

IP TouchCall Modernizes Operations on Czech Railway

Modern Solution Based on Dialogic® Components Reduces Operational Costs



Case Summary

Challenge

The Czech Republic wished to modernize the national dispatching center on its railway system to improve railway operation and lower operational costs.

Solution

The Czech Republic chose IP TouchCall, a dispatching terminal developed by TTC Telekomunikace, for its new dispatching center because IP TouchCall provides a broad range of powerful voice communication tools. It is also able to interconnect with other railway systems, using a single user interface to significantly lower costs. Dialogic® components, such as Dialogic® Host Media Processing Software, are part of the solution and also contribute to lowering costs because they use standardized PC-based platforms.

Challenge

The Czech Railway system has undergone a major transformation, including a large-scale restructuring that has divided the infrastructure and transportation elements into two separate entities. During the restructuring, much of the railway's infrastructure was modernized to increase overall efficiency and reduce costs. One step was establishing a new Dispatching Center to centralize remote site operations (many new stations are unattended) and improve safety procedures by reducing the possibility of human error.

A new centralized communications system was needed to completely replace the former set of systems, which consisted of isolated networks and terminals (radio, proprietary phone, regular analog phone, and ISDN phone). The centralized system was also expected to significantly reduce operational and maintenance costs.

Solution

The Czech Railway system chose TTC Telekomunikace, a Czech communications equipment provider, to develop a communications system to power the new Dispatching Center.

TTC's IP TouchCall dispatching terminal-based solution offers a broad range of new IP-based voice communication tools (such as conference, incoming call queue handling, hotkeys, and CODEC conversion) as well as the ability to interconnect various railway systems. Such an interconnection requires complex integration with local and track radio communication systems, voice recording devices, passenger information systems, and IT integration servers. Because of the complexity of the project, TTC served as both Independent Software Vendor (ISV) and System Integrator (SI) in coordination with its distributor CTI-PRO, who is also providing support services.

IP TouchCall uses Dialogic® products, such as Dialogic® Host Media Processing Software, for user communications, and the software is connected to the network via an IP/Ethernet interface. The Dialogic® components are part of a new communications site based on a Cisco IP telephony platform with Cisco CallManager Express in the role of an IP PBX and an ISR router that provide a gateway to legacy voice networks.

Results

IP TouchCall is able to completely replace all required voice communication terminals including a private voice network, public voice network, and local and track radio network devices. It also supports the recording of all dispatch communications and provides railway station broadcasts.

The solution's ability to integrate communication and information from different environments means that it can act as a central communications hub to significantly reduce operational expenditure. The solution allows the replacement of multiple devices with a single compact terminal, which reduces the total cost of ownership and operational costs. In addition, the Dialogic components use standard off-the-shelf PC-based hardware that requires no proprietary technology, making the system easier to upgrade and maintain at a lower cost in equipment and labor than the previous system.

In addition, IP TouchCall is compatible with GSM-R, the Pan European standard for railway radio communications.

About TTC Telekomunikace

TTC Telekomunikace s.r.o. is a company with a long tradition of producing telecommunications equipment and delivering complete telecommunications solutions. Since the 1950s, TTC has undergone significant changes as it moved from a state-owned research institute to a modern private development and manufacturing company. It supplies reliable communication solutions to ever more demanding customers in the telecommunications sector.

For more information, visit <http://www.ttc.cz/>.

About CTI-PRO

CTI-PRO provides VARs, System Integrators, and Developers with a single source point for hardware and software converged technology building blocks from leading computer telephony manufacturers. Strong product portfolio knowledge and a variety of expert services such as application consulting, product support, and training make CTI-PRO a leading choice for customers. CTI-PRO was founded in 1998 and has offices in Praha and Wrocław and a strong reseller network in central and eastern Europe.

About Dialogic Corporation

Dialogic Corporation is a leading provider of world-class technologies based on open standards that enable innovative mobile, video, IP, and TDM solutions for Network Service Providers and Enterprise Communication Networks. Dialogic's customers and partners rely on its leading-edge, flexible components to rapidly deploy value-added solutions around the world.

To learn more about Dialogic® products, go to www.dialogic.com

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Information about TTC Telekomunikace has been provided for this case study by TTC Telekomunikace.