

Bittium

Bittium SafeMove® Analytics

Intelligent Tool for Analyzing Device and Network Performance



Are you aware of where and when your devices are used? Do you know the coverage and capacity of your mobile networks? Are your users getting the performance required for business and mission critical applications? Can you notice security events such as vulnerability exploitation or failed password attempts? Do you know the software versions your devices are running? Bittium SafeMove® Analytics can answer all of these questions and more.

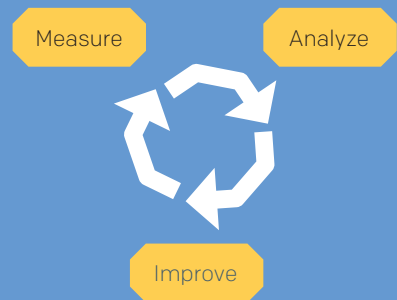
Bittium SafeMove® Analytics is an intelligent tool for monitoring and analyzing device utilization and the performance of wireless networks. Real-time and historical information about the device fleet's whereabouts and connectivity status helps you understand where, when, and how your devices are being used. Relevant, accurate data allows making fact-based decisions in order to improve business efficiency and user experience.

Measure-Analyze-Improve

Bittium SafeMove® Analytics collects connectivity, location and usage data, processes it and presents it in an easy-to-use web UI. The web UI comes with a set of pre-defined dashboards that give you

an overview of the connectivity status and utilization of your entire device fleet.

The web UI also gives you full control and allows you to customize the visualizations, create new dashboards or drill down to an individual device. What was the real status of the user that reported connectivity issues last Wednesday, and where was he? With Analytics you can easily find that specific device and get a snapshot of the situation at the time. Do you want to know how your new tablet compares to the old device fleet? Create a report that compares the new device model to the rest. Analytics will support you regardless of what you need to understand about your device fleet and its connectivity.



Solution benefits

- › Gives insight and understanding about wireless service provider performance
- › Provides valuable information for troubleshooting
- › Helps to improve productivity and customer experience
- › Possibility for tailor-made reports
- › On-line, real time browsing of current and historical data
- › Easy to use and dynamic web UI
- › SafeMove Analytics can be used in closed, private networks

FOR MORE INFORMATION, PLEASE CONTACT:

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Bittium SafeMove[®] Analytics

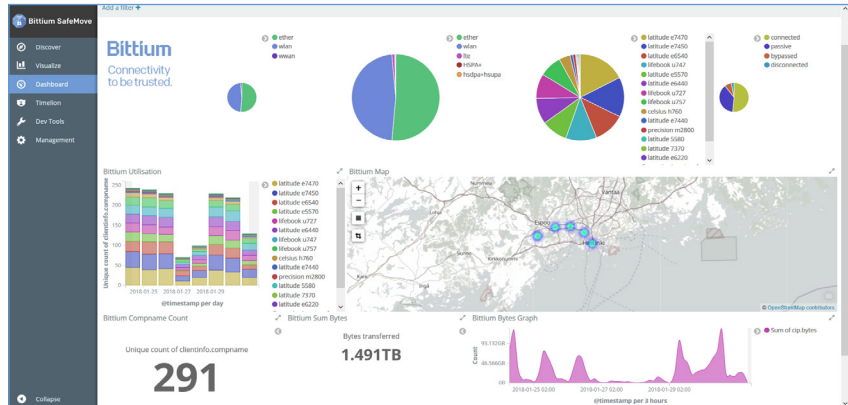
Architecture

The Bittium SafeMove[®] Analytics system comprises three major components: data collection, the analytics engine, and the visualization and reporting user interface.

Bittium SafeMove[®] continuously collects key connectivity and security performance data from several different sources, both on individual clients and on servers. Client data includes connectivity and security status, speed, throughput and bytes transferred, network type, Wi-Fi network information, geographical coordinates to name a few. Client data is collected also when the client is disconnected from the network. This is important, as it is exactly the data that is needed to find out the underlying reasons to connectivity problems. Server data includes detailed system performance and health, throughput, total network tonnage as well as log data and audit information such as IPsec security association (SA) details.

Supported platforms

- › Microsoft Windows 10 (or newer) tablets and laptops
- › Android™ tablets and smartphones:
 - › Android 9 (or newer)
 - › Support for older Android versions
- › Bittium Tough Mobile 2 - Secure LTE Android smartphone
- › Mobile Routers based on Windows/ Linux[®]



› Example of dashboard

Customers use Analytics to:

- › Measure signal strength, latency, and other mission critical KPI's
- › Drive testing network performance (air, ground, sea)
- › Monitor private LTE coverage
- › Make an informed decision on selecting the best cellular operator for their users
- › Monitor software versions of their device fleet
- › Detect abnormal levels of failed login attempts
- › Troubleshoot VPN connectivity in different remote networks
- › Identify "hotspots" and eliminate them by providing alternative coverage
- › Predict the effect of subscribing to a public Wi-Fi service to augment cellular connectivity
- › Let individual managers and team leaders measure connectivity performance of their teams, display trends and compare against other teams
- › Understand if mobile device are utilized in the way envisioned by management
- › Identify teams and individuals most in need of training in order to allow them to adapt to mobile working procedures

Example Dashboards and Reports

Connectivity performance dashboard:

- › Connectivity performance histogram/ pie chart: GOOD/OK/BAD based on connection status and configurable link speed thresholds.
- › Connectivity percentage: CONNECTED/ DISCONNECTED
- › Connectivity performance time line: connectivity performance and trends over days, weeks, months.

Connectivity Map:

- › Seamlessly scrollable and zoomable map displaying connectivity data by geographic location.

- › Provides aggregated connectivity information for a selected geographical regions.

Side by side Comparison: performance comparison between different, configurable sets, e.g., between:

- › Different operating systems, Windows 10 1809 vs Windows 10 2004
- › Different cellular network operators, e.g. Verizon vs T-Mobile
- › Different device types
- › A specific device or group against the whole fleet

Wi-Fi Report:

- › Performance of different Wi-Fi networks
- › Most used networks
- › Available networks

Cellular Report:

- › Performance of different operators
- › Different cellular classes, e.g., percentage of 5G, LTE, UMTS, GPRS
- › Coverage
- › Roaming