ManageEngine
Site24x7

Cloud monitoring with Site24x7 for organizations adopting a **multi-cloud approach**

Key points to explore

Introduction

According to the Cisco 2023 Global Networking Trends Report, two-thirds of organizations already have more than 40% of their workloads in multiple clouds, and 92% of organizations are using two or more cloud providers.

This widespread embrace of cloud environments, while offering undeniable advantages in scalability and flexibility, presents a few significant challenges—the growing complexity of monitoring performance across this diverse landscape, and collating and translating all these performance metrics into meaningful, sensible data that can help ease your optimization journey.

Elements involved in a cloud and multi-cloud monitoring setup

A typical business organization leveraging a cloud or a multi-cloud setup would include the physical foundation of the cloud, a composite of private and public cloud environments (like AWS, Microsoft Azure, and GCP), robust network bandwidth and connectivity for communication and data transfer, orchestration tools like Ansible and Terraform, IAM solutions, a strict security posture, and monitoring solutions catering to each of the organizational components.

Challenges with multi-cloud monitoring

While cloud monitoring offers undeniable benefits, setting it up can be tricky. Setting up the monitoring tool itself can be taxing and cumbersome due to various setbacks, including unclear planning and requirements and scope creep due to increased feature additions, which can lead to a delay in deployment. Apart from this, compatibility issues like configurational workarounds, problems with data extraction and sourcing, ensuring secure data access, and additional considerations like vendor lock-in and learning curve of the monitoring solution can make implementing it challenging.

Here are some common roadblocks to implementing cloud monitoring:

- Interoperability between various environments
- Scalability of a cloud monitoring solution
- Siloed visibility in a dynamic architecture
- Selection of KPIs across environments
- Network connectivity and bandwidth management
- Ensuring data accuracy, integrity, and security
- Adapting to current trends and technology
- Cloud cost management
- Unified view across cloud deployments
- Eliminating tool sprawl

Site24x7 for multi-cloud monitoring

Site24x7 is a cloud-based SaaS solution for IT operations and DevOps. Its easy learning curve and seamless onboarding steps have helped many cloud-based organizations adopt a multi-cloud monitoring approach. Here's how you can leverage Site24x7 for your multi-cloud infrastructure.

Auto-discover all the newly scaled resources in your cloud infrastructure

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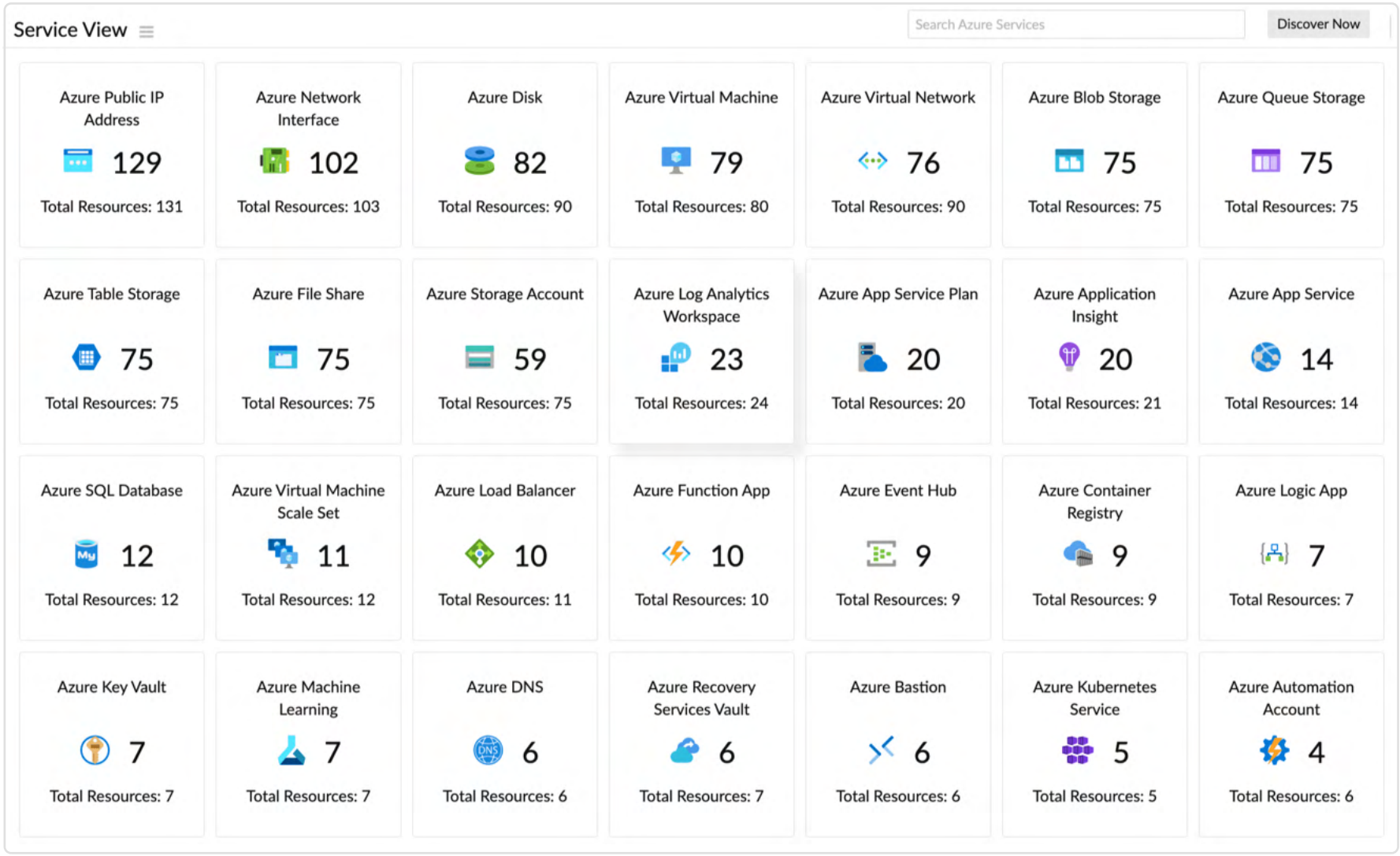
Cloud environments sprawl fast, making manual monitoring impractical. This is why Site24x7's auto-discovery is a game-changer for organizations using cloud solutions. Auto-discovery ensures comprehensive coverage by automatically finding and monitoring auto-scaled resources, preventing blind spots, reducing configurational errors, and minimizing downtime.

