Integrace Skype for Business s Asteriskem postup instalace

Verze

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Schvaleno: Kategorie: Předmět: Cílová skupina:	<> Skype for Business Konfigurační manuál Skype for business integrátoři

1. Skype for Business instalace a konfigurace

1.1. Vytvoření sdílené složky

Krok	Popis		
Vytvoření sdílené složky	Vytvořte novou složku na server na kterém později budou nainstalovány Skype for Business komponenty. Složku pojmenujte SFBShare a dejte do adresáře C:\SFBShare		
	Name	Date modified	
	퉬 PerfLogs	8/22/2013 10:52 AM	
	Program Files	8/22/2013 9:50 AM	
	Program Files (x86)	8/22/2013 10:39 AM	
	🎍 SFBShare	6/7/2015 6:01 PM	
	🌗 Users	6/7/2015 5:31 PM	
	🎳 Windows	6/7/2015 4:55 PM	
Přiřazení	Zkontorlujte, že lokální skupina A	dministrators má práva Ful	l Control.
správného	Permissions for SFBShare		
oprávnění	Share Remissions		
	Share Permissions		
Group or user names:			
	Administrators (FE\Administrators)		
	as Everyone		
		Add Remove	
	Permissions for Administrators	Allow Deny	
	Full Control		
	Change		
	Read		
	Klikněte pravým tlačítkem myši na složku -> Properties -> Sharing -> Advanced Sharing ->		
	Zaškrtnout Share this folder -> Pe	rmissions	_

Krok	Popis				
DNS záznamy	Vytvořte DNS záznam	y podle nádleduj	ícího obrázku		
	meet.dplocal.com		CNAME	fe.dplocal.co	m
	dialin.dplocal.com		CNAME	fe.dplocal.co	m
	admin.dplocal.com		CNAME	fe.dplocal.co	m
	lyncdiscoverinterna	l.dplocal.com	CNAME	fe.dplocal.co	m
	sip.dplocal.com		Α	192.168.88.3 FE server)	0 (IP adresa
	_sipinternaltlstcp.	dplocal.com	SRV	sip.dplocal.c port=5061	om,
Konfigurace DNS v MS	Pokud používate MS I Forwarding Zone pro	DNS server, je za dplocal.com don	ootřebí nakonfigur nény	ovat všechny zázi	namy do
DNS serveru		•	DNS Manager		_ 🗆 X
	File Action View Help				T
	 Joc Joc Forward Lookup Zones msdcs.dplocal.com msdcs msdcs	Image intes ites itep udp DomainDnsZones isters isters <td< td=""><td>Start of Authority (SOA) Name Server (NS) Host (A) Alias (CNAME) Host (A) Alias (CNAME) Host (A) Alias (CNAME) Host (A) Alias (CNAME) Alias (CNAME) Host (A) Host (A) Host (A)</td><td>[211], dc.dplocal.com., ho dc.dplocal.com. 192.168.88.31 fe.dplocal.com. 192.168.88.32 192.168.88.32 192.168.88.30 192.168.88.30 fe.dplocal.com. fe.dplocal.com. fe.dplocal.com. 192.168.88.40 192.168.88.41 192.168.88.41</td><td>static static 23. 5. 2017 19:00:00 static static static 24. 5. 2017 16:00:00 static static static 24. 5. 2017 16:00:00 24. 5. 2017 21:00:00 static</td></td<>	Start of Authority (SOA) Name Server (NS) Host (A) Alias (CNAME) Host (A) Alias (CNAME) Host (A) Alias (CNAME) Host (A) Alias (CNAME) Alias (CNAME) Host (A) Host (A) Host (A)	[211], dc.dplocal.com., ho dc.dplocal.com. 192.168.88.31 fe.dplocal.com. 192.168.88.32 192.168.88.32 192.168.88.30 192.168.88.30 fe.dplocal.com. fe.dplocal.com. fe.dplocal.com. 192.168.88.40 192.168.88.41 192.168.88.41	static static 23. 5. 2017 19:00:00 static static static 24. 5. 2017 16:00:00 static static static 24. 5. 2017 16:00:00 24. 5. 2017 21:00:00 static

