

Hardware Check

Carlos Abido
Core Team



Hard check is tool for validating the hardware configuration.
For projects that are already in IPU with no hardware changes,
it can help to quickly validate the project's (POR)
configuration.

Hardware Check is python script that compares the BoardInfo output data.json file with manually configurable yaml file per projects.

Features:

- Automatically selects between Python 2 and Python 3
- Creates two fail files with different extensions: .html and .log on local host and copy .log to OD Collect during a failure in automation.
- There are two options available to run the hardware check: manually or through the loaders Xwrapper or Satellite. Additionally, two flags are available for automation: 'stop-on-error' and 'continue-on-error'. These flags allow the automation to either stop or continue in case of an error. A log is created for further investigation.
- Automatically selects the correct yaml per siliconfamily and units.

Board Info is a complex python collection scripts that reports the inventory of various installed components of a given system.

Example: DIMM Installation, CPU SN#, CPU Step, PCIe card , etc

A data.json file is created. It contain formatted data from the most recent run.

BoardInfo: C:\SVSHARE\BoardInfo\BoardInfo.py

data.json: C:\SVSHARE\BoardInfo\Output\data.json

Installation



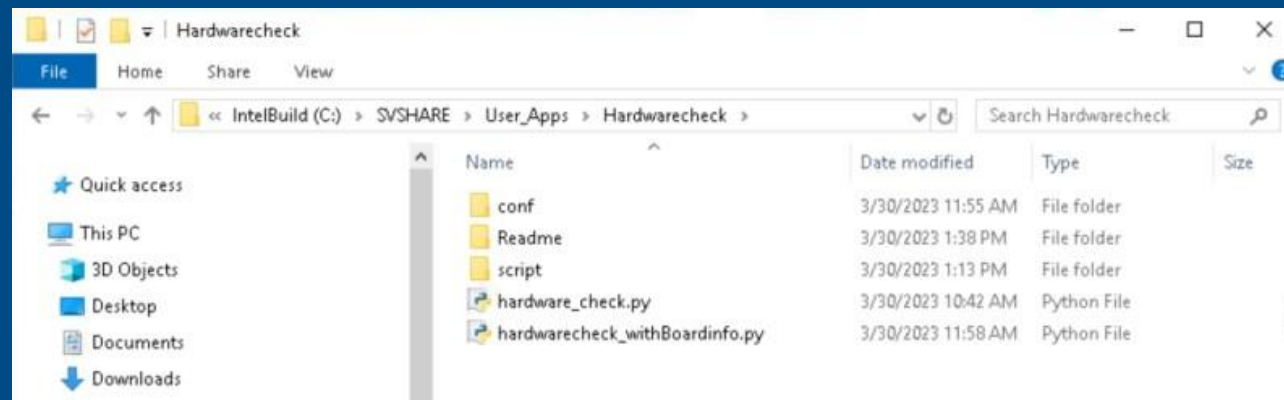
The hardware_check package is available in Packman.

To install, use the following command:

```
packman install --name hardware_check
```

Hardware Check will be installed in:

```
C:\SVSHARE\User_Apps\Hardwarecheck.
```



The following folders are included:

- **conf**: contains all yaml configuration files
- **Readme**: This PDF
- **script**: contains Python 2 and Python 3 scripts
- **hardware_check.py**: calls the appropriate script depending on the Python version. Xwrapper or Satellite.
- **hardwarecheck_withBoardinfo.py**: This script calls boardinfo.py –intrusive and hardware_check.py. This script doesn't call the loaders Xwrapper or Satellite. It's call BoardInfo and hardware_check.py with no flag.

The yaml file is mirrored from data.json. This website <https://www.json2yaml.com/> can be used to convert json to yaml.

Configuration

The yaml will allow an easy way to enable / disable any elements available.

Format allow for yaml file: SPR_UP.yaml, SPR_DP.yaml, EMR_UP.yaml, EMR_DP.yaml etc

```
{
  "Source": "BoardInfo",
  "SiliconFamily": "SPR",
  "NumOfCores": 8,
  "NumOfThreads": 16,
  "Units": [
    {
      "UnitSerial": "71RF772500534",
      "Product": "SAPPHIRE RAPIDS-SP-XCC",
      "DataSource": "CATTS",
      "Socket": 0,
      "NumOfCores": 4,
      "NumOfThreads": 8,
      "UnitUlt": "D1318650 677 3 -2",
      "QDF": "Q03H",
      "UnitStep": "E0",
      "FuseRevision": "",
      "NPKAddress": "0x72600009",
      "CpuID": "0x806f4",
      "AtomStepping": "",
      "Straps": [
        "Strap_BIST_ENABLE: ON",
        "Strap_SAFE_MODE_BOOT: OFF",
        "Strap_TXT_PLT_EN: OFF",
        "Strap_TXT_AGENT: ON"
      ]
    },
    {
      "UnitSerial": "71RF772500346",
      "Product": "SAPPHIRE RAPIDS-SP-XCC",
      "DataSource": "CATTS",
      "Socket": 1,
      "NumOfCores": 4,
      "NumOfThreads": 8,
      "UnitUlt": "D1318650 757 -4 4",
      "QDF": "Q03H",
      "UnitStep": "E0",
      "FuseRevision": "",
      "NPKAddress": "0x72400009",
      "CpuID": "0x806f4",
      "AtomStepping": "",
      "Straps": [
        "Strap_BIST_ENABLE: ON",
        "Strap_SAFE_MODE_BOOT: OFF",
        "Strap_TXT_PLT_EN: OFF",
        "Strap_TXT_AGENT: ON"
      ]
    }
  ]
}
```

```
# ---
# Source: BoardInfo
SiliconFamily: SPR
# NumOfCores: 8
# NumOfThreads: 16
Units:
- #UnitSerial: 71RF772500534
  # Product: SAPPHIRE RAPIDS-SP-XCC
  # DataSource: CATTS
  Socket: 0
  # NumOfCores: 4
  # NumOfThreads: 8
  # UnitUlt: D1318650 677 3 -2
  # QDF: Q03H
  # UnitStep: E0
  # FuseRevision: ''
  # NPKAddress: '0x72600009'
  # CpuID: '0x806f4'
  # AtomStepping: ''
  Straps:
  - 'Strap_BIST_ENABLE: ON'
  - 'Strap_SAFE_MODE_BOOT: OFF'
  - 'Strap_TXT_PLT_EN: OFF'
  - 'Strap_TXT_AGENT: ON'
- #UnitSerial: 71RF772500346
  # Product: SAPPHIRE RAPIDS-SP-XCC
  # DataSource: CATTS
  Socket: 1
  # NumOfCores: 4
  # NumOfThreads: 8
  # UnitUlt: D1318650 757 -4 4
  # QDF: Q03H
  # UnitStep: E0
  # FuseRevision: ''
  # NPKAddress: '0x72400009'
  # CpuID: '0x806f4'
  # AtomStepping: ''
  Straps:
  - 'Strap_BIST_ENABLE: ON'
  - 'Strap_SAFE_MODE_BOOT: OFF'
```

