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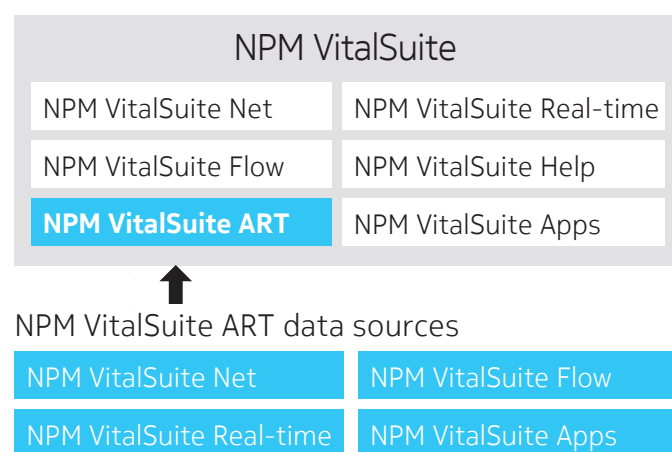
Nokia Performance Manager VitalSuite Advanced Reporting Tool

Nokia Performance Manager (NPM) VitalSuite Advanced Reporting Tool (ART) software is a powerful Web-based tool that enables you to generate custom presentation-quality reports and graphs using data from your NPM VitalSuite Net and NPM VitalSuite Apps software products, as well as NPM VitalSuite Real-time and NPM VitalSuite Flow modules. The wizard based report definition feature walks you through the report creation process. Powerful report scheduling and output formatting features allow users to view performance data when they want it, and in the formats they need.

Figure 1. NPM VitalSuite

NPM VitalSuite	
NPM VitalSuite Net	NPM VitalSuite Real-time
NPM VitalSuite Flow	NPM VitalSuite Help
NPM VitalSuite ART	NPM VitalSuite Apps

NPM VitalSuite ART data sources

NPM VitalSuite Net	NPM VitalSuite Flow
NPM VitalSuite Real-time	NPM VitalSuite Apps

With NPM VitalSuite reporting software, administrators no longer need to export files to complex and expensive commercial reporting packages. The flexible formatting power of the software lets you easily transform performance data into dynamic, custom reports so you can quickly determine the status of your network infrastructure and applications. It optimizes the report capabilities of your NPM VitalSuite software to increase resource efficiency and staff productivity.
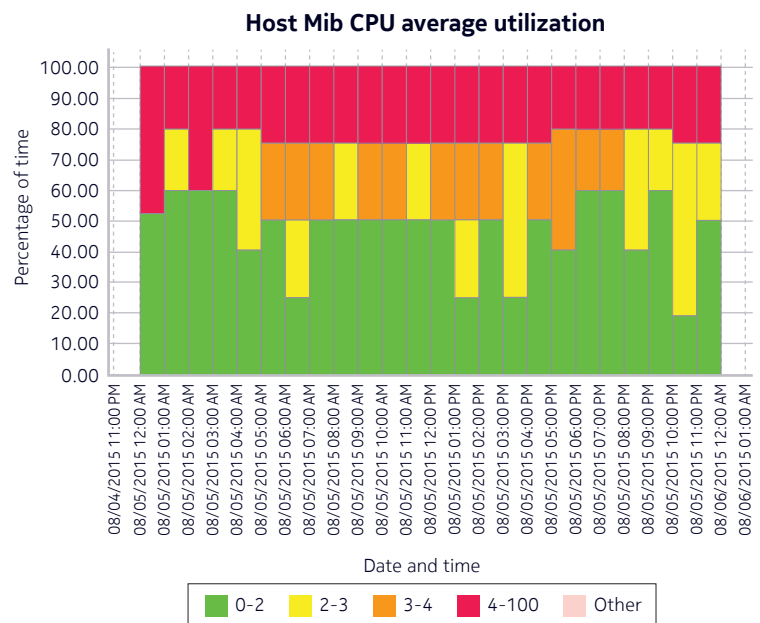
As a component of the NPM VitalSuite software portfolio along with NPM software, Real-time Event Analysis software and Advanced Reporting Tool software, NPM VitalSuite positions IT to support business requirements today and tomorrow.