1.2. Vytvoření DNS záznamů

1.3. Instalace server prerekvizit

Krok	Popis
Aktivace roles a features	Na serveru, kde má být nainstalovaný Skype for Business, spusťte Windows PowerShell jako Administrátor a spusťte následující příkaz. Je zapotřebí aby instalační DVD Windows bylo vloženo v mechanice D:\
	Add-WindowsFeature NET-Framework-Core, RSAT-ADDS, Windows-Identity-Foundation, Web-Server, Web-Static-Content, Web-Default-Doc, Web-Http-Errors, Web-Dir-Browsing, Web-Asp-Net, Web-Net-Ext, Web-ISAPI-Ext, Web-ISAPI-Filter, Web-Http-Logging, Web-Log- Libraries, Web-Request-Monitor, Web-Http-Tracing, Web-Basic-Auth, Web-Windows-Auth, Web-Client-Auth, Web-Filtering, Web-Stat-Compression, Web-Dyn-Compression, NET- WCF-HTTP-Activation45, Web-Asp-Net45, Web-Mgmt-Tools, Web-Scripting-Tools, Web- Mgmt-Compat, Server-Media-Foundation, BITS -Source D:\sources\sxs -Restart



1.4. Instalace Admin Tools

Krok	Popis
Instalace	Mount DVD se Skype for Business a spusťte ho. Případně otevřete DVD jednotku a
Admin Tools	spusťte D:\Setup\adm64\Setup.exe
	Nainstaluje se MS Visual C++ a Skype for Business komponenty, které jsou nainstalovány do složky C:\Program Files\Skype for Business Server 2015

S Executing	Commands	
Checking prerequisite Checking prerequisite Installing sqlncli.msi(F	PowerShellprerequisite satisfied. VCredistprerequisite satisfied. EBOOT=ReallySuppress IACCEPTSQLNCLILICENSETERMS=YES)success	^
Installing SQLSysClrTy Installing SharedMana Installing Setup\Ucma BOOT=1) success	pes.msi(REBOOT=ReallySuppress)success gementObjects.msi(REBOOT=ReallySuppress)success Runtime.msi(REBOOT=ReallySuppress EXCLUDETRACING=1	
Installing AdminTools. INSTALLDIR="C:\Prog	msi(ADDLOCAL=Feature_AdminTools REBOOT=ReallySuppress am Files\Skype for Business Server 2015\")success ad skinning lostall_COatabase	
No roles discovered, s	kipping Enable-CsComputer	

1.5. Příprava Active Directory

Krok	Popis
Deployment Wizard	Spust'te deplyoment wizard C:\Program Files\Skype for Business Server 2015\Deployment\Deploy.exe
	V Deployment wizardu spusťte Prepare Active Directory
	Skype for Business Server 2015 - Deployment Wizard
	Welcome to Skype for Business Server 2015 deployment
	Deploy 🕏
	Prepare Active Directory Prepares the Active Directory schema, forest, and domain for Skype for Business Server. Prepares a single Standard Edition server to host Central Management Service. Note: This task requires local administrator
	Help > Complete rights. This task does not apply to Standard Edition Servers that are not planned to host the Central Management Service or for
	Install of update a Skype for Business Server Server deployment member system
	This option installs Skype for Business Server core components, and a local replica configuration store. Note: Before installing a server, you need to have a valid topology created and published. Install Administrative Tools to the current system. Your deployment requires at least one installation of the Topology Builder.
	Help > Deploy Monitoring Reports Deploy Monitoring Reports to selected SQL Server Reporting Services (SSRS) instances.
	Call Quality Dashboard Skype for Business Server 2015, Call Quality Dashboard is a portal that provides OLAP reports to Skype for Business Server administrators to help troubleshoot Call Quality issues.
	First Run Videos Click to view getting started videos.
Prepare	Běžte krok po kroku
Active	Step 1 : Prepare Schema
Directory	Step 3 : Prepare Current Forest
	Step 5 : Prepare Current domain

