

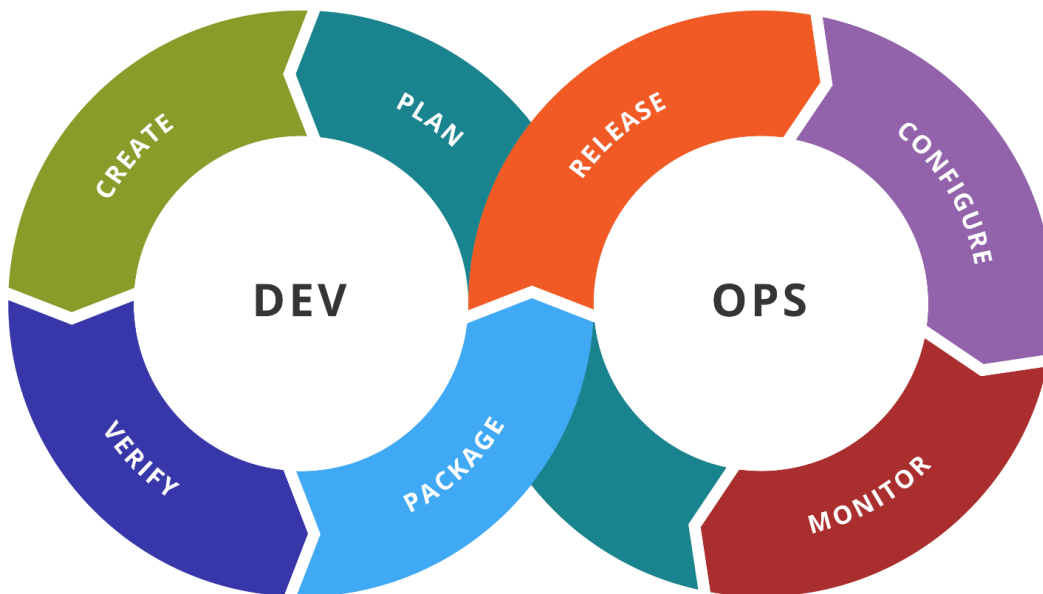
xOps for MSPs

Managed Service Providers (MSPs) are excellent choices to handle datacenter and cloud based hosting including hardware purchase, installation and configuration for network, storage, and databases. More recently, they are handling OS and VM environment installation, patching and maintenance of these environments in coordination with a DevOps consulting specialist. In addition to client environments it is assumed that MSPs will provide environments that can be managed and monitored using DevOps tools and processes.

xOps Overview

xOps has a DevOps specialty in monitoring and ensuring application and infrastructure uptime. We use open source tools and provide IT consulting to ensure business operations performance efficiently and effectively.

xOps also provides onsite and offshore consultants for traditional DevOps functions to ensure deployability, modifiability, testability and monitorability.



xOps develops open source operations monitoring tools and offers related services through our consulting practice. We provide tools to enable operations to run seamlessly, identifying problems before they impact customers and helping to quickly identify and fix problems when they do occur.

Open Source Tool Functionalities

In addition to best of class off-the-shelf products for monitoring and management of technical operations, xOps has developed open source monitoring and management products. Our cornerstone product, xView provide a single place for to view monitoring and operational data across entire applications. xView is a powerful correlation and presentation tool that brings all of data together.

Our open source tools provide a unique competitive advantage:

- All operational metrics, logs, alerts, and business data in one place, in real time.
- Tools to identify issues before they impact the customers.
- Self-healing systems through automated issue resolution.
- Elastic systems with automated capacity adjustment.
- Visibility across business metrics with predictive analytics to determine trends before the competition.

DevOps, ITIL, Process, and Management Consulting IT Services

We have a team of the best operations talent in the world. Our team can help deploy the latest tools or implement practices throughout the datacenter. xOps can drive cost improvements in your operations.

xOps is a global company with headquarters in New York City and resources around the world. Our global presence allows us to pull from the best technology talent in the world to develop software solutions at a low cost. It also allows us to offer services such as 24 x 7 Tier 1 and Tier 2 operations support as part of our Managed Service Provider offering. In addition, we offer operations consulting services In the US through our DevOps, ITIL, and Cloud consulting practice.

