

Accelerate the launch of new PSTN services for cloud calling in a cost effective and repeatable manner

Capture new high growth opportunities with small and medium businesses

Keep up to date with the latest cloud APIs with a ready-made solution

Integrate into order management and billing systems for a true end-to-end automated workflow, with minimal revenue leakage

Provide a foundation to upsell new value-added capabilities around customer self-service, disaster recovery, and managed services

Streamline customer and user onboarding with intuitive multi-step automated workflows

Access a single point of control with a view across the entire customer base under management

Provide a link and discovery into existing PBX and hosted platforms as a foundation for migrating to cloud calling



LAUNCHING TELEPHONY SERVICES FOR CLOUD CALLING NETWORKS

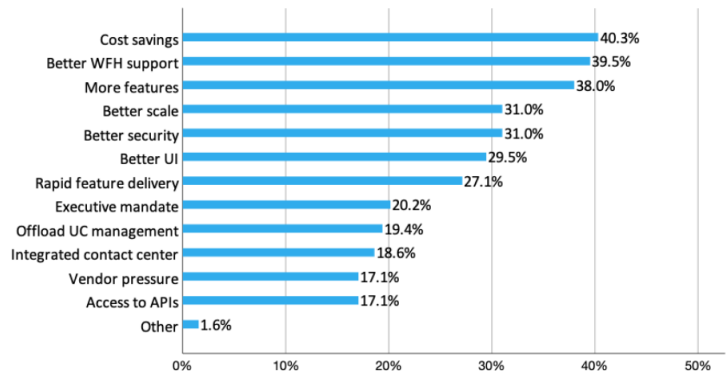
Automating the provisioning, activation, billing, and reporting for number management and PSTN services

Customers are moving telephony to the cloud

The very significant growth in cloud calling, provided by Microsoft Teams Phone, Cisco Webex calling, and other cloud vendors continues at a pace. Customers, having already evaluated their options, and are now adopting next generation voice and collaboration, driven by factors that align with their general IT strategy and help automate and streamline to save costs.

- Continued push for increased productivity
- Need for hybrid, agile, flexible working practices
- IT strategy and move to cloud computing
- Growing requirement to integrate telephony
- Overall maturity of cloud solutions
- Savings and rationalization on older equipment

UCaaS Adoption Drivers



Operators are transforming to compete and take advantage of this opportunity

For operators, the growth opportunities are significant but so too are the challenges. Faced with delivering a range of cloud services efficiently, automation has become center stage as they transform and adapt their operating models.

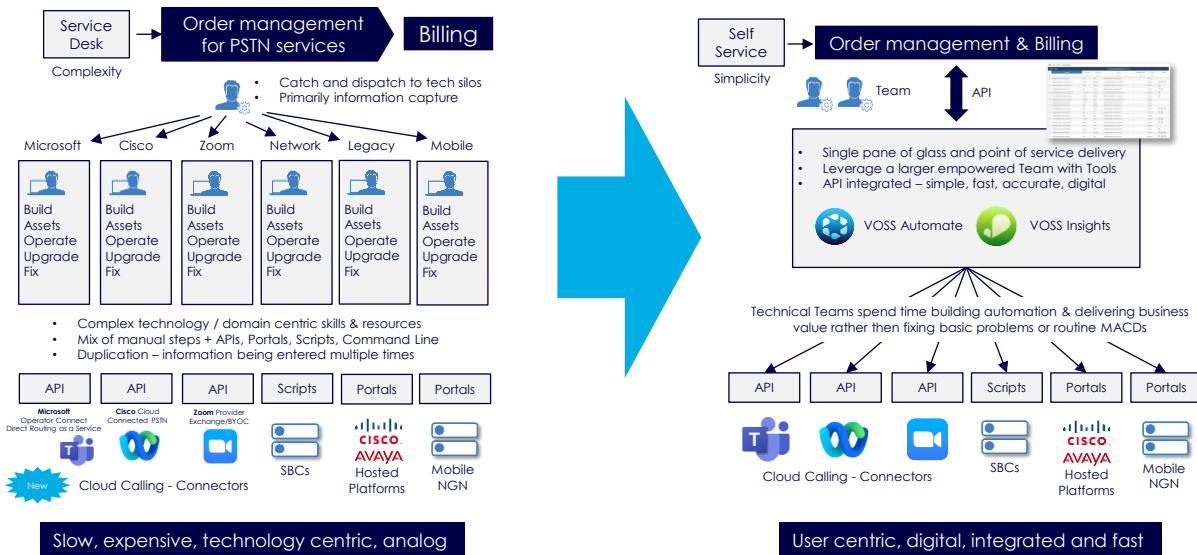




Moving to a New Operating Model

Older operating models, built around and specializing in a small number of technology towers, with a manual catch and dispatch ticket driven interface, are transforming. Operators need to change. New requirements have come to the forefront, driven by the adoption of the cloud:

- Providing choice – one cloud vendor does not fit all customers
- Adding value and launching services quickly – identifying customer needs and requirements
- Driving speed and scale - customers won't wait
- Improving efficiency and cost - margin maximization
- Self-service – customers want to order and manage from the web
- Optimizing critical skills and resources across technologies
- Keeping up with the rapidly changing technology and API landscape



A Benefits Checklist

By simplifying and flattening the operating model, operators are transforming and competing:

Single portal – a single intuitive point of control that can be accessed by teams on the service desk, at the front of a streamlined customer order, provisioning, and billing process.

Automation – taking the complexity and manual steps out of the process, offering speed, accuracy, and efficiency during customer and user onboarding, with the option to directly integrate into related business systems such as CRM, service management, and billing, through an API.

Cloud APIs – enablement for all the major cloud calling platforms and related APIs – Microsoft Teams Operator Connect, Microsoft DRaaS, Cisco Webex CCP, Zoom Exchange/BYOC, and others.

Mobile – an option to extend into related mobile next generation networks, as customers and users increasingly work remotely and on mobile devices.

Self-service – controlled access into the model, allowing customers to dynamically select services, order and manage, directly from the web.

Legacy – providing a migration pathway for customers on older PBX systems and hosted platforms.





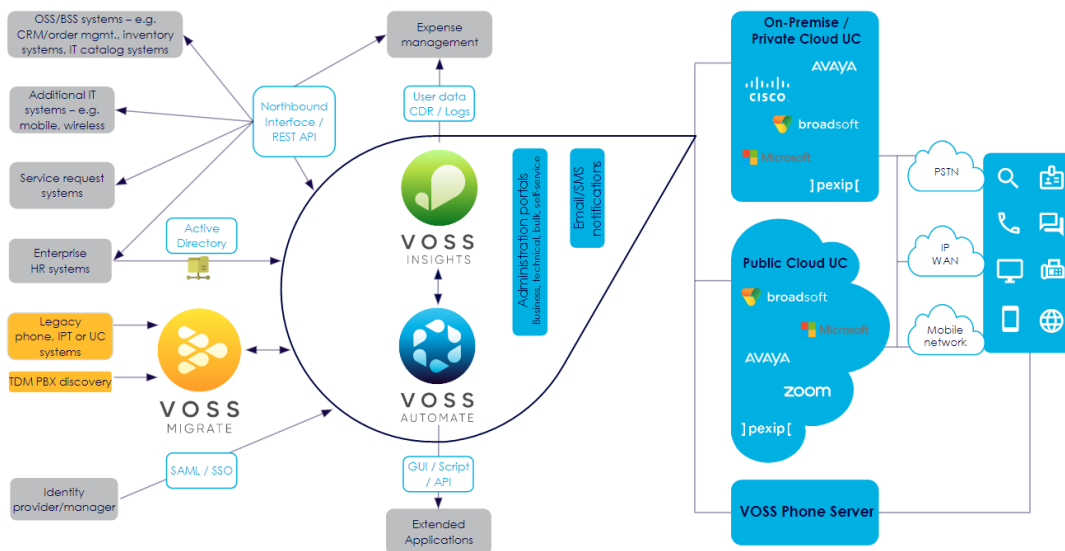
Automation for Cloud Calling Platforms

VOSS automation integrates into an operator's existing ecosystem – business and operational systems, automating and streamlining the delivery of PSTN services to new cloud calling platforms. In doing so, VOSS delivers a proven and ready-to-go solution, which can be adapted to the individual needs of each operator.

The result is a fast launch of new PSTN services for cloud calling without the need for either an expensive DIY approach associated with the new cloud APIs or manual input into a plethora of cloud portals.

Automation from VOSS provides the foundation that opens up new value added services, driving operator revenue streams and creating service differentiation in areas such as cloud tenant and user management, integration of fixed and mobile, and automatic call handling in disaster recovery (DR) situations.

