagara daemon port: 3011 en0: inet 172.16.10.211 netmask 0xfffffe00 broadcast 172.16.11.255 en1: <disabled> 1. Update System Time 2. Update Network Settings 3. Ping Host 4. Enable/Disable Ftp 5. Enable/Disable Telnet 6. Update Platform Account 7. Reboot L. Logout Enter choice: sh # osupdate #</disabled>	
Connected 0:25:07 Auto detect 115200 8-N-1 SCROLL CAPS NUM Capture Print echo	

Once the JACE reboots, it will install the clean.dist file and the JACE will be restored to factory default condition. A platform connection should be made and the JACE should be commissioned in the intended Niagara version before anything else is done.

Legal

Information and/or specifications published here are current as of the date of publication of this document. Tridium, Inc. reserves the right to change or modify specifications without prior notice. The latest product specifications can be found by contacting our corporate headquarters, Richmond, Virginia. Products or features contained herein are covered by one or more U.S. or foreign patents. This document may be copied by parties who are authorized to distribute Tridium products in connection with distribution of those products, subject to the contracts that authorize such distribution. It may not otherwise, in whole or in part, be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form without prior written consent from Tridium, Inc. Complete confidentiality, trademark, copyright and patent notifications can be found at: http://www.tridium.com/galleries/SignUp/Confidentiality.pdf

JACE, Niagara Framework, Niagara AX Framework and the Sedona Framework are trademarks of Tridium, Inc.

(c)Copyright 2011 Tridium Inc. All Rights Reserved

3951 Westerre Parkway, Suite 350 Richmond, VA 23233

Phone: 804.747.4771 Fax: 804.747.5204