

Microsoft Network Testing Companion

To install the components of the Microsoft Network Testing Companion, perform the steps below:

Note: You should be logged in as a local admin account writing to the local Hard Drive. The use of Microsoft One Drive may cause the MNTC to run improperly.

- 1. **Run PowerShell as Administrator**. You can open PowerShell by left clicking on the Windows Icon at the bottom left of your screen typing PowerShell. Highlight PowerShell, right click and select Run as Administrator.
- 2. Run the following commands in PowerShell:
 - a. Set-ExecutionPolicy RemoteSigned
 - b. Install-Module -Name Network Testing Companion Required Version 1.5.5
 - c. Invoke-ToolCreateShortcuts
- 3. Look for the following Network Testing Companion Icon on the desktop and open.





4. The shortcut will open the following dashboard below either showing a green Install button or green Run button. Select Install -or- If the Green button says START, move onto step 5.



5. In the settings tab select your Network connectivity and quality test parameters as follows:





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6. Press Start to begin the Network Test

Skype for Business and Microsoft Teams Network Testing Companion X Network connectivity and quality test Windows operating Internet connection system Start Tests View Results Settings About Windows version 10.0.19041.0 has Your Internet connection has been been detected and is a 64-bit successfully verified. operating system. 1 \oslash 0 \oslash Microsoft Teams or Network Assessment Click the start button to begin testing Skype-certified device Tool A Teams/Skype-certified device was The version detected on this Connectivity Quality not detected. Please click the info computer is compatible with this icon to learn more. application. R ?) 0 0 0

While the test is running you will see the following screen:

| Windows operating system | Internet connection | Network connectivity | y and quality test |
|--|--|--|--------------------|
| Windows version 10.0.18362.0 has been detected and is a 64-bit operating system. | Your Internet connection has been successfully verified. | Start lests View Results Settings Abor | |
| Microsoft Teams or Skype-certified device | Network Assessment Tool | Running audio qu | ality test 1/20 |
| A Teams/Skype-certified device was | The version detected on this computer is compatible with this | Connectivity | Quality |



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Once the test is completed you are returned to following screen:

📕 Skype for Business and Microsoft Teams Network Testing Companion



7. Select the View Results Tab

| Window system | ws operating | Internet connection | | Network co | nnectivity and o | quality test |
|-------------------------|--|-----------------------------------|-------------|--|-------------------------|---------------------------------|
| System | | | Start Tests | View Results Set | tings About | |
| Windows | rersion 10.0.19041.0 has | Your Internet connection has been | | Ľ | Detailed results | |
| been dete operating | system, | successfully verified. | Netwo | rk connectivity | \odot | |
| | \oslash () | \odot | Report | No issues detected. required ports. | The tool was able to re | each all transport relays on al |
| Microso Skype- | oft Teams or certified device | Network Assessment Tool | Netwo | rk quality | \oslash | |
| | · · · · · · · · · · · · · · · · · · · | | | Packet loss: | 0.2355713% | \odot |
| A leams/S not detect | kype-certified device was ed. Please click the info | omputer is compatible with this | Report | Round trip time (ms) | : 33.7 | \odot |
| icon to lea | rn more. | application. | | Jitter (ms): | 19.889189 | \odot |
| | 1000 | 0 | | Packet reorder ratio: | 0% | \odot |



8. Select the Network Connectivity and Network Quality reports, one at a time.

| | Windows operating | Internet connection | Network connectivity and quality test | |
|---|---|--|--|--|
| | | • | Start Tests View Results Settings About | |
| | Windows version 10.0.18362.0 has | Your Internet connection has been | Detailed results | |
| | operating system. | successiony vernied. | Network connectivity | |
| | \odot (1) | \odot | No issues detected. The tool was able to reach all transport relays on required ports. | |
| | Microsoft Teams or | 🔑 Network Assessment | Network quality | |
| - | Skype-certified device | Tool | | |
| | | | Packet loss: 0.471142520612485% | |
| | A Teams/Skype-certified device was not detected. Please click the info | The version detected on this computer is compatible with this | Report Round trip time (ms): 16.5 | |
| | icon to learn more. | application. | Jitter (ms): 5.610888 | |
| | | | Packet reorder ratio: 0% | |

Text files will be created for each report with your results.

Connectivity results are written to: C:\Users\yourname\AppData\Local\Microsoft Skype for Business Network Assessment Tool\connectivity_results.txt. Copy and save the file.

| Connectivity_results - Notepad | | | 14 | | × |
|---|-------------|--------------------|--------|---|---|
| File Edit Format View Help | | | | | |
| Skype for Business - Network Assessment Tool | | | | | ~ |
| Starting Connectivity checks | | | | | |
| Relay : 13.107.64.2 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 13.107.64.2 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 13.107.64.2 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 13.107.65.5 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 13.107.65.5 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 13.107.65.5 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.113.192.2 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 52.113.192.2 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 52.113.192.2 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.113.193.5 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 52.113.193.5 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 52.113.193.5 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.114.188.1 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 52.114.188.1 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 52.114.188.1 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.114.188.254 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 52.114.188.254 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 52.114.188.254 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.114.189.1 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 52.114.189.1 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 52.114.189.1 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.114.189.254 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 52.114.189.254 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 52.114.189.254 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.114.190.1 is reachable using Protocol UDP and Port 3478 | | | | | |
| Relay : 52.114.190.1 is reachable using Protocol TCP and Port 443 | | | | | |
| Relay : 52.114.190.1 is reachable using Protocol HTTPS and Port 443 | | | | | |
| Relay : 52.114.190.254 is reachable using Protocol UDP and Port 3478 | | | | | ~ |
| (| | | | 1 | > |
| | Ln 1, Col 1 | 100% Windows (CRLF |) UTF- | 8 | |



Assessment (Quality) Results are written to:

C:\Users\:"username"\AppData\Local\Temp\results_analyzer.txt

NOTE: This Quality Result file is a temp file available only while the Assessment utility is opened and should be copied while the companion is still open. Closing the utility results in the deletion of the results_analyzer.txt file and the utility will need to be run again.

| Content of the second s | | 1.7 | × |
|--|---|-----|---|
| File Edit Format View H | lelp | | |
| Skype for Business - | Network Assessment Tool - Results Analyzer | | |
| Input file: | C:\Users\James\AppData\Local\Temp\3\results temp.csv | | |
| Total rows read: | 20 | | |
| Total rows skipped: | 0 | | |
| Total rows processed: | 20 | | |
| 90th percentile value | s per metric: | | |
| Packet loss rate: | 0,1179245% | | |
| RTT latency: | 16 | | |
| Jitter: | 4.566045 | | |
| Packet reorder ratio: | 0% | | |
| If this is a Skype fo | r Business Client machine connecting to the Microsoft network Edge: | | |
| Packet loss rate: | PASSED | | |
| RTT latency: | PASSED | | |
| Jitter: | PASSED | | |
| Packet reorder ratio: | PASSED | | |
| If this is a network | Edge connecting to the Microsoft network Edge: | | |
| Packet loss rate: | FAILED | | |
| RTT latency: | PASSED | | |
| Jitter: | PASSED | | |
| Packet reorder ratio: | PASSED | | |

You can send both result reports to your network administrator for review with copies sent to your Altigen Communications Project Manager