

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 administrator):

- **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:

SUMMARYMONITORINGLICENSINGDIAGNOSTICSHelp

LumenVox Dashboard Summary

Machine Configuration Information

Parameter	Value
System Name	LAG-10
Operating System	Windows 10 Pro, version 6.3 build 17134 64-bit
Machine Type	8 CPUs, 3408 MHz, 15.94 GB memory
Software Version	17.0.600 (64-bit)
System Uptime	0 Days, 0 hrs, 11 mins, 54 secs,

Summary of LumenVox Services

Service	Status							
Manager	Online	Start	Stop	Restart	Configuration	Stats	Logs	
License Server	Online	Start	Stop	Restart	Configuration	Stats	Logs	
Media Server	Online	Start	Stop	Restart	Configuration	Stats	Logs	
ASR Server	Online	Start	Stop	Restart	Configuration	Stats	Logs	
TTS Server	Offline	Start	Stop	Restart	Configuration	Stats	Logs	

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

SUMMARY
MONITORING
LICENSING
DIAGNOSTICS
HELP

[Summary](#) > Manager > Configuration

Manager Configuration Information
Basic
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[SETTINGS]

Parameter	Value	Default	Description
MACHINE_IP	10.42.15.16	127.0.0.1	► IP address of the local machine.
LOGGING_VERBOSITY	1	1 (Low)	► Controls the verbosity of event logging
INTERVAL	1000	1000	Interval between scans (in milliseconds)
ENABLEAUTHENTICATION	DISABLED	0 (disabled)	► Login authentication mode
USERNAME	LVAdmin	LVAdmin	When authentication mode is enabled, a username with this value is required for remote access
PASSWORD	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_LOGGING	DISABLED	0 (disabled)	► Enables HTTP access logging to file. 0 (false) = disabled. 1 (true) = enabled
ACCESS_CONTROL_LIST			► Specify an optional access control list (ACL).
SSL_CERT_FILE			► Specifies full path to SSL certificate (*.pem) file to use.
SSL_PROTOCOL	TLSv1.2	TLSv1.2	Specifies the Protocol to use during SSL negotiation.
CIPHER_LIST			► Optional Cipher List to use during SSL negotiation.
PROCESS_MONITOR_LIST			► An optional comma delimited list of process names for which to monitor resources.
RESOURCE_LOG_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:

SUMMARYMONITORINGLICENSINGDIAGNOSTICSHelp

LumenVox Dashboard Summary

Machine Configuration Information

Parameter	Value
System Name	LAG-10
Operating System	Windows 10 Pro, version 6.3 build 17134 64-bit
Machine Type	8 CPUs, 3408 MHz, 15.94 GB memory
Software Version	17.0.600 (64-bit)
System Uptime	0 Days, 0 hrs, 22 mins, 50 secs,

Summary of LumenVox Services

Service	Status							
Manager	Online	Start	Stop	Restart	Configuration	Stats	Logs	
License Server	Online	Start	Stop	Restart	Configuration	Stats	Logs	
Media Server	Online	Start	Stop	Restart	Configuration	Stats	Logs	
ASR Server	Online	Start	Stop	Restart	Configuration	Stats	Logs	
TTS Server	Offline	Start	Stop	Restart	Configuration	Stats	Logs	

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

SUMMARYMONITORINGLICENSINGDIAGNOSTICSHelp

Summary > License Server > Configuration

License Server Configuration Information (127.0.0.1)

BasicIntermediateAdvanced

[GLOBAL]

Parameter	Value	Default	Description
PORT_NUMBER	7569	7569	Port number used by the license server to listen for connecting license clients
LOGGING_VERBOSITY	1	1 (Low)	Controls the verbosity of event logging
LICENSE_SERVER_GUID			Unique ID associated with license server in LumenVox Flexible Licensing database
FLEXIBLE_LICENSING_MODE	ENABLED	0 (disabled)	If enabled (1), License Server will start in "flexible" licensing mode
USE_FLEX_REPORTING_HTTPS	DISABLED	0 (disabled)	Controls HTTPS use with Flexible reporting.
FLEX_REPORTING_PORT	80	80	HTTP Port used to connect to LumenVox Flexible Licensing system.
FLEX_REPORTING_PORT_HTTPS	443	443	HTTPS Port used to connect to LumenVox Flexible Licensing system.
FLEX_DESIRED_SYNC_HOUR	0	0	The hour at which flexible licensing reports should be initiated.
FLEX_DESIRED_SYNC_MINUTE	0	0	The minute at which flexible licensing reports should be initiated.
FLEX_NODE_LIST	flexlicense1.lumenvox.com;flexlicense2.lumenvox.com	(see notes)	List of HTTP licensing nodes used in flexible licensing mode.
FLEX_NODE_LIST_HTTPS	flexlicense-s01.lumenvox.com;flexlicense-s02.lumenvox.com	(see notes)	List of HTTPS licensing nodes used in flexible licensing mode.

