NETXMS
IT INFRASTRUCTURE MONITORING SYSTEM

MONITORING FOR ESPECIALLY DEMANDING NETWORKS

BY RADEN SOLUTIONS

WHAT IS NETXMS

Powerful monitoring solution for extra-large, complex or unstable networks

ONE SOLUTION FOR EVERY TYPE OF DEVICE
No more switching or stitching together. NetXMS can monitor and manage your entire IT infrastructure — from network switches to apps — all in one place.

ENDLESSLY SCALABLE
From tens to tens of thousands of devices per server. Millions of metrics collected with no interruption. Distributed data collection for vast or unstable networks.

GET A FULL PICTURE
NetXMS offers automated network discovery and topology visualisation, both on IP and link level.

DESIGNED WITH FLEXIBILITY IN MIND
Built-in scripting and extension mechanisms allow for endless variations and no-hassle customisation for all kinds of specific challenges.

MANAGE YOUR OWN WAY
Desktop, web-based or both at the same time. Desktop version available for Windows, Mac OS X, and Linux.

FREE AND OPEN SOURCE
No hidden charges or fine print. NetXMS is supported by its original creators, Raden Solutions, dedicated to constant growth and improvement.

WWW.NETXMS.ORG

MAIN FACTS

Our customers around the world

Works in more than 25 countries: Canada, Kuwait, Ethiopia, Germany, New Zealand, Australia, Ireland, USA, Peru, UAE, Romania, Turkey, Estonia, Egypt, Malawi, Lebanon, Russia, Latvia, Malaysia, Israel, Mexico, Dominican Republic

10000+

From a handful to 10,000+ devices per server

ONE MILLION+

Millions of metrics per server

20

Years in operation

Enterprise edition available

Open-source monitoring solution

ARCHITECTURE

Three-tier architecture

- Database abstraction layer for multiple engine support
- Enforced access control
- Authentication and encryption of all communications

Performance Database*

SQL Database

Cortex

IST

SNMP

Agent

Web server

Agent

Web client

Rest API

SNMP

Server

Proxy**

WEB services

Ticket system

Integration scripts

Mobile client

Desktop client

Notification

Email
SMS
Instant messages
Etc.

