



Subtitle Edit

(ver. 3.6)

Technical Report

*SE Users and Designers
are invited to the dialogue about
incomplete or controversial points of this Report*

=<>=

Copyright Page

S-PM 210400



"SE - Subtitle Edit — Technical Report"

about the Nikolaj Lyngge Olsson work as available at URL: <https://www.nikse.dk>
by Pietro Moras (E-mail: Studio-PM@hotmail.com) — licensed under a:
Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License

No commercial uses, No modifications allowed; Jurisdiction International.

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.

To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/>

or send a letter to Creative Commons, 444 Castro Street, Suite 900, Mountain View, California, 94041, USA.

Current edition PDF file “SE[3.6]-TR”

at URL: <https://app.box.com/s/4fcab4qbwbj520y09z3tjkw4jen7gc30>

as available under “Creative Commons License”.

Disclaimer The information in this document is subject to change without notice. The author and publisher have made their best efforts about the contents of this book, nevertheless the author and the publisher make no representation or warranties of any kind with regard to the completeness or accuracy of the contents herein and accept no liability of any kind including but not limited to performance, merchantability, fitness for any particular purpose, or any loss or damages of any kind caused or alleged to be caused directly or indirectly from this book.

Brand Names Brand names such as Windows, Linux, Apple are assumed to be universally known, and are here used in full respect of their respective owners.

Planned edition On paper, under traditional copyright

Published by [*not yet—just appointed*] Town & Country Reprographics, Inc.
230 N Main St Concord, NH 03301 (U.S.A.)

All rights reserved No part of this book may be reproduced or used in any form or by any means, such as: graphic, electronic, or mechanical, including photocopying, recording, videotaping, or information storage and retrieval systems, without written permission of the publisher. The media possibly accompanying this book contain software resources to be considered as an integral part of the same book, and therefore subject to the same rules.

Foreword

S-PM 210200¹

Dear Reader,

Here is this “SE (Subtitle Edit) – Technical Report” to enrich the collection of Reports so far produced² under the same basic principles characterizing this whole testing and documentation production.

That is, in summary:

- ◆ All what you'll read here is the result of a test & documentation project carried on in fair collaboration with the related s/w producer but, nevertheless, in total independence from him.
- ◆ Besides positive technical documentation and instructions, also our possible doubts, perplexities and difficulties have been here fairly reported.
- ◆ Technical dialogue with you is strongly encouraged, to the obvious benefit of all involved parties. To some extent we'll measure the effectiveness of this Report by the amount of feed-back originated, as an evidence of the active role that the user community of such advanced s/w products, as SE is, should be entitled to play. Active role that we strongly advocate and welcome.

Throughout this Report you'll happen to read some non-impersonal statements, such as in the following “Viewpoint” section.

Viewpoint

As an overall assessment, to date, SE can be compared to a rough diamond, precious, rich in facets and a little indecipherable. Still waiting to be scrapped and cleaned in order to highlight its full value.

□

Non-impersonal statements—in contrast with the customary impersonal authoring of technical documentation—here expressed by the pronoun “we”. Well, it's that our purpose, and ambition, is to speak and operate on behalf of the Users' community, this the reason. Your feed-back also about such ambition is welcome.

The Author

—◇—

1 Section marker [§], with: “S-PM” short for “Studio-PM” and “yymdd” as date-code. Sections with a more recent date-code are intended to supersede older ones. <↳ This is how this Tech.Report will be selectively updated.

2 See at: <https://app.box.com/s/oao1kv62t2hct18scc3t>
<https://eric-ide.python-projects.org/eric-documentation.html>

Essentials

S-PM 210200

Essential reference data, so to precisely identify the product we are talking about, its hosting environment, prerequisites, and execution procedure.

Version Reference

Nr	Item	Version	Note
1	Microsoft Windows 10	2004 Build 19041.867 (64 bit)	Host Operating System
2	Microsoft Windows 7	6.1 Build 7601:S.P.1 (32 bit)	Alt. Host Operating System
3	Subtitle Edit	3.6	Program, main version

Subject “Subtitle Edit – Technical Report”, short form: “SE-TR”

Prerequisite Standard operating system, as here listed, both 64 or 32 bit;
then such SubtitleEdit-3.6.0-Setup.exe downloaded from <https://www.nikse.dk> web site.
Nothing else.

Execution Just after setup execution, SE is immediately up and running. Possible further setting, tuning and add-on will be described hereafter in this Report, where and when required.

Particularly relevant is the Video player on which SE will rely [*see sct.:* Video Command Menu \ Requisite].

□

What & Where in the Internet

SE Program Home: <https://www.nikse.dk>
Docs: <ToBeCompleted>
Contact: nikse.dk@gmail.com

S-PM Report Storage: Box, Inc.
Deliver (“AsIs”): <https://app.box.com/s/4fcab4qbwbj520y09z3tjkv4jen7gc30>
Contact: Studio-PM@hotmail.com

—◇—

Subtitles: Terms & Concepts

Special activities require specialized words, indeed here are introduced those related to what we'll be talking about³, now on. If we are to communicate and understand each other, the preliminary and fundamental requisite and condition is to convene and agree clearly and unambiguously about the meaning of the specific terms we are going to use dealing with the elements of our activity. Here the declared purpose is not lexicographical or so—to that purpose there are other and more qualified sources—, but eminently practical, operative.

<⚡ Please, do not proceed without paying the due attention to each and all the following terms, and to the implied concepts.

□

Terms

Subtitle generic term referred to the main subject of this SE program. So generic, that we'll accurately avoid using it alone, without such necessary specification as: *Subtitle File*, *Format*, or *Text*. With, in particular, the *Subtitle Text* typically composed by just one or, at most, two *Lines*; not more⁴.

<◊> Here *Italics* and initial Capital letter are used to signify, and recall, that we are deliberately using a standard term with a precise meaning in a given technical context.

Remark

Throughout this Report all such terms as: *Subtitle Text*, *Record*, *List view*, *Table*, *Row*, *Column*, *Record Field* are usually written with initial capital letter, so to clearly recall their conventional meaning and role. Convention strictly observed at first, then gradually relaxed.

□

File term here assumed as universally known to signify: ordered set of *Records*, each structured into a precise set of *Data items*, or *Elements*, or *Fields*. Such as, as in the case of our specific interest (that is *Subtitle files*): *Initial time*, *End time*, ... and *Text*. Files are typically stored into a computer mass storage where they are identified by a Name, characterized by a Type extension, and a Path.

Subtitle Record may also be called *Subtitle Fragment*. Or, when here seen associated to the related Soundtrack segment: *Subtitle Unit*.

Record Field File as an ordered set of *Records*, *Record* as an ordered set of distinct *Fields*; this last concept particularly relevant dealing with *Subtitle Records*, composed, indeed, by distinct *Fields*, such as: *Start time*, *End time*, *Duration* and *Text*. *Text Field* possibly, in its turn, comprising *Markup Tags* (such as: ``) and plain *Lines* of text.

Timestamp encoded time information about an event. Thus a *Subtitle record* may be described as

3 Cf.: “El mundo era tan reciente, que muchas cosas carecían de nombre, y para mencionarlas había que señalarlas con el dedo.”, excerpt from “Cien años de soledad”, by G. G. Márquez (1969 ca.); worth reading in original.

4 Nonetheless, here we feel no need for such further subtle definitions as “Closed Caption” (CC), or so.

composition of: *Timestamps* and *Text*; usual *Text*, comprising, at most, two *Lines*.

Remark

Subtitle files may actually be of two distinct types:

- *Text format files* – most popular specimen: SubRip⁵ Text format, file extension “.srt”. With SE, it is the format of reference [*cf. sct.:* Program Window \ Format, and *cmd:* File > Save as...]. Rather common are also the “.ttml” Timed Text Markup Language, “.dfxp” Distribution Format Exchange Profile, also “.ttml”-based, and the “.xml” formats.
- *Binary format files*, that is Raster (Text) Image Files – most popular specimen: Blu-Ray “Subtitle Bitmap”, file extension “.sup”. Bridge between these two formats is the technique of *Optical Character Recognition*. SE deals with this binary text kind of formats exclusively through File > Import and Export commands [*see*].

□

<🔗> Main purpose of this SE – Subtitle Edit program is, indeed, to edit, that is to read, play, test, modify and write such Subtitle files.

<!!> Note that the other multimedia Video/Audio files, here relevant, can be exclusively read and played, that is NOT edited with SE.

□

Table a convenient way of representing the a Subtitle file, in *Row*–Records and *Column*–Fields. A given Column, on a given Row, identifies what is called a Cell, that is, in Record terms, a given Field of a given Record [*see sct.:* Subtitle View and Video Work Area].

*Media*⁶ / *Multimedia* here typically to signify recorded Video (moving visual images) and Audio (sound, music, speech) sequences, flowing in the same Timeline. The same term can be used to signify either the h/w container, that is: package, tape, disc; and also the contents, that is: data file⁷.

The only Media here of practical interest are those manageable with a computer where the SE program can be installed and can operate. Media which SE is supposed to exclusively read and Play, that is certainly not to create nor modify, and typically associated with a distinct, autonomous Subtitle file, which is the main object of the SE functionality. In case, as it is possible, a Multimedia already comprises also its own Subtitles, in that case SE cannot play any editing role on them.

Virtual Screen form on the SE Window operating as an independent device where to play Video Media.

5 SubRip is a GNU GPL free program to extract (“rip”) subtitles from various video to a text file. With its subtitle format's file extension “.srt”, widely supported.

6 Actually a term used both as a singular and plural form. The original singular form “medium” in this context is ignored.

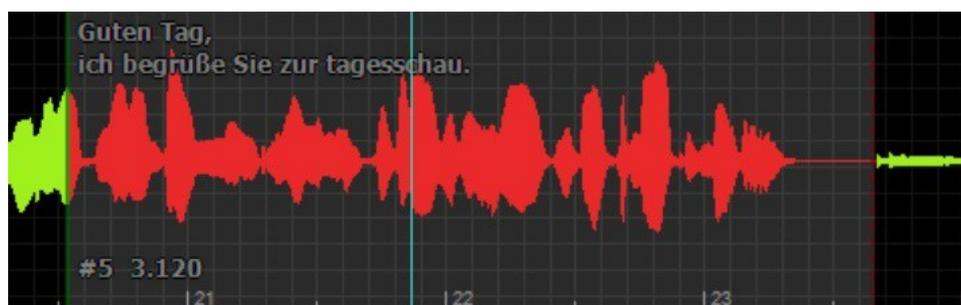
7 Files of typical extensions: “.mov”, “.mp4”.

<i>Virtual Monitor</i>	perfectly analogous to “Screen”, but here conventionally reserved to the display of Soundtrack's Waveform, Timeline & related [see <i>scf.</i> : Program Window & Context Menus]. Here we found rather convenient to introduce this conventional distinction between <i>Screen</i> and <i>Monitor</i> .
<i>Movie</i>	Movable (“moving”) Image, synonym to film. Sequence of images giving the illusion of continuous movement.
<i>Still Image</i>	as the opposite of Movable Image. Single static image, with as “intermediate” condition that of a Still Image inserted into a Movie.
<i>Audio</i>	Sound, that is all speech, music and noises, associated to a movie.
<i>Inscription</i>	writings possibly “burnt” onto some Movie sequence. Typically Titles, Names, Comments, such things; nothing to do with Subtitles as here intended. Also actual Subtitles can be “burnt” onto Movies, in that case SE has nothing to do with them, in the sense that they are out of its control.
<i>Segment</i>	contiguous portion of a <i>linear sequence</i> , as with a “line segment”; here typically: Soundtrack or Video Segment. □
<i>Interval</i>	contiguous portion of <i>time</i> ; here typically: Timeline Interval.
<i>Timeline</i>	common timing scale for each and all Media in a given Multimedia; that is, typically: Video and Sound. Same time-reference is adopted by Subtitle too, with a difference: Video and Sound Timeline is out of SE control, whereas Subtitle timing is part of the Subtitle editing activity.
<i>Waveform</i>	is a way of representing a Soundtrack, with a horizontal time-scale (here: <i>Timeline</i>) and a vertical sound volume indicative scale. It's the representation here in use.
<i>Soundtrack</i>	all sound, music, speech and noise, associated to a Video along the same Timeline. □

Remark

It is so frequent to talk about different Subtitle set in different conditions that we assumed here convenient to propose the following specific terminology [*N.B.: the only somewhat “original” terms proposed in this Report*].

Unit a contiguous Timeline interval associated to a single Subtitle Record, conveniently represented “transparently” over the Waveform on the Soundtrack monitor – as in the following figure [*cf. also: Main Tasks and Soundtrack Work Area*].



It may be convenient to talk of Subtitle Unit, instead of Record or Fragment, when you'd rather consider it not exclusively in itself, but together with the associated Video and Audio segments, in the common time interval instead.

<.> For practical reasons the single term “*Subtitle*”, when not otherwise specified, is here generally assumed to signify “*Subtitle Record*”, as a practical synonym of *Unit*.

Void a continuous Timeline segment where no Subtitle Record is defined. As an extension of the above concept, it can also be considered as a Unit, a “Void Unit”. In this sense, a whole movie without Subtitles can be defined as “Void”.

Gap void *interval* between successive Subtitle Records.

<.> Do not undervalue the expressive role of “Gaps” between Subtitles: their extensions will limit the persistence of last Subtitle Text on the screen, and create a visual pause before the next one.

Blank is defined “Blank” a Subtitle Record with an empty Text field. Of course “Void” and “Blank” are not the same thing, even though the result on the screen is the same.

Silent is defined “Silent” a Subtitle Record containing Text not corresponding to any speech, or sound; that is, more sort of a caption than a Subtitle. To some extent a Silent Timeline interval is the inverse of a Void one, in the sense that:

- Silent is a Subtitle text *without* corresponding *Sound* in that Unit,
- whereas Void is an interval of Sound *without* corresponding Subtitle *Text*.

—<>—

Concepts

Time

“Time” is here operationally defined as that thing you measure with a watch, in Hours, Minutes, Seconds and decimal fractions of second: hh:mm:ss.msec. More precisely here, at least for what Subtitle editing is concerned, we are dealing exclusively with *Intervals of time*, as defined by the Media considered, from which SE derives its time values; that is: Timeline, Start, End and Duration.

“Absolute time”, “Event time” and “Real time”—whatever it means—is a Media's concern, only indirectly relevant for SE, through what is here convenient to call “Media time”, that is the proper Video and Audio Multimedia Time.

Preferred SE reference time is anyhow that of the Audio Media. The Video's and then Subtitle's time are conveniently derived from that primary reference, which is assumed as the “Media reference time”. There is a reason for that:

- Video-media is recorded and played as a discrete sequence of images, each of which could well be considered and viewed as a still image, that is independently from time.
- Audio in general, and speech in particular, is necessarily a time-sequence event, both whether considered as a real event or as a recorded and played (i.e. reproduced) one. There is not such thing as a meaningful “still”-sound, as a still-image can be. That is why the audio-timing is here considered as the unambiguous reference for Movie and Subtitles synchronization.
- Subtitles, meant to reflect voice and sounds, are laid upon images where they appear as still for an interval of time, so to be read by the viewer. It is with his reading action that the viewer re-assigns a time sequence to the still text image.

<.> All that here said also to unambiguously deal with such things and concepts as: film frames, “.srt” subtitle file type real timing, SMPTE timing (drop frame) and variable frame rate.

□

Line

A text may be subdivided into “lines”, separated by <CR> / <LF>, or
 if expressed in Markup terms. Subtitles texts can be subdivided into lines, usually not more than two.

Unfortunately, at present, SE makes a sad confusion between this neat and clear concept and such other completely different concepts, as: Subtitle Record and Subtitle List view of row and columns. There are innumerable examples of that Babelic confusion [*cf.*: Insert subtitle after this line..., Extend to line, Adjust durations for selected lines...], which is our firm opinion should be thoroughly and all fixed, without hesitation.

—◇—

What, How and Why

What

“SE – Subtitle Edit” program—hereafter, in short, “SE”—deals with Subtitle files as an added functionality to Video files. SE comes handy to modify and tune Subtitle files with respect to the associated Video, to create translated version of existing ones, and also to create them from scratch. Purpose of this Report is to describe in detail all such functionalities and that, as a rule, after having tested them on a real case, on such computer configuration as here of reference [*see*: Version Reference *above*]⁸.

Remark

For what we know⁹ SE can operate exclusively on usual Subtitle and Video computer files, that is not on Subtitles and Videos as, for instance, “frozen” on such media as DVDs. And that, apart from any possible legal constraint. For this reason throughout this report we'll always talk not generically of Subtitles and Videos, but always specifically of “Subtitle files” and “Video files”.

□

How

Anyhow the stated purpose doesn't come without the acceptance of some intended limits¹⁰, among which there is the exclusion of some subjects here just hinted at, as considered off-scope and more suited to be possibly described by dedicated papers [*not here considered*]. Examples:

- Edit > Multiple replace... a command comprising advanced Find & Replace editing tools and Regular Expression, here just cited [*see*];
- Too specialized elements, such as the esoteric: Proxy server settings, Token endpoint, FFmpeg [*cf.*].
- Dedicated functionalities belonging to cultural environment and practice unknown to us [*e.g.*: “*Right-To-Left*” writing, *non-Latin Character Encoding*], and whose availability is a major SE quality not deserving to be spoiled with a shabby description.

□

Inversely some other SE features, minor, or too specialized, or highly intuitive, will not be here minutely described, but left to the user's creative understanding; as it would be highly impractical or merely impossible do to otherwise¹¹. Examples:

- Tool-icons, as in the Tool Bar [*see*], here assumed as not requiring any dedicated and detailed description.
- Command short-cuts, as Ctrl+Z, Ctrl+Y, in the Edit menu.

8 Obviously leaving to each user the freedom of choosing any other compatible environment he wants, along with the consequent burden of taking care of the necessary and, hopefully, easily manageable specific differences.

9 That is to say: anyhow glad to be better informed.

10 Then, of course, there certainly are also some un-intended, unintentional limits. Surely another story...

11 In that accepting M. Talleyrand's advice: “*Surtout, pas trop de zèle*”, with a fastidious doubt, though: how much is “*trop*”?

Very common, similar or identical commands as: Open, Close, Save;
available in different menus and that will be described only once, if ever;
then simply referred to, if ever.

Detailed description of the “Alt” keystroke in getting, or not, such underlined keyboard shortcut characters:



as here shown in the Help menu.

-◇-

Why

At the origin of our interest for Subtitles is the desire of really understanding the point of view of others, as shown by original TV-News openly available on a public “Mediathek” (=media library), that is, in the case of interest for us, in the German language. German is not among the two-three languages we understand, therefore the availability of automatically generated subtitles was there absolutely precious.

Alas, automatically generated subtitles are currently not that perfect, so that a program such as “SE” was really welcome but, again, there was a problem: SE lacked of documentation, therefore we adventured to test and document it for our personal use – and then, why not, on behalf of other would-be users with similar aim as ours. Therefore, here we are, offering witness of our experience. That is said also to “justify” in this Report the presence of so many Video & Subtitles examples dealing with original German TV-News.

<⚡> *This is said also to delimit the range of our specific tests and experience about this (SE) program—certainly a range not complete, nor particularly ample—so to accordingly warn the reader, and also to encourage his possible contribution of other and different experiences of use.*

□

Who's Who, in our experience of use

References and evaluations.

SE – Subtitle Edit here, in particular, treated as a solution to Subtitle–Voice synchronization problems.
The appreciated subject of this whole Tech.Reference.

MediathekView as “explorer” of German public TV Mediathek (media library, e.g.: ARD-Mediathek), with related UT-Untertitel (subtitle) included, when available.
An excellent tool, technically reliable and stable¹².

AmberScript as a rather interesting Media voice-to-text automatic transcriber, of quality (text's, not subtitles') well above that of the current “on-the-fly” subtitle automatic generators, by our experience.

An interesting starting point for creating brand new subtitles files out of Media where, for any reason, they are not satisfactory or simply not available.

–◇–

¹² But whose social environment (“Forum”) revealed unfriendly towards “foreigners”, with unsympathetic and arrogant attitude, sometimes even insulting. A sad human experience, alas.

Basic Tasks

S-PM 210400

“Technical Reference” and “User Guide” are standard complementary ways of conceiving and subdividing technical documentation, the first focused on tools, the second on results; both useful in their own specific way. With this Tech.Report we dared to propose both such views about the Subtitle Edit program, together, as considered equally relevant and useful¹³, assigning even precedence to the second one, as here shown.

BT0 – “Adjust”, Subtitle synchronization

This task is at the origin of our interest for the process of Subtitle Editing, as our initial purpose was to improve the quality, and therefore the usefulness, of Subtitles generated automatically for a German TV-News media, a feature we appreciated particularly as German is a language we do not know very well.



¹³ An unusual choice, about which it would be nice to know Mr. User's opinion.

Operating model

The “Adjust” task here described is conducted operating on a specific issue of “Tagesschau · Das Erste”, a media of public domain, available on the ARD Mediathek web site¹⁴ [format: .mp4], whose issues can be downloaded directly¹⁵ or via the MediathekView program¹⁶, along with the associated Subtitle files [format: .srt and .ttml], generated automatically.

The specific issue here considered is the “Tagesschau 14_50 Uhr-0136664133”, 31. Januar 2021, available upon request as an “extras” to this Tech.Report, along with the “fixed”—that is, adjusted—Subtitle file as here generated, all that made available under the same “Creative Commons” conditions as stated on the Copyright Page [see].

No change, no editing process will be here performed on the original Subtitle text¹⁷, even less, of course, on the original video and audio file. Our purpose here is simply that of improving the timing-correspondence between the speech and the subtitles appearance on the screen, and also, whenever possible, even with the lips movement of the speaker. That is, as usually called, the “sync”, originally not always perfect, fairly understandable being the result of an almost instantaneous and automatic process.

□

Chronicle of a basic “Adjust” experience

Main purpose of this section is to become familiar with related basic SE tools & features. Operative efficiency is not a first concern here, and is substantially left over as a subsequent goal, up to Mr. User.

Actions

- A0) SE – Subtitle Edit program assumed as standard installed, up & running [see sct.: Setup and General Management].
- A1) Dedicate a directory to the Video “.mp4” and Subtitle “.srt” files, that is to the operating model as here considered [ref. above sct.], be it: ..\SE-Lab. Plus, inside, a sub-directory where to store such useful items as: back-up copies of all original files, included the other available Subtitle file of “.ttml” format, and then, prudentially, also back-up copy of the under-way edited file.
- A2) Run SE, in standard initial condition [that is, via: File > New after a look at the: Video Command Menu \ Requisite; and possibly: Options > Settings... > Restore default settings > OK, so to ensure the overall standard initial conditions as here assumed].
- A3) Choose tab “Adjust” on the Main Tasks area [ref.: Main Tasks and Soundtrack Work Area].
Take care to adjust this area so that also the bottom-left “Video position” control is well in sight.

14 [see: <https://www.ardmediathek.de>]

15 [see: <https://www.tagesschau.de/download/podcast/>]

16 [see: <https://mediathekview.de>]

17 Just the original subtitle file name has been altered with, indeed, an “Original–” prefix, and the here fixed one, with a “–fixed” suffix; caption terms also added to the respective silent Subtitle Record No. 3 [see on respective List view].

- A4) File > Open the named original “.srt” Subtitle file, and then also the associated “.mp4” file. As a consequence you'll get the List view displaying an initial set of Subtitle Records, a still Video image on the Virtual Screen and the Soundtrack in view as Waveform, on its dedicated Virtual Monitor.
- A5) Pay particular attention to “Video position” and “Start time” box values.
- A6) Ensure a Video position=0 and push the Play button, either on the Virtual Screen or on the Virtual Monitor: you'll realize that even the first Subtitle text is displayed a short time *before* the related speech, inconvenience that then will get even worse. That's what we are here to fix.
- A7) So now the question is: what is to be done so to “tune”, that is to better “synchronize” this first appearance of a Subtitle text with its corresponding speech?
We'll assume that, to begin with, the right tools to be used are precisely those available under the very “Adjust” tag, even though we know that there is a specialized and presumably powerful set of commands under the “Synchronization” main menu item [*see*].
- A8) So, to the stated purpose, we re-Play the film starting from Video position=0, ready to “Pause” it as soon as we hear the first spoken words, so to take good note of:
 - the “Video position” timing of such first spoken word (by the way: 06.04);
 - the “Start time” of the Subtitle Record containing the words we've heard (by the way: Record No. 2, Start time=02.120). Whereas the currently selected Subtitle Record on the List view is already the No. 3, *well in advance* with respect to the actual current speech.
- A9) Besides, we have noticed also the appearance on the screen of:
 - an initial date/time [31. Januar 2021 / 14:53:ss] “printed” inscriptions that are certainly not subtitle text, in the sense that they are not originated by any Subtitle record;
 - at first an initial Subtitle “blank” Record, that is one without any Text inside;
 - and then also such a “silent” Record No. 3, certainly a Subtitle text (by the way: “Herzlich willkommen...”), but not corresponding to any audible speech. Then ordinary “speech” Subtitles come.