To enable in Xwrapper, need to add these lines in TargetConfig.xml

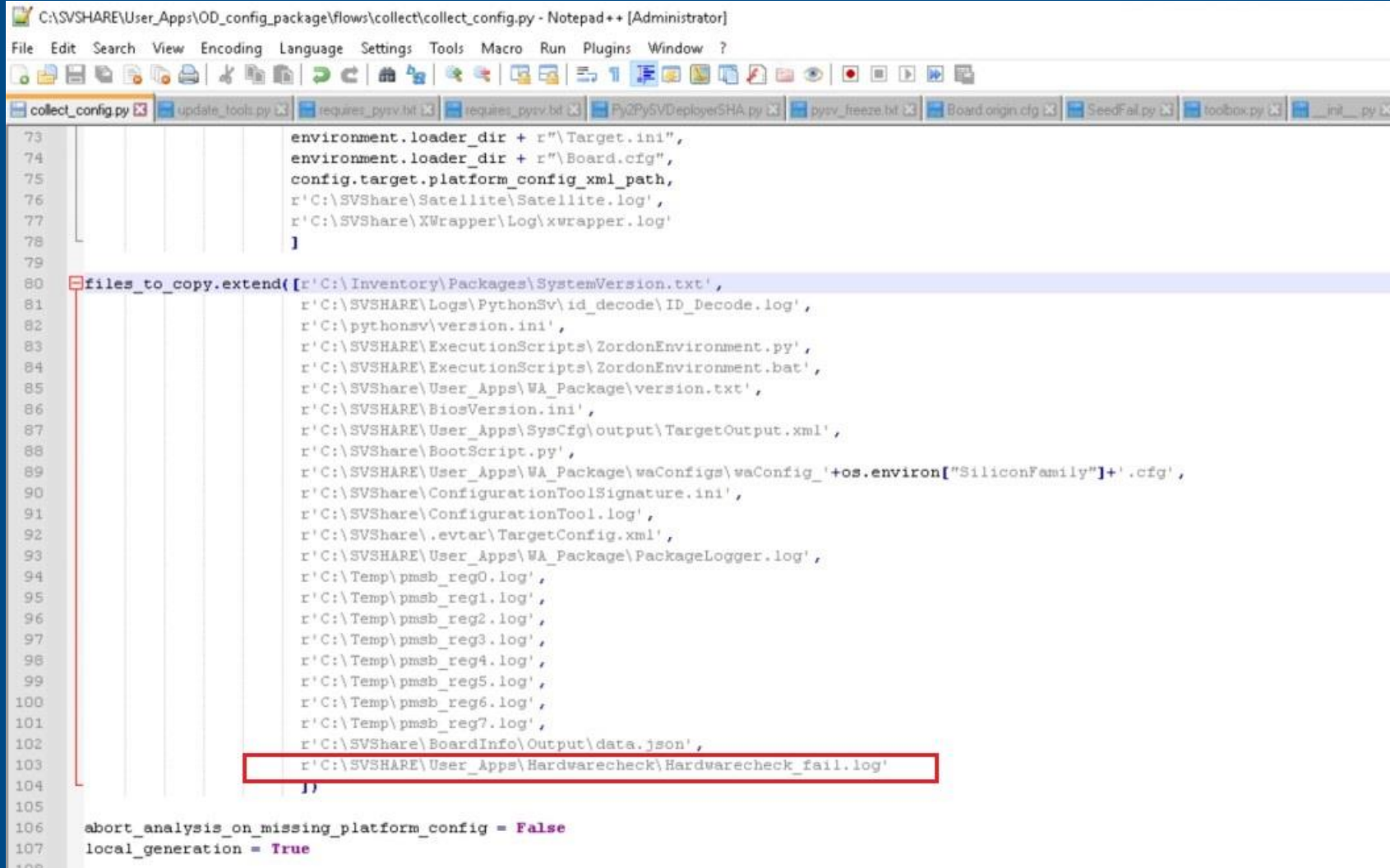
```
<CafeConfiguration>
  <CafeInterceptions>
    <Interception0>
    <Interception1>
      <Event>'PCxmlGenerated'</Event>
      <Script>'python'</Script>
      <Params>'C:\\SVShare\\BoardInfo\\BoardInfo.py --intrusive'</Params>
      <TimeoutSec>600</TimeoutSec>
    </Interception1>
    <Interception2>
    <Interception3>
    <Interception4>
    <Interception5>
    <Interception6>
    <Interception7>
    <Interception8>
      <Event>'PCxmlGenerated'</Event>
      <Script>'python'</Script>
      <Params>'C:\\SVSHARE\\User_Apps\\Hardwarecheck\\hardware_check.py --continue-on-error'</Params>
      <TimeoutSec>600</TimeoutSec>
    </Interception8>
  </CafeInterceptions>
```

