

# Configuration speech analysis software of EML



## Administration manual for system providers and tenants

7/25/2019

### Product line neo, version 6.x

The described functions can be used with the following ASC products:

INSPIRATIONneo

Please note that you can always find the most up-to-date technical documentation and product updates in the partner area on our website at <http://www.asctechnologies.com>.

Copyright © 2019 ASC Technologies AG. All rights reserved.

Windows is a registered trademark of Microsoft Corporation. VMware® is a registered trademark of VMware, Inc. All other marks and names mentioned herein may be trademarks of their respective companies.

**ASC Technologies AG - Seibelstr. 2-4 - 63768 Hösbach - Germany**



## Contents

<b>1</b>	<b>General information .....</b>	<b>4</b>
<b>2</b>	<b>Introduction .....</b>	<b>5</b>
<b>3</b>	<b>Licenses .....</b>	<b>6</b>
<b>4</b>	<b>Configuration.....</b>	<b>7</b>
4.1	Information .....	7
4.2	Configure INSPIRATIONneo server.....	7
4.2.1	Configure NAS drive .....	7
4.2.2	Activate replay.....	8
4.2.3	Activate export .....	8
4.2.4	Configure EML clients .....	9
4.2.4.1	Configure keyword spotting.....	10
4.2.4.2	Configure real-time keyword spotting.....	11
4.2.4.3	Configure transcription .....	12
4.2.5	Deactivate audio analysis (SAES) .....	12
4.3	Configure real-time keyword spotting.....	13
4.4	Export transcribed recording .....	15
	<b>Glossary .....</b>	<b>19</b>

## 1 General information

In the context of this document ASC represents ASC Technologies AG, its subsidiaries, branch offices, and distributors. An up-to-date overview of the aforementioned entities can be found at <https://www.asctechnologies.com>

ASC assumes no guarantee for the actuality, correctness, integrity or quality of the information provided in the manuals.

ASC regularly checks the content of the released manuals for consistency with the described hardware and software. Nevertheless, deviations cannot be excluded. Necessary revisions are included in subsequent editions.

Some aspects of the ASC technology are described in general terms to protect the ownership and the confidential information or trade secrets of ASC.

The software programs and the manuals of ASC are protected by copyright law. All rights on the manuals are reserved including the rights of reproduction and multiplication of any kind, be it photo mechanical, typographical or on digital data media. This also applies to translations. Copying the manuals, completely or in parts, is only allowed with written authorization of ASC.

Representative, if not defined otherwise, is the technical status at the time of the delivery of the software, the devices and the manuals of ASC. Technical changes without specified announcements are reserved. Previous manuals lose their validity.

The general conditions of sales and delivery of ASC in their latest version apply.

## 2 Introduction

This manual describes the configuration of the audio analysis software EML Transcription Server of the company EML European Media Laboratory GmbH to be used with the ASC recording system.

EML Transcription Server allows transcribing audio into text or detecting keywords which can then be searched for.

Audio analysis jobs are configured and administrated in the Audio Analysis module of the application INSPIRATION<sup>neo</sup>.



---

Additional information about creating audio analysis jobs and about how to use them can be found in the user manual *Usage Audio Analysis module*.

---

### ASC licenses for transcription

License name	Number
INSPIRATION <sup>neo</sup> or INSPIRATION <sup>neo</sup> Advanced or INSPIRATION <sup>neo</sup> for Compliance Server Basic	1 per system
Transcription Analytics	1 per channel
Import & Export	1 per system

Tab. 1: Licenses of ASC

### ASC licenses for keyword spotting

License name	Number
INSPIRATION <sup>neo</sup> or INSPIRATION <sup>neo</sup> Advanced or INSPIRATION <sup>neo</sup> for Compliance Server Basic	1 per system
Keyword Spotting Analytics	1 per channel
Import & Export	1 per system

Tab. 2: Licenses of ASC



When calculation the number of channels, keep in mind the following processing times:

Transcription is carried out in real time.

Example: 24 hours of audio recording are transcribed within 24 hours.

Keyword spotting is carried out in 2.5-time real time.

Example: 60 hours of audio recordings are processed within 24 hours.