Krok Popis Spust'te deplyoment wizard C:\Program Files\Skype for Business Server Deployment Wizard 2015\Deployment\Deploy.exe V Deployment wizardu spust'te Prepare first Standard Edition server х Skype for Business Server 2015 - Deployment Wizard Welcome to Skype for Business Server 2015 deployment 2 Deploy Prepare first Standard Edition server Prepare Active Directory Prepares the Active Directory schema, forest, and domain for Skype for Prepares a single Standard Edition server to Business Server. host Central Management Service. Note: This task requires local administrator Help) Complete rights. This task does not apply to Standard Edition Servers that are not planned to host Install or Update Skype for Business Server System the Central Management Service, or for deployments that include Enterprise Edition. Install or update a Skype for Business Server Server deployment member system. Install Administrative Tools 🗸 This option installs Skype for Business Server core components, and a Installs the Administrative Tools to the local replica configuration store. current system. Note: Before installing a server, you need to have a valid topology created Your deployment requires at least one and published. installation of the Topology Builder. Help) **Deploy Monitoring Reports** Deploy Monitoring Reports to selected SQL Server Reporting Services (SSRS) instances. Call Quality Dashboard Skype for Business Server 2015, Call Quality Dashboard is a portal that provides OLAP reports to Skype for Business Server administrators to help troubleshoot Call Quality issues. First Run Videos Click to view getting started videos. Tato akce nainstaluje SQL Express server pro lokální CMS Databázi Přiřazení práv Po těchto krocích je příprava hotová. Jelikož při přípravě Active Directory se vytvořili speciální skupiny pro správu systému, je potřeba aby doménový Administrátor byl součástí těchto skupin, a tedy měl práva spravovat Skype for Business systém. Na FE serveru či na doménovém kontroleru otevřete Active Directory Users and Computers -> klikněte pravým tlačítkem myši na doménu dplocal.com -> Find -> Do vyhledávacího pole vložte CsAdministrator -> Otevřete skupinu -> Members -> Přidejte dplocal/Administrator. Stejně proveďte pro skupinu RTCUniversalServerAdmins

1.6. Příprava Central Management Service (CMS)

	Active Directory Users and Computers
File Action View Help	Find Users, Contacts, and Groups
	File Edit View
Active Directory Users and Com Saved Queries A dplocal.com Builtin Computers Domain Controllers Mana	Find: Users, Contacts, and Groups In: Im: Im:
 ForeignSecurityPrincipal: Managed Service Accour Users 	General Members Member Of Managed By Members: Name Active Directory Domain Services Folder Administrator dplocal.com/Users
	Search results: Name R. CSAdministr

1.7. Vytvoření Topologie

Krok	Popis
Topology Builder	Spust'te Skype for Business Server Topology Builder, který se nainstalovatl při instalaci Administration Tools. Vytvořte novou topologii. Topology Builder Welcome to Topology Builder. Select the source of the Skype for Business Server topology document. Download Topology from existing deployment Retrieve a copy of the current topology from the Central Management store and save it as a local file. Use this option if you are editing an existing deployment. Open Topology from a local file Open an existing Topology Builder file. Use this option if you have work in progress. New Topology Create a blank topology and save it to a local file. Use this option for defining new deployments from scratch. Uložte novou topologii pod vlastním jménem. Doporučení je ukládat ve formátu data
Nastavení FQDN pro Front-End	Zadejte FQDN Front-End server fe.dplocal.com (nastavené v DNS záznamech). Zvolte Standard Edition Server