To enable in Satellite, need to add these lines in board.cfg

```
[AutoDiag_POSTDone]
Enable=1
TimeOutSec = 2400
Cmd0="C:\\Python27\\Python.exe C:\\pythonsv\\skylakex\\cafe\\automation\\F6Done.py --dis_mca_break --dis_lmup"
;Cmd1="Cwrapper.cmd skylakex\\cafe\\automation\\cafe_hwcc.py %COMPUTERNAME%"
;Cmd2="Cwrapper.cmd skylakex\\cafe\\automation\\cafe_swcc.py %COMPUTERNAME%"
Cmd1="C:\\Python27\\Python.exe C:\\SVSHARE\\BoardInfo\\BoardInfo.py --intrusive"
Cmd2="C:\\Python27\\Python.exe C:\\SVSHARE\\User_Apps\\Hardwarecheck\\hardware_check.py --continue-on-error"
```

Collect Conf

To enable copy the log file to OD Collect flow during a failure. Add the path
Of the log file into collect_config.py



```
C:\SVSHARE\User_Apps\OD_config_package\flows\collect\collect_config.py - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?

collect_config.py update_tools.py requires_pyvsv.txt requires_pyvsv.txt Py2PySVDDeployerSHA.py pyvsv_freeze.txt Board.orign.cfg SeedFail.py toolbox.py __init__.py

73 environment.loader_dir + r"\Target.ini",
74 environment.loader_dir + r"\Board.cfg",
75 config.target.platform_config_xml_path,
76 r'C:\SVShare\Satellite\Satellite.log',
77 r'C:\SVShare\XWrapper\Log\xwrapper.log'
78 ]
79
80 files_to_copy.extend([r'C:\Inventory\Packages\SystemVersion.txt',
81 r'C:\SVSHARE\Logs\PythonSv\id_decode\ID_Decode.log',
82 r'C:\pythonsv\version.ini',
83 r'C:\SVSHARE\ExecutionScripts\ZordonEnvironment.py',
84 r'C:\SVSHARE\ExecutionScripts\ZordonEnvironment.bat',
85 r'C:\SVShare\User_Apps\WA_Package\version.txt',
86 r'C:\SVSHARE\BiosVersion.ini',
87 r'C:\SVSHARE\User_Apps\SysCfg\output\TargetOutput.xml',
88 r'C:\SVShare\BootScript.py',
89 r'C:\SVSHARE\User_Apps\WA_Package\waConfigs\waConfig_'+os.environ["SiliconFamily"]+'.cfg',
90 r'C:\SVShare\ConfigurationToolSignature.ini',
91 r'C:\SVShare\ConfigurationTool.log',
92 r'C:\SVShare\.\evtar\TargetConfig.xml',
93 r'C:\SVSHARE\User_Apps\WA_Package\PackageLogger.log',
94 r'C:\Temp\pmsb_reg0.log',
95 r'C:\Temp\pmsb_reg1.log',
96 r'C:\Temp\pmsb_reg2.log',
97 r'C:\Temp\pmsb_reg3.log',
98 r'C:\Temp\pmsb_reg4.log',
99 r'C:\Temp\pmsb_reg5.log',
100 r'C:\Temp\pmsb_reg6.log',
101 r'C:\Temp\pmsb_reg7.log',
102 r'C:\SVShare\BoardInfo\Output\data.json',
103 r'C:\SVSHARE\User_Apps\Hardwarecheck\Hardwarecheck_fail.log'
104 ])
105
106 abort_analysis_on_missing_platform_config = False
107 local_generation = True
108
```


This is the output when the hardwarecheck_withBoardinfo.py is run and hardware check passes:

```
Administrator: C:\Windows\System32\cmd.exe
#####
Executing scripts on: XmlCli v1.5.0 | Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)]
#####
INFO: Please run flexconUtils.readProjectCfgFile(['<YourProject+Focus>.ini']) prior to manually using any functions in flexconUtils
2023-03-30 11:52:57 - INFO - Resuming unit
2023-03-30 11:52:58 - INFO - Unit resumed
2023-03-30 11:52:58 - INFO - Detecting connected probe(s) on the system
2023-03-30 11:53:03 - INFO - XDP HW was detected on the system
2023-03-30 11:53:03 - INFO - About to parse xml file: C:\SVSHARE\BoardInfo\Configuration.ini
2023-03-30 11:53:03 - INFO - Directory: C:\SVShare\BoardInfo\Output already exists
2023-03-30 11:53:03 - INFO - About to parse xml file: C:\SVSHARE\BoardInfo\Configuration.ini
2023-03-30 11:53:03 - INFO - Reporting unit D6B47Y2500240 to Unit Location Service
2023-03-30 11:53:03 - INFO - Sending POST URL='http://unitlocation-service-prod.apps1-lc-int.icloud.intel.com/api/v1/unitLocation' with body: {'scanDateTime': '2023-03-30 16:53:03.128000', 'vid': u'D6B47Y2500240', 'hostName': 'AN4COREPRT053', 'comments': '', 'toolName': 'BoardInfo', 'hostLocation': u'AN-Austin'}
2023-03-30 11:53:04 - INFO - Got response: {'scanDateTime': u'2023-03-30T16:53:03.128', u'vid': u'D6B47Y2500240', u'hostName': u'AN4COREPRT053', u'comments': u'', u'toolName': u'BoardInfo', u'hostLocation': u'AN-Austin'}
2023-03-30 11:53:04 - INFO - Reporting unit D6B47Y2500275 to Unit Location Service
2023-03-30 11:53:04 - INFO - Sending POST URL='http://unitlocation-service-prod.apps1-lc-int.icloud.intel.com/api/v1/unitLocation' with body: {'scanDateTime': '2023-03-30 16:53:04.644000', 'vid': u'D6B47Y2500275', 'hostName': 'AN4COREPRT053', 'comments': '', 'toolName': 'BoardInfo', 'hostLocation': u'AN-Austin'}
2023-03-30 11:53:05 - INFO - Got response: {'scanDateTime': u'2023-03-30T16:53:04.644', u'vid': u'D6B47Y2500275', u'hostName': u'AN4COREPRT053', u'comments': u'', u'toolName': u'BoardInfo', u'hostLocation': u'AN-Austin'}
2023-03-30 11:53:05 - INFO - Trying to close OpenIPC connection
2023-03-30 11:53:05 - INFO - Parsing MasterFrame config for timeout before killing the process
2023-03-30 11:53:05 - INFO - Timeout value is 0, Dal will be kept open
Shutting down ITP Commands Library...
-----
Executing hardware_check.py
-----
[INFO] - HARDWARE_CHECK PASSED!
C:\SVSHARE\User_Apps\Hardwarecheck>
```

