Netreo

Eliminate the Challenges of Scaling IT Management

Growth for an enterprise is an exciting thing, but it often presents a unique challenge for IT professionals. There are common roadblocks that are encountered when trying to scale an IT management environment, many of which can be solved by using distributed data collection and high availability.

Observe

Visibility for enterprise IT has always been a challenge. As the frontiers of digital work expand the scope of the environment, this problem frequently gets worse. Netreo's approach of a single source of truth for monitoring all aspects of enterprise IT from the infrastructure to the application layer provides a unique approach that has solved these challenges for thousands of companies around the world.

Analyze

One of the major challenges is taking all that raw data and providing usable information and insights to help organizations grow and mature their services, improve service levels and reliability, and resolve issues faster while conserving resources. Netreo integrates actionable intelligence, simplified and easy to understand views, and long-term trends with AI and ML anomaly detection and event correlation.

Act

Netreo empowers DevOps workflows with event-driven automation and rich API support to enable IT organizations to adapt to dynamic cloud-based and hybrid-cloud enterprise infrastructures. Powerful scripting capabilities allow instant response to outages and easy-to-use, preventative measures, even in complex heterogeneous environments. Netreo also provides easy integration into existing ITSM and DevOps workflows and platforms, such as ServiceNow, Remedy, Ivanti/Cherwell, and many others.

How do you distribute monitoring data collection?

Netreo makes distributed data collection possible through the use of Service Engines, which are remotely deployed appliances, either physically or virtually, that offload functions from your central Netreo platform. Service Engines are used to perform several different tasks, or specialized tasks, depending on the needs of your specific environment.
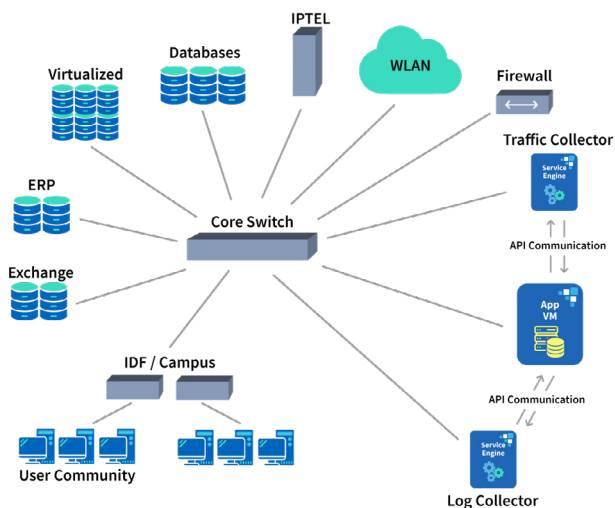
Flexible Deployment - Many scalable options available for logging, Flow collection, polling, monitoring SaaS application response from remote locations, or any combination of the above.
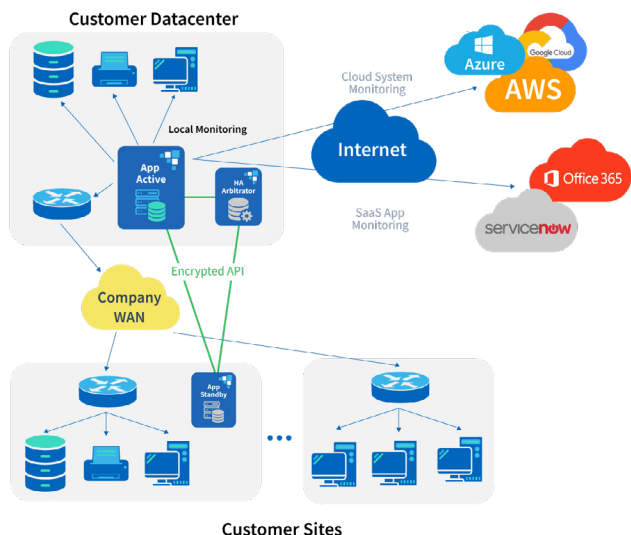
Easy Administration - Fully administered and automatically updated through your central Netreo appliance, no additional administration required.

Unlimited Scalability - By linking Netreo Active instances - each supporting up to 1,000 Service Engines, which in turn support more than 5,000 devices each - Netreo scalability is truly unlimited. This provides performance at scale with rapid access to reports, dashboards and troubleshooting tools. Centralized administration changes are automatically applied to remote Service Engines, providing incredible scalability with extremely low to zero administrative overhead.

