zoom

WHITEPAPER

Migrate your legacy on-premises UC system to Zoom Cloud Hybrid

There has never been a better time to migrate your users from legacy Unified Communication (UC) on-premises deployment like Skype for Business or Cisco Jabber to the state-of-the-art Zoom Workplace enabled by Zoom Node and CMK for rich functionality and improved performance while supporting your compliance, data residency, survivability and privacy needs.

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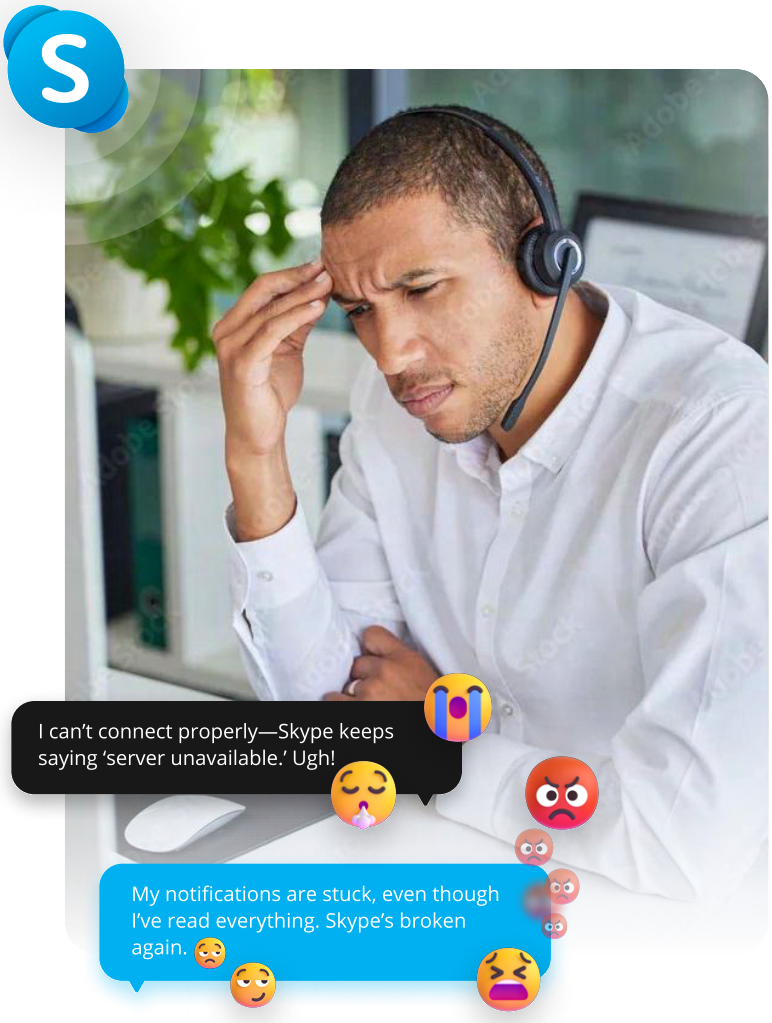
The end of an era for on-premises Unified Communications



For over two decades now, businesses have relied on on-premises Unified Communication (UC) solutions such as Microsoft Skype for Business and Cisco Jabber.

These platforms are typically installed in the corporate data centers to provide end-users with integrated voice, video, messaging, sharing and presence capabilities, while giving businesses complete control over their communication infrastructure and allowing them to meet their regulatory compliance obligations.

However, as the communication and collaboration needs of individuals and organizations evolved, these solutions have quickly become outdated with their limitations apparent. As their technical debt increases, these deployments have been replaced by more modern cloud-based Unified Communication as a Service (UCaaS) technology providing greater flexibility, scalability, and cost efficiency, freeing IT departments from the need to maintain extensive on-premises server infrastructures. In recent months this migration accelerated with Microsoft uncertain future support for Skype for Business Server and Cisco announcing Jabber end of sale last year.

