

3070-102

# Modification Recommended Service Note

Supersedes:  
NONE

## E9905E-AS2/N1178-AS2/N1178A-AS3 Async systems or upgrades

Serial Numbers: ALL  
Manufacturing ID Number: ALL

### The Problem –

Testhead Configurator software cannot support new CAP switch N1178-66804.

### Parts Required:

P/N Description Qty.  
NONE

#### ADMINISTRATIVE INFORMATION

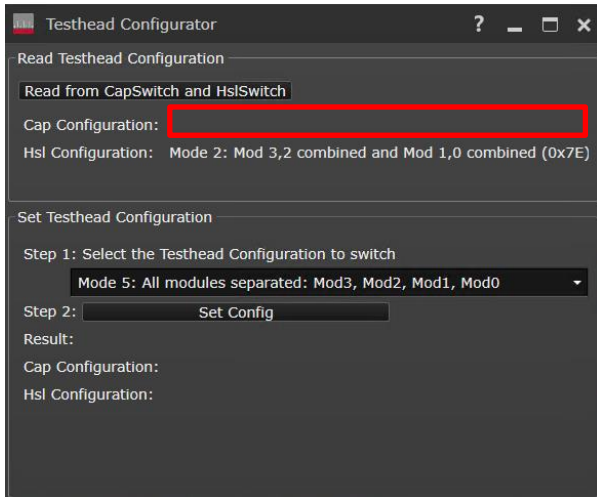
ACTION	<input type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS			
CATEGORY:	<input checked="" type="checkbox"/> AGREEABLE TIME	LABOR:	1.5 Hours		
LOCATION	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE	SERVICE:	<input type="checkbox"/> RETURN	USED	<input type="checkbox"/> RETURN
CATEGORY:	<input checked="" type="checkbox"/> ON-SITE (active On-site contract required)	INVENTORY:	<input type="checkbox"/> SCRAP	PARTS:	<input type="checkbox"/> SCRAP
	<input checked="" type="checkbox"/> SERVICE CENTER		<input checked="" type="checkbox"/> SEE TEXT		<input checked="" type="checkbox"/> SEE TEXT
	<input checked="" type="checkbox"/> CHANNEL PARTNERS				
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL:	11/15/2022		
	<input type="checkbox"/> Calibration Required	PRODUCT LINE:	PL80		
	<input checked="" type="checkbox"/> Calibration NOT Required	AUTHOR:	LKW		

ADDITIONAL INFORMATION:

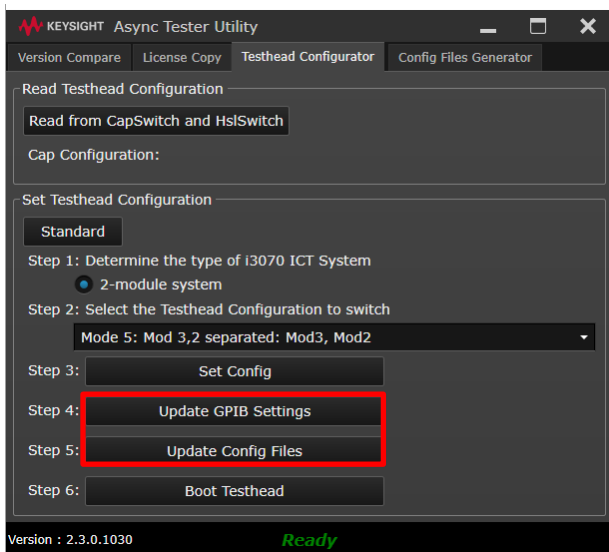
**Situation:**

CAP switch N1178-66801 is used on early Async systems or upgrades to handle the switching of the iCAP connections between the operating modes. The switching is handled by a software called Testhead Configurator. **Testhead Configurator supports i3070 software version 9.20p and 9.20pc only.** It does not support version 10.0p and above.

N1178-66801 has been replaced by a new revision part N1178-66804. Testhead Configurator cannot control N1178-66804 because of different chip ID. Cap configuration will not be available.



An upgraded version of the software called Async Tester Utility was introduced to support N1178-66804. **Async Tester Utility only support i3070 software version 10.0p and above.** Although it can handle the switching, it cannot update the testhead config and GPIB adaptor settings automatically on older software versions.