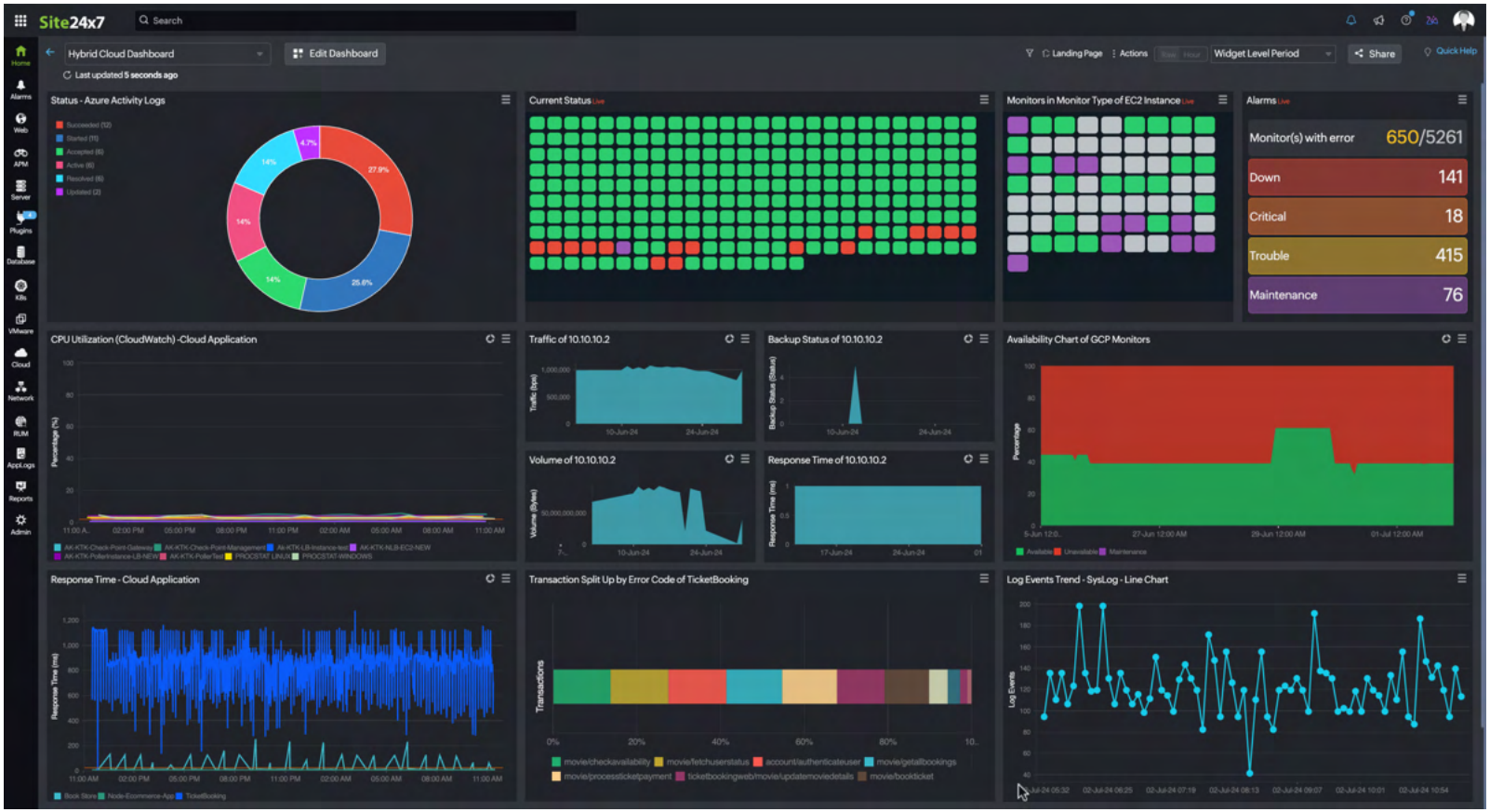
Most importantly, it allows your monitoring system to scale along with your infrastructure, ensuring all components are effectively monitored, even during auto-scaling.



