

AMDOCS CUSTOMER SUCCESS STORY

AMDOCS AND IBM HELP T-MOBILE CZECH REPUBLIC ACHIEVE MOBILE AND FIXED-LINE NETWORK CONVERGENCE



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MIROSLAV HOLUB
HEAD OF OSS SUPPORT
T-MOBILE CZECH REPUBLIC

amdocs

COMPANY AT A GLANCE

COMPANY: T-Mobile Czech Republic a.s

HEADQUARTERS: Prague, Czech Republic

WEBSITE: www.t-mobile.cz

REVENUES: USD \$1.67bn, CZK 29.2bn (Czech Koruna, 2010)

STOCK MARKET: DTE

EMPLOYEES: 247,000 employees (Deutsche Telekom)

SUBSCRIBERS: 5,475m (Dec 2010); 2nd largest Internet service provider in the Czech Republic

SERVICES: Public mobile communications network - GSM and UMTS; high-speed internet connection services based on ADSL technology; voice services via a public fixed-line network; ICT services; and satellite T-Mobile TV

TECHNICAL ENVIRONMENT

AMDOCS PRODUCTS: Amdocs OSS: Resource Manager, Task Engine, Site Planner, Resource Planner

AMDOCS PARTNER: IBM for implementation and integration services

INTEGRATIONS: Amdocs OSS to the IBM Tivoli Netcool Alarm Management system with plans to integrate to Amdocs Customer Management

HARDWARE: Sun Blade X6270

OPERATING SYSTEM: REDHAT

DATABASE: ORACLE 10

NETWORK TECHNOLOGY: High-speed internet connection services based on ADSL technology, and also voice services via a public fixed-line network

EXECUTIVE SUMMARY

T-Mobile's acquisition of Ceske Radiokomunikace retail telecommunication business made T-Mobile the Czech Republic's second largest Internet service provider, and expanded its fixed-line telephony and data communications services. But combining two separate mobile and wireline networks was a huge transformation challenge. T-Mobile turned to Amdocs OSS – already successfully deployed in its mobile network – and a partnership between IBM and Amdocs, born out of their relationship in service assurance. The result was the consolidation of over 85 systems into a single network inventory, providing greater operational efficiency and reduced operational costs. Amdocs OSS enables 10 different technologies to be modeled across 87 hardware types, providing T-Mobile with a robust planning, fulfillment and assurance platform to support other planning and operations projects, and further integration with the customer-facing Amdocs Customer Management system.

“We are using Amdocs OSS to add more and more features and capabilities to improve and enhance our network operations and the quality of service we deliver to our customers.”

When T-Mobile Czech Republic a.s. acquired Ceske Radiokomunikace, it transformed T-Mobile into the second largest Internet service provider in the country. The customer base expanded and additional fixed-line telephone and broadband services were added. But behind the scenes, the merger presented a huge challenge. T-Mobile now had a new and radically different network infrastructure. How was the business going to integrate its existing mobile network operations with the fixed-line ones?

One key challenge was dealing with over 85 different systems and databases used for managing network operations – ranging from full-scale applications to standalone spreadsheets. Although there were two different types of networks, many of the associated functions are the same, and having separate systems and processes for each network meant duplication, sometimes twice as much work as was necessary.

Miroslav Holub, Head of OSS Support at T-Mobile Czech Republic, explains, “The acquisition of Ceske Radiokomunikace was a strategic step for the business. Overnight it increased significantly our customer base and expanded our service capability. But from an operational point of view, it was a huge change. We’d gone from having just a mobile network infra-structure to incorporating a fixed-line network that had cables in the ground to homes and business locations. We had to tie the two together into a single entity and find a way to manage this effectively and efficiently.”

AMDOCS-IBM PARTNERSHIP DELIVERS RESULTS

Having previous experience with the Amdocs OSS inventory products in its mobile network, T-Mobile chose Amdocs and IBM to solve the problem, using Amdocs OSS as the basis for the network operations transformation project. IBM was contracted to carry out system implementation, integration and data migration, with Amdocs providing the central inventory software and expertise.

Today Amdocs OSS provides a single inventory of all T-Mobile assets for both the fixed-line and mobile networks. It is used across several processes including Service Assurance, Fulfillment and Planning. Amdocs Resource Manager models more than 10 different technologies across 87 hardware devices and provides data to the network alarm management system for alarm enrichment and root cause analysis.

During the fulfillment process, Resource Manager is used to configure circuits for DSL (digital subscriber lines) between the network and customer locations. This includes equipment such as DSL modems, DSLAMs (Digital Subscriber Line Access Multiplexer), splitters, distribution frames, and line termination devices.

Resource Manager maps physical network connections to logical paths to show how the customer services are routed through the network. For example, a customer in Prague may have a simple logical connection, but the physical connection – comprising routes around the city and multiple types of network equipment to enable the connection – is far more complex. Mapping these relationships makes it easy to visualize how resources are utilized, particularly for capacity planning. Physical configuration information is also used by field technicians to identify the various connections and equipment required.