This created a broken link for users running software version below 10.0p but had their CAP switch upgraded to N1178-66804. It will not be possible to use Testhead Configurator or Async Tester Utility to handle the switching correctly.

Problem Matrix :

<b>i3070 SW version</b>	<b>Cap Switch hardware</b>	<b>Software</b>	<b>Result</b>
<b>Below 10.0p</b>	N1178-66801	Testhead Configurator	OK
		Async Tester Utility	Not supported. Cannot update config and GPIB settings
	N1178-66804	Testhead Configurator	Cannot switch hardware
		Async Tester Utility	Not supported. Cannot update config and GPIB settings
<b>10.0p and above</b>	N1178-66801	Not tested. No such system built	
	N1178-66804	Testhead Configurator	Not supported. Cannot switch hardware
		Async Tester Utility	OK

**Solution/Action:**

The solution requires an upgrade of the Oracle Virtual Box Manager to version 6.1.26 and Testhead Configurator to version 2.0. After which, user can perform switching using Testhead Configurator 2.0.

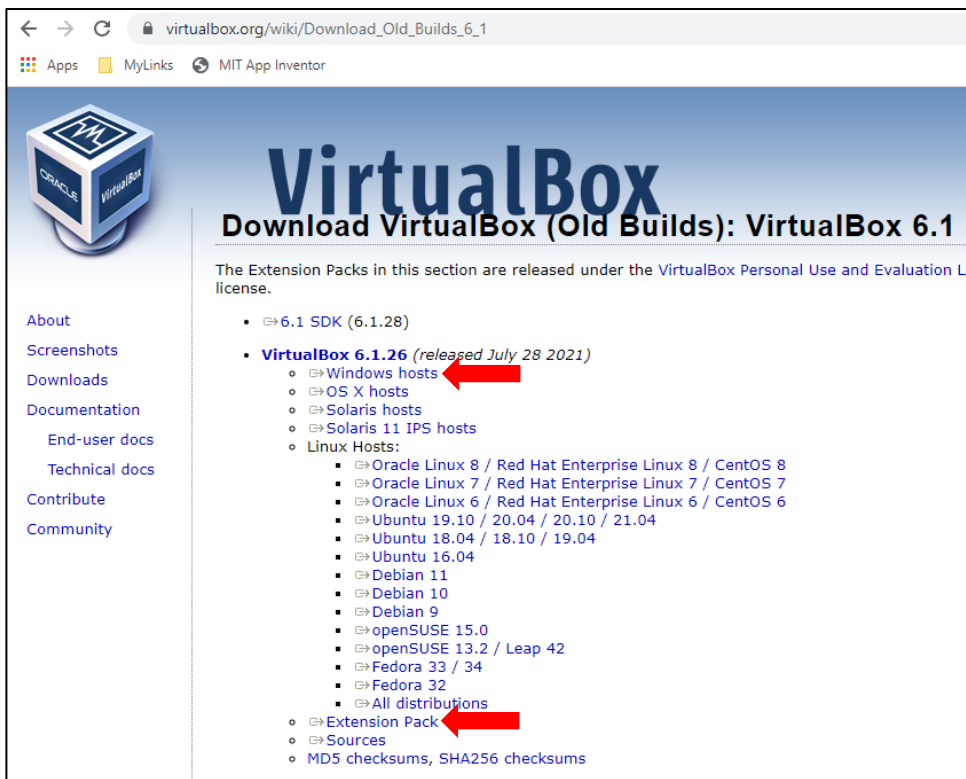
**Upgrade Oracle Virtual Box Manager**

Virtual Box Manager version 6.0.2 exhibits intermittent lock up of USB device assignment into the virtual machines. As such, it is recommended to download and upgrade the virtual box manager to version 6.1.26.

Link to download Virtual Box Manager 6.1.26 :

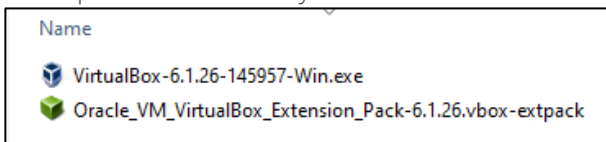
[https://www.virtualbox.org/wiki/Download\\_Old\\_Builds\\_6\\_1](https://www.virtualbox.org/wiki/Download_Old_Builds_6_1)

Download “Window hosts” and “Extension Pack”

