crexendo®
Powered by NetSapiens®

The Ultimate Metaswitch MaX UC Migration Playbook

Executive Summary

End-of-life strategy and product support longevity are key considerations for telecom service providers when it comes to vendor selection and making network infrastructure decisions. Service providers start the diligence to switch vendors if/as they sense a shift in the long-term commitment to the product or industry, case in point **Microsoft's decision to End-Of-Life their Metaswitch MaX UC product line.**

As service providers scramble to devise a medium to long-term strategy in the wake of Microsoft sunsetting Metaswitch Max UC, it is critical to understand available options and not least for the legacy TDM migration. There is little to no appetite for service impact, and the flexibility of a phased approach is highly desirable; especially when a provider network consists of legacy TDM lines.

Crexendo's Mission

Crexendo's mission is to **empower service providers** to deliver **compelling cloud communications, collaboration and customer care solutions.**

In the rapidly evolving cloud communications space, Crexendo's NetSapiens® Platform stands out with its **differentiated commercial model and flexible deployment options** that allow service providers to consume in whichever manner they choose.

Providers can choose between utilizing NetSapiens® Cloud, or theirs, or both; and with purchase or subscription licensing available, it allows the provider flexibility with capex and opex.

In addition to that, the unique pricing model for the NetSapiens® platform where the Service Provider does not pay per seat but rather per active session, this allows a **service provider to generate seat-based revenues** while keeping licensing costs session based, disconnecting costs from pricing.

In this eBook we attempt to propose different migration strategies that a provider can adopt while replacing Metaswitch. The focus is to address **TDM interface interoperability,** leveraging TelcoBridges' Tmedia units towards NetSapiens® powered software deployments.

The Six Easy Steps –
To Ensure a Seamless Migration

With hundreds of migrations under our belt and a deep understanding of migrating Metaswitch-based service providers to Crexendo's NetSapiens platform, Crexendo in partnership with Vox-Matic have developed a **proven six-step process designed to ensure a smooth and efficient transition for service providers.**

Since each service provider deployment has its own provisioning flavor and conventions, subscriber migration projects can rarely fit a cookie cutter approach. Custom designed migration tools are utilized as part of this process – to eliminate human errors, to cut down time and resource costs for the migration, and to provide for a balance between process automation and human checkpoints.

Crexendo® has partnered with Vox Matic, whereby they consult with the Service Provider and build a customized tool for their migration off Max UC and onto Crexendo's NetSapiens Platform. This then becomes a custom-built self-service tool, keeping the Service Provider in control while enabling them with the ability to migrate at their own pace, in stages or all at once. **Vox Matic uses "The Snowflake Method"**, where major functional/provisioning components are mapped within the Otto automation engine. The Snowflake can consist of several 3rd party platforms (not just Metaswitch), all getting updated with pertinent information about the provider and their users who are migrating.

A Typical Migration Project **Has 6 Steps:**

STEP 01

Explore

A high level customer overview (like a directory) is collected from Metaswitch deployment.

STEP 02

Gather

Detailed subscriber information and call flow are retrieved, converted and stored into Vox Matic's unique data structure for standardized processing.

STEP 03

Review

All data is available to review as the migration "scope"in Metaswitch specific terms, as well as NetSapiens specific terms.

STEP 04

Migrate

Reviewed data is built into migrating provider's NetSapiens instance in real-time, using the rich set of NetSapiens APIs.

STEP 05

Activation

Otto offers certain service activation operations to save on time and resources once the migrating service provider is ready to move their service over to NetSapiens. Updating SIP trunk IDs at the carrier or within internal routing engines, and sourcing new config files for SIP endpoints are two of the examples here.

STEP 06

Complete

This step can include updating other ancillary services like billing, ticketing, or carrier call routing systems.