Systems Monitoring Capabilities

xOps has extensive monitoring capabilities with our global network operations center in Sri Lanka and our monitoring and management toolkit. We provide 24 x 7 x 365 monitoring for systems around the world.

Our unique focus on DevOps means we take a different approach to traditional managed service providers. We staff our NOC with top engineers and constantly look for ways to automate and innovate. We also look for ways to more closely collaborate with application development teams to foster better feedback loops and rapid resolution to any issue that may arise.

Monitoring Tools

We can use any tools our clients prefer or our own combination of open source and industry leading tools to monitor services.

In addition to best of class off-the-shelf products for monitoring and management of technical operations, xOps has developed our own open source monitoring and management products.

Monitoring tools are also customized for each MSP client. Our standard set of tools includes:

- Correlation and Presentation Engine - xView (xOps Open Source)
- Synthetic Monitoring - NewRelic
- Application Performance Monitoring (APM) - NewRelic
- System level monitoring - Zabbix
- Network monitoring - SolarWinds
- DB - Oracle
- Storage - Netapp
- Logs - xView (xOps Open Source)

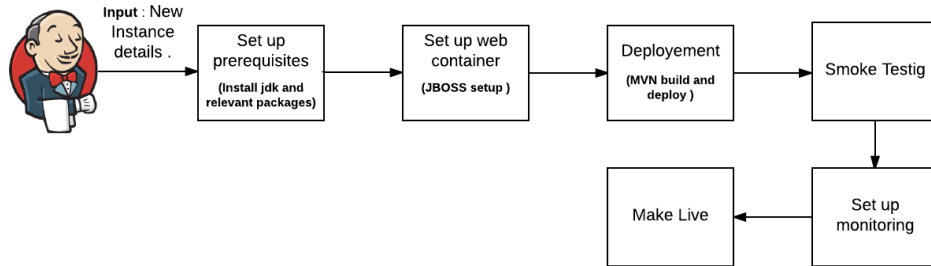
In addition to these monitoring tools we use the following collaboration and ITSM management tools:

- ServiceNow
- Jira
- Google Team Chat
- G Suite

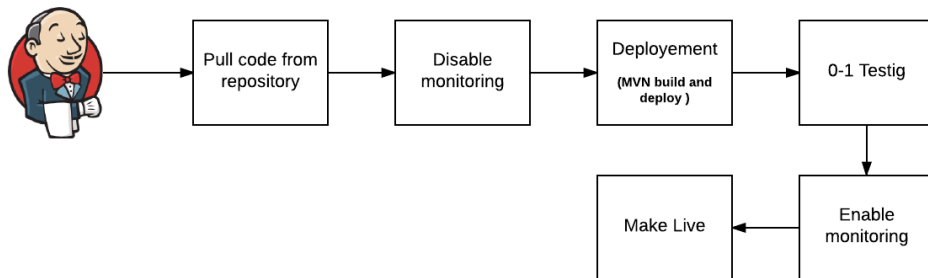
Software Deployment Model and Upgrade Procedures

We use every opportunity to automate the deployment. We treat configurations as code to allow for automated deployment of applications and dynamic infrastructure. We will do fully automated deployments including virtual machine deployment and configuration and virtual network configuration and deployment

using Jenkins. We do A/B deployments to allow us to deploy without downtime or negative impact to our clients.



After deployment we have instant visibility into application and infrastructure status through Jenkins reports and other monitoring metrics.



Fault Analysis, Logging and Active and Passive Monitoring Procedures

xOps uses our correlation and presentation engine, xView, to bring data from different monitoring tools together to provide insight across all systems. We also use ServiceNow to track incidents. xView allows us to manage all alerts in one place, directly integrated with ServiceNow.

Our team of skilled engineers follows ITIL service management best practices for management of alerts and events. We leverage detailed runbook integration in ServiceNow to handle known issues and are continually building our knowledge base.

We provide 24 x 7 x 365 staffing based out of our Sri Lanka engineering team. As part of our DevOps practice we put experienced engineers on the front line to enable continuous improvement. These engineer not only monitor systems but constantly look for opportunities to drive improvement through automation.

We use the open source Elastic stack (Elasticsearch, Logstash, Kibana)

to collect logs across all of our systems to enable us to view and manage them in one place. Our monitoring system, xView, is build using Elastic enabling us to combine log data with monitoring data for a powerful and comprehensive to everything happening on our systems at any time.