## 4 Configuration

For the configuration, this manual uses the following IP addresses by way of example:

1. 192.168.169.3 - EML server
2. 192.168.169.4 - INSPIRATION<sup>neo</sup> server

### Preconditions

- Required licenses are available (see [chapter "Licenses"](#), p. 6).
- An operative EML server with a minimum of one EML decoder
- Audio analysis has been deactivated (see [chapter "Deactivate audio analysis \(SAES\)"](#), p. 12).



For information about how to install the EML server refer to the installation manual for system providers *Installation speech analysis software of EML Windows version* or *Installation speech analysis software of EML Linux version*.

### 4.1 Information

Before you start the configuration, make sure that the following information is available:

- IP address of the EML server
- IP address of the INSPIRATION<sup>neo</sup> server.

#### Installation values of the following parameters (from the installation of the EML Transcription Server)

- engineID
- projectName
- queueName
- channels
- supportedLanguages

### 4.2 Configure INSPIRATION<sup>neo</sup> server

In a distributed architecture, the following string must be added between the Java configuration strings in the file *Domain.xml* in the directory *C:\Program Files (x86)\ASC\ASC Product Suite\glassfish4\glassfish\domains\enterprisecore\config\*:

```
<jvm-options>-Dcom.asc.settings.EnableMachinelessAnalytics=true</jvm-options>
```

Example:

```
<java-config classpath-suffix="" debug-options="" agentlib:jdwp=transport=dt_socket,server=y,suspend=n,address=9009" system-classpath="">
```

```
<jvm-options>-Dcom.asc.settings.EnableMachinelessAnalytics=true</jvm-options>
```

```
</java-config>
```

We speak of a distributed architecture when the option *Transfer data for replay* or *Transfer data for data storage* in the Setup module of the application System Configuration in the tab *Usage > Data processing* has been activated. See administration manual for system providers *Configuration servers and recording architectures*.

#### 4.2.1 Configure NAS drive

1. Configure a [NAS](#) drive for the audio analysis.  
Make sure that the respective tenant has been assigned in the tab *Tenant*.

2. By means of the Windows Explorer, create a target directory on the [NAS](#) drive, e. g. ...NAS \TranscriptionAnalyse.



For information about the configuration of drives refer to the administration manual *ASC System Configuration - Configuration drives*.

#### 4.2.2

##### Activate replay

1. Start the application System Configuration on the INSPIRATION<sup>neo</sup> server.
2. Log in as system administrator.
3. Select the menu item *Setup > Servers*.
4. In the detail view of the server *192.168.169.4*, click on the tab *Usage*.

##### Group field Replay

<i>Replay</i>	<p>Activate the check box <i>Replay</i> to be able to use the replay function of the players.</p> <p><input checked="" type="checkbox"/> = Function has been activated. The entry field <i>Replay server</i> becomes active.</p> <p><input type="checkbox"/> = Function has not been activated.</p>
<i>Replay server</i>	In the entry field <i>Replay server</i> , enter the name which is supposed to denote the server as the replay server in the system.

Tab. 3: Configure replay

1. Click on the button *Save* to apply the entries.

#### 4.2.3

##### Activate export

1. Start the application System Configuration on the INSPIRATION<sup>neo</sup> server.
2. Log in as system administrator.
3. Select the menu item *Setup > Servers*.
4. In the detail view of the server *192.168.169.4*, click on the tab *Usage*.

[Details\\*](#)
[Usage\\*](#)
[Media Streamer](#)
[Replay Server Address Mapping](#)

