Frequently Asked Questions
August 17, 2021

Contents

NSC Firmware Revision: 3.0.10

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1. Firmware

➢ Latest firmware to use

- NSC 3.0.10 Available from VIAVI StrataSync
- MTA 4.4 Available from Google Play & Apple App Store
- ONX DSL 10.4.10 Available from VIAVI StrataSync
- ONX CATV 4.4.18 Available from VIAVI StrataSync

- StrataSync (U.S.) https://stratasync.viavisolutions.com/
- StrataSync (Europe) https://eu.stratasync.viavisolutions.com

➢ Upgrade your NSC with latest firmware – via USB

- Download latest firmware: NSC Firmware (3.0.10)
- Load it on an empty memory stick
- After the complete boot of your NSC when the power LED is solid green, plug the memory stick into your NSC
- Note that the red/blue 'disco' lights will stop after ~60 seconds when the upgrade is complete
- The NSC should shut down
- Power on the unit

➢ Add SW options, Test Profiles or Customer Settings to your NSC – via USB

- Upgrade first your NSC to the latest Firmware (see above)
- Copy the file(s) – like Test Profile files, SW Option files (file name must start with "options"), Customer Setting file (file name must start with "cust_") – to an empty memory stick; do not change file names
- After the complete boot of your NSC when the power LED is solid green, plug the memory stick into your NSC
- Note that the red/blue 'disco' lights will stop after few seconds after files are installed
- Disconnect & reconnect the MTA (Mobile Tech App) to the NSC to see all new options installed

➢ Add SW options, Test Profiles or Customer Settings to your NSC – via MTA

- Select the file in the email
- Share it – via the app-to-app share button – with MTA (Mobile Tech)
- MTA opens and places the file under "Mobile Tech Files"

- Press the 'Share' icon next to your file
- Deploy to NSC-100
- Disconnect & reconnect the MTA to the NSC to see all new capabilities installed

2. Test Profiles

➢ **Special characters which can be used for Test Profile names**

- Only spaces and hyphens can be used

3. GPON & XGSPON

➢ **Laser Class of VIAVI PON SFPs**

- The laser of the VIAVI GPON SFP is Class 1
- The laser of the VIAVI XGSPON SFP+ is Class 1

➢ **ODN Class of VIAVI PON SFPs**

- The ODN Class of the VIAVI GPON SFP is Class B+
- The ODN Class of the VIAVI XGSPON SFP is Class N1

4. Speed Tests

➢ **How to test against any public Ookla server**

- Select "Auto Server" in the Test Profile
  - That way, the NSC with test against the closest public Ookla server at each test i.e. the public Ookla server with the least delay from the NSC

➢ **How to test against any public Ookla server owned by a Provider**

- Unselect "Auto Server" in the Test Profile
- Leave the "Server URL" blank

- Enter the string of characters you want to filter the Ookla Server details with – from these Ookla server detail fields
  - Host
  - Name
  - Country
  - Sponsor
  - That way, the NSC with test against the closest public Ookla server which details contain that string of characters e.g. “Telefonica”, “Baltimore”, “Japan”

➢ **Why can SpeedCheck results be so high?**

- While SpeedCheck does use HTTP over TCP as the Application/Transport layer for test execution it reports the layer 2 rate
  - 987 Mbps (L2 speed) displayed instead of the 949 Mbps (L4 speed) on a 1G link for example

- Initially, on ONX-CATV & ONX DSL, this was done intentionally to prevent a discrepancy between the rate that CPE devices are provisioned for and the rate that is measured by SpeedCheck throughput test, so this a legacy discrepancy for now

5. Loopback

➢ **Is a far end ‘Loop Up’ command always required?**

- L2 or L3 Loopback mode needs to receive a Loop Up command from the far end

- Port Loopback mode loopbacks everything, so doesn’t need any loop up command to be received

6. Calibration

➢ **NSC-100 calibration**

- There’s no Calibration required for the NSC-100
  - Applies to NSC mainframe and PON SFPs

7. **Log Files** (for diagnostics with VIAVI R&D)

➢ How to get Log Files while testing

- Insert a memory stick into the NSC
- Run your tests
- A Log File for each test will be created & stored on the memory stick

- Once all Log Files are on your memory stick, please share them with VIAVI with as much context as possible

➢ How to get Log Files after testing

- Turn your NSC on
- After your NSC is booted, plug a memory stick into your NSC
- Press 3 times the right-blue Play key (not too fast) and all Log Files associated with all past tests will be copied to the memory stick
- The red/blue 'disco' lights will stop after few seconds once the Log Files are copied to the memory stick