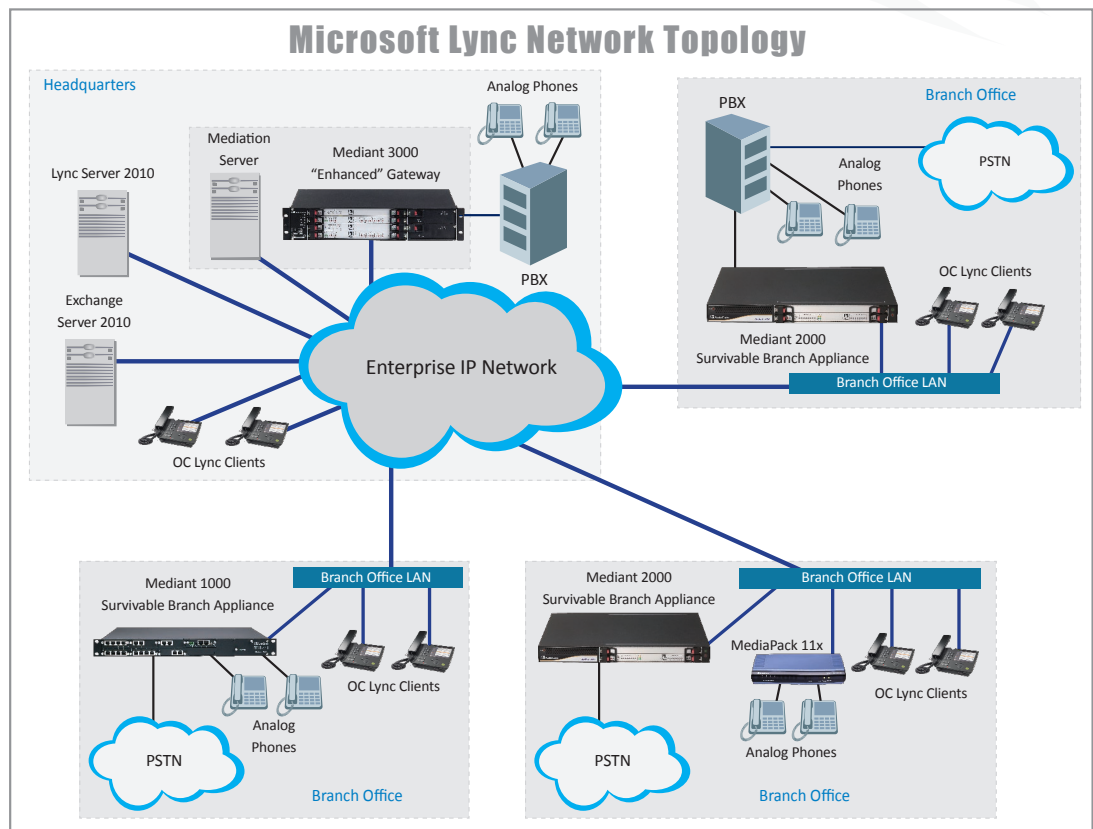


## Ten “Golden Rules” for Selecting a VoIP Gateway for Microsoft Unified Communications Solutions

Selecting a Microsoft certified gateway may not be enough to make the ideal choice for your office network. There are other important factors, which should first be uncovered and considered for optimizing the gateway selection.

Microsoft is expanding its offer with Microsoft® Lync™ Server and Microsoft Exchange Server 2010, aimed at increasing employee productivity, by means of collaboration, presence detection, and most significantly, unification of all messages “bombarding” Information Workers today.

Many of these advanced tools rely on transparent connectivity of voice and media via a VoIP gateway, interfacing between the Microsoft Unified Communications Solution and legacy PBX and PSTN networks, or IP-PBX systems. The option to continue using existing office telephony equipment (while securing previous investments and know-how) allows a gradual, cost effective, and safer migration towards Microsoft solutions – surely beneficial factors for any IT or telephony manager.