**Data Processing**

☒ Data storage

☐ Transfer data for replay

Target Server

Name IP Address ↕

☐ Transfer data for data storage

Target Server

Name IP Address ↕

Activate period of time ☐

from

to

Receives data from

Name Only Replay

No records found

☒ Archiving

☒ Export

☒ Import

Save Reset

Fig. 1: Activate export function

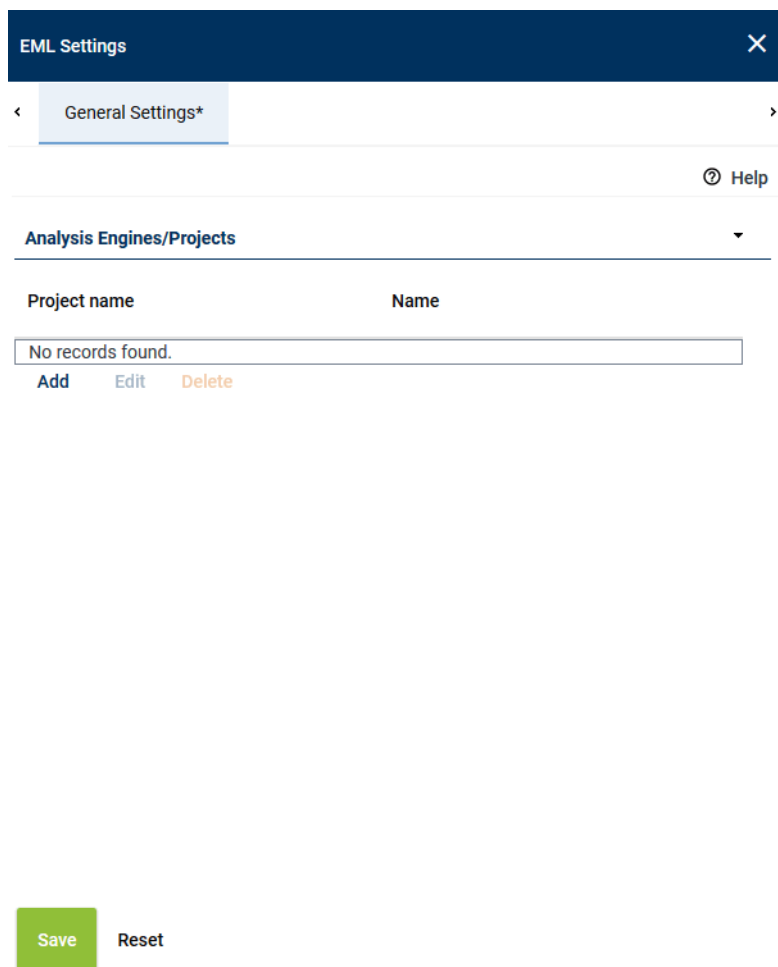
5. In the group field Data Processing, activate the check box *Export*.
6. Click on the button *Save* to apply the entries.



For information about the configuration of the server refer to the installation manual *Configuration of servers and recording architectures*.

#### 4.2.4 Configure EML clients

1. Start the application System Configuration on the INSPIRATION<sub>neo</sub> server.
2. Log in as 1st tenant-admin.
3. Select the menu item *Clients*.
4. In the main view, click on *EML Settings*.
  - ⇒ The following window appears:



**EML Settings** [X]

< General Settings\* >

[?] Help

**Analysis Engines/Projects** ▼

Project name	Name
No records found.	

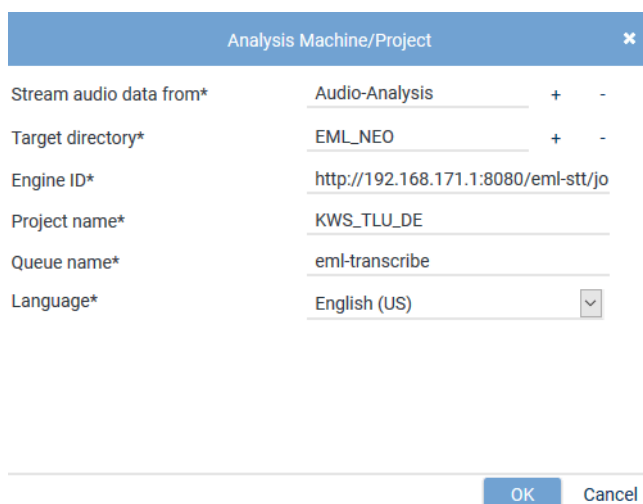
Add Edit Delete

Save Reset

Fig. 2: Detail view EML settings (example)

5. Click on the button *Add*.
6. Select an option. The following options are available:
  - Keyword spotting (see [chapter "Configure real-time keyword spotting", p. 11](#))
  - Real-time keyword spotting (see [chapter "Configure keyword spotting", p. 10](#))
  - Transcription (see [chapter "Configure transcription", p. 12](#))

#### 4.2.4.1 Configure keyword spotting



**Analysis Machine/Project** [X]

Stream audio data from\* Audio-Analysis + -

Target directory\* EML\_NEO + -

Engine ID\* <http://192.168.171.1:8080/eml-stt/jo>

Project name\* KWS\_TLU\_DE

Queue name\* eml-transcribe

Language\* English (US) ▼

OK Cancel

Fig. 3: Configure keyword spotting (example)