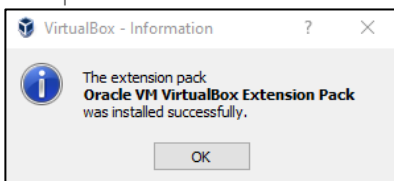


### Installation Steps:

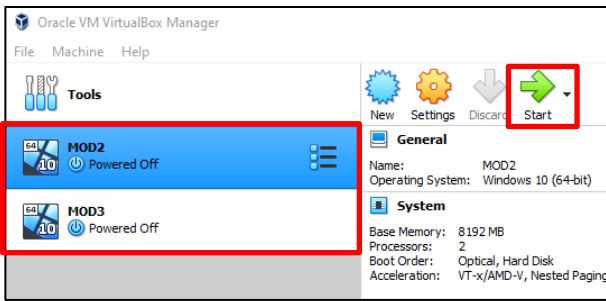
1. Double click on “VirtualBox-6.1.26-145957-Win.exe” and follow the on-screen instructions to complete the installation.
2. Double click on “Oracle\_VM\_VirtualBox\_Extension\_Pack-6.1.26.vbox-extpack” and follow the on-screen instructions to complete the installation. This will launch Virtual Manager will startup. Do not start any VM at this moment.



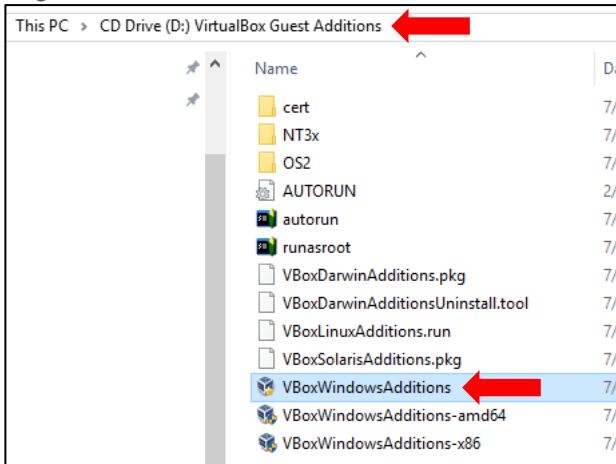
3. Complete the installation of the extension pack before starting any of the virtual machines(VM).



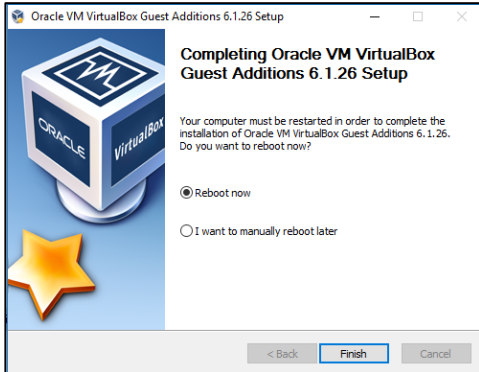
4. Start Mod2 and Mod3 virtual machines(VM).



5. Login into each of the VM and execute “VBoxWindowsAdditions.exe” under the below path.



6. Follow the on-screen instructions to complete the installation and select Yes to reboot the VM.



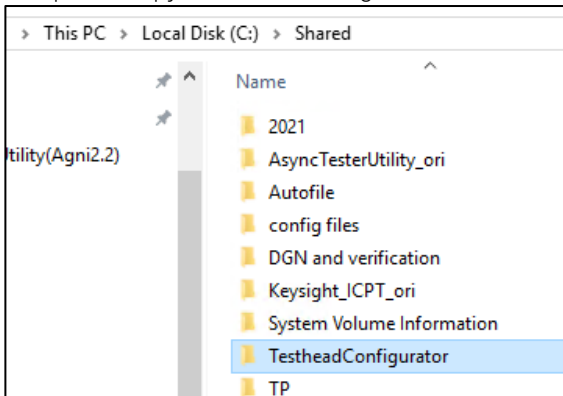
7. The upgrade is completed.

