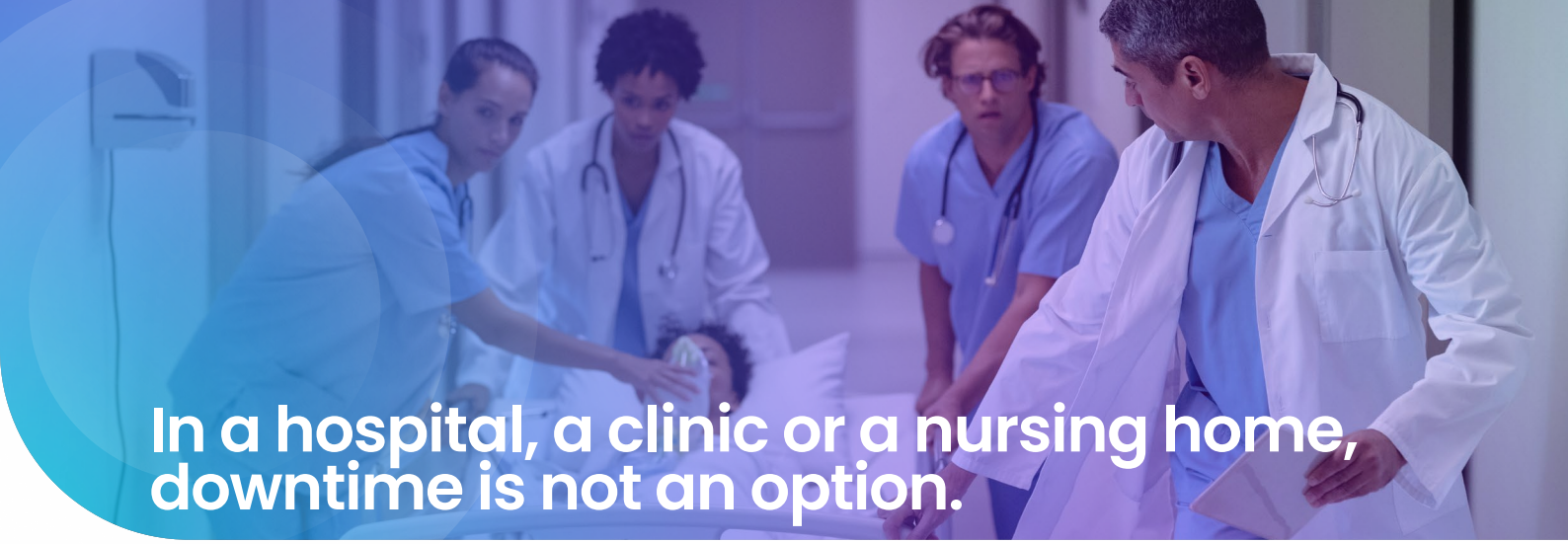


Continuity by design

Mission-critical network and communications for **healthcare**

Alcatel·Lucent

SOLUTION BRIEF



In a hospital, a clinic or a nursing home, downtime is not an option.

When everything is connected and a link fails, real resilience is the continuity that follows to enable care teams to continue their mission.

In healthcare, mission-critical features must remain continuously available to support:

- Patient care and clinical operations
- Critical communications and coordination
- IT and connected medical applications
- Safety and security
- Building and facility management
- Logistics and essential support services

Any disruption to these functions could compromise continuity of care. And in healthcare, the consequences go beyond cost: lives can be at risk.

Why continuity matters now

More connected, more exposed

Information technology (IT), operational technology (OT), communications, devices and cloud services depend more on one another. A broken link can quickly become an operational disruption.

Cyber risk meets operational risk

Healthcare is one of the most targeted sectors. A cyberattack can disrupt clinical operations and put patients at risk, not just expose data. Essential services must remain available even when external or cloud connectivity is lost, while meeting GDPR, HDS, HIPAA and NIS2 requirements.

Modernization cannot mean interruption

Legacy systems must change step by step, without forced replacement, downtime or the loss of specialist systems performing critical jobs.

Skills and resources are stretched

As OT-IT teams do more with less, they need simpler management, greater visibility and AI-assisted guidance to ensure operational continuity. They must also remain in control of every decision.

Three outcomes are essential to ensure continuity of patient care, regardless of what fails around them.

