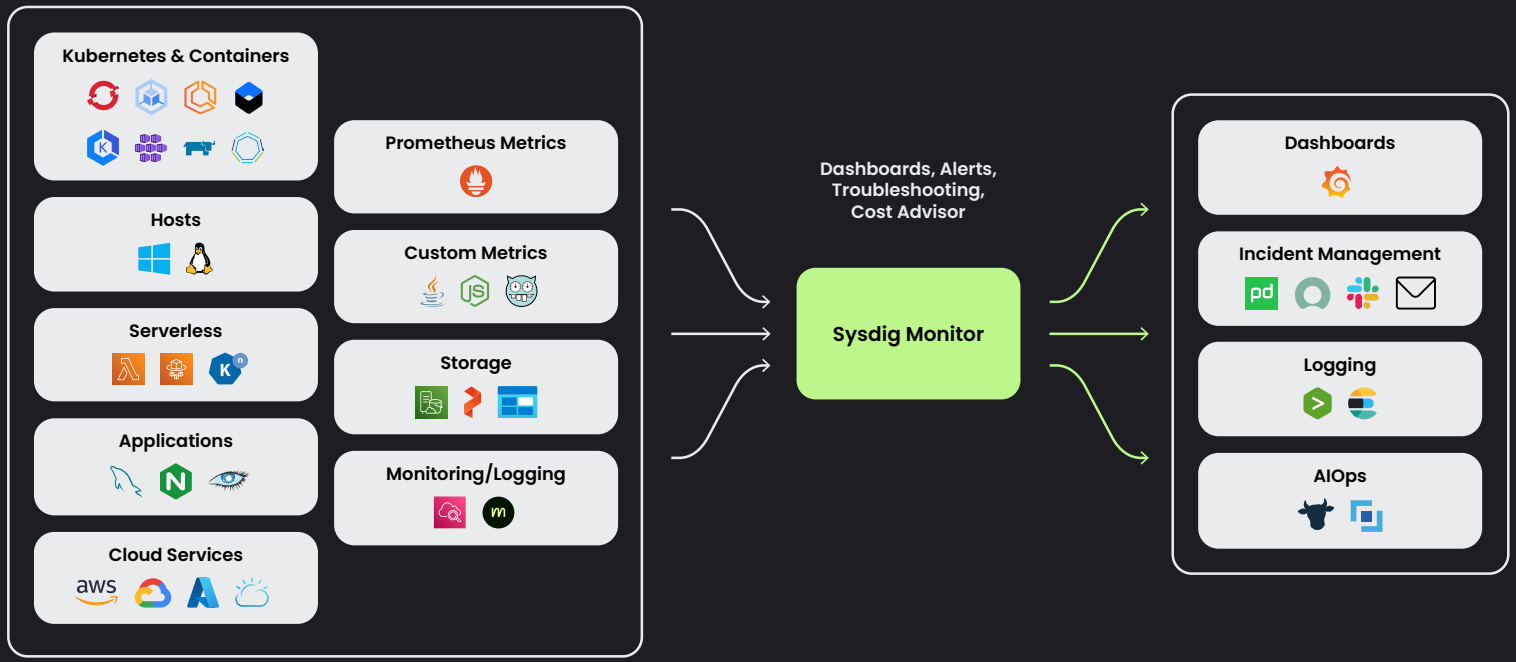
sysdig SECURE EVERY SECOND.

Top 6 Use Cases for Monitoring Cloud-Native Workloads with Sysdig Monitor

Organizations are using Kubernetes, Prometheus, and DevOps workflows to build modern cloud-native applications. However, the dynamic nature of these complex environments can lead to gaps in visibility and difficulty in resolving issues when they arise. Meeting user expectations for availability, performance, and cost requires complete visibility into infrastructure, services, and applications across hybrid and multi-cloud environments. Traditional tools were not built for containers and Kubernetes and can't deliver the granular data and troubleshooting context to rapidly address issues. SREs and developers need easy-to-use monitoring solutions that integrate into DevOps workflows without breaking open source standards.

