

CZECH TELECOM, a.s. is one of the biggest companies in the Czech Republic. With a market capitalization of CZK 148 billion, it is the biggest company in Central Europe listed openly on the stock exchange. CZECH TELECOM a.s. has been pursuing business in the field of telecommunications services with the exception of television and radio transmission all over the country. CZECH TELECOM a.s. is currently implementing a demanding network development and modernization programme, designed to bring the quality of the telecommunications sector in the Czech Republic inline with the best international standards. Extensive investment, transformation and cost control programmes aiming at improved quality and effectiveness together with the rapid development of new services will bring improved benefits to customers, company shareholders and its other partners.

Load testing SAP R/3 system at CZECH TELECOM

The Challenge

The project objective was to test and demonstrate that the proposed configuration of the SAP R/3 system will provide the necessary performance needed for a satisfactory response to end-users working with the SAP system. The entire computer system had to be designed to make it capable of serving all end-users with a sufficiently short

Solution

In the introductory analytical stage of the project, the most loaded point of the system had to be identified together with the peak load duration, so that the simulated load approximated real-life as closely as possible. A representative sample of end-user transactions and a suitable load time were selected. After recording end-user transactions and preparing data inputs, the test scenario operating with



response time, as necessary for smooth operation. Therefore, the project objective was to test the system behaviour in response to the simultaneous access of up to 2000 end-users and to fine-tune the systems' dynamic behaviour. The whole hardware and software configuration of the computer system and application includes the server and all peripherals, the network, the operating system, the database and the SAP R/3 application.

a few virtual end-users groups was designed. The testing itself followed, involving the step-by-step launching of different virtual end-user groups in order to establish the limit number of end-users, which the system is capable of safely serving. The end-user groups were simulated in different nodes in the network with connection points spread all over the country. The test was controlled from a single centre located in Prague in the first test and

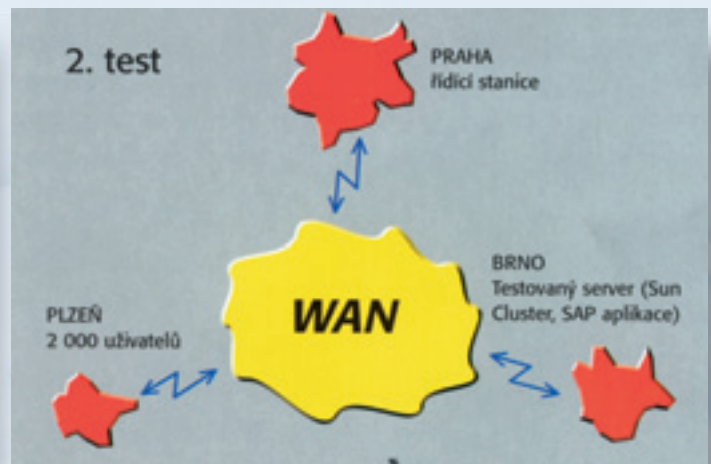
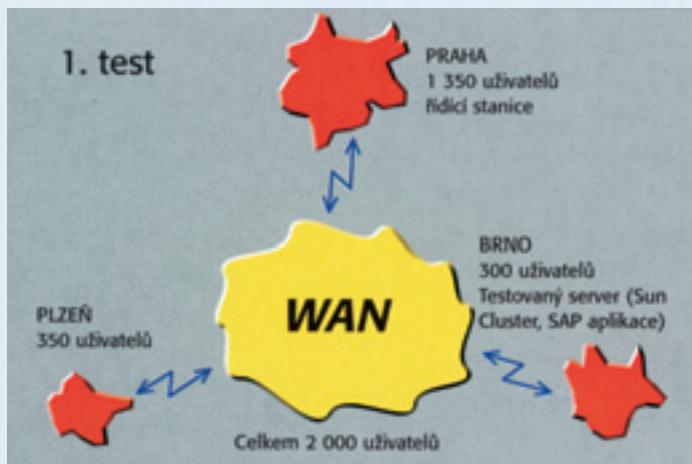
in Brno for repeated tests. Under the conditions of an increasing load the response of the whole system including the SAP R/3 application, the database and the computer network was monitored.

The characteristics measured during the test were useful for debugging of the SAP R/3 system and the database server since the network load measurements can identify network bottlenecks and effect remedial measures. The test was repeated several times and between the test runs the SAP R/3 system and the database was reconfigured in order to achieve the maximum number of simultaneously working

end-users as possible. The test results included verification of the dependability of the system under the desired load of 2000 end-users. The tested system was successfully put into operation and it has been reliably performing the desired functions ever since.

Highlights

- To fine-tune the systems' dynamic behaviour.
- To identify and isolate problems.
- To optimize performance of SAP R/3 system.



KOMIX – SYSTEM INTEGRATOR

KOMIX Ltd. is a system integrator providing its own IT solutions based on advanced but well-established technologies. The services it provides cover all information system life cycle stages, starting from definition of requirements applying to system functionality up to acceptance testing and support of system operation.

The company KOMIX was established in Prague, September 1992.



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