Coordination	Operations	Control
Connect care teams, emergency responders, support staff and decision-makers through secure communication and collaboration.	Maintain resilient network and communications infrastructure that help keep essential operations running.	Maintain visibility, security and governance across critical infrastructure, data and communications.



Coordinate care under pressure

Whether a patient's condition deteriorates, a fire breaks out, a system fails or a staff member is threatened, seconds matter. **Continuity of coordination** requires communication and collaboration tools that connect the right people, and a secure network that keeps those tools available. From caregivers and technical teams to security and external responders, everyone must be able to communicate and coordinate when it matters most.

Coordinate the right response, at the right moment

- Keep external communications running during an emergency and other critical situations
- Send alerts to the right people, with clear information about the patient, location and level of urgency
- Escalate unacknowledged alarms automatically to the next qualified responder
- Connect nurses, physicians, biomedical engineers, security and facilities teams in seconds
- Bring hospital teams, emergency services and outside partners together through shared tools
- Integrate existing third-party systems such as nurse call, medical devices, staff duress, access control, video surveillance, radio, public address and building systems

Solutions that support coordination

Immediate response 24/7

Patient welcome and contact center applications maintain effective communications during emergencies, mass casualty events and other critical situations, ensuring external calls are answered and routed to the right people.

Protection for mobile staff

Available on DECT or Wi-Fi handsets, lone worker protection sends an alert with the worker's location when a worker falls, stops moving or pulls a cord. If nobody responds, it escalates the alert automatically.

A resilient foundation

Care teams are constantly on the move, making secure, reliable connectivity essential. Alcatel-Lucent OmniAccess® Stellar Wi-Fi does not rely on a central controller, so communications and notifications continue even if part of the infrastructure goes down. Private 5G complements Wi-Fi to deliver ultra-low latency and high bandwidth for advanced medical technologies.

Targeted or large-scale awareness

Visual Notification Assistant helps critical information quickly reach the right people, wherever they are and through the communication channels available to them. Notifications can be tracked, retried, or escalated when needed.

Open integration

Application programming interfaces (APIs), connectors, gateways and developer tools help you connect the third-party solutions you already use.

Collaboration from anywhere

Rainbow™ by Alcatel-Lucent supports secure collaboration between teams, locations and devices. Outside partners can join as guests. Collaboration bubbles (or spaces) combine chat, voice, video and file sharing in one experience.



Keep care operations running

Continuity of care relies on resilient wired and wireless networks, local voice survivability, integrated management and AI-assisted monitoring. Healthcare organizations must keep critical systems running during equipment failures, cyber incidents or loss of external connectivity.

Keep essential services available

- Support technical rooms, building facilities and outdoor areas with equipment designed for demanding environments
- Keep voice communications available during outages or network disruption
- Find and fix network issues before they interrupt clinical workflows
- Upgrade infrastructure without taking wards or departments offline
- Give care teams continuous access to patient records, medical images, prescriptions and test results across all sites
- Align infrastructure support with long healthcare technology lifecycles

Solutions that support operations in healthcare

Ruggedized networking

Alcatel-Lucent OmniSwitch® ruggedized switches are built to keep working through heat, cold, dust and vibration at industrial and other outdoor sites. Ring and virtual chassis designs (multiple switches working as one) avoid single points of failure.

AI-assisted network operations

Alcatel-Lucent OmniVista® Network Advisor watches the network around the clock to detect issues, explain what is wrong (and where) and suggest fixes. Your team can apply updates with a single click or enable automatic remediation. The AI Virtual Assistant can also be queried in plain language.

Always-on networking

SPB (shortest path bridging) and ring protection automatically find the best route for data and switch to another path in milliseconds if a link or switch fails. Cameras, phones and control systems stay connected.

Mission-critical communications

Alcatel-Lucent OmniPCX® Enterprise Communication Server Purple delivers resilient voice communications with redundancy, hot standby, call preservation and local survivability.

Maintenance without downtime

Redundant designs let your team upgrade or replace equipment while traffic keeps flowing on another path, so planned work does not stop operations. Data and power over existing legacy cabling connect modern IP and DECT equipment without re-cabling wards or disrupting services.

Long-term support

Support for 10+ years helps match the hardware lifecycle to the needs of critical infrastructure.



