



# Reporting & Alarming

Fully integrated in GlobalRoamer and SITE

SITE and GlobalRoamer Reporting enables users to create, view and forward multiple reports. These reports are generated from measurements collected in the report database. These reports can either be based on Keynote SIGOS standard Key Performance Indicators (KPIs), on KPIs according to ETSI standards or on individual customized KPIs.

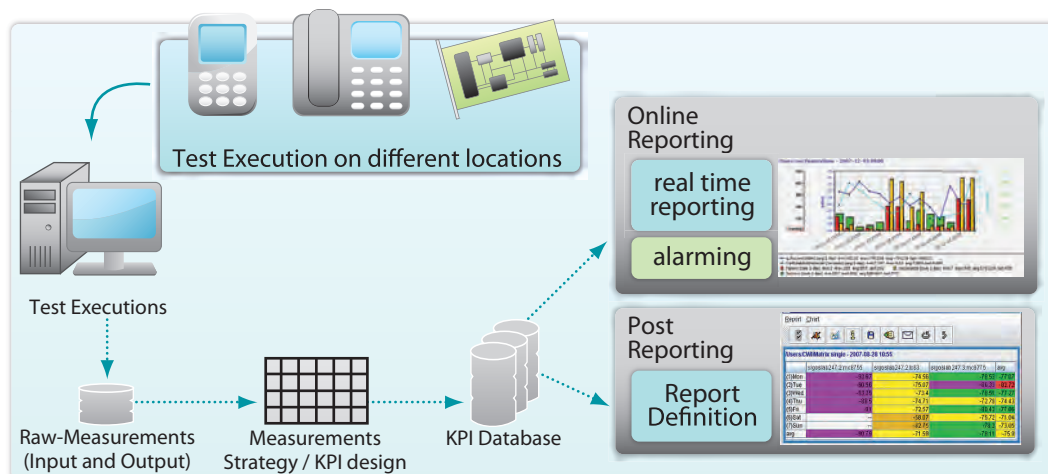
Report creation is done by means of an easy drag-and-drop arrangement. SITE and GlobalRoamer Reporting offers the possibility to visualize test results using various graphical tools, serving even very specific presentation and monitoring needs.

Flexible standard charts and diagrams as well as enhanced functionalities like "percentile", "ad hoc reporting" and "derive to" can be immediately generated from recorded KPI data.

Real time alarming is also embedded: resulting alarm notifications are automatically distributed via SMS, e-mail, SNMP, etc. to defined recipients. Users can define threshold-settings, counters, severity triggering points, etc. which control when alarms should be generated or cleared. Reports can be illustrated in different ways, either charts in various formats; markers, bars, lines etc, or by matrix tables to provide a fast color coded overview of vital services or specific KPIs.



- Reporting
- Alarming



Measurement processing: from test execution to test reports

All solutions of SITE and GlobalRoamer Reporting allow the users to observe KPI performance in an optimal way: analysis of trends / analysis of incidents based on locations or based on service problems.

## Who benefits from reporting functionality?

- Telco Service Manager, who read service performance reports
- Network Experts, who analyze test results and trace information
- Report Designer, who set up reports



## Dashboard

This Graphical User Interface (GUI) system tool provides a simplified intelligent interface to SITE and GlobalRoamer reporting. It is of special interest to the people responsible for the service, who want to work intuitively without any training effort. KPIs can easily be filtered and individually stored in a few clicks. Individual configurations allow additional, more customer-oriented, data analysis. Fast and easy drill down to individual traces is possible directly from the Dashboard.



## Matrix Report

The Matrix Report environment allows the user to view Key Performance Indicator (KPI) data as a numerical value, which can be easily color coded to provide a quick, easy to understand overview of network performance. Service KPIs can therefore be displayed in a format which is especially useful for Network Management and Operations personnel.

Report Viewer - Copy of GRQ Summary Report

GRQ KPIs - Atlantis Telecom roaming to Sunflower Mobile

Test	Measurement	sunflower	sunflower	sunflower	sunflower	sig
GRQ	14H CS-LU-SR [Percent]	100	100	100	100	100
GRQ	14V CS-LU-SR [Percent]	100	99.72	100	100	99.71
GRQ	24H CS-LU-Delay [Seconds]	31.12	28.22	29.27	30.21	29.74
GRQ	24V CS-LU-Delay [Seconds]	33.75	32.46	33.66	34.37	33.40
GRQ	34M MFR-MO [Percent]	95	95.53	---	---	95.74
GRQ	144H MFR-MT [Percent]	100	100	100	100	100
GRQ	54V PDD-MO [Seconds]	10.96	8.65	---	---	9.9
GRQ	64M PDD-MT [Seconds]	8.42	11.15	3.45	3.92	3.97
GRQ	74V CSSR-MO [Percent]	95	95.53	---	---	95.74
GRQ	84H CSSR-MT [Percent]	100	100	100	100	100
GRQ	114V CCR_CS_T [Percent]	99.24	99.89	100	100	99.89
GRQ	124H ALOC [Seconds]	112.63	112.94	112.2	111.45	112.42
GRQ	124V ALOC [Seconds]	110.77	112.88	---	---	111.74
GRQ	134H CU [Percent]	0	100	3.5	38.67	14.01
GRQ	134V CU [Percent]	100	---	---	---	14.28
GRQ	144H SpQ Uplink [PESQ]	3.29	3.45	3.33	3.31	3.38
GRQ	144H SpQ Downlink [PESQ]	3.21	3.42	3.24	3.23	3.29
GRQ	144V SpQ Uplink [PESQ]	3.24	3.24	---	---	3.28
GRQ	144V SpQ Downlink [PESQ]	3.29	3.24	---	---	3.38
GRQ	214V SA-SMS-MO [Percent]	97.5	100	---	---	98.68



- Dashboard
- Matrix
- GIS

## GIS

For service testing "on the move", a map based Geographical Information System (GIS) is integrated into SITE.

Each drive test case collects position data from a GPS receiver during "visibility" of GPS satellites. These are displayed in a GIS. This means that after service testing a rich set of KPIs according to GPS data can be locally analysed displayed on geographic maps.