	Define New Front End Pool
	Define the Front End pool FQDN
	You may deploy your Front End Server as either an Enterprise Edition pool or a Standard Edition server. FQDN: *
	 Enterprise Edition Front End Pool An Enterprise Edition Front End pool can contain as many as 20 computers for large scale deployments that require load balancing or high availability. The SQL Server instance that hosts the user store and the application store for this pool must be on a server or pool that is running Microsoft SQL Server.
	A Standard Edition server is a single computer for smaller deployments that do not require high availability. The SQL Server instance that hosts the user store and the application store for this Standard Edition server is an instance of SQL Server Express Edition, which is automatically installed.
Nastavení	Nastavte služby, které se na serveru budou využívat.
funkcí a	Define New Front End Pool
služeb	Select features
	Instant messaging and presence are always enabled. Select the additional features that you want this Front End pool to handle.
	Conferencing (includes audio, video, and application sharing)
	Image: Image: Market State
	C Enterprise Voice
	Call Admission Control
	Call admission control (CAC) is an optional component that manages the bandwidth used by unified communications traffic within the deployment. Only one Front End pool per site can enable CAC.
	To enable Exchange Server integration, use Skype for Business Server Control Panel.
	Monitoring (CDR and QoE metrics)
Select	Zanechte zaškrtnute "Collocate Mediation Server"
Collocated	
Associate	Nechte vše prázdé, jelikož v této instalaci není potřeba alokovat Edge server
Server Roles	
with this	
Fornt End	
Pool	
Define the	Jelikož instalujeme Standard edition server, není zde možné vybrat SQL store. Bude totiž
SQL Server	pouzit ten, ktery je jiz predinstalovan na stejnem serveru.
Define the file	Vložte jméno sdílené složky, kterou jsme vytvářeli v předešlých krocích

store	Define New Front End Pool
	Define the file store
	Select an existing file store, or define a new one, to be used by the server. For this Standard Edition Front End Server, the file store can be collocated, or it can be on another single-server pool. The file store must be created manually before you can install it. Use a previously defined file store. Define a new file store. File server FQDN: * fe.dplocal.com File share: * SFBShare
Specify the Web Services URL	External Base URL je automaticky nastaveno na stejné FQDN jako interní Front-End server fe.dplocal.com. Toto můžeme zanechat, jelikož nekonfigurujeme Edge server a externí servisy.
Select an Office Web Apps Server	Jelikož OWAS nebudeme konfigurovat v tomto scénáři odklikneme Finish
Nová	Po dokončení by se nám měla zobrazit nově vytvořená toplogie
Topologie	Skype for Business Server 2015, Topology Builder
	File Action Help
	 Skype for Business Server Lab Lync Server 2010 Lync Server 2013 Skype for Business Server 2015 Standard Edition Front End Servers fe.dplocal.com Enterprise Edition Front End pools Director pools Mediation pools Persistent Chat pools Trusted application servers Video Interop Server pools Shared Components Branch sites
Nastavení	V Topology builder klikněte pravým tlačítkem myši na Skype for Busness Server -> Edit
CMS a	Properties -> Simple URLs a vložte URL pro Administraci https://admin.dplocal.com
Kontrol	
panelu	V Central Management Server a vyberte nový Front-End server

	19	Edit Properties			
	SIP domain Simple URLs	Add Add ^ Remove ^			
	Central Management Server	Make Active Edit URL			
		Meeting URLs:			
		Simple URL SIP domain			
		✓ https://meet.dplocal.com dplocal.com Add			
		Remove			
		Make Active Edit URL			
		Administrative access URL:			
		https://admin.dplocal.com			
		Central Management Server			
		Front End Server to install Central Management Server on:			
		fe.dplocal.com Lab			
		Note: If you want to reassign the Central Management Server after initial deployment, you must follow the procedure described in the Operations section of the product documentation.			
Publish	Jdete na Action -> Publish Topology				
Topology					

1.8. Implementace serveru

Krok	Popis			
Deployment	Opět spusťte Deployment Wizard C:\Program Files\Skype for Business Server			
Wizard	2015\Deployment\Deploy.exe			
	Spust'te Install or Update Skype for Business Server System			
Step 1	Spust'te Step 1 a nainstalujte Local Configuration Store			
	Install Local Configuration Store			
	Configure Local Replica of Central Management Store			
	Data can be retrieved directly from the Central Management store or imported from a file.			
	Retrieve directly from the Central Management store (requires read access to the Central Management store)			
	 Import from a file (recommended for Edge Servers) 			
	To generate a configuration file, run the Export-CsConfiguration cmdlet on a computer that has access to the Central Management store.			
Step 2	Spusťte Step 2 nastavení Skype for Business server komponentů. Ověřte, že nastavení			
	proběhlo ůspěšně			