MQTT Broker

SSH
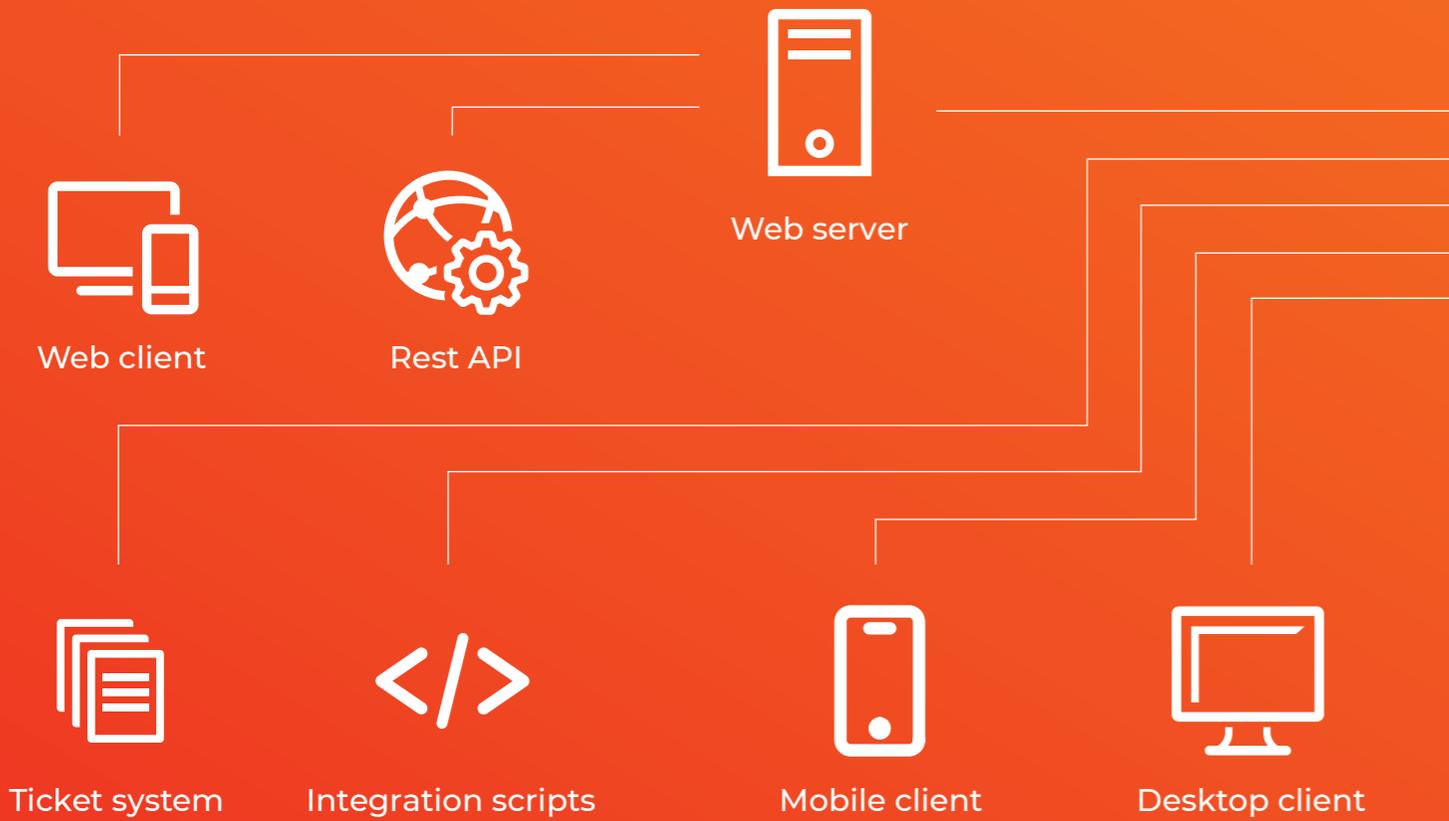
*Write only (Influx, etc.)
** Optional

USE CASES

A great choice for

INTERNET SERVICE AND TELECOM PROVIDERS

- Automated network discovery
- Network topology visualisation
- Topology-based event correlation
- Fully autonomous and integrable
- Distributed load-balancing data collectors
- Wide range of supported devices

MANAGED SERVICE PROVIDERS

- Multitenancy support
- Automated network discovery
- Distributed data collectors with automatic load balancing and high availability
- Servers and workstations monitored from one system
- Helpdesk application for end users

BANKS AND OTHER FINANCIAL INSTITUTIONS

- Agent-based or agentless multivendor ATM monitoring
- Server and application monitoring
- Payment system monitoring
- Database monitoring
- HSM monitoring
- Granular access control
- Real-time statistics and historical data reports

INDUSTRIAL COMPANIES

- Protocols for all kinds of equipment: SNMP, MQTT, LoRaWAN, EtherNet/IP, MODBUS-TCP, OPC UA, SSH
- Automated device discovery
- Distributed load-balancing data collectors
- Customisable template-based data collection
- Single platform for monitoring of all components of industrial networks
- Usable for constant monitoring or one-time site assesment

FEATURES

Discover NetXMS in detail

NETWORK MONITORING

- Builds network topology and maps automatically
- Collects information via ARP caches, routing tables, LLDP, CDP, STP, switch forwarding databases
- Automatically updates peer information for all registered hosts and devices
- Provides searches for specific MAC or IP address and information about wireless access points and wireless clients
- Offers easy access to routing tables, MAC tables, and VLAN information
- Visualises IP routes
- Enables topology-based event correlations
- Supports all SNMP versions
- Has configurable routing change detection
- Provides a mechanism for handling vendor- or device-specific information and presenting it in a unified way
- Collects data via SSH