The end of an era for on-premises Unified Communications

Indeed, the limitations and challenges of the legacy on-prem solutions are significant and need to be summarized. The list below provides just the key disadvantages of legacy on-prem solutions compared to modern cloud-based alternatives like AI-powered Zoom Workplace:

	On-premises challenge	Cloud-based advantage
High infrastructure and maintenance costs	Legacy systems require significant investment in hardware, servers, and complex maintenance, leading to high capital expenditures (CapEx) and operational costs.	Cloud-based solutions eliminate the need for expensive on-prem infrastructure and maintenance, reducing IT operational expenses (OpEx) by hosting the infrastructure in the cloud and leveraging a subscription-based model.
Limited scalability and flexibility	Expanding or reducing an on-premises system requires purchasing additional hardware, licenses, provisioning, and network resources—a time-consuming and expensive process.	Cloud platforms offer on-demand scalability, allowing businesses to easily adjust capacity to the needs of their organization.
Lack of modern features and functionality	Legacy platforms lack AI capabilities and other advanced features, such as real-time transcription, translation, meeting summaries, and nuanced personalization. They also lack intuitive interfaces, modern collaboration tools, and real-time document co-editing features.	Cloud solutions like Zoom Workplace offer modern feature sets, user-friendly interface, document collaboration and AI Companion virtual assistant
Complex updates and security patching	Updating and patching an on-premises UC system requires manual intervention, downtime, and IT resources, making system updates and security patching complex and expensive.	Cloud solutions offer automatic system and feature update capability and real-time security patching, reducing the burden on IT teams, providing up-to-date protection, and continually evolving to align with your organization's needs.

	On-premises challenge	Cloud-based advantage
Limited remote access and mobile capabilities	Legacy on-prem solutions require VPN access and additional security configurations for remote employees, making them less user-friendly for hybrid and remote work.	Modern cloud solutions offer seamless mobile and remote service access through the cloud, allowing employees to collaborate from anywhere on any device with secure, cloud-based authentication and without the need for complex VPN technology.
Reduced business continuity and survivability	If an organization's data center infrastructure or individual servers fail or experience downtime (e.g. due to natural disaster), communication services will be disrupted until the infrastructure is restored or rebuilt.	Cloud solutions support high availability, geo-redundant backups, and disaster recovery capabilities, minimizing such downtime risks.
Integration challenges with modern business applications	Legacy solutions often require manual security configurations, and archival capabilities, leading to potential compliance risks in regulated industries.	Cloud solutions like Zoom Workplace provide native API integrations with thousands of business applications, enabling automated workflows and seamless collaboration across platforms.
Lack of advanced security and compliance features	Legacy solutions often require manual security configurations, and archival capabilities, leading to potential compliance risks in regulated industries.	Modern cloud-based platforms offer built-in compliance tools, support for end-to-end encryption, role-based access control (RBAC), and AI-driven threat detection for enhanced security. support for modern Zero Trust security models and key management.
Poor user experience and modern collaboration tools	Older systems often lack intuitive interfaces, modern collaboration tools, and real-time document co-editing features.	Modern cloud solutions like Zoom Workplace provide a modern, user-friendly interface, real-time document collaboration, and AI-powered virtual assistants for enhanced productivity.

So why are the on-premises UC solutions still in use?

Many organizations long ago realized the benefits of the UCaaS solutions and successfully migrated. Most, but not all! Quite a few organizations remain committed to on-prem solutions and continue to maintain these legacy systems. Why? The reasons are often complex and primarily revolve around specific requirements, which cannot be addressed by the cloud solutions alone, often due to inherent cloud technology limitations:

Data residency and privacy compliance

Many industries — such as finance, healthcare, pharma, defense, and government sectors — operate under strict regulatory obligations to localize sensitive data and minimize storage on third-party cloud infrastructure. For example:

- **Financial service** firms may need to store or archive communication on the company premises or within their operating country, depending on specific regulations.
- **Healthcare** – Local compliance regulations may require conducting patient communications and storing data on local, private servers.
- **Government and defense** – Agencies with heightened security mandates may be restricted from using the cloud for certain forms of communication (e.g. file sharing).

