

## MOBILE EYE REFERENCE GUIDE

Mobile Eye enables enterprises to crowdsource Wi-Fi performance data from every corner of their global networks, directly from the smartphones, tablets and laptops of their diverse user-base. Login to EyeQ™ in the cloud to centrally monitor and manage the Wi-Fi experience from anywhere in the world.



Thanks to a resilient, highly scalable cloud architecture, Mobile Eye is equipped to handle wireless networks of any size. It can store 3 months of detailed historical performance data for an entire organization's access points and clients. No need to worry about storage, backups or feature upgrades.

### Mobile Eye Capability Matrix

|   | Windows   | macOS   | Android  | iOS  |
|---|---|---|--|--|
| <b>Supported Versions</b>                       | 7, 8, and 10  | Yosemite, El Capitan, Sierra, High Sierra   | 5 (Lollipop)<br>6 (Marshmallow)<br>7 (Nougat)<br>8 (Oreo)                      | 9, 10 and 11   |
| <b>Key Performance Indicators/ Network Data</b> | Throughput, delay, frequency, channel, signal strength, data rate, SSID, BSSID                | Throughput, delay, frequency, channel, signal strength, data rate, SSID, BSSID                | Throughput, delay, frequency, channel, signal strength, data rate, SSID, BSSID | Throughput, delay, web download time, jitter, packet loss and VoIP voice quality (MOS) |
| <b>Device Data Gathered</b>                     | Make, model, OS, WLAN adapter with driver version, approx. location, MAC address, client name | Make, model, OS, WLAN adapter with driver version, approx. location, MAC address, client name | Make, model, software version, location, client name                           | Make, model, software version, location, client name                                   |
| <b>Deployment</b>                               | MSI installer, SCCM script or equivalent  | MSI installer, SCCM script or equivalent  | Google Play  | App Store  |
| <b>Background Mode</b>                          | Yes   | Yes   | Yes  | No   |

### Installation

Mobile Eye for Android and iOS may be downloaded from Google Play or The Apple App Store. Enterprise Mobile Management systems, such as Airwatch® or Mobile Iron® may be used to distribute the app to devices across your organization.

You may obtain the msi or pkg installer packages for Windows and macOS from the download link provided in the upper right corner of the EyeQ management system. Once downloaded, double-click the file and walk through the Setup Wizard.

During the process, users are prompted for their Organization ID, which must be obtained from 7SIGNAL Customer Support (support@7signal.com).



Network administrators may also perform remote, silent installations of Mobile Eye on Windows or macOS laptops. Below is a SAMPLE script for installing a Windows MSI file from the command line. Windows msi installers allow you to pass in the Organization ID variable during install, which defines your tenant in EyeQ Cloud. This is the only variable that needs to be passed-in during the installation process.

```
msiexec /quiet /i 7signal-Mobile-Eye-Agent-Win-1.0.3.55.msi ORGANIZATION_ID=globalcorp
```

Your Windows and macOS administrators should determine the proper script for installing MSI and PKG files known to work on their networks, with their clients.

## Basic Management

|                                   | Windows   | macOS  | Android  | iOS  |
|-----------------------------------|---|--|--|--|
| <b>Log File Location</b>          | C:\Program Files (x86)\7signal Solutions, Inc   | /Library/Application\ Support/7signal/   | n/a  | n/a  |
| <b>Manually Change the Org ID</b> | Run Notepad as an administrator. Open the application.properties file in the directory above, then edit the Organization_ID | Open the application.properties file in the directory above, then edit the Organization_ID | Use the app's start screen and press the 'gear' icon in the upper corner.                                  | Use the app's start screen   |
| <b>Start, Stop and Quit</b>       | Task Manager → Services   | sudo launchctl stop com.sevensignal.mobileeyeagent   | Start/Stop button available through UI. To quit: go to Settings → Apps, then select 7signal and Force Stop | Start/Stop button available through UI. To quit: double-tap home button → [7signal] swipe up to quit |
| <b>Uninstall</b>                  | Control Panel → Add/Remove Programs   | /Library/Application\ Support/7signal/uninstall.sh   | Delete the app   | Delete the app   |

## Configuring Your Profile

Currently, an organization has one profile, called "default", that they may configure after logging into EyeQ at <http://eyeq.7signal.com> and clicking the Config tab at the top of the page.

The Config tab allows administrators to modify the test endpoints for Mobile Eye. Each test may be toggled on or off by clicking the check-circle on the green title bar. Targets may be added to each test by clicking the + sign on the green title bar. Each target under each test type may also be toggled on or off by clicking the check-box. Always save changes using the blue button in the lower right-hand corner of the page before exiting.

The Mobile Eye app or agent loads the profile before each time it tests. Therefore, changes made to the profile will be applied the next time any client tests. However, the Mobile Eye agent fetches its configuration every 30 minutes.

## Wi-Fi Experience Thresholds

Administrators may choose when colors change in the EyeQ dashboard from green to yellow (Warning) to red (Critical), in accordance with service levels set for target performance. Values entered which are unsupported will appear in red, until corrected.

## SSID Control

Add the names of SSIDs that administrators want to include in their testing. With no entries, agents and apps will test on any Wi-Fi network. The SSID name must match exactly and is case sensitive.

## Test Intervals and Business Rules

There are two test intervals. Android and iOS apps use the Active Tests interval, whereas Windows and macOS agents use both. The intervals begin only when the app or agent starts up. Both interval reset when the program is restarted.

When devices go into standby, sleep, or low-power mode, then testing is suspended. Alternatively, the test interval may elongate, depending on the operating system's rules for conserving power. This will occur until the device is woken up by the user.

| OS                         | Active Tests                                      | Passive Tests   | Business Rules  |
|----------------------------|---|---|---|
| Windows, macOS and Android | Ping and Throughput                               | SSID<br>BSSID<br>Frequency/Channel<br>RSSI (signal strength)<br>Data Rate | <ul style="list-style-type: none"> <li>• Can ping an unlimited number of IP addresses or hostnames.</li> <li>• Can perform throughput tests against an unlimited number of Sonars.</li> <li>• The protocol is required before the Sonar's IP address or host name and the full path is required after. See example below:               <ul style="list-style-type: none"> <li>○ Throughput DL -- http://10.0.0.123/moset/tests/moset0.jpg</li> <li>○ Throughput UL -- http://10.0.0.123/benchmark</li> </ul> </li> </ul> |
| iOS                        | Ping, Throughput, Web Download, and Voice Quality | n/a   | <ul style="list-style-type: none"> <li>• Can ping only the first 5 IP addresses or host names in the Config list.</li> </ul>  |