Figure 1: Six Steps of Migration

Facilities Based Deployment

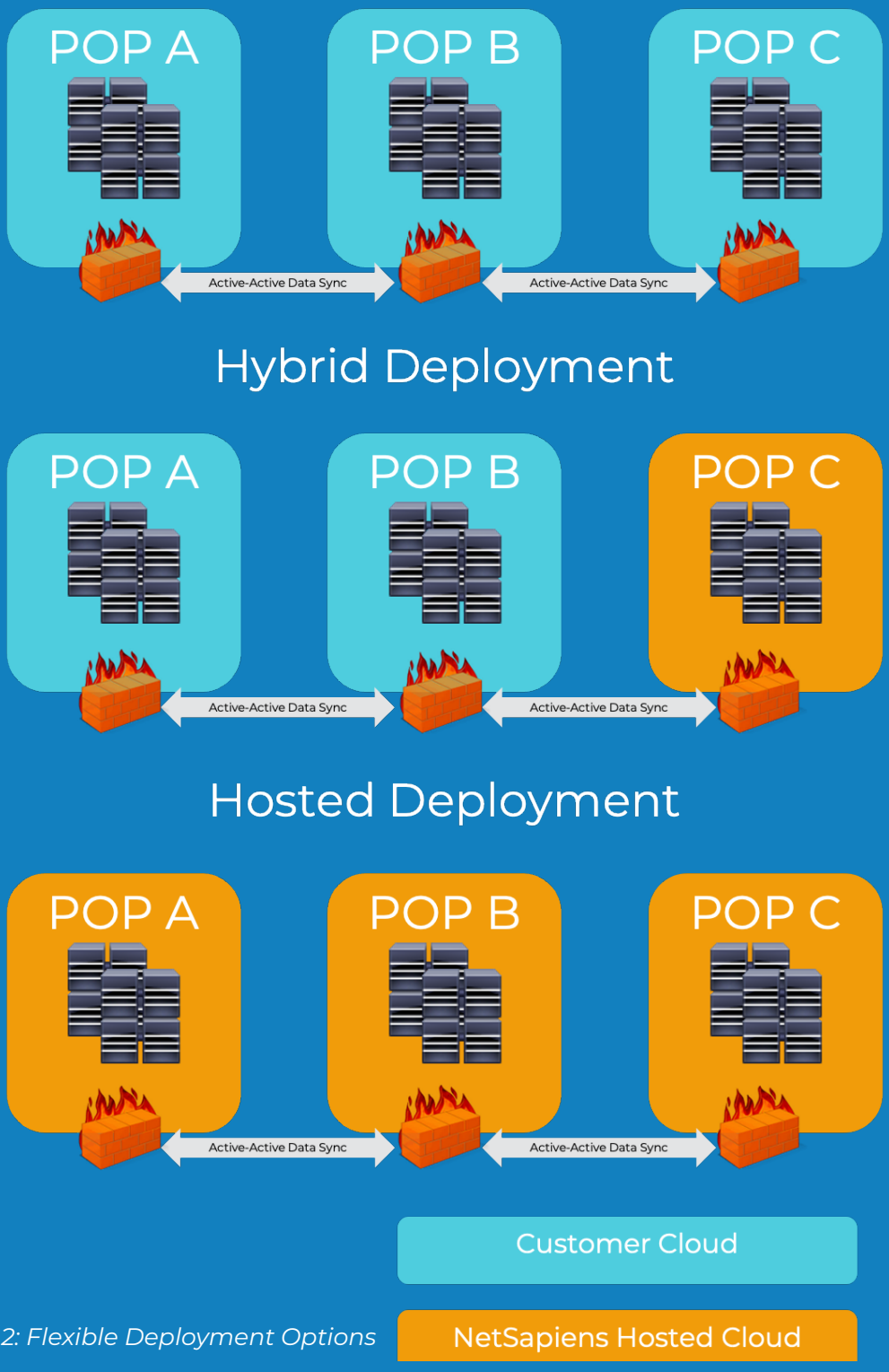

Figure 2: Flexible Deployment Options

When it comes to deployment environment, the migrating service provider gets to pick whether to deploy within their own geographically redundant data centers, within Crexendo's Hosted security-first architecture utilizing Oracle Cloud Infrastructure (OCI) with multiple HIPAA compliant regions, or both. In all cases, the deployment blueprint involves active-active configuration with geographically redundant data centers.

NetSapiens® offers one of the largest range of pre-established interconnections with telecom carriers (voice, E911, and messaging) thereby allowing the Service Provider bring their own carrier and has by far the largest endpoints and endpoint manufacturer support, ensuring the best possible seamless, drop-in replacement for Metaswitch.

This minimizes the work required at the carrier's Central Offices and remote Points of Presence. Flexible SIP trunking and dial translation interfaces allow for easy call routing setup for a Service Provider controlled and gradual migration of the user base and services. Finally, Crexendo's large and growing Ecosystem Vendor Partner (EVP) **program ensures the latest technology partners are deeply integrated into the platform.**

Upgrading After a Metaswitch Max UC End-Of-Live

The diagram below is a sample depiction of modernizing a service provider network containing hardware and/or software components that are at the end of life (EOL) or are approaching EOL. Leveraging open interfaces available through mainstream VoIP protocol SIP, and by deploying already deployed and tested vendor partner solutions like Tmedia gateway from TelcoBridges, the whole service provider network can be upgraded to NetSapiens® Platform stack and surrounding ecosystem with minimal impact to service availability.