This is the output when the hardwarecheck_withBoardinfo.py is run and hardware check fails:

```
Administrator: C:\Windows\System32\cmd.exe
[SKX_C55_T0] Wait for SIPI loop break at 0xF000:0000000000000000
2023-03-30 12:07:59 - INFO - Unit halted
#####
Executing scripts on: XmlCli v1.5.0 | Python 2.7.15 (v2.7.15:ca079a3ea3, Apr 30 2018, 16:30:26) [MSC v.1500 64 bit (AMD64)]
#####
INFO: Please run flexconUtils.readProjectCfgFile(['<YourProject+Focus>.ini'] prior to manually using any functions in flexconUtils
2023-03-30 12:08:00 - INFO - Resuming unit
2023-03-30 12:08:02 - INFO - Unit resumed
2023-03-30 12:08:02 - INFO - Detecting connected probe(s) on the system
2023-03-30 12:08:06 - INFO - XDP HW was detected on the system
2023-03-30 12:08:06 - INFO - About to parse xml file: C:\SVSHARE\BoardInfo\Configuration.ini
2023-03-30 12:08:06 - INFO - Directory: C:\SVShare\BoardInfo\Output already exists
2023-03-30 12:08:06 - INFO - About to parse xml file: C:\SVSHARE\BoardInfo\Configuration.ini
2023-03-30 12:08:06 - INFO - Reporting unit D6B47Y2500240 to Unit Location Service
2023-03-30 12:08:06 - INFO - Sending POST URL='http://unitlocation-service-prod.apps1-lc-int.icloud.intel.com/api/v1/unitLocation' with body: {'scanDateTime': '2023-03-30 17:08:06.364000', 'vid': 'u'D6B47Y2500240', 'hostName': 'AN4COREPRT053', 'comments': '', 'toolName': 'BoardInfo', 'hostLocation': 'u'AN-Austin'}
2023-03-30 12:08:08 - INFO - Got response: {'u'scanDateTime': 'u'2023-03-30T17:08:06.364', 'u'vid': 'u'D6B47Y2500240', 'u'hostName': 'u'AN4COREPRT053', 'u'comments': 'u'', 'u'toolName': 'u'BoardInfo', 'u'hostLocation': 'u'AN-Austin'}
2023-03-30 12:08:08 - INFO - Reporting unit D6B47Y2500275 to Unit Location Service
2023-03-30 12:08:08 - INFO - Sending POST URL='http://unitlocation-service-prod.apps1-lc-int.icloud.intel.com/api/v1/unitLocation' with body: {'scanDateTime': '2023-03-30 17:08:08.020000', 'vid': 'u'D6B47Y2500275', 'hostName': 'AN4COREPRT053', 'comments': '', 'toolName': 'BoardInfo', 'hostLocation': 'u'AN-Austin'}
2023-03-30 12:08:08 - INFO - Got response: {'u'scanDateTime': 'u'2023-03-30T17:08:08.02', 'u'vid': 'u'D6B47Y2500275', 'u'hostName': 'u'AN4COREPRT053', 'u'comments': 'u'', 'u'toolName': 'u'BoardInfo', 'u'hostLocation': 'u'AN-Austin'}
2023-03-30 12:08:08 - INFO - Trying to close OpenIPC connection
2023-03-30 12:08:08 - INFO - Parsing MasterFrame config for timeout before killing the process
2023-03-30 12:08:08 - INFO - Timeout value is 0, Dal will be kept open
Shutting down ITP Commands Library...
-----
Executing hardware_check.py
-----
[WARNING] - HARDWARE_CHECK FAILED!
[WARNING] - Log files created at C:\SVSHARE\User_Apps\Hardwarecheck
[INFO] - no flag.

C:\SVSHARE\User_Apps\Hardwarecheck>
```

