

Serept's Multi-Site Facility Now Has Fully Integrated Communications Thanks to Avaya



One of the leading oil exploration and development companies in Tunisia, Serept has developed over 244 oil wells in its 85+ years of operation. Looking to the future, Serept leaders decided that its legacy communications infrastructure, consisting of separate systems managed by multiple vendors, was a hindrance to its future success. The plan was set to create a fully integrated, advanced unified communications solution for Serept. In addition, an important project requirement was that the upgrade did not disrupt business operations during the migration process.

Choosing the Right Partner

Serept issued a tender at the end of 2014, with the objective of migrating their current data, telephony and wireless infrastructure to create a standardised unified communications environment.

Databox, a subsidiary of Telnet Holding, is a local Avaya partner in Tunisia which has enjoyed a strong partnership with Serept for years. Serept trusted Databox's capabilities, hence Databox was short-listed for Serept's tender.

Databox responded to the tender, based on Avaya's comprehensive range of IP telephony, data and wireless solutions. The tender process was extensive and complex, but by September 2015, Databox had received a preliminary contract agreement.



Challenges

- Eliminate disparate business communication systems with a move to a single, integrated UC platform
- Avoid disruption to business operations during the migration
- Improve customer service

Value Created

- Higher resilience with less risk of downtime - a critical component in the gas and oil industry
- Reduced operating and support costs
- Enhanced security
- Streamlined system administration

The Implementation Process

The contract was finalised in November 2015, with the aggressive goal of procuring a large proportion of the equipment by the end of December 2015. Most factories slow down their production schedule towards the end of the year, so the timelines were tight. Avaya and Databox had to develop detailed and complex plans on how to migrate the networks by the end of March 2016.

The migration was a challenging task, as network availability and telephony communication is fundamental to the successful running of the business. Serept's legacy system had to be moved smoothly, with as little disruption as possible. Serept also required a new dial plan for a clearer and more efficient operational structure. The implementation was phased over several weekends so as not to interrupt day-to-day business operations.

Avaya started the network migration at the main site. Once that portion of the work was complete, they began to migrate the other three sites.

Amir Ballaaj, Project Manager and Telecoms Engineer at Serept, commented, "Working with Avaya, Databox met the rigorous deadline, seamlessly migrating the data and wireless network infrastructure in multiple stages over several weekends."

Multifaceted Wireless Network Infrastructure

- Two Avaya VSP 4450 switches, known for high capacity, were deployed at Serept as core switches with resilience. Avaya Ethernet switches are designed to be highly reliable and to simplify service delivery and maximise application availability. The Avaya Virtual Services Platform (VSP) 4000 is designed to extend the reach of Avaya Fabric Connect technology to the network edge. The VSP 4000 delivers fully featured network virtualisation capabilities in a low-cost 1/10 Gigabit platform, optimised for small locations.
- Two Avaya 4826 switches were used to allow the aggregation of traffic coming in and out of the servers.

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- Two Avaya 4826 POE switches were used to handle video surveillance.
- 12 Avaya 3549 POE switches were implemented for managing the computer network, as well as the IP phones.
- 14 Avaya Access Point 9133 were used to ensure wireless connectivity for users. The Access Point 9100 series is a wireless LAN solution that delivers wired-like performance and predictability to mobile users via the Wireless LAN 9100 which puts business-critical application needs first. Being robust and simple to operate, it can accommodate inevitable increases in capacity demands, whilst reducing equipment requirements and costs.
- The Avaya WLAN Orchestration System (WOS) was used to manage access points, providing full monitoring and management of the Avaya WLAN 9100 Series network via a web-based application with graphical map views.
- The Avaya Identity Engine was deployed to control access for wireless users. It helps Serept comply with regulatory requirements, control who enters the network and delivers differentiated access based on user roles. It provides true network protection, mitigating the risk of data loss and exposure to vulnerabilities.

IP Telephony Solution

Once the network portion of the upgrade was complete at all sites, the migration of analogue-to-IP phones began, following a similar phased process.

- Four analog Avaya Gateways IP500 V2 were deployed at each site and analog extensions were added. IP Office Server Edition is the ideal solution for mid-sized businesses, delivering intelligent Unified Communications, scalable growth and seamless management. Server Edition enables businesses to quickly and easily add users to an existing office or even connect a remote office, all from the central HQ. A Linux server is the heart of Server Edition, running IP Office software, Voice Messaging and Unified Communications (Avaya one-X® Portal for IP Office). Server Edition delivers true centralised management and licensing for all users, across all locations, in one intuitive, graphical user interface.
- 257 Avaya IP 1608-I phones were installed for the main users.
- 33 Avaya IP 9641 phones were installed for advanced users.
- Four Avaya IP 1616 phones were installed for the operators.
- Four Avaya DECT 3720 handsets were also added.

Excellent Results

The initial feedback has been very positive. Serept’s users have embraced the varied and multiple capabilities of the new Avaya technology and have found that its multiple features greatly enhance their overall end user experience. From a project deliverable perspective, the upgrade was delivered on time and on budget.

Nejib Kallel, DataBox Line of Business Director, explained: “By integrating Serept’s communications, Databox (as Avaya’s Regional Partner) ensured excellent customer satisfaction for Serept.”

Bellaaj added, “Avaya’s technology is very robust and reliable. This is Avaya’s first implementation in the gas and oil industry in Tunisia, and it

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Why Avaya?

Avaya provides the most complete portfolio of Unified Communications, software, services and networking infrastructure for digital business. The project with Serept was complex and challenging, but Avaya successfully implemented a truly unified IT solution, demonstrating strong technical expertise in the context of the oil and gas industry.

For more information on how Avaya can take your enterprise from where it is to where it needs to be, contact your Avaya Account Manager or a member of the Avaya Connect channel partner programme, or visit www.avaya.com.

Solutions

- Avaya IP Office™ Platform (Server Edition)
- 1600 Series IP Deskphones
- 9600 Series IP Deskphones
- 3700 Series DECT Wireless handsets
- Avaya one-X® Portal for IP Office

About Serept

Serept is an abbreviation for “Society for Research and Exploitation of Petroleum in Tunisia”. Serept was established in 1931 and today has over 500 employees. It is a multi-site operation whose notable activities include operation of the oil field ‘Ashtart’, located in the Gulf of Gabès, off the coast of Tunisia.