Azure service view dashboard

Auto-discovery acts as a safety net, simplifying management, improving scalability, and empowering proactive cloud monitoring. Additionally, it reduces configurational errors by automating the configuration settings of your monitoring resources with Site24x7's configuration rules. You can also create custom rules to continuously track configuration changes and achieve the ideal configuration settings.

Tackle interoperability with a multi-cloud monitoring tool



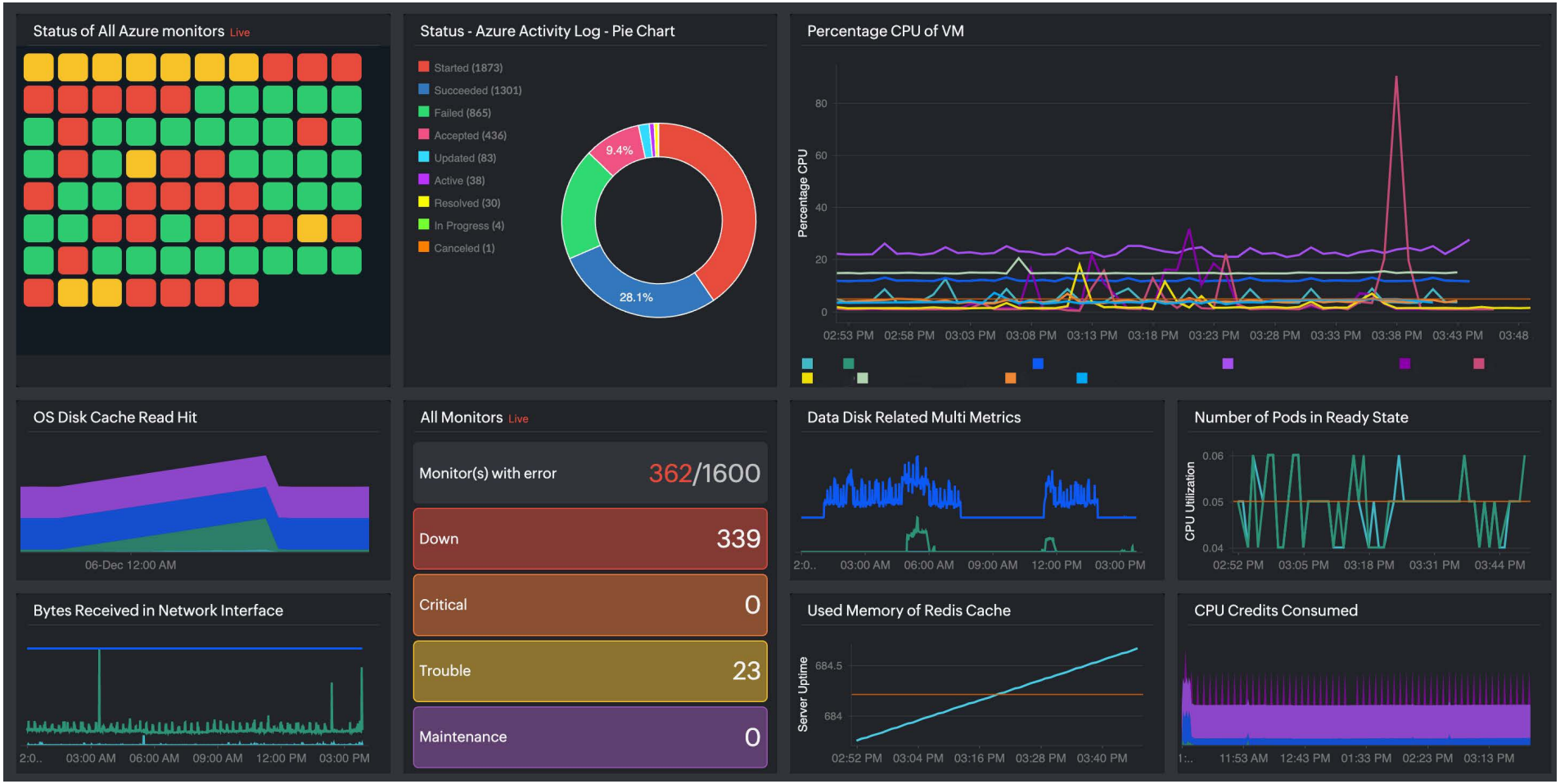
Site24x7's cloud monitoring tool breaks operational silos with a detailed approach. Integrating with a wide array of cloud providers, such as AWS, Azure, and GCP, allows seamless data collection and monitoring of resources within these cloud environments. Enable communication with third-party and native-cloud monitoring solutions and platforms, fostering a more comprehensive view of your entire infrastructure, thereby eliminating tool sprawl.

