Telenet

Kenan Batch Performance Tuning

PERFORMANCE

Case Study

CROSSJOIN

SUMMARY

Crossjoin were challenged to optimize E2E Billing scheduler, for the company, in half, decreasing the elapsed time to 12 hours. The whole scheduler, compounded with more than 350 jobs, has a high level of complexity with several layers of parallelism.

It was a must to the client, since delays in Billing chain directly impacting invoice delivery and maintenance windows.

ABOUT THE CLIENT

Telenet began in October 1994. Leading provider of media and telecommunications services in Belgium, Telenet is always looking for the ideal experience in the digital world for all of its residential and business customers.

Our goal was simple: making work and life easier and happier.

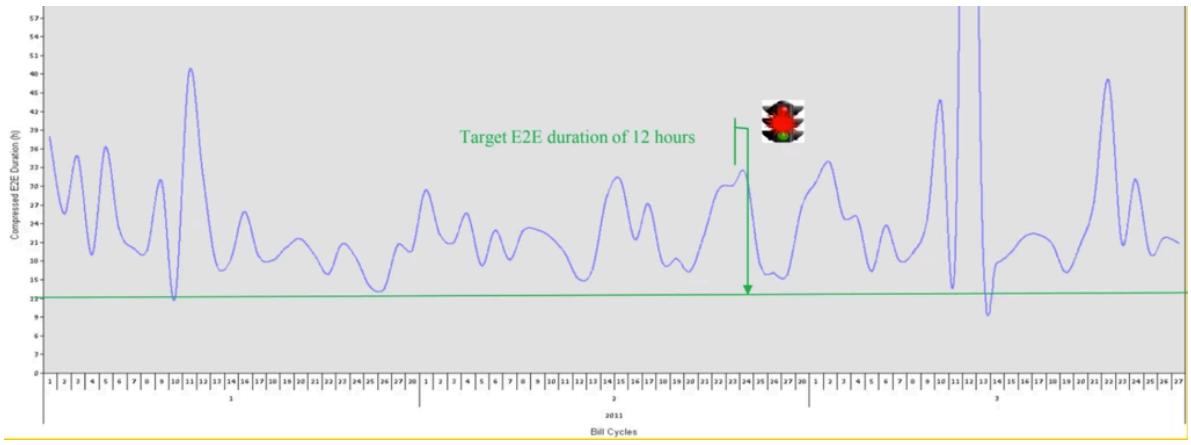
CHALLENGE

The Challenge/Objective were set in Billing Daily Schedule E2E Compressed duration in 12 hours. M01 separate goal of 18 hours.

During this project we faced some critical challenges:

1. The jobs were implemented in several technologies and systems, like Oracle database, Kenan, Datastage, etc.
2. Highly unstable performance with very varied bottlenecks.
3. Short in time to identify, optimize and implement the solutions proposed

The biggest challenge was how to identify the jobs to attack, timely, with confidence that its optimisation would contribute to a significant reduction of E2E.



WHY CROSSJOIN

Crossjoin is recognized in the market to deliver a performance engineering service based on a methodology that guarantees success achieving results in projects defined as “impossible” missions.

The initial contact was driven from an internal reference of a Telenet senior engineer that already knew our capabilities and expertise and considered Crossjoin as best option for the Hallo project. Due to the successful outcome of the this first project, Crossjoin continued with the Kenan Batch Performance Tuning project.

SOLUTION

The solution in order to achieve the expected was based in a well-defined strategy:

- Analyzed and studied chain dependence of the 350+ jobs that comprise the billing scheduler, with a forecast algorithm to define the expected gains. This valuable action has permitted to:
- Identified critical paths to improve
- Defined approach to monitor and control E2E billing
- Proposed compressed scheduler to separate actual performance issues from scheduler gap
- Confirm the gains achieved after each recommendation

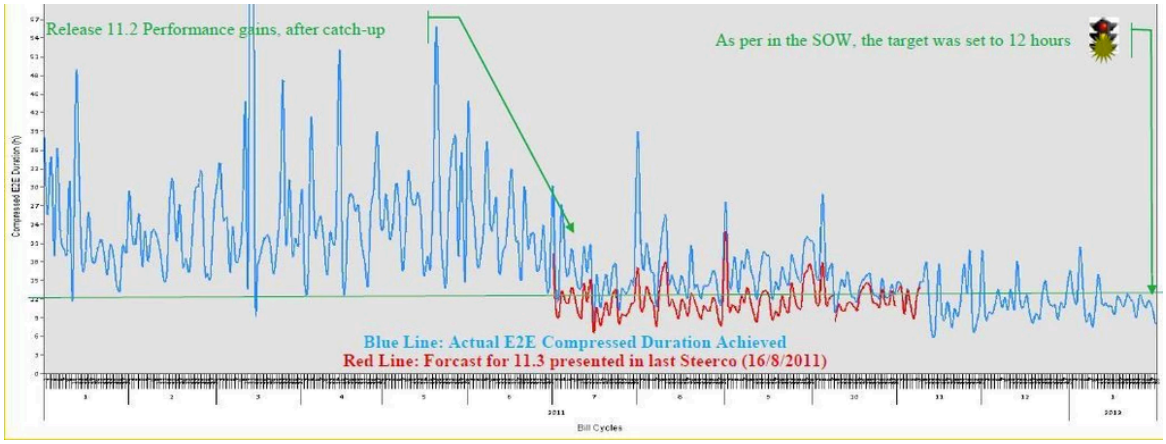
Upon the critical jobs identified, several actions were performed:

- Implemented high benefit/low impact solutions
- Tuned JNL
- Implemented partitioning enhancements
- Done platform analyses
- Analyzed Arbor platform and database and Cacti infrastructure indicators

RESULTS

Achieved the SOW target of 12 hours by 140 Improvement Initiatives:

- 28 Jobs Tuned with overall positive side effects in the entire chain
- Delivered partitioning Management scripts and Database health checks
- Reviewed and Optimised Database configuration



We also identified a set of actions to assure good levels of performance in order keep the expected times:

- Maintenance Framework (Database monitoring and archiving)
- Keep Monitoring & Control
- React in time
- Proact for prevention