USER INTERFACE

- Choose between the desktop or web-based version, or use both simultaneously
- Desktop version available for Windows, Max OS X, and Linux
- Offers graphical network maps and user-configurable dashboards
- Can be integrated with Grafana

SERVER AND WORKSTATION MONITORING

- Provides agents for all popular platforms and operating systems — centralises configuration and upgrades, uses the minimum system resources, acts as proxy for other agents and SNMP devices if necessary, communicates in a firewall-friendly way, offers local cache for unstable connections
- Monitors log file contents
- Wide range of metrics out of the box: network and I/O performance; process, CPU, and memory consumption; network services; hardware sensors; application-level metrics for various applications; and many others
- File transfer capabilities built into the NetXMS agent
- Can be utilised for user support — a low-footprint application that presents users with preconfigured actions and basic information for helpdesk, configurable actions via NetXMS policies, screenshots and screencast

DISTRIBUTED MONITORING

- Divides networks into zones with overlapping subnets and proxy agents for logical grouping or distributing data collection load
- Ensures automatic load balancing and failover with multiple proxy agents for each zone
- Continues to collect data in autonomous mode when the central management server is not available
- Receives syslog messages and SNMP traps from monitored devices to forward them to central management server or local storage if the connection is down
- Eliminates the need to connect directly to each device in remote locations — a single TCP port open in either direction is enough for server-to-proxy-agent communication

MORE FEATURES

</> BUILT-IN SCRIPTING ENGINE

- Allows for advanced automation and management
- "Hook" scripts can be called from many places within the system for custom processing
- Can be used for data transformation, complex thresholds, complex event processing rules, SNMP trap transformation, and many other purposes
- Uses easy-to-earn non-strict typed interpreted language
- Optimised for speed and low memory footprint so that a server can run hundreds of scripts simultaneously
- Each script runs inside its own VM with no access to anything outside the server process other than through well-defined APIs
- Additional security mechanisms are available to prevent unauthorised data access via scripts

INTEGRATION

- Full Java API allows users to do everything that can be done from UI
- Permits partial or complete replacement of UI
- Web service API provides API functionality via web service calls (web hooks)
- Has modular agents and servers so that their functionality can be extended by writing additional modules (plugins)
- Python-based scripting language provides access to full Java API
- Built-in integration with helpdesk systems

SECURITY

- Offers an internal user database or integration with external directory using LDAP (both can be used simultaneously)
- Supports authentication with passwords, X.509 certificates, smart cards, RADIUS or LDAP server
- Uses two-factor authentication with TOTP or one-time codes sent via SMS or instant message
- Encrypts all communications
- Enables fine-grained access control configuration
- Offers an extensive audit log with optional sending to external system

DATA AND EVENT PROCESSING

- Offers flexible policy-based event processing
- Enables alarm creation and termination, internal script execution, command execution on a management server or on a remote host via a NetXMS agent and other configurable commands
- Supports notifications via email, MS Teams, Telegram, Slack, SMS via GSM modem or SMS gateway
- Offers support for problem escalation
- Has a flexible threshold system for data collection
- Configurable with templates for simplified management of large networks

PROFESSIONAL SERVICES

Get the most out of NetXMS

SUPPORT

Benefit from free, community technical support or go for a contract-based, responsive technical support, directly from developers.

TRAINING

An in-depth training course in NetXMS network management to suit your needs and schedule — equip your team with the know-how to maximise effectiveness.

CUSTOM DEVELOPMENT

Significantly improve or completely rebuild your network monitoring and management system with a fully customised and integrated solution for your business — there are no limits with our highly scalable and customisable NetXMS features.

PROFESSIONAL INSTALLATION

We perform the initial installation and configuration, or fine-tune the existing setup to ensure a production-ready system with minimal effort on your part.