

OmniSight

Case study Elektrodistribucija - Beograd

Elektrodistribucija - Beograd (EDB) is one of the biggest electricity distributors in the Serbian power utility system. EDB's distribution network covers Belgrade and 16 surrounding municipalities which sums up to 650,000 customers and a total electrical grid length of about 15,000 km. Various systems help EDB to ensure the electrical power distribution in the Belgrade region like SCADA systems, radio systems and a Geographic Information System (GIS) amongst others. These systems have to be monitored all the time in order to avoid failures of the electricity distribution network, which would cause enormous financial and economical damage to the EDB-customers and to EDB as well. As even small failures can cause big damages, it is very important to have fast information about system states, a fast decision and the best possible reaction.

When EDB was looking for a display solution to improve the monitoring of their systems, they were trying to find a system which enables parallel monitoring and control of all the installed and distributed systems from one control point. Moreover EDB was looking for a display system capable to improve the reaction time of their monitoring staff. Of course the system had to feature highest reliability and 24/7 availability.



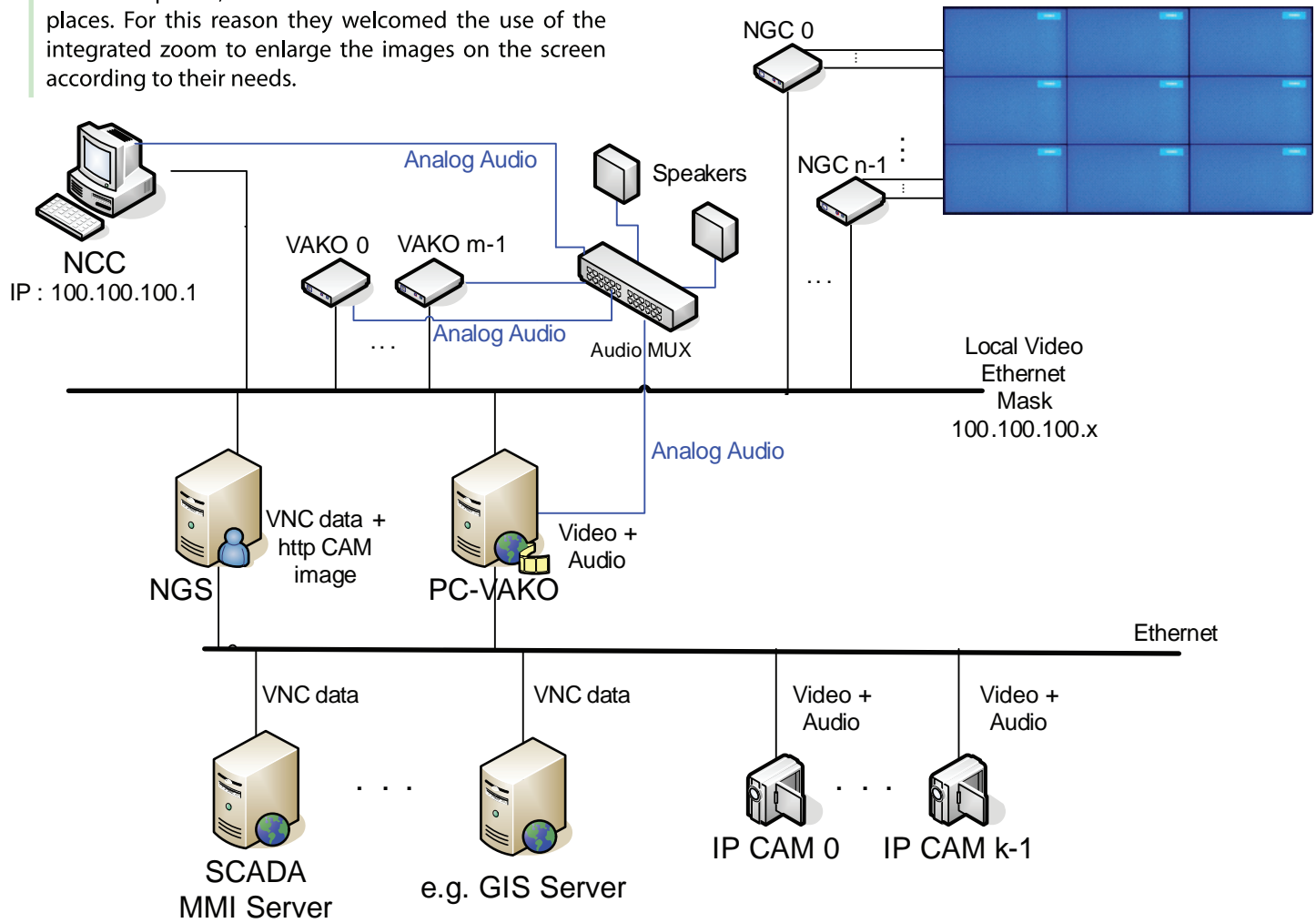
Following initial discussions with **IMP-Telecommunications** EDB noticed that the OMNISIGHT distributed display management system satisfies all the requirements and even offers additional advantages as well as an excellent quality-to-cost ratio. IMP-Telecommunications' OMNISIGHT is a distributed display management system based on a standard PC as a graphical server. This graphical server is connected to graphical sources via standard Ethernet and it sends data from the sources to remote graphic units (RGUs) that enable displaying the data on any standard screen.

As OMNISIGHT supports different kinds of graphical sources such as applications on remote computers, video signals from local and external sources as well as SCADA signals EDB got the possibility to display all graphical representations of its various systems on one modular display wall. Hereby the OMNISIGHT software is designed in a way that the layout can be changed according to the user's preferences. Moreover the user can enable the system to switch automatically from one layout to another according to the system state. Having the right information on the right time decreases the users' reaction time to changes in the system state significantly. This was a very welcome feature for EDB as it allows them to automatically display the GPS coordinates (obtained by the GIS system) for a system part failing in a certain moment. This feature is also used to indicate critical states in the SCADA system as soon as those states arise.

Since the OMNISIGHT was designed to be applied in security relevant systems, it offers outstanding features regarding reliability and system stability. It is based on simple and robust RGUs that can be, in case of failure, changed while the system is running (hot swapping capability). Moreover it is possible to add a redundant OMNISIGHT server. The system stability is further increased by the separation of functions for system control (OMNISIGHT client) and for the generation of graphical data (OMNISIGHT server).

Another feature that was appreciated by EDB was the local zoom capability of the OMNISIGHT. Since EDB has a large control room and a large display wall it would be uncomfortable for their employees to stand up from their desks to take a look on the details on the screen, which are sharp thanks to the unlimited resolution of the desktop area, but also too distant from their workplaces. For this reason they welcomed the use of the integrated zoom to enlarge the images on the screen according to their needs.

From the end of 2008 OMNISIGHT has been installed at the EDB Headquarter in Belgrade and since then it was running without any malfunctions or failures. Božidar Ćirić, Computer Center Administrator of the EDB Headquarter really appreciates the system: „It was a pleasure working with IMP-Telecommunications since they are a company following international standards, offering products of highest quality and reliability and also outstanding support in case of any help needed. Their OMNISIGHT system is a really innovative solution for our control room helping us to coordinate in a better way information from several SCADA systems and other servers and to solve potential problems more efficiently. Moreover working with the OMNISIGHT system is very intuitive.“



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