## Upgrading Testhead Configurator to version 2.0

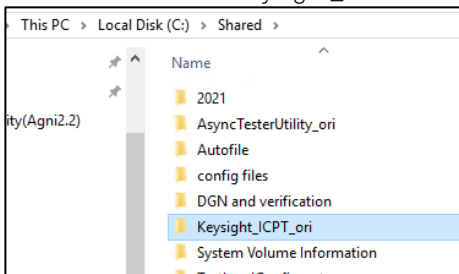
Download Testhead Configurator 2.0 package:

<https://1drv.ms/u/s!AgAhfq7b1qZ6ijyVoyPnFaa-c0l8?e=dcdex7>

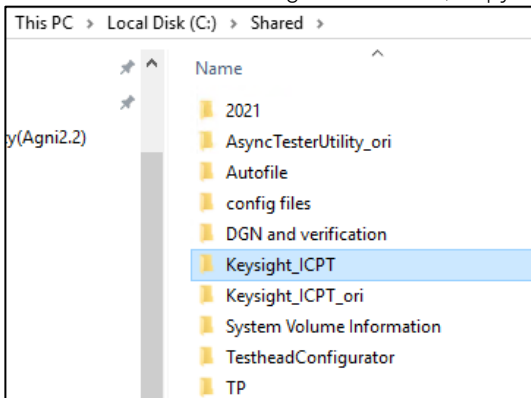
1. Unzip and copy Testhead Configurator folder to the host PC under C:\Shared\ folder



