



CHEETAH NETWORKS VALIDATES iTAP NETWORK MONITORING SOLUTION

Cheetah Networks has created a comprehensive network performance monitoring solution called iTAP, which uses micro sensor technology to provide metrics on the performance of a network without having high resource requirements. iTAP was tested at CENG to ensure that it operates efficiently and provides accurate information while monitoring the network in real-time.

Cheetah Networks is an Ottawa-based company developing a micro-sensor based, low-impact network performance and monitoring analytics solution. Titled iTAP, their network monitoring system gives operators and equipment vendors an inside, real-time look at the performance of their network. In their CENG project, Cheetah Networks validated the functionality of their iTAP solution by measuring its required CPU, RAM, and bandwidth consumption rate.

WHY NETWORKS NEED LIGHTWEIGHT PERFORMANCE MONITORING

To ensure networks are optimized and efficient, network operators and equipment vendors need to track performance and resource requirements. It's critical to know immediately when any issues with a network arise so that service quality can be repaired immediately and brought back to an acceptable performance level. Currently on the market there are a number of tools available that track network performance. A common industry issue is that these monitoring tools can have a significant impact on an operator's other services by producing a high resource consumption rate. Cheetah Networks is solving this issue through their low latency iTAP network monitoring system.

iTAP: HIGH PERFORMING, LOW CONSUMING

The micro-sensor based iTAP solution has little impact on your network but has a heavy influence on your business. It's designed to give network operators the information they need in real-time without impacting other network functions.

The performance sensors run on top of several network services concurrently without slowing service to customers. Beyond that, iTAP has a carrier-grade architecture with a robust alarming mechanism, upgradeability for future adds, and reporting for fault tolerance to accommodate unexpected network connectivity issues.

iTAP FEATURES:

- Portable architecture to enable deployment on a multitude of Operating System platforms (Windows, Linux, Android)
- Low latency approach minimizes the impact on network operator and equipment vendor services
- Monitors transport service traffic with granularity as low as a microsecond
- Remotely and automatically tests services before turn up or after a configuration change

PROJECT SETUP

In their project at CENG, Cheetah Networks tested the operation of the iTAP agents for monitoring network data. To perform their testing, Cheetah Networks was provided a private network within a cloud tenancy on the CENG Testbed. The iTAP agents were then deployed on top of two virtual machines (VMs) processing images to monitor metrics such as throughput, bandwidth, delay loss, and jitter. iTAP measured the communication between the two VMs to validate that it accurately monitors and reports information and that the system requirements to do so carry a small footprint.

CENG MEMBERS