Security and data access control

Organizations operating in particularly sensitive fields or geographies are often reluctant to migrate to the cloud due to potential data security vulnerabilities, cyber risk concerns, and dependency on untrusted external providers. They want to maintain more direct control over their security protocols, encryption, keys, and access management, to help mitigate against the following example areas of concern:

- **Risk of data breaches** – Organizations fear that sensitive corporate communication data stored in the cloud could be compromised.
- **Cloud vendor control** – Some businesses worry about losing autonomy over security settings, encryption, and access policies.
- **Insider threats and compliance risks** – Strict internal security policies prevent storing conversations and video meetings outside their infrastructure.
- **Rogue state** – Organizations are concerned about state actors unlawfully (or lawfully) gaining access to data stored in the cloud data centers located within that country's boundaries.

Network survivability and performance

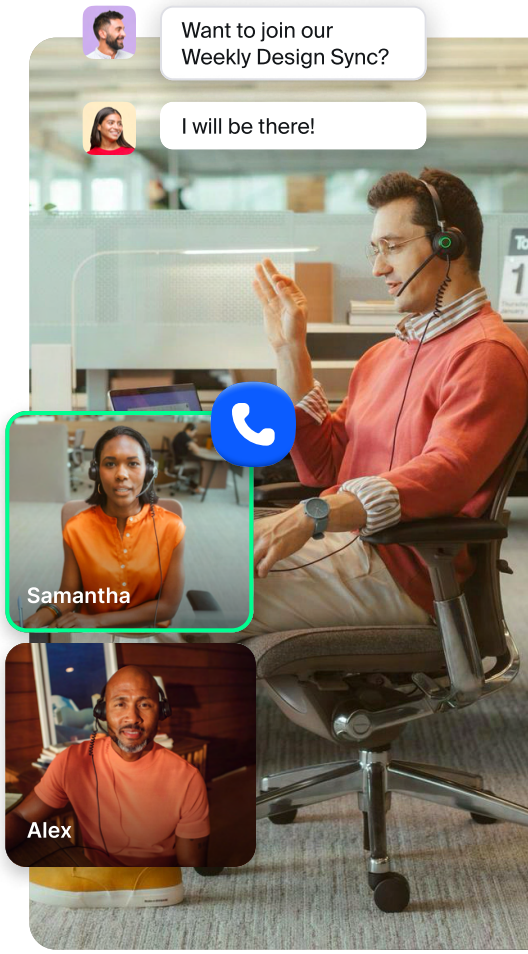
For organizations with global operations or those in regions with unstable internet connectivity, cloud-based UCaaS solutions may not provide optimal performance or reliability. They want predictable, robust performance without dependence on the internet cloud infrastructure uptime.

- **Survivability** – Organizations and businesses heavily reliant on uninterrupted communication cannot afford to rely on an internet connection. Once the connection is lost, all communication modalities will cease to function, severely impacting business continuity.
- **Remote locations** – Businesses in areas with poor internet infrastructure may struggle with latency issues.
- **Real-time communication needs** – Industries like emergency services, stock trading, and healthcare cannot afford internet-dependent outages.
- **Network optimization** – in many scenarios meetings hosted in the cloud require the media to traverse up to the cloud and back down (so-called "tromboning") even if the participants are in the same location.

Zoom Cloud Hybrid to the rescue

Zoom has understood the needs of customers still relying on legacy on-prem UC solutions and the limitations of pure cloud-based UCaaS technology. It responded by developing state-of-the-art Cloud Hybrid communication solutions based on the innovative Zoom Node Platform and Customer Managed Key (CMK), providing both the advantages of the cloud solution and on-prem technology.

Unlike a typical cloud-only UCaaS solution that does not address regulatory requirements and network performance limitations described above, Zoom Cloud Hybrid solution supports these needs, while providing organizations with a modern Zoom Workplace communication and collaboration experience. Zoom Cloud Hybrid communication technology enables organizations to maintain critical communication workloads within their data centers while leveraging the control, scalability, and flexibility of the cloud.



Thus, migrating from legacy UC solutions like Skype for Business and Cisco Jabber to Zoom Cloud Hybrid offers both tactical and strategic advantages by addressing both on-prem and cloud-critical concerns, including:

Data residency and privacy compliance

Communication is controlled from the cloud while critical user data and communication history is localized within customer network boundary.

