Lumenvox

Installation (Windows / TEL)

Install the Lumenvox Packages which can be obtained from the Lumenvox site:

http://www.lumenvox.com/knowledgebase/index.php?/article/AA-00627/151/

Install the packages as administrator (right mouse click ... run as administator):

- Engine_(version).exe
- LVTools_(version).exe
- LicenseServer_(version).exe

And then any required languages, for example:

• German_(version).exe

32 Bit Note: Install the 32 Bit Versions.

Host IP and Port 8080 NOTE: The IP Address and Port of the Lumenvox Dashboard should be changed.

The Lumenvox Dashboard uses Port 8080 as standard. You will need to stop any running services on Port 8080 before installation, and then reconfigure Lumenvox to use a different port if this will be a problem.

Also, it is recommended to set the machine IP Address.

The configuration is accessed here:

	MONITORING	LICENSING	DIAGNOSTICS	HELP		
l umen\/ox	Dashboard Su	mmary				
Lumenvox						
Machine Con	figuration Informa	ation				
Parameter	Value					
System Name	LAG-10)				
Operating Syste	m Windov	vs 10 Pro, version 6.	3 build 17134 64-bit			
Machine Type	8 CPUs	s, 3408 MHz, 15.94 0	GB memory			
	47000					
Software Versior System Uptime	0 Days	0 (64-dit) , 0 hrs, 11 mins, 54 s	ecs,			
Software Versior System Uptime	0 Days	0 (64-bit) , 0 hrs, 11 mins, 54 s	ecs,			
Software Versior System Uptime Summary of I	0 Days	0 (64-bit) , 0 hrs, 11 mins, 54 s es	ecs,			
Software Versior System Uptime Summary of I Service	umenVox Servic	0 (64-bit) .0 hrs, 11 mins, 54 s es	ecs,			
Software Versior System Uptime Summary of I Service Manager	LumenVox Servic	0 (64-bit) 0 hrs, 11 mins, 54 s es S Start (S)	ecs, Stop C Restart	Configuration	III Stats	Cogs
Software Version System Uptime Summary of I Service Manager License Server	LumenVox Servic Status Online	0 (04-Dit) 0 hrs, 11 mins, 54 s es ⊘ Start ⊗ s ⊘ Start ⊗ s	ecs, Stop C Restart Stop C Restart	Configuration	II Stats	Logs
Software Versior System Uptime Summary of I Service Manager License Server Media Server	LumenVox Servic Status Online Online	0 (04-Dit) 0 hrs, 11 mins, 54 s es	ecs, Stop C Restart Stop C Restart Stop C Restart	Configuration	II Stats II Stats II Stats	Logs
Software Version System Uptime Summary of I Service Manager License Server Media Server ASR Server	LumenVox Servic Status Online Online Online	0 (04-Dit) 0 hrs, 11 mins, 54 s es ♥ Start ♥ Start ♥ Start ♥ Start ♥ Start ♥ Start ♥ Start ♥ Start	ecs, Stop C Restart Stop C Restart Stop C Restart Stop C Restart	Configuration Configuration	III Stats III Stats III Stats III Stats	Logs
Software Version System Uptime Summary of I Service Manager License Server Media Server ASR Server TTS Server	LumenVox Servic Status Online Online Online Online	o (o4-bit) o hrs, 11 mins, 54 s es	Stop C Restart Stop C Restart Stop C Restart Stop C Restart Stop C Restart Stop C Restart Stop C Restart	Configuration Configuration Configuration Configuration	I Stats I Stats I Stats I Stats I Stats I Stats I Stats	Logs

And can be changed here (click on advanced first), then change the MACHINE_IP and ADMIN_PORT as necessary:

