



# Custom Speed Test Server

6300-CX, 6310-DX, 6330-MX, and 6350-SR

# Custom Speed Test Server

Skill level: *Intermediate*

## Goal

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To setup a custom speed test server and have your Accelerated 63xx-series router perform speed tests to it.

**!** The *Speed test* command leverages the management tunnel established between the 63xx-series router and Accelerated View. For details on the monthly data usage for this access, refer to the following article:

[Data Usage Estimates](#)

## Setup

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For this setup, you will need access to Accelerated View, and a 63xx-series router online and syncing with Accelerated View. If you see the 63xx-series router listed as up (green status) in Accelerated View, you are good to go.

## Details

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Accelerated View utilizes the IPSec tunnel the 63xx-series router establishes to remote.accns.com to send remote commands to the device. One of the available commands a user can run is the *Perform Speed Test* command. This will trigger the 63xx-series router to perform a speed test to the speedtest server specified in its configuration settings. The default speed test server is speedtest.accns.com.

**!** **Note:** In order to minimize the speed test's impact on cellular data consumption, the results are an estimation of the available throughput of the device, and may not represent the full network speed available.

This article will detail setting up a separate speed test server that a 63xx-series router can use as an alternative to the default speed test server.

## Speed Test server setup

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The speed test server utilizes the [nuttcp](#) tool in Linux. This setup was tested using nuttcp version 6.1.2 on an Ubuntu 16.04 server with 1GB of RAM and a 30GB hard drive. The nuttcp tool used approximately 150kB of disk space, and consumed an average of 100MB of RAM.

Run the following command to install the nuttcp package.

```
sudo apt-get install nuttcp
```

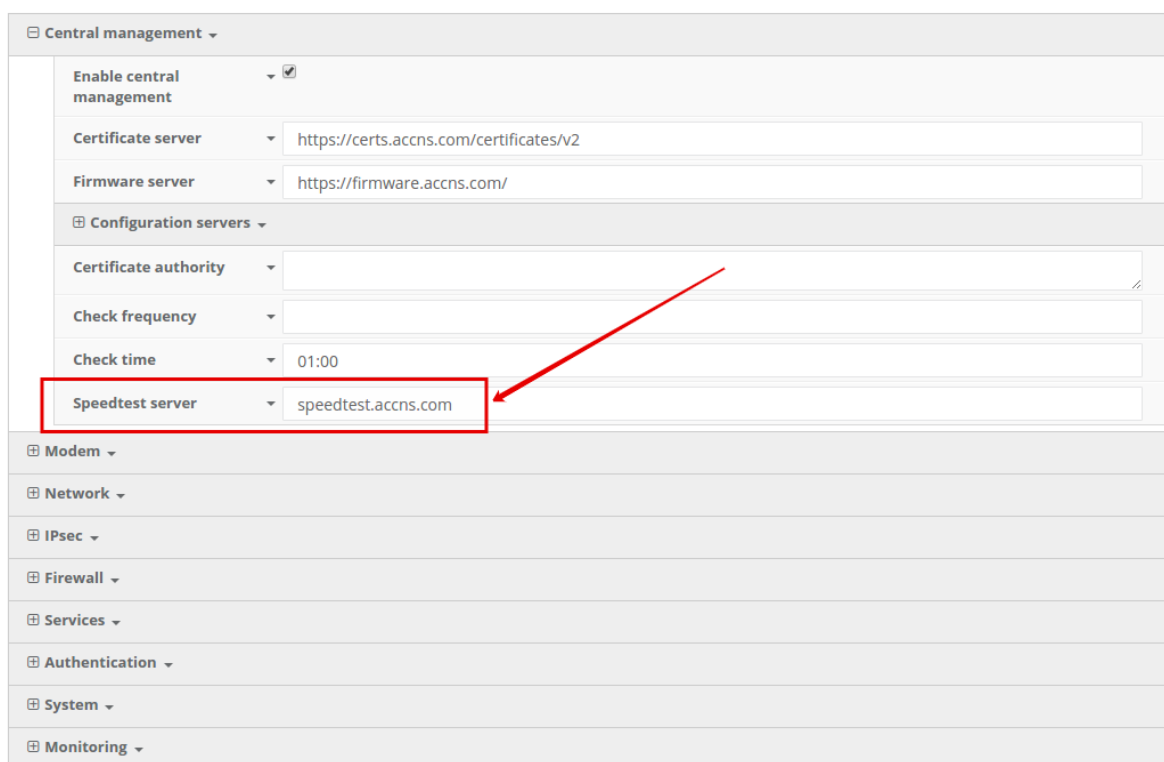
Then start the nuttcp speed test server with the following command:

```
nuttcp -S
```