Lightweight agents deployed on cloud resources translate metrics for consistent monitoring. With numerous integration options, you can tailor monitoring for each cloud environment and set up automated workflows based on collected data.

Simplify monitoring by collecting all your data in a single pane of glass

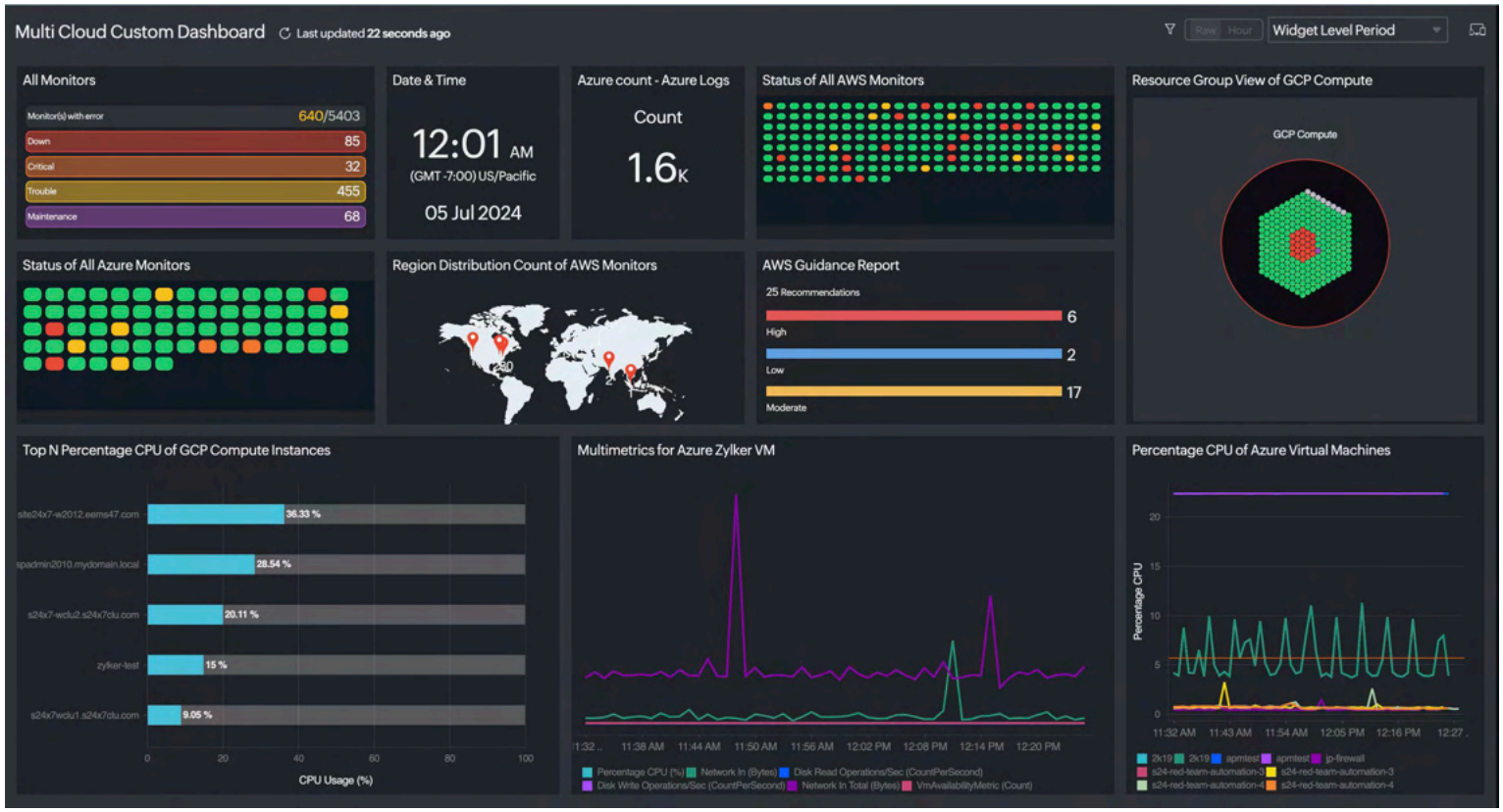
Organizations managing multiple clouds might find the switch between different monitoring tools for each cloud platform a challenge, hindering a holistic understanding of overall application and infrastructure health. But with Site24x7, if the data centers of an organization are hosted on disparate cloud environments, Site24x7 functions as a one-stop maintenance hub for cross-platform correlation and easy troubleshooting.