Features

- Fully integrated reporting tool provides access to all NPM VitalSuite software data sets, calculations, multi-level domain and group definitions; automatically discovers new collector data

- Powerful custom reporting tool supports a wide variety of chart types with robust cataloging, viewing, exporting and scheduling options

- Web-based report administration package provides reports that can be private or published across your organization

- Multi-platform supports both Microsoft® Windows® and Linux operating systems

- Supports IPv4 and IPv6 devices

- Easy to use, out-of-the-box functionality through a wizard-based structure and step-by-step operating procedures

- Integrated with NPM VitalSuite – seamless integration with key NPM VitalSuite components, allowing you to configure a complete performance management solution to meet your individual needs. NPM VitalSuite ART reports use data from any of the NPM VitalSuite modules:

  – **NPM VitalSuite Net –** Network Performance Management component
  – **NPM VitalSuite Real-time –** Advanced Threshold/Alarm component
  – **NPM VitalSuite Flow –** Advanced collection and analysis of Netflow records directly from flow-enabled network routers
  – **NPM VitalSuite Apps –** Application Performance Management component

Benefits

- Wizard-based Report Definition feature makes it easy to create sophisticated custom reports

- Increases staff productivity by reducing analysis time, allowing staff to focus their time and effort on other value-added activities. Allows you to produce powerful and flexible reports without purchasing a third-party reporting package

- View data from different object types in a single combined report by leveraging report sections feature

- Protects your investment in reporting by allowing the same custom report definition to be reused many ways simply by specifying different report run-time parameters

- Ideal for creating customized quality of service (QoS) or service level agreement (SLA) reports

- Saves time and effort of revising reports when your NPM VitalSuite server configuration changes (add a server, for example) because NPM VitalSuite ART automatically knows where to find the data required for each report
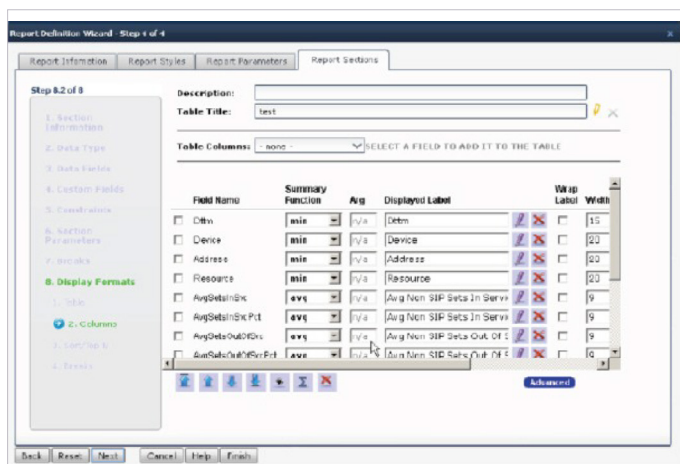
Host Mib CPU average utilization

Operations

NPM VitalSuite ART software supports a wide variety of chart types and reporting options to graphically depict the critical data you need. Use the software to optimize resources, proactively preempt service problems, perform a trend analysis and make informed network investment decisions.

The unique flexibility of the NPM VitalSuite software allows you the freedom to choose your own metrics, custom counts, report designs, report type, reporting period and report outputs, providing a truly versatile, easy to use and customized presentation system for performance data. Access to the detailed information can allow users to analyze the data and determine the root cause of network and application performance problems at a glance.

Regression analysis provides a trend of what has happened and then based on this data extrapolates to what can be expected in the future.

NPM VitalSuite ART includes percentile reporting, the capability to plot multiple resources on a single graph, and reporting of both application, network, real time, and flow data on a single report. It also provides the flexibility of defining reports your way that may include your corporate logo, data, format, and timing information.

Ease of use

- Automatically determines NPM VitalSuite software (e.g. NPM VitalSuite Net) data sets and schema
- Incorporates NPM VitalSuite software system multi-level domains, groups and user permissions
- Simplifies reporting across NPM VitalSuite software distributed architecture
- Presents single view of periodic and configuration information
- Allows for conditional chart generation
- Enables selection of periodic data aggregation level at report execution time – no need to duplicate reports for hourly/daily/weekly/monthly data
- Allows definition of hierarchical reports by determining relationships between data sets
- Multi-pass reports allow information to have dependencies on data in parent reports
- Supports Unicode 3.0

Report flexibility

- Each section can contain tables, graphs, crosstab or a combination
- Supports a variety of tabular formats, plus bar, area, pie and line chart types
- Users can:
  - Add, edit, copy, delete and reorder sections
  - Add subsections within sections
  - Name the section
  - Pick the format (tabular, chart)
  - List and pick the data set and format of data values
  - List and select fields to use within the report
  - Define their own custom fields
  - Override displayed field names and width of any field
  - Specify inclusion and exclusion periods for data to be used for percentile reports

- – Display aggregated data using functions: Average, minimum, maximum, first, last, total and count

- – Preview selections

- Users can specify:

  - – Up to 10 field groupings

  - – Ascending/Descending options

  - – Report output on Top N records

  - – Page break handling

  - – Sorting up to 10 fields

  - – Custom fields and display order of the fields

  - – Filters for report output

  - – Report categories

  - – SQL supported expressions

  - – Report titles – free text and run-time values

  - – Customized chart fonts for X-axis and Y-axis values/labels – separate for each

  - – Legend labels and chart title

  - – Text displays to add notes

- – Conditional styles based on a value to highlight a data point – font, point size, foreground and background color can be controlled

- – Hidden fields – fields used in generating the report that are not displayed

- – Special functions – maximum/minimum/ average, count, percentile

- – Constraints on the data that is to be included in the report – up to two constraints per field – and/or custom

- – A logo – tailor font styles and colors

- – Page orientation and page size

- Graph definitions allow you to specify:

  - – The value for the X-axis

  - – The value for each Y-axis

  - – The value for the series

  - – Auto, manual or matching of left and right Y-axes scales

  - – Chart size and side-by-side chart placement

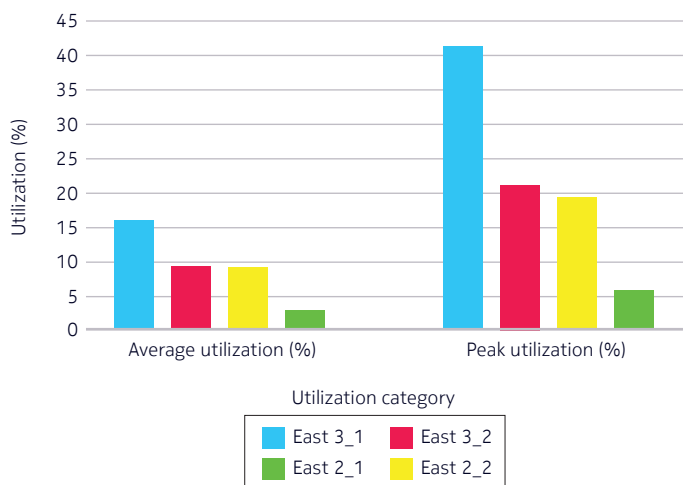 - – Multiple series, up to six, to plot against the Y-axis

Report Scheduling

- Daily, weekly, monthly

- Every "x" days, weeks, months

- Based on the day of week and/or day of the month

- Multiple selectable times of day to run reports

- Optional schedule end date

- E-mail delivery

Report Data Sources

- NPM VitalSuite Advanced Reporting Tool allows reports on all of the raw performance statistics that are collected and calculated by NPM VitalSuite Net, NPM VitalSuite Apps, NPM VitalSuite Real-time, and NPM VitalSuite Flow modules.

  – Some examples include: Any collector currently available in NPM VitalSuite Net, LAN/WAN counts, Multi-Protocol Label Switching (MPLS) and QoS data, 95th percentile utilization data, Key Performance Indicators (KPIs), Quality Indexes, router measurements, device IP addresses

  – Normalized Call Detail Record (CDR) call performance statistics for VoIP

  – NPM VitalSuite Real-time – advanced alarm information

  – NPM VitalSuite Flow – flow records and statistics

- Includes data defined using MIBWorks or DataWorks

- Automatically identifies new data sets added to NPM VitalSuite Performance Management software and makes the data accessible to the user community

- Supports Coordinated Universal Time (UTC) values and formats as a date and/or time string

Report Administration

- Catalogs existing reports and provides history, copy, publish, export and print functions

- Allows a variety of viewing/exporting options including PDF, CSV, XLS (Excel), RTF, XML, ZIP, and HTML formats

- Report page allows users to manage and/or run existing reports

  – Summary view shows the report name, owner, last status and detail, access to history

  – Count view shows status details: How many instances of the report are scheduled, pending, running, success, failure, cancelled

- Reports are organized based on NPM VitalSuite multilevel domain definitions and are private unless published to others in the domain

