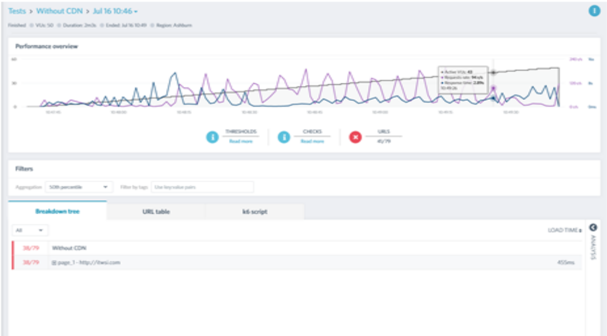

Figure 3: Load testing before implementation

Loadimpact also provide a k6 extension, Using k6, researchers can run fast, daily load tests, on their own machines (local testing, behind the firewall), as part of their Continuous Integration process.

Table 1: Comparison between CDN & Heterogeneous CDN

Results		
	Before CDN	After CDN
No of VMs	50	50
Average load time	455ms	96ms
Max Request rate	201 r/s	638 r/s
Max Response time	11.49s	1.35s

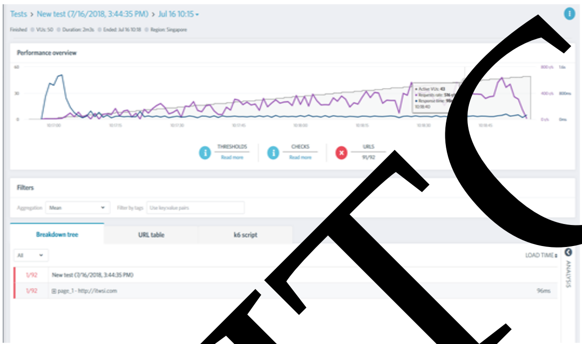

Figure 4: Load testing after implementation.

In this test we are using 50 VMs for load testing where average Load time is around 455ms and maximum requests performed by server [illegible]

IV. CONCLUSION AND FUTURE SCOPE

This research explored the recent trends in the cloud computing technology. The main issue remained is content delivery, caching and the resource utilization. Therefore, the content delivery should be more dynamic and efficient to improve the performance of the cloud computing technology. In the load balancing mechanism, as described in the thesis, we have to tackle with the situation of efficient loading of the workload. The existing work considered several load distribution techniques that manage the load among various virtual machines and assigns load corresponding to their priority and states. There is an issue of overloading which means the resources may be over utilized and hence there increases the response time. There was also an issue of security and encryption. Content delivery network reduces power consumption if cached content is served during the request so we need to reduce the power consumption if content is delivered directly from the server. The analysis of the results shows that response time of the server is reduced as compared to the other algorithms. A resource allocation policy that takes into consideration resource utilization would lead to a better energy efficiency, as an idle server consume 70% of power with 0% utilization, as per by power model. Hence the proposed work is also energy efficient.

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