You can also group metrics from different cloud environments, create your custom visualization with intuitive dashboards, and conduct RCA with in-depth reports for improved performance. Get best practice recommendations to optimize costs, enhance security, increase operational excellence, and ensure the availability of all your cloud resources with our exclusive Guidance Report.



Set up standardized thresholds and notification rules based on your business needs across various cloud platforms to receive uniform alerts about deviations from set thresholds, irrespective of the cloud. Reduce alert fatigue by streamlining your communication channels and requirements to receive minimal messages.

Standardized KPI selection for multi-cloud environments



Inconsistent metrics and business needs make choosing KPIs difficult in multi-cloud environments. For example, different cloud providers use different names for their compute services (EC2 for AWS, VMs for Azure, and Compute Engine for GCP), and despite offering CPU utilization metrics, these providers use distinct terminology.

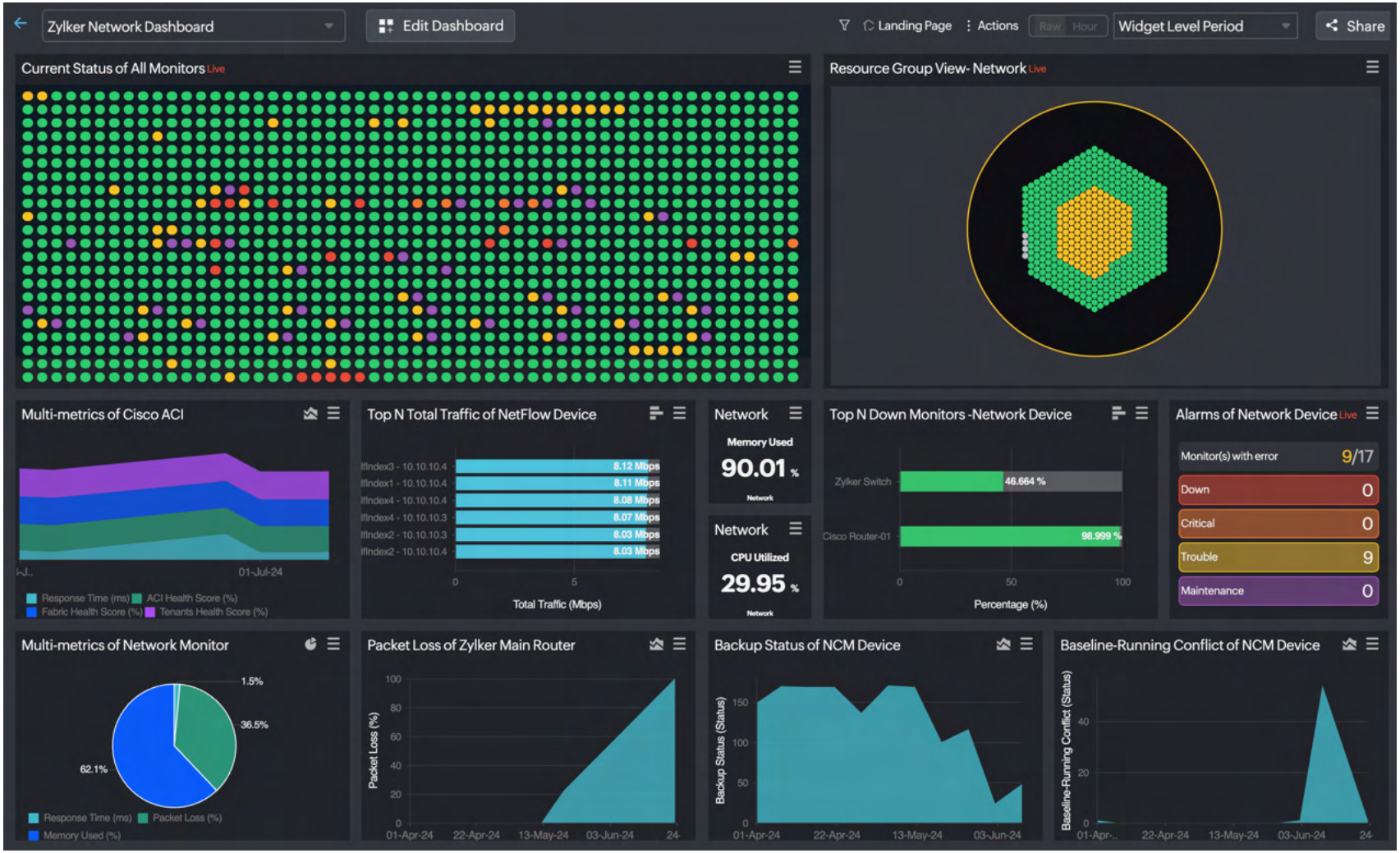
But Site24x7 makes it easy by collecting, sorting, and consolidating all your data types under the same name, making it easy to toggle across environments and correlate events and incidents.

