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ITQAN Transforms Communication in Mafraq Hospital
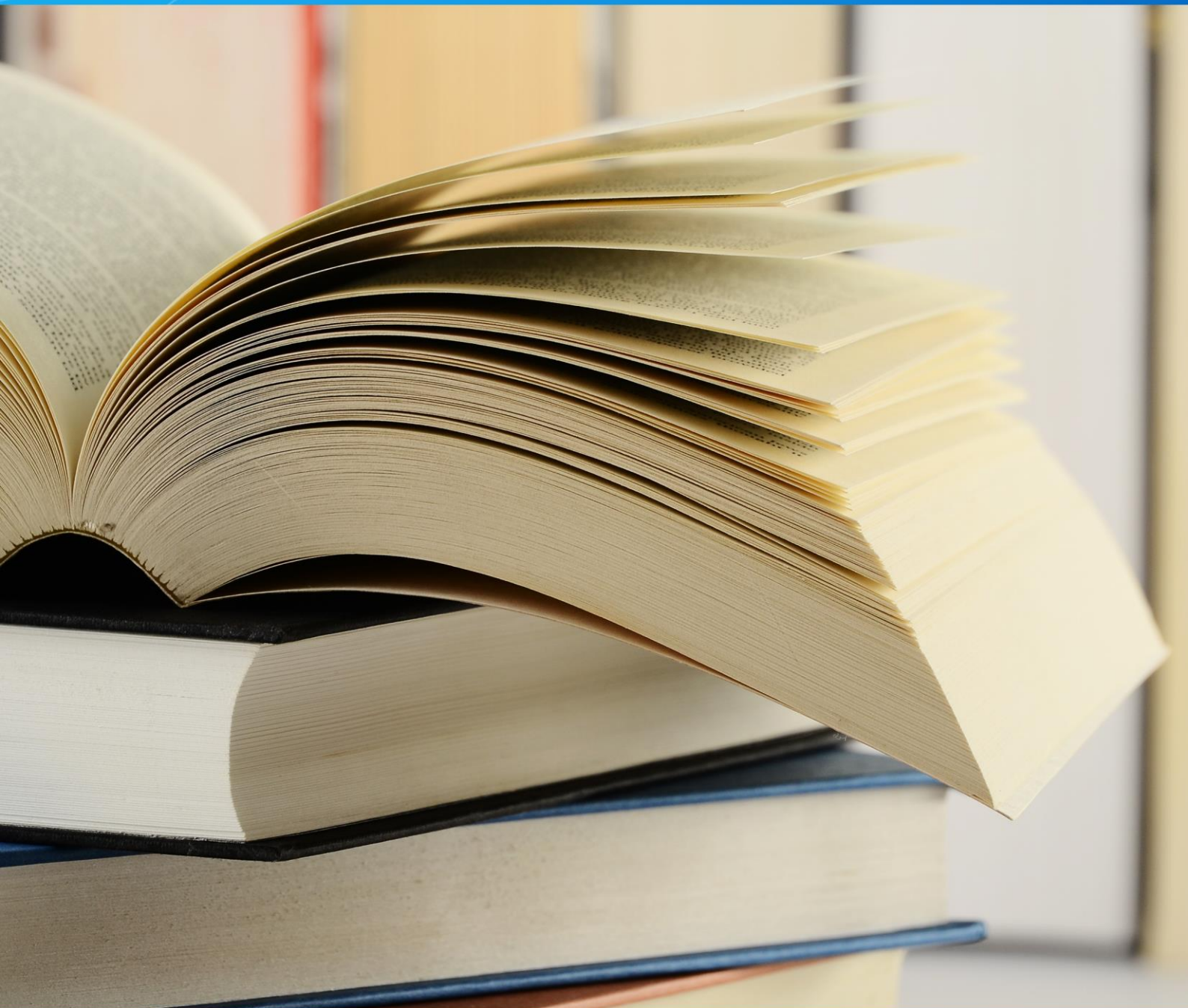
ITQAN sets up a remarkable networking implementation in one of the biggest hospitals in the UAE, Mafraq Hospital. In very simple terms, Mafraq Hospital basically needed to improve the level of patient care through effortless and practical communication among the doctors, nurses and the patients. A more intelligent security system was also set up, with constant and relentless supervision on the patients

Introduction

Ever since ITQAN has tapped into the IT infrastructure realm, it has solidified its status in this horizontal with every project that it signs on. The projects specifically stand out in terms of complexity and technical sophistication, in addition to the caliber of organizations that award ITQAN the opportunity to develop their IT platform. ITQAN now possesses extensive experience in infrastructure projects, from everything ranging from migrations and upgrades to complete revamps and datacenters installation.

The latest endeavor that ITQAN has embarked on is a remarkable networking implementation in one of the biggest hospitals in the UAE, Mafraq Hospital. The affinity ITQAN possesses with the healthcare sector is truly an impressive one, with most projects being gigantic in scope and impact. This project also reaffirmed an ever-growing and continuously fruitful partnership with networking solutions juggernaut, Cisco. ITQAN is a Silver Cisco partner, and has carried Cisco's solutions to a wide range of customers, such as Al-Hosn University, Abu Dhabi Accountability Authority, Western Region Municipality, ADNOC and Ministry of Health, to name a few.