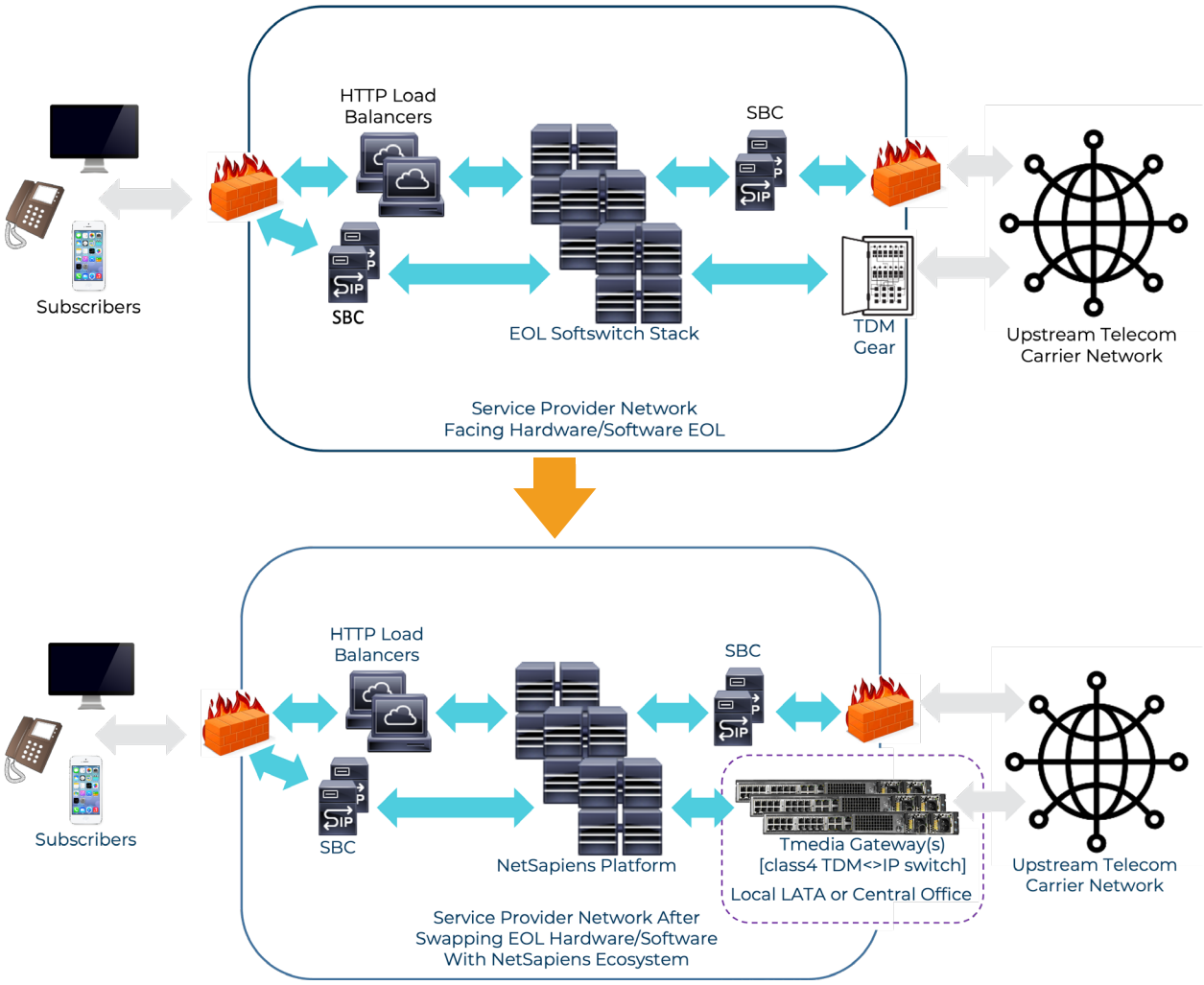

Figure 3: Upgrade Architecture

Option 1: Maintaining SIP & TDM Connectivity with Existing Tmedia Gateways

The process of connecting existing Tmedia units to a newly deployed NetSapiens softswitch is straightforward, leveraging standard SIP-based communication between the new and retiring softswitches for phased migration strategy:

01 Service provider uses NetSapiens® Admin UI to connect Tmedia device(s) to NetSapiens Media Server (NMS) using SIP Trunking interface. NetSapiens offers professional services based on the provider's requirements.

