

racksnet® Network Orchestration Center

Product Datasheet v.2.3



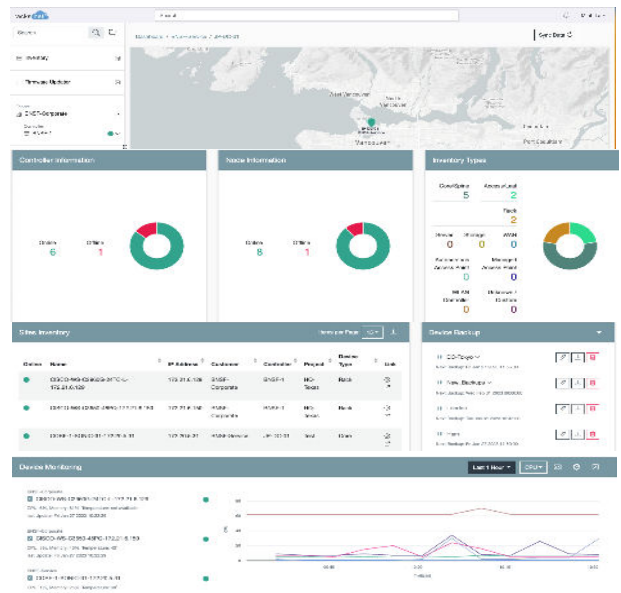
racksnet® automation and management solution enables users to visualize, control and configure their IT network infrastructure cost-effectively and with greatly reduced complexity. This multi-vendor NOC software is suitable for DC, Edge and IoT networks and supports all major Network Operating Systems and platforms (e.g. DELL, SONiC, Cisco, HPE and Huawei) .

The Distributed Multi Controller Architecture (DMCA) has the advantage that the data volume is better structured, requires minimum bandwidth and processed faster than if each device were to communicate individually with the cloud platform.

Another special feature of the browser-based racksnet® software is the fully graphical user interface. It is completely vendor-agnostic and easily structured and designed across all applications and functional areas. This eliminates the need for complicated CLI-based scripting.

Powerful monitoring, management and troubleshooting tools

racksnet® network automation and management software's design and structure deliver rapid insights about your network. The dashboard and whiteboard are equipped with functions to significantly increase network manager performance. The network's health status, component utilization level, free ports, etc., no longer have to be checked onsite. Real-time services and automated notifications based on defined threshold settings provide efficient support for administrators in their day-to-day operations.



Cloud or On-premise

Although racksnet® uses cloud-based options for its solution, it also offers an On-premise solution as a private cloud. Regardless of which solution the customer chooses, both variants offer a complete automation and management platform that is secure, stable and scalable in every respect.

PLATFORM BENEFITS

Dashboard:

- Hierarchical dash boards that reflect the converged network status in real time
- Drill down capabilities to troubleshoot and arrive at rich set of information in one click
- End User experience dashboards to display dynamic network health status (Site, Controller, devices, Systems)
- Service/Domain specific contents grouped in one view
- Multi Tenant and Multi Controller architecture
- Single Pane-of-Glass (automation & management via single interface)

Whiteboard:

- Easy to deploy and manage
- Graphical view
- Add devices or sites in minutes
- Secure access control for each device
- Templates for large scale configuration
- No CLI programming
- Zero-touch provisioning
- Network-wide monitoring and alerts
- List view displays a unified list of all network devices in detail



Reduce TCO:

- Prior to the implementation of racksnet, customers estimated that their IT Managers would spend approx. 30% of their time on troubleshooting. Racksnet provides proactive problem monitoring plus the ability to automate common configuration actions, thus administrators have more time for other critical production activities .
- A study by the Uptime Institute (2020) indicated 70% of all data center outages are due to human error (e.g., CLI programming). This study documented that roughly 1/3 of the companies surveyed lost more than \$ 1 million within 12 months due to outages. The racksnet solution is a "no code automation" which significantly reduces human intervention.
- Ease of multi-vendor deployments - racksnet enables the lifecycle management of multi-vendor infrastructures including deployment, change configurations and updates all with one software platform. Cost savings can be achieved because minimal technical resources are required to manage, maintain and monitor your DC, Edge and IOT networks.