→ Read More

Security and access control

Meeting media and data remain within the customer network in most scenarios. When the data must traverse the cloud, customers have the option to manage the encryption keys, preventing third parties (including Zoom) from accessing it. Zoom's zero trust model, automated security updates, encryption by default, and extensive use of certificates provide a robust security posture.

→ Read More

Survivability

Customers will be able to conduct meetings and phone conversations even in the event of both their data center outage (Zoom services will fall back to the cloud) and Internet disruption (their meetings and phone calls will be hosted entirely within their premises).

→ Read More

Network performance

By localizing media and data, the solution improves latency and bandwidth utilization and eliminates cloud "tromboning" in most scenarios. It also significantly reduces the overhead on network edge controls such as proxies and firewalls, resulting in a more reliable and stable meeting experience.

ZOOM NODE

The foundation of Zoom Cloud Hybrid

At the core of Zoom's Cloud Hybrid approach is the Zoom Node platform (see Figure 1) — a modular scalable solution that is installed on virtual machines in your data center and controlled through Zoom Cloud via the Zoom Web Portal, which provides tools for service management, upgrades, log management, performance reporting, and troubleshooting.

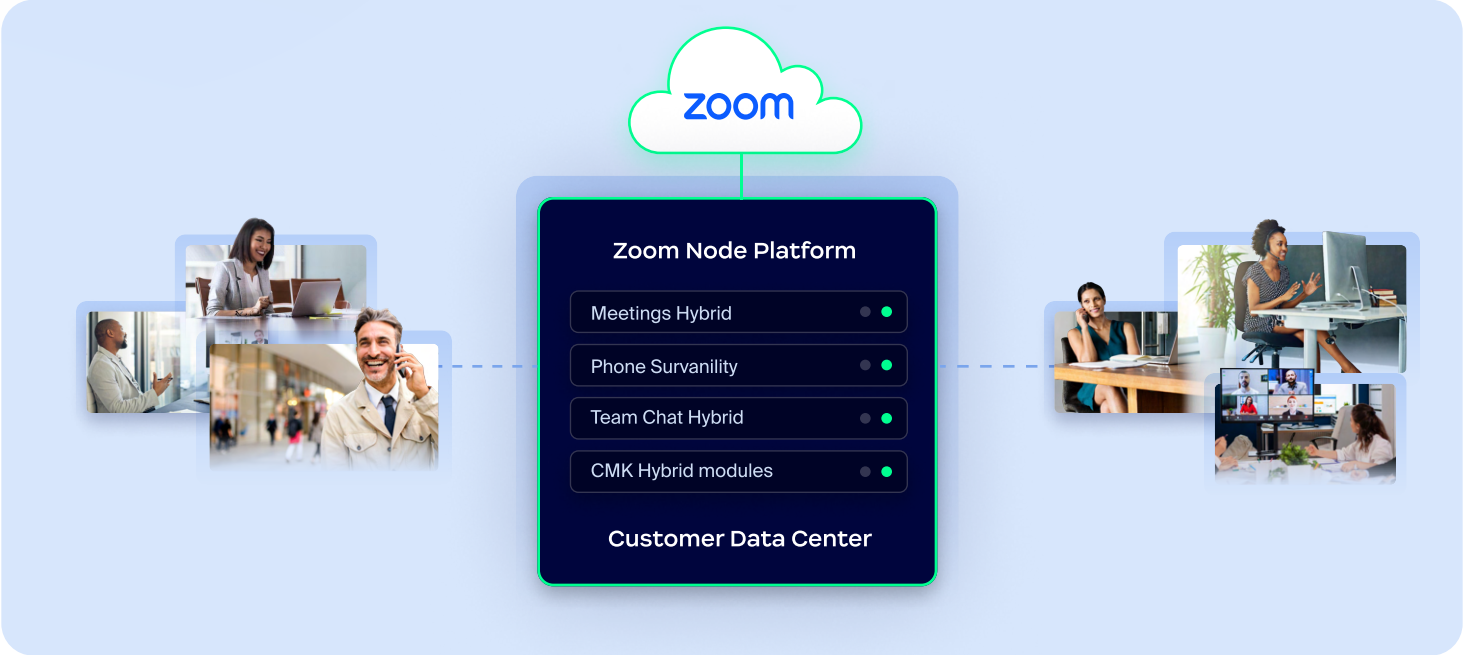
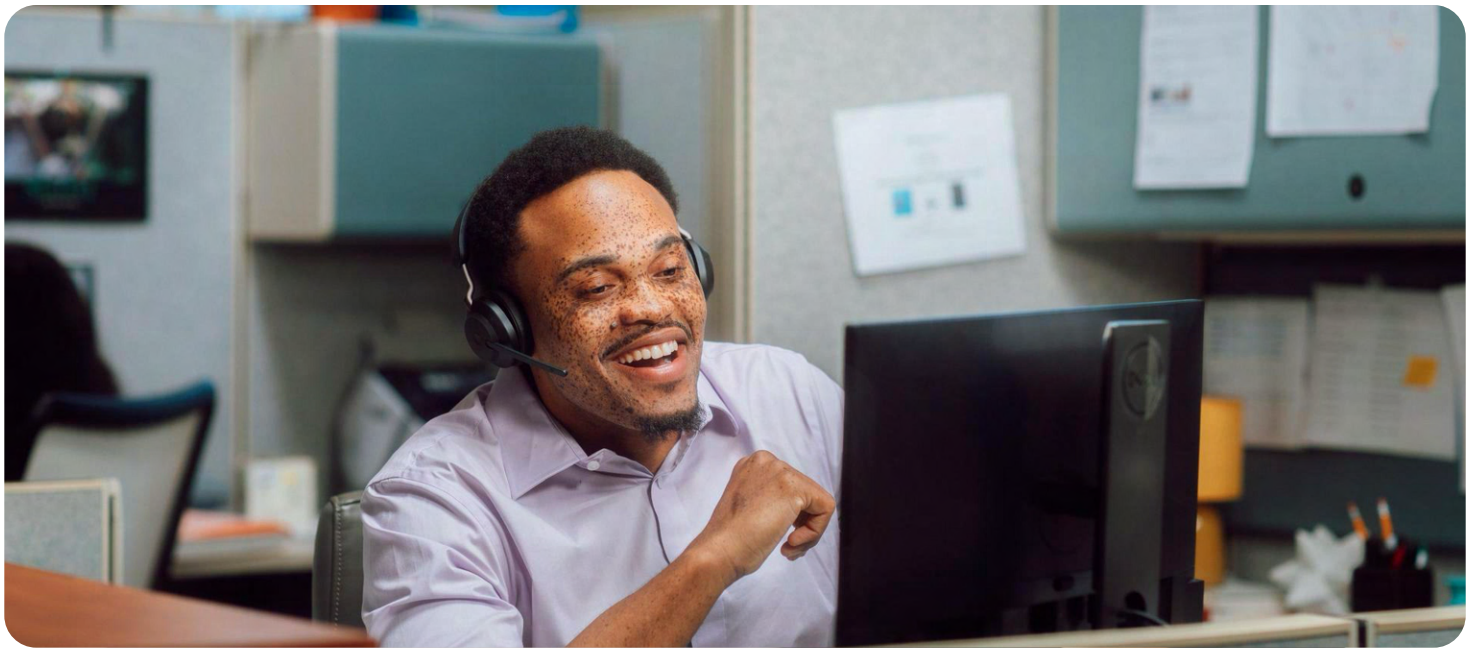


Figure 1

Unlike traditional on-premises solutions, Zoom Node is not an isolated system. It's an extension of the Zoom cloud, managed through the same administrative portal and receiving automatic updates without manual intervention. Zoom Node platform hosts various Zoom workloads called service modules designed to extend cloud-based Zoom Workplace services to your premises. While the list of workloads is quickly expending, currently supported workloads include (see Figure 2):

- **Zoom Meetings Hybrid (ZMH):** This service module supports on-premises Zoom Meetings and Webinars. Its features include Local routing of Meeting and Webinar media within your network, Cloud cascading for external attendees, elastic capacity and failover, Media consolidation providing Single connection per meeting to minimize firewall ingress & egress points, Meeting Survivability to maintain meeting functionality during Internet and cloud outages.

