



NetMotion Diagnostics gives IT teams the real-time visibility to diagnose connectivity-related problems, whether on the mobile device, GPS unit, corporate servers, or across any of the networks being used. It dramatically speeds resolution of remote device issues to ensure mobile users stay productive. Diagnostics is a component of NetMotion's Mobile Performance Management software that accelerates, optimizes and secures all traffic to mobile devices across any network, application or operating system.



Quickly Identify Root Cause and Troubleshoot Chronic Connectivity Problems

- Minimize downtime by quickly identifying problems and solving with pinpoint accuracy.
- Reduce IT support costs by eliminating unnecessary work and accelerating mean-timeto-repair.



Get More User Uptime

- Ensure mobile workers have access to the best coverage and the fastest network technologies.
- Monitor GPS performance to ensure maximum benefit from location-based applications and services.
- Track and report geo-tagged coverage data to better manage carrier SLAs.



Seamless Integration

- Export to business intelligence tools such as Splunk, SIEM systems and log analysis tools
- Use NetMotion Mobility policy controls to automatically launch and send Diagnostics reports
- Access Diagnostics data via the API for use by in-house and custom programs to control functions or workflows

Diagnostics and Troubleshooting

Scope	End-to-end interrogation of network data path encompassing device, network, and corporate servers/resources (both on-premises and cloud-based)
Diagnostics Available	 Device Tests – Network adapter status, local network (routing table, gateway), GPS, Mobility connection status. Network Tests – Internet (DNS, speed, firewalls, etc.), captive portal, Mobile VPN. Custom Defined Tests – HTTP/HTTPS, name resolution, ping (latency), TCP connect, traceroute, web resource.
Execution Control	 Via menu in NetMotion Mobility system tray. Automated launch on specified conditions via integration with Policy module Programmatic launch by other applications
GPS Integration	Not required for diagnostics, but geo-tags test location if available.

Alerts and Reporting

Alerts	Configurable; based on diagnostics, adapter usage/inactivity (detects over- or under-utilization)
Alerting Methods	Email, SMS, syslog, and export to tools such as Splunk, Elasticsearch, Kiwi and others.
Reporting/Analytics	 Comprehensive reports, including geo-tagged data if available, on: User, device, network and application activity Analytics on devices, network performance and usage Dropped-connection analysis based on trend, hardware, software and user information
Data Export	Export including geo-tagged data for import into enterprise operational intelligence, SIEM (security, information and event management), BI (business intelligence) and log analysis tools.
Syslog Integration	Syslog RFC 5425-supported key-value message export of: • Device samples (coverage quality, network technology, location, etc.) • Mobile diagnostic test results (probable root cause, latency, page load times, etc.) • Mobility information (application usage, compression data)
Device Tracking/ Inventory	Central repository of all mobile devices, with detailed information about each user's device configuration, including phone number, ESN and firmware.

Network Coverage, Technology, and Device Mapping

Network Performance Maps	Geo-located maps of: • Signal quality and network performance by carrier or technology • Availability of each network technology (2G, 3G, 4G, LTE) • Performance trends
Deployed-Device Maps	Detailed location information for an individual device showing signal quality, network technology and dropped connections.
GPS Monitoring	GPS unit performance: how often GPS unit sees a feed over a period of time and how often the unit drops the feed.

Platform Support & System Requirements

Clients Supported	iPad and iPhone devices (iOS 8 and later), Android devices (Android 4.0 or later), Windows Pro Tablets, laptops and other devices running Windows 7, 8 and 10.
Supported Adapters	Cellular including embedded, USB, PC-Card, FirstNet, and trunk mount (see list of Supported Network Adapters on our website), Wi-Fi and Ethernet.
Client Distribution	Remotely installed in conjunction with NetMotion Mobility, or via clients available through app stores.
Deployment Model	Hosted, cloud-based solution or installed on-premises.
Diagnostics Server Requirements	Up to 1,500 clients – Minimum configuration: 2.2 Ghz x64 compatible with 2 cores; 8 GB RAM; 250 GB free disk space; Windows Server 2012 R2 or 2008 R2 with .NET Framework 4 and ASP.NET 4.5 enabled.
	Up to 15,000 clients - Minimum configuration:
	2.8 Ghz x64 compatible with 8 cores; 64 GB RAM; Disk 1 - 150 GB free space; Disk 2 - 1.5 TB free space RAID 10; Disk 3 – 1.5 TB free space RAID 10; Windows Server 2012 R2 or 2008 R2