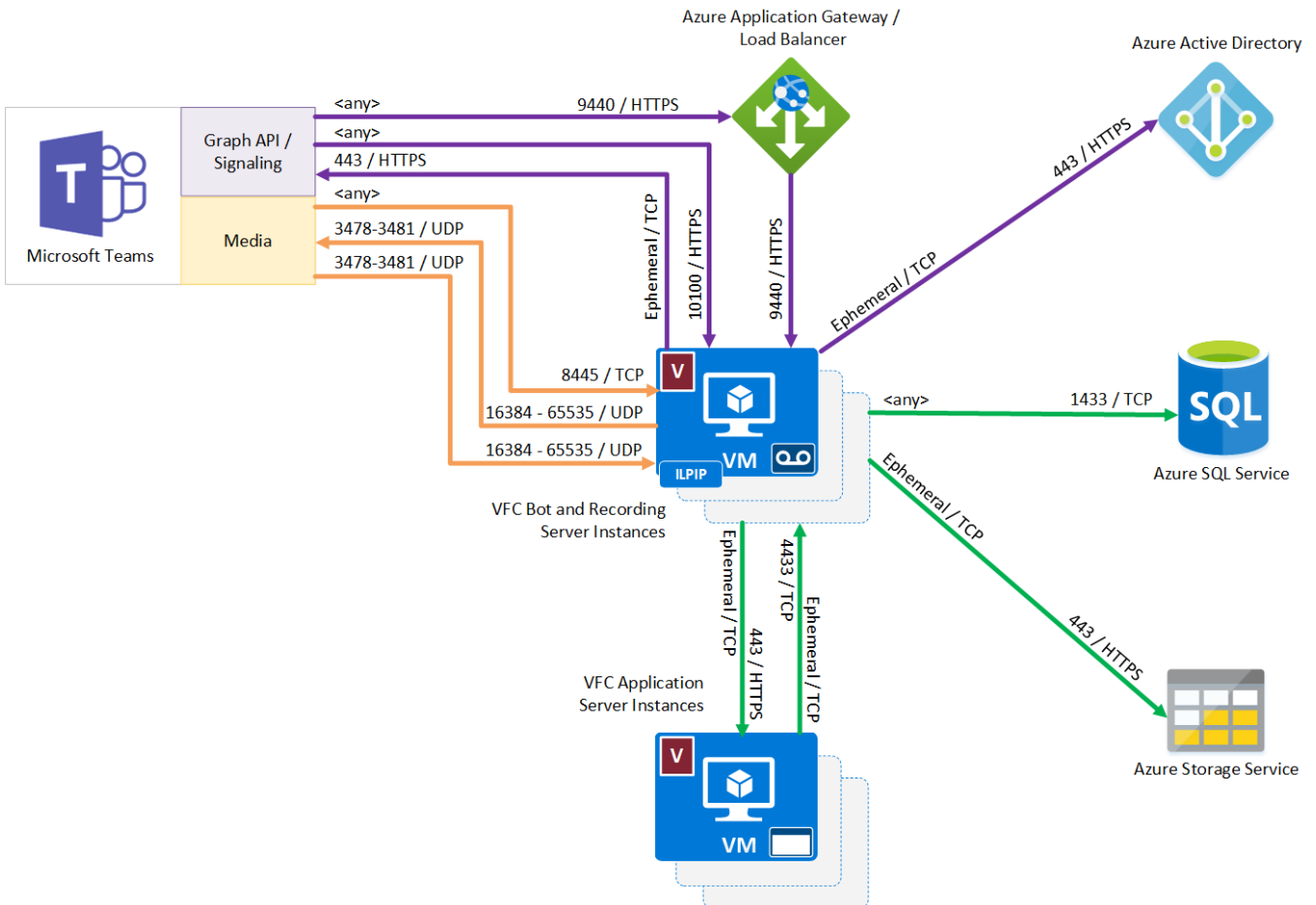


# Firewall configuration for Microsoft Teams recording deployments

This chapter summarizes the required firewall configuration for Microsoft Teams recording deployments.



