

Performance analytics and end user experience for the cloud and 5G age

What does Accedian Skylight do for our customers?

5G. Cloud. Customer experience.

The world has changed and customer expectations have changed with it. They now expect their digital services to add value to their lives and the infrastructure that powers them to perform faultlessly.

All of this requires end-to-end network and service performance management, as well as the ability to analyze and resolve customer-impacting issues at speed.

Visibility and control in real time are needed to confidently deploy and manage latencysensitive 5G and cloud services.

Accedian provides the ability to see far and wide across your entire infrastructure, and deep into how your customers actually experience digital services.

accedian.com

2 billion

users of the world's digital assets are assured with Accedian technology, across physical, cloud and hybrid architectures

1µs

accuracy and 1 ms granularity, the world's most accurate performance measurement systems

Source: Accedian customer data

"Slow is the new down."

– Google

⁴⁴ Thanks to our partnership with Accedian, we feel confident in our ability to deliver the highest possible quality of experience. We view Accedian as a key partner in this strategic project.??

Enrique Blanco, CTO

' Jelefínica



Improving customer experience is a top priority for Telefónica

Telefónica is one of the largest telecom companies in the world with 365 million customers across Europe and Latin America.

Challenge

Meeting high customer expectations through improved network reliability is a big part of Telefonica's growth strategy. To accelerate their customers' transition to 4G, and lay the foundation for 5G, Telefonica needed a more effective way to optimize network performance.

Solution

Skylight sensors were deployed to monitor call quality, boost availability, and optimize bandwidth across Telefonica's mobile networks. This high-quality continuous monitoring with microsecond accuracy and real-time metrics proactively assures the quality of each service.

Outcomes

- A single performance management solution for all services (enterprise, wholesale, residential) plays a vital role in achieving customer experience goals
- Quality of experience (QoE) visibility uniquely positions Telefónica to deliver solid business value in the emerging 5G market

SK Telecom moves confidently toward 5G with end-to-end performance assurance

Korea's largest mobile operator serves 28 million mobile subscribers.

Challenge

Lacking an efficient big data performance management solution hindered SK Telecom's core business goal: to reliably assure all services, network segments, and datacenter interconnects. These capabilities are also necessary for the operator as it rolls out 5G services.

Solution

SK Telecom deployed Skylight to centralize a real-time view of network performance. Skylight provides quality of service (QoS) and QoE key performance indicators (KPIs) to SK Telecom orchestrators.

Outcomes

- Accurate information pinpoints the source of performance issues and enables fast problem resolution
- Real-time metrics make it possible to drive the orchestration layer in an automated, programmable, dynamic manner

⁴⁴ Partnering with Accedian helps us ensure the best-possible quality of service and experience, which are at the heart of our reputation and our business. This is particularly important as we continue to extend our network towards 5G, making the need for 24x7 end-to-end visibility critical.⁹⁹

> Choi Seung-won, Sr Vice President and Head of Network Solutions Office



Reliance Jio brings high-quality mobile services to over 320 million customers in India

Mobile operator Reliance Jio's mission is to enable a digital revolution for India's 1.2 billion people with affordable mobile broadband, smartphones and rich content and applications.

Challenge

Reliance Jio was preparing to launch a brand-new LTE network and VoLTE service, requiring excellent performance. Jio lacked detailed, accurate network visibility and needed an efficient and affordable all-software performance monitoring solution.

Solution

Skylight virtualized performance sensors and software run on Jio's own hardware. Skylight provides Jio with over 20 billion KPIs every day, and can identify outages as short as 33 milliseconds.

Outcomes

- Live network performance dashboards to quickly prioritize any issues
- Ability to pinpoint cause and location of customer issues speeds up troubleshooting and mean time to repair

⁴⁴ Accedian's innovative, virtualized network performance monitoring technology plays a significant part in enabling Jio to deliver high-quality 4G services to our customers across India.²⁷

Tareq Amin, SVP Technology Development and Automation



T-Mobile Poland extends end-toend performance visibility across its multi-vendor mobile network

Deutsche Telekom's T-Mobile provides voice and data services to over 10 million mobile customers in Poland.

Challenge

T-Mobile needed to assure quality of service (QoS) across its entire network, but lacked an end-to-end performance management solution for their multi-vendor network.

Solution

T-Mobile closed its performance monitoring gaps by deploying Skylight across its existing network infrastructure. They use the solution to monitor three classes of service to each tower in each of 14 RAN areas.