02 TelcoBridges provisions staged SIP configurations in the Tmedia device, based on the agreed upon routing design.

- Tmedia units supports configurations that are inactive, so the configuration process does not require a maintenance window. The process requires approximately 1-3 hours per unit, where the exact length of time depends on the complexity of the connections to the Tmedia unit.

03 Service provider and TelcoBridges agree on a timeline to turn on new SIP configurations and turn off old configurations simultaneously.

- This step may require a maintenance window based on the following considerations:
  - If the Signaling Stack moves from the old softswitch to the TMG.
  - If the TDM Lines are PRI ISDN Trunks that go directly to the end customer.
- A maintenance window for the TDM trunks doesn't necessarily mean end-customers are affected; if the trunks are SS7 CICs then re-routing is easy for the carrier and seamless for the end users.

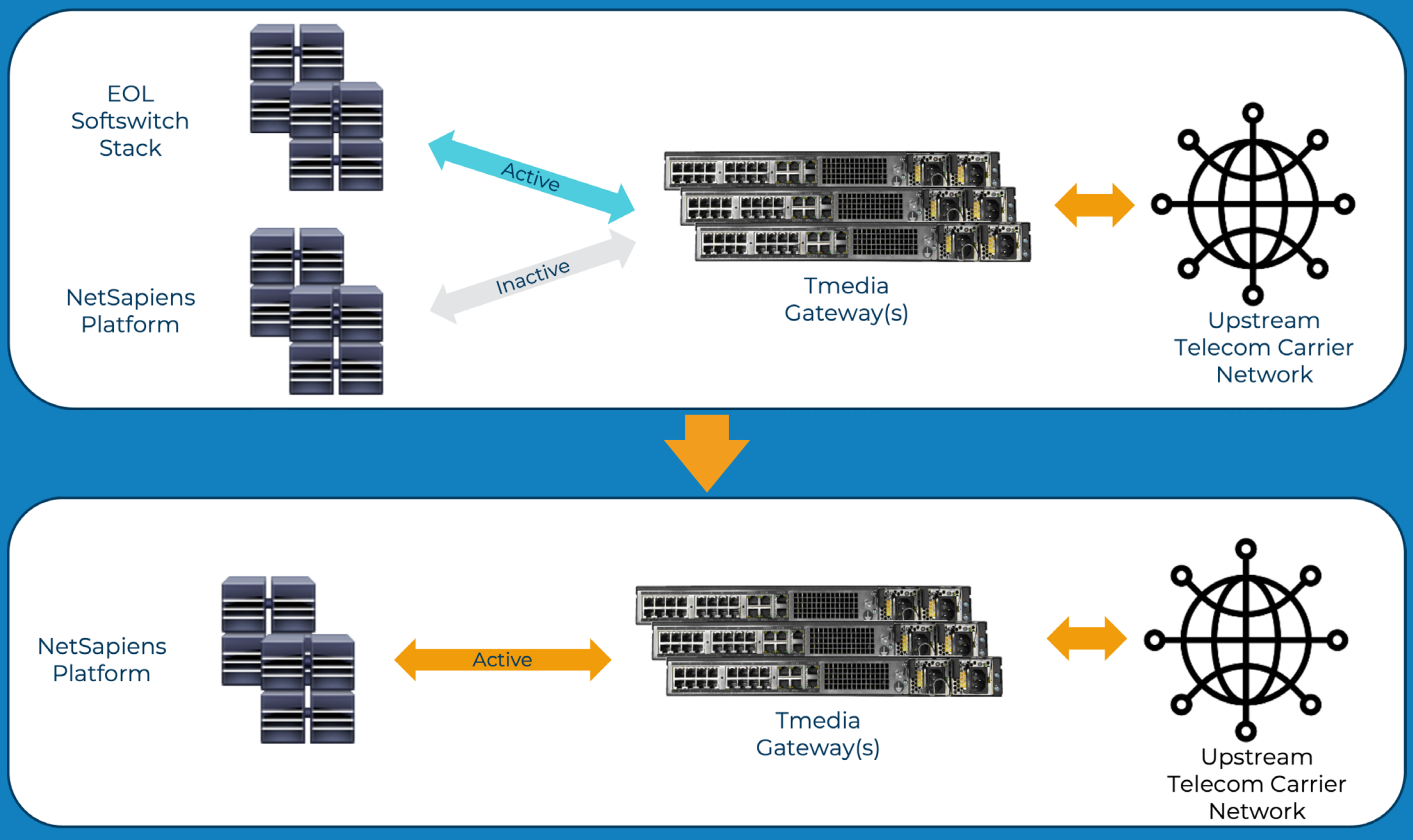

Figure 4: TDM Connectivity

Option 2: Maintaining SIP & TDM Connectivity with New Tmedia Gateways

Service providers interested in changing their softswitch and their media gateways can think of each migration as a distinct project to be executed in a serial sequence. In this scenario there is only one question to answer to determine the best path forward: **what protocol is being used to connect the existing media gateways to the existing softswitch?** If the answer is SIP, then the order of the migration matters little. If the answer is something different, then TelcoBridges can help determine the best path forward.

In almost all cases the process of migrating to Tmedia gateways closely resembles what is described in Option 1 thanks to the ability to set up inactive configurations in Tmedia units. It can be done as quickly or as slowly as required as it simply needs to be repeated for each unit with similar configurations. Further, the process can be significantly accelerated if multiple units are migrated simultaneously (this typically depends on technician availability).

NetSapiens® & TelcoBridges: Simplifying Operations & Reducing Long-Term Costs

NetSapiens® Platform softswitch is a proven, highly performance, and reliable system, which interacts with TelcoBridges Tmedia gateways using SIP protocol. The connection enables significant flexibility and simplicity for service provider networks:

01 Flexibility: SIP Supports both Centralized & Decentralized Network Design

- Interoperability problems can be addressed and normalized at network edge without core infrastructure being involved.
- Expansion is easier as it can be segmented and phased in ways not possible with other protocols