2. Rename C:\Shared\Keysight\_ICPT folder to a different name.

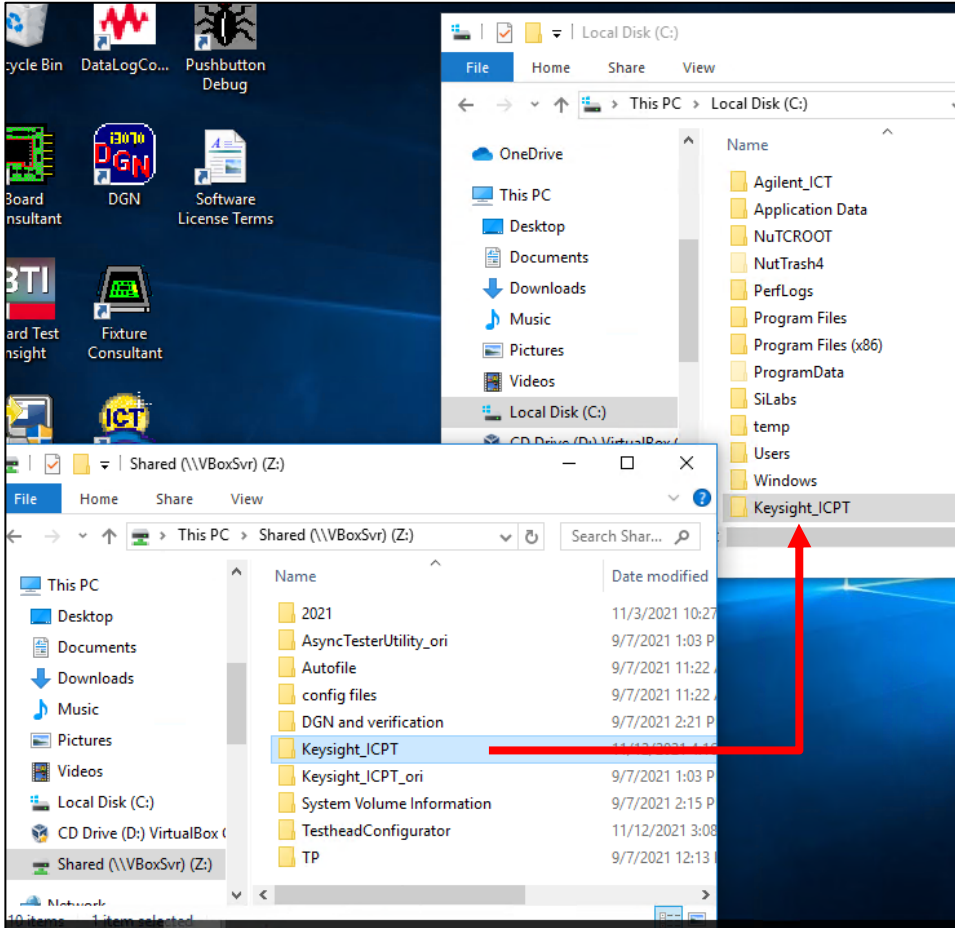


3. From the Testhead Configurator folder, copy Keysight\_ICPT to host PC C:\Shared

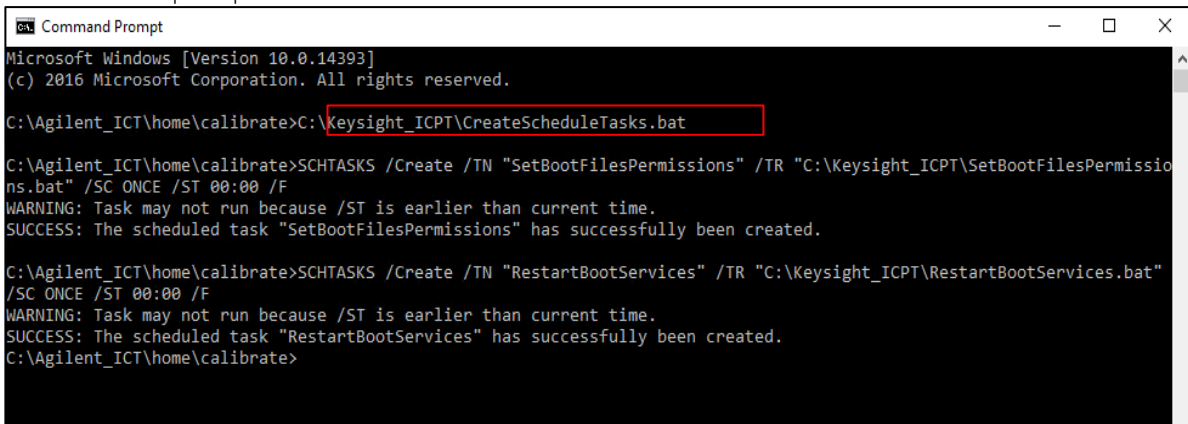


4. Start Mod2 and Mod3 VM and login.

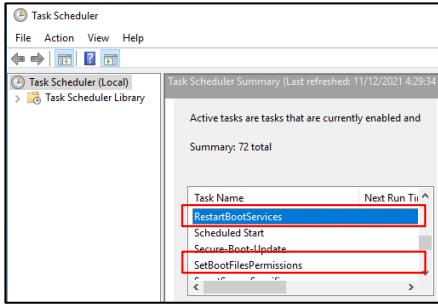
5. In each of the VM, go into C:\Shared folder and copy Keysight\_ICPT to C:\ root. Do this for both VM.



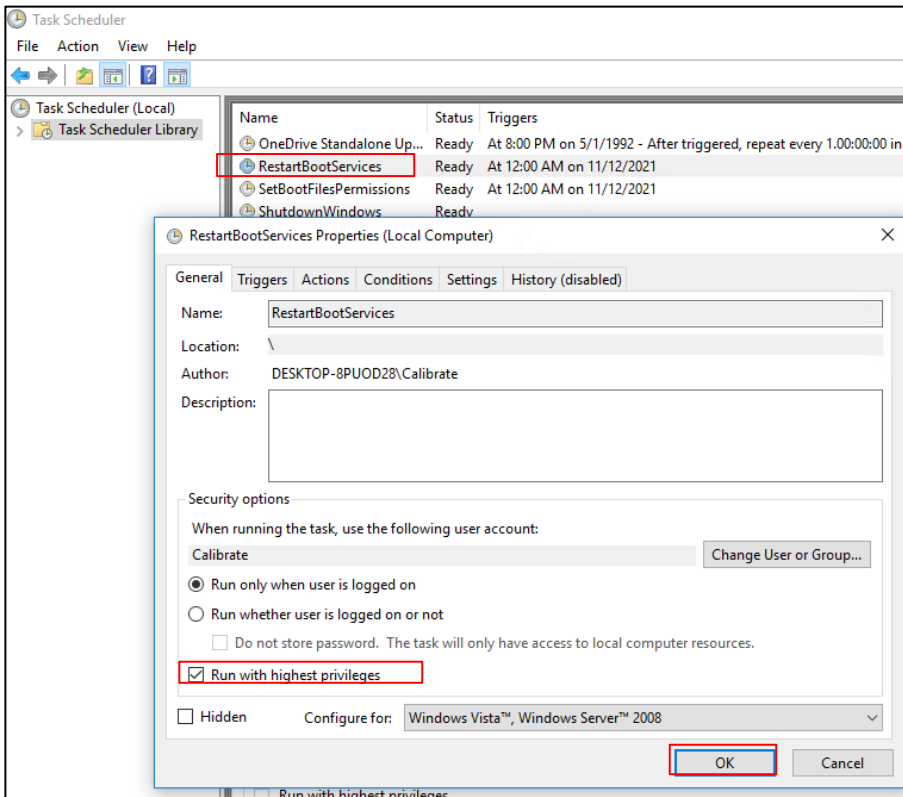
6. In MOD2 VM and MOD3 VM, execute the command "C:\Keysight\_ICPT\CreateScheduleTasks.bat" using command line prompt.