Update Settings

Start Service

Stop Service


Restart Service

Run Diagnostics

Next, run diagnostics:

SUMMARYMONITORINGLICENSINGDIAGNOSTICSHelp

System Diagnostics

Run Diagnostic Tests

Perform a series of configuration and functional tests, generating a report

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 Information (127.0.0.1)

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[SRE]

Parameter	Value	Default	Description
SRE_PORTNUM	<input type="text" value="5730"/>	5730	Port number used by the ASR to listen for connecting clients
ENABLE_CACHE	<input checked="" type="checkbox"/> ENABLED	1 (enabled)	Enables writing of cached grammars to disk
CACHE_EXPIRATION	<input type="text" value="1440"/>	1440	» Number of minutes a cached grammar is inactive before it is removed
CACHE_MAX_NUMBER	<input type="text" value="1000"/>	1000	Maximum number of grammars loaded into memory before oldest are removed
CACHE_MAX_MEMORY	<input type="text" value="268435456"/>	268435456	Maximum bytes of memory used by cached grammars before oldest are removed
NUM_DECODE_THREADS	<input type="text" value="4"/>	4	» Maximum number of concurrent decode jobs that the SRE server will run
FRAME_TRACK_MODE	<input type="text" value="2"/>	2	Determines how available resources are used to track information required for confidence scoring
CRITICAL_MEMORY_THRESHOLD	<input type="text" value="100"/>	100	Memory threshold in MB for critical memory behavior
LOW_MEMORY_THRESHOLD	<input type="text" value="250"/>	250	Memory threshold in MB for low memory behavior
LIMITED_MEMORY_THRESHOLD	<input type="text" value="750"/>	750	Memory threshold in MB for limited memory behavior
FST_DETERMINIZE_SUBSET_LIMIT	<input type="text" value="50000"/>	50000	The maximum size a subset list can grow during FST determinization before it gives up
LOGGING_VERBOSITY	<input type="text" value="1"/>	1 (Low)	» Controls the verbosity of event logging
PUBLIC_RULE_ACTIVATION_MODE	<input type="checkbox"/> DISABLED	0 (disabled)	» Enables or disables public rule activation
UNKNOWN_LANGUAGE_VALUE	<input type="text" value="AmericanEnglish"/>	AmericanEnglish	String value to use if unknown language identifier is specified in a grammar
ENABLE_APP_STAT_LOGGING	<input type="text" value="1"/>	1 (enabled)	Updates statistics file when enabled. 0 = disabled
OUT_OF_SERVICE	<input type="checkbox"/> DISABLED	0 (disabled)	» Enables or disables out-of-service mode

Update Settings

☒ Start Service☒ Stop Service☒ Restart 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

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[GLOBAL]

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

Copy all files from `\8Server\deploy\OEM\JTEL\ClientServer\Release` to the `\8Server\bin` directory.

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/csResServerLV.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/LogResServerCMD_LV.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/LogUDPListenerFile.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_Address	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_Count	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
```

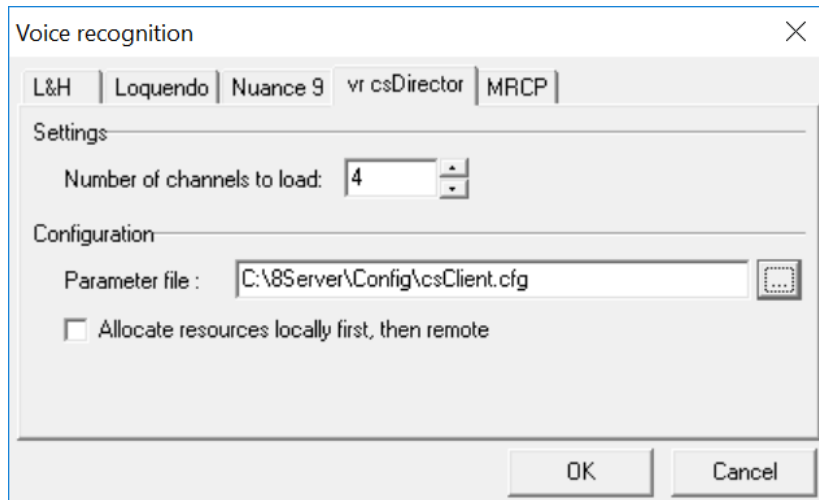
Add the following lines to the end of **\8Server\bin\startup.cmd**

```
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:



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

Cleaner Set up

Set up the following batch file to clean the local log files:

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).