- **Zoom Recording Hybrid (ZRH):** This module allows you to record, store and retrieve hybrid meeting recordings on-premises.
- **Meeting Connector (MC):** a simplified version of ZMH supporting private meetings only.
- **Recording Connector (RC):** a simplified version of ZRH supporting basic Meeting Connector recordings.
- **Zoom Phone Local Survivability (ZPLS):** This service module enables continued Zoom Phone service even when internet connectivity is lost or unreliable.
- **Zoom Team Chat Hybrid (ZTCH):** This module allows you to store Zoom Team Chat persistent chat history within your data center.
- **Customer Managed Key Hybrid (CMK Hybrid):** This module lets you generate and manage your own encryption keys on-premises.
- **Room Hybrid Interoperability:** This module allows you to connect legacy video endpoints to Zoom Meetings and manage them locally.



Service Module	Survivability	Compliance	Data Residency and Privacy	Security	Bandwidth Optimization	Interoperability
Zoom Meetings Hybrid (ZMH)	✓	✓	✓	✓	✓	-
Zoom Recording Hybrid (ZRH)	-	✓	✓	✓	✓	-
Zoom Phone Local Survivability	✓	✓	-	-	-	-
Zoom Team Chat Hybrid (ZTCH)	-	✓	✓	-	-	-
Meeting Connector & Recording Connector	-	✓	✓	✓	✓	-
Room Hybrid Interoperability	-	-	✓	-	✓	✓
Customer Managed Key (CMK) Hybrid	-	✓	✓	✓	-	-

Figure 2

CMK Hybrid: a robust security and privacy offering

Security and privacy remain top of mind for not just our customers but also Zoom. Our ongoing commitment to safeguarding your data is supported by many solutions and capabilities, like Zoom Customer Managed Key (CMK). Zoom CMK allows customers to protect their data at rest (such as chat history) stored within the Zoom Cloud infrastructure using their own encryption keys managed by a supported Key Management Service (KMS) of their choice.

Our CMK Hybrid solution enhances regular CMK by letting customers generate and manage their own data keys and control the encryption/decryption process for certain data stored on-premises within their data center. To take advantage of this capability, we are introducing client-side encryption options for services like Zoom Team Chat. It will allow the Zoom Workplace app to encrypt messages directly, thereby limiting access by the Zoom Cloud platform.

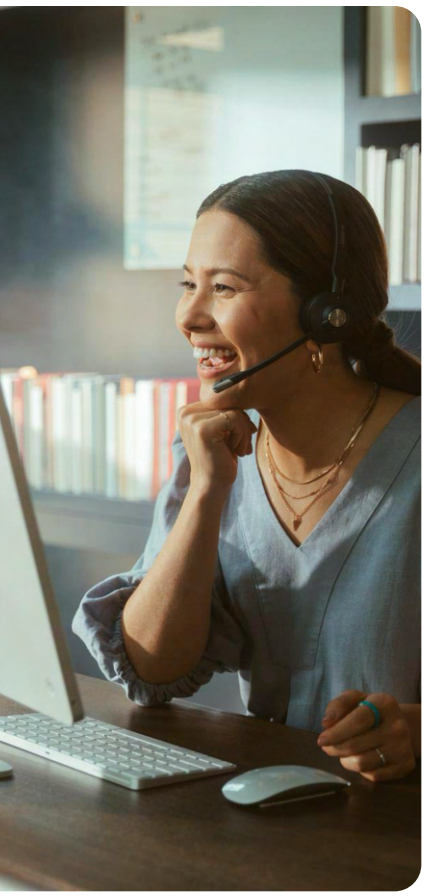
Migration strategy

Organizations can choose between two primary migration approaches: direct cutover, best suited for small to mid-sized organizations with simpler environments, and phased coexistence best suited for large enterprises or organizations with complex environments.