Outcomes

- Consistent support for standard, continuous monitoring protocols across multiple vendors' equipment
- Ability to baseline performance for planned 5G services on a link-by-link basis

BSO automates service activation testing to unlock new revenue streams

BSO provides Ethernet, cloud, hosting and high availability, lowlatency network services in 23 countries.

Challenge

The cost of BSO's 'manual' turn-up and performance testing compromised the business case for many services. BSO needed a way to prove compliance with stringent SLAs without cutting into revenues.

Solution

BSO's international network is now instrumented edge-to-edge with Accedian's Skylight platform, which delivers distributed performance management at a highly competitive price point.

Outcomes

- Service turn-up and delivery costs less: fewer truck rolls, less operational costs
- No more false positives or wasted man-hours during troubleshooting; network segments can be tested in isolation

⁴⁶ After engaging with Accedian, we increased our ability to test newly deployed services from about 30% to more than 70%. The solution also eliminated localized testing as a significant cost that was on the rise."

> Tony Jones, **Global Network** Services Director

Bouygues Telecom optimizes performance with micro and macro visibility

bouygues

Bouygues Telecom is a French mobile and fixed network operator with over 20 million customers.

Challenge

Persistent, 'invisible' network performance issues and traffic bursts were impacting Bouygues Telecom's 4G service quality. These issues were hard to detect and fix without lengthy manual investigations.

Solution

Bouygues Telecom deployed Skylight to get performance visibility into microbursts impacting service quality and macro intelligence on network performance. Skylight performance analytics ingests this data, combined with metadata, to visualize and pinpoint the cause of issues.

Outcomes

- Optimized performance and continuous monitoring of the entire mobile network and services
- Significant reduction of customerimpacting issues and resources spent on troubleshooting

Over 130 users at Bouygues rely on Skylight to:



Tune router QoS settings



Identify congestion hotspots



Monitor network cross-sections (regions, classes of service)



Analyze trends and anomalies

Real-time Supports operations Metadata correlation **Zone analysis**

⁴⁶ Skylight gives us a complete 'telescopic and microscopic' view of performance in a single tool. We can look at network performance at any level, from a single site or service, and at regional or national network level.⁹⁹

André Ethier, Telecom Engineer

Why did Bouygues choose Skylight?

KPI reporting Web-based interface **Big data analytics** Scalable

5G. Cloud. Customer experience.

Digital transformation and the move to the cloud have been heralded as the saviors of future technology performance and customer experience, and with the advent of technologies such as 5G, automating service quality

However, with this migration, visibility and control are needed more than ever, with the ability to see far and wide across your entire infrastructure and deep into your users' experience.

Accedian exists to solve these problems, giving you the ability to dive deeper into the data, allowing you to regain control and take performance and user experience to

Disruptive time to insight

reduced resolution time of any performance issues with a solution that installs in minutes

Unsurpassed ease of use

more efficient than other performance analytics and end user experience systems

Cloud migrations made easy

TCO improvement on any hybrid cloud deployment

Source: Accedian customer data

⁴⁴Skylight covers all our performance requirements for both network performance and application transaction monitoring, as well as offering an exceptionally intuitive and easy-to-manage solution.⁹⁹

Vinicius Silva Teixeira. IT Manager



CGI puts an end to the blame game in the cloud

One of the largest cloud service providers, CGI is a global system integrator and IT outsourcer with 70,000 professionals in over 400 offices globally, including a large presence in Brazil.

Challenge

CGI Brazil aims to be a "trusted IT advisor" capable of solving any issues guickly for their growing base of cloud customers. They required a solution to help them find the root cause of service degradations affecting end user experience—whether the origin was in their own infrastructure or elsewhere in the cloud.

Solution

Using Skylight, CGI Brazil accelerated their mean time to resolution (MTTR) and can quickly identify issues occurring within complex hybrid cloud environments. CGI uses Skylight as a one-stop solution to increase customer satisfaction, achieve high availability, optimize productivity, and accelerate resolution times.

Outcomes

- Proactive end user experience monitoring across hybrid cloud infrastructure.
- Increased overall customer spend thanks to accelerated MTTR and higher satisfaction

T · · Systems ·

T-Systems gains East-West traffic visibility, from core to cloud

A subsidiary of Deutsche Telekom, T-Systems's 40,000 employees offer a broad range of business solutions to manage IT systems, security, ICT and cloud-based services.

Challenge

With three large datacenters in South Africa and a growing cloud services presence, T-Systems needed a network performance monitoring solution to manage the increasing complexity of its operations. The goal: be more agile with complete visibility into their varied infrastructure and environments.

Solution

With Skylight, T-Systems gained complete datacenter visibility, North-South and East-West, and the fastest issue resolution of any monitoring solution used by their team to date.