KEY FEATURES

| Dashboard | |
|-------------------------------|---|
| Site Inventory | <ul style="list-style-type: none"> • Task driven centralized network discovery and management • Scan Templates • Device can also be added (manually, individually, or bulk import) • Download Inventory as Excel-File for documentation |
| Firmware Update | <ul style="list-style-type: none"> • Admins can conduct scheduled or on demand firmware upgrades on their networks • Allows admins to quickly and easily manage firmware versions on a per-device type • Supports firmware update for multiple vendors • GUI based workflows |
| Backup Devices & Projects | <ul style="list-style-type: none"> • On demand or scheduled • One-click function to create devices or projects backup • Ability to download a copy of the backup file to an external location |
| Distributed Controller DCMA | <ul style="list-style-type: none"> • Facilitates simple, automated, and programmatic deployment of network services • Standard API Northbound to racksnet® Cloud-Controller • Standard API Southbound to Network-Devices • Inventory, Topology and Automation Functionality |
| Multi-Tenancy | <ul style="list-style-type: none"> • Support multiple client organisations from a single instance. • Role Based Administration Control and Audit Trail <ul style="list-style-type: none"> ➤ Permissions, clients and projects can be assigned by super Admin. ➤ With Audit Trail, super Admins can track the most recent login of their users at any time based on their compliance rules. |
| Two-factor authentication | <p>Browser-based software login requires two-factor authentication. This prevents unauthorized persons accessing the network.</p> |
| SSL certification and timeout | <p>racksnet® solution can only be accessed via https, ensuring that all communication between the browser, SDN controller, and racksnet® software engine (cloud) is encrypted</p> |
| Monitoring | <ul style="list-style-type: none"> • Multi-vendor monitoring - check constant health status of critical network infrastructures • View interface statistics <ul style="list-style-type: none"> ➤ Total bandwidth usage ➤ Input / Output errors ➤ Daily/weekly or per month • Send alerts to users when thresholds are reached • Pro-active monitoring |
| Troubleshoot Faster | <ul style="list-style-type: none"> • Create dashboards with alerts, topology, and monitoring to locate service-affecting problems for faster mean time to resolution (MTTR). |

| Whiteboard | |
|--------------------------|--|
| Deploying | <ul style="list-style-type: none"> • Template based configuration for multi vendor devices via a single GUI • Editing and configuring per device • Multiple vendor and multi-device editing and configurations • Enabling instrumentation on routers and switches • Create your own golden templates and parameterize it for any device, projects or sites |
| Configuration | <ul style="list-style-type: none"> • Archiving and versioning of configuration <ul style="list-style-type: none"> ➢ Fetch & store all the configurations on network devices. ➢ Store multiple versions of configurations. ➢ Job based. for periodic archival ➢ Detect changes done outside the server and archive the change • Compare configuration <ul style="list-style-type: none"> ➢ View and compare configurations between versions of same or different devices ➢ Report configuration mismatches • Troubleshooting <ul style="list-style-type: none"> ➢ Ability to specify which troubleshooting information is to be downloaded |
| Unified GUI | <ul style="list-style-type: none"> • Single GUI to manage, deploy and automate multi-vendor environments. • Simply define one template and racksnet® network automation engine will ensure that vendor specific configurations will be deployed. |
| Config Compliance | Search misconfigurations, security risks in configurations of all devices at once, highlight, download and fix them with “config compliance”. |
| Cloning | <ul style="list-style-type: none"> • An elegant way to apply standard configs across all your switches. • Cloning a switch will replicate configuration elements e.g. <ul style="list-style-type: none"> ➢ Switch port configuration ➢ Access policies ➢ VLAN ➢ Management ➢ NTP, syslog, Etc. |
| Real Time Service RTS | <ul style="list-style-type: none"> • Track uplinks • Select critical interfaces to be monitored in real time • Select Interfaces are shown as green, down links are offline |
| Zero Touch Deployment | <ul style="list-style-type: none"> • racksnet® ZTD is a simple, highly secure and scalable automated network device deployment solution • The agent is supported for multi vendors OS and devices • Benefits: <ul style="list-style-type: none"> ➢ DHCP Server built in ➢ No pre-staging of devices ➢ Unskilled Installer at remote sites ➢ GUI based workflows ➢ Secure and scalable |

| Whiteboard cont. | |
|----------------------|--|
| All Port | <ul style="list-style-type: none"> List all interfaces/ports in a project, changes can be done very quickly |
| Port Settings-Wizard | <ul style="list-style-type: none"> Shows port configuration of all devices in a project like a linecard Shows at a glance all important information like <ul style="list-style-type: none"> ➤ Interface name ➤ Tagged and untagged vlans ➤ MAC address ➤ Line and admin state ➤ The whole port configuration line show interface Eth x |
| Connector | <ul style="list-style-type: none"> Easy creation and configuration of connectors with the help of the unique GUI - vendor independent <ul style="list-style-type: none"> ➤ Connectivity (L2, L3, Trunk, LACP, L2 Virtualization, L3 Virtualization) |
| Build Topology | <ul style="list-style-type: none"> Automate device discovery with detailed information on devices and their connectivity, with the ability to draw physical and logical topology map. |
| List-View | <ul style="list-style-type: none"> List view displays a unified list of all network devices in detail Automation and configuration functions similar to those in the whiteboard |
| Command Audit | <ul style="list-style-type: none"> Search running configurations of all devices for security issues like insecure cipher settings and fix these issues directly |
| Deployment Summary | <ul style="list-style-type: none"> Check the commands that will be sent to the devices |
| Deployment Log | <ul style="list-style-type: none"> Deployment visibility - NO black box <ul style="list-style-type: none"> ➤ Shows deployment process from the device console ➤ Check if all commands have been processed correctly |

| Template HUB | |
|-------------------------|--|
| Vendor Validated Design | <ul style="list-style-type: none"> The Template Hub is a repository of vendor-specific reference architectures. Simply search, download and deploy your desired configuration: <ul style="list-style-type: none"> ➤ EVPN ➤ VxLAN ➤ BGP ➤ OSPF ➤ QoS ➤ And many more |