Sysdig Monitor radically simplifies cloud and Kubernetes monitoring and helps lower costs with deep visibility into cloud-native workloads. You get immediate, granular details and troubleshooting tools for rapidly changing container environments. Unlike other vendors who provide limited Kubernetes detail, Sysdig displays all important information in a single unified view with actionable remediation steps. Our cost savings estimates based on utilization metrics help you prioritize rightsizing efforts. Offload the maintenance of Prometheus servers and get a fully compatible managed service with long-term storage, automatic service detection, out-of-the-box dashboards/alerts, and curated exporters for integrations. If you need custom metrics, Sysdig Monitor can provide more data from your application environments at a lower cost.



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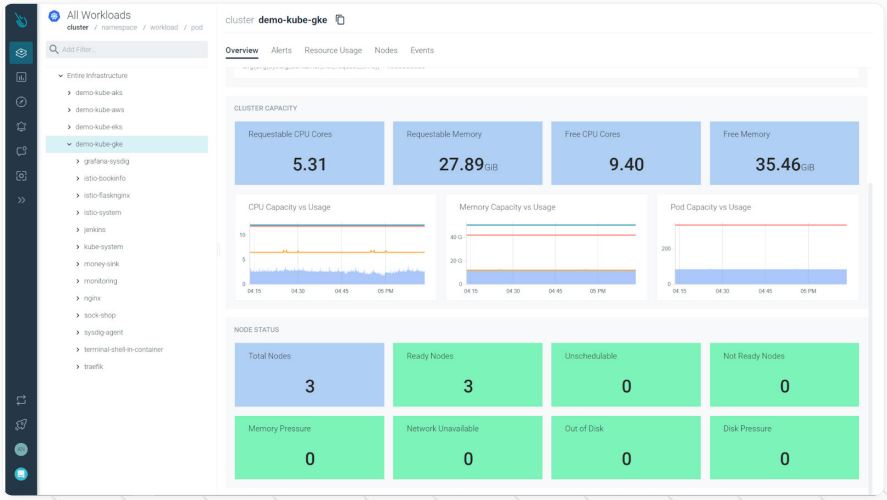
01 Monitor Kubernetes

Monitoring starts with visibility. This is especially important in rapidly changing environments like Kubernetes, which are filled with complexity. Traditional tools fall short of providing the level of detail needed to understand what is happening in Kubernetes environments. It can be difficult to correlate metrics from Kubernetes with inputs from custom metrics and cloud services to get a complete picture of performance at any given point in time.

Sysdig Monitor makes it easy to inspect every aspect of your Kubernetes Clusters, from capacity to control plane, so you can see what is really happening and avoid potential problems. Our detailed dashboards and alerts are ready to go right out of the box, so organizations can start optimizing their Kubernetes environments instantly. Additional sources of metrics from cloud providers and application services can easily be added to provide context that is hard to find elsewhere. Teams can see golden signals from your application environments to make sure you have correctly set your service level objectives (SLOs) and are meeting your service level agreements (SLAs).



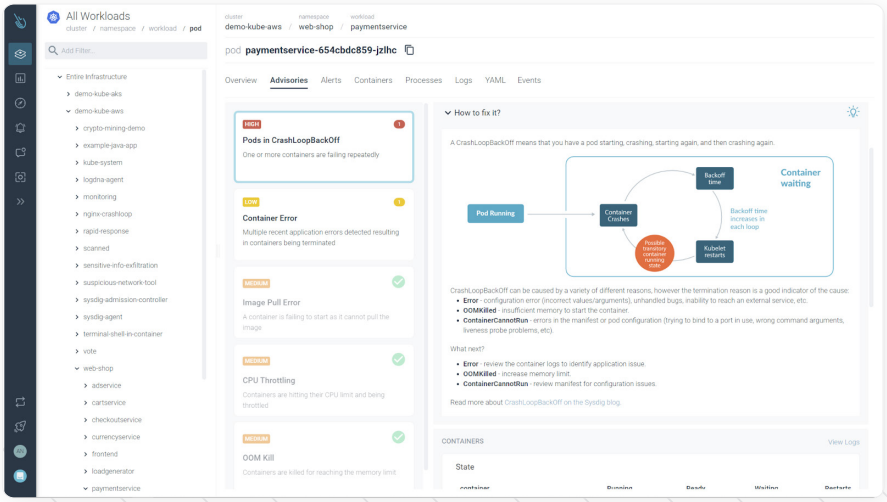
With Sysdig Monitor, you can:

- Get granular details about all your Kubernetes environments instantly.
- Report on cluster availability and capacity to identify overallocated or under-provisioned portions of your infrastructure.
- View and alert on cluster, namespace, workload, and pod level performance.
- Compare resource usage with requests and limits to rightsize your deployments.
- Monitor each element of the Kubernetes control plane to prevent widespread impact to applications and services.
- Get up and running quickly with easy setup and out-of-the-box dashboards/alerts.

02 Troubleshoot Kubernetes Faster

Kubernetes has addressed orchestration, scaling, and automation issues in cloud-native application environments, but the ability to quickly troubleshoot problems remains one of the most difficult challenges. Granular details are needed to get to the root cause so issues can be fixed before end users are affected.

Sysdig Monitor makes it easier to troubleshoot issues such as crashloop backoffs, pod evictions, and resource allocation and limits. With features like a prioritized errors list, live logs, and helpful remediation information teams can find the source of issues much quicker than with traditional troubleshooting approaches. Teams can quickly see which containers are running out of CPU, memory, or file system resources leading to throttled or killed containers. Other tools show resource usage information only to the container level. Our Explore tool also provides the ability to inspect every aspect of your environment both physically and logically. Then, Sysdig Monitor enriches those views including network connections with Kubernetes context and event overlays.



With Sysdig Monitor, you can:

- Troubleshoot Kubernetes 10x faster with details, like top errors that need to be addressed, live logs to help pinpoint problems, and remediation steps to reduce time to resolve.
- Get correlations of events to changes that are happening across your environment to narrow down the scope of your investigation.
- See golden signals to help you understand errors, latency, traffic, and saturation that may indicate application and service issues.
- Perform detailed analysis of every syscall that happens during an incident with automatic captures for important events.
- Explore process-level details down to the pod level with metric segmentation to pinpoint which process is the source of a performance problem.

03 Simplify Prometheus with a Managed Service

Prometheus is fast becoming the tool of choice to monitor Kubernetes-based workloads as organizations build modern cloud applications. Developers and SREs rely on Prometheus as an open standard for collecting time series metrics that provides broad capabilities and helps avoid vendor lock-in. However, as Prometheus environments proliferate throughout an organization, managing the infrastructure, exporters, dashboards, and alerts becomes complex and time-consuming. In addition, organizations struggle with long-term storage of time series, information silos, and a lack of a global view of the health of their environment across all applications and infrastructure.

Sysdig Monitor is natively compatible with Prometheus. Organizations can enjoy the best of both worlds by maintaining their existing investment in the Prometheus standard while gaining the simplicity and enterprise support that Sysdig adds to the equation. Free up valuable people resources to concentrate on business-critical applications instead of mundane monitoring infrastructure.

With Sysdig Monitor, you can:

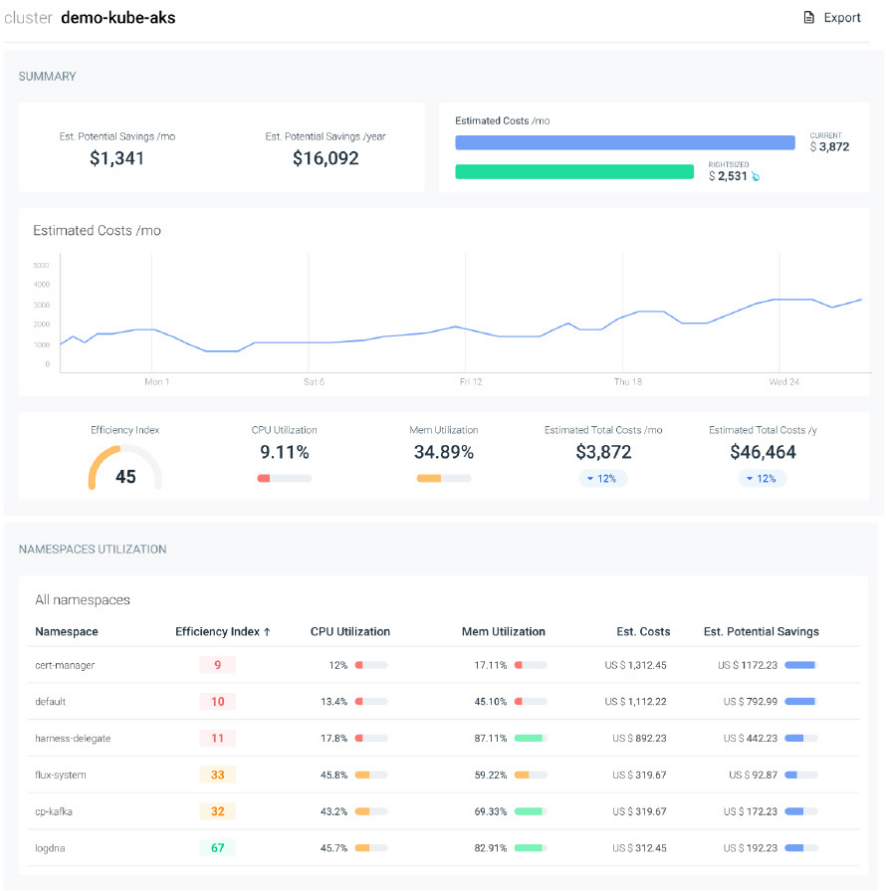
- Easily scale your Prometheus environment with our managed service that provides long-term storage, simplified labeling, and a unified view across services, clusters, and clouds.
- Reduce maintenance, troubleshooting, and compliance burden by offloading infrastructure setup and exporter selection/testing to Sysdig.
- Automatically discover services to ensure important metrics are always being collected.
- Save time with out-of-the-box integrations, dashboards, and alerts.
- Eliminate vendor lock-in with native support for Prometheus including PromQL, remote_write, and Prometheus exporters.
- Increase access to metrics to those who may not know PromQL by using simple form-based queries.

04 Manage Cloud-Native Costs

Running cloud-native application environments at scale doesn't come cheap. The challenge is to run these environments as efficiently as possible while still providing for unplanned spikes in demand or overpaying for the number of custom metrics they are collecting. In an ephemeral, dynamic environment like Kubernetes, capacity management and planning are inherently difficult. Limits on how many resources a container can use often go undefined. In addition, environments where developers are allowed to choose their own capacity needs can lead to overallocation and these are rarely rightsized. Without knowing the utilization of their clusters, organizations could be wasting money due to overallocation or causing performance issues by running out of resources. Additionally, with the explosion of microservices, organizations need a way to collect, store, correlate, and analyze metrics that are unique to a given set of infrastructure and applications.

With Sysdig Monitor, you can:

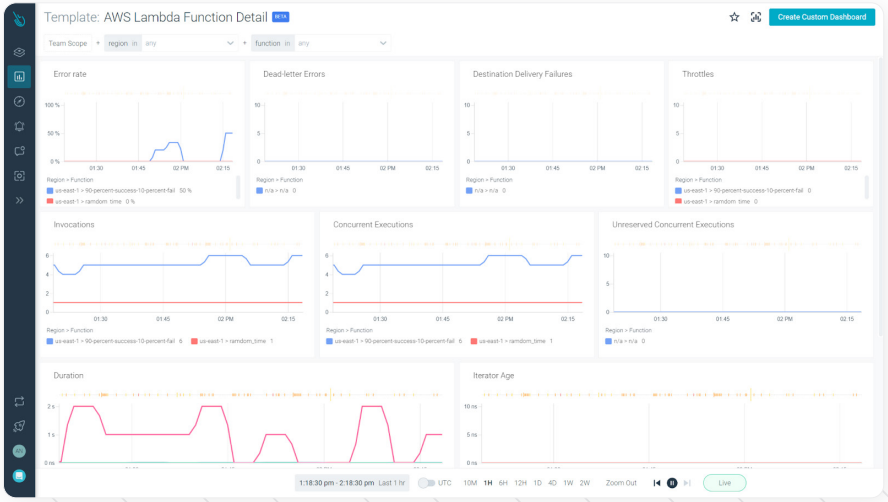
- Rightsize your Kubernetes infrastructure with a clear understanding of the relationship between costs and real-time performance, utilization, and issues in your environment.
- Optimize spending with estimated cost savings and recommended adjustments to requests and limits configuration.
- Get ahead of cost overages with alerts that flag unplanned spending or utilization trends.
- Get detailed visibility of where you are spending money to enable more accurate chargebacks.
- Lower maintenance costs for monitoring your environment by offloading time-consuming configuration and maintenance tasks to Sysdig and refocusing on business problems.
- Reduce the cost of custom metrics and see detailed usage reports so you know which environments are generating the most metrics.



05 Monitor Cloud Services

When deploying cloud-native applications, organizations rely on the health of the cloud services that are provided by a single cloud vendor or across multiple cloud vendors. Each cloud service provider has its own tools to manage the services they provide and these tools can vary widely in terms of the capabilities and level of detail they provide. Organizations need a consistent way to monitor these services that provide Kubernetes context to quickly visualize the performance and health of their environment.

Sysdig Monitor allows teams to see important details quickly with easy metric collection, out-of-the-box dashboards, and pre-configured alerts for hundreds of cloud services. Sysdig supports any standard Kubernetes deployment no matter whether it is running in EKS, AKS, GKE, Open Shift, or other Kubernetes platforms. With Sysdig's monitoring integrations, organizations can collect and view metrics in a consistent way from the cloud providers for their managed services, including CloudWatch, Stackdriver, or Azure Metrics. Sysdig's approach is based on Prometheus exporters along with configuration guides to help teams get started quickly. Sysdig Monitor provides a consistent approach for cloud monitoring, including serverless, self-managed, and managed cloud services like Fargate, Lambda, RDS, S3, ALB, EBS, and more.



With Sysdig Monitor, you can:

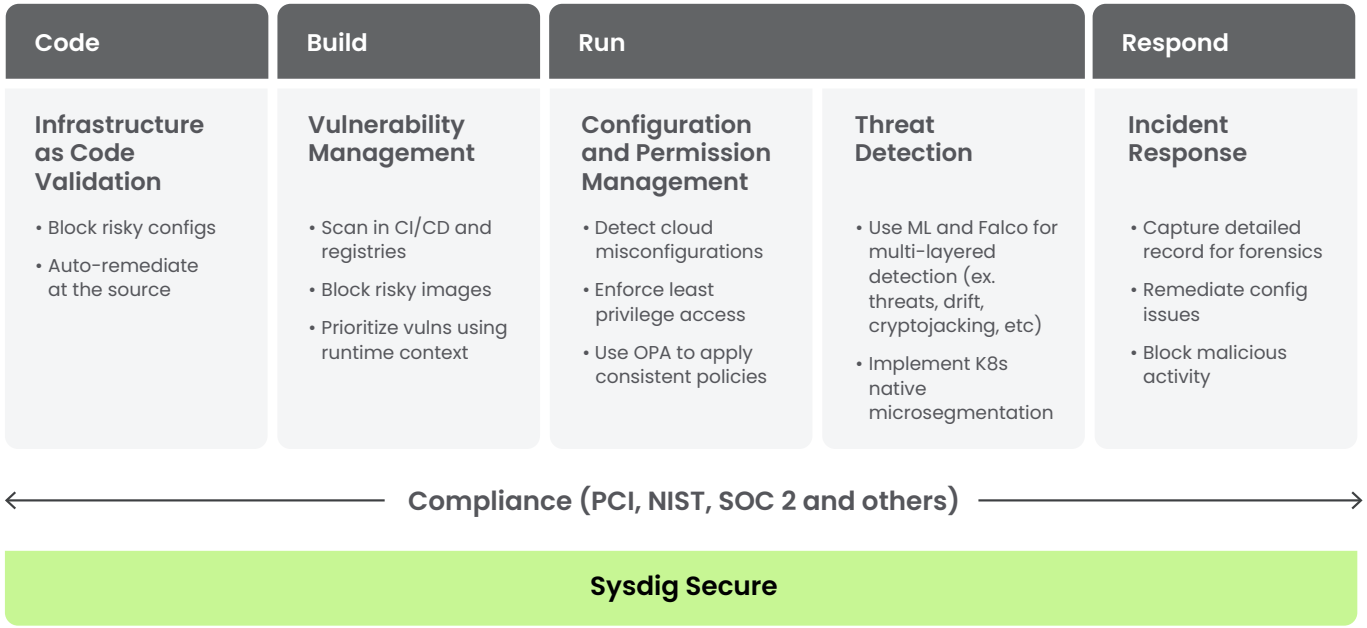
- Monitor cloud Kubernetes environments.
- Inspect the health and performance of cloud services.
- Enrich metrics with cloud metadata.
- Integrate with cloud vendor ecosystems by sending alerts to cloud notification channels.
- Export metrics to cloud services using Sysdig's APIs.