This is the output showing hardware check passing in Xwrapper:

```
XWrapper 1.0.100 with XMON 3.3.4.4
03/30/2023 11:44:59 [ StdOut] DFV should not run in this system
03/30/2023 11:44:59 [ StdOut] C:\SVSHARE\Xwrapper>exit 0
03/30/2023 11:45:00 [XmonInterface] Process Completed.
03/30/2023 11:45:00 [XmonInterface] returnCode: 0
03/30/2023 11:45:00 [XmonInterface] Executing python.
03/30/2023 11:45:00 [XmonInterface] Regular call script name : C:\Windows\System32\cmd.exe /c python C:\SVSHARE\User_Apps\hardwarecheck\hardware_check.py --continue-on-error
03/30/2023 11:45:00 [XmonInterface] Args: /c python C:\SVSHARE\User_Apps\hardwarecheck\hardware_check.py --continue-on-error
03/30/2023 11:45:00 [XmonInterface] Working Dir: C:\SVSHARE\Xwrapper
03/30/2023 11:45:00 [XmonInterface] Waiting process to finish...
03/30/2023 11:45:00 [ 600000] Timeout value is
03/30/2023 11:45:00 [ StdOut] [INFO] - HARDWARE_CHECK PASSED!
03/30/2023 11:45:01 [XmonInterface] Process Completed.
03/30/2023 11:45:01 [XmonInterface] returnCode: 0
03/30/2023 11:45:02 [XmonInterface] SaveGBT second False.
03/30/2023 11:45:02 [XmonInterface] GeneratePcXmlAfterEachBoot secondFalse.
03/30/2023 11:45:02 [XmonInterface] Regular call script name : C:\SVSHARE\Xwrapper\PC2TargetIniConv.exe -s
03/30/2023 11:45:02 [XmonInterface] Converting Target.ini
03/30/2023 11:45:02 [XmonInterface] Waiting process to finish...
03/30/2023 11:45:02 [XmonInterface] Args: -s
03/30/2023 11:45:02 [XmonInterface] Working Dir: C:\SVSHARE\Xwrapper
03/30/2023 11:45:02 [ 600000] Timeout value is
03/30/2023 11:45:02 [ StdOut] Loading HalMessageComWrapper...
03/30/2023 11:45:02 [ StdOut] (Message) GBT Version 3.0901 Creating target.ini with pci-devices section
03/30/2023 11:45:03 [XmonInterface] Process Completed.
03/30/2023 11:45:03 [XmonInterface] returnCode: 0
03/30/2023 11:45:03 [XWrapper] Reboot completed
03/30/2023 11:45:03 [XWrapper] PlatformConfig archived - C:\SVSHARE\Xwrapper\PlatformConfig-03-30-23-114503.xml
03/30/2023 11:45:03 [XWrapper] Idle - Waiting for seed
```