Outcomes

- Detailed performance reports and dashboards help datacenter staff identify root cause and resolve degradations faster
- A single integrated solution for network and application performance monitoring eliminates multiple tools for monitoring devices, WAN and application performance

⁶⁶One of our key goals was to become more agile in resolving issues ... Skylight offers a continuous view of our environment. It is the fastest tool we ever implemented!"

> Andre Vilioen. Datacenter **Operations Manager**



ROI deep dive: Degradation specific to an application used for stocking medical supplies in treatment rooms

Problem: An in-house application determined, based on daily inventory, how medical supplies should be replenished each morning in over 40 treatment rooms. Degradations impacted the restocking of these rooms as replenishment orders were not received in time for daily restocking. This impacted a medical professional's daily productivity.

Resolution: With Skylight, resolution time was reduced from approximately 15 days to approximately two days. The solution identified degradation issues not only by looking at network performance but by offering visibility into database transactions and SQL requests.

ROI savings:

Medical professional productivity: 1.5 hours of time spent @ €60/hour (€90) x four medical professionals (e.g., nurses) = €360

Number of treatment rooms: There were 42 treatment rooms located throughout the medical facility, which equates to 42 x €360

Total Daily Cost: €15,120

Cost per degradation without Skylight €226.800 €15,120 x 15 days

Cost per degradation with Skylight €30.240 €15,120 x 2 days

Overall savings per degradation 95.560

Improved network performance leaves more time for patient care at Citadelle

Citadell Regional Hospital Center (CRHC) is a major healthcare facility in Belgium with six locations that focus on state-of-the-art and patient-centric care. They perform over one million procedures annually.

Challenge

CRHC has a 30-member IT team responsible for over 200 active applications. three datacenters, staff productivity, and nimble response times for medical records and imaging systems. They needed a cost-effective performance monitoring solution to help them reduce network and application performance degradations.

Solution

Since deploying Skylight, CRHC has achieved an average annual cost savings of two million Euros! This is because 1) IT spends much less time analyzing and mitigating technical issues; 2) medical and admin teams spend less time reporting incidents so they can focus instead on performing billable services that drive revenue. The CRHC team now has more time for things that matter—patient care.

Outcomes

- Productivity is improved because user issues and complaints can be resolved in minutes or hours versus days or weeks



- 360-degree, real-time visibility drives expedited resolution times,
- improved satisfaction and overall quality of experience



Local government delivers superior experience to a diverse set of citizens

The Belgian province of Liege's IT department offers services to citizens across 80 sites and more than 400 buildings.

Challenge

With an extremely diverse set of users and services to support, the IT team had a broad set of questions to answer with their performance monitoring solution. For example: "Who are the users and what applications are they using?" and "Do network slowdowns and degradations really originate from the WAN?" They needed a solution to improve end user experience and respond faster to issues.

Solution

The IT team used Skylight to perform a diagnostic procedure that they were struggling with: what was causing a critical application to randomly crash? With its deep diagnostics and continuous end user performance monitoring capabilities, Skylight was able to quickly diagnose a broader issue of sub-optimal routing.

Outcomes

- A clear view of network usage (which users, on what bandwidth, when, and for which applications) and deep diagnostic capabilities across a diverse set of sites and users
- Quick identification and resolution of degradations helps keep user complaints and open ticket times to a minimum

⁴⁴ Without Skylight, it would be absolutely impossible to adequately control the network infrastructure's usage for all users, and to respond quickly to all performance degradations."

Philippe Pieters, Network Manager



Real-time transaction analysis of network traffic keeps BCPE banking transactions flowing

BPCE is the second largest banking group in France, with over 100,000 employees and more than 31 million customers, many of whom are cooperative shareholders.

Challenge

BPCE's IT department, with over 1,200 employees, required a solution to optimize productivity for a highly distributed team. The solution required real-time transaction analysis capabilities to accelerate fault handling processes across their IT infrastructure.

Solution

By deploying Skylight, BPCE's IT team was able to streamline their fault handling process and reduce downtime for their customer-facing e-banking application. They also realized significant cost savings across their entire IT infrastructure, namely with more efficient rollouts and optimized capacity planning.

Outcomes

- The ability to quickly pinpoint problem origins across a distributed infrastructure optimizes staff productivity
- Real-time transaction analysis accelerates fault-handling, improving customer satisfaction of e-banking and overall BPCE brand value

⁴⁴ We clearly have shorter resolution times with Skylight! We get clear facts and answers instantly ... and it helps our network and security teams improve our infrastructure."

> Jeremy Renard Network Engineering



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