

# Case Study

**KPI/SLA Visibility Improves Uptime, Governance  
and Streamlines Audit and Validation for GTL**



## GTL's Global Command Center Operations computes multiple KPI/SLAs per circle as per contract on shared infrastructure and streamlines audit and validation process with Khika

### About Khika

Khika is a log analytics platform for Big Data/IOT/Security. It leverages distributed architecture to index and search small or large amounts of time stamped data - log data or other types of machine data. In addition, visual reports, dashboards and alerts can be generated and shared across the organization. Organizations use Khika to improve Security posture, demonstrate Performance, Compliance and troubleshoot problems across multiple applications/devices.

### About GTL

GTL Limited (GTL) is a part of the Global Group that has Revenue of USD 500 million and Asset base of USD 2.5 billion, is a leading Network Service Company offering services and solutions to address the Network Life Cycle requirements of Telecom Operators, Technology Providers (OEMs) and Tower Companies

### Global Command Center

GTL has a world class NOC known as Global Command Center, located in Pune. GTL Global Command Center manages Telecom Tower Portfolio of 28,000 Towers classified as Ground Based Towers and Roof Top Towers. These towers are located in all the 22 Telecom Circles of India. Telecom operators use these telecom towers to host their active and passive telecom equipment and provide 2G, 3G, 4G LTE and Broadband services. GTL leverages IOT for Telecom, to manage the active and passive telecom infrastructure. At the back of its talented pool of engineers, large pool of field technicians, data analysts and infrastructure, GTL offers stringent Service Level Performance across several KPIs to enable the operators offer high availability of telecom services to their users.

### Challenge : Telecom Infra Management of Active and Passive Elements

#### Active Infra Challenges

Multiple formats for each Switch and proprietary data formats of Ericsson, ZTE, NSN and Huawei meant that the unstructured data from OSS logs had to be parsed, correlated and brought to a uniform consumable format by a battery of MIS personnel. The process was time consuming and prone to manual errors.

#### Passive Infra Challenges

Generating the usual reports of Uptime, DG run time, Power alarm itself consumed 6 FTE. By the time the data was available, the employees were lagging as per requirements of on-time and accurate reporting.

#### SLA Complexity Management

GTL operates an eco-friendly shared infrastructure for multiple operators, each of whom has a different SLA for performance and service assurance. Thus, there are multiple SLAs on a single asset. Calculating the SLA as per contract on each asset for each operator, across multiple circles along with performance against KPIs was an important requirement.

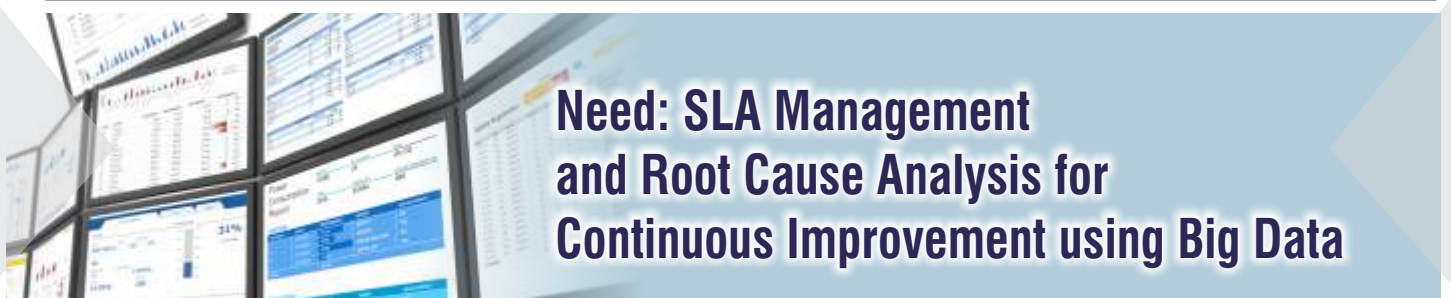
#### RCA for Events

GTL guarantees 99.9% availability SLA of their infra to operators. Pin pointing root cause of failures was important to define whose scope the event lies and to ensure that same issues don't get repeated on multiple sites. However, historical granular transaction level Big Data of logs was too large to be stored or searched, and only aggregated reports were being saved.



*There were plenty of logs coming in but the challenge was to identify the root cause and fix the issue quickly to maintain the high availability of our infrastructure. We deployed IOT/ Big Data platform Khika with data analytics professionals to enable us manage complex SLA effectively.*

**Amit Bhingare** Head IT and Network Operations – GTL Limited



## Need: SLA Management and Root Cause Analysis for Continuous Improvement using Big Data



## Khika offers peace of mind

### Enter Khika

With Khika, GTL was able to crunch their big data from logs with adapters for each of the switches – Ericsson, ZTE, NSN, Huawei- and preset it in a report format as and when required. The Khika Search enabled GTL Global Command Center employees to look for particular type of errors, sites, downtimes and patterns which helped them coordinate with the field staff and honor SLA parameters.

### Single dashboard for all sites

Single console for all switches and sites reduced clutter. Big data of logs was crunched and critical reports such as OSS Uptime Report impacting SLA were readily available when desired thus leaving time for employees to focus on improving SLA.

### Categorization and calculating KPI/SLA

It was determined if the failure is due to active or passive components. There was transparency in the SLA and events which were out of scope could be categorized thus improving the SLA by attributing events to contractual scopes.

### Drill down from graph to details

Ability to drill down to the most granular level after seeing a trend in graph meant going to the supporting data without phone calls to multiple people thus making the whole process efficient and effective.

### Root Cause Analysis

As multiple systems could be correlated, it was possible to know where exactly the issue was and fix the same reducing the MTTR.

### Audit and Validation

Assured data being readily available for Audit and Validation along with the supporting data meant the process was streamlined and escalations managed.

### Key Benefits

- | **Single dashboard for all switches reduced clutter**
- | **Critical reports such as OSS Uptime Report readily available**
- | **Automated report generation meant multiple FTE were free to take action to influence SLAs**
- | **Drill down to detail level from graphs**
- | **Accuracy and confidence in data in Khika as Excel sheets were unreliable**
- | **Root Cause Analysis of failures meant fixing the right things than symptoms**
- | **Separate dashboard for auditors made the audit process fast, easy and transparent**
- | **KPI/SLA report being delivered on time with accuracy and data being available for validation**



Khika  
offers  
peace of mind

