

Solution Brief

Migrating to the Cloud with Skylight

Cloud-native performance monitoring solution

Migrating applications to the cloud is an enterprise transformation initiative to make IT responsive to mobile-driven access. The key goal 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 above, include business planning and implementation procedures to ensure a well-orchestrated migration.

Accedian's Skylight for cloud migrations

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

Skylight 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 generated 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 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 don't pay for the same data twice.

Skylight 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 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 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.

The unique benefits of Skylight'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 – a fraction of cloud hosting and competitive bandwidth costs

Six steps for successful cloud migrations

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

Discover, catalog, and select applications

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

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
- Refactor – rewrite parts of the application
- Retire – replace application with another one
- Retain – no migration

Test and refine

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

Migrate

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

Monitor

- Drive performance optimization
- Keep resolution time under control
- Manage vendor performance and costs and end user experience achieve their mandated performance goals.

How Skylight can help

Define business goals

Business planning – just requires the IT experts on your team.

Discover, catalog, and select applications

Monitor data center traffic and view

- All apps
- Location and volume of users
- Current end user experience and performance profile
- Current network impact
- Screen each targeted application
- Baseline performance and network requirements
- Assess bandwidth and cloud configuration dependencies and usage profile

Specify the migration type

Business planning – just requires the IT experts on your team.

Test and refine

- Evaluate app behavior for implementation options
- Test and compare multiple options
- Assess network bandwidth require
- Test and refine end user experience

Migrate

- Monitor application workloads during the migration
- Check infrastructure performance from and to and within the cloud infrastructure
- Check performance vs baseline
- Monitor performance through ramp up

Monitor

- Drive performance optimization
- Identify most frequent and slowest transactions and errors
- Verify SLA management for the cloud
- Verify SLAs for cloud connections

About Accedian

Accedian is the leader in performance analytics and end user experience solutions, dedicated to providing our customers with the ability to assure their digital infrastructure, while helping them to unlock the full productivity of their users.

Learn more at accedian.com