If the direct cutover option is selected, the Zoom Nodes will have to be installed and Zoom service enabled for all users before the existing Skype for Business or Cisco Jabber accounts are disabled and the infrastructure is decommissioned. When the phased coexistence option is selected, both the legacy UC environment and Zoom Node infrastructure will coexist while users are migrated in phases and in groups to minimize business continuity disruption.

The migration process: Managing risk for a smooth transition

Zoom provides enterprises with multiple migration paths tailored to their unique needs. Whether opting for a direct cutover or a phased coexistence model, Zoom supports a smooth transition with minimal disruption.



1

Assess and plan

A detailed assessment of the existing UC infrastructure is critical. Organizations should evaluate:

- Active user base and workloads (meetings, messaging, telephony)
- Compliance and security requirements
- Bandwidth and network performance
- Integration dependencies with third-party applications

2

Procure Zoom licenses

- Acquire the appropriate number of Zoom Workplace licenses
- Select the services your organization requires

3

Deploy Zoom Node Platform

- Install the platform and required service modules.
- Follow the installation procedure described in support articles

4

Integrate

Zoom Cloud Hybrid integrates seamlessly with existing enterprise applications, including Microsoft Exchange, Active Directory, and CRM tools. In this phase you will also connect Zoom to your calendar server (Office 365, Exchange, or Google).

- Meeting performance is optimized
- Security policies are enforced
- Employees can access features without friction

5

Testing and validations

Ensure the solution supports performance and compliance requirements

6

User training and adoption

Change management and adoption are key to a successful migration. Zoom offers:

- Live training sessions
- On-demand tutorials
- Dedicated customer succe

7

Export legacy data

Transfer relevant chat history and recordings from legacy UC solutions

8

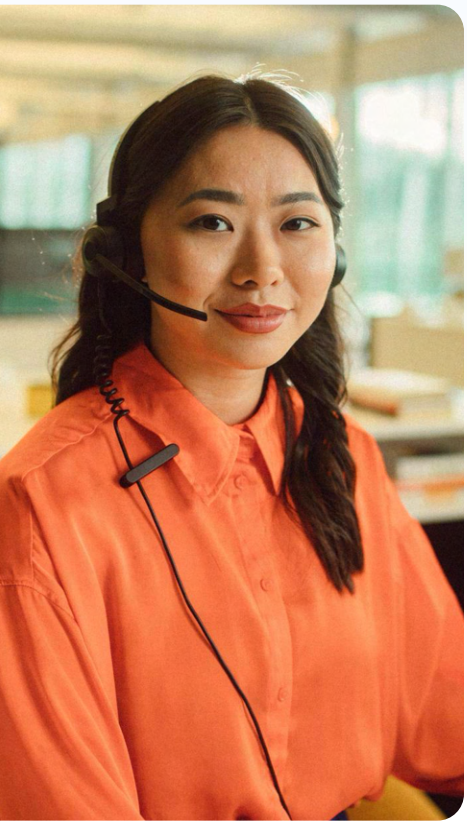
Roll out to end users

- Deploy Zoom clients
- Once migration is complete and users are familiar with Zoom, disable legacy UC clients

9

Decommission legacy systems

- Once all users are transitioned, IT teams can gradually phase out legacy UC servers
- Remove or repurpose legacy UC servers and components
- Closeout licenses and terminate support agreements



MAKING THE MOVE

Next steps

As support for legacy on-premises UC solutions approaches its end, organizations face an important decision: migrate to a pure cloud solution that might not meet all of their requirements, or adopt a Cloud Hybrid approach delivered by Zoom, that combines modern cloud AI-driven UCaaS functionalities with compliance, privacy and survivability-friendly architecture.

Zoom Cloud Hybrid offers the best path forward for organizations that need to maintain certain on-premises capabilities while modernizing their collaboration environment. With flexible deployment options, advanced security features, and improved user experience, it provides a compelling upgrade path from aging Skype for Business and Cisco Jabber deployments.

Is your organization ready to make the switch?

Contact your Zoom account representative today to begin your migration journey and experience the future of enterprise communications.

Go Beyond The Basics With Zoom Cloud Hybrid

If you are looking to explore further, for more information on Zoom Cloud Hybrid, visit the Zoom advanced enterprise website.

Get Started