That is, here the initial Subtitle Records sequence:

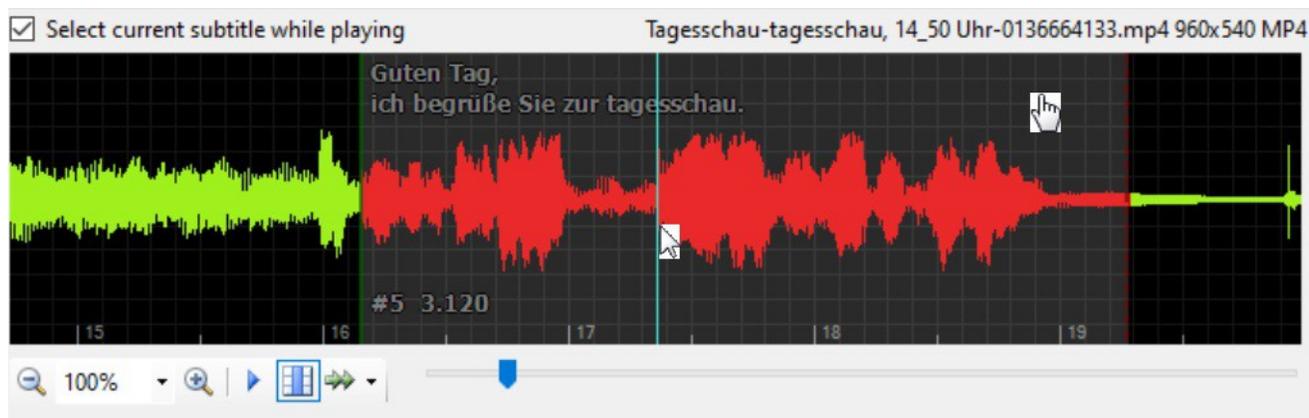
- “printed” inscription
- # 1 Blank Record
- # 2 Speech – ordinary Subtitle Record
- # 3 Silent Record
- # 4 Speech
-

Remark

<.> Indeed, it is precisely because of the presence of such different elements as here seen—that is: Subtitle items of different kind—that we are determined, in this Tech.Report, to adopt a specific, non-generic, non-ambiguous terminology [*cf. sct.:* Subtitles: Lexicon & Concepts].

□

Then it is also well worth taking good note of what is in display on the Soundtrack Monitor,



where you get visual “overlapped” correspondence between Waveform and Subtitle Records for each Subtitle Unit, as delimited by the transparent squared reference grid [see]. Note that the Subtitle Text will be here in sight only for a Monitor view scale at least 70%, and above.

Particularly relevant and worth “hands-on” testing actions here are:

- ▶ horizontal sliding;
- ▶ hand-dragging of a Subtitle Unit within its Gaps limits, on the Timeline scale (Ctrl+Z to undo);
- ▶ right-click to select a Subtitle Unit (then red-colored);

<.> other useful manual control actions, not even here cited, are left to the initiative of the adventurous Mr. User [please, be adventurous].

□

- A9) All that considered, we decided to intervene first on the first spoken Record (that is the No. 4, “Heute im Studio: ...”, just after the “silent” one), and to synchronize it with the corresponding real speech making use of the powerful “Set start and offset the rest” Adjust button [see description at section: Main Task: Adjust]; this way:
- ▶ select that Record on the List view and Go to sub position and pause
 - ▶ Play, ready to Pause as soon as heard the expected speech – which happened about at Video position: 16.600;
 - ▶ fine so: that was where to “Set start and offset the rest”;
 - ▶ then a little more tuning, as it is nice to see Subtitle Text a little before the speech (never after);
 - ▶ this way: manually dragging the Unit a bit left; again Set start and offset the rest, and checking the result on Video screen, possibly at “full screen”. This way we found that Start time at position 15.7 sec was a better choice.-
- A10) Preceding Record (# 3), being “silent”, that is not linked to any speech, is freely movable by hand within the large room now available within preceding and following spoken Records. So that, the very first spoken Record, that is the No. 2, was easy to be adjusted by hand, and via a dedicated “Set start time”; that is, obviously, without altering all subsequent Records of the film.

Doing that we “discovered” rather convenient to jump from one Unit to another clicking the desired Record on the List view.

Remark

<?> Possible timing conflicts are conveniently signaled on the List view color-coding the offending field values (Ctrl+Z to undo).

A11) Resulting Sync-tuning effects on a specific Record can be evaluated via (^) Play selection context command [*shortcut*: F5], aimed at focusing your attention precisely at the currently selected Subtitle Record Unit [*see*: Soundtrack Context Menu].

A11) A nice File > Save, and we are ready give a look at, and take care of, the remaining part of this same film in a next tuning session.

Well, almost, in the sense that we'll leave this task to the adventurous Mr. User, hoping to get news from him about his experience [*Thanks!*].

A12) So far we have improved the speech–Subtitle text synchronization substantially evaluating and tuning numeric time values. Essentially: Start time, End time, Duration. Well, there is another way to do the job; an “analogical” way, rather convenient and worth learning. It is substantially based upon the context command (^) Play selection, this way:

- ▶ select the desired Subtitle record on the List view or, alternatively, clicking directly on its Unit in the Waveform monitor, whether in sight;
- ▶ Adjust \ Go to sub position and pause to set the “vertical green-line” Position marker;
- ▶ (^) Play selection [*shortcut*: F5];
- ▶ just move/extend/reduce the Record Unit interval acting directly on the virtual Monitor;
- ▶ (^) Play selection again, to verify results;
- ▶ go to next Subtitle Unit; also (^) Split and (^) Delete context commands may come handy [*see*];
- ▶ from time to time Play and evaluate all movie from the beginning up to the last adjusted Record. As simple as that.-

Compare the two here contributed Subtitle files: the original one vs. the “adjusted”, to appreciate the difference.

□

Automatic Subtitles

<?> At this point a naïve question: why on earth should Subtitles be fixed, shouldn't they be created well at first, when they are created? There are many reasons for that, here we'd consider just this one:

<?> It is convenient, if not necessary, to produce some Subtitles automatically, even though such production is not, and probably will never be, absolutely “perfect” (←anyhow, a rather slippery concept in itself...). And that is particularly true with such thing as TV-news, as here considered.

—◇—

BT1 – “Create” a Subtitle file, from scratch

Starting point is here a Video file of charming beauty, rich in dialog and comments, in a regional language, originally with no subtitles¹⁸.



Operating model

Now the aim is to provide such Video with Subtitles, in multi-lingual versions. Copy both of this Video and the resulting Subtitle files as here created are available upon request as “extras” to this Tech.Report, under the same “Creative Commons” license as declared on the Copyright Page of this very Report [see]. Hereafter, title and description.

□

The village is reborn

“On the Carnic Alps, in the province of Udine, there is a corner of Friuli-Venezia Giulia that is still authentic: the Aupa valley, with its crown of human settlements rich in peasant history. Unfortunately many of these villages are now sparsely inhabited, sometimes abandoned. But there are some exceptions, as in the case of the village of Dordolla, located at 630 meters above sea level it is the most lively and active center of the valley: instead of emptying itself, it attracts people, residents or visitors. Especially in summer, when cultural events and initiatives flourish.”

[St 2020/21 28 min] A documentary by Aldo Pavan and Marisa Bortoletto.-

□

18 Courtesy of the owner (and the Authors), from: https://www.raiply.it/video/2021/03/il-borgo-rinasce---29032021-aba9c261-74cb-4e80-b6a7-c95fa23a3a91.html?wt_mc=2.www.wzp.raiply

Chronicle of a basic “Create” experience

Main purpose of this section is to become familiar with basic SE-“Create” tools & features. Operative efficiency is here not a first concern, being substantially left over as a subsequent goal up to Mr. User.

Viewpoint

Subtitle Texts are to be edited according to basic style rules primarily regarding the max. number of lines and of char.s per line. Most common of such rules are by:

Netflix max 2 lines, 42 char.s per line;

BBC max 2 lines, 34 char.s per line.

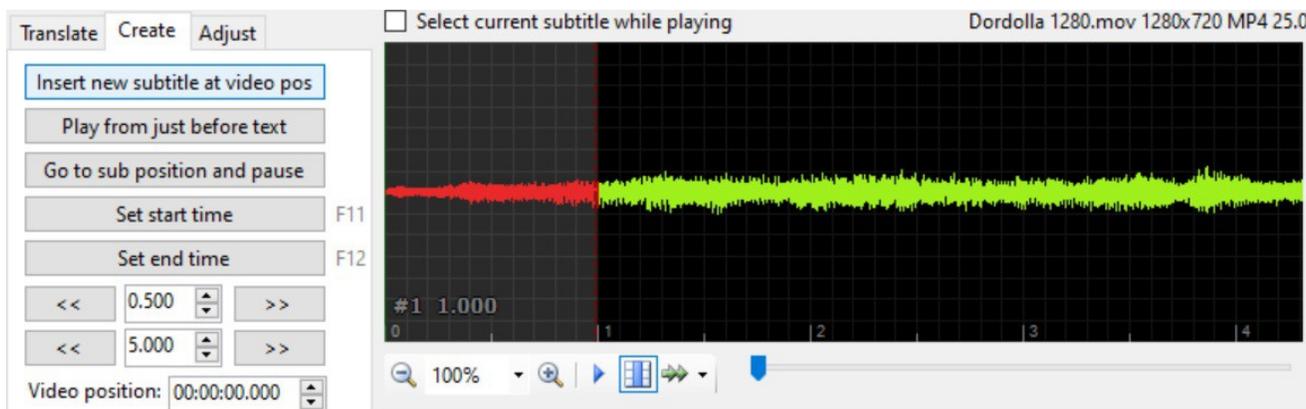
SE doesn't recall explicitly such rules, they are considered instead as Options > Settings... : General, where you are offered such default values: Single line max. length=43 / Max number of lines=2

<~> It is our opinion that, at least during a “Create” session, it would be nice to be recalled about such relevant figures on the bottom Status Bar.

□

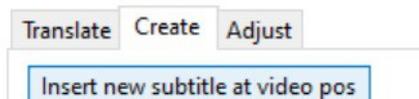
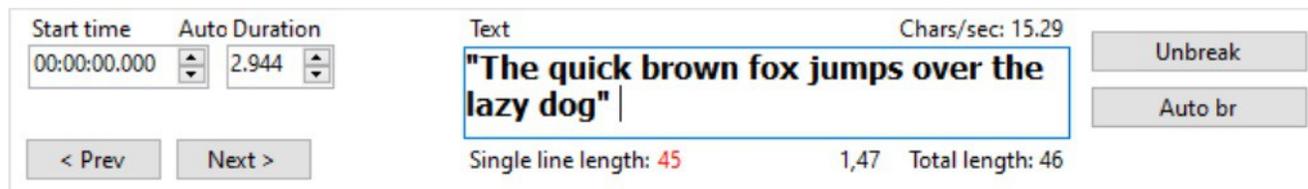
Actions

- A0) Former “BT0” section [see] is here assumed well known, and the implied expertise acquired.
- A1) First action here is the transcription of the whole original movie “script”—here intended as speech, that is all audible comments and dialog—on a standard text file, ready to become a comprehensive Subtitle file. Before endeavoring into a painstaking manual transcription process we took the opportunity for investigating how mature are the currently available audio and video-to-text transcription services, such as that one offered for instance by Amberscript¹⁹. Also a good opportunity to evaluate and compare such experience of ours among the community of SE users.
- A2) Select the “Create” tab, and click on the Virtual Monitor to load the desired “Dordolla 1280.mov” video file.



19 Ref.: Amberscript B.V., Keizersgracht 668b, 1017 ET Amsterdam; <https://www.amberscript.com>

A3) An initial “Insert new subtitle at video pos”, and then the task can begin, with subsequent “Insert” actions at the next desired Video positions.



Here in show a typical operative situation after an initial “Insert new subtitle at video pos” command, clear enough not to require any further explanations, but for:

- Auto (blinking) before the Duration caption, to say that it will be automatically evaluated according to the actually entered Text, when “played” at the given speed of 15.29 Chars/sec (indeed: 45 chars / 15.29 chars/sec = 2.94 sec).
- Auto br automatic “break” (
) of the entered Text into lines (by the way, default Max.number of lines = 2).
- 45 red-colored line length, to say it is beyond the default limit value of 43, as with Options > Settings... : General \ Single line max. length [see].
- 45, 47, 46 slightly different line length values to say, respectively: trailing blank ignored, next char. position (on the 1st line of Text) and total length, trailing space included.

□

A2) Typical sequence of actions with each new Subtitle Unit is:

- ▶ Insertion of desired Text, possibly with Line-break and formatting [see: (^) On: Text Edit Form];
- ▶ positioning of the right-margin of the Subtitle Unit to make enough room for the Text;
- ▶ a look at the List view if any error condition. Typically: unsuited line-breaks, timing-conflicts.-

Remark

Line-break and formatting implies the automatic insertions of such Markup Tags into the Subtitle Text:
, and pairs; tags of which Mr. User is not going to be directly bothered about.

Viewpoint

Consider that it is nice to have Subtitles appearing on the screen just a little earlier, and then lasting a bit longer than the corresponding speech. That means also that the extension of the pause between Subtitle Units—that is: Subtitle Gaps—plays a rather relevant expressive role.

Then a slow “Play rate (speed)” [*see sct.*: Soundtrack Controls and Actions] may then come handy to fine-tune both timing and text-speech correspondence²⁰.

□

A3) But then, even for a relatively short film (28 min.), this way of inserting one Subscript Unit at a time, revealed rather painstakingly tedious and slow. Therefore we endeavored to find out a quicker SE tool, given the fact that, via Amberscript [*see*], we got the entire film's script transcribed also into an “.srt” Subtitle file type.

Actually a Subtitle file really poorly subdivided into almost “random” Records (by the way, the reason why we didn't use it first). Anyway, we copy-pasted the desired amount of Records (actually, records # 46 ÷ 206, that is excluding those already inserted one-by-one) into a “.txt” file type, so that we could then utilize the presumably powerful context command:

(^) Insert subtitle after this line... [*see*].

A4) What we got was a nice “raw” complete Subtitle file, unusable as such, but good enough to be corrected individually (a typical “Random Edit and Sync” activity), making good use of the expertise acquired with the preceding “Adjust” Basic Task [*see*]. That, plus such other Merge / Split / Delete context commands [*see sct.*: Soundtrack Context Menu], we could complete satisfactorily also this second “Create” Basic Task²¹.

A5) <f> Here we found also particularly handy, even precious, the (^) Play selection context command [*shortcut*: F5], to focus attention on each specific Subtitle Unit.

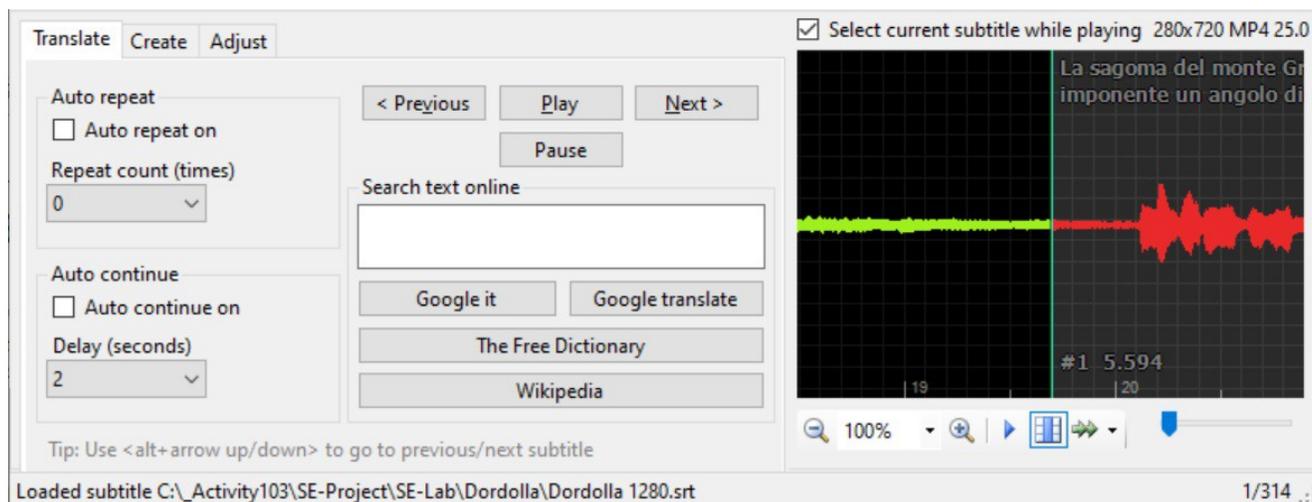
-◇-

20 <> This tiny set of hints is here the maximum we dare to say about the art of subtitling.

21 Result, as said, also available upon request as “extras” to this Tech.Report.

BT2 – “Translate” a Subtitle file, multi-lingual

Let's assume to have “Created” a nice Subtitle file, and well “Adjusted” it to the related video-audio media file [*see preceding sct.s*], now the task is that of deriving from it a pair of other Subtitle files translated into different languages, say: German and English. Let's see hereafter how it can be done.



Here is the dedicated Translate tag, take care to adjust the frame so to have all the task area well in sight. Besides, there is an interesting Auto-translate > Auto-translate... main menu command on which to rely upon [*see*]. Let's consider what can be done to the stated purpose.

Viewpoint

As said, Translate bottom controls can possibly go off-frame, and that shouldn't with a more accurate automatic resizing of this area²².

□

Actions

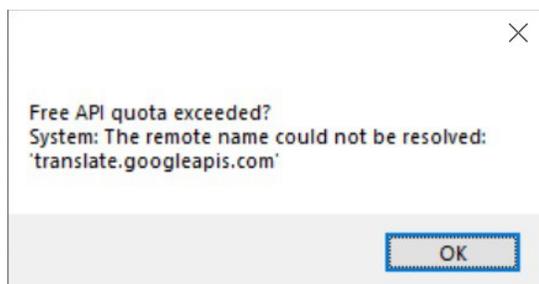
A1) The Subtitle file here considered: ...*Dordolla 1280.srt*, name shown at left on the Status Bar [*see*], isn't that short, as it contains more than 300 Subtitle Records. Therefore we decided to process the lot trying the promising Auto-translate command [*see on: Main Command Menu*], the following way.

- ▶ File > Open : ...*Dordolla 1280.srt*
- ▶ Auto-translate > Auto-translate... : Service: *Google Translate V1 API* \ From: *Italian* \ To: *German* \ Line merge: *No merging* ← instead of the default condition *Merge max two lines*, for two Reasons:
 - R1) We are doubtful about the real meaning and role of the “Line merge” feature, being, alas, the SE term “line” rather ambiguous [*cf. sct.: Subtitles: Lexicon & Concepts*];
 - R2) It is our intention to deal with the same number of Subtitle Units—i.e. Subtitle Records—for

²² <~> Not an infrequent SE inconvenience, alas.

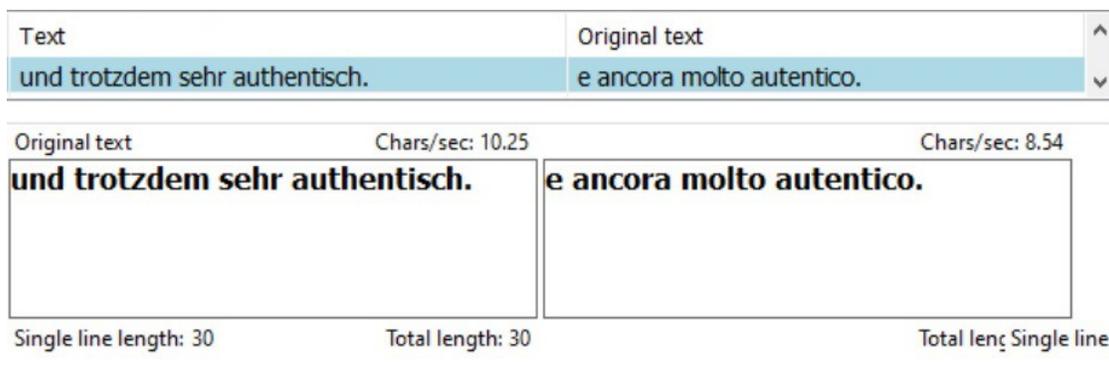
all possibly translated Subtitle files. Indeed, if the case, equalizing the number inserting “dummy” Blank Records. Therefore we'd rather avoid any such action as an automatic—that is uncontrolled—merging of lines, whatever it means. <~> Anyhow, we'll certainly investigate about this “merging” feature too.

- ▶ Then: Translate, ignoring the rather cryptic consequent message—something about “API key”—investigation postponed, as about the above cited “V1 API”. As a result we got this mysterious message:



Message that we interpreted this way: the “Auto-translate” feature relies upon an active Internet connection, a prerequisite that we'd consider fair not fail to signal in advance where appropriate.

- ▶ Indeed, Internet connection granted, we got and OK—saved a nice automated translation, then shown on the SE Work Area this way:



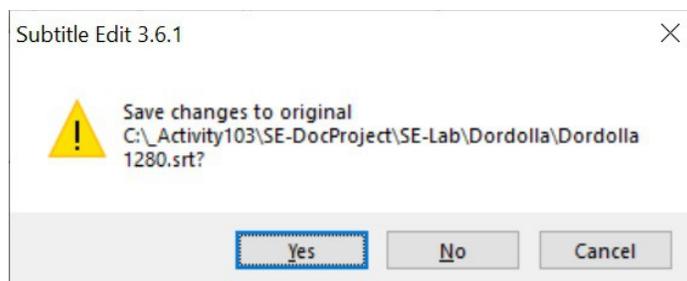
that is, with some not negligible flaws hopefully to be fixed soon [see next sect.].

□

To be fixed:

<~> “Original text” caption misplaced on the Text box; and the bottom info line miss-printed. Condition then not repeated when re-entering the same job.

<~> Then, at exit, you will be anyhow asked:



even with no changes whatsoever on the original Subtitle.

□

Anyhow, an overall positive result deserving three relevant *Remarks*:

R1) Both original and translated Subtitle files will now be in display on the SE Work Area, with the main focus on the translated one.

<!> As a consequence, the before mentioned preference for an equal number of records in both files, results particularly valid, otherwise comparison would result really odd.

R2) Some translated Subtitle records result error-marked, such as:

#	Start time	End time	Durat...	Text
1	00:00:19....	00:00:25....	5.594	Die Silhouette des Berges Grauz...
2	00:00:25....	00:00:28....	2.927	und immer noch sehr authentisch.

presumably because of different and conflicting word / text lengths. To fix them the “Adjust” experience will come handy [see *sct.*: BT0 – “Adjust”].

R3) Translated Subtitle file will be named after the original one, suffixed with such a language code as “.de”; with these consequent “Open” conventions:

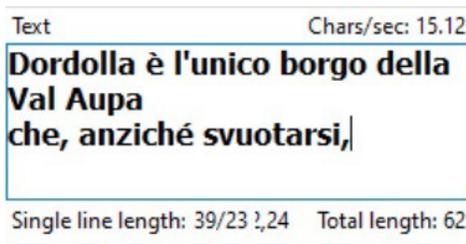
- Original Subtitle file can be opened singularly, as before;
- Opening of the translated file implies also that of the original one too, if present in the same directory; otherwise it can be opened singularly. That is, obviously functional to making a comparison among the two, presumably operating under the “Translate” tag; an operating way that it is not our goal to explore here in detail.
- As a rule, automatic translation requires qualified tuning of the resulting text. Activity that, in our experience, has been conveniently carried on apart from SE, and almost exclusively as a linguistic task.

□

Remark

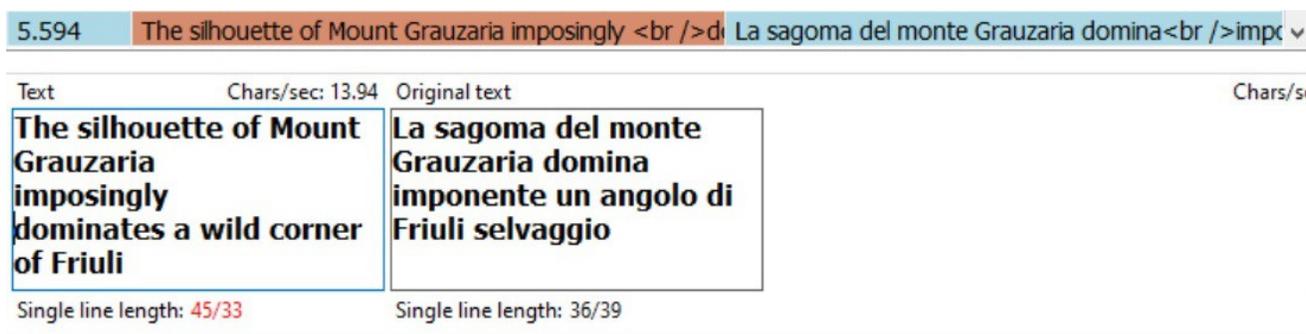
<~> During this basic tasks experience we have noticed some examples of poor auto-positioning of elements within the frames. Here some examples.

□



Here the overlapping on the central pair of “2,24” figures, those without a leading caption.

□



Here the right off-flow of the “Chars/se” caption, and figure. In this case we’ve noticed that a sequence of Maximize / Restore window may fix the trouble.

—◇—

The Art of Subtitle Editing

Subtitle editing, more than a craft, is clearly an *Art*, an art as that of writing “opera librettos”. That is evident even after the elementary experience gained with such basic “Adjust”, “Create” and “Translate” tasks as here described.

An art for which the timing—that is: start, duration, pause—has a particularly relevant expressive role, besides that of the literal meaning, as, indeed, with the opera librettos. Here some relevant aspects to be considered:

Reading time: the user must have the time to read it, and timing of reading is generally not the same as the timing of speech;

About start time: not too much in advance with respect the actual speech, just a little bit, at most;

About duration: it may remain longer in view then the actual speech, so, for instance, to give time to

read it, provided there is no danger of overlapping with the next speech;

Pause: it's fundamental, so to re-gain fresh attention for what follows next;

Punctuation: just essential, otherwise it's distracting;

Translation: a timing challenge, given the fact that different languages may well have completely different word lengths.

<.> Indeed an art, about which all that can be fairly here offered are simply some technical tools, with the rest left up to you.

□

Conclusion

To this basic “User Guide”-style section, a much more complete and detailed “Technical Reference”-style treatment follows. Two prospective conclusions may be drawn:

- ✓ Combined hands-on experience and detailed SE knowledge are both crucially user-beneficial;
- ✓ Fair feed-back from experienced users is crucially beneficial for future Tech.Report development and issues.-

-◇-

Program Window & Context Menus

S-PM 210200

On the SE Program Window it is convenient to distinguish and describe separately the following components: Title Bar, Main Menu Bar, Tool Bar, Main Work Area, Status Bar. Description referred exclusively to the standard SE initial setup, not here considering the possible different choices the user is entitled to make through such commands as: Video > Show/hide waveform and video, or Video > Un-dock and Re-dock video controls [see].