## Inbound rules

Server	Server Role	Service name	Source	Port	Protocol	Notes
SQL Server	-	-	All Verba Servers	1433	TCP	SQL connection
All Verba Servers	-	Verba Node Manager Agent	Verba Media Repository	4433	TCP	Central configuration from Verba Web Application
Verba Media Repository Server	Media Repository	Verba Web Application	Any	80	TCP	Used for HTTP-based web access
		Verba Web Application	Any	443	TCP	Used for HTTPS-based web access
		Verba Media Streamer and Content Server Service	Any	10105	TCP	Media port for playback via HTTP

		Verba Media Streamer and Content Server Service	Any	10106	TCP	Media port for playback via HTTPS
		Verba Storage Management Service	Verba Recording Server	20111	TCP	Communication with Verba Storage Management services, used for secure file upload
		SQL Server (if co-located on Verba Media Repository)	All Verba Servers	1433	TCP	SQL connection
<b>Verba Recording Server</b>	<b>Recording Server</b>	Verba Microsoft Teams Bot Service	Any It can be only restricted to Azure networks, Microsoft cannot restrict the Teams side to specific IP ranges at the moment. To download Azure IP ranges, see <a href="https://www.microsoft.com/en-us/download/details.aspx?id=56519">https://www.microsoft.com/en-us/download/details.aspx?id=56519</a> Make sure that the IP addresses of the VMs running the bot service are allowed.	8445	TCP	Media control port for Teams
	<b>Recording Server</b>	Verba Microsoft Teams Bot Service	Any It can be only restricted to Azure networks, Microsoft cannot restrict the Teams side to specific IP ranges at the moment. To download Azure IP ranges, see <a href="https://www.microsoft.com/en-us/download/details.aspx?id=56519">https://www.microsoft.com/en-us/download/details.aspx?id=56519</a> Make sure that the IP addresses of the VMs running the bot service are allowed.	9440	TCP	<ul style="list-style-type: none"> <li>▪ Call invite from Teams</li> <li>▪ HTTPS health probe for Azure Traffic Manager and Application Gateway</li> </ul>

<b>Recording Server</b>	Verba Microsoft Teams Bot Service	Any  It can be only restricted to Azure networks, Microsoft cannot restrict the Teams side to specific IP ranges at the moment. To download Azure IP ranges, see <a href="https://www.microsoft.com/en-us/download/details.aspx?id=56519">https://www.microsoft.com/en-us/download/details.aspx?id=56519</a>  Make sure that the IP addresses of the VMs running the bot service are allowed.	10100	TCP	Call control port for Teams
<b>Recording Server</b>	Verba Microsoft Teams Bot Service	Verba Recording Server / Verba Unified Call Recorder Service	10501	TCP	Recording Director connection (it is recommended to deploy the bot and the recording service on the same VM)
<b>Recording Server</b>	Verba Microsoft Teams Bot Service	Verba Recording Server / Verba Unified Call Recorder Service	10502	TCP	Media Recorder connection (it is recommended to deploy the bot and the recording service on the same VM)
<b>Recording Server</b>	Verba Microsoft Teams Bot Service	52.112.0.0/14  <a href="https://docs.microsoft.com/en-us/office365/enterprise/urls-and-ip-address-ranges#skype-for-business-online-and-microsoft-teams">https://docs.microsoft.com/en-us/office365/enterprise/urls-and-ip-address-ranges#skype-for-business-online-and-microsoft-teams</a>	16384 - 65535	UDP	Media port range
<b>Recording Server</b>	Verba Microsoft Teams Bot Service	Any	10038	TCP	Bot service API port
<b>Recording Server</b>	Verba Unified Call Recorder Service	All Verba Servers All Verba Desktop Agents (if used) (plus all playback stations if silent monitoring is used)	10031	TCP	Service API port

## Outbound rules

The Microsoft Teams Bot Service is considered as a standard Microsoft Teams endpoint and the standard firewall rules can be applied.

The following Microsoft documentation contains all the required endpoints and ports which has to be accessible for a Teams endpoint: [Office 365 URLs and IP address ranges](#) (section Skype for Business Online and Microsoft Teams)

In addition, the Microsoft Teams Bot Service uses Microsoft Graph API via the <https://graph.microsoft.com/v1.0> endpoint for sending requests to Microsoft Teams (e.g.: Call answer, Azure AD queries)