THE AMDOCS OSS CENTRALIZED INVENTORY REDUCES COSTS AND INCREASES EFFICIENCY

“Amdocs OSS enables T-Mobile to bring together all its network resources into a single inventory, which gives the business centralized access to data and one view of its entire network resource capability,” says Holub. “Amdocs OSS means faster and clearer analysis of network capability, and it’s this kind of efficiency and better access to information that will enable T-Mobile to reduce operational costs.”

These improvements have delivered significant operational efficiency. Instead of searching through multiple, disparate data sources, information can be accessed almost instantly. As a result, T-Mobile has reduced the time it takes to perform operational tasks and resolve network problems.

Amdocs OSS also helps to automate processes so that providing new services is more efficient and faster for customers. For example, Task Engine is the principle fulfillment design tool within the Amdocs inventory system. When a customer requests a new service, Task Engine automatically checks to see if the service is already available, assesses resource availability, and initiates feasibility checks. From this, the system can determine how long it will take to deliver the service.

MANAGING NETWORK FAULTS FASTER AND MORE EFFECTIVELY

Another example of how Amdocs Resource Manager has improved operations is its integration with the IBM Tivoli Netcool Alarm Management system, which monitors network alarms. A network fault often triggers multiple alarms from the network and related IT equipment. Previously, engineers would have to sift through these manually to resolve the root cause and analyze the problem.

CHALLENGES

- > Business merger created complex and diverse network integration and opportunity to converge fixed-line and mobile networks
- > Over 85 different databases and systems used to manage network operations
- > Duplicated functions meant network operations processes were performed twice as much as necessary

SOLUTION

- > Use Amdocs OSS to create a single network inventory for Service Assurance, Fulfillment and Network Planning
- > Leverage the winning combination of Amdocs and IBM to integrate the Amdocs OSS inventory system and IBM's Fault Management system
- > Deploy the IBM Tivoli Netcool system for alarm management in service assurance
- > Prepare for future deployments of Amdocs Resource Planner and Site Planner to manage and prepare for expected demand on network capacity

RESULTS

- > Consolidates over 85 data sources into one central network inventory system
- > Simplifies network inventory with one single platform for both mobile and fixed-line networks
- > Increases operational efficiency and reduces operational costs
- > Enables 10 different technologies to be modelled across 87 hardware device types
- > Future Amdocs OSS projects and integrations will deliver more efficiencies and improvements

By linking Netcool to Resource Manager through the Amdocs Service Assurance Adaptor, information about the relationships between physical network resources, circuits and services are made available to the alarm management system. Then root cause analysis can be automated, making it much easier and faster for engineers to identify the fault and deal with it.

Resource Manager also enriches the alarm data with further information, such as details of faulty devices and related service information, so that the service impact can be identified, which helps resolve the problem efficiently. "We are very satisfied that the IBM and Amdocs partnership combined the best products and the best implementation and integration services," said Holub.

Because of the effectiveness of Amdocs OSS, T-Mobile is extending its use across the organization, and is about to launch a new transformation project which will see the Amdocs Site Planner and the Resource Planner modules used across T-Mobile's planning department.

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AMDOCS OSS EXTENDED ACROSS PLANNING AND CRM

T-Mobile needs to be able to predict what future demand is likely to be, so it can ensure there is sufficient network capacity to meet the demand. T-Mobile is planning to implement the Amdocs OSS planning modules to monitor current network demand and model future demand scenarios so it can assess what network equipment, and associated cooling and power resources are needed.

Other future Amdocs OSS applications include integration with Amdocs Customer Management to provide further correlation between network faults and customer services. This will help T-Mobile further improve the customer experience by linking customer information automatically to services and any related fault status information, so that the relevant customers can be given the right information faster.

Holub concludes, "Amdocs OSS is a very important part of the strategic development of T-Mobile. We are using Amdocs OSS to add more and more features and capabilities to improve and enhance our network operations and the quality of service we deliver to our customers."

ABOUT AMDOCS

Amdocs is the market leader in customer experience systems innovation. The company combines business and operational support systems, service delivery platforms, proven services, and deep industry expertise to enable service providers and their customers to do more in the connected world. Amdocs' offerings help service providers explore new business models, differentiate through personalized customer experiences, and streamline operations. A global company with revenue of \$2.86 billion in fiscal 2009, Amdocs has approximately 17,000 employees and serves customers in more than 60 countries worldwide. For more information, visit Amdocs at www.amdocs.com.

For the most up-to-date contact information for all Amdocs offices worldwide, please visit our website at www.amdocs.com/corporate.asp

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CANADA

COSTA RICA

MEXICO

UNITED STATES

ASIA PACIFIC:

AUSTRALIA

CHINA

INDIA

JAPAN

SINGAPORE

THAILAND

VIETNAM

EUROPE, MIDDLE EAST & AFRICA:

CYPRUS

CZECH REPUBLIC

FRANCE

GERMANY

HUNGARY

IRELAND

ISRAEL

ITALY

NETHERLANDS

POLAND

RUSSIA

SOUTH AFRICA

SPAIN

SWEDEN

TURKEY

UNITED KINGDOM