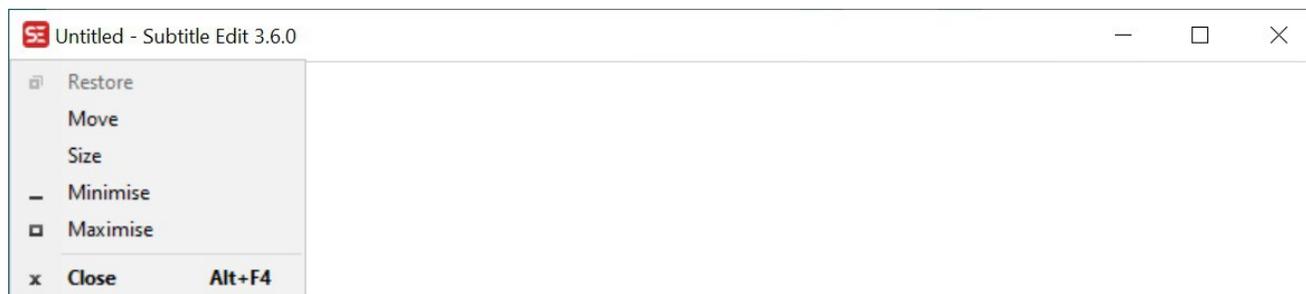
Remark

Appearance of SE Program Window on the screen will depend also upon the system Start > Settings > System > Display : Scale and Layout, where you may: “Change the size of text, apps and other items” [see].

□

SE Program Window, “exploded”

Title Bar



Standard Title Bar positioned, as usual, at the top of the program's window, with, at left, the standard Icon Menu²³ and, at right, the Minimize, Maximize and Close buttons. And also showing the currently opened Subtitle's file name, if any—otherwise: “Untitled”—, followed by the “Subtitle Edit” full program's name and version in use.

□

Main Menu Bar

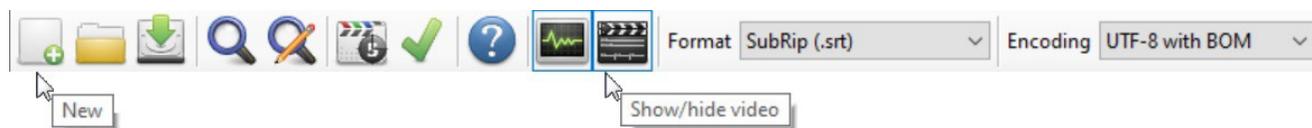


Main menu bar, functionally described in detail hereafter, on the dedicated section [see].

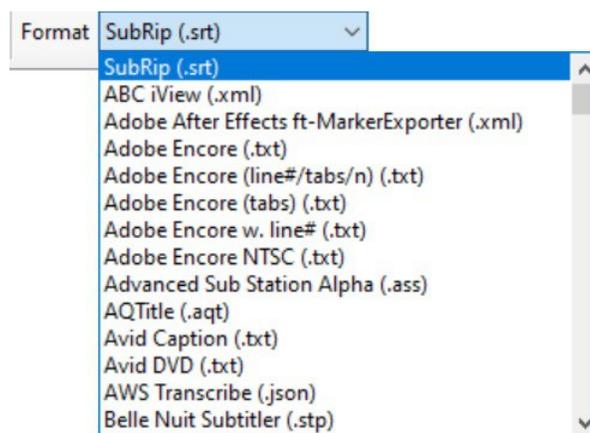
□

²³ A menu here not described, as usual for all such standard features assumed as well known. Just a remark: please notice the presence of a dimmed-disabled “Restore” command, a rather standard and useful convention that we'd appreciate would be commonly adopted by the SE program too, as we'll have some occasion to suggest hereafter.

Tool Bar



Standard SE Tool Bar, composed of shortcut icons for some frequently used commands hinted at by such tooltips as those here shown, plus a couple of Drop-down lists—Format and Encoding—worth some explanation.



Format More precisely: *Subtitle file Format*. A drop-down list where to choose a Subtitle file format possibly required to File > Open it, or to File > Save, Save as... it with a format possibly different from the automatic SE-default value, in which case the Save commands [see] operate also as a conversion tool²⁴. As a rule, the automatic default format is that of the opened file, auto-detected. On top of this list there is the most popular SubRip “.srt” type.

<~> Note the curious presence of some rather odd choices as the many “Unknown *nn* (.txt)”, and the absence of the rather common Subtitle file format “*.ttml”²⁵.

Remark

Even if not in this list, a “.ttml” Subtitle file can be Open-ed, recognized as a “Timed Text 1.0 (.xml)” format. Then it can be Save-d as such, or converted, e.g. as “.srt”, with the Save as... command [see].

□

24 <~> File conversions, in general, are required when, for some reason, no unique standard format is universally accepted. And, apparently, that’s currently the case with Subtitle files.

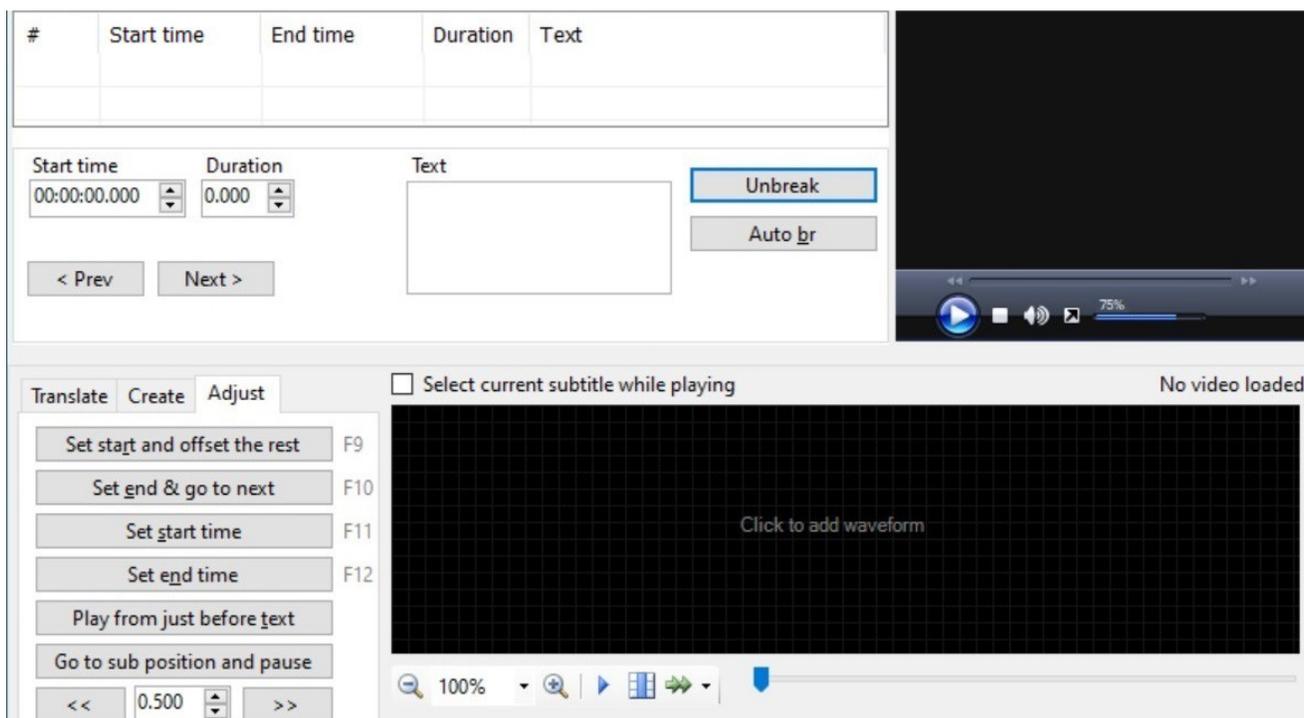
25 By the way, the only one we know besides the popular “.srt”.



Encoding More precisely: *Character Encoding*, that is the encoding of characters for Subtitle texts. May come useful with File > Import [see] for conversion purposes. Rather relevant feature with Subtitles possibly written in any of the world languages²⁶.

□

Main Work Area



Main SE Work Area, internally subdivided into two dedicated areas, here conventionally referred to as Video and Soundtrack—more precisely: Subtitle View and Video (above), and Main Tasks and Soundtrack (below)—work areas, on which specific Main Menu and context commands operate.

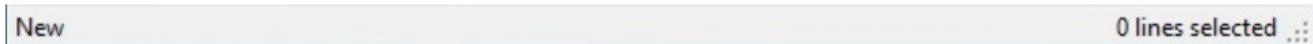
²⁶ Anyway, a feature in which we have no direct experience, being substantially confined within two-three west European languages.

Areas contained within rectangular frames which can be conveniently resized by means of such usual controls as: , and that will be described in full detail hereafter, along with the related context commands [see].

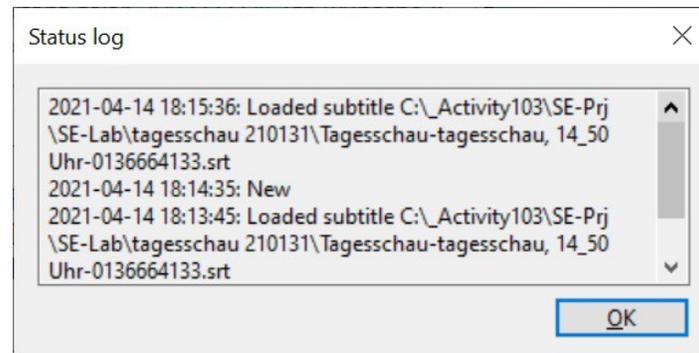
□

Status Bar

And now, the bottom Status Bar, where to display such information as:



Here a double click²⁷, and you'll get such a “Status log”:



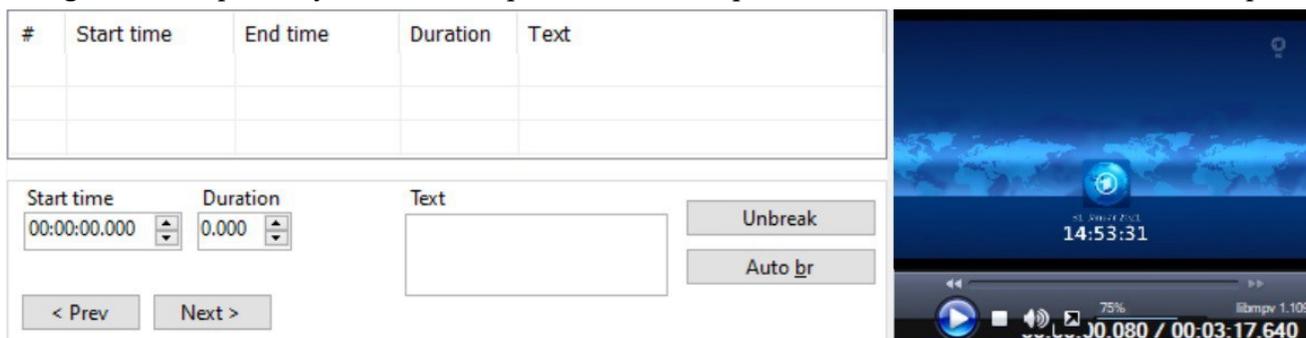
-◇-

²⁷ <> Mouse-related action, symbolically represented throughout this Report with a: (^)

Subtitle View and Video Work Area

S-PM 210200

Here is where to watch Subtitle and Video files, combined. An area rich in controls, most intuitive enough not to require any further description, and rich in powerful context menu worth full description.



Structured records of Subtitle file are here in display as rows of a table, conveniently organized in columns corresponding to distinct record-fields, with then, at right, a handy screen for the related Video file. A right-click on that screen is equivalent to Video > Open video file... command [see]. See then hereafter described all the Context Menus available on this area.

□

Subtitle View Context Menus

SE is rich in context menus, most of them offered precisely where they are more useful, and not available anywhere else, plus some others that can be found also elsewhere, as within the ordinary Tool Bar, and here duplicated just for convenience.

□

(^) On: Title Row

A right click [symbol: (^)] on the Title row of the Subtitle table, and you can modify the display of record's field-columns.



Remark

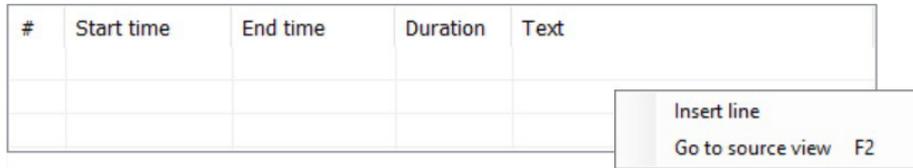
Notice that whilst such Subtitle timing parameters as Start, End and Duration time are under direct SE operator's control, Char/sec and Words/min are not, in the sense that they are evaluated as a ratio between the number of characters, or words, and the time Duration of their display on the screen.

More precisely, considering actually readable characters only, that is with the exclusion of HTML markup tags, e.g. encoding Italic, Bold and Underline characters; and possibly the exclusion of spaces according to Options > Settings... : General \ Chars/sec (CPS) includes spaces [see].

<⤴ Meaning—and therefore relevance—of the Char/sec and Words/min parameters is that they offer an indication about the reading speed required to the film viewer to effectively utilize the presence of Subtitles, knowing that an average user hardly can read more than *three words per sec.*, that is more than about *twenty char.s per second*.

(^) On: List View (empty)

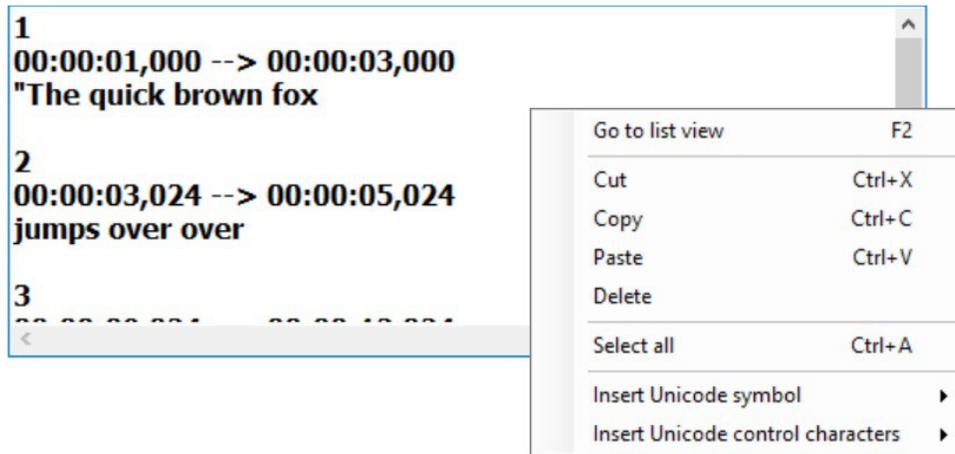
A right click on an empty row, and you get inserted a new Subtitle record—with no text, just default time parameters—,



or you can Go to source view, as hereafter shown.

(^) On: Source View

The same Subtitle file can be seen in a Text-editor “source view”, that is as a continuous sequence of structured records, instead of as in a “list view” table of row and columns.



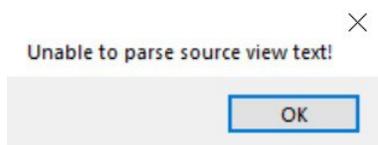
A source view where, with a right click, you'll get a Subtitle edit context menu as here shown, including a command for back to Go to list view. Other commands here deserving description are:

Insert Unicode symbol as with Edit > Insert Unicode symbol [see]

Insert Unicode control characters designed for dealing with “Right-To-Left” languages, as Arabic and Hebrew [all we can here say, being that a cultural environment unknown to us]

Warning

Consider that in this Source view you may easily “corrupt” the structure of a Subtitle record, typically inserting text characters into time-parameter fields.

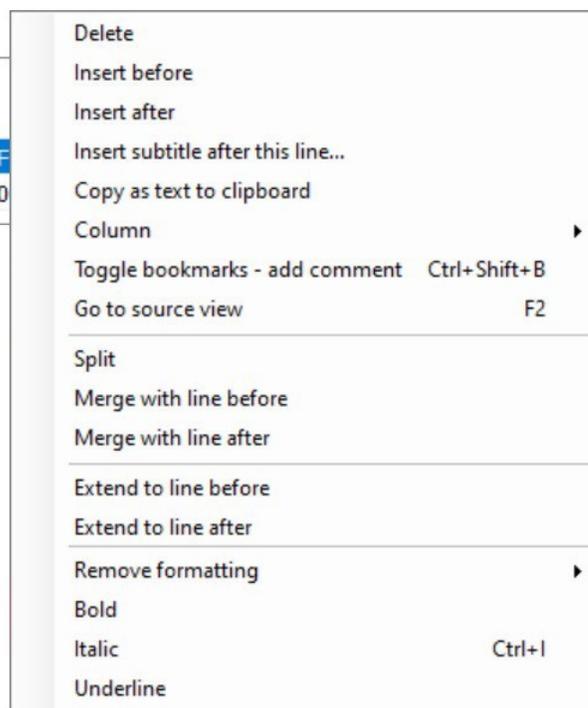
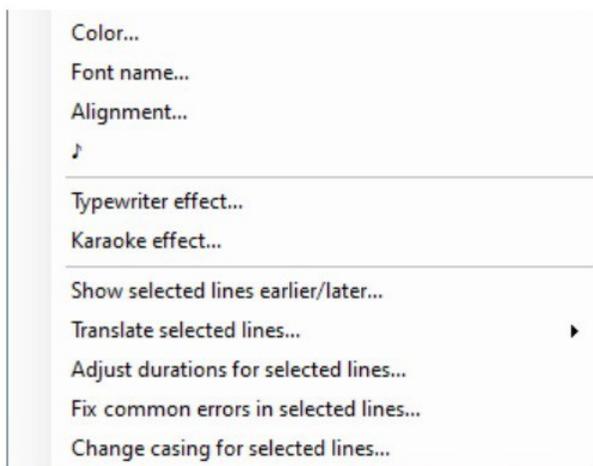


In that case, when trying to go back to the List view, you'll be informed about the inconvenience with such diagnostic message.

□

(^) On: List View (non-empty Row)

#	Start time	End time	Duration	Text
1	00:00:00.040	00:00:02.000	1.960	
2	00:00:02.120	00:00:05.600	3.480	<font color="#F
3	00:00:05.680	00:00:09.560	3.880	<font color="#0



Remark

Notice the color-coding of the selected record. Would, as possible, any error condition arise, typically because of timing-conflicts, the List view will show it with a specific color-coding on the offending values [see: Options > Settings... : Syntax coloring].

Command List

Delete	Insert before	Insert after	Insert subtitle after this line...
Copy as text to clipboard		Column	Toggle bookmarks - add comment
Go to source view	Split	Merge with line before	
Merge with line after		Extend to line before	Extend to line after
Remove formatting	Bold	Italic	Underline
Color...	Font name...	Alignment	♪ Typewriter effect...
Karaoke effect...	Show selected lines earlier/later...		
Translate selected lines...		Adjust durations for selected lines...	
Fix common errors in selected lines...		Change casing for selected lines...	

□

Viewpoint

As you see, context menu associated to a “non-empty” List View is considerably ampler than that associated to an “empty” List View [cf.], in coherence with, indeed, the different operating context.

Fact is that we oddly have noticed a similar “dynamic” change of menu length also *with non-context* SE-Main menu [e.g. see: *first Viewpoint at sct. File Command Menu*] where, and for good reasons, commands possibly inapplicable in a given circumstance should, as a standard rule followed by all programs we know, merely become dimmed-disabled *but still kept present* where they are located, so to keep non-context menu unchanged in composition and length.

<↳ That is to say that we'd be strongly in favor of this standard way of doing things with SE too.

□

(^) Delete

Just delete all Record-rows currently selected on the Subtitle Table, in List view.

As usual, a Ctrl+Z to undo.

□

(^) Insert before

(^) Insert after

Insert a new blank record before/after the currently selected one.

Beware: Timing-overflow condition not detected [cf. next: (^) Insert subtitle after this line...].

□

(^) Insert subtitle after this line...

Insert all Records of a given Subtitle file after the currently selected Record on the List view. Possible error condition may arise, as List view will show.

Insert Overflow

<~> Be aware that current SE program will accept all kind of new Subtitle Record “Insert”

commands, without checking whether there is still time-room left, or not. As a result new Records may be “added” after the actual End-Of-Film, that is in time-overflow condition, that is *nowhere*, without Mr. User being informed of the incongruity.

Viewpoint

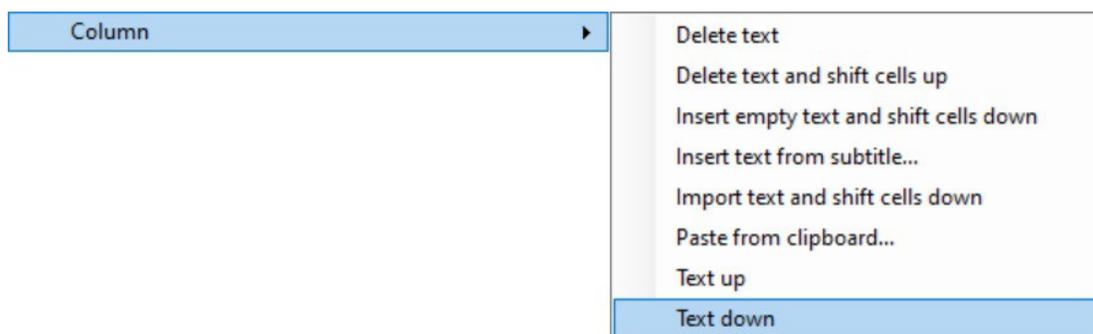
<~> Of course this command refers to “Records”, not “Lines”. Lines are elements of a Text field, whereas it is Records which are the elements of a Subtitle file [*see sct.:* Subtitles: Terms & Concepts].

(^) Copy as text to clipboard

Copy the whole contents—that is, all fields, not only the text—of the currently selected Records into the system clipboard, ready to be possibly pasted somewhere else, that is possibly via: (^) Column > Paste from clipboard... [*see*].

(^) Column

Activate the following context sub-menu operating on the currently selected set of contiguous Subtitle records, as hereafter described in detail.



Viewpoint

<~> In spite of the name, this context sub-menu is evidently not referred to any particular “Column”, but to the entire Subtitle Records here displayed as Table Rows, instead.

Command List

- | | | |
|------------------------------|----------------------------------|--|
| Delete text | Delete text and shift cells up | Insert empty text and shift cells down |
| Insert text from subtitle... | Import text and shift cells down | Paste from clipboard... |
| Text up | Text down | |

(^) Column > Delete text

Delete the Subtitle text contained into the selected contiguous Records. All other Record Fields remain unaltered (Ctrl-Z to undo).

□

(^) Column > **Delete text and shift cells up**

Delete the Subtitle text contained into the selected contiguous Records, and replace it by shifting up the text Fields of the subsequent Records. All other Record Fields remain unaltered.

□

(^) Column > **Insert empty text and shift cells down**

Shift down Text Fields orderly out from the selected Records, leaving the original cells empty. Bottom Text Field are lost, all other Record Fields unaltered.

□

(^) Column > **Insert text from subtitle...**

Substitute orderly, from the currently selected Record on, all text Fields with those found into the Subtitle file to be opened. No new Record will be created, no other Record Field altered.

□

(^) Column > **Import text and shift cells down**

Interesting, innovative, and powerful tool that we'll here describe by means of a particularly relevant example of use, so to focus more on its the general functionality rather than on precise operating details. That also because, as we have been informed, this command is currently:



<Under revision>²⁸

– Report left AsIs

To begin with, consider that currently are available many ways to automatically transcribe into text files the speeches as recorded into audio-video multimedia. A functionality useful in general, and particularly in case of conferences, meetings or lessons. Well, this SE-tool can happily be used to convert such a text-transcription file into a Subtitle file to be added to the related media, as we'll hereafter describe²⁹ [*as you see, the future is already here*].

Steps

- ▶ First action is the creation of a dummy Subtitle file containing just one Record. Be it:

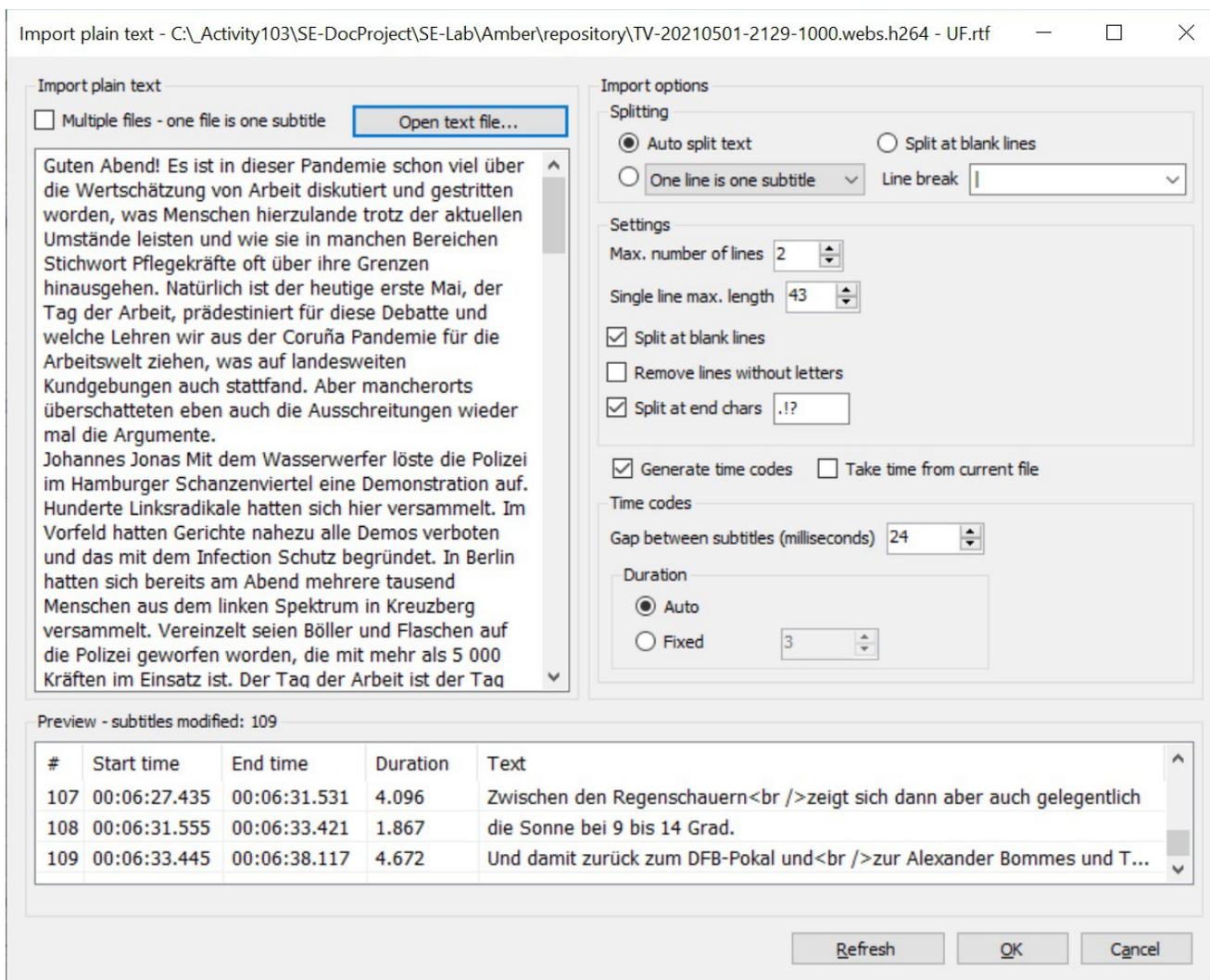
#	Start time	End time	Duration	Text
1	00:00:01.000	00:00:03.000	2.000	Guten Abend!