- Core Network changes have less impact on the outer layers.
- SIP can be secure natively, allowing for a more efficient Security Strategy inside a network.

02 Simplicity: SIP is More Common, More Accessible, More Widely Used

- Finding SIP proficient technicians and/or training existing technicians for SIP is easier considering the adoption level and maturity of the protocol.
- SIP is designed for internet communications, and works well with firewalls and NAT.
- Interoperability with new partners/services/customers is easier.
- Configuring/Maintaining/Designing/Debugging networks and connections is easier.

Credentials

5M+
Users Globally

20+
Years in Business

100K+
New Users Added Monthly

235+
Service Provider Partners

24+ Industry Awards

Vox Matic

It's that simple!

Integration & Automation

- **10+** Service Providers
- Cloud hosting automated Snowflakes

60K+

2024 Active Migrations

up to **8K**/mo.

TelcoBridges credentials

- TelcoBridges has helped dozens of service providers complete their network transformations, for providers with >10 locations and >50 total Class 4/5 switch units.
- Supports migration involving both H.248 and SIP controlled units.
- Tmedia units are compatible with a broad range of TDM technologies, including GR-303, SS7, ISDN-PRI, and more.
- Backed by TelcoBridges' commitment to a "no End-of-Life" policy, Tmedia provides a reliable, long-term solution for Carriers, CLECs, ILECs, Operators, MVNOs, and more.

22
Years in business

100+
Service Providers with active Tmedia Gateways deployed

14+
Awards won

110+
Countries represented by clients

Additional Resources

Webinar: Winning Strategies for Service Providers Transitioning Off Metaswitch MaX UC

eBook: Download our Comprehensive Guide to Migrating off Metaswitch Max UC

Blog: Critical Decision Points when Navigating the Transition from Metaswitch MAX UC

Blog: How to Navigate a Metaswitch MaX UC End-Of-Life Announcement

Blog: Unlocking Your Brand Potential: A Journey Towards Authenticity and Innovation

Blog: The End of an Era – MSP's No Longer Paying Per Seat

Blog: Choose a Communications Platform Partner that Empowers Your Vision, not Dictates Theirs

Blog: Embracing the Power of The All-In-One Platform Revolution

Blog: Unlocking the Power of Customization: Crafting Solutions Tailored to Your Customers' Needs

Blog: Breaking Down Barriers: Seamless CRM Integrations for Enhanced Customer Experience

Blog: SS7 to IP Migration - A Roadmap

Blog: TBWiki links on commissioning Tmedia units (SIP controlled)

Video: TDM to IP Transformation with NetSapiens (video)

Blog: TDM to IP Transformation with NetSapiens (solution brief)