"In an industry characterized by continual advancements, ITQAN has been successful in staying at the forefront by dint of our futuristic approach to business, focus on technological edge and above all, determined effort to ensure the best service to our valued customers," commented Feras Al Jabi, General Manager of ITQAN.

The networking implementation for Mafraq Hospital is distinctively cutting edge, and will inevitably bring about a substantial improvement to the level of its services. It is worthy to note that this was the first networking project of its kind for ITQAN, and it was an immense responsibility to venture into it while not possessing the most longstanding experience in this line of solutions. Nonetheless, Mafraq Hospital trusted ITQAN fully, and reaped the benefits of this trust through a highly proficient implementation.

The Need

In very simple terms, Mafraq Hospital basically needed to improve the level of patient care. There is more to a hospital than getting the best doctors, nurses, and medical equipment. The management in Mafraq Hospital understood that notion fully, and realized that IT is undoubtedly the ideal accelerator to help them elevate the level of patient care. The experience for the patient at the hospital needed to be an exceptional one, specifically when it comes to the responsiveness and attentiveness of the doctors and nurses.

Mafraq Hospital saw the need to improve this area, to a level where the communication among the doctors, nurses and the patient is effortless and practical. The personnel of the hospital needed to be continuously in touch and in constant awareness of the hospital's surroundings and assets. The security system had to be improved and more intelligent, with constant and relentless supervision on the patients.

Among the employees themselves, collaboration also had to be enhanced and fostered by a comprehensive IT solution. Employees needed to be in better control of handling requests, and this in specific resonated loudly when it came to support calls. There was an urgent need to have a system that handles support requests from employees to ensure a smoothly flowing line of operations.

"It is an unquestionable must for a hospital of this caliber to have an up-to-date and cutting edge IT environment. It was extremely impressive to see the hospital's management dedicate this amount of investment for an IT project, and we guarantee them an extremelyhigh return on this investment," added Al-Jabi.

The Difference

The ultimate solution that would inevitably fill those gaps and bring about the desired change encompasses two aspects of unified communication: IP telephony and mobile communication. While this will play a pivotal role in the facilitation of daily operations for the hospital's administrative departments, more importantly, both will guarantee a superior level of patient care, which is the hospital's optimum goal.

The limitations of the archaic nature of the previous environment are surely eliminated now since a wireless local area network (WLAN) will cover the whole hospital, thus enabling instant and immediate response to all patient requests by doctors and nurses, who typically will be carrying their mobile handsets. This will enable users to have complete mobility of data voice and video, with many advanced systems up and running, such as location tracking, context aware tracking, RFID, and patient tracking, among many others. The unique advantage of IP telephony enabled by this implementation will predominantly facilitate in the area of devices tracking through their unique IP addresses.

Impressively, this will not only be restricted to assets inside the hospital, but outside the hospital as well, thus allowing hospital personnel to be continuously aware and in touch with the hospital's surroundings.

Perhaps a glowing aspect of this project is the integration between the most advanced IP telephony systems and features, and Microsoft's Active Directory and Outlook applications. The integration between them will allow the tracking process to be specified to the level of the employee's name, which is stored in the Active Directory. The voicemail also becomes forwarded to the Outlook via this integration, thereby creating an integrated call system that includes additional features such as single sign-on, mobility, text messaging and improved coverage and paging systems, speed dials based on contact list, and many more. Furthermore, the unified communication architecture also provides enhanced integration with the HIS (healthcare information system) to provide the patients with automated SMS messages notifying them about their appointments.

"The healthcare sector is of utmost importance and priority to ITQAN, since we started playing a major role in the transformation projects in this sector since 1998 when we first implemented the HIS application in Mafraq Hospital in 1999, and now after we built a rich domain experience in healthcare informatics with more than 30 references across all UAE, we have solidified our stature as always catering solutions to meet the demands of this rich and crucial vertical. We are immensely proud to have the trust of an esteemed organization such asMafraq Hospital to help them improve the level of their healthcare services. We are confident that Mafraq Hospital with this implementation will be the most advanced hospital in the region by a landslide when it comes to internal communication and efficiency of patient care," said Al-Jabi.

The project is exceptionally a comprehensive convergence project that integrates more than six technologies from leading providers,which include Dell, Cisco, Commtech,Fortinet, F5, Microsoft, and Asterisk, who will all be integrated to put Mafraq Hospital at the vanguard when it comes higher patient satisfaction and quality of services, and have them in line with the international standards.

To ensure that the working environment is non-disruptive through efficient resolution of any technical bugs, the implementation entailed the installation of a complete helpdesk solution that comprised oftwo contact centers: one dedicated to infrastructure support, while the other would function as a HIS application support desk. Altogether MafraqHospital now has a managed contact center with nearly 15 agents attending the support calls for both infrastructure and application support.

The unified communication design offers collaborative communication facilities for its employees by providing them seamless voice video and data services within the network. Video capabilities extendto audio, video, web conferencing and instant messaging facilities. Moreover, seamless mobility is given to the end users, where they have the choice of receiving the calls on their desk phone, IP communicators, personal communicators and mobile phones anywhere at any time. The LAN (local area network) is also enabled with the latest 10 Gigabit Ethernet backbone to handle all current and future, rich media applications.

"This venture is undoubtedly one of the biggest highlights in ITQAN's rich history of Cisco implementations. Mafraq Hospital already has started experiencing the difference, but we are also confident about the bigger transformation it will also bring about on the long-run," assured Al-Jabi.

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