<i>Stream audio data from</i>	Click on the button <b>+</b> to select the server from the list from which the audio data is supposed to be streamed.
<i>Target directory</i>	Click on the button <b>+</b> to select the server from the list on which the audio data is supposed to be exported for audio analysis.
<i>Engine ID</i>	In the entry field, enter the <a href="#">URL</a> of the EML server (e. g. <a href="http://192.168.171.1/eml-stt/jobSubmit">http://192.168.171.1/eml-stt/jobSubmit</a> ).
<i>Project name</i>	Enter the project name in the entry field which has been configured in the EML system.
<i>Queue name</i>	In the entry field, enter the value configured in the EML system (e. g. <i>eml-transcribe</i> ).  If a customer configures its own EML system, enter the queue name in the entry field which has been configured in the EML system.
<i>Language</i>	Select a language.

1. Click on the button **Save** to apply the settings.

#### 4.2.4.2 Configure real-time keyword spotting

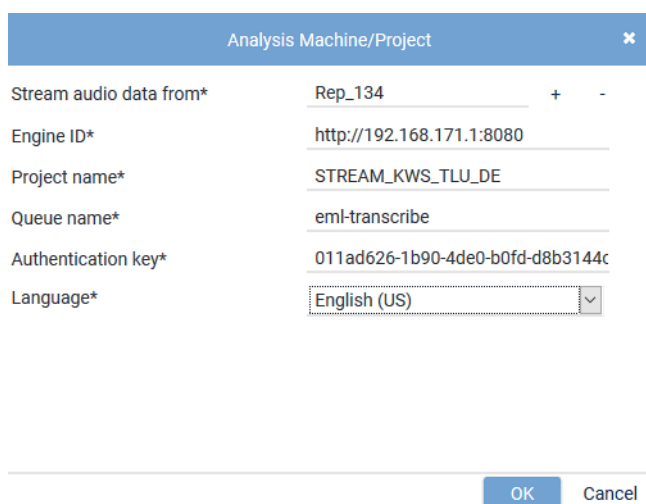


Fig. 4: Configure real-time keyword spotting (example)

<i>Stream audio data from</i>	Click on the button <b>+</b> to select the server from the list from which the audio data is supposed to be streamed.
<i>Engine ID</i>	In the entry field, enter the <a href="#">URL</a> of the EML server (e. g. <a href="http://192.168.171.1:8080">http://192.168.171.1:8080</a> ).
<i>Project name</i>	Enter the project name in the entry field which has been configured in the EML system.
<i>Queue name</i>	In the entry field, enter the value configured in the EML system (e. g. <i>eml-transcribe</i> ).  If a customer configures its own EML system, enter the queue name in the entry field which has been configured in the EML system.
<i>Authentication key</i>	In the entry field enter the key configured in the EML system. See <a href="#">chapter "Configure real-time keyword spotting", p. 13</a> .
<i>Language</i>	Select a language.

1. Click on the button **Save** to apply the settings.

#### 4.2.4.3 Configure transcription

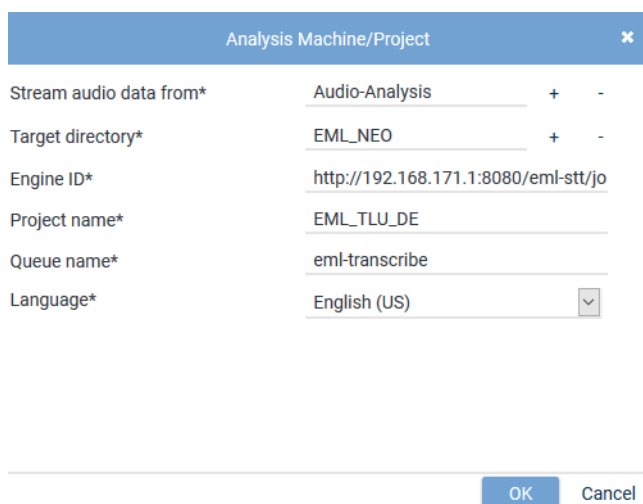


Fig. 5: Configure transcription (example)