7. Go to Task Scheduler, should see the RestartBootServices and SetBootFilesPermissions as below:

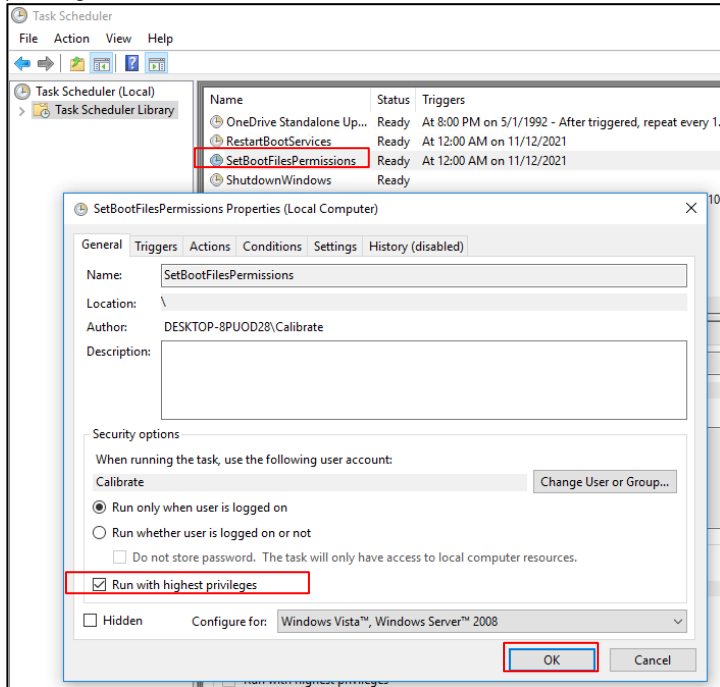


8. In Task Scheduler Library, double click on RestartBootServices and enable “Run with highest privileges” and click OK.

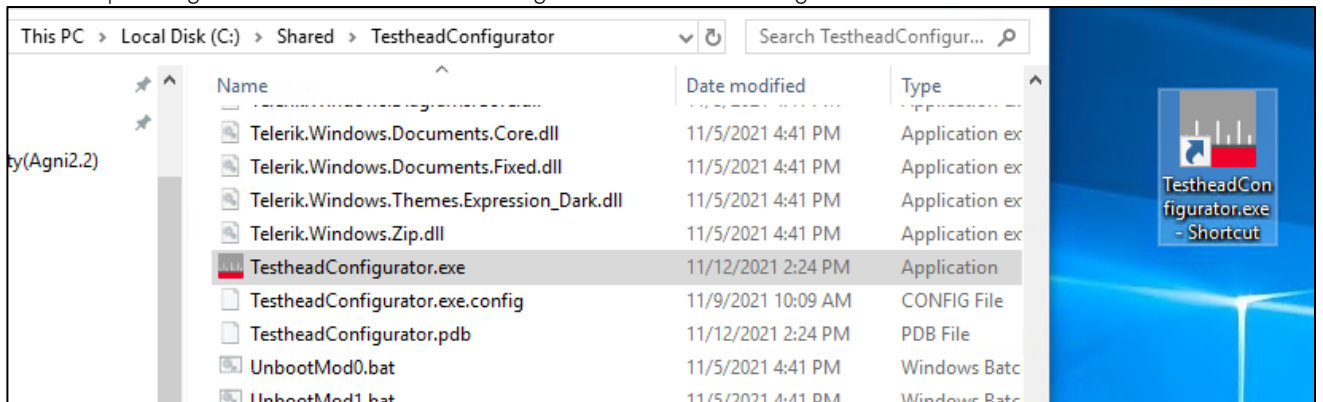




9. In Task Scheduler Library, double click on SetBootFilesPermissions and enable “Run with highest privileges” and click OK.