- ▶ On that dummy new Subtitle, open the named multimedia file, and give it a look so to notice its duration [*in our test-case: 06:36 mm:ss*].

28 <~> And also “Under refinement”, we'd dare to suggest, starting from the command's caption, with its missing trailing ellipsis “...”, and the misleading term “Import”, at least that to be corrected with a more precise “Replace”.

29 In our hands-on test the speech-to-file transcription was obtained using the services as available online by Amber Script, www.amberscript.com [see]; and the test multimedia file was a short TV-News as available on the public media library <https://www.tagesschau.de/download/podcast/> [see].

- ▶ Then, such a first “Import plain text” call, so to get a significant “Preview” of the final result.



Notice, in particular:

- “Import options” area, where to set the criteria for splitting the transcribed text into Subtitle records, here deliberately left to the default condition.
 - “Generate time codes” and “Duration / Auto” controls, currently inoperative: <~> a known bug, to be fixed soon.
 - Record No. “#” [here: 109] and “End time” [cf.: test media file full duration] of the last Subtitle record, useful data for the next operative step; that will be:
- ▶ Creation of a suited set of dummy Subtitle records to be added after the first. A set required by this

tool aimed at operating exclusively *on existing Records*, that is, without creating any new one³⁰.

- ▶ The desired set of dummy Records [*here: 109*] can be easily and quickly created duplicating, via Copy [Ctrl+C] and then repeatedly Paste [Ctrl+V *kept pressed*], a suited model-Record with such a Duration [*in our case ca.: 3,4 sec*] to cover the entire media duration [*in our case ca.: 06:36 mm:ss*].
- ▶ Now you are ready to call again “Import plain text” followed by “OK”, so to get all the dummy Records filled with the “real” Subtitle text. As simple as that.
- ▶ Then “(^) Adjust durations for selected lines...” and “(^) Fix common errors in selected lines...” may do. But certainly then only a patient “manual” revision and editing (a typical “Random Edit and Sync” activity) will complete the job.

Controls

- Import plain text rather appropriate title, with the keyword “plain” to imply the process of conversion, indeed, from plain text to formatted Subtitle records.
- Open text files... two possible ways: one unique text file containing the whole lot; or...
Multiple files or distinct files, each one assumed containing just one Subtitle record.
- Preview a consequent display table offering an immediate idea of the result.
- Import options assumed as self-explanatory, and anyhow easy to test.

□

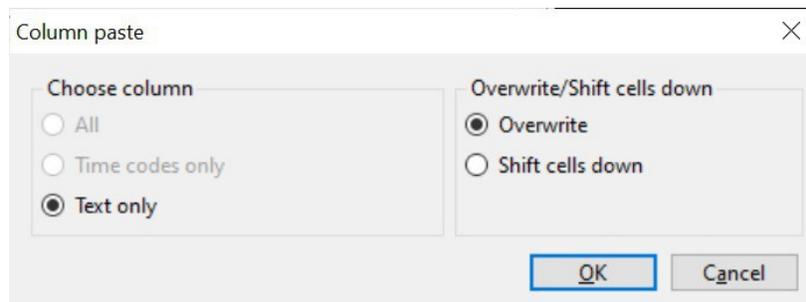
Viewpoint

In conclusion, our suspect is that the obscure/inappropriate command caption and possible execution inaccuracy are not the consequence of coding errors but rather symptoms of some unripe basic design, with consequent ambiguity and contradiction, to be fixed first.

□

(^) Column > **Paste from clipboard...**

Paste Subtitle record fields starting from the currently selected record, and according to the options chosen in this control box; particularly those about Overwrite or Shift mode.



30 <~> That's why here we consider improper the term “Import”, being this a typical action of text “Replace”.

A command well suited to paste Subtitle records copied via (^) Copy as text to clipboard [*see*].

□

(^) Column > **Text up**

(^) Column > **Text down**

Swap Text field (only) between consecutive Records.

-◇-

(^) Toggle bookmarks - add comment

Enter/cancel a “bookmark”-label³¹ onto the selected Record.

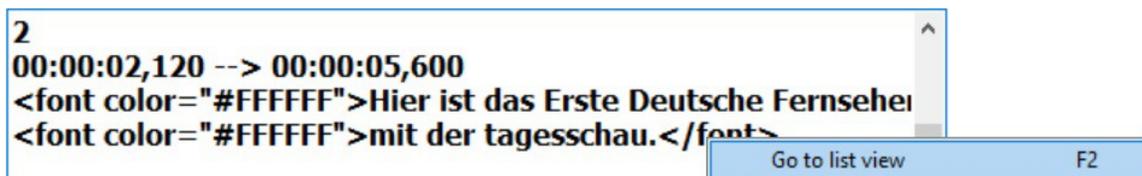


The Record will result accordingly flagged.

□

(^) Go to source view

To switch from List to Source view (F2 to toggle). Context menu will change accordingly [*cf. sct.s:* (^) On: Source View *and* (^) On: List View].



□

(^) Split

(^) Merge with line before

(^) Merge with line after

Split/merge currently selected single Subtitle Record [*hint: hands-on to test operative details*].
 <.> When more than one Row selected, these three commands change into the following two [*see next*].

Viewpoint

Obviously not referred to “Lines”, but to List view Rows, that is Subtitle Records, instead.

□

(^) Merge selected lines

(^) Merge selected lines as dialog

“as dialog” is to signify: with leading “-” hyphens [*hint: hands-on to test operative details*].

□

³¹ In itself stored along with the related Subtitle file, into such file type: “*.SE.bookmarks”.

(^) Extend to line before**(^) Extend to line after**

Extend the current Subtitle Record time duration up to the Record before / after. Involved Records remain distinct. No such Extend action takes place before the first / after the last Record.

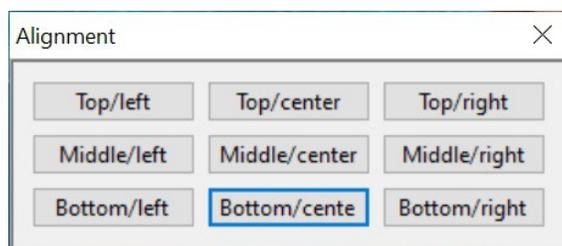
Remark

We have noticed that this extend action reduces the Gap between Records to about 24 msec [*cf.*: Options > Settings... : General \ Min gap between subtitles]. A value that may be further reduced by hand to the point that, in case of a (^) Play selection action, current selection will be transferred to the successive Record, up to a larger Gap is encountered.

Viewpoint

<~> In this command it is particularly evident the necessity of a sound and unambiguous definition of the terms in use, as proposed with section “Subtitles: Terms & Concepts” [*<f> see*]. Obviously here the term “line” is absolutely inappropriate, as it should concern Texts, not certainly Records.

□

(^) Remove formatting**(^) Bold****(^) Italic****(^) Underline****(^) Color...****(^) Font name...****(^) Alignment**

Set / remove Subtitle text formatting as displayed on the screen, for all selected Subtitle Records.

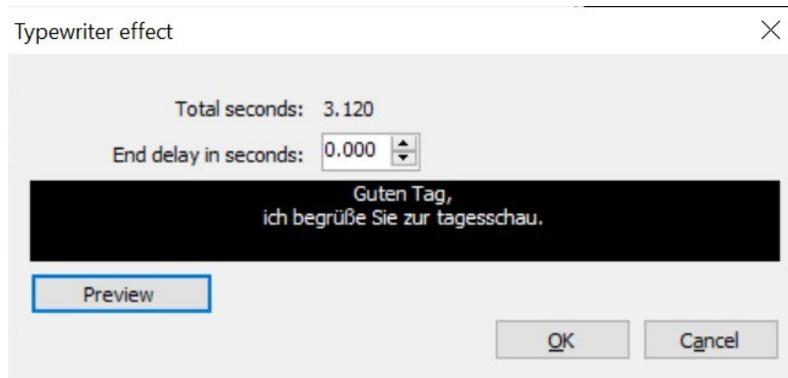
□

(^) 🎵

Insert a “🎵” symbol at the beginning and at the end of each single text line of each Subtitle Record selected, to signify the text is assumed to be sung, instead of spoken [*cf.*: Edit > Insert Unicode symbol].

□

(^) Typewriter effect...



Feature to make the Subtitle text appearing on the screen as typed one character after the other.

Warning

The Subtitle timing will be, comprehensibly, deranged.

□

(^) Karaoke effect...



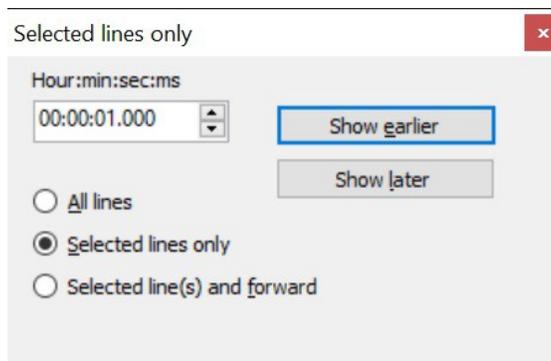
Viewpoint

Gene Kelly³² would have appreciated it.

□

³² Gene Kelly, a guy who enjoyed “*Singin' in the Rain*” and being “*An American in Paris*” (1950s).

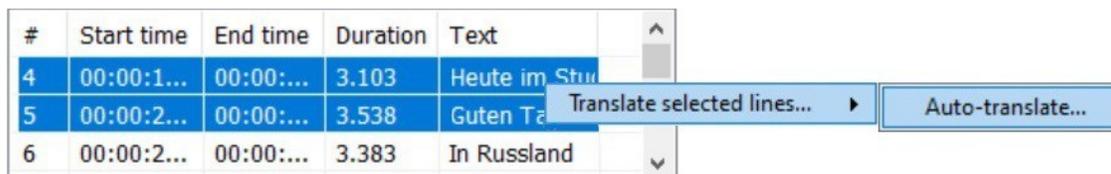
(^) Show selected lines earlier/later...



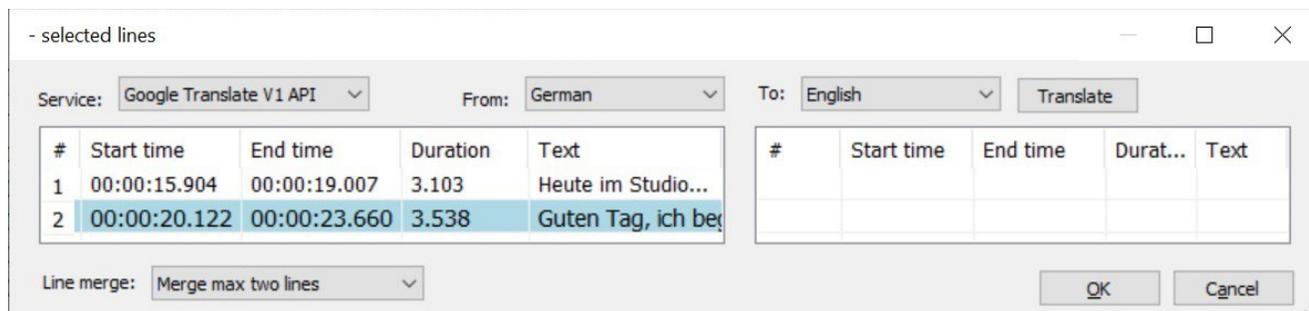
Tune the timing of Subtitle Text appearance on the screen, according to the set-up on this control form, assumed self-explanatory. Analogous to (^) Adjust durations for selected lines... and Tools > Adjust durations...commands [cf.].

□

(^) Translate selected lines...



Precisely the same feature as that of Auto-translate > Auto-translate... command [see], but aimed at the selected Subtitle records³³, instead of the whole Subtitle file.

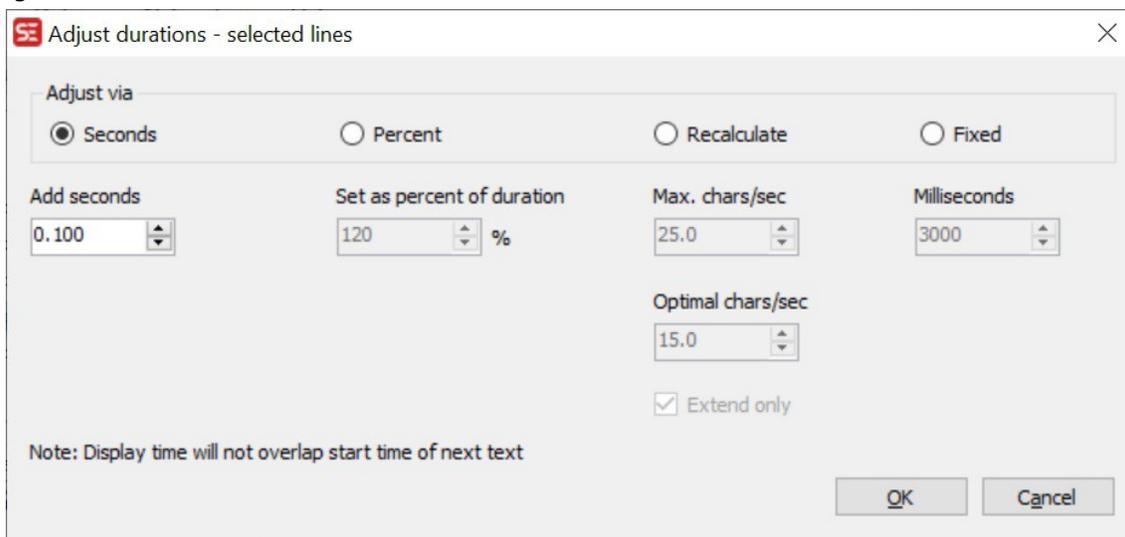


Refer to the cited Auto-translate > Auto-translate... command for complete description of this feature too.

□

³³ Of course *Records*, or equivalently *Rows*, not certainly *lines*, as here said... [cf.: Subtitles: Terms & Concepts].

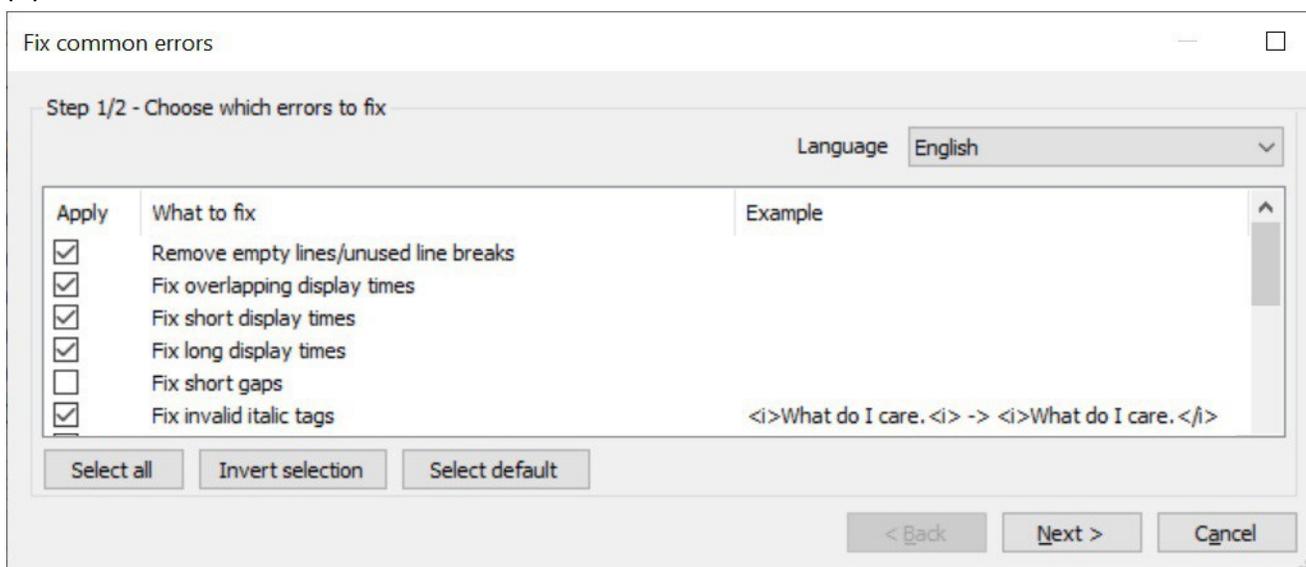
(^) Adjust durations for selected lines...



Self-explanatory feature about Subtitle timing³⁴.

□

(^) Fix common errors in selected lines...



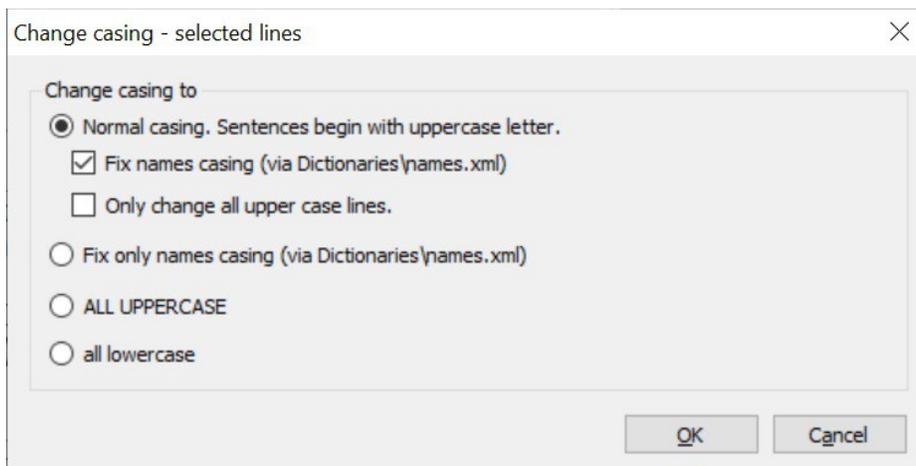
Self-explanatory command and control form, with specific items left to the user's curiosity & initiative.

□

34 <> Rather powerful, worth thorough testing as specific synchronization tool.

(^) Change casing for selected lines...

Set the text casing on currently selected Records as decided in this control form, markup tags excluded [*cf.*: Tools > Change casing...].



A control form self-explanatory enough not to require any further description, but for:

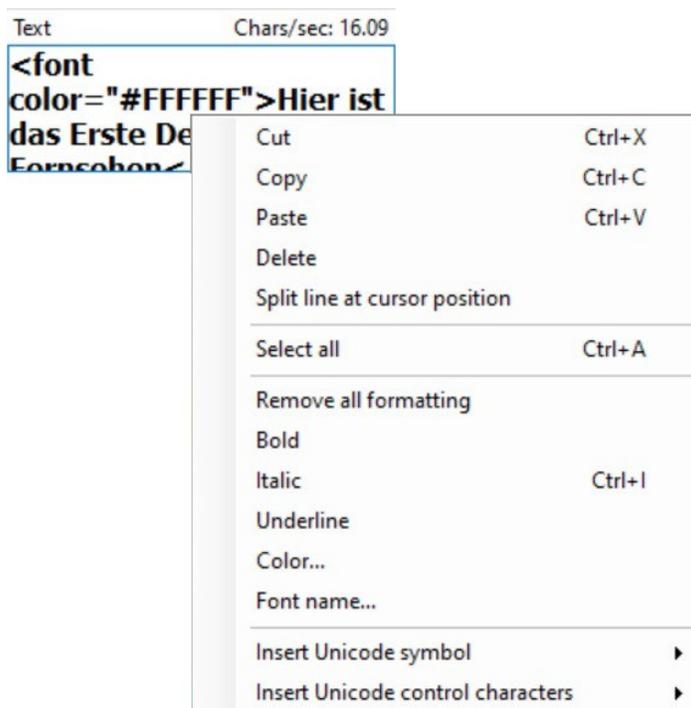
(via Dictionaries\names.xml) same “Names” dictionary as described at command Tools > Change casing...
[*see*]

Viewpoint

This command is obviously referred to Subtitle *Records*, i.e. List view's Table rows, not certainly “*lines*”, as the caption imprecisely says [*see sct.*: Subtitles: Lexicon & Concepts].

—◇—

(^) On: Text Edit Form



Command List

Cut	Copy	Paste	Delete	Split line at cursor position	
Select all	Remove all formatting		Bold	Italic	Underline
Font name...	Insert Unicode symbol		Insert Unicode control characters		Color...

□

(^) Cut / Copy / Paste / Delete

[assumed as well known]

(^) Split line at cursor position

[cf.: (^) On: List View (non-empty Row)]

(^) Select all

[assumed as known]

(^) Remove all formatting / Bold / Italic / Underline / Color... / Font name...

[cf.: (^) On: List View (non-empty Row)]

(^) Insert Unicode symbol / Insert Unicode control characters

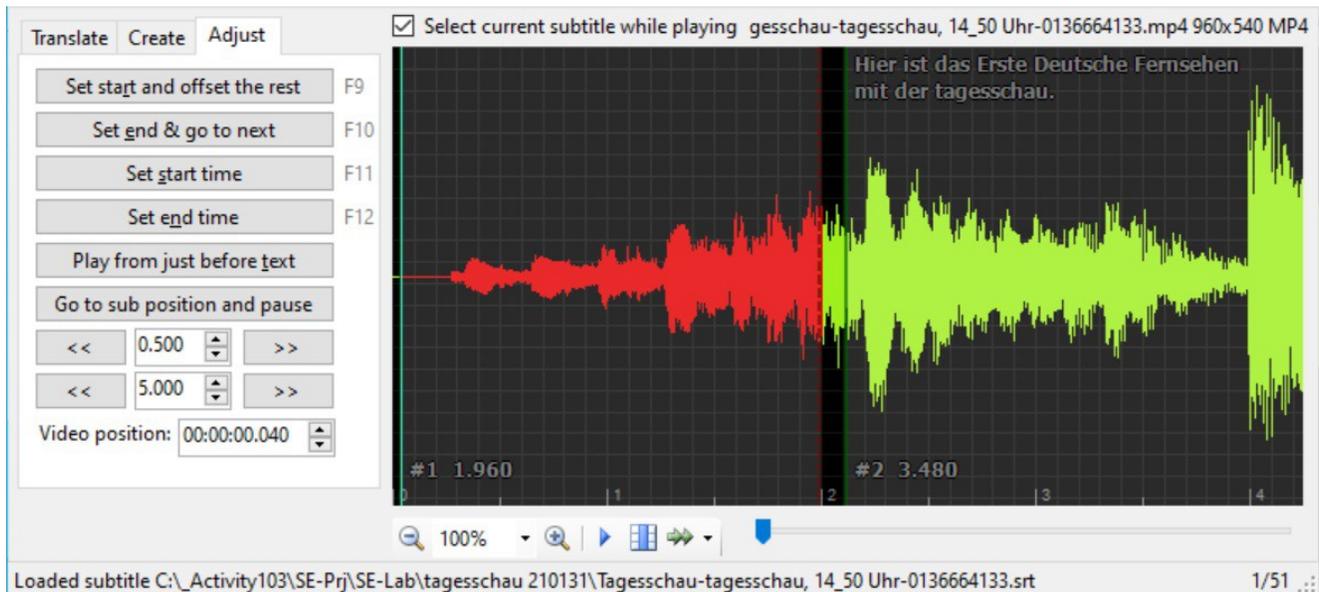
[cf.: (^) On: Source View]

—<>—

Main Tasks and Soundtrack Work Area

S-PM 210200

Here is the SE-cockpit where, as the Tab-labels tell, to Translate, Create, Adjust a Subtitle file; all combined with the above part of the main work area, that is the Subtitle View and Video Work Area [see].



Two distinct sub-areas:

- ◆ At right, a virtual monitor visualizing the soundtrack along with the associated Subtitle text and some related numeric data, and also equipped with touch-screen and control capabilities; as hereafter described in detail.
- ◆ At left, three overlapped Tab-control pages, equipped with dedicated task-controls and context menus; as hereafter described in detail.

