Migrating to the Cloud with SkyLIGHT PVX

Cloud-Native Performance Monitoring Solution

Migrating applications to the cloud is an enterprise digital transformation objective. It's goal is to make IT responsive to mobile-driven access. The expected result is to accommodate frequent, but sporadic, application demands from both customers and users. Key benefits include considerable cost savings and improved IT maintenance and reliability because cloud service providers maintain and keep the infrastructure up-to-date.

A surge in demand can happen at any time, dependent upon when users are active. The cloud has created the elastic computing paradigm that provides additional IT capacity to handle peak demand periods.

The shift away from purely on-premise IT infrastructure, where performance can be easily monitored, to public cloud or hybrid on-premise and cloud infrastructure has led to a key drawback – lost visibility for applications in the cloud.

This visibility gap begins the moment that the application migration to the cloud begins, not just when the applications go live. This occurs because the performance monitoring tools that could monitor server to server traffic on-premise simply don't work in the cloud.

Implementing Successful Cloud Migrations

Successful cloud migrations begin with in-depth planning and end with an ongoing evaluation that migrated applications are performing as required.

The individual steps, outlined below, include business planning and implementation procedures to ensure a well-orchestrated migration.

Accedian's SkyLIGHT PVX for Cloud Migrations

SkyLIGHT PVX is an integrated, software-only network and application performance monitoring platform (NAPM) specifically designed for monitoring cloud migrations.

ACCEDIAN

SkyLIGHT PVX uses lightweight, passive traffic capture points which are deployed in a virtual machine (VM). They monitor virtual switch traffic and forward a thin stream of metadata to a server-based capture store.

The metadata it generates is a fraction of the full monitored traffic – generally between 0.2 and 0.5 percent. For a 10 Gbps link, that's only about 2 to 5 Mbps as compared to the full 10Gbps captured.
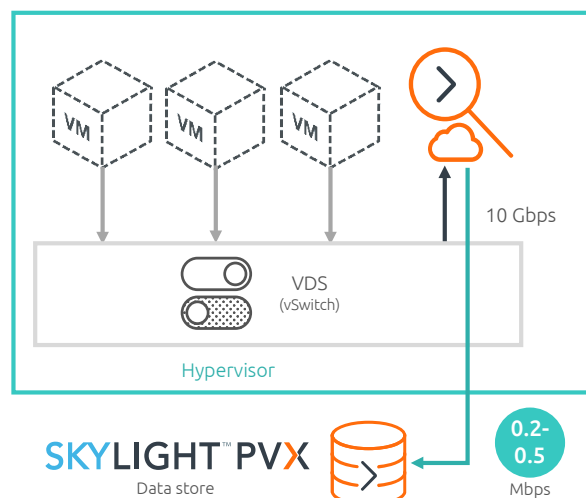
That means that SkyLIGHT PVX monitoring captures every packet to provide 100% visibility without placing a heavy traffic load on cloud and on-premise backend networks. It also dramatically reduces the cost of the network traffic created by packet capture – so that you don't pay for transferring the same data over the cloud network twice.

SkyLIGHT PVX transfers the metadata to a virtual capture appliance where it's retained to enable real-time performance analytics. This enables real-time performance information to be reviewed within the context of historical performance data to enhance troubleshooting and problem resolution.

Accedian's SkyLIGHT PVX provides:

- 360° visibility of all network traffic throughout the entire migration process

- Complete end user experience status for all applications

- 100% of application transactions visibility

- 100% of application backend performance information

SkyLIGHT PVX is an ideal solution for ensuring the success of cloud migrations. It provides complete performance visibility throughout the migration, starting with baselining performance on-premise and ending with seamless digital experiences of migrated applications sitting in the cloud, all without requiring any additional hardware components. It can help migration teams ensure that application performance and end user experience achieve their mandated performance goals.

SkyLIGHT PVX NAPM Performance Monitoring Solution

The unique benefits of SkyLIGHT PVX's cloud migration approach

- **Simple, lightweight deployment** model and no agents or hardware to install ensures that you are up and running in minutes

- **One vendor** for your cloud performance monitoring – no need for virtual TAPs

- Highly granular metadata for the **shortest MTTR and long historical look-back abilities**

- **Lowest TCO** on the market provided by a fraction of cloud hosting and competitive bandwidth cost

Universal coverage
- Users to data centers ("North-South")
- Inside data centers and cloud ("East-West")
- Remote locations ("edge")

Time to insight
- Installed in minutes
- Adaptive: deploy new capture points anywhere, anytime, at no extra cost
- Instant QoE fault isolation (scope and origin)

Full convergence of NPM and APM
- End user experience
- Network performance
- Application performance

Non-intrusive
Based on passive traffic analysis
- High scalability
- Massively distributed
- Natively designed for virtual and cloud environments

Six Steps for Successful Cloud Migrations

1. Define business goals

- Identify business goals for the migration
- Map business goals with IT capabilities and constraints, such as compliance
- Involve all stakeholders in the process

2. Discover, catalog and select applications

- Identify all applications in use
- Qualify applications for cloud readiness
- Baseline performance and networks
- Map dependencies

3. Specify the migration type

- Re-hosting – simple app re-hosting in the cloud
- Re-platform – host app in cloud and make minor changes
- Repurchase – SaaS applications
- Refactor – rewrite parts of the application
- Retire – replace application with another one
- Retain – no migration

4. Test and refine

- Compare app behavior on-premise and in the cloud
- Test multiple implementation options
- Resolve problems and fine-tune

5. Migrate

- Migrate the infrastructure
- Migrate the application workload
- Final testing

6. Monitor

- Drive performance optimization
- Keep resolution time under control
- Manage vendor performance and costs

How SkyLIGHT PVX Can Help

1. Define business goals

Business planning using your team's IT experts.

2. Discover, catalog and select applications

Use SkyLIGHT PVX to monitor data center traffic

- Determine user experience, performance profile, location and volume for all apps
- Current network impact
- Screen each targeted application
- Baseline performance and network requirements
- Assess bandwidth and cloud configuration dependencies and usage profile

3. Specify the migration type

Business planning using your team's IT experts.

4. Test and refine

Use SkyLIGHT PVX to evaluate app behavior for implementation options

- Test and compare multiple options
- Assess network bandwidth requirements
- Test and refine end user experience

5. Migrate

Use SkyLIGHT PVX to monitor application workloads during migration

- Check performance from, to and within the cloud
- Check performance vs baseline
- Monitor performance through ramp up

6. Monitor

Use SkyLIGHT PVX to drive performance optimization

- Identify most frequent and slowest transactions and errors
- Verify cloud management and connection SLAs

ACCEDIAN