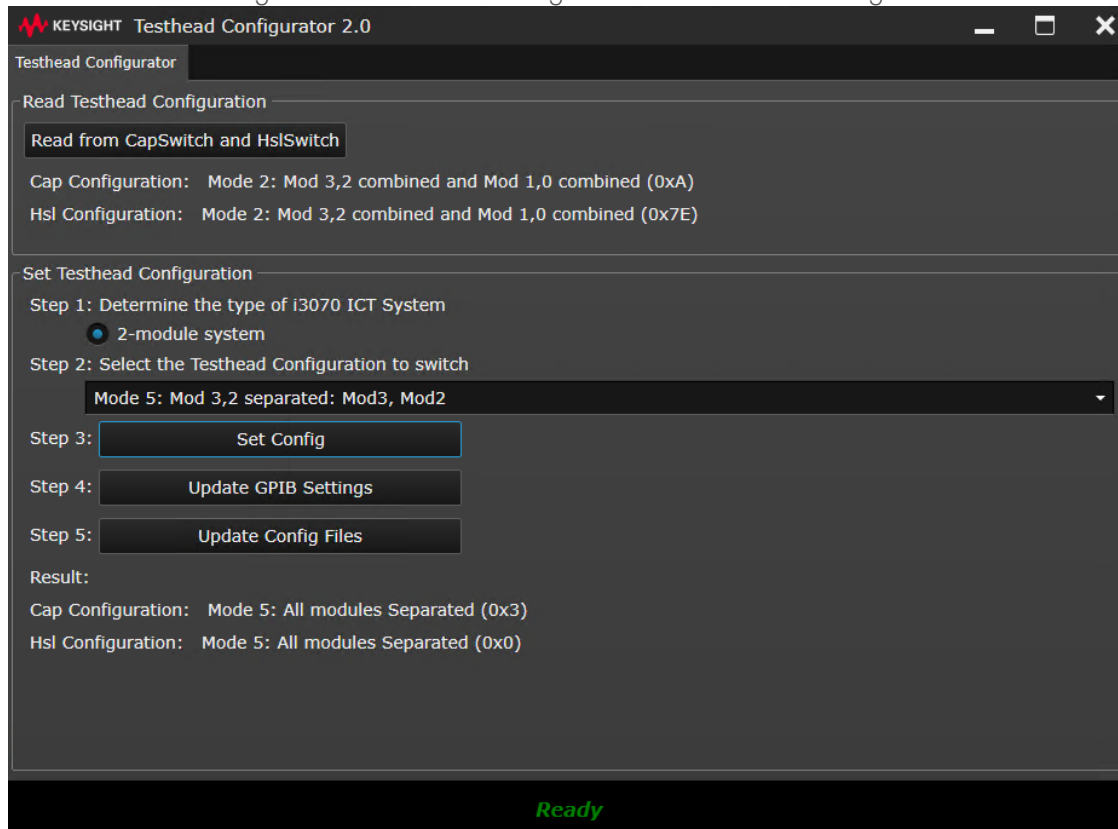


10. In the host PC's Desktop, remove the original Testhead Configurator short cut (if any), and create a new shortcut pointing to C:\Shared\TestheadConfigurator\TestheadConfigurator.exe.



## Switching Testhead operating modes

Use Testhead Configurator 2.0 for switching between testhead configuration modes.



1. Close all VM and launch Testhead Configurator.
2. Click on “**Read from CapSwitch and HslSwitch**” and you should be able to see the configuration of both switches.
3. Select the target mode at Step2.
4. At Step3, click on “**Set Config**” to set the cap and hsl switches. You can read back the switch board configuration again using the Read button.
5. At Step4, click on “**Update GPIB Settings**”. If any VM is active, shut it down.
6. Set the USB-GPIB adaptor serial number for each module and click OK.
7. The targeted VM will now start up.
8. Once the VM startup, login to the VM using “calibrate” username. Leave the VM as it is.
9. At Testhead Configurator Step5, click on “**Update Config Files**”. The testhead config files for the selected mode will be updated into the VM. A console window will launch, and commands lines will be executed. Press any key at the console window to complete the operation.
10. After console window completed its operation and closes, you may proceed to boot the testhead in each of the VM as usual.

Revision History:

Date	Service Note Revision	Author	Reason for Change
12 Nov 2021	01	LKW	As Published