- 1. “One-Stop-Shop” vendor** – System Integrators or telephony/IT managers will benefit from having a single vendor for the smallest branch phone/fax adaptor, as well as the headquarters’ “heavy duty” gateways. Additionally, check that your gateway vendor portfolio includes a full range of interfaces (FXS/FXO, BRI, E1/T1 and even T3, STM-1/OC3). Make sure that using the same supplier for all types of gateways also means using the same user interface for Gateway configuration and provisioning, saving on staff training and installation costs. Having the same vendor also providing you with IP Phones for the Microsoft environment and enabling the existing installed base of SIP IP Phones to connect, as well, are great benefits, too.
- 2. “Future Proof” gateway provider** – Microsoft Office Communications Server 2007 R1, Microsoft Office Communications Server 2007 R2, Microsoft Lync Server 2010, Microsoft Exchange Server 2007, Microsoft Exchange Server 2010 Is your gateway capable of supporting all of these releases and future releases by Microsoft? Up until now, Microsoft has defined five types of gateways: IP Gateway for Microsoft Exchange Server 2007 & 2010, “Basic” Gateway and “Basic Hybrid” Gateway for Microsoft Office Communications Server 2007 R1 & R2, “Enhanced” Gateway for Lync Server 2010 and “Survivable Branch Appliance” for Lync Server 2010. Make sure that your selected Gateway vendor has the support for all Gateway configurations and is also capable of protecting your investment by upgrading your existing gateway to future Microsoft releases. Can you use the same E1/T1 interface for connecting your PBX to Office Communications Server / Lync Server and Exchange Server simultaneously? Can your gateway support SMDI for voicemail as well as a digital trunk for your PBX? This ability allows the re-use of your investment, when beginning with one application and subsequently adding the other.
- 3. “Connectivity to any Network”** - with the accelerated adoption of Microsoft Unified Communication worldwide as an established solution for enterprise voice communication, the need to connect Microsoft Office Communication Server / Lync Server directly to PSTN over traditional TDM trunks or SIP Trunking connectivity has become inevitable. Therefore, enterprises need to ensure that they select a gateway vendor that has a range of supported PSTN & SIP Trunk signaling protocol flavors and homologations. Are you protecting your organization from malicious VoIP attacks? The use of SIP Trunking as a low-cost alternative to legacy telecom services brings with it a set of new challenges which enterprises need to address. VoIP security, interoperability and the flexibility to connect to any SIP Trunking provider are just some of the challenges. Does your gateway vendor include the SBC functionality? To meet these challenges, the need for new network functionality has entered the market – the Enterprise Session Border Controller (E-SBC), which provides Perimeter Defense, Mediation and Quality of Service.
- 4. “Certify the non-certified”** – A non-certified IP-PBX is limited in its connectivity to Microsoft Unified Communications solutions. This problem can be solved by a gateway that performs IP-to-IP mediation between the two. Such a gateway solves interoperability issues for both sides. As a system integrator serving a variety of organizations, each with their own variety of IP-PBX solution, an extensive gateway interoperability list is a significant advantage. Note also the need for re-certification of your IP-PBXs with every new version of the Microsoft servers. IP-to-IP Mediation support in the gateway can work around this limitation, as well. Does your IP-PBX vendor require you to buy a user license for enabling each user for the Microsoft environment? Using IP-to-IP Mediation in the Gateway can save on this cost too.
- 5. Support of your existing IP Phones Installed Base** – Do you have some hundreds or thousands of IP Phones from another vendor already installed? Do you want to protect your investment and reduce your operation costs by connecting these phones to Microsoft Office Communications Server 2007 or Lync Server 2010? A gateway vendor that can provide you with such a solution, in addition to providing you with cost-effective IP Phones for the Microsoft environment to support your new installations will help you achieve better results with your Microsoft Unified Communications solution.

**6. Fax & legacy analog interfaces support** – Since Office Communications Server 2007, Lync Server 2010 and Exchange Server 2010 do not natively support Fax, a gateway enabling high quality Fax/T.38 is essential for keeping your office fax machines operational. In addition, supporting analog phones is now enabled with Microsoft Lync Server 2010. Make sure your gateway supports those analog interfaces for analog phones and faxes.

**7. “Redundancy and Survivability”** – Do you want your Microsoft Unified Communications system to be backed up using your existing TDM PBX infrastructure? Do you want to use your Active Directory or ENUM services for call re-routing? Selecting a Media Gateway that can support an extensive implementation of internal call routing tables, as well as an external standard interface to Active Directory and ENUM services allows easy migration from the existing TDM infrastructure to the Microsoft Unified Communications environment, while providing support for flexible call routing for survivability and redundancy.

**8. “Mix and Match”** – Delivering to a variety of organizations (branch offices) requires the ability to “tailor” a gateway by mixing and matching line modules (FXS, FXO, E1, T1, BRI), which assists in reducing stock and speeding up deployment. In addition, a “Pay-as-you-Grow” approach of adding line modules or increasing capacity by a software license can help you control your new gear investments in parallel with actual service ramp-up.

**9. “Carrier-grade ready”** – No, this is not a mistake. In dealing with large enterprises and mainly businesses of a critical nature, “carrier-grade” standards are often required. Enterprises are demanding high service availability, manageability of large-scale networks and high capacity on a single gateway (1000’s of ports). Is your gateway “carrier-grade ready”?

**10. “Hard-coded” vs. “Soft-coded” gateway** – Flexible on-site programming of the gateway functionality is often required to meet specific dialing plans or advanced configurations. Are these parameters “hard-coded” and require vendor intervention, or is a quick on-site modification possible by a simple configuration tool? How many PBX vendors and localization flavors does your media gateway vendor support? Can you easily integrate the gateway in all of your global locations? Can you easily integrate it with all of your voice mail servers? Think about how much a wide interoperability record and “soft-coding” can save you time.

Revealing these potentially “hidden” factors will allow you to make the optimal choice, when selecting a VoIP gateway, which is instrumental for a successful and cost-effective deployment of Microsoft Unified Communications.

## About AudioCodes

AudioCodes Ltd. (NasdaqGS: AUDC) designs, develops and sells advanced Voice over IP (VoIP) and converged VoIP and Data networking products and applications to Service Providers and Enterprises. AudioCodes is a VoIP technology leader focused on VoIP communications, applications and networking elements, and its products are deployed globally in Broadband, Mobile, Cable, and Enterprise networks. The company provides a range of innovative, cost-effective products including Media Gateways, Multi-Service Business Gateways, Residential Gateways, IP Phones, Media Servers, Session Border Controllers (SBC), Security Gateways and Value Added Applications. AudioCodes underlying technology, VolPerfectHD™, relies primarily on AudioCodes leadership in DSP, voice coding and voice processing technologies. AudioCodes High Definition (HD) VoIP technologies and products provide enhanced intelligibility, and a better end user communication experience in emerging Voice networks.

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