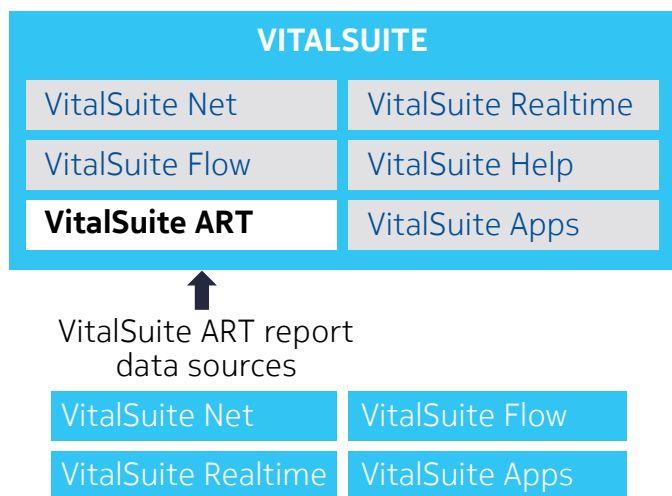


Nokia VitalSuite[®] Advanced Reporting Tool

Release 14.2

VitalSuite[®] Advanced Reporting Tool (VitalSuite ART) software is a powerful Web-based tool that enables you to generate custom presentation-quality reports and graphs using data from your VitalSuite Network and Application Performance Management software products, as well as VitalSuite Realtime and VitalSuite Flow Analysis 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. VitalSuite ART Data Sources

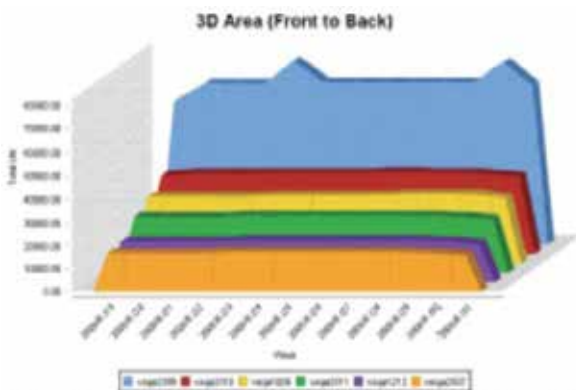


With VitalSuite reporting software, administrators no longer need to export files to complex and expensive commercial reporting packages. The flexible formatting power of the software lets you easily transform performance data into dynamic, custom reports so you can quickly determine the status of your network infrastructure and applications. It optimizes the report capabilities of your VitalSuite Performance Management software to increase resource efficiency and staff productivity.

As a component of the VitalSuite software portfolio along with Network Performance Management software, Real-time Event Analysis software and Advanced Reporting Tool software, VitalSuite positions IT to support business requirements today and tomorrow.

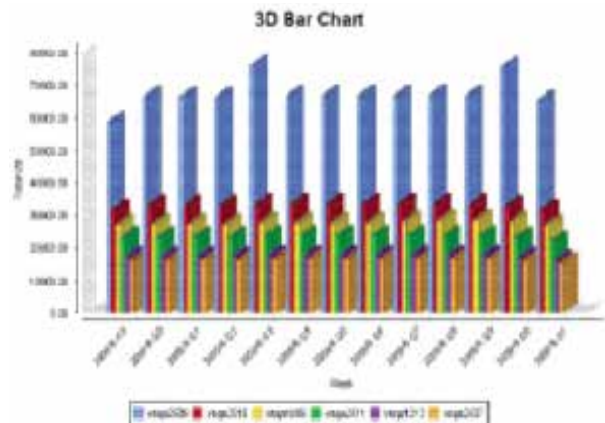
Features

- Fully integrated reporting tool provides access to all VitalSuite Performance Management 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 VitalSuite – seamless integration with key VitalSuite components, allowing you to configure a complete performance management solution to meet your individual needs. VitalSuite ART reports use data from any of the VitalSuite modules:
 - **VitalSuite Net** – Network Performance Management component
 - **VitalSuite Realtime** – Advanced Threshold/Alarm component
 - **VitalSuite Flow** – advanced collection and analysis of Netflow records directly from flow-enabled network routers
 - **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 VitalSuite server configuration changes (add a server, for example) because VitalSuite ART automatically knows where to find the data required for each report



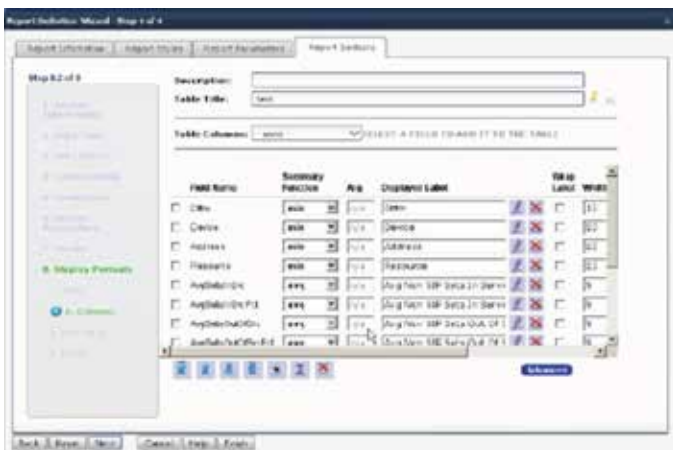
Operations and specifications

VitalSuite Advanced Reporting Tool 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 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.