Organizations use the cloud differently—for example, stricter CPU thresholds for high-performing workloads—and Site24x7's uniform nomenclature and formats facilitate metric correlation and allow for consistent comparisons across multi-cloud environments. Continuously monitor critical metrics for all your cloud services, including the availability and performance for compute, web, analytics, storage, and networking to ensure year-around uptime, swift response times, and fast debugging. Minimize mean time to resolve (MTTR) to keep your multi-cloud environment running smoothly.

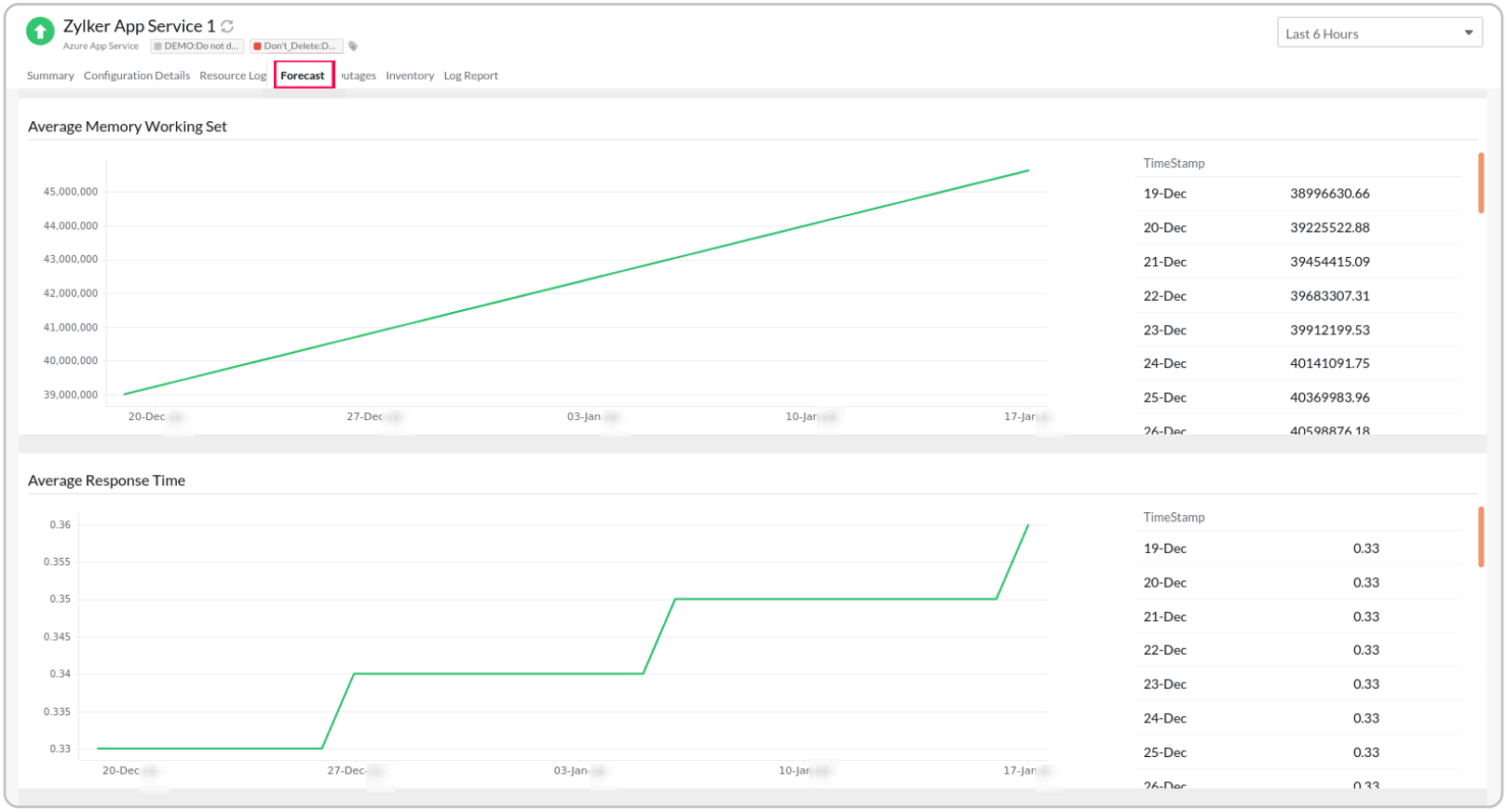
Manage all your network needs for a better infrastructure stack