MULTI-VENDORS HW & OS SUPPORT

| Manufacturer* | Series/model range (switches, routers) |
|--|--|
| <p>Dell Technologies® Firmware:</p> <ul style="list-style-type: none"> • Enterprise SONiC 4.0.1 and higher • OS 10: 10.5.2 and higher • OS 9.1 and higher • OS 6: 6.5.2 and higher | <p>S3048 series S3100 series S4048 series S4100 series S4200 series S5048F series S5148F series S5200 series S6010 series S6100 series N1100 series N1500 series N2000 series N3000 series N4000 series</p> |
| <p>Cisco® Firmware:</p> <ul style="list-style-type: none"> • NX OS 7.1 and higher • IOS-XE 16.1 and higher • IOS 12.4 and higher • IOS 15.2 and higher | <p>Nexus 2000 (1 GE Fabric Extender; 10GBASE-T Fabric Extender; 10G SFP+ Fabric Extender) Nexus 3000 (3000 series; 3100 series; 3100 V-series; 3100 Z-series; 3200 series; 3400 series; 3500 series; 3600 series) Nexus 5000 (5000 series; 5500 series; 5600 series) Nexus 7000 (7000 series; 7700 series) Catalyst 9600 series Catalyst 9500 series Catalyst 9400 series Catalyst 9300 series Catalyst 9200 series Catalyst 2960 L series Catalyst 3560 series; 3750 series; 3850 series; 4500 series; 6500 series; 6800 series C800 (800 series; 810 series; 860 series; 880 series; 890 series) C4000 (4200 series; 4300 series; 4500 series; 4600 series) ASR 1000 series ISR 1800 series; 1900 series ISR 2800 series; 2900 series; 3800 series; 3900 series</p> |
| <p>HPE®/H3C® Firmware:</p> <ul style="list-style-type: none"> • 7.1.059 and higher | <p>Comware / HPE® Flex Fabric 5700 series; 5900 series; 7900 series Comware / HPE® Flex Network 10500 series Comware / HPE® Flex Fabric 12500 series; 12900 series MSR 900 series MSR 1000 series; MSR 2000 series; MSR 3000 series; MSR 4000 series; HSR 6800 series</p> |

| Manufacturer* | Series/model range (switches, router) |
|--|---|
| HPE®/Aruba® Firmware: <ul style="list-style-type: none"> • 16.02.0010 and higher Aruba CX® Firmware: <ul style="list-style-type: none"> • 10.06.0110 and higher | 2530 Series 2930 F Series 2930 M Series 3800 Series 5400 Series Aruba CX 4100i Series Aruba CX 6000 Series Aruba CX 6100 Series Aruba CX 6200 Series Aruba CX 6300 Series Aruba CX 6400 Series Aruba CX 8320 Series Aruba CX 8325 Series Aruba CX 8360 Series Aruba CX 8400 Series Aruba CX 10000 Series |
| Huawei® Firmware: <ul style="list-style-type: none"> • VRP8 Operating System | Huawei Cloud Engine Series: 5800, 6800, 8800, 9800, 12800, 16800 Huawei S Series: S27XX, S57XX, S67XX, S77XX, S97XX, S127XX |

TECHNICAL SPECIFICATIONS

Supported Operating Systems

- Onprem - Virtual Appliance (64-bit)
 - Vmware ESXi > 6.x
 - Microsoft HyperV > 8.x
- Controller - Virtual Appliance (64-bit)
 - Vmware ESXi > 6.x
 - Microsoft HyperV > 8.x
- Trial, Pricing, Options
 - Subscription options in 1/3/5 year terms
 - Free 30-days trial
- Dashboard / Whiteboard App
 - Windows 10/11
 - Apple OS X > 10.6.8
 - Internet Browser:
 - Google Chrome
 - Mozilla Firefox
 - Apple Safari
 - Microsoft Edge
- Demos, Quotes , Purchase
 - sales@racksnet.com

About racksnet®

racksnet® is a provider of multivendor automation solutions for IT networks. racksnet® software enables users to automate their IT networks securely and efficiently, even in complex multivendor environments. Thanks to the multivendor, intuitively operable drag & drop-based GUI, users no longer have to resort to vendor-specific scripting when automating networks, thus significantly increasing the security and flexibility of their networks.

The racksnet® solution is capable of managing not only common conventional network component vendors such as DELL, Cisco, Hewlett Packard Enterprise, and Huawei, but also Open Networking operating systems as well as white-box and brite-box solutions supplied by DELL Technologies.

“

A stable and scalable network is the backbone of every successful organization. That is what we provide to our customers.

By automating endlessly repetitive tasks, we can free up employee time to allow them to focus on the truly significant challenges.

Nauman Basit | CEO racksnet®



<https://www.linkedin.com/company/racksnet-gmbh>

https://www.instagram.com/racksnet_team