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NEC

Krems town council

Krems is one of the larger towns in Austria and a significant centre in terms of trade, culture and education. To advance its communications Krems required to migrate to a high availability VoIP infrastructure for its town council and 39 connected facilities.

Wolfgang Schmid, IT department manager in Krems:
"PKE recommended us NEC's SIP@ Net Communication Server as new communication system – and I have to say we're completely satisfied with it."

Challenges

When the Krems town council looked for a new communication system, the list of requirements was long – almost 40 locations within the town were to be IP-networked and equipped with almost 400 wired and mobile devices. PKE won the tender with an innovative, convergent concept and delivered such a good solution that the town now saves € 80,000 each year.

Wolfgang Schmid, IT department manager in Krems explains:
"Our stated goal was to step away from our traditional, analogue infrastructure with nine networked telephone system nodes. We didn't want to maintain separate IT and telecommunications networks any longer but we did want to manage our own system and over and above that, we wanted more open interfaces for IT and GSM integration. VoIP was the only viable option for us."

Solution

The town council's telephone network currently comprises 39 locations with approximately 450 employees – from the town hall to refuse collection to burial services. Until 2010 each facility either had its own communications node or was connected via dedicated telephone lines to another agency's telephone system as a client. A VoIP network is obviously much more adequate.

Customer
Krems town council, Austria

Industry
Government

Challenges
- Step away from separate IT and communications networks and migrate to VoIP
- Unify the numerous locations previously connected by separate nodes or via dedicated telephone lines into one single network.
- In-house system management
- More open interfaces for IT and GSM integration

Solution
- Installation of two redundant NEC SIP@Net servers
- 3 ISDN multi (PRI) interfaces and 2 GSM direct access interfaces
- 195 fixed SIP connections
- 173 NEC Business ConneCT mobile extensions
- 26 fax machines and fax boxes
- 6 PC-based NEC Business ConneCT operator stations
- Unified messaging server for voicemail and fax
- MA4000 system management and billing
- PKE as NEC's dedicated partner in Austria

Results
- One unified IT and communications network
- Enhanced user convenience
- Flexibility in handling enquiries during peak hours
- Easy in-house management
- Significantly lower operational costs

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Krems installed two redundant servers to guarantee failsafe operation – one in the town hall and one in the cultural office. Additional security is provided by a UPS and the Marathon everRun 2G virtual high availability solution. As yet we've had no call for this safety net as the main server is running reliably and without a hitch. Krems has a LAN layer2 and GSM-based virtual private network which covers all locations. Telephones on site are easily connected to a local LAN switch where they receive an extension from the administrator. Some locations only require a single telephone and these have simply been equipped with GSM mobile phones. These mobiles are connected via the VPN and the NEC server's "mobile extension" feature. They function as normal system extensions – for example, employees can also use them to use the central switch board, access call lists and much more. For small establishments such a connection is ideal.

The network is entirely IP-based, while Krems still has 26 analogue fax machines which operate via IP-analogue adapter. Since all NEC servers are secured through an individual firewall which is optimised for real time transmission, and communication flows via encoded point-to-point connections, the town council of Krems have no security concerns.

Besides their phones every employee can have a CTI client installed so that they can dial straight from their Outlook address book – in terms of convenience things have definitely improved. As to the centralised switchboard the town council has licensed six PC-based NEC Business ConneCT operator stations. During peak periods the town council can make use of additional operator stations at anytime. It is also convenient that employees can register as operators at any PC workstation, regardless of where they are located. This means that when things get a little stretched, there is always someone who will step in to help. One of the stations is also equipped with a Braille option for employees who are visually impaired.

Results

The solution offers users considerably more convenience and flexibility. Management of the solutions is done by an in-house IT team of six – and this, as Krems town council sees it, is the biggest benefit of moving over to VoIP. Previously Krems had to call in the provider whenever someone was employed or transferred.

With over 370 extensions this proved not only to be a highly inflexible but also very expensive solution. Now Krems can manage it in-house via the NEC MA4000 management application – obviously a great advantage. For larger adjustments the town council calls upon the PKE team.

Thanks to the transition Krems is saving approximately € 80,000 each year – due to several factors. Firstly, the rental charges for the nine old telephone systems don't apply any more. In the second place Krems now connects external locations via a single data line and finally there are considerable savings in terms of administration now that it is handled in-house. Furthermore, Krems also benefits from the significant drop in flat rate prices over the years, both for LAN layer2 and GSM.

About

Krems an der Donau is the eastern gateway to the Wachau Valley, one of Europe's loveliest river landscapes. It is also one of the oldest cities in Austria. This history extending back more than a thousand years is evident everywhere - in the streets and squares, in the old monasteries and churches, in the town houses and fortifications. In 1975 Krems was singled out as a "Model City for Historical Preservation" and in 2000 it was added to the UNESCO World Heritage List. Despite this history, Krems is very open to modern life: Contemporary art and culture play an important role, adding variety and energy to public areas throughout the city.

Thousands of visitors flock to Krems year after year to attend the Danube Festival, East-West Music Festival, Wachau Film Festival, Folk Music Festival and the many other musical and theatrical events staged here. Economy and Education Krems also has a rich tradition as an economic and educational center. Its Bio Science Park is an attractive location for companies engaged in bio-tech and in application-oriented research. As the site of the Danube University, a technical college and a broad range of secondary schools, Krems is also a major center of Austrian education.