е

SUMMARY	MONITORING	LICENSING	DIAGNOSTICS	HELP	
<u>Summary</u> > Mar	nager > Configuration				
Manager C	onfiguration Inf	ormation			Basic Intermediate Advanced
[SETTINGS]					
Parameter		Value		Default	Description
MACHINE_IP		10.42.15.16	i	127.0.0.1	▶ IP address of the local machine.
LOGGING_VEF	RBOSITY	1		1 (Low)	Controls the verbosity of event logging
INTERVAL		1000		1000	Interval between scans (in milliseconds)
ENABLEAUTHE	INTICATION		D	0 (disabled)	► Login authentication mode
USERNAME		LVAdmin		LVAdmin	When authentication mode is enabled, a username with this value is required for remote access
PASSWORD		•••••	S)	LVPassword	When authentication mode is enabled, a password with this value is required for remote access
ADMIN_PORT		8100s		8080s	▶ HTTP Port used by the Dashboard.
HTTP_LOGGIN	G		D	0 (disabled)	▶ Enables HTTP access logging to file. 0 (false) = disabled. 1 (true) = enabled
ACCESS_CON	TROL_LIST				Specify an optional access control list (ACL).
SSL_CERT_FIL	E				Specifies full path to SSL certificate (*.pem) file to use.
SSL_PROTOCO	DL	TLSv1.2	•	TLSv1.2	Specifies the Protocol to use during SSL negotiation.
CIPHER_LIST					Optional Cipher List to use during SSL negotiation.
PROCESS_MO	NITOR_LIST				An optional comma delimited list of process names for which to monitor resources.
RESOURCE_LO	DG_INTERVAL	60		60	Specifies the frequency of snapshots taken for resource logging, in seconds

Set Environment Variable

Set the following environment variable to the lang directory of the installation, for example:

LVLANG=D:\LumenVox\Engine\Lang

License Configuration

Configure the license server using the Lumenvox Dashboard:

SUMMARY	MONITORING	LICENSING	DIAGNOSTIC	5 HELP		
LumenVox	Dashboard Su	mmary				
Machine Con	figuration Inform	ation				
Parameter	Value					
System Name Operating Syste Machine Type Software Versio	LAG-10 em Windov 8 CPUs n 17.0.60) vs 10 Pro, version 6 s, 3408 MHz, 15.94)0 (64-bit)	.3 build 17134 64-bit GB memory			
System Uptime	0 Days	, 0 hrs, 22 mins, 50	secs,			
Summary of	LumenVox Servic	es		(
Service	Status	3				
Manager	Online	🐼 Start 💌	Stop C Restart	Configuration	I Stats	📝 Logs
License Server	Online	Start 🛛 🛞	Stop C Restart	Contiguration	II Stats	Dogs 📝
Media Server	Online	Start 🛞	Stop C Restart	Configuration	II Stats	📝 Logs
ASR Server	Online	Start 🛛 🛞	Stop C Restart	🔧 Configuration	II Stats	📝 Logs
			atom a Destant	A Configuration	. L. Stoto	

Click Advanced, enter the License Server GUID and enable Flexible Licensing Mode. Then click Update Settings and Restart Service.

SUMMARY	MONITORING	LICENSING	DIAGNOSTICS	HELP		
Summary > License	e Server > Configuratio	n				
License Serv	ver Configurati	ion Informatio	n (127.0.0.1)			Basic Intermediate Advanced
[GLOBAL]						
Parameter		Value			Default	Description
PORT_NUMBER		7569			7569	Port number used by the license server to listen for connecting license clients
LOGGING_VERBO	OSITY	1			1 (Low)	Controls the verbosity of event logging
LICENSE_SERVE	RGUID					Unique ID associated with license server in LumenVox Flexible Licensing database
FLEXIBLE_LICEN	ISING_MODE				0 (disabled)	▶ If enabled (1), License Server will start in "flexible" licensing mode
USE_FLEX_REPC	ORTING_HTTPS	DISABLED			0 (disabled)	Controls HTTPS use with Flexible reporting.
FLEX_REPORTIN	IG_PORT	80			80	▶ HTTP Port used to connect to LumenVox Flexible Licensing system.
FLEX_REPORTIN	IG_PORT_HTTPS	443			443	▶ HTTPS Port used to connect to LumenVox Flexible Licensing system.
FLEX_DESIRED_S	SYNC_HOUR	0			0	▶ The hour at which flexible licensing reports should be initiated.
FLEX_DESIRED_	SYNC_MINUTE	0			0	\blacktriangleright The minute at which flexible licensing reports should be initiated.
FLEX_NODE_LIST	Т	flexlicense1.lum	envox.com;flexlicense2	2.lumenv	(see notes)	List of HTTP licensing nodes used in flexible licensing mode.
FLEX_NODE_LIST	T_HTTPS	flexlicense-s01.	umenvox.com;flexlicen	se-s02.lu	(see notes)	▶ List of HTTPS licensing nodes used in flexible licensing mode.
Update Settings						
~			_			
Start Service	Stop Service	C Restart Serv	ice			

Run Diagnostics

Next, run diagnostics:



This will let you know what other settings you should change.