VOSS INTEGRATED DIGITAL WORKPLACE MANAGEMENT



Business Value

- Accelerate the launch of new PSTN cloud calling services - choice for the customer
- Integration with existing systems and infrastructure - no major investments or outsourcing to third parties
- Streamline customer on boarding with intuitive multi-step workflows
- Centralized, accurate, transparent, single point of control - no risk of manual errors
- Keep up to date with the latest cloud capabilities without the need to invest in costly API development
- Expandable to high growth SMB markets profitably, to increase market share and volume
- Adaptable, including number porting, to suit the operator's internal processes
- Intuitive analytics and real-time reporting - respond to change quickly
- Access new revenue streams: customer self-service, tenant management and disaster recovery

Feature Summary

- Single platform across a number of cloud calling API services - multi-vendor, customer choice
- Centralized point of control for key assets and services - fixed, cloud, and mobile
- Adaptable and integrated (VOSS Rest APIs) into operator's CRM, billing, and numbering systems
- Workflow automation for rapid customer onboarding and number range loading
- Accurate, up-to-date, real-time link into billing - reduces revenue leakage
- Automated uploading of CDR records for end-to-end reporting on quality and SLAs
- Customer upsell pathway for full cloud tenant management and managed services
- Support for alternate routing in the event the cloud calling platform is not available - DR services




Case Reference – Microsoft Operator Connect

Microsoft Operator Connect, one of the options for enabling telephony for Microsoft Teams, gives customers that have already subscribed to Microsoft 365 and Teams the ability to easily identify and sign up with a local operator. In return, the operator offers PSTN services – essentially telephony dial tone plus available numbers with agreed SLAs and support mechanism. The customer can then allocate these numbers to users.

Microsoft Operator Connect provides a set of APIs for a qualified operator to deliver the service. This API provides the mechanism to integrate with the operator's ordering process, activate the service, allocate numbers to the customer and link to billing. This behind the scene multi-step process provides the opportunity to fully digitize and streamline the service with VOSS automation.

Technical Details

<i>Architecture</i>	Multi-node platform for carrier grade robustness and scalability; flexible deployment options are provided. The nodes can be installed on-premises, into private geo-redundant data centers, or onto a cloud service (Microsoft Azure, Amazon AWS, or Google).
<i>Integration</i>	Utilizes REST APIs and a flexible API interface to communicate with adjacent OSS and BSS systems – including CRM, order management, and billing, to provide a fully automated end-to-end customer onboarding process flow.
<i>Extensibility</i>	Adaptation template framework enables the rapid creation of new features, configuration options, and optimization of workflows to cater for individual operator requirements.
<i>Single point of control</i>	<p>Intuitive web portal with access controls to cater for the various operator roles. New add-on menu options to manage Operator Connect without any need to understand technical Microsoft APIs.</p> <p>Includes set-up of Operator Connect services, order management and history, upload of telephone numbers (TN) to Microsoft Teams customer tenant and regular / scheduled SBC CDR reporting.</p> <p>Existing configuration on Operator Connect is synchronized with VOSS to provide an accurate and up-to-date view of the live service.</p> 
<i>Set-up of Operator Connect services</i>	Access to Operator Connect service set-up for calling profiles (containers for trunks that are used for outbound routing and emergency calling) and number usage capabilities.



<i>Automated customer onboarding</i>	Automated step-by-step workflow to streamline the addition of new customers onto the Operator Connect service. Covers capture of key customer information along with required number ranges that are then created on the service, including number range upload (TNUUploadToAccount). Customer can be identified by a user friendly descriptive text as opposed to complex Microsoft Tenant IDs.
<i>Order and number management</i>	Full visibility into the service configuration for each customer – including consents, order history, and number allocation, with the ability to release numbers under the scenario a customer off boards. Ability to upload numbers individually or in ranges.
<i>Automated reporting of CDR information</i>	Extract and upload to call detail information to the Operator Connect service, for inclusion in call quality reporting on the Microsoft Teams CQ,D and similar.
<i>SBC routing</i>	Automation, as part of the customer on boarding workflow, to back up and configure routing and number range information into the infrastructure (SBCs) as required – removing manual touch points.
<i>Microsoft 365 / tenant management</i>	Upsell/Option – the ability to provide a wider range of managed services around the customer Microsoft 365 / Teams tenant – including automated user join/move/leave, customer self-service, full number inventory management, and access to call routing – dial plan, policies, call queues and auto attendant set-up.
<i>Disaster recovery services</i>	Upsell/Option – automation for creating disaster recovery plans against critical numbers ahead of time, which can then be activated in an event, with split customer self-service administrator roles for creation and activation. Highly suitable for scenarios such as service outages on the Microsoft Teams cloud, connectivity issues, unplanned access restrictions on certain locations, and business continuity testing.
<i>Migration</i>	Upsell/Option - integration into existing PBX estates and hosted platforms, providing a robust and automated migration approach to accelerate the move to cloud calling – including discovery, automation mapping and rules, batch by batch migration and logging, audit, and rollback features.
<i>Analytics</i>	Upsell/Option - analytics draws data from multiple applications, devices, and infrastructure, including the Microsoft cloud, into a single dashboard, giving a big picture view of resource utilization. This data can be used for usage analysis, licensing, capacity planning, and general insight into the deployment and performance of customers under management.

To find out more about VOSS automation for PSTN service and cloud calling, please contact us.