Cloud environments are heavily dependent on network connectivity and bandwidth. Monitor your cloud network resources, including router, firewall, VPN, DNS, and load balancer, irrespective of their native environment. In addition, monitor network traffic and configuration by integrating with a network monitoring tool.

Apart from managing the cloud environment and the networks binding it, it is also important to manage the physical infrastructure, including printers, WANs, and UPSs, stabilizing its functioning. With Site24x7, you not only monitor your multi-cloud needs but also extend your strategies to keep track of minute details of the happenings in your entire infrastructure stack, including physical servers, databases, containers, configuration platforms, and application stack.


Zylker Network Dashboard
Edit Dashboard
Landing Page
Actions
Raw
Hour
Widget Level Period
Share
Current Status of All Monitors Live
Resource Group View- Network Live
Multi-metrics of Cisco ACI
01-Jul-24
Response Time (ms)
ACI Health Score (%)
Fabric Health Score (%)
Tenants Health Score (%)
Top N Total Traffic of NetFlow Device
ifIndex3 - 10.10.10.4
ifIndex1 - 10.10.10.4
ifIndex4 - 10.10.10.4
ifIndex4 - 10.10.10.3
ifIndex2 - 10.10.10.3
ifIndex2 - 10.10.10.4
8.12 Mbps
8.11 Mbps
8.08 Mbps
8.07 Mbps
8.03 Mbps
8.03 Mbps
Total Traffic (Mbps)
Network
Memory Used
90.01 %
Network
Network
CPU Utilized
29.95 %
Network
Top N Down Monitors -Network Device
Zylker Switch
46.664 %
Cisco Router-01
98.999 %
Percentage (%)
Alarms of Network Device Live
Monitor(s) with error 9/17
Down 0
Critical 0
Trouble 9
Maintenance 0
Multi-metrics of Network Monitor
1.5%
36.5%
62.1%
Response Time (ms)
Packet Loss (%)
Memory Used (%)
Packet Loss of Zylker Main Router
Packet Loss (%)
01-Apr-24
22-Apr-24
13-May-24
03-Jun-24
Backup Status of NCM Device
Backup Status (Status)
01-Apr-24
22-Apr-24
13-May-24
03-Jun-24
Baseline-Running Conflict of NCM Device
Baseline-Running Conflict (Status)
01-Apr-..
22-Apr-24
13-May-24
03-Jun-24

Intelligent monitoring and preemptive resource management



If your organization focuses only on rectifying outages instead of adopting an AIOps approach, it might fail to correlate the events and prevent future recurrences. Site24x7's Zia-powered AIOps-infused monitoring analyzes data inputs and identifies trends and outliers for predictive issue identification, auto-healing, forecasting, and capacity planning.