It is recommended to check the following settings:

ASR Server Configuration

Check that the UNKNOWN_LANGUAGE_VALUE is set to an installed and licensed language.

Summary > ASR Server > Configuration						
ASR Server Configuration Infor	mation (127.0.0.1)			Basic	Intermediate	Advanced
[SRE]						
Parameter	Value	Default	Description			
SRE_PORTNUM	5730	5730	Port number used by the ASR to listen for cor	necting cli	ents	
ENABLE_CACHE		1 (enabled)	Enables writing of cached grammars to disk			
CACHE_EXPIRATION	1440	1440	▶ Number of minutes a cached grammar is in	active befo	re it is removed	
CACHE_MAX_NUMBER	1000	1000	Maximum number of grammars loaded into m	emory befo	ore oldest are remov	ed
CACHE_MAX_MEMORY	268435456	268435456	Maximum bytes of memory used by cached g	rammars b	efore oldest are rem	oved
NUM_DECODE_THREADS	4	4	► Maximum number of concurrent decode job	s that the S	SRE server will run	
FRAME_TRACK_MODE	2	2	Determines how available resources are used scoring	I to track in	formation required for	or confidence
CRITICAL_MEMORY_THRESHOLD	100	100	Memory threshold in MB for critical memory b	ehavior		
LOW_MEMORY_THRESHOLD	250	250	Memory threshold in MB for low memory beha	avior		
LIMITED_MEMORY_THRESHOLD	750	750	Memory threshold in MB for limited memory b	ehavior		
FST_DETERMINIZE_SUBSET_LIMIT	50000	50000	The maximum size a subset list can grow dur	ing FST de	terminization before	it gives up
LOGGING_VERBOSITY	1	1 (Low)	Controls the verbosity of event logging			
PUBLIC_RULE_ACTIVATION_MODE	DISABLED	0 (disabled)	Enables or disables public rule activation			
UNKNOWN_LANGUAGE_VALUE	AmericanEnglish	AmericanEnglish	String value to use if unknown language iden	tifier is spe	cified in a grammar	
ENABLE_APP_STAT_LOGGING	1	1 (enabled)	Updates statistics file when enabled. 0 = disa	bled		
OUT_OF_SERVICE	DISABLED	0 (disabled)	▶ Enables or disables out-of-service mode			

Update Settings

Start Service Stop Service CRestart Service

ASR Languages Installed

AmericanEnglish	
BritishEnglish	
German .	

Media Server Configuration

Change the MRCP_SERVER_IP to the ip address of the local machine.

Also, change the SIP PORT used to something other than 5060, if SIP is also running on the machine for telephony purposes.

Summary > Media Server > Configuration			
Media Server Configuration	Information		Basic Intermediate Advanced
[GLOBAL]			
Parameter	Value	Default	Description
MRCP_SERVER_IP	127.0.0.1	127.0.0.1	\blacktriangleright IP address of local machine to use when communicating with clients
MRCP_SERVER_PORT_BASE	20000	20000	Lowest numbered port that will be used for MRCP
RTP_SERVER_PORT_BASE	25000	25000	Lowest numbered port that will be used for RTP/RTCP
NUM_CHANNELS	200	200	Maximum number of channels
MRCP_SERVER_RESMAX	auto	auto	Maximum number of concurrent resources
MESSAGING_PORT	7590	7590	Port used to communicate with LVManager
SRE_IP	127.0.0.1	127.0.0.1	IP address of machine running ASR
ENABLE_SRE_LOGGING	0 (none) •	0 (none)	Controls the amount of data collected in callsre files
ENABLE_APP_STAT_LOGGING	1	1	0 = Disable, 1 = Enable logging statistics information
LISTENING_SOCKET_SIZE	5	5	Number of sockets that are allowed to backlog on the listen function
PORT_ALLOCATION_MODE	0 (Round-Robin)	0 (Round-Robin)	Port allocation mode
NUM_SPAWNING_THREADS	auto	auto	Number of threads dedicated to handling RTSP and SIP session creation
NUM_GRAVEYARD_THREADS	auto	auto	Number of threads dedicated to performing RTSP and SIP session cleanup
NUM_MRCP_EVENT_THREADS	auto	auto	Number of MRCP processing threads
NUM_RTP_EVENT_THREADS	auto	auto	Number of RTP processing threads
SIP PORT	5060	5060	Port used for SIP communication