	Set Up Skype for Business Server Components					
	Executing Commands					
	REBOOT=ReallySuppress INSTALLDIR="C:\Program Files\Skype for Business Server 2015\")success Installing XmppTGW.msi(ADDLOCAL=XmppTGW REBOOT=ReallySuppress INSTALLDIR="C: \Program Files\Skype for Business Server 2015\")success Installing any collocated databases Executing PowerShell command: Install-CSDatabase -Confirm:\$false -Verbose -LocalDatabases - Report "C:\Users\administrator.JDSKYPE\AppData\Local\Temp\2\Install-CSDatabase-[2015_06_08] [14_51_20].html" Enabling new roles This step will configure services, apply permissions, create firewall rules, etc. Executing PowerShell command: Enable-CSComputer -Confirm:\$false -Verbose -Report "C:\Users \administrator.JDSKYPE\AppData\Local\Temp\2\Enable-CSComputer-[2015_06_08][14_52_53].html" Image: Completed					
Step 3 –	Spusťte Step 3 a klikněte na Request					
certifikát	Select a Skype for Business Server Certificate Type and then select a task. Expand the Certificate Type to perform advanced certificate usage tasks.					
	Certificate Friendly Name Expiration Date Location Request					
	▲ Default certificate ✓ Skype for Business Server 2015 9/18/2017 9:56:54 PM Local Assign					
	Server default Skype for Business Server 20 9/18/2017 9:56:54 PM Local Remove					
	Web services internal ✓ Skype for Business Server 20 9/18/2017 9:56:54 PM Local View					
	Skype for Business Server 20 9/18/2017 9:50:54 PM Local					
	• OAuthTokenIssuer ✓ SfB Oath Cert ✓ SfB Oath Cert Ø/18/2017 9:56:54 PM ✓ SfB Oath Cert Ø/18/2017 9:56:54 PM					
Step 3 –	Nastavnte pozadavek jak je uvedeno na obrazku					
∠adost o						
certifikat						

	Les Certificate Request				
	Certificate Request				
	Select a CA from the list detected in your environment.				
	Friendly name:				
	skype for business server 2015 belault certificate 5/25/2017				
	Organization: Lab Organizational unit: Lab				
	Country/Region:				
	Czech Republic 👻				
	State/Province: CZ City/Locality: Prague				
	Selections or more SID domains for which a sin domain), entry in to be added to the subject				
	alternative names list.				
	I⊈ dplocal.com				
	Subject name:				
	fe.dplocal.com				
	Subject alternative name:				
	te.dplocal.com adialin.dplocal.com				
	meet.dplocal.com				
Step 4 – Start služeb	Nyní je potřeba nastartovat služby Skype for business systému.				
	Spusťte PowerShell jako Administrator a spusťte příkaz Start-CsWindowsServices Čekejte, než se spustí všechny služby. To při prvním spuštění může chvíli trvat kvůli replikaci systému.				
	Až příkaz skončí, ověřte, že všechny služby byly korektně spuštěny pomocí příkazu Get- CsWindowsServices				