Warning

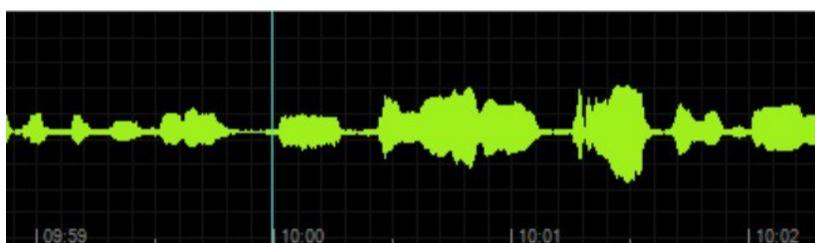
Resizing the SE-Window to its minimum size will hide the bottom part of this left sub-area.

□

Soundtrack Virtual Monitor

Here a general and operative description, as usual leaving out all most intuitive elements and, anyhow, to be necessarily completed by a direct hands-on experience.

The main subject on this Virtual monitor (or Visualizer) is the Soundtrack associated to the current Video, represented as a Waveform running on a horizontal Timeline (in: hh:mm:ss). Here a typical display, where you see what “happens”, in sound terms, around the 10th minute of the Play, as indicated by the vertical green line, as the playback Position marker; and the vertical amplitude of the Waveform that represents the sound level as function of time. Of course Soundtrack and Video Timelines should be exactly the same thing³⁵.



On this Virtual monitor, when void, you'll see a “Click to add waveform” caption, suggesting an action equivalent to the Video > Open video file... command [cf].

□

Now, assuming that your Video has got a Subtitle file to be opened via File > Open command, you will see, laid upon distinct segments of the Waveform stream,



single Records of the Subtitle file, as printed on a transparent slide with, on the background, a squared grid horizontally graduated in 10th of second, here conveniently named Subtitle Unit [SubUnit, *in short*]. On each Unit you'll see the Subtitle text and some other data such as the record's Number and Duration [cf. *sect.*: Subtitle View]. Note that between subsequent SubUnits you'll see “Gaps”, that is segments of Waveform with no SubUnit superposed. Currently executing SubUnit is put in evidence by the corresponding Waveform turned red-colored, all other Waveform flow is kept usual green-colored. Now a look at the various controls and commands here available.

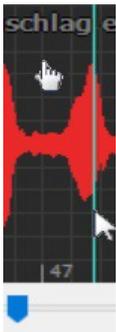
³⁵ Anyhow, if not, there is absolutely nothing that SE can do about [cf. *sect.*: Concepts \ Time].

□

Soundtrack Controls and Actions

Here too, as usual in this Tech.Report, not absolutely ALL Controls and possible consequent user's Actions are to be described, as it would be both unpractical and unnecessary. Indeed, some are left to the hands-on user's experience, anyhow obviously indispensable.

Select current subtitle while playing when ticked—default condition—, the List view results synchronized with the running Soundtrack, the current Subtitle record results selected, and current SubUnit results red-colored.



notice here the vertical green-line playback Position marker, click positionable, and the shift-SubUnit hand pointer.



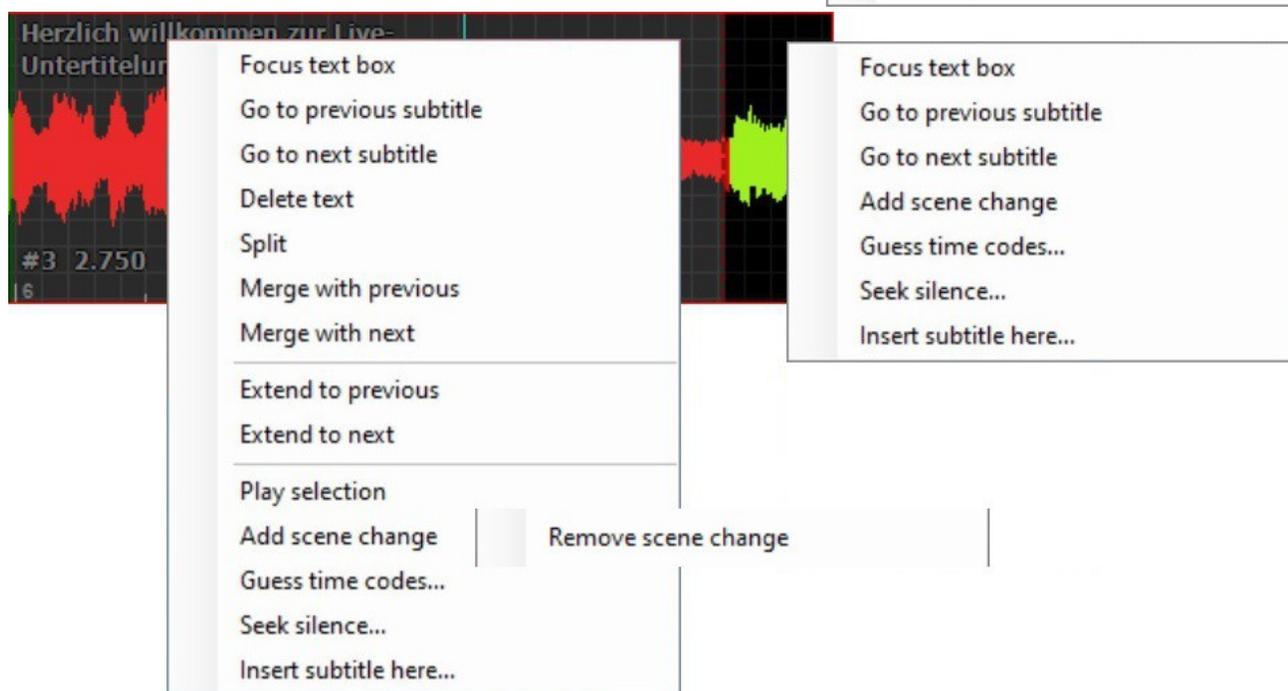
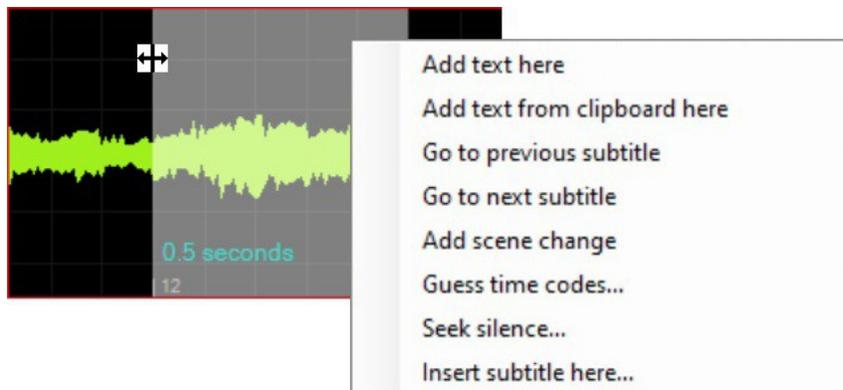
“Play / Pause”, “Center” (the exec-point on the virtual screen) and “Play speed rate”

□

Soundtrack Context Menu

Hint: shift-drag  to select, click outside to deselect.

Notice: Record Units cannot be selected this way, act on the List view instead.-



□

Context on Soundtrack Segments: Selected, Active and Gap

Distinct sets of context commands here, in this section, considered together, in sequence. Same command not repeated.

Warning

<~> Alas some menu items are here actually out-of-context, and therefore both useless and misleading. Such as: “Go to” subtitle commands with no subtitle available, and so on... And that shouldn't be, as accuracy in composition of context menu is crucial to grant operative efficiency.

□

Command List

Add text here

Add text from clipboard here

Focus text box

Go to previous subtitle

Go to next subtitle

Delete text

Split

Merge with previous

Merge with next

Extend to previous

Extend to next

Play selection

Add / Remove scene change

Guess time codes...

Seek silence...

Insert subtitle here...

□

(^) Add text here

(^) Add text from clipboard here

Insert the clipboard contents or what will be typed into the Text frame into the currently selected segment of Soundtrack, this way transformed into a SubUnit. Note that only Void segments of Soundtrack can be selected, and possibly become new SubUnits.

□

(^) Focus text box

To select in the List view the text of the Subtitle record corresponding to the currently click-pointed SubUnit.

Viewpoint

<~> Shouldn't be uselessly available also off-context, that is: without a Subtitle file, or in Source view [*see*].

□

(^) Go to previous subtitle

(^) Go to next subtitle

To jump to prev/next Subtitle Unit with respect the currently click-pointed one.

Viewpoint

<~> Shouldn't be uselessly available also off-context, that is: without a Subtitle file, or “prev” at first SubUnit, or “next” at last [*see*].

□

(^) Delete text

To delete the whole Subtitle Record on the current SubUnit (Ctrl+Z to Undo, as usual).

Viewpoint

<~> Both terms “text”, in the very command, and “line”, in the consequent confirmation window, are ambiguous and misleading, as *the whole* Subtitle Record is here referred to, and with all its Fields: record number, time parameters and text; with all the following Records consequently re-numbered.

□

(^) Split

Split a SubUnit in two, at the current position of the vertical green-line Position marker. A look at the new List view is then advisable, as an error condition may arise.

□

(^) Merge with previous

(^) Merge with next

Merge current SubUnit with the prev/next one. A look at the new List view is then advisable, as an error condition may arise.

□

(^) Extend to previous

(^) Extend to next

Extend current SubUnit up to prev/next one, that is: including existing “Gap”.

□

(^) Play selection

Play just the Subtitle Record Unit³⁶ currently selected on the Soundtrack Virtual monitor, then pause. Notice that also a segment of Void Timeline can possibly be “shift-drag” selected, and then played [*see above sct.:* Soundtrack Context Menu, *initial Hint and Notice*].

Remark

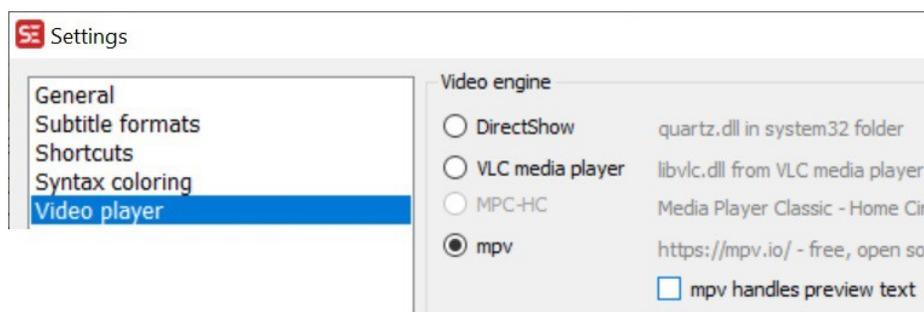
Notice a rather similar “F5” shortcut command [*see sct.:* Shortcut Commands], whose main difference lies on the Record selection, made acting on the List view instead of, as here, directly on the Soundtrack Virtual monitor.

□

³⁶ <,> By the way: describing such command as this one, the term and concept of Subtitle *Unit* results particularly useful [*cf.:* Subtitles: Terms & Concepts].

Text Permanence

In default Options > Settings... condition, and selected the “mpv” Video player [see], at the end of each (^) Play selection command execution the Subtitle text will disappear from the screen. Same behavior also with the similar “F5” shortcut command. In case you'd prefer otherwise, you may just clear the related “mpv handles preview text”³⁷ check box, so to get the desired text display permanence.



But, alas, that comes at a price: instead of having the Subtitle text written “over” the video image, as usual, you'll have it set on a dedicated stripe, so reducing the video surface, as hereafter shown.



<~> Another related inconvenience—probably a minor bug, or simply an oversight—is that the same Subtitle text permanence doesn't occur operating with the otherwise equivalent “Play” actions, in the basic task “Translate” mode [cf].

□

37 <~> Whose precise meaning and role, apart from this specific effect, is anyhow unknown to us.

(^) Add scene change

(^) Remove scene change



<Insufficient information> – Report suspended

All we know so far about “Scene change” and “Scene Change Detection” (SCD) is that it is a subject in itself, worth attention and further analysis and investigation. And that, sometimes, it may be useful in setting the Subtitle Units Start / End time according to specific rules, e.g. as by Netflix's.

□

Operatively, here we just consider that, with this Add / Remove command, a “scene change” can be marked with a vertical white line on the Waveform at the current vertical green-line Position marker; or then removed, precisely pointing at an existing one [*cf. also*: Video > Generate/import scene changes...].

–◇–

(^) Guess time codes...



<~> – for reasons as hereafter hinted [and marked with a: <~>].

Presumably, <~> in spite of the rather inexpressive command name, it's an automatic procedure aimed at creating a sequence of blank Subtitle Units, i.e. Records, along the Timeline where the Soundtrack is likely to contain speech. Records to be then possibly filled with actual Texts.

A tool based on the analysis of the Soundtrack according to parameters entered into the above control form, as hereafter described.

Controls

- Delete lines <~> not certainly “lines” is here intended, but Subtitle Units, that is Records, instead [cf.: Subtitles: Terms & Concepts].
- block it is here assumed to signify a single “discrete” scan-interval on the Timeline.
- above / below [ref.: average volume] to define an intermediate band of sounds volume—above a certain min. level (threshold of silence), below a certain Max. level (threshold of noise)—where speech is presumably located. Unfortunately parameters verified as: <~> as unreliable. Indeed the resulting number of Units seems to be quite indifferent

to the actual two threshold values entered. For instance a “negative”-width band, that is: a Max. value *inferior* to the min., will generate anyhow a non-empty set of speech-candidate Records.

<~> and as unpractical. In the sense that this is a typical setting to be adjusted via try-and-error, that is tuning just one value, for instance the min. or Max. threshold value, and leaving all the other settings unchanged. Unfortunately that cannot be easily done because the form doesn't “remember” last entered values, and when re-called, even during the same command-session, it will be reset to all the same initial default values.

long subtitles presumably: Duration field of a Record, so to establish a maximum above which a Record will be split in two or, presumably, more.
 <~> Anyhow feature not tested because of the other above declared difficulties.-

Viewpoint

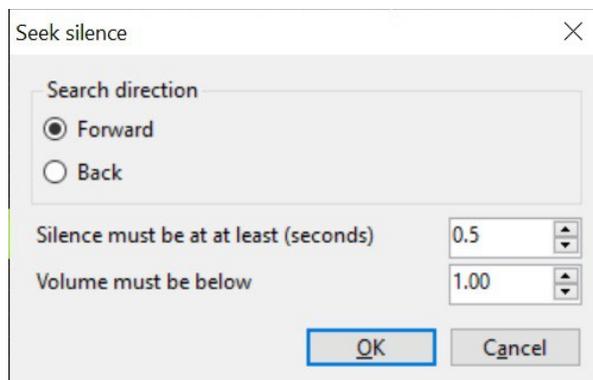
Our conclusion:

<~> A rather interesting tool, well worth the effort of fixing at all the here stated <~> points.

□

(^) Seek silence...

To jump to the position along the Timeline where there is a condition of “silence”, as defined in the subsequent dialog box.



Then the exact numeric time-position possibly found is shown on the “Video position” box [*at: Create or Adjust Tabs*], besides being indicated by the vertical green Position line.

Viewpoint

<~> It would be nice to know how to evaluate the “Volume” value [*in: decibel (dB)*], particularly with reference to the Waveform squared grid scale.

<~> We have also noticed that the same Seek, if Forward or Back, leads to different position values, and that is presumably due to the fact that in one case it will indicate the start, in the other the end point of the same interval. We wonder if we could get this same information in a more convenient way.

<~> We have also noticed that if no condition of silence is encountered, then there is no change in the current “Video position”. We wonder if this “null” result could be simply, and more correctly, signaled by moving the Video position to the end of the scanned Timeline interval.

□

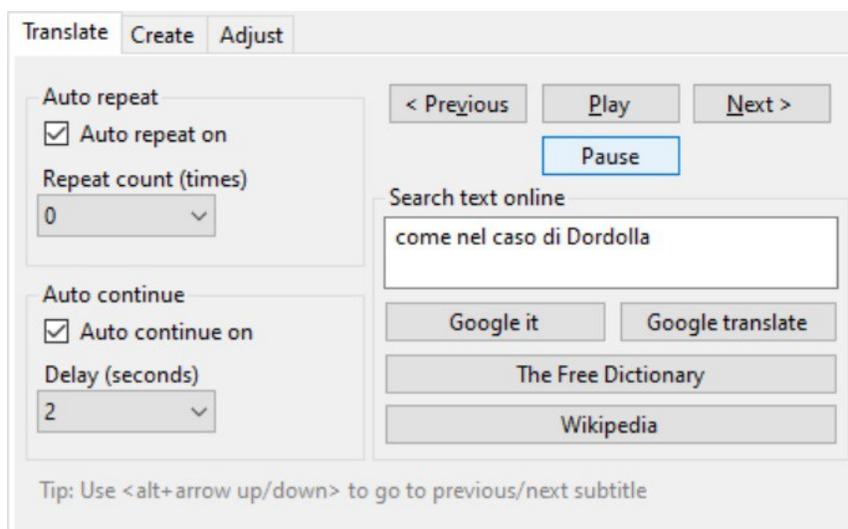
(^) Insert subtitle here...

Insert all the Records of a given Subtitle file into a “Void” interval [*i.e.*: a “Void Unit”] starting from the current position of the vertical green-line Position marker. In that it is different from otherwise similar commands as: (^) Insert subtitle after this line..., or File > Open [*cf.*].

Possible error condition may arise, as List view will show.

-◇-

Main Task: Translate



Controls

Delay takes effect when *both* “Auto” conditions are set on³⁸, and inserts the stated delay before playing each next Subtitle Unit.

All other controls are here assumed as self-explanatory.

□

Remark

<~> “Translate” tab-page may be profitably used not only for the named main task [*cf. sct.:* BT2 – “Translate” a Subtitle file, multi-lingual], but also in other circumstances where careful watching over and over specific film sequences and subtitles might be required.

Viewpoint

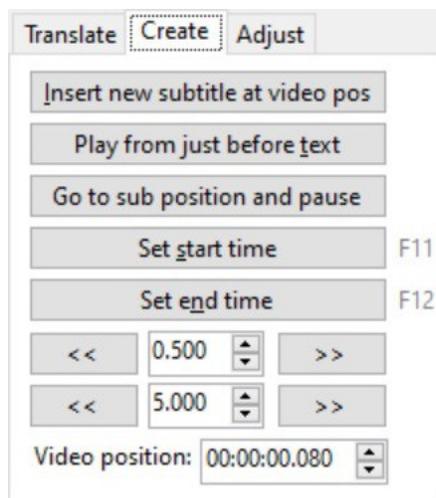
<~> Thus—our opinion—it would be nice if this “Translate” tab-page could operate also on a given contiguous set of selected Subtitle Units, and not only onto single ones, as it is now. Besides here, on the List view table, selection of more than one Record-Row is perfectly permitted, but ineffective, as only the first one will be then considered.

<~> An illusory selection, permitted, but not respected; and as encountered in many other SE's operative circumstances which—our opinion—should be all thoroughly revised.

—<>—

38 <~> Therefore we assume inappropriate and misleading to locate this control within the “Auto continue” area, as it equally belongs to the “Auto repeat” area too.

Main Task: Create



Controls

- | | |
|----------------------------------|---|
| Insert new subtitle at video pos | insert, at the current Video position, a blank new Subtitle Record with initial default duration value of 1 sec ³⁹ ; and select it ready for new Text. |
| Play from just before text | shift the Video Position Marker precisely at the beginning of the currently “red”-selected Subtitle Unit, and Play. |
| Go to sub position and pause | same as former command [see], and pause the Playback. |
| Set start /end time | set the start / end time of the selected Record at the current “Video position” box value (Ctrl+Z to undo). |

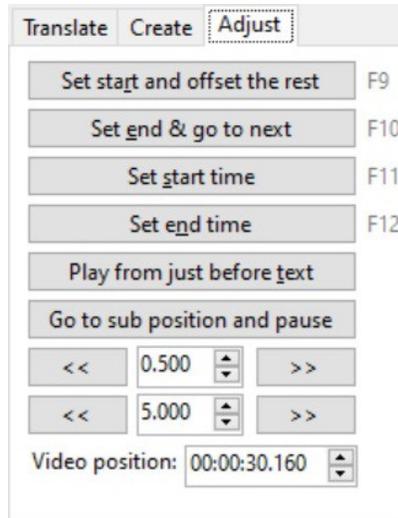
Remark

As a rule the “Video position” numeric value and the vertical “green” Video Position Marker correspond reciprocally, so that acting on each of them is equivalent.

—<>—

39 <~> Similar action via command (^) Insert has default duration of 2 sec [cf.]. We wonder if such values are hard coded or could be tuned somewhere.

Main Task: Adjust



Controls

Set start and offset the rest	almost as with next Set start time [cf.], with the “rest”—that is, all timing of subsequent Records—consequently adjusted.
Set end & go to next	almost as with next Set end time [cf.], then go to next Subtitle Unit.
Set start / end time	set selected SubUnit start / end time at the current “Video position” value. <.> “Video position” in itself doesn't change any Subtitle time-field value, being conceived to control the position of Video Position Marker only.
Play from just before text	force anyhow Playback starting from the beginning of the currently selected SubUnit, as shown on the List view table; SubUnit red-colored, as usual. Same move as “Go to” here below [cf.], then Play.
Go to sub position and pause	same move as “Play” here above [cf.], then Pause.
	shift “Video position”: backward/forward, by fine/large steps.
	display/set a precise numeric “Video position”, with reference to the time scale: hh:mm:ss.msec – linked to Position Marker manual setting.

Remark

<...> We have noticed an automatic rounding of the “Video position” numeric value, probably worth further investigation.

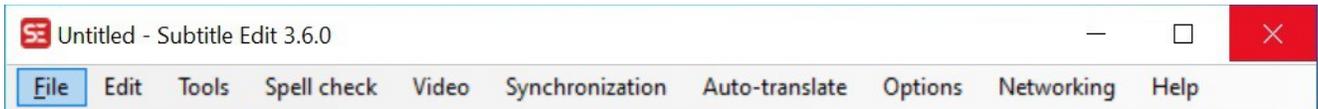
—◇—

Main Command Menu

S-PM 210500

Menu Bar, and Commands

This the main Menu Bar, in its standard position just below the Title Bar, in its standard shape, where all drop-down Command Menus can be called. The main subject of this section.



Menu Index

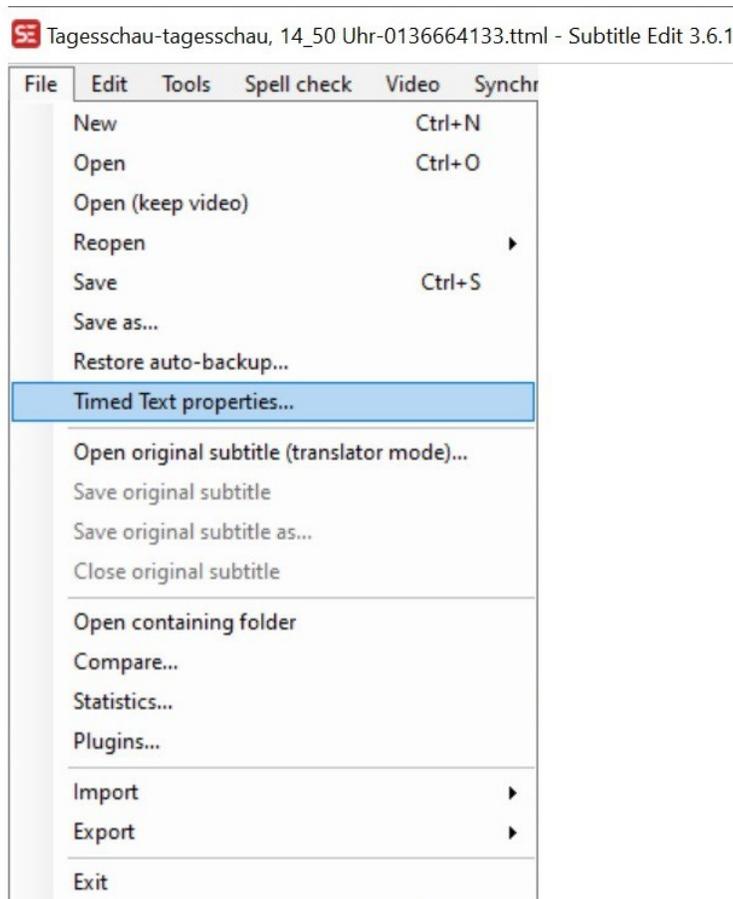
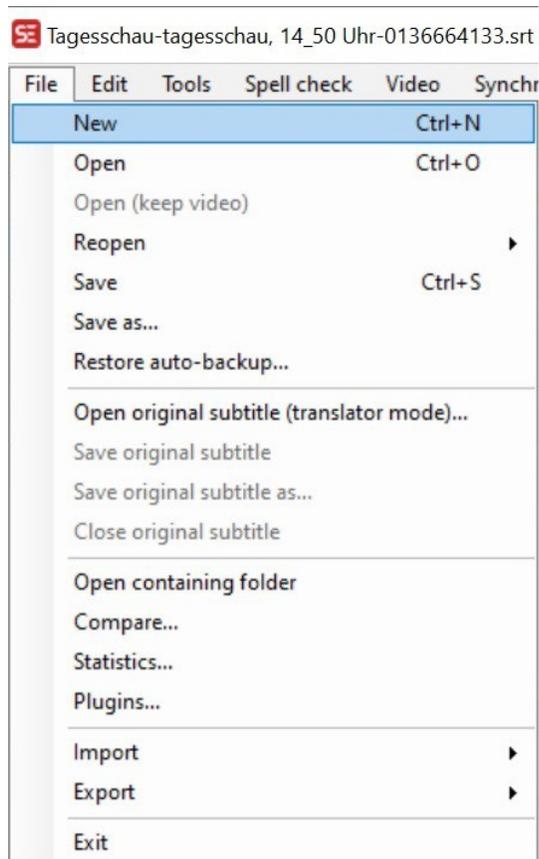
File	Edit	Tools	Spell check	Video
Synchronization	Auto-translate	Options	Networking	Help

Each and all command menus to be thoroughly described hereafter, with the exclusion of such operative details as keyboard shortcuts and Tool Bar icons, left to the initiative, and preference, of the adventurous user. □

<.> The “Untitled” name on the Title Bar refers to the current Subtitle file, not yet properly defined.