Diagnostics

Run diagnostics again. You should receive an error for the TTS engine - this is normal, but otherwise all other diagnostics should run OK.

jtel 8-Server Configuration

Binaries

Configuration

Download all Configuration files to the \8Server\Config directory.

https://cdn.jtel.de/downloads/asr/LumenVox/csClient.cfg https://cdn.jtel.de/downloads/asr/LumenVox/csDirector.cfg https://cdn.jtel.de/downloads/asr/LumenVox/csUDPListener.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogClientFile.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogDirectorCMD.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogDirectorFile.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogDirectorFile.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogDirectorFile.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogResServerFILE_LV.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogUDPListenerCMD.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogUDPListenerCMD.cfg https://cdn.jtel.de/downloads/asr/LumenVox/LogUDPListenerCMD.cfg

Check the following settings:

Setting	Configuration Files	Value
Server_Name	ALL FILES	Change this setting appropriately. For example acd-tel1 RESSERVER Lumenvox or acd-tel1 DIRECTOR.
Paths	ALL FILES	Check all paths for c:\8Server\ and change all if you have installed to another location.
UDP_Broadcast_IP_Addr ess	ALL FILES	Change this in all files to the local network UDP broadcast address for discovery purposes. This setting is important even with just one server, as the CLIENT (DLL), DIRECTOR (ROUTING) and RESSERVER (the actual ASR Server) need to find eachother even on the local machine.
Recogniser_DLL_Name	csResServerLV.cfg	Make sure this points to \8Server\bin\StdRecLV.dll
Recogniser_Name	csResServerLV.cfg	Lumenvox
Recogniser Count	csResServerLV.cfg	Set this to the number of licensed channels.
Recogniser_Language_C ount	csResServerLV.cfg	Set this to the number of licensed languages.
Recogniser_Language_0	csResServerLV.cfg	Set this to the language ID of the first licensed language.
		See the following table for details:
		https://docs.microsoft.com/en-us/windows/win32/intl/language-identifier-constants-and-strings
		Simply select the licensed language (for example LANG_GERMAN, SUBLANG_GERMAN), and convert the first column (in this case 0x0407) to decimal. This is the required value.
Recogniser_Language_1	csResServerLV.cfg	If further languages are licensed, keep adding new keys to this section as required.

Startup Configuration

Add the following lines to the start of \8Server\bin\startup.cmd

(further taskkill are here) ...

taskkill /im csUDPListener.exe /f
taskkill /im csDirector.exe /f
taskkill /im csResServer.exe /f

Add the following lines to the end of \8Server\bin\startup.cmd

```
start "Director" csDirector ..\Config\csDirector.cfg
start "Resserver" csResServer ..\Config\csResServerLV.cfg
...
(down here \8Server\bin\robot5.exe is started)
```

8-Server Configuration

Change the following in 8-Server configuration:

Voice recognition
L&H Loquendo Nuance 9 vr csDirector MRCP Settings Number of channels to load: 4 Configuration Parameter file : C:\8Server\Config\csClient.cfg Allocate resources locally first, then remote
Settings Number of channels to load: 4 Configuration Parameter file : C:\8Server\Config\csClient.cfg Allocate resources locally first, then remote
Number of channels to load: 4
Configuration Parameter file : C:\8Server\Config\csClient.cfg []
Parameter file : C:\8Server\Config\csClient.cfg
Allocate resources locally first, then remote
OK Cancel

Set the number of channels to load to the total number of licensed ASR channels.

Cleaner Set up

c:\8Server\bin\clean_local_asr_logfiles.cmd

ForFiles /p "c:\8Server\log" /s /d -10 /c "cmd /c del /q @file" set errorlevel=0

Then set up this file with the scheduler for 00:00 at night, run with elevated privileges (as administrator).