<i>Stream audio data from</i>	Click on the button <b>+</b> to select the server from the list from which the audio data is supposed to be streamed.
<i>Target directory</i>	Click on the button <b>+</b> to select the server from the list on which the audio data is supposed to be exported for audio analysis.
<i>Engine ID</i>	In the entry field, enter the <a href="#">URL</a> of the EML server (e. g. <a href="http://192.168.171.1/eml-stt/jobSubmit">http://192.168.171.1/eml-stt/jobSubmit</a> ).
<i>Project name</i>	Enter the project name in the entry field which has been configured in the EML system.
<i>Queue name</i>	In the entry field, enter the value configured in the EML system (e. g. <i>eml-transcribe</i> ).  If a customer configures its own EML system, enter the queue name in the entry field which has been configured in the EML system.
<i>Language</i>	Select a language.

1. Click on the button **Save** to apply the entries.

#### 4.2.5 Deactivate audio analysis (SAES)

If audio analysis is active, proceed as follows to deactivate audio analysis:

1. Start the application System Configuration on the INSPIRATION<sup>neo</sup> server.
2. Log in as system administrator.
3. Select the menu item *Setup > Servers*.
4. In the detail view of the server *192.168.169.4*, click on the tab *Usage*.

Details\*
Usage\*
Media Streamer
Replay Server Address Mapping

### Audio Analysis

☐ Audio analysis (SAES mode)

Stream audio data from\*  + -

☒ Emotion detection

Stream audio data from\*  + -

### Recording Control/Key Management

### Data Processing

### Replay

☒ Replay

Replay server\*

WebSocket port\*   
(max. 5 characters)

API server\*

+

-

Name ↕	Connection Status
Audio-Analysis	OK

### Virtualization

Save

Reset

Fig. 6: Activate replay function

## Group field Audio Analysis

<i>Audio analysis</i>	Deactivate this check box. <input checked="" type="checkbox"/> = Function has been activated. <input type="checkbox"/> = Function has not been activated. <b>NOTICE!</b> The <b>SAES</b> service is not used. Since the option <i>Audio analysis</i> automatically starts the <b>SAES</b> service automatically, this check box must have been deactivated.
-----------------------	--

### 4.3 Configure real-time keyword spotting

To be able to configure real-time keyword spotting, an authentication key must be created in the EML Streaming Service and the language must be configured. This data must then be saved in the application System Configuration in the Clients module. See [chapter "Configure real-time keyword spotting", p. 11](#).

#### Create key

1. Open the EML Streaming Service.
2. Click on the menu *Keys*.
3. Click on the button *Add Key*.

⇒ The window *Add Key* appears.