- Allows View Only permissions

- Customizable display format without rerunning the report

- Search based on report name, definition name, category, or owner
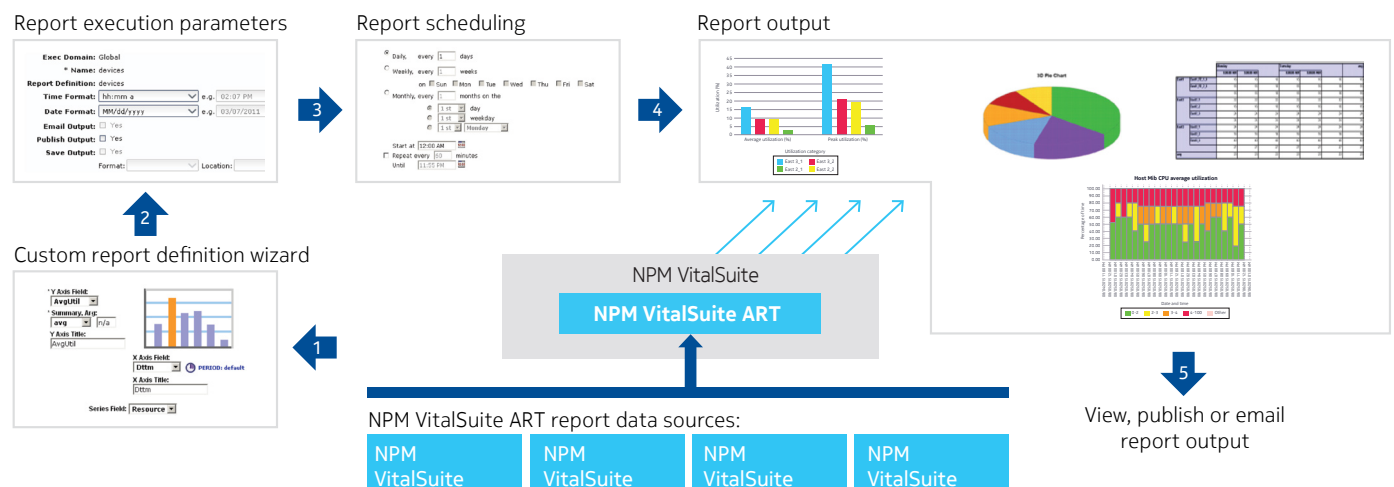
- Report definitions import/export function

Summary

NPM VitalSuite software portfolio – Designed to optimize network, application, and business performance

- The **NPM VitalSuite** portfolio is used today by medium and large enterprises and service providers worldwide. The portfolio leverages key innovations from Nokia Bell Labs and experience and expertise from Nokia Worldwide Services to provide robust and scalable solutions that increase IT staff productivity, ensure optimal network and applications performance, and improved service availability. The NPM VitalSuite product team partners with world-class business partners to deliver proven solutions that maximize the return on IT investments.

- **NPM VitalSuite Net** software provides on-demand access to the critical network performance information necessary to preempt problems, optimize resources and plan for maximum return on investment (ROI). This market-leading tool gives end-to-end, Web-based visibility into geographically dispersed, multivendor networks,

including routers, switches, servers, virtualization platforms, and VoIP. It provides a single centralized location to monitor, analyze, manage and predict performance.

- **NPM VitalSuite Apps** software provides detailed application performance analysis using agent software deployed on user desktops or servers in the network. It captures actual end-user experience and monitors individual applications for response time and number of transactions.

- **NPM VitalSuite Real-time** software helps optimize multivendor packet data and voice networks with powerful real-time and topology mapping capabilities that traditional management products cannot match. It offers technically advanced tools to monitor, measure, analyze and visualize performance data and immediately identify network resources that have exceeded defined network service levels.

- **NPM VitalSuite Flow** software provides direct collection of network flow records, and powerful flow analysis reports that reveal which endpoints, applications, and protocols are using the network capacity.

Figure 2. NPM VitalSuite ART report creation steps

Specifications

NPM VitalSuite

NPM VitalSuite Module	Latest supported OS version/DB version
NPM VitalSuite Net	• MS Windows 2012 R2/MS SQL 2014 • Linux Red Hat 7.1 or later/Oracle 12cR1 • Linux Red Hat 7.1 or later/MariaDB 10.1
NPM VitalSuite Apps	• MS Windows 2012 R2/MS SQL 2014
NPM VitalSuite ART	• MS Windows 2012 R2/MS SQL 2014 • Linux Red Hat 7.1 or later/Oracle 12cR1 • Linux Red Hat 7.1 or later/MariaDB 10.1

NPM VitalSuite Agents	Latest Supported OS version
VitalNet Server Agent	• MS Windows 2012 R2 • Linux Red Hat 7.1 or later
VitalNet VoIP Agent	• MS Windows 7
VitalApps VitalAgent	• MS Windows 7, 8.1 (64-bit) and 10
VitalApps Mid-Tier Agent	• MS Windows 2012 and 2012 R2
NPM VitalSuite WAM	• Client Web Browser: must support JavaScript and cookies • Application Web Server • Apache HTTP 2.x • Nginx 1.4.x • MS IIS 7.0 or 8.5 • Node.js

User and Admin Interface	Latest Supported Browser
NPM VitalSuite	• MS IE 10, 11 • Firefox 48 or Firefox ESR 45.3.0

To learn more about these and other management solutions, contact your Nokia sales representative, authorized reseller or sales agent.