-◇-

File Command Menu



Command List

New	Open	Open (keep video)	Reopen
Save	Save as...	Restore auto-backup...	Timed Text properties...
Open original subtitle (translator mode)...		Save original subtitle	Save original subtitle as...
Close original subtitle	Open containing folder	Compare...	Statistics...
Plugins...	Import	Export	Exit

□

Remark

This File > ... menu may assume two distinct compositions [see figure]:

- a shorter one, with the usual “*.srt” SubRip Text format Subtitle file;
- a longer one, in case of “*.tml” Timed Text Markup Language and “*.xml” formats.

A typical example of SE menu-adaptation to different operative conditions. As a rule, in this Report all same menu's commands will be presented, no distinction whether they belong to a longer or shorter list.

□

Viewpoint

In all such cases—disconcertingly frequent with SE—, instead of having commands disappearing and appearing according to some environmental operative conditions, we'd be strongly in favor of a different approach, that is keeping anyway the same commands' presence, just possibly dimmed-disabled. That, in our opinion, would be much more appropriate and user-friendly.

Indeed that of a “dynamic” presence of commands according to environmental condition is a typical characteristic reserved to *context menus*, not to main menus, traditionally always kept constant in their composition.

□

File > **New**

Create a brand new and empty “Untitled” Subtitle file and, in the same time, possibly close the currently opened one, if any. In essence, designed to reset all conditions for a new Subtitle editing session.

□

File > **Open**

Open an existing Subtitle file, whether recognizable as such.

Main SE subject is, indeed, the Subtitle file. That is to say that possible opening of other files—typically video media files—are consequently subordinate⁴⁰ to this primary purpose [*cf. cmd: Video > Open video file...*].

Prevalence of subtitle over video media is witnessed also by the fact that, inversely as with usual video player programs, at the opening of a subtitle file SE may automatically open also a corresponding video file, whether anyone is found nearby with the same subtitle's name and appropriate extension; and provided such behavior is permitted by the “Auto-open video file when opening subtitle” check box on the Options > Settings... : Video payer form [*see*]. But no analogous inverse automatism [*that is: Subtitle opening after Video*] is provided by SE.

Remark

Note here the—deliberate—absence of a corresponding “Close” command. To that purpose just use the File > New command instead [*see*], which is precisely provided to do all required housekeeping actions. Or, equivalently, try open another Subtitle file, which will imply a neat closure of the possibly current subtitle editing session first.

□

File > **Open (keep video)**

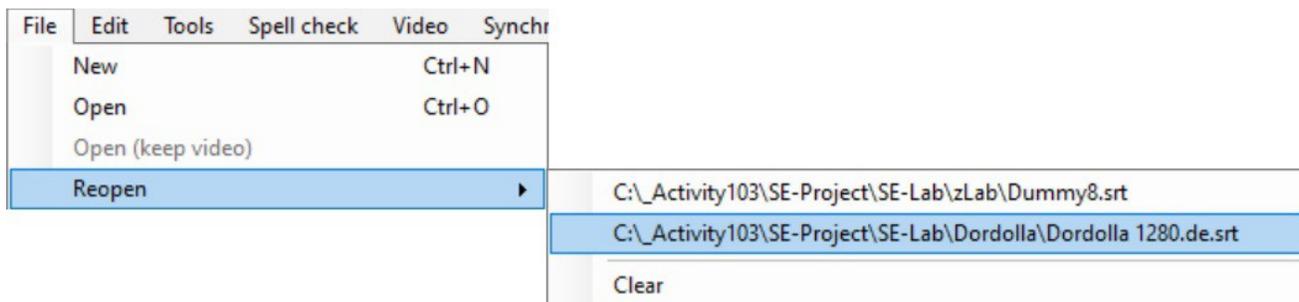
Same as “Open” [*see*], just keeping the same video currently opened.

□

40 Subordinate in various and intuitive ways, that we are *not* going to describe here in detail.

File > Reopen

Designed to display the History-list of the last opened Subtitle files, handy to possibly re-open again one of them.



Remark

Command not available, nor shown, in case of an empty History-list, that is to say just initially, or after a File > Reopen > Clear, or after an Options > Settings... > Restore default settings > OK button action [see – see also the Viewpoint stated under sct.: File Command Menu].

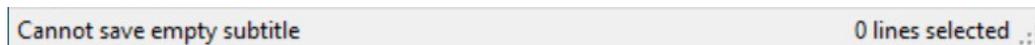
□

File > Save

Save overwriting the currently open Subtitle file, without closing the editing session. In case of a “Untitled” file, this command operates like “Save as...” [see].

Remark

SE “Cannot save empty subtitle”,



so you'll be told on the bottom Status Bar in case you'd try doing so.

□

File > Save as...

The very same as with the other “Save” command [see], but onto a file possibly different in: name, location, type and extension.

Type and extension to be chosen among those shown available on the related “Save as type” drop-down list: SubRip (*.srt), ABC iView (*.xml), ..., Unknown 103 (*.txt); possibly implying a conversion. Same drop-down Format list of the Tool Bar [see].

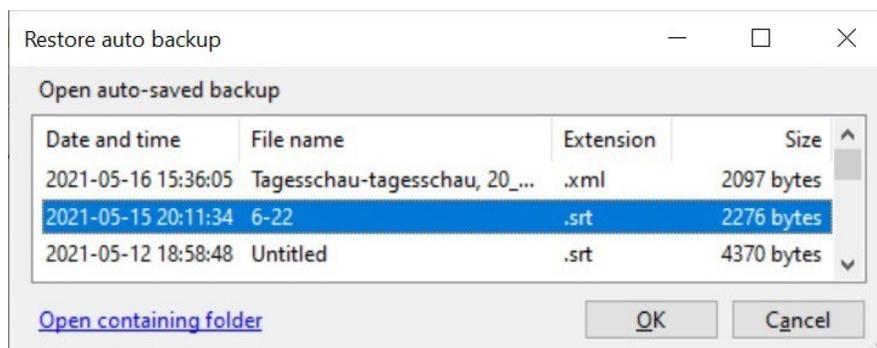
Remark

As a rule SE deals with Subtitle files of text format, as primarily the popular SubRip's “.srt”; that is: not binary image files [cf.: Subtitles: Terms & Concepts]. Binary text formats are exclusively subject of the dedicated File > Import and Export commands [see].

□

File > **Restore auto-backup...**

Nice to know that SE grants such an auto-backup mechanism, typically useful to possibly recover Subtitle files previously automatically saved so, for instance, to limit damages after a system crash.



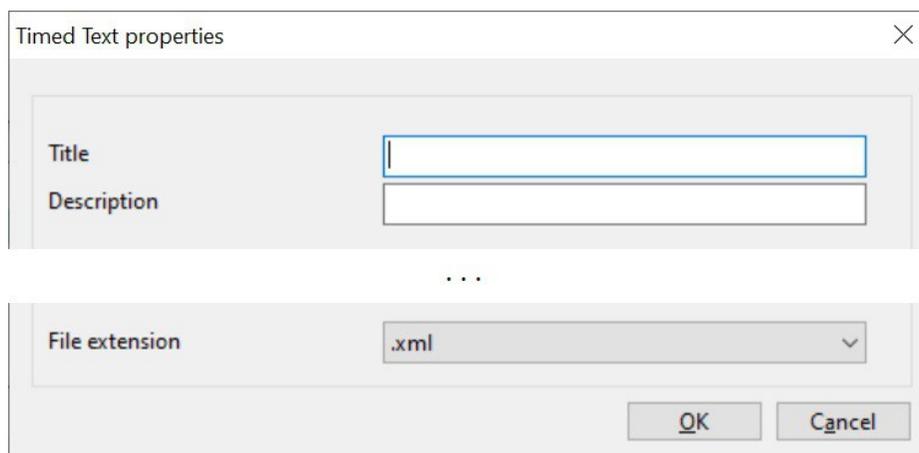
As usual with SE, a different containing folder is assigned to each single user, this way:
 C:\Users\User103\AppData\Roaming\Subtitle Edit\AutoBackup

□

File > **Timed Text properties...**



<Not Covered> – Off-Report



Highly specialized “properties” form, in connection with the Timed Text Markup Language “*.ttml” Subtitle file format [*and, it seems, also with: ASSA, ebu stl formats*].

Remark

Currently [*S-PM 210000*], we privilege the most popular “*.srt” Subtitle file format, then only look with discreet attention to such other Subtitle formats, possibly ready to evaluate their diffusion and

relevance.

□

File > **Open original subtitle (translator mode)...**

Text	Chars/sec: 10.93	Original text	Chars/sec: 8.54
und immer noch sehr authentisch.		e ancora molto autentico.	
Single line length: 32	Total length: 32	Single line length: 25	Total length: 25

When engaged in a “Translate” task [*see sct.*: BT2 – “Translate” a Subtitle file] it may be handy to open also the original Subtitle file of which the current one is the translation.

Remark

Useful here to know about the “ToggleTranslationMode Control+Shift+O ” Shortcut command [*see*].

□

Viewpoint



<Insufficient information> – Report suspended
Further tests and inquires required to issue a valid Report
[*cf. also cmd*: Tools > Make new empty translation from current subtitle].

□

File > **Save original subtitle**

File > **Save original subtitle as...**

File > **Close original subtitle**

Usual command [*cf.*] just acting on the current “original” Subtitle file, in “translator mode” [*see*].

Viewpoint

<~> As a rule, any original text, be it a novel, an article or a subtitle, shouldn't be changed while under translation, being its role that of a read-only reference. Therefore we consider here utterly inappropriate and “dangerous” to dispose of any “Save” command for an “original subtitle” in such a circumstance.

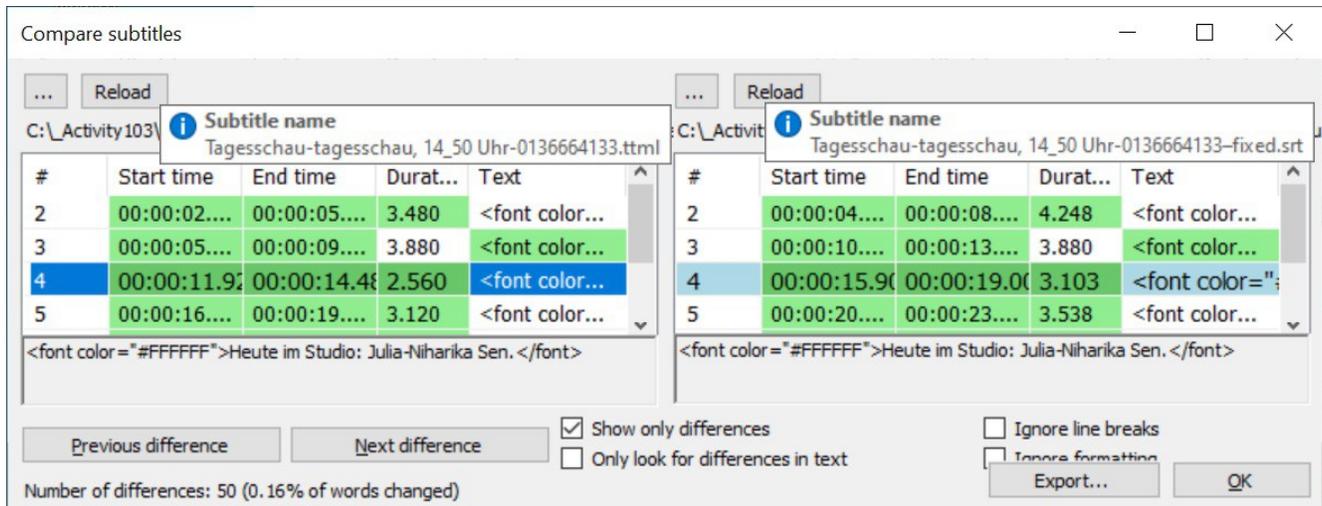
□

File > **Open containing folder**

Just to open the directory containing the current Subtitle file, for inspection or so.

□

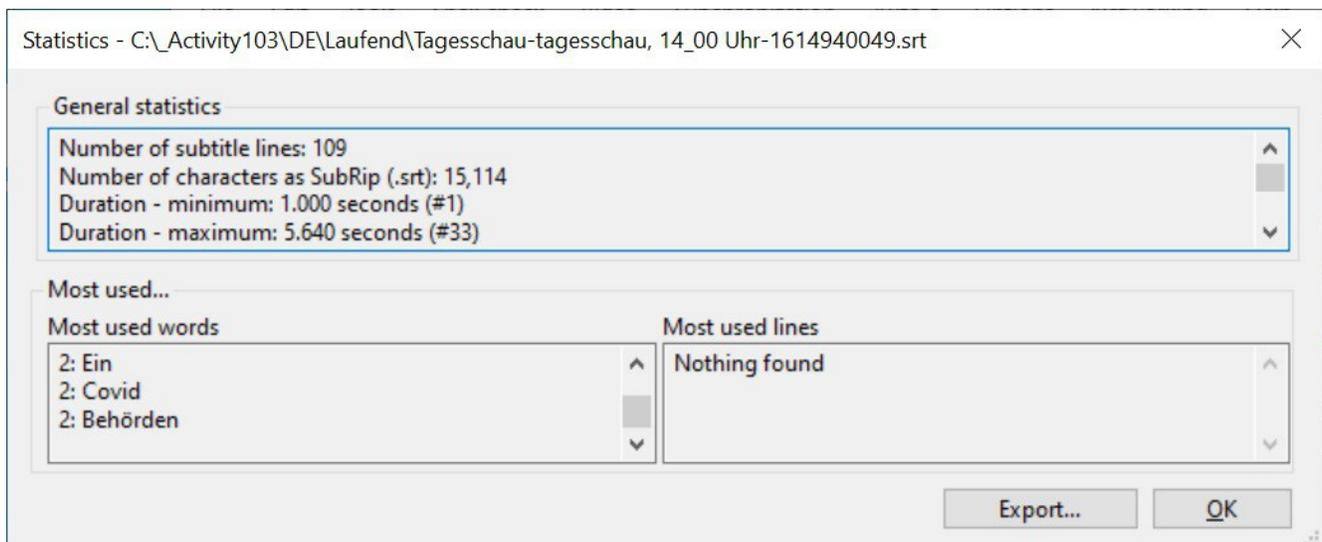
File > Compare...



In this example, for instance, it is to tell the difference between the same Subtitle file, in “.ttml” and “.srt” format, with different sync Timestamps.

□

File > Statistics...

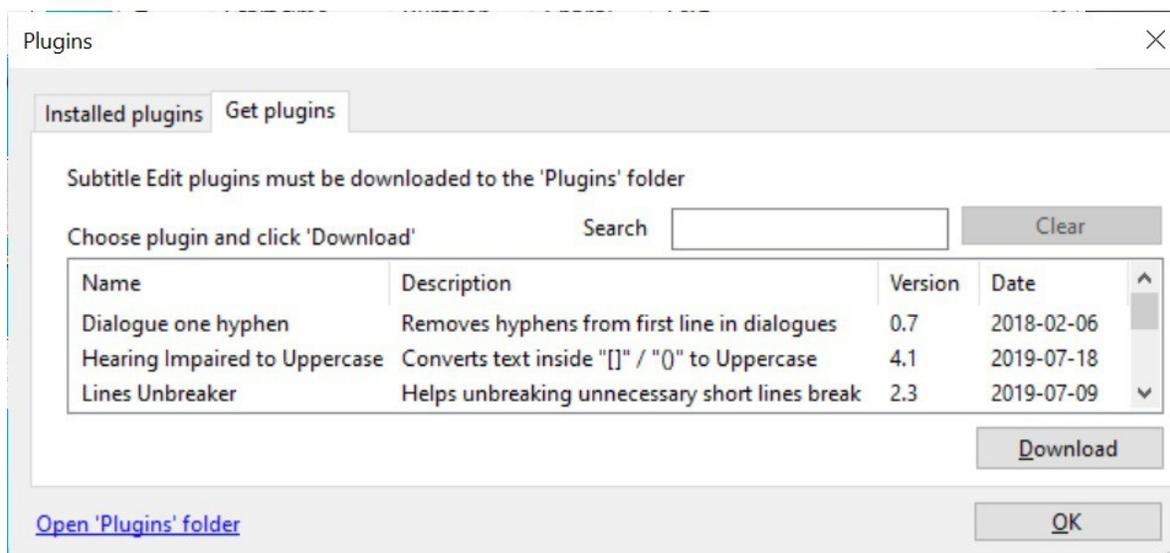


To display and export such kind of info about the current Subtitle file.

□

File > **Plugins...**

A way for adding special functionalities beyond those offered by the standard SE program.



With this command you may explore which SE-Plugins are available in the dedicated “raw.github.com” Internet site, and which one have been possibly already downloaded into your local depot, that is:
 ... \Users\myUserName\AppData\Roaming\Subtitle Edit\Plugins

Remark

Detailed description of the currently available SE-plugins, or how to possibly develop them, is at the moment beyond the purpose of this Report.

□

File > **Import**

File > **Export**

Interchange and conversion commands for files of special formats, other than those dealt with the usual File > Open and > Save commands [cf. – see also 2nd Remark, that about Text/Binary format files, at sct.: Subtitles: Terms & Concepts]. That is, formats spanning from plain text to Blu-ray (.sup), as available through the related drop-down lists of these very commands.

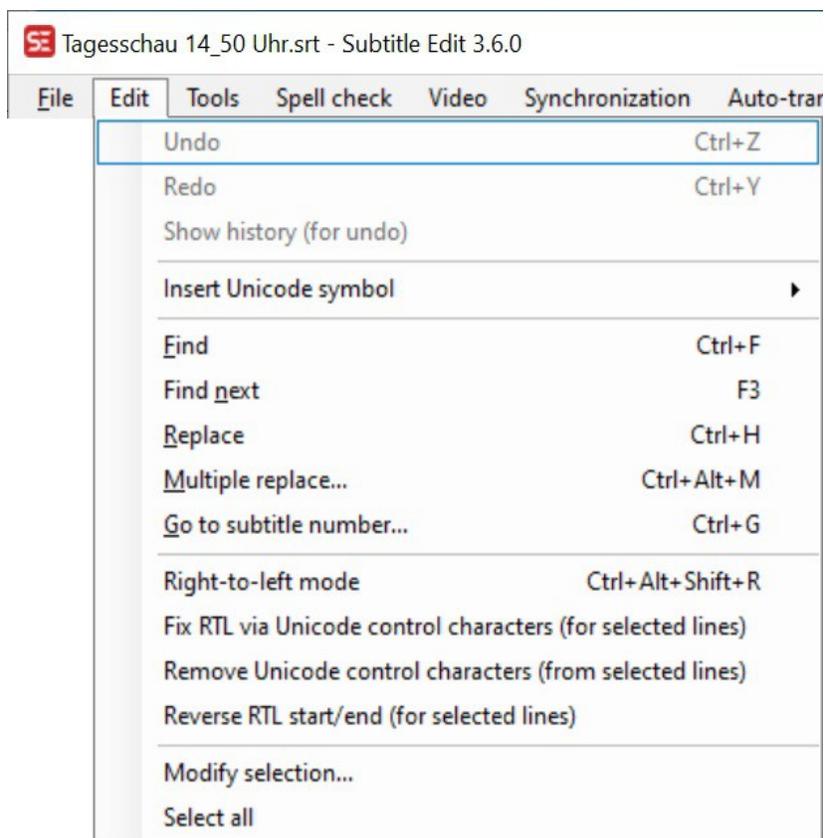
□

File > **Exit**

Close the current SE session, and perform all related house-keeping.

—◇—

Edit Command Menu



Command List

Undo	Redo	Show history (for undo)	Insert Unicode symbol	Find
Find next	Replace	Multiple replace...	Go to subtitle number...	Right-to-left mode
Fix RTL via Unicode control characters (for selected lines)				
Remove Unicode control characters (from selected lines)			Reverse RTL start/end (for selected lines)	
Modify selection...	Select all			

□

Text Edit Area

Before going into detail about each and all Edit Menu Commands let's have a look at the work area where these commands operate.

A Subtitle file is composed of single text-items as here listed into a table, in numbered rows and with related timing property-columns [hh:mm:ss.msec]; all editable by means of dedicated controls, self-explanatory enough not to require much explanation.

#	Start time	End time	Duration	Text
3	00:00:05.680	00:00:09.560	3.880	Herzlich willkommen zur Live...
4	00:00:11.920	00:00:14.480	2.560	Heute im Studio: Julia-Nihari...
5	00:00:16.160	00:00:19.280	3.120	Guten Tag, <
6	00:00:20.680	00:00:24.120	3.440	In Russland gibt es erneut /

Start time	Duration	Text	Chars/sec: 13.14	Unbreak
00:00:16.160	3.120	Guten Tag, <		Auto br
		ich begrüße Sie zur tagesschau.		
		Single line length: 10/31	Total length: 41	

- Text selected Subtitle's text-edit box
- Chars/sec Total length⁴¹ / Duration ratio (e.g.: 13.14 Chars/sec), that is the implied reading speed – ref. upper limit for an average viewer: 20 char.s/sec
- Single line length e.g.: 10 and 31 char.s, two lines⁴²
- Total length e.g.: 41 char.s
- Unbreak / Auto br buttons to reset / add automatic break-lines

□

Edit > **Undo**

Edit > **Redo**

Edit > **Show history (for undo)**

Designed to perform the named usual editing actions. Commands conveniently dimmed-disabled when not usable, that is when there is no former action to undo/redo/show.

Viewpoint

As already said [cf. footnote at Title Bar], we consider this way of declaring disabled a command, when unusable, much preferable to not displaying it at all. And, for obvious reasons of uniformity, so not to disconcert the poor user, we are strongly in favor of adopting always this same convention wherever required, as for instance also with File > Reopen and File > Export commands [see].

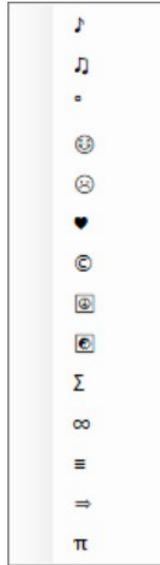
□

41 Conventions: exclusion of html and ASSA tags for Italic, Bold and Underline characters; and possibly the exclusion of spaces according to Options > Settings... : General \ Chars/sec (CPS) includes spaces [see].

42 <-> Text lines, table rows and Subtitle records are distinct terms and concepts, of course. Not to be confused as, for instance, erroneously done in such a command as: Insert subtitle after this line..., or: Extend to line before [see, and see also sct.: Subtitles: Terms & Concepts].

Edit > **Insert Unicode symbol**

Designed to insert into the pointed position of the Text frame one of the here available Unicode symbols. That is:



Symbols that may be useful to have here handy, being not available on usual keyboards.

□

Edit > **Find**

Edit > **Find next**

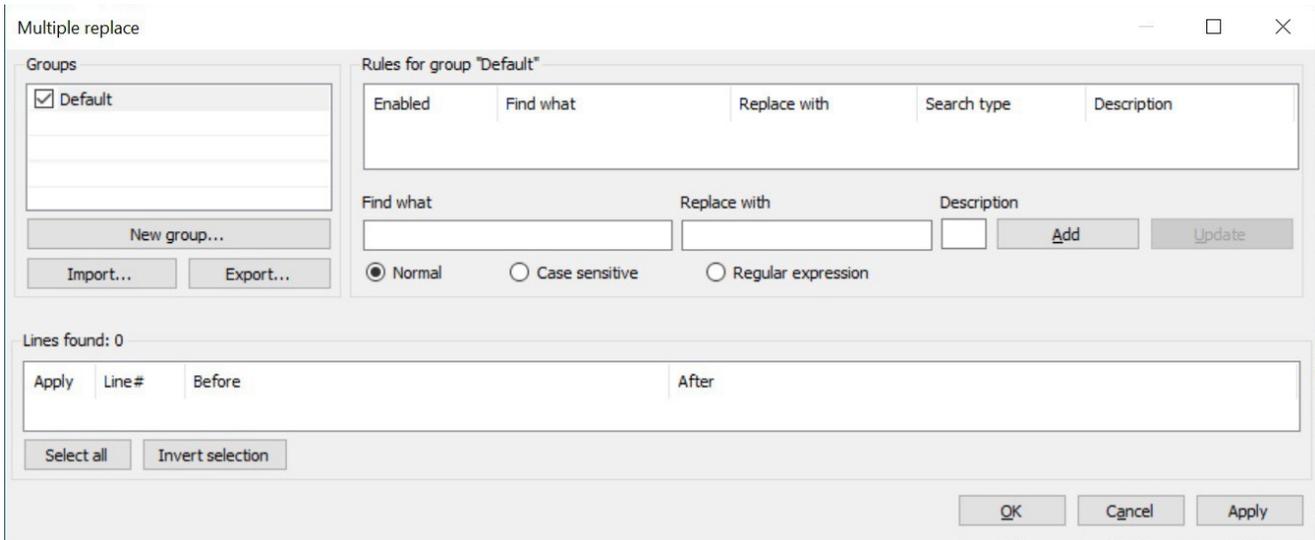
Edit > **Replace**

Usual edit-commands, assumed as universally known.

□

Edit > **Multiple replace...**

Offer a form for an advanced Find & Replace editing tool⁴³, making use of standard text search lists and regular expressions.



A tool aimed at translators, editors and DeskTop Publishing (DTP) specialists, whose operative description would go beyond the purpose of this Report and deserve a dedicated booklet of its own.

Remark

A look at: Edit > Modify selection... for another powerful “composable” search text tool.

□

Edit > **Go to subtitle number...**

Designed to quick jump to and select a numbered row on the Subtitle table.