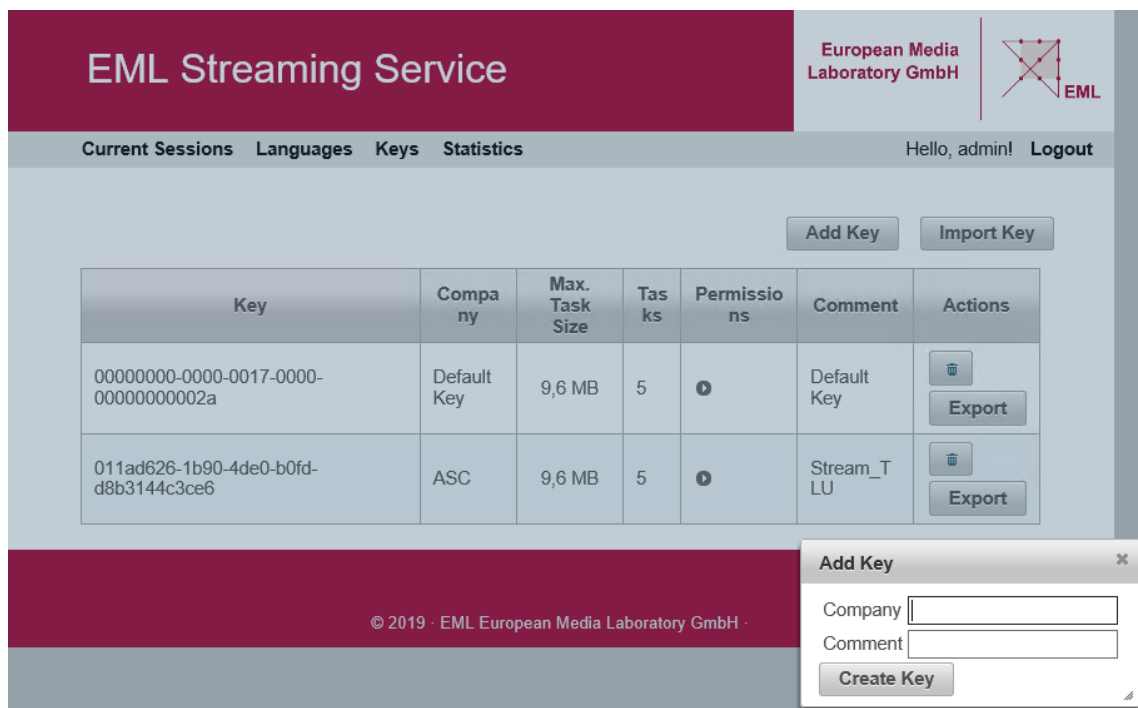


Fig. 7: Create key

4. Enter your company name and a comment.
5. Click on the button *Create Key* to create the key.

### Configure language

1. Click on the menu *Languages* and subsequently on *Manage Projects*.  
⇒ The window *Configure Projects* appears.

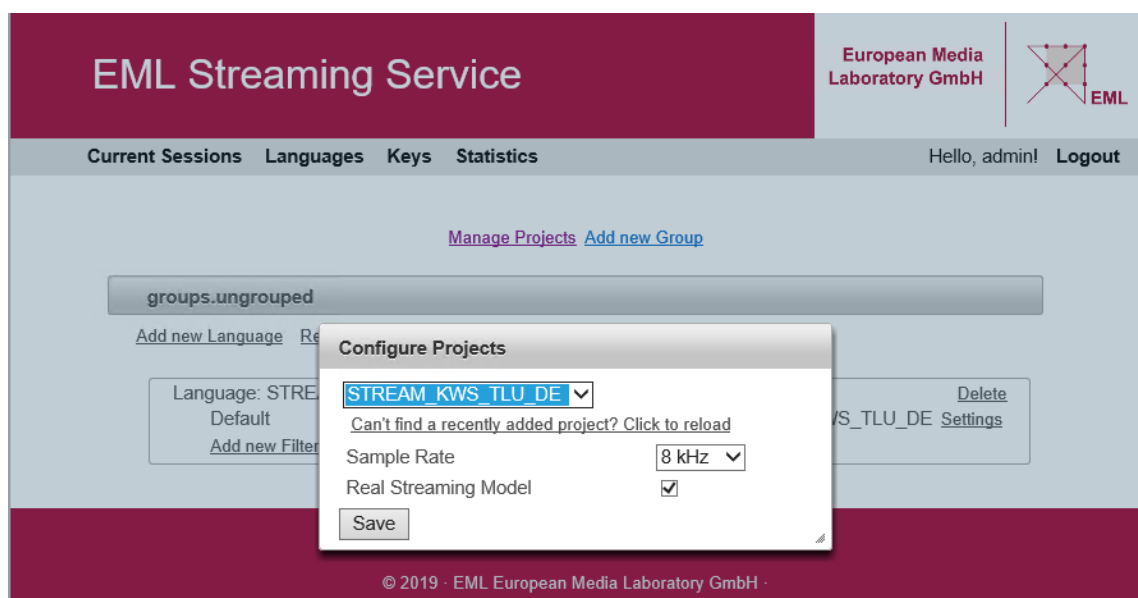


Fig. 8: Create key

2. Select the project created for real-time keyword spotting during the installation.
3. Activate the check box *Real Streaming Model*.
4. Click on the button *Save* to save the configuration.
5. Click on the menu item *Add new Language*.

⇒ The window *Settings* appears.