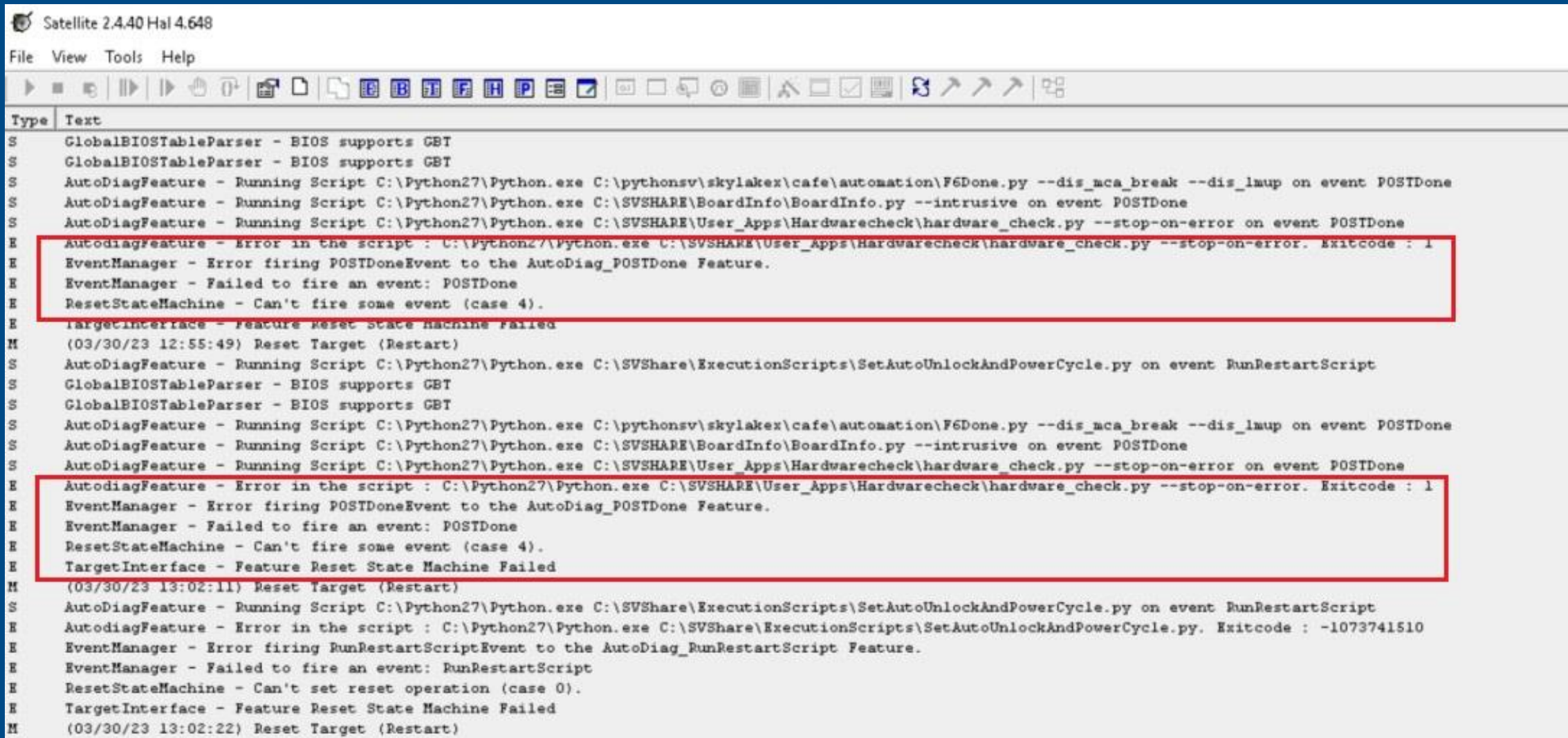

This is the output showing hardware check failed in Xwrapper with `--continue-on-error` flags

```
XWrapper 1.0.100 with XMON 3.3.4.4
03/30/2023 11:21:43 [XmonInterface] Process Completed.
03/30/2023 11:21:43 [XmonInterface] returnCode: 0
03/30/2023 11:21:43 [XmonInterface] Executing python.
03/30/2023 11:21:43 [XmonInterface] Regular call script name : C:\Windows\System32\cmd.exe /c python C:\SVSHARE\User_Apps\hardwarecheck\hardware_check.py --continue-on-error
03/30/2023 11:21:43 [XmonInterface] Working Dir: C:\SVSHARE\XWrapper
03/30/2023 11:21:43 [XmonInterface] Waiting process to finish...
03/30/2023 11:21:43 [ 600000] Timeout value is
03/30/2023 11:21:43 [XmonInterface] Args: /c python C:\SVSHARE\User Apps\hardwarecheck\hardware check.py --continue-on-error
03/30/2023 11:21:43 [ StdOut] [WARNING] - HARDWARE_CHECK FAILED!
03/30/2023 11:21:43 [ StdOut] [WARNING] - Log files created at C:\SVSHARE\User_Apps\hardwarecheck
03/30/2023 11:21:43 [ StdOut] [WARNING] - Continuing execution due to --continue-on-error flag
03/30/2023 11:21:44 [XmonInterface] Process Completed.
03/30/2023 11:21:44 [XmonInterface] returnCode: 0
03/30/2023 11:21:44 [XmonInterface] SaveGBT second False.
03/30/2023 11:21:44 [XmonInterface] GeneratePcXmlAfterEachBoot secondFalse.
03/30/2023 11:21:44 [XmonInterface] Regular call script name : C:\SVSHARE\XWrapper\PC2TargetIniConv.exe -s
03/30/2023 11:21:44 [XmonInterface] Converting Target.ini
03/30/2023 11:21:44 [XmonInterface] Working Dir: C:\SVSHARE\XWrapper
03/30/2023 11:21:44 [XmonInterface] Waiting process to finish...
03/30/2023 11:21:44 [ 600000] Timeout value is
03/30/2023 11:21:44 [XmonInterface] Args: -s
03/30/2023 11:21:44 [ StdOut] Loading HalMessageComWrapper...
03/30/2023 11:21:44 [ StdOut] (Message) GBT Version 3.0901 Creating target.ini with pci-devices section
03/30/2023 11:21:46 [XmonInterface] Process Completed.
03/30/2023 11:21:46 [XmonInterface] returnCode: 0
03/30/2023 11:21:46 [XWrapper] Reboot completed
03/30/2023 11:21:46 [XWrapper] PlatformConfig archived - C:\SVSHARE\XWrapper\PlatformConfig-03-30-23-112146.xml
03/30/2023 11:21:46 [XWrapper] Idle - Waiting for seed
```

This is the output showing hardware check failed in Xwrapper with `--stop-on-error` flags

```
XWrapper 1.0.100 with XMON 3.3.4.4
03/30/2023 11:04:15 [XmonInterface] Executing python.
03/30/2023 11:04:15 [XmonInterface] Regular call script name : C:\Windows\System32\cmd.exe /c python C:\SVSHARE\User_Apps\hardwarecheck\hardware_check.py --stop-on-error
03/30/2023 11:04:15 [XmonInterface] Args: /c python C:\SVSHARE\User_Apps\hardwarecheck\hardware_check.py --stop-on-error
03/30/2023 11:04:15 [XmonInterface] Working Dir: C:\SVSHARE\Xwrapper
03/30/2023 11:04:15 [ 600000] Timeout value is
03/30/2023 11:04:15 [XmonInterface] Waiting process to finish...
03/30/2023 11:04:16 [ StdOut] [WARNING] - HARDWARE_CHECK FAILED!
03/30/2023 11:04:16 [ StdOut] [WARNING] - Log files created at C:\SVSHARE\User_Apps\hardwarecheck
03/30/2023 11:04:16 [ StdOut] [WARNING] - Stopping execution due to --stop-on-error flag
03/30/2023 11:04:17 [XmonInterface] Process Completed with error!
03/30/2023 11:04:17 [XmonInterface] Regular call script name : C:\Windows\System32\cmd.exe /c python C:\SVSHARE\User_Apps\hardwarecheck\hardware_check.py --stop-on-error
03/30/2023 11:04:17 [XmonInterface] returnCode: 1
03/30/2023 11:04:17 [ 600000] Timeout value is
03/30/2023 11:04:17 [XmonInterface] Waiting process to finish...
03/30/2023 11:04:17 [XmonInterface] Args: /c python C:\SVSHARE\User_Apps\hardwarecheck\hardware_check.py --stop-on-error
03/30/2023 11:04:17 [XmonInterface] Working Dir: C:\SVSHARE\Xwrapper
03/30/2023 11:04:17 [ StdOut] [WARNING] - HARDWARE_CHECK FAILED!
03/30/2023 11:04:17 [ StdOut] [WARNING] - Log files created at C:\SVSHARE\User_Apps\hardwarecheck
03/30/2023 11:04:17 [ StdOut] [WARNING] - Stopping execution due to --stop-on-error flag
03/30/2023 11:04:18 [XmonInterface] Process Completed with error!
03/30/2023 11:04:18 [XmonInterface] returnCode: 1
03/30/2023 11:04:18 [ ERROR] [XmonInterface]
Detail]
Failed to execute PC hack script.
03/30/2023 11:04:19 [XWrapper] Workflow Stopped.
03/30/2023 11:04:19 [XWrapper] Reboot Failed
03/30/2023 11:04:19 [XWrapper] Halted!!
```


This is the output showing hardware check failed in Satellite with `--stop-on-error` flags