	Administrator: Windows PowerShell	_ D X		
	Windows PowerShell Copyright (C) 2014 Microsoft Corporation. All rights reserved.	<u>^</u>		
	PS C:\Users\Administrator.DPLOCAL> Get-CsWindowsService			
	Status Name ActivityLevel			
	Running W3SVC Running MASTER Running RASTER Running RTCCLSAGT Running FabricHostSvc Running RTCCLSAGT Running RTCCAA Concurrent Calls=0 Running RTCCAS Concurrent Conferences=0 Running RTCCAS Concurrent Conferences=0 Running RTCCAS Current Active Calls=0 Running RTCPDPAUTH Running RTCPDPAUTH Running RTCPDPCORE Active Client Connections=0,Active Edge Connections=0 Running RTCPDCRE Active Calls=0 Running RTCCPS Total Parked Calls=0 Running RTCASC Current Active Conferences=0,Connected Users=0 Running RTCAMCU Active Conferences=0,Number of Users=0 Running RTCAMCU Active Conferences=0,Number of Users=0 Running RTCAXMCU Active Conferences=0,Connected Users=0 Running RTCAMCU Active Conferences=0,Connected Users=0 Running RTCAMCU Active Conferences=0,Connected Users=0 Running RTCAMCU Active Conferences=0,Connected Users=0 Running RTCAMSU Active Conferences=0,Connected Users=0 Running RTCAMSU Active Conferences=0,Connected Users=0 Running RTCAMSU Active Conferences=0,Connected Users=0 Running RTCMEDSRV Current Outbound Calls=0,Current Inbound Calls=0,Current Outbound Priority Running RTCAMCU RU	0 Calls=0,Current		
Nastavení	V Topology builder klikněte pravým tlačítkem myši na Skype for Busness S	Server -> Edit		
CMS a	Properties -> Simple URLs a vložte URL pro Administraci https://admin.dp	olocal.com		
Kontrol				
panelu	V Central Management Server a vyberte nový Front-End server			
	Edit Properties	_ 		
	SIP domain Simple URLs Simple URLs	Add ^		
	Server Make Active Edit URL			
	Meeting URLs:	,		
	Simple URL SIP domain			
	Thttps://meet.opiocal.com	Add Remove		
	Make Active Edit URL]		
	Administrative access URL:			
	https://admin.dplocal.com			
	Central Management Server Front End Server to install Central Management Server on: fe.dplocal.com Lab Note: If you want to reassign the Central Management Server after initial deployment, the procedure described in the Operations section of the product documentation.	≡ you must follow		
		~		

1.9. Administrace Skype for Business

Krok	Popis
Skype for	Otevřete Internet Explorer a do vyhledávače zadejte https://fe.dplocal.com/cscp
business	
Control panel	
Instalace	Při prvním spuštění prohlížeč požádá o doinstalaci Silverlight
Silverlight	

	Microsoft" Silverlight	nstall Silverlight r diding Install now you accept the Silve ense agreement. iew the Silverlight License Agreeme veright updates automatically. iew the Silverlight Privacy Statement Insta	right at it		
Skype for Jakmile je instalace dokončena, obnovte stránku a spustí se Skype for Busi				for Business Control	
Business	Panel				
Control Panel	X				
	S Skype for Business Server				
	Home STATUS SERVER APPLICATION SIMPLE URL TRUSTED APPLICATION				
	Users	-			
	Topology	٩			
	IM and Presence Get service status	Properties Action 🔻 🕠 Refresh		0	
	Persistent Chat Computer	Pool Si	te Status Replie	ation Version	
	Voice Routing asterisk.dplocal.com	asterisk.dplocal.com La	ab N/A N	/A N/A Shune for Business Server 2015	
	Voice Features	Standard Edition La	io Recieving y	y skype for business Server 2015	

2. AsteriskNOW Instalace

2.1. Instalace systému

Krok	Popis
CD image mount	Připojte image staženého AsteriskNOW systému do CD/DVD mechaniky a spusťte systém
Výběr instalace	Vyberte první možnost instalace jako na obrázku

	Image: Asterisktest v DESKTOP-GT5293R – připojení k virtuálnímu počítači — Soubor Akce Média Schránka Zobrazit Nápověda Image:		×	
	Welcome to FreePBX 6.12.65FreePBX 6.12.65 with Asterisk 11Full InstallFull Install No RAIDFull Install No RAIDFull Install AdvancedHA Install Requires 250G or larger diskFreePBX 6.12.65 with Asterisk 13 (EXPERIMENTAL!!)Full Install			
	Full Install Advanced Full Install Advanced HA Install Requires 250G or larger disk			
	Press [Tab] to edit options			
Nastavení TCP/IP	Press [Tabl to edit options Nastavte IPv4 a manualní konfiguraci, jelikož potřebujeme přiřadit serveru statickou IP Odškrtněte podporu IPv6			
Nastavení statické IP adresy	Nastavte IP adresu pro Asterisk server			