Use the metric details cohesively and orchestrate auto-healing on multiple heterogeneous systems, including Microsoft Azure, GCP, VMware, and AWS, and set up fail-safes in advance.

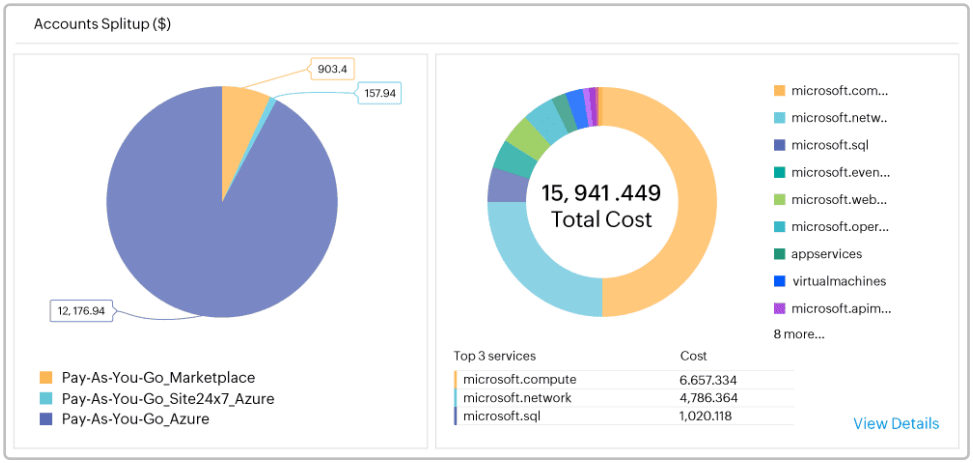
Ensure compliance and a strict security posture

Site24x7's robust security features, like biometric and two-factor authentication support, end-to-end encryption, and access controls like role-based permissions and IP restrictions, protect your environment from unauthorized modifications and prevent insecure dependencies and data tampering.

Its extensive guidance report for cloud platforms looks for security vulnerabilities and analyzes if your cloud infrastructure complies with global security and regulatory standards like the PCI DSS, NIST, and CIS Controls. Integrate with our network monitoring tool to reshape and customize your monitoring solution to align with your compliance checklist.

Optimize cloud costs with CloudSpend

Managing cloud expenditures has become a paramount concern, given the complexity of multi-cloud environments and the ever-expanding array of services. With CloudSpend, address challenges to empower businesses with comprehensive visibility, analytics, and control over their cloud expenses.



To streamline the process, you need a centralized, accessible mechanism that offers budgeting, forecasting, and anomaly detection capabilities across multi-cloud environments. Investing in robust cost management solutions ensures efficiency and accuracy, mitigating the challenges of manual efforts and disparate platforms.

Obtain metrics, traces, and logs for an observable approach

Imagine a slow application during peak business hours. Without observability, it's difficult to pinpoint the source of the lag in a multi-cloud IT environment. Was it a database overload on GCP, a server issue on AWS, or network latency in Azure? Site24x7 monitors the performance metrics of all your multi-cloud platforms to ensure efficiency. Leverage its distributed tracing to debug slow method calls and unite disparate telemetry data to correlate event dependencies. Rise above application levels of tracing and perform RCA for infrastructure events by drilling down to the root cause of an issue with over 100 application logs.

Bridge the gap in monitoring with Site24x7

While the adoption of multi-cloud environments offers businesses flexibility, scalability, and reliability, keeping track of everything can be tricky. The different systems and tools can be tough to work with together, managing everything can become overwhelming as things grow, and making sure the data you're looking at is accurate can be a challenge. On top of that, keeping costs under control can be difficult. To really get the most out of a multi-cloud setup, businesses need to find ways to overcome these hurdles.

Site24x7 offers a compelling solution for multi-cloud monitoring challenges. It tackles scalability, interoperability, and siloed visibility with a unified platform that can ingest data from diverse cloud environments.

With features like auto-discovery, AIOps, IT automation, and cost management recommendations, Site24x7 empowers organizations to proactively manage their multi-cloud infrastructure and optimize performance. If you're looking for a comprehensive and scalable monitoring solution for your cloud journey, try Site24x7 now.

About ManageEngine Site24x7

ManageEngine Site24x7 is an AI-powered observability platform for DevOps and IT operations. The cloud-based platform's broad capabilities help predict, analyze, and troubleshoot problems with end-user experience, applications, microservices, servers, containers, multi-cloud, and network infrastructure, all from a single console. For more information about Site24x7, please visit www.site24x7.com.

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