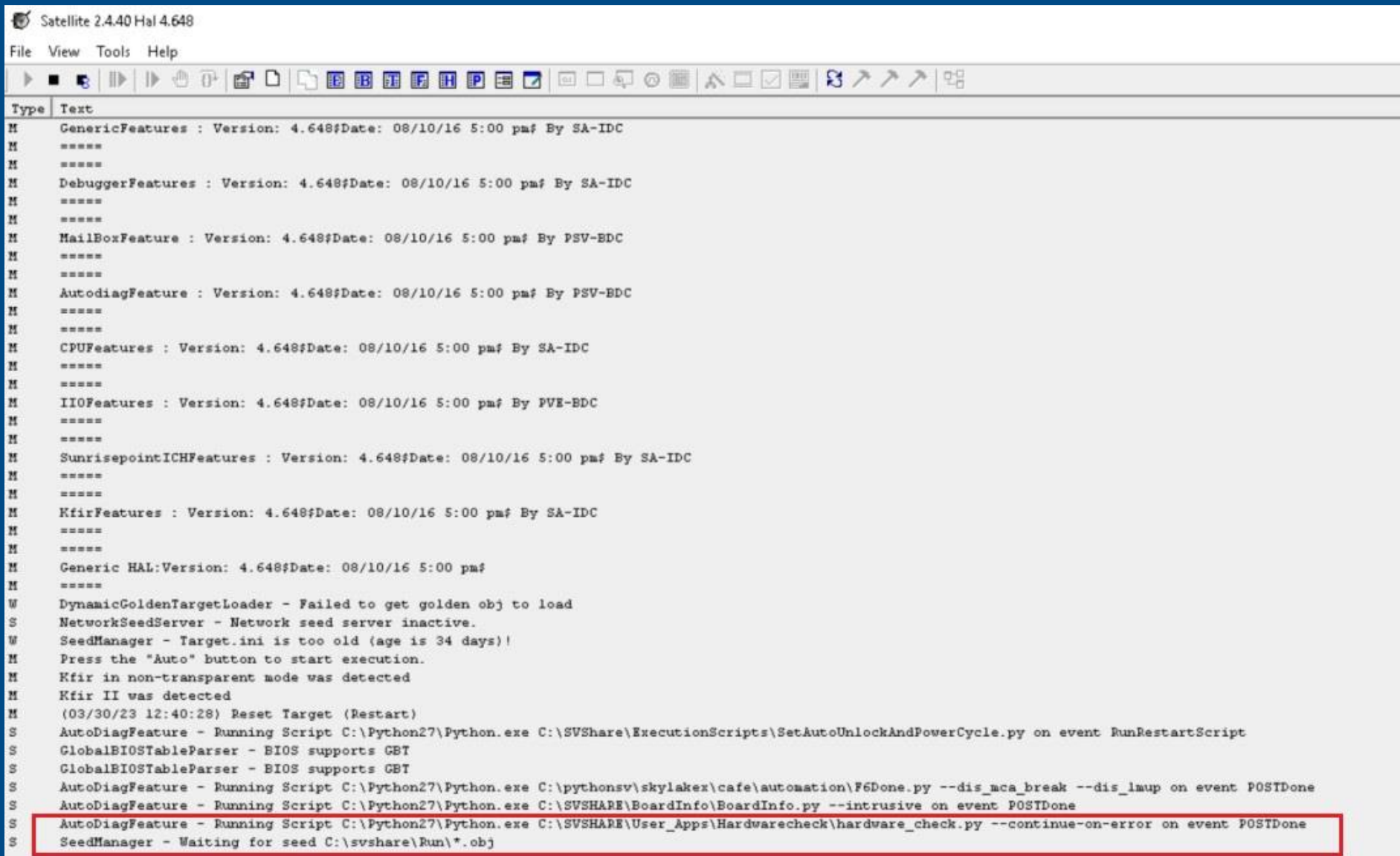
```

Satellite 2.4.40 Hal 4.648
File View Tools Help

Type Text
S GlobalBIOSTableParser - BIOS supports GBT
S GlobalBIOSTableParser - BIOS supports GBT
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\pythonsv\skylakex\cafe\automation\F6Done.py --dis_mca_break --dis_lmup on event POSTDone
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVSHARE\BoardInfo\BoardInfo.py --intrusive on event POSTDone
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVSHARE\User_Apps\Hardwarecheck\hardware_check.py --stop-on-error on event POSTDone
E AutodiagFeature - Error in the script : C:\Python27\Python.exe C:\SVSHARE\User_Apps\Hardwarecheck\hardware_check.py --stop-on-error. Exitcode : 1
E EventManager - Error firing POSTDoneEvent to the AutoDiag_POSTDone Feature.
E EventManager - Failed to fire an event: POSTDone
E ResetStateMachine - Can't fire some event (case 4).
E TargetInterface - Feature Reset State Machine Failed
M (03/30/23 12:55:49) Reset Target (Restart)
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVShare\ExecutionScripts\SetAutoUnlockAndPowerCycle.py on event RunRestartScript
S GlobalBIOSTableParser - BIOS supports GBT
S GlobalBIOSTableParser - BIOS supports GBT
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\pythonsv\skylakex\cafe\automation\F6Done.py --dis_mca_break --dis_lmup on event POSTDone
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVSHARE\BoardInfo\BoardInfo.py --intrusive on event POSTDone
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVSHARE\User_Apps\Hardwarecheck\hardware_check.py --stop-on-error on event POSTDone
E AutodiagFeature - Error in the script : C:\Python27\Python.exe C:\SVSHARE\User_Apps\Hardwarecheck\hardware_check.py --stop-on-error. Exitcode : 1
E EventManager - Error firing POSTDoneEvent to the AutoDiag_POSTDone Feature.
E EventManager - Failed to fire an event: POSTDone
E ResetStateMachine - Can't fire some event (case 4).
E TargetInterface - Feature Reset State Machine Failed
M (03/30/23 13:02:11) Reset Target (Restart)
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVShare\ExecutionScripts\SetAutoUnlockAndPowerCycle.py on event RunRestartScript
E AutodiagFeature - Error in the script : C:\Python27\Python.exe C:\SVShare\ExecutionScripts\SetAutoUnlockAndPowerCycle.py. Exitcode : -1073741510
E EventManager - Error firing RunRestartScriptEvent to the AutoDiag_RunRestartScript Feature.
E EventManager - Failed to fire an event: RunRestartScript
E ResetStateMachine - Can't set reset operation (case 0).
E TargetInterface - Feature Reset State Machine Failed
M (03/30/23 13:02:22) Reset Target (Restart)