Stay in control

Healthcare organizations need visibility for security and ownership for control. **Continuity of control** means that you decide where data is stored, who can access it, how you show compliance and how fast your infrastructure changes. Modernization should never require you to give up control of data, access, pace or AI.

Keep control of your architecture, your data and your pace

- Protect communications and control where sensitive data is stored
- See wired, wireless, internet of things (IoT), communications and network environments in one view
- Contain a compromised device or segment while keeping unaffected care services running
- Use your own AI model with your own data, and approve every recommendation before it is applied
- Adopt new technologies without being forced into a specific cloud model
- Prepare the network for imaging, virtual care, automation and future clinical AI

Solutions that support control in healthcare

Sovereign collaboration

Rainbow Edge supports private communications and collaboration on premises. Data is stored in your own data center, so you always keep control of your data.

Zero trust by design

Zero trust network architecture (ZTNA) means that no user, device or application is trusted by default. Each device, including OT and IoT, is identified and placed in its own segment, so an incident can be contained without crippling the rest of the operation.

Human-decided AI

AI-assisted operations give insights, recommendations and automation. Your team decides what to approve and what to automate.

Sovereign management

OmniVista management tools run on premises or in the cloud, giving you central deployment, visibility and control of your voice and data infrastructure.

Freedom of deployment

Deploy on premises, in a private cloud, in a public cloud or in a hybrid environment, so you are never forced into a single infrastructure model. Legacy and modern systems can run side by side, enabling a ward-by-ward migration.

AI-ready data center

AI data center delivers a scalable design, intelligent automation and fast response times for modern AI applications.

Proven continuity for mission-critical healthcare operations



John Flynn Private Hospital – Australia

Better categorized and prioritized alarms help nurses respond faster to emergencies.

Learn more



Mayotte Hospital Center – France

Continuity of communication is essential for the future of healthcare in an overseas region.

Learn more



Kaiserswerther Diakonie – Germany

A sustainable communications solution for a complex critical infrastructure.

Learn more



Korea University Medicine – South Korea

Robust distributed architecture supports advanced medical technologies.

Learn more



Medcare – United Arab Emirates

Highly available network gives doctors 24/7 access to medical information.

Learn more



Why Alcatel-Lucent Enterprise?

Strengthening healthcare continuity through security and data control

Protecting sensitive healthcare information and connected care services requires cybersecurity, controlled access and clear data location choices. At Alcatel-Lucent Enterprise, we:

- Follow National Institute of Standards and Technology (NIST) best practices for secure development
- Apply ISO 27001 standards to our organization and Alcatel-Lucent Enterprise operated solutions
- Support zero trust principles, granular network segmentation and highly specific security policies
- Conduct specialized security testing and validation
- Meet key healthcare regulatory and certification requirements, including HIPAA and HDS
- Support sovereign deployment models, including on premises, private cloud, public cloud and hybrid environments

We contribute to European Union proposals for cybersecurity directives. We help customers choose and use the right mix of secure networking, communications and collaboration solutions, and we train their employees in cybersecurity best practices.

Certified solutions, active risk management and trained staff help healthcare organizations strengthen cyber resilience, data control and service continuity.

One partner for the foundation of continuity in healthcare

Alcatel-Lucent Enterprise provides networking, communications and collaboration from one portfolio. Our solutions keep people connected, operations running and control with the people who own the system.

Continuity is not a hope or a promise. It is an architecture.

Learn more about Alcatel-Lucent Enterprise mission-critical solutions for healthcare.

Always connected. Always operating. Always in control.

Alcatel-Lucent Enterprise products, solutions and services are general-purpose communication, collaboration and networking technologies. They can be used in a healthcare environment, but they have not been developed as a Medical Device or Medical Device accessory within the meaning of Regulation (EU) 2017/745 and do not carry the corresponding certifications.

Not all solutions are available in all countries. Please contact your local Alcatel-Lucent Enterprise team for product availability.

www.al-enterprise.com

© 2026 ALE International, ALE USA Inc. All rights reserved in all countries. The Alcatel-Lucent name and logo are trademarks of Nokia used under license by ALE. To view a list of proprietary ALE trademarks, visit: www.al-enterprise.com/en/legal/trademarks-copyright.
Some visuals in this document may have been generated using AI and are for illustrative purposes only. DID26111601EN (November 2026)

Alcatel·Lucent