06 Securing Cloud and Containers

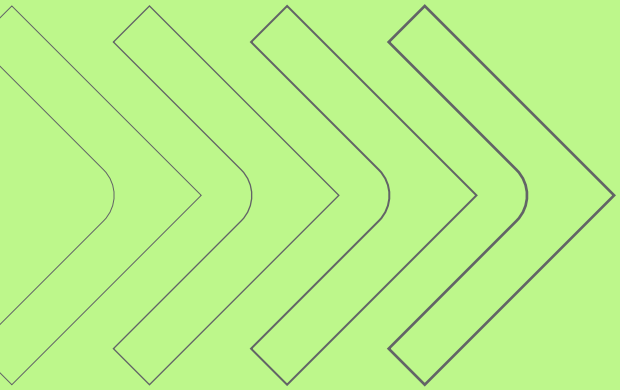
When migrating apps to the cloud or developing in modern cloud-native environments, organizations struggle to put together a security plan and get the visibility required to manage security risk, continuously meet and validate compliance, as well as implement real-time protection across cloud and containers. Performance issues caused by a security breach can be detected by either the security team or the operations team. At the same time, changes made by the operations team could lead to risky configuration changes or expose an application environment to vulnerabilities.

By including Sysdig Secure along with Sysdig Monitor, security, DevOps, and developer teams can find and prioritize software vulnerabilities in predeployment and in production, detect and respond to threats, and manage cloud configurations, permissions, and compliance. From containers and Kubernetes to cloud services, with Sysdig, you get a single view of risk from source to run with no blind spots, no guesswork, and no black boxes.

Secure Containers, Kubernetes and Cloud Services



For more details, check out the Top 10 use cases for Sysdig Secure



Sysdig Monitor helps you resolve issues faster for cloud-native workloads with Kubernetes troubleshooting along with a managed Prometheus service. This way, you get maximum visibility to ensure application availability, performance, and fast problem resolution. With issue remediation, automatic service discovery, out-of-the-box dashboards, and easy-to-use alerts, you can simplify your monitoring and save time so you can focus on what matters most.

See Sysdig in action:

GET A DEMO →

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About Sysdig

In the cloud, every second counts. Attacks move at warp speed, and security teams must protect the business without slowing it down. Sysdig stops cloud attacks in real time, instantly detecting changes in risk with runtime insights and open source Falco. Sysdig correlates signals across cloud workloads, identities, and services to uncover hidden attack paths and prioritize real risk. From prevention to defense, Sysdig helps enterprises focus on what matters: innovation. **Sysdig. Secure Every Second.**