```

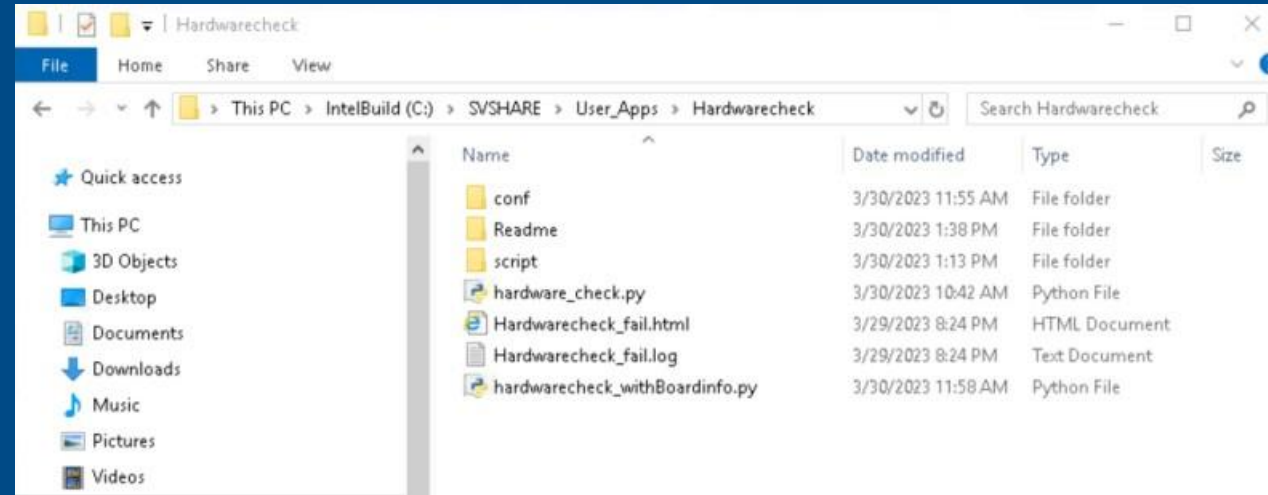
This is the output showing hardware check passed in Satellite with `--continue-on-error` flags



```
Satellite 2.4.40 Hal 4.648
File View Tools Help

Type Text
M GenericFeatures : Version: 4.648$Date: 08/10/16 5:00 pm$ By SA-IDC
M =====
M =====
M DebuggerFeatures : Version: 4.648$Date: 08/10/16 5:00 pm$ By SA-IDC
M =====
M =====
M MailBoxFeature : Version: 4.648$Date: 08/10/16 5:00 pm$ By PSV-BDC
M =====
M =====
M AutodiagFeature : Version: 4.648$Date: 08/10/16 5:00 pm$ By PSV-BDC
M =====
M =====
M CPUFeatures : Version: 4.648$Date: 08/10/16 5:00 pm$ By SA-IDC
M =====
M =====
M IIOFeatures : Version: 4.648$Date: 08/10/16 5:00 pm$ By PVE-BDC
M =====
M =====
M SunrisepointICHFeatures : Version: 4.648$Date: 08/10/16 5:00 pm$ By SA-IDC
M =====
M =====
M KfirFeatures : Version: 4.648$Date: 08/10/16 5:00 pm$ By SA-IDC
M =====
M =====
M Generic HAL:Version: 4.648$Date: 08/10/16 5:00 pm$
M =====
W DynamicGoldenTargetLoader - Failed to get golden obj to load
S NetworkSeedServer - Network seed server inactive.
W SeedManager - Target.ini is too old (age is 34 days)!
M Press the "Auto" button to start execution.
M Kfir in non-transparent mode was detected
M Kfir II was detected
M {03/30/23 12:40:28} Reset Target (Restart)
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVShare\ExecutionScripts\SetAutoUnlockAndPowerCycle.py on event RunRestartScript
S GlobalBIOSTableParser - BIOS supports GBT
S GlobalBIOSTableParser - BIOS supports GBT
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\pythonsv\skylaker\cafe\automation\F6Done.py --dis_mca_break --dis_lmup on event POSTDone
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVSHARE\BoardInfo\BoardInfo.py --intrusive on event POSTDone
S AutoDiagFeature - Running Script C:\Python27\Python.exe C:\SVSHARE\User_Apps\Hardwarecheck\hardware_check.py --continue-on-error on event POSTDone
S SeedManager - Waiting for seed C:\svshare\Run\*.obj
```

When hardware check fails, two files extensions .html and .log are created.



Hardwarecheck_fail.log

```
Differences between required SPR_DP.yaml (expected) and collected data.json (actual)
+-----+-----+-----+
|                                     Differences between required SPR_DP.yaml (expected) and collected data data.json (actual). Log created: 03/29/23 at 20:24                                     |
+-----+-----+-----+
| Items                                     SPR_DP.yaml                                     data.json                                     |
+-----+-----+-----+
| ['Units', 0, 'Straps', 0, 'Strap_BIST_ENABLE: OFF'] | Strap_BIST_ENABLE: OFF | Strap_BIST_ENABLE: ON |
+-----+-----+-----+
```

Hardwarecheck_fail.html

Differences between required SPR_DP.yaml (expected) and collected data data.json (actual). Log created: 03/29/23 at 20:24		
Items	SPR_DP.yaml	data.json
['Units', 0, 'Straps', 0, 'Strap_BIST_ENABLE: OFF']	Strap_BIST_ENABLE: OFF	Strap_BIST_ENABLE: ON

In conclusion, the Hardware Check always calls BoardInfo to scan hardware and update the data.json file, which is then compared to the YAML configuration file.

The Intel logo is centered on a solid blue background. It features the word "intel" in a white, lowercase, sans-serif font. A small, light blue square is positioned above the first vertical stroke of the letter 'i'. To the right of the word "intel" is a small white registered trademark symbol (®).

intel®