□

Edit > **Right-to-left mode**

Edit > **Fix RTL via Unicode control characters (for selected lines)**

Edit > **Remove Unicode control characters (from selected lines)**

Edit > **Reverse RTL start/end (for selected lines)**

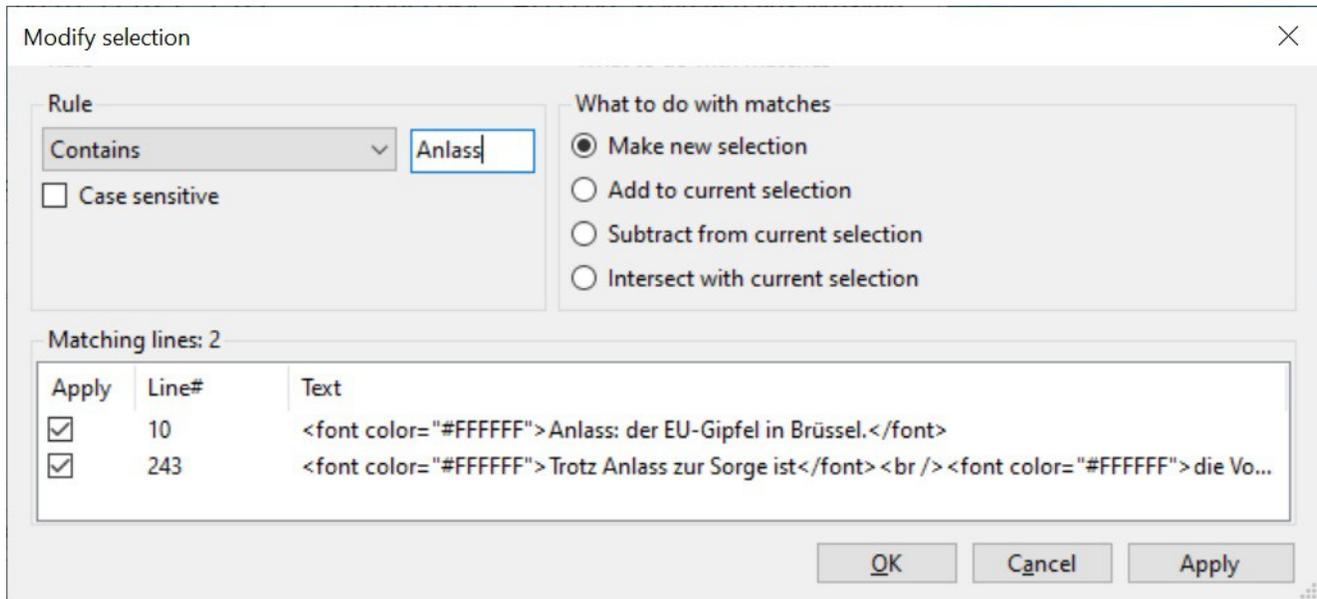
Designed for dealing with “Right-To-Left” languages, as Arabic and Hebrew [*that's all we can here say, being that a cultural environment unknown to us*].

□

⁴³ As can be found with Excel or Digital Workroom's “Noted” application.

Edit > **Modify selection...**

Powerful multi-section logically composable Subtitle text search and select tool.

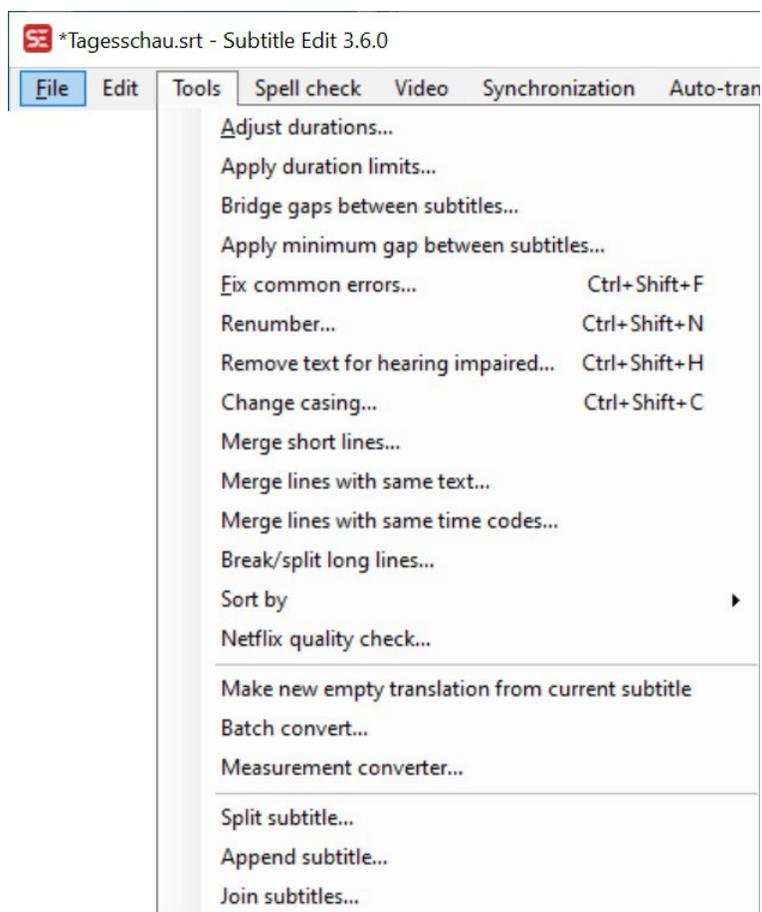


Edit > **Select all**

Designed to select all Subtitle records on the List view and all corresponding Units on the Soundtrack Virtual monitor.

—◇—

Tools Command Menu



Command List

Adjust durations...	Apply duration limits...	Bridge gaps between subtitles...
Apply minimum gap between subtitles...	Fix common errors...	Renumber...
Remove text for hearing impaired...	Change casing...	Merge short lines...
Merge lines with same text...	Merge lines with same time codes...	
Break/split long lines...	Sort by	Netflix quality check...
Make new empty translation from current subtitle	Batch convert...	Measurement converter...
Split subtitle...	Append subtitle...	Join subtitles...

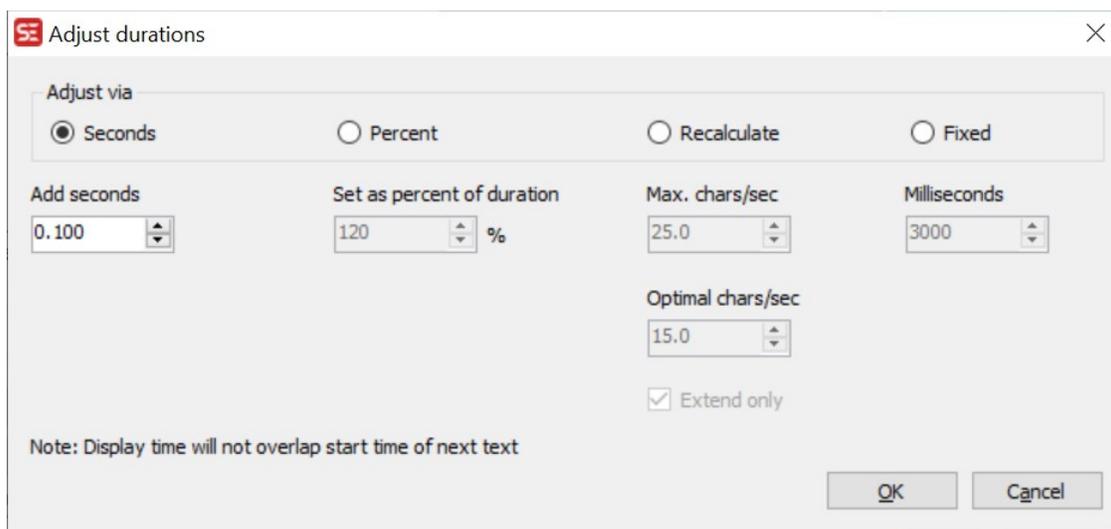
Requisite

<> Most of these Tools commands require the presence of a Subtitle file.

□

Tools > **Adjust durations...**

Tool for a rough general Subtitle duration adjustment fit for languages of remarkably different average word lengths, typically in case of a transition between oriental and occidental languages.



Seconds / Percent referred to the Duration of all Subtitle records.

Recalculate each Duration, based upon the given char.s per second speed parameters.

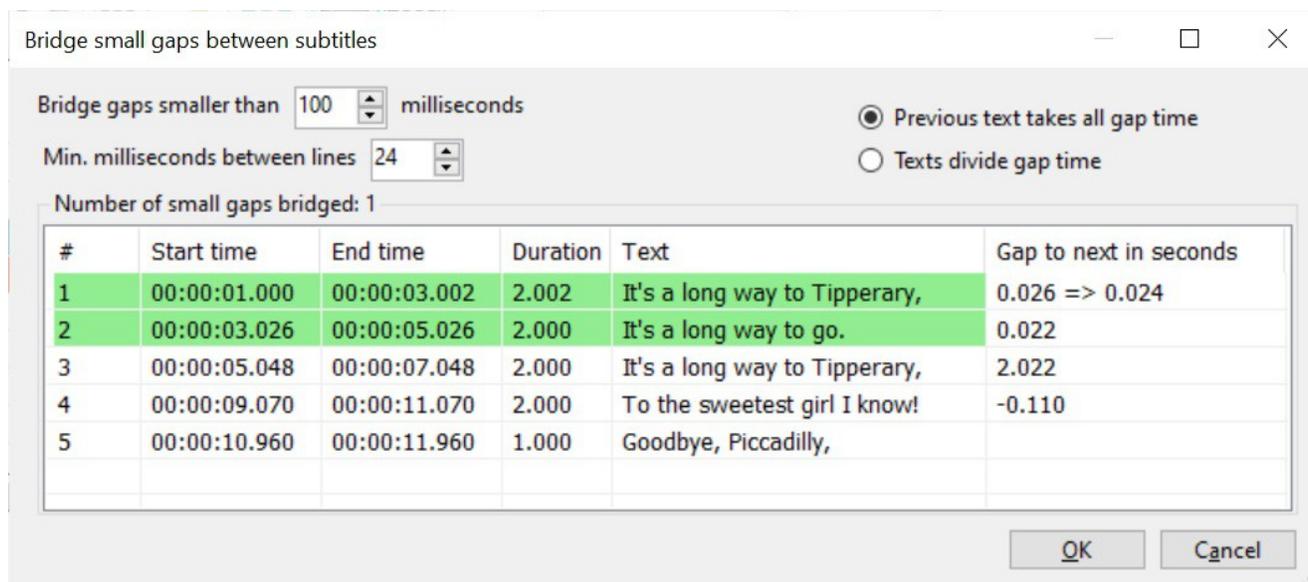
Remark

Worth recalling that a good average top reading speed is about three word/sec, that is around 20 char/sec, with occidental languages. For instance, Netflix standard limit is a prudential 17 char/sec.

Extend only no Duration reduction admitted, only extension.

Fixed same value for all Durations.

□



Bridge gaps corresponds to the “G” value in the above scheme. In this example only Gaps ≤ 100 and > 24 msec will be chopped to 24 msec; all the others are left as they are.

Min. milliseconds corresponds to the “g” value in the above scheme. In this example: 24 msec.

Previous text possible time correction is assigned only to the Record at left of the Gap;

Texts divide possible time correction is equally assigned to both contiguous Records.

□

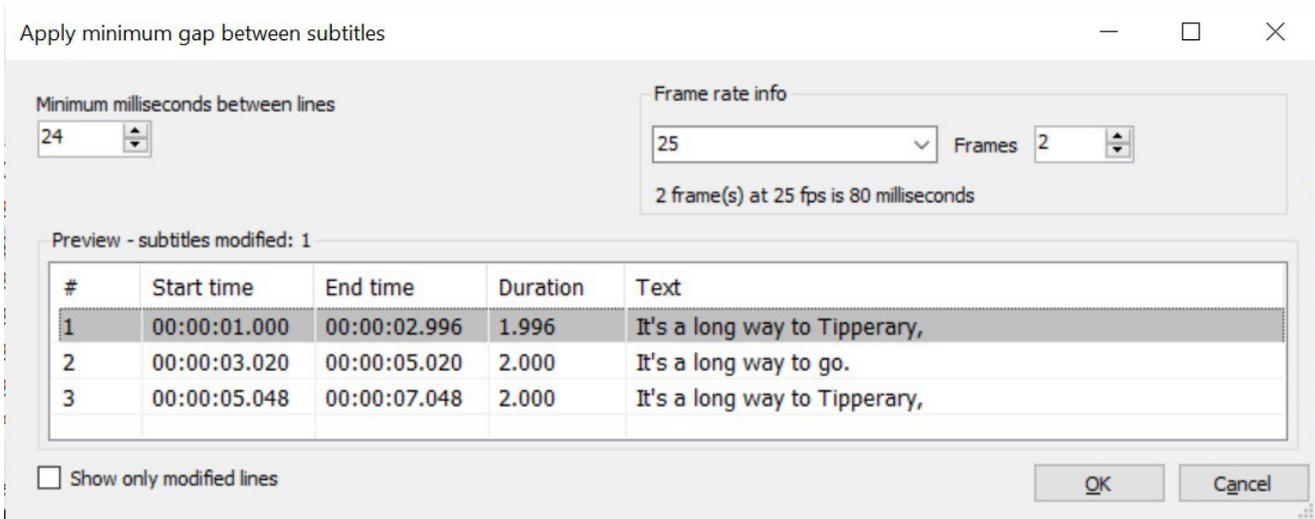
Viewpoint

<.> In this tool frame is particularly evident how relevant is a clear, unambiguous and coherent adoption of terms [as stated in: Subtitles: Terms & Concepts], and how confusing, almost unmanageable are instructions expressed with unappropriated, imprecise terms.

□

Tools > **Apply minimum gap between subtitles...**

Just to ensure that all Subtitle Gaps be greater than a given minimum value [e.g. here: 24 msec]. Possible adjustment affects lower Gap's limit only, upper remains unchanged.



Controls



<Inquiry> – About:

Frame rate info not clear whether it's an information Mr. User is supposed here to receive or to enter. And, if the second, we wonder how Mr. User can know. And, above all, its meaning in this context.

Frames “fps” (frame per second) is a value of frequency, given here also as its inverse, the “period”, namely the time interval between two cyclic events; frames, in this case. Or possibly more than two, so, we presume, to increase the precision. To be confirmed.

Remark

It may be worth recalling that there is a simple relation between duration of a film and the above cited Frames parameter, i.e.: “fps” (frame per second). It is:

$$t = \tau * n$$

Where:

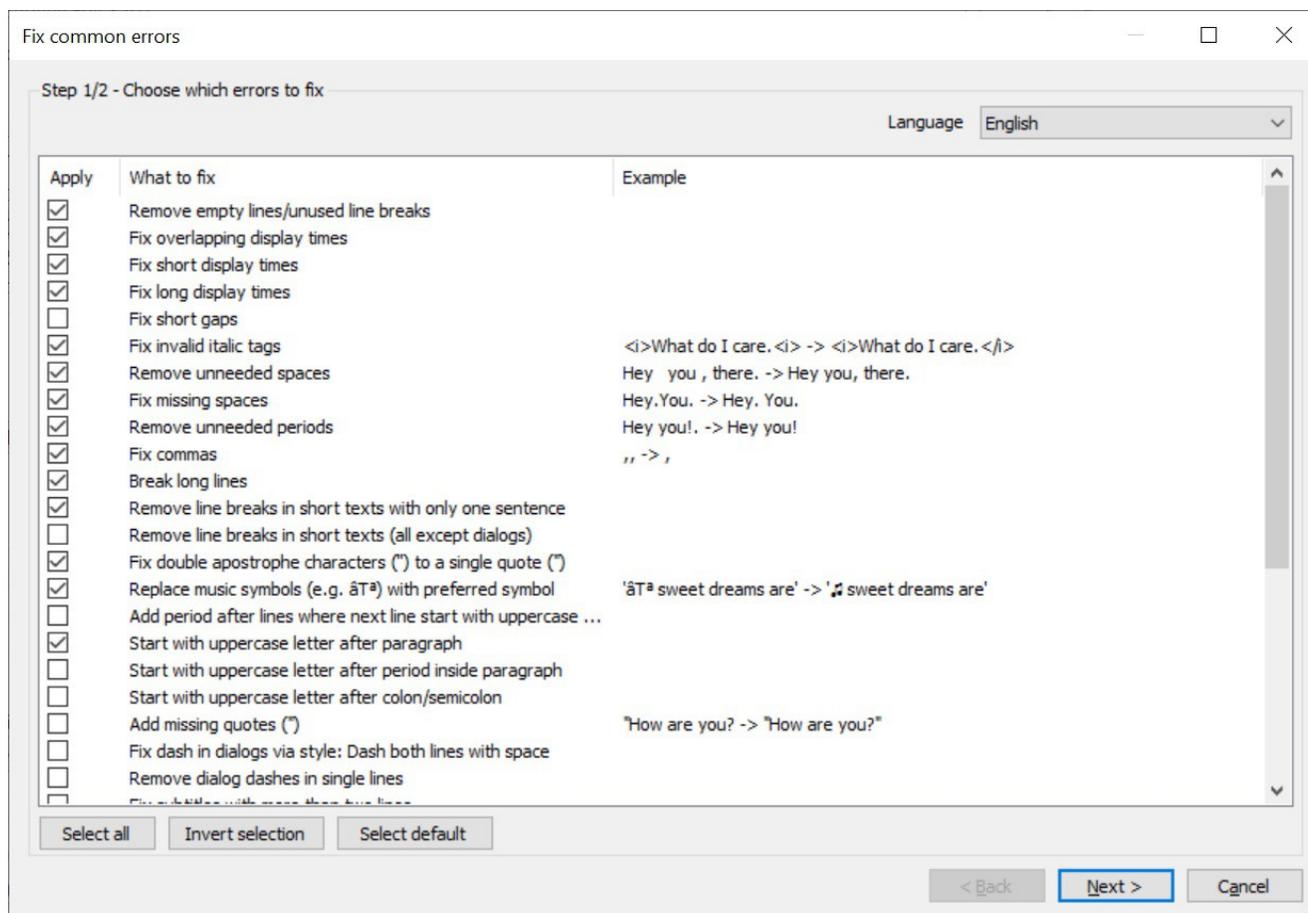
- t elapsed time, that is: duration of a film, or of a given fraction of it.
- τ “period”, that is: duration of one cycle; in this case: the display of one frame. being: $\tau = 1/f$, that is: the inverse of the “frequency” [f].
- n number of frames in a given frame-sequence, be it a film or fraction of it.

This same formula expresses also the basic relation between “time-[τ] based” vs. “frame-[$f=1/\tau$] based” Subtitle sequence⁴⁴.

□

Tools > **Fix common errors...**

Powerful tool, in two steps; mostly self-explanatory.



Controls

Select refers to action check-boxes.

Next no action before next step [see], from which one may always return to this first.

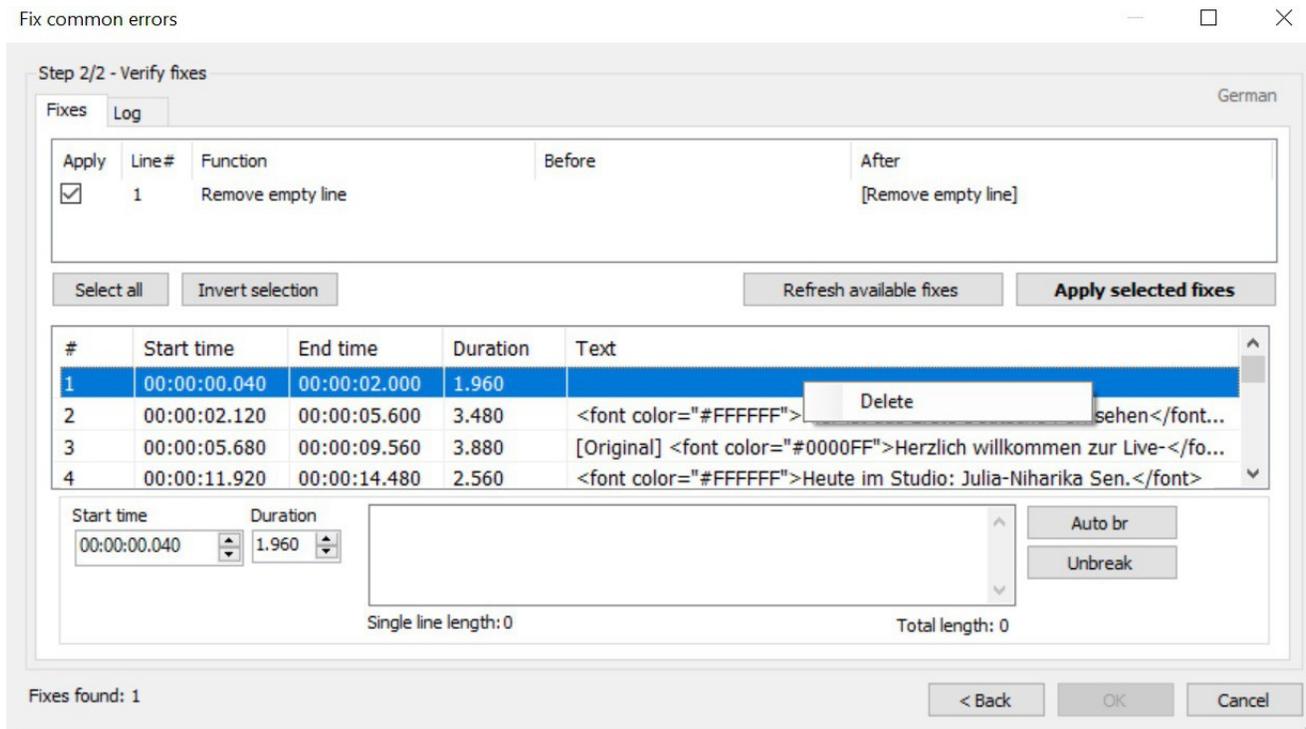
□

Second step, where to possibly perform manual actions too.

⁴⁴ <> Cited f , τ , n parameters are specific of any given film, and it would be nice to find out a tool for reading them.

Such a tool could be the program MediaInfo [see: <https://mediarea.net/>], alas also practically undocumented.

<~> We wonder if SE could be entrusted with such a useful feature too...



Controls

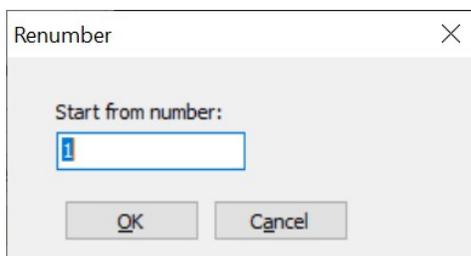
Select refers to action check-boxes.

Back to preceding step [see].

OK available after “Apply selected fixes”, meanwhile Subtitle file remains unaffected⁴⁵.

Tools > **Renumber...**

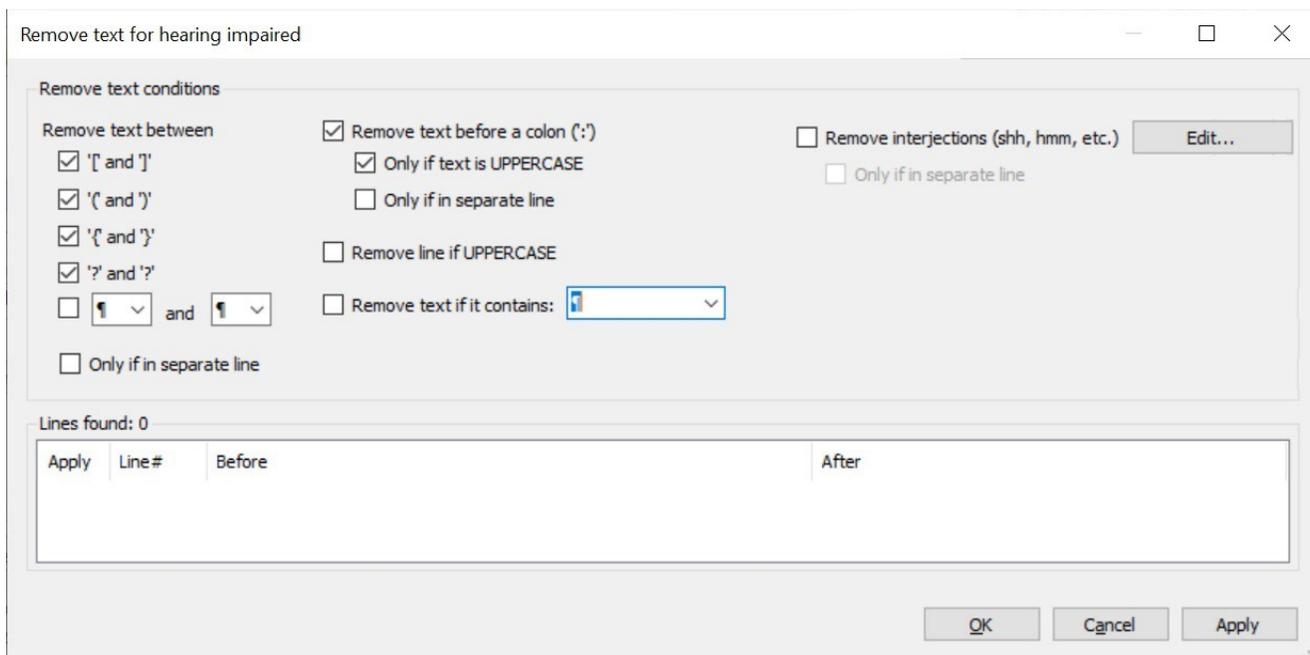
Sort of “refresh” Subtitle records numbering, possibly messed-up.



⁴⁵ By the way, that's why here, apparently, “Ctrl+Z” (Undo) doesn't work: it does, but possibly only after a final “OK”.

Tools > **Remove text for hearing impaired...**

Subtitles declared “for hearing impaired” contain also sort of “description” of sounds and noises, which this command is aimed to remove so to get the ordinary version of the same Subtitles file. It isn't infrequent to leave then both file-versions—ordinary and for hearing impaired—to the user's choice.