General Netreo Deployment Utilizing a Traffic Collection Service Engine and a Syslog/SNMP Collection Service Engine

Typical Netreo Customer High Availability Deployment Architecture,
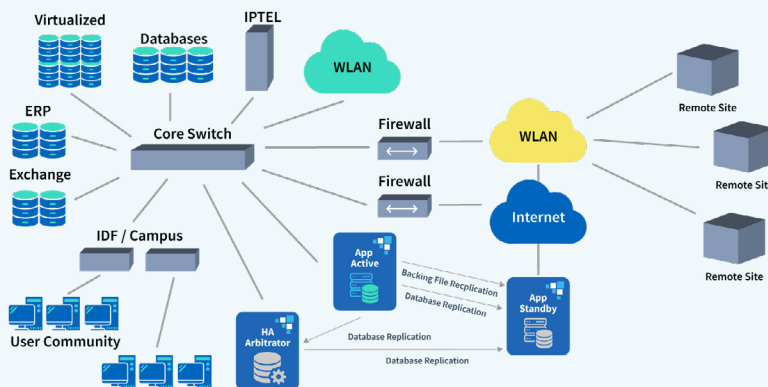Hot Fail-Over Cluster Configuration

Ensure Your Environment is Always Monitored & Available

To ensure maximum coverage and minimal downtime, Netreo offers High-Availability (HA) support. In this solution, Netreo HA appliances operate in a hot-failover cluster configuration installed at the same location for near-instant seamless failover or at a geographically separate location for disaster recovery.

What is High Availability?

High-availability clusters (also known as HA clusters or failover clusters) are groups of computers that support server applications that can be reliably utilized with a minimum amount of down time. HA clusters operate by using high availability software to harness redundant computers in groups or clusters that provide continued service when system components fail.

- Three appliance cluster deployments act as a hardware or virtual appliance
- Active / Passive failover with Arbitrator
- Systems can be co-located or remote for DR
- Synchronization via encrypted API
- High Availability can be deployed in any non-SaaS Netreo deployment option (on-premises, private cloud, multiple service engines, MSP-connected, etc.)

Netreo Customer High Availability Deployment Architecture,
Geographically Distributed Configuration for Disaster Recovery Requirements

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Active/Standby/Arbitrator

The three roles of Active, Standby, and Arbitrator are fixed and assigned (by license type) to the three Netreo instances of the HA cluster.

The Active node is the Netreo instance intended to be the central source of monitoring for your infrastructure, is licensed with your standard annual subscription, and is designated as Active to the other nodes. Typically, this Netreo instance will be installed close to your core network.

The Standby node is the Netreo instance intended to be the backup source of monitoring in the event that the Active node fails, will have a specific Standby license, and will not function outside of an HA configuration. This instance is typically offsite for disaster recovery protection.

The Arbitrator is the Netreo instance intended to provide quorum within the cluster. If the Active fails or the Standby thinks the Active has failed, the Arbitrator's job is to confirm the failure of the Active with the Standby before it tries to take over monitoring responsibility. If the Standby has lost contact with the Active and the Arbitrator, the Standby assumes that the fault lies with it rather than with the Active and will not attempt to take over. This is the disadvantage of a two node HA configuration. Without an Arbitrator, a Standby that loses contact with an Active that is still functioning normally may result in a condition called "split-brain." The Arbitrator is typically co-located with the Active due to network speed requirements for initial data replication in the cluster.

Scalability Challenges Eliminated

Managing hybrid, multi-vendor enterprise infrastructures is challenging enough without supporting large factions of your employee base shifting to remote working models. Netreo gives your IT team a modern monitoring solution for comprehensive infrastructure observability, a consolidated dashboard view of all infrastructure resources, and an accurate, single source of truth for all your network data.

With powerful AIOps, Netreo helps your IT team scale and simplify IT management and assure a great user experience, regardless of how your network grows in size and complexity. Netreo turns growing mounds of network data into actionable insights, eliminating recurring administrative tasks and even automating issue resolution before impacting users. With HA clustering, Netreo also provides fault-tolerance and disaster recovery, so your IT team can focus more on strategically supporting business initiatives.

To see how the **Netreo Platform** delivers maximum value at scale for your enterprise, **Request a Demo Today!**

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