Matrix Telecom Solution Revamps Communication at a Leading Cancer Research Institute, from Legacy to Modern VoIP Technology

Case Study

Application:

Unified Communication Solution, Hybrid Communication solution

Industry: Government

Products Offered:

- Matrix Embedded IP-PBX Server: PRASAR UCS -SPARK200
- Matrix VoIP PRI Gateway: SETU VTEP1P

Location: Maharashtra

Client Overview:

A leading cancer research and treatment institute in India, recognized for its commitment to advancing cancer care, serves as a national hub for specialized healthcare services. This institute is dedicated to providing cuttingedge treatments and comprehensive care for cancer patients. Equipped with state-of-the-art technology and a highly skilled medical team, the institute focuses on holistic patient management, medical research, and educational programs aimed at enhancing expertise in oncology. Its facilities are designed to support extensive medical research, fostering advancements in cancer treatment and patient care.



Challenges/Requirements:

The research institute operated with a legacy network setup that, over time, presented several challenges:

- **Integration with Existing Infrastructure:** The institute required a Unified Communication System that could seamlessly integrate with its existing setup. Their complex legacy infrastructure was essential for daily operations, making compatibility crucial to ensure smooth connectivity and workflow.
- **Scalability for Future Requirements:** As the institute expands, they anticipate additional communication needs, including increased connectivity and advanced features. Matrix was tasked with delivering a solution that not only addresses current challenges but also scales to meet future demands.
- Secure Communication: Given the sensitive nature of medical communications, data security and adherence to healthcare standards were top priorities. Matrix needed to provide a solution fortified against security risks to ensure privacy and secure communication.

Solution:

The Matrix Unified Communication system featured a VoIP-PRI gateway and an embedded IP-PBX server, which, successfully integrated with third-party IP phones. This setup seamlessly merged modern communication technology with legacy systems. The solution details are as under:

- Integration with Legacy Network: Two Matrix VoIP-PRI gateways, SETU VTEP1P, were seamlessly integrated with the legacy PRI network, forming an important component of Matrix Unified Communication System
- **IP Network:** The embedded IP-PBX server, PRASAR UCS-SPARK200, enables the IP network through a router.
- Integration with Third-Party IP Phones: The IP network, enabled by the IP-PBX server through the LAN, facilitates IP connectivity for more than 300 third-party IP phones forming a comprehensive Unified Communication System.

Results:

The deployment of the Matrix Unified communication system brought significant improvements to the Cancer Research Institute's communication infrastructure. Key results included:

- Efficient Integration with Existing Infrastructure: The seamless integration with the legacy PRI network allowed the institute to leverage its existing infrastructure while benefiting from advanced VoIP features. This compatibility ensured that day-to-day operations remained uninterrupted, maintaining workflow efficiency without any costly overhauls.
- Scalability to Meet Future Demands: With the scalable IP-PBX server (supporting up to 2100 users) in place, the institute now has a flexible solution that can adapt to future growth. The system can support increased connectivity and additional advanced features as the institute expands, making it a future-ready solution that aligns with the institute's evolving needs.
- **Optimized Licensing Structure:** By deploying the Matrix SIP server, the institute achieved up to 20% savings on licensing expenses.
- **Optimized Connectivity Across Devices:** With reliable IP connectivity established across more than 300 third-party IP phones, the institute experienced improved internal communication. Staff can now communicate effortlessly across departments, leading to faster decision-making and more cohesive operations.

The Matrix Unified Communication System enabled the Cancer Research Institute to upgrade to a Scalable, and Integrated communication infrastructure that supports both current operations and future expansion, addressing their core challenges with a seamless and sustainable approach.

Application Diagram



About Matrix

Established in 1991, Matrix is a leader in Security and Telecom solutions for modern businesses and enterprises. As a technology-driven, and customer-focused organization, the company is committed to keeping pace with the revolutions in the Security and Telecom industries.

With around 40% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products like Video Surveillance Systems – Video Management Systems, Network Video Recorders and IP Camera, Access Control and Time-Attendance Systems as well as Telecom Solutions such as Unified Communications, IP-PBX, Universal Gateways, VoIP and GSM Gateways and Communication Endpoints. These solutions are feature-rich, reliable, and conform to international standards.

Having global footprints in Asia, Europe, North America, South America, and Africa through an extensive network of more than 4000+ channel partners, Matrix ensures that the products serve the needs of its customers faster and longer.

Matrix has ISO 27001: 2013, 20000-1 2018, 14001- 2015, and 9001: 2015 certifications for quality management standards. Matrix has also been awarded ZED Quality Certification, and DSIR Certification for indigenous R&D and Manufacturing. Matrix has gained the trust and admiration of customers representing the entire spectrum of industries.

		TELECOM SECURITY
For further information, please contact:		MATRIX COMSEC
		Head Office 394-GIDC, Makarpura, Vadodara-390 010, India. Ph: +91 265 26137222, E-mail: Inquiry@MatrixComSec.com
		Manufacturing 19-GIDC, Waghodia, Dist. Vadodara-391 760, India.
		www.MatrixComSec.com
		Call: 1800-258-7747
Due to continuous technology upgradations, product specificatio	ons are subject to change	without notice.