Unlocking the Potential of Mission-Critical Communication

NearbyOne & Streamwide in Private Networks

Automation, Orchestration & Management at your fingertips

Key topic

In today's rapidly evolving technological landscape, the need for seamless, secure, and efficient mission-critical communication solutions is paramount. Organizations and agencies across the globe rely on advanced communication systems to respond swiftly and effectively to critical situations, from public safety emergencies to industrial operations.

This whitepaper explores how deploying Streamwide's next generation mission-critical communication application, Team on Mission (TOM), with the cutting-edge Edge Computing Orchestration and automation platform, NearbyOne, within a private network environment can offer unparalleled advantages.

Challenges to be faced:

1. Interoperability: Ensuring seamless communication and data sharing among different agencies and organizations with varying communication systems is a top priority. Achieving interoperability allows for coordinated responses during emergencies.

2. Reliability and Redundancy: Building and maintaining highly reliable communication networks with redundancy and failover mechanisms is critical. These systems must operate without fail even in adverse conditions.

3. Security: Protecting sensitive information, preventing unauthorized access, and safeguarding against cyberattacks

are paramount. Robust encryption and authentication methods are essential to maintain security.

4. Spectrum Allocation: Managing and allocating radio spectrum for mission-critical use, while avoiding interference, is challenging. Sufficient spectrum availability is necessary for uninterrupted communication.

5. Cost: Balancing the need for robust mission-critical systems with budget constraints is a significant challenge. Implementing and maintaining these systems can be expensive, making cost-effective solutions crucial.

Value proposition

The combined solutions from NearbyOne and Streamwide are designed to offer businesses cutting-edge MCX services with unparalleled efficiency and speed, both in the deployment and maintenance phases.

By harnessing NearbyOne's capabilities to deploy Streamwide's solution, customers streamline the deployment process while cutting associated costs.

With this collaborative approach, users gain access to next-generation MCX services delivered swiftly and cost-effectively, ensuring your business stays ahead in today's fast-paced market.

The easiest, fastest, and most cost-effective deployment for your apps.

The integration of Streamwide's TOM into the NearbyOne orchestration framework enables businesses to access a technology that accelerates considerably the deployment phase and reduces its cost.

NearbyOne contributes in making the deployment process more efficient by accelerating the delivery times:

- By generating less errors or issues in the initial deployment phase.
- By enabling procedures that generate less support requests during the product lifetime.

In addition, the automation of Streamwide's TOM deployment through NearbyOne opens access to a set of reference architectures for Edge Computing services and solutions that are rapidly becoming the drivers of the scaled expansion of many industrial SW solutions, such as private networks.

Features description

- Manage the infrastructure, the network functions, and services from a **single-pane of glass**.
- **Rich marketplace** with a pre-existing catalog of integrated applications and Streamwide's solutions available out of the box.
- **Service Applications intent driven orchestration:** such to automize overall solution deployment independently from the specific service applications KPIs and needs.
- **Distributed telemetry**, log, and tracing collection from multiple sites.
- **Vendor agnostic and integrated support for hyperscalers**, VMware vSphere and vCD, Red Hat Advanced Cluster Management for Kubernetes, SUSE Rancher, Sylva, Wind River Studio Cloud Platform and more
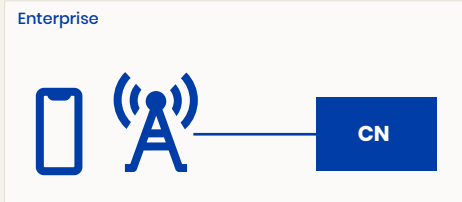- **RBAC:** Unified RBAC framework delivers full multi-tenancy.

Solution Architecture

Standalone

Enterprise

Full LCM
KPI Observability

CN

Field deployments

Hosted by MNO

Enterprise

MNO

Full LCM
KPI Observability

CN

Field deployments

RAN sharing

Enterprise

MNO

Full LCM
KPI Observability

CN

CN

Field deployments

MNO Slico

Enterprise

MNO

Full LCM
KPI Observability

CN
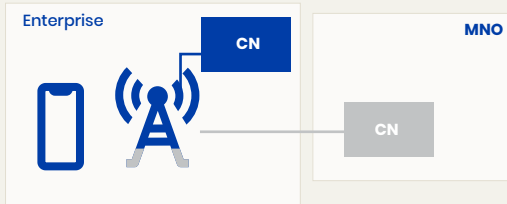
Field deployments

Benefits

01

Enhanced Security and Control

Deploying within a private network environment provides a heightened level of security, shielding sensitive communications and operations from external threats. Organizations retain full control over their infrastructure, ensuring data integrity and confidentiality.

02

Reliable and Low-Latency Communication

Private networks offer improved reliability and lower latency compared to public networks. This translates to swift and dependable communication, crucial in mission-critical scenarios where every second counts.

03

Simplified Deployment Process

The integration of Streamwide's TOM application with NearbyOne results in a 100% automated and unattended deployment process. Parameters like FQDNs and other configurations are easily customizable at deployment time, simplifying the setup for end-users.

04

Cost Savings through Automation

NearbyOne's automation capabilities significantly reduce deployment and configuration times. The utilization of a single instance of NearbyOne infrastructure allows for the efficient operation over multiple streams, leading to evident cost optimization. In addition, the deployment process has been significantly improved, reducing installation time from an average of around 15 days to just 1 day.

05

Observability, Monitoring, and Logging

NearbyOne empowers organizations with comprehensive telemetry data, logs, and monitoring capabilities. This invaluable insight into the network's performance enhances troubleshooting, support services, and overall system reliability.

Conclusions

The partnership between Streamwide and NearbyOne within a private network environment offers an unmatched solution for mission-critical communication needs. This collaborative approach not only addresses the challenges but also unlocks significant benefits, including enhanced security, reliability, cost savings, and streamlined deployment processes. By choosing this solution, organizations can elevate their mission-critical communication capabilities to new heights.

About Streamwide

A major player in the critical communications market for over 20 years, STREAMWIDE provides **cutting-edge communications and digitization software solutions**, Team on mission (mission critical) and Team on the run (business critical), tailored to address the challenges and needs of administrations and businesses.

These solutions for smartphones and PCs, offered in a SaaS model or on Premise, benefit from numerous functionalities such as the New Generation Push-to-Talk/ MCPTT over 4G LTE/5G Networks, multimedia group discussions, VoIP, collaboration tools, advanced telephony system, business process digitization and automation, field operations management, among others.

These innovative solutions address the escalating demands for digital transformation and real-time coordination of interventions, empowering field teams to seamlessly convert individual efforts into collective success and operate as a unified force (ACT AS ONE) even in the most challenging professional environments.

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About NearbyComputing

The company was founded in 2018 and operates globally from its headquarters in Barcelona, Spain as **global leader in Edge Orchestration**.

Nearby Computing has been Named a **2023 Gartner Cool Vendor in Edge Computing** and helps Telcos & Enterprise customers unleash the potential of Edge Computing through Orchestration and Automation of MEC and 5G.

NearbyOne is an orchestration platform that goes beyond market standards to manage all tiers of the network, from Cloud and Data Centre to Edge, from a single pane of glass. Using a cross-domain approach that is fully agnostic, NearbyOne manages hybrid networks at scale through domain-specific as well as comprehensive end-to-end orchestration. The solution covers all critical elements of deployment automation - from the initial Edge node provisioning to application on-boarding, to lifecycle management and LA monitoring.

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