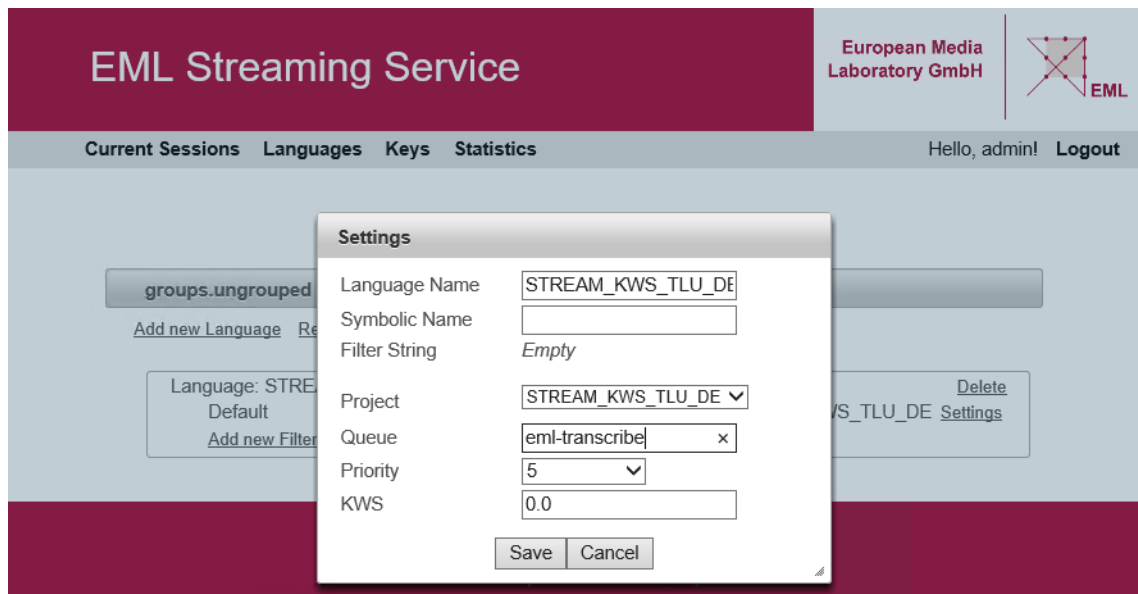


Fig. 9: Create key

6. Under *Language Name*, enter the same name that you have used as project name for real-time keyword spotting.
7. In the entry field, enter the value configured in the EML system (e. g. *eml-transcribe*).
8. Select the priority. 0 = lowest priority and 9 = highest priority.
9. Click on the button *Save* to save the configuration.

#### 4.4

#### Export transcribed recording

##### Configure NAS drive

1. Configure a [NAS](#) drive for the export of the transcription. Make sure that the respective tenant has been assigned in the tab *Tenant*.
2. By means of the Windows Explorer, create a target directory for the export of the transcription on the [NAS](#) drive, e. g. ...NAS\TranscriptionExport.



For information about the configuration of drives refer to the administration manual *ASC System Configuration - Configuration drives*.

##### Create transcription job (audio analysis job)



For information about the Audio Analysis module refer to the user manual *INSPIRATIONneo - Audio Analysis module*.

1. Create a transcription job (audio analysis job) in the Audio Analysis module.
2. Select the tab *Transcription*.
3. Activate the option *Export transcription*.
4. In the drop-down list *Format*, select one of the following options:
  - TXT
  - XML
5. Select the [NAS](#) drive as target drive that you want to export the transcribed recording to.
6. In the entry field *Target directory*, enter the directory into which the transcribed recording is supposed to be exported, e. g. TranscriptionExport.

- 
7. If required, activate the option *Remove NOISE elements*.

## List of figures

Fig. 1	Activate export function.....	9
Fig. 2	Detail view EML settings (example).....	10
Fig. 3	Configure keyword spotting (example).....	10
Fig. 4	Configure real-time keyword spotting (example).....	11
Fig. 5	Configure transcription (example).....	12
Fig. 6	Activate replay function .....	13
Fig. 7	Create key.....	14
Fig. 8	Create key.....	14
Fig. 9	Create key.....	15

### List of tables

Tab. 1	Licenses of ASC.....	6
Tab. 2	Licenses of ASC.....	6
Tab. 3	Configure replay.....	8

---

## Glossary

### NAS

---

Network Attached Storage is a file-level computer data storage server connected to a computer network providing data access to other devices on the network. NAS is usually used to provide independent storage capacity in a computer network without major effort. (Source: Wikipedia 4th May 2017)

### SAES

---

Speech Analysis Engine Service

### URL

---

Uniform resource locator. Identifies and locates a resource (e. g. a website) about the used access method (e. g. the used network protocol as HTTP or FTP) and the location of the resource in the computer network. (Source: Wikipedia 20th November 2013)