The 63xx-series router will need access to this server on UDP ports 5000 and 5001. Please ensure proper firewalls are opened to allow access to the IP address of the speed test server and its respective ports.

## Using the new speed test server

Once the new speed test server is running, add the IP address to the 63xx-series router's configuration profile under **Central management** -> **speedtest server** and apply the configuration to the device.



The screenshot shows the configuration page for a router, specifically the 'Central management' section. The 'Speedtest server' field is highlighted with a red box, and a red arrow points to it from the right. The configuration includes the following fields:

- Enable central management:
- Certificate server:
- Firmware server:
- Configuration servers section:
  - Certificate authority:
  - Check frequency:
  - Check time:
  - Speedtest server:  (highlighted with a red box and a red arrow)
- Modem
- Network
- IPsec
- Firewall
- Services
- Authentication
- System
- Monitoring

To run a speed test, select the **Perform Speed Test** option under the **Commands** drop-down listed on the device's details page in Accelerated View.

MAC: 0027042BB05B

Home / Devices / Cellular / 6350-SR / 0027042BB05B

Cellular 6350-SR

Reports Actions Commands SMS Pages

**Device Details**

- Configuration
- Settings
- Associated Devices
- Cellular Details
- Tunnels
- Networks
- Location
- Contacts
- Netflow

Organization:	Accelerated Demo
Site ID:	SR-JD Desk1
Configuration:	SR Default Demo - Last checked at Aug 13 2017 01:00:17 (EDT)
MAC Address:	0027042BB05B
Serial:	6300030007401689
Status:	Device is up
Model:	6350-SR
Uplink IP Address:	
Terminal:	Terminal on Unit
Firmware Version:	17.5.108.6
Primary Interface:	wan
Activated At:	Nov 15 2016 14:40:56 (EST)
Last Heartbeat:	Aug 16 2017 19:27:42 (EDT)
Last Restart:	Jul 28 2017 06:42:44 (EDT)
Data Plan:	N/A

Check Status

Check Signal Strength

**Perform Speed Test**

ARPing Attached Device

Send Wake-on-LAN to Attached Device

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Check Configuration

Reboot

The 63xx-series router will acknowledge the request to perform the speed test, and will send another event to Accelerated View once the speed test completes. Clicking on the speed test results will display a window with the upload and downloads speeds observed in the test.

Search for devices ...

MAC: 0027042BB05B

Home / Devices / Cellular / 6350-SR / 0027042BB05B

Filter MAC: 0027042BB05B

Cellular 6350-SR

MAC: 0027042BB05B

Export

Created	Type	Level	Information
Aug 16 2017 20:07:05 (EDT)	Remote	Info	<b>Speed Test Results</b>
Aug 16 2017 20:06:33 (EDT)	Status	Info	Heard [speed]. Starting speed test.
Aug 16 2017 20:06:32 (EDT)	Remote	Info	Successfully sent command to device
Aug 16 2017 20:06:01 (EDT)	Remote	Info	Attempting to perform speed test ...

**Raw Message**

```

{
  "speed": {
    "tx_avg": "25.7319Mbps",
    "tx_latency": "65.20ms",
    "rx_avg": "20.0471Mbps",
    "rx_latency": "62.11ms"
  }
}

```

Go To Event