VitalSuite ART features include 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 VitalSuite Performance Management software (VitalSuite Net) data sets and schema
- Incorporates VitalSuite Performance Management software system multi-level domains, groups and user permissions
- Simplifies reporting across 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

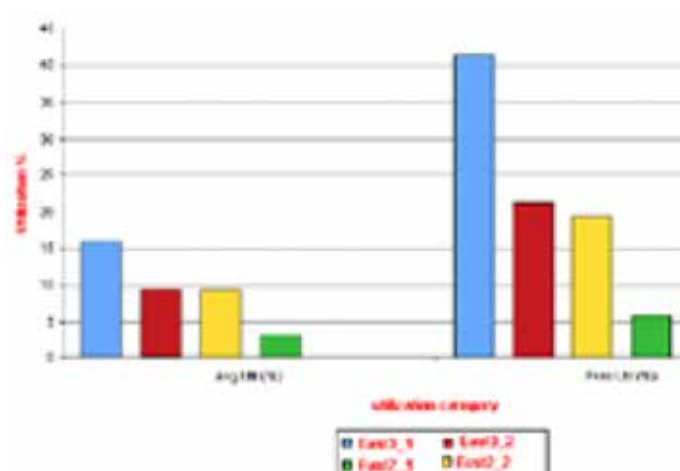
- Daily, weekly, monthly
- Every “x” days, weeks, months
- Based on the day of week and/or day of the month
- Multiple selectable times of day to run reports
- Optional schedule end date
- E-mail delivery

Report Data Sources

- VitalSuite Advanced Reporting Tool allows reports on all of the raw performance statistics that are collected and calculated by VitalSuite Net, VitalSuite Apps, VitalSuite Realtime, and VitalSuite Flow modules.
 - Some examples include: Any collector currently available in 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
 - VitalSuite Realtime – advanced alarm information
 - VitalSuite Flow – flow records and statistics
- Includes data defined using MIBWorks or DataWorks
- Automatically identifies new data sets added to 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 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



Specifications

Client/Administrator interface requirements

- Microsoft Internet Explorer® 10, 11 or Firefox 43 or Firefox ESR 38.2.0

System requirements

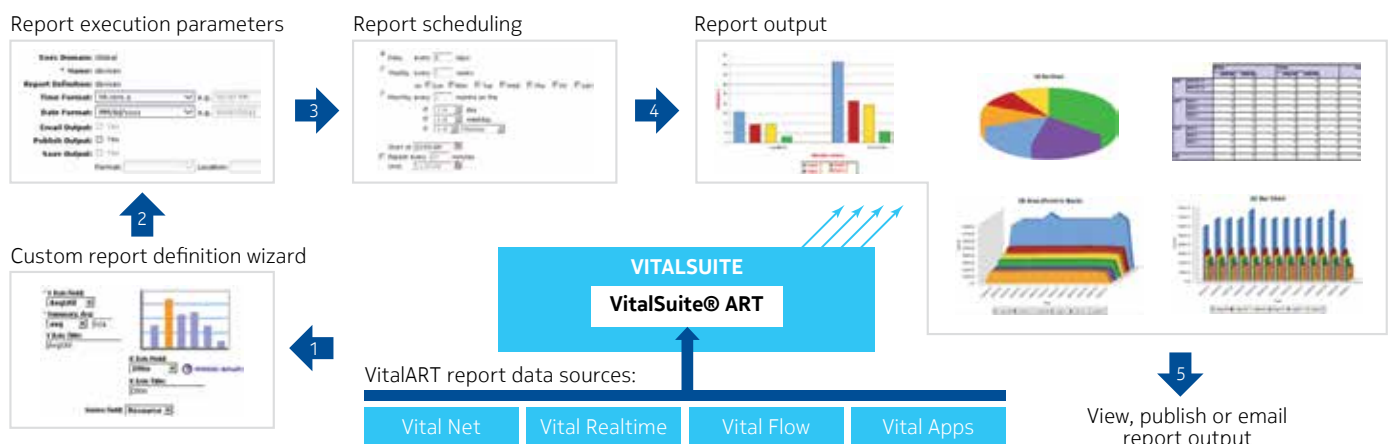
- Red Hat Linux 7.x (7.1 or later) / Oracle 12.1
- Red Hat Linux 6.x / Oracle 11.gR2 or Oracle 12.1
- Windows Server 2012 R2 / SQL Server 2014 64-bit
- Windows Server 2012 or 2012 R2 / SQL Server 2012
- Windows Server 2012 or 2012 R2 / SQL Server 2008 R2 64-bit
- Windows Server 2008 R2 64-bit / SQL Server 2012
- Windows Server 2008 R2 64-bit / SQL Server 2008 R2 64-bit or SQL Server 2008 64-bit

The VitalSuite Performance Management software portfolio - Designed to optimize network, application, and business performance

The VitalSuite Performance Management portfolio is used today by medium and large enterprises and service providers worldwide. The portfolio leverages key innovations from 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 VitalSuite product team partners with world-class business partners to deliver proven solutions that maximize the return on IT investments.

VitalSuite Network Performance Management software (VitalSuite Net) 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.

Figure 2. VitalSuite ART Report Creation Steps





VitalSuite Applications Performance Management software (VitalSuite Apps) 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.

VitalSuite Real-time Event Analysis software (VitalSuite Realtime) 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.

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

To learn more about these and other management solutions, contact your Nokia sales representative, authorized reseller or sales agent, or [visit our web site](#).

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