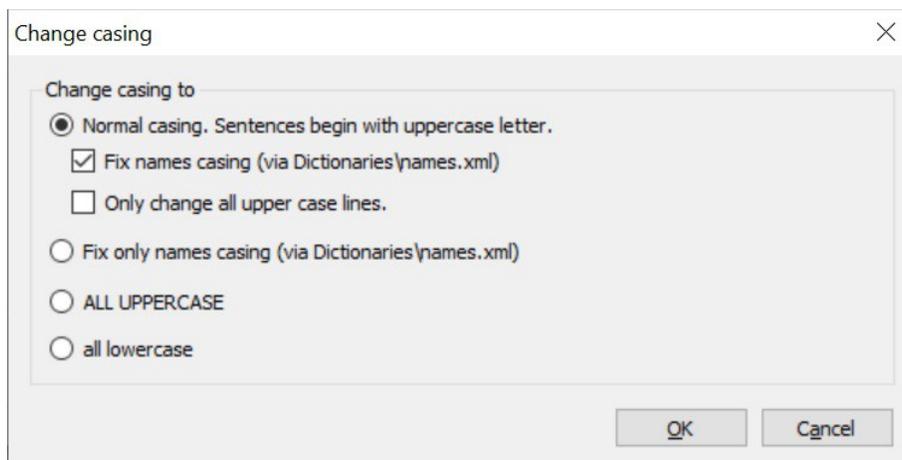


A form self-explanatory enough not to require any further description.

□

Tools > **Change casing...**

Activate a specific Upper/lower case style according to possibly different conventions and rules⁴⁶, valid for all the current Subtitle file – in that different from the otherwise identical context command: “(^) Change casing for selected lines...” [see], which refers to the selected Subtitle records only.



A control form self-explanatory enough not to require any further description, but for:

(via Dictionaries\names.xml)⁴⁷ dictionary of the recognized Names, which may be:

- inspected via “[Open 'Dictionaries' folder](#)”, command Spell check > Get dictionaries... [see];
- customized via “Add to names/noise list”, command Spell check > Spell check... [see].

Remark

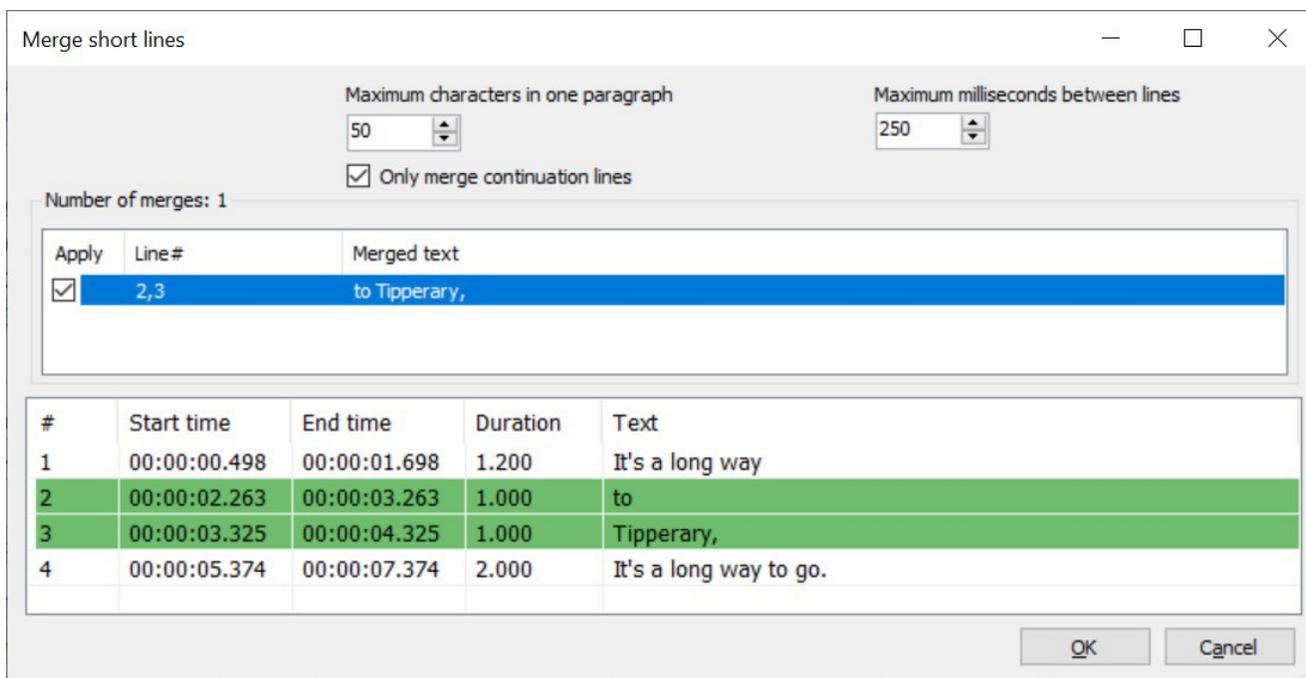
This same Names dictionary is used by “Change casing...” commands [see] and OCR tool [SE tool here not yet tested, nor documented].

□

46 E.g.: UPPERCASE to signify words pronounced aloud / Text in German language, with all nouns capitalized / ...

47 More precisely, e.g.: C:\Users\User103\AppData\Roaming\Subtitle Edit\Dictionaries\de_names_user.xml

Tools > Merge short lines...

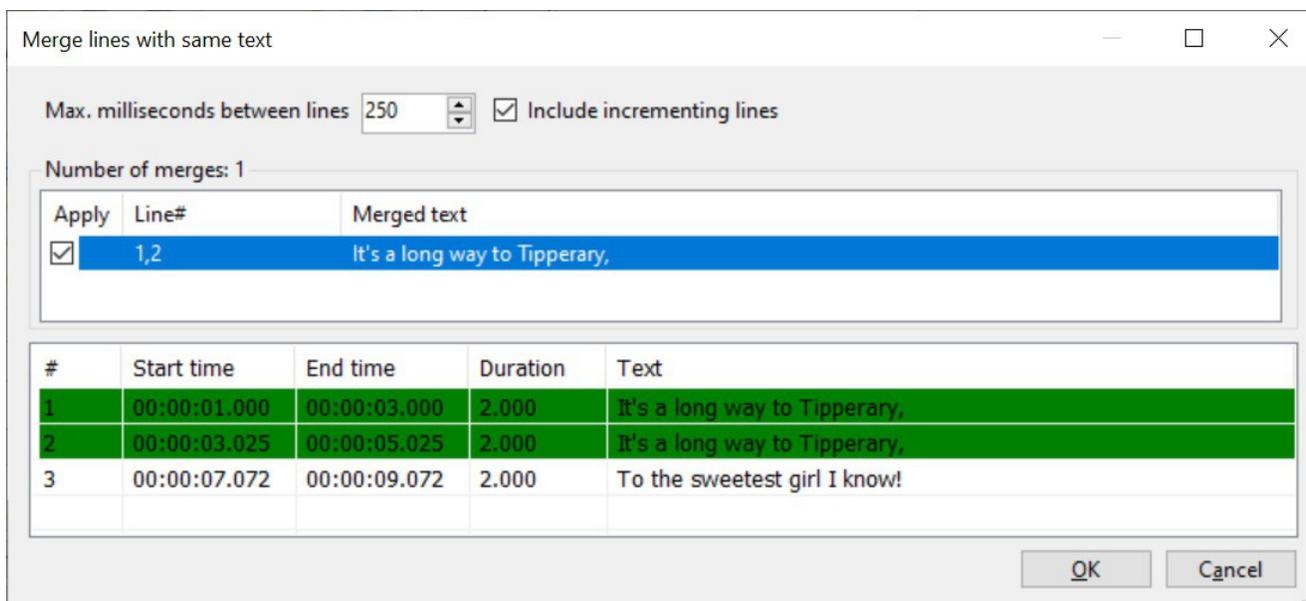


<?> What this command does is clear enough, but for the following details deserving precise definition:

- ... short lines apart from the ambiguity of the term “lines” [see questions hereafter], what does it mean precisely “short”?
- ... one paragraph no idea what here this term precisely means [cf.: Subtitles: Terms & Concepts, please do]
- ... between lines same as before, but the “suspect” that it stands for Subtitle Units
- ... continuation lines same as before

□

Tools > Merge lines with same text...



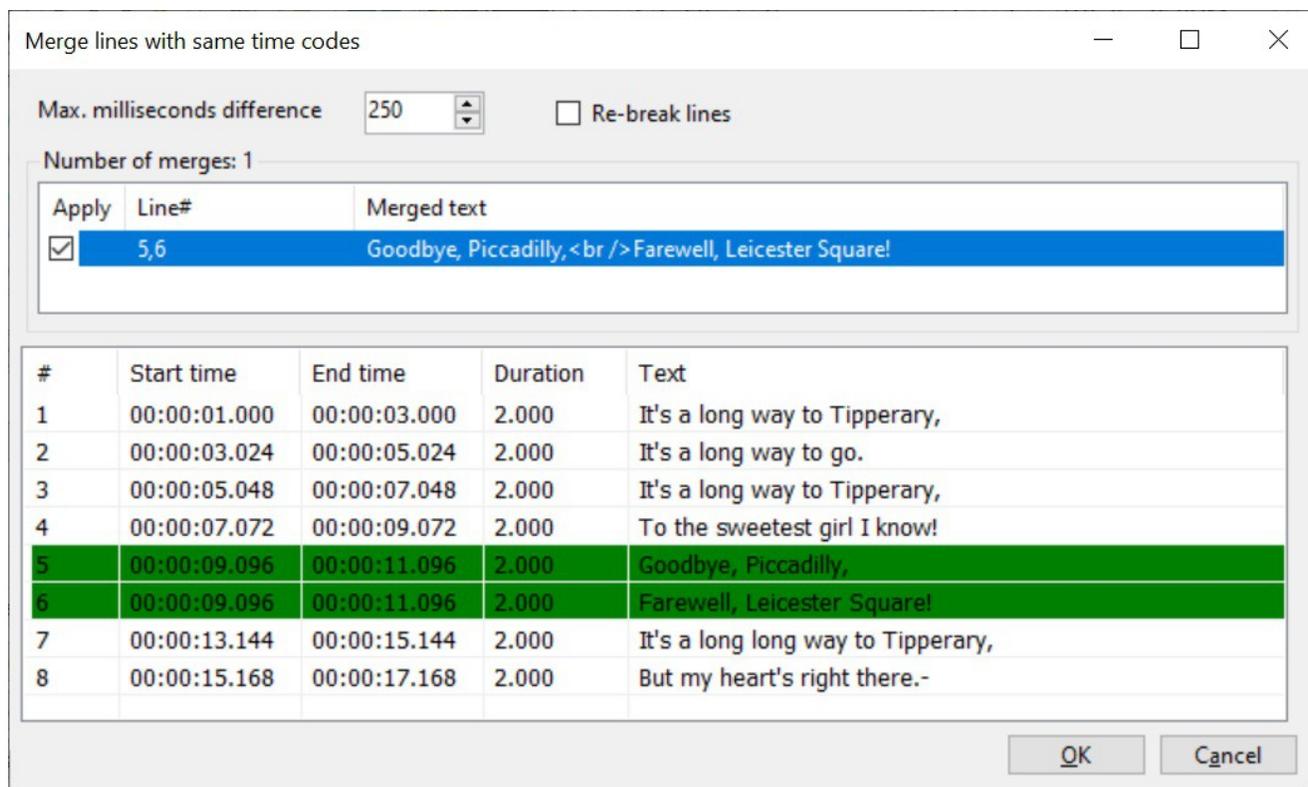
<?> As with the preceding one [see], what this command does is clear enough, but for some details deserving precise definition:

Max milliseconds between lines “same text” check is executed only within such time-Gap,
 <~> of course time-Gap between Subtitle records, nothing else.

Include incrementing lines <?> no idea what an “incrementing line” is;
 <~> again, as ascertained all over in this Report, all SE-terminology should be totally and accurately revised.

□

Tools > Merge lines with same time codes...



With this command, as shown in the example above, two Subtitle records with “almost” the same timestamp—that is: Start time and Duration—can be merged into one.

Max millisecond difference what “almost” means: within the stated difference

... lines <~> here again: the same word “lines” used with a completely different meaning in “Merge lines”, referred to Record, and “Re-break lines”, referred to Text.

□

Tools > Break/split long lines...



<Inquiry> – About:

Although, in principle, clear enough, about this Tool we have just questions to ask, instead of explanations to offer. Questions mainly due to the inextricable ambiguity of the terms here in use. Anyhow, these are the facts.

□

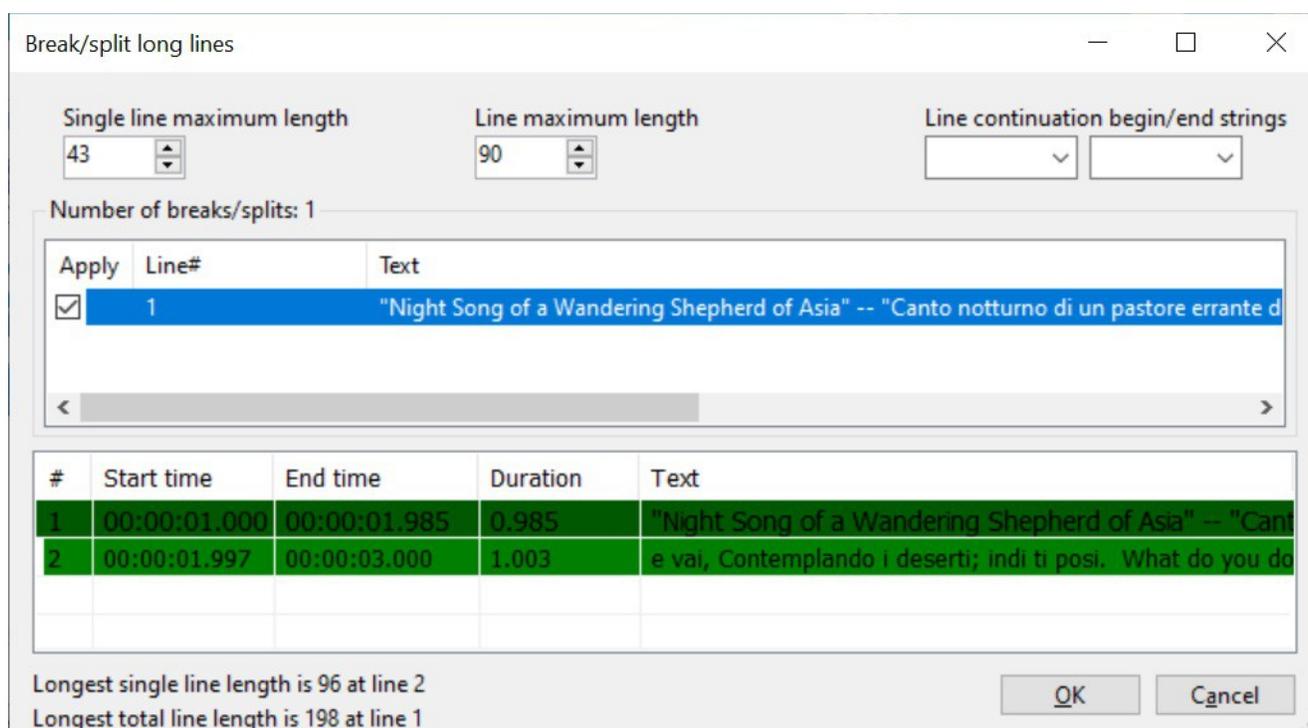
0) Test starting point is this Subtitle file “CantoN0.srt”, initially comprising just one very long, deliberately abnormal Record:

```
1
00:00:01,000 --> 00:00:03,000
"Night Song of a Wandering Shepherd of Asia" -- "Canto notturno di un pastore errante dell'Asia"
(Giacomo Leopardi, 1831)
```

```
Che fai tu, luna, in ciel? dimmi, che fai, Silenziosa luna?
Sorgi la sera, e vai, Contemplando i deserti; indi ti posi.
```

```
What do you do, moon, in the sky? Tell me, what do you do, Silent moon?
You rise in the evening, and go, Contemplating the deserts; then you stand.
```

□



1) A first “OK” execution of Tools > Break/split long lines... generates this “CantoN1.srt”, two Records:

```
1
00:00:01,000 --> 00:00:01,985
"Night Song of a Wandering Shepherd of Asia" -- "Canto notturno di un pastore errante dell'Asia"
(Giacomo Leopardi, 1831) Che fai tu, luna, in ciel? dimmi, che fai, Silenziosa luna? Sorgi la sera,
```

```
2
00:00:01,997 --> 00:00:03,000
e vai, Contemplando i deserti; indi ti posi. What do you do, moon, in the sky? Tell me, what do
you do, Silent moon? You rise in the evening, and go, Contemplating the deserts; then you stand.
```

□

2) A second execution of the same command generates this “CantoN2.srt”, four Records:

```
1
00:00:01,000 --> 00:00:01,471
"Night Song of a Wandering Shepherd of Asia" --
"Canto notturno di un pastore errante dell'Asia"

2
00:00:01,483 --> 00:00:01,985
(Giacomo Leopardi, 1831) Che fai tu, luna, in ciel?
dimmi, che fai, Silenziosa luna? Sorgi la sera,

3
00:00:01,997 --> 00:00:02,487
e vai, Contemplando i deserti; indi ti posi. What
do you do, moon, in the sky? Tell me, what do

4
00:00:02,499 --> 00:00:03,000
you do, Silent moon? You rise in the evening, and
go, Contemplating the deserts; then you stand.
```

□

3) A third and last execution of the same command generates this “CantoN3.srt”, eight Records:

```
1
00:00:01,000 --> 00:00:01,221
"Night Song of a Wandering
Shepherd of Asia" --

2
00:00:01,233 --> 00:00:01,471
"Canto notturno di un
pastore errante dell'Asia"

3
00:00:01,483 --> 00:00:01,729
(Giacomo Leopardi, 1831)
Che fai tu, luna, in ciel?

4
00:00:01,741 --> 00:00:01,985
dimmi, che fai, Silenziosa
luna? Sorgi la sera,

5
00:00:01,997 --> 00:00:02,243
e vai, Contemplando i
deserti; indi ti posi. What

6
00:00:02,255 --> 00:00:02,487
do you do, moon, in
the sky? Tell me, what do

7
00:00:02,499 --> 00:00:02,745
you do, Silent moon?
You rise in the evening, and

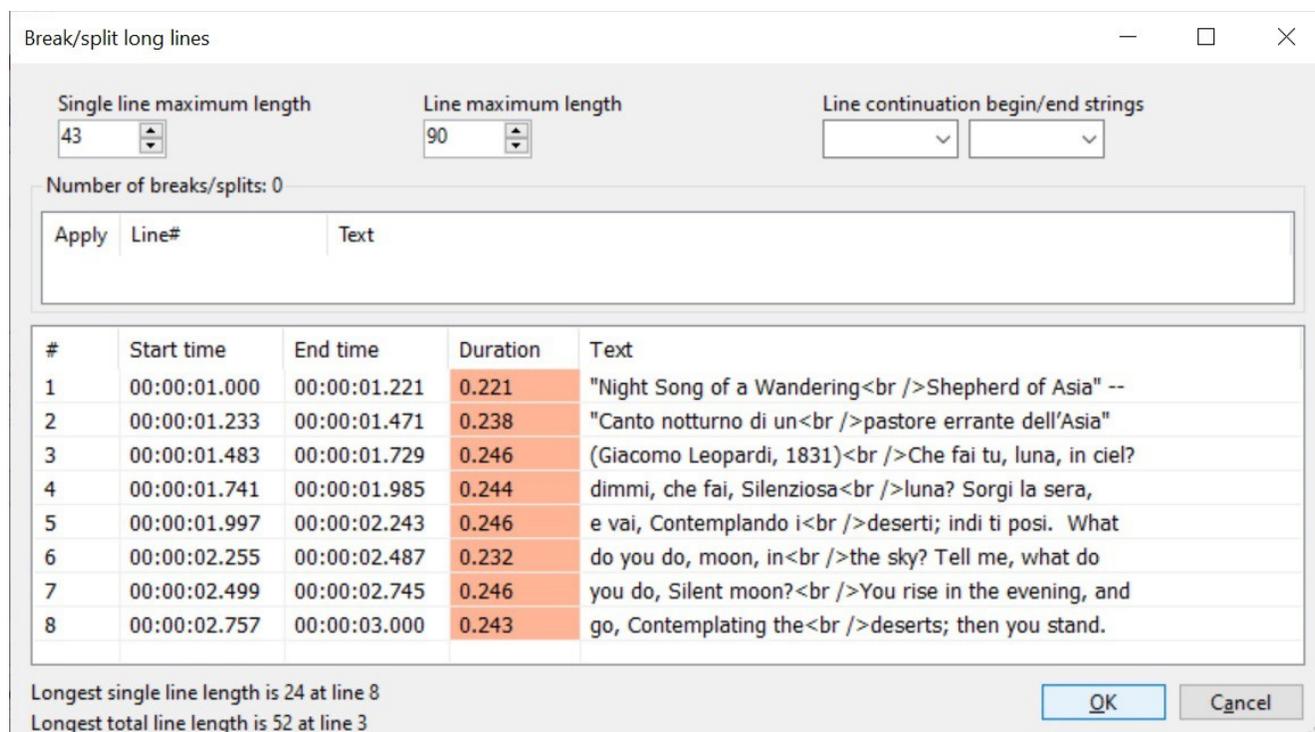
8
00:00:02,757 --> 00:00:03,000
```

go, Contemplating the
deserts; then you stand.

At this point, after three distinct steps, the command “Tools > Break/split long lines...” declares that, in the present condition, it has done all what it could do.

□

Thus, here follows the related final image, and the related questions.



Questions

<?> Instead of guessing, we'd like to have neat and precise description of the following terms, and of their use⁴⁸.

long lines in Title caption “Break/split long lines”, being unclear if the actions “Break” and “split” refer to the same or to different things.

Single line in caption: “Single line maximum length”.

Line in caption: “Line maximum length”.

Line continuation *and* strings

in caption: “Line continuation begin/end string”.

⁴⁸ Of course glad to collaborate to this clarification process as done with sct.: Subtitles: Terms & Concepts [see].

Line *and* Text as in the tables' heading, whether and how they related with the terms found in the other captions, where, by the way, the term “Text” never appears;

single line *and then* line in the *same* caption: “Longest single line length is *nn* at line *n*”

total line *and then* line in the *same* caption: “Longest total line length is *nn* at line *n*”

<?> Required: neat, precise, unambiguous definition of all these terms, and of their use.

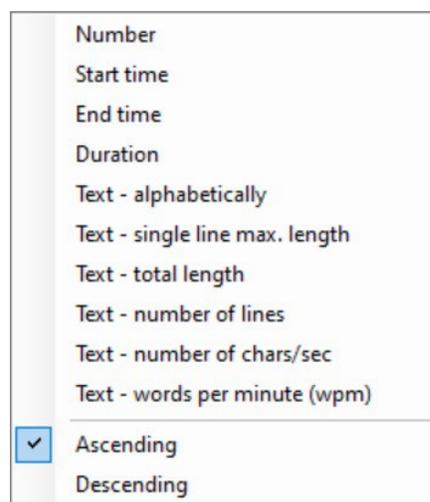
□

Tools > **Sort by**

Re-order all Subtitle records according to the chosen criterion.

That's, for instance, to:

- Compare and evaluate the overall “Words per minute” (WPM) speed spread, but then to restore the original numeric order;
- Reset all Records' position according to the actual Start time values, so to then re-order them via Tools > Renumber... command [see].



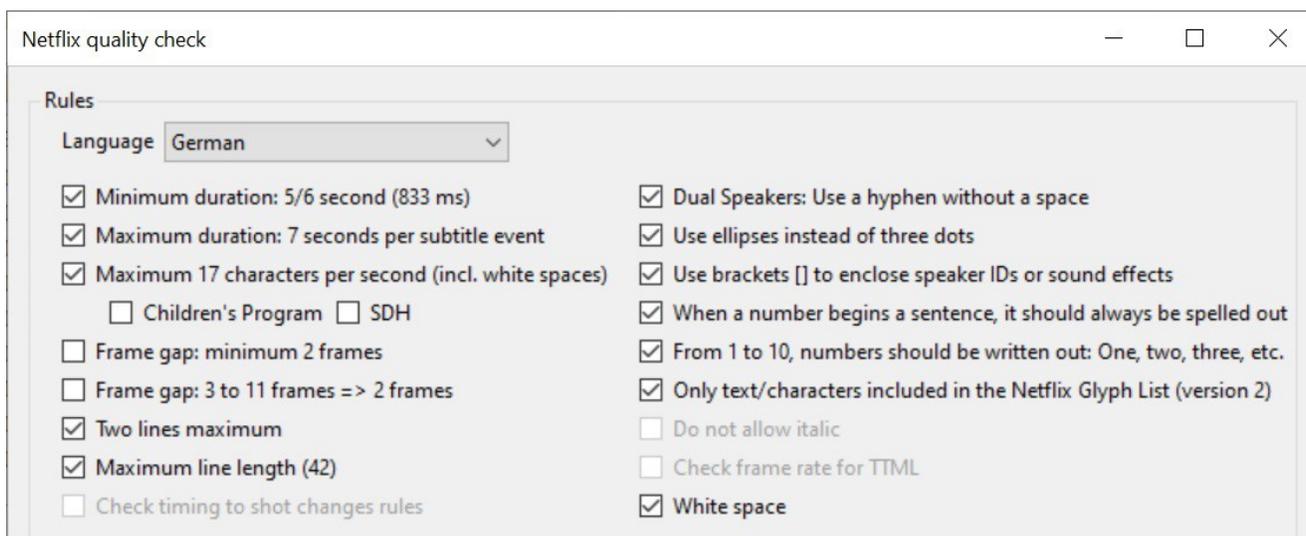
□

Tools > **Netflix quality check...**

Tool aimed at performing a thorough Subtitle “quality check” in conformity with the standard Netflix rules⁴⁹.

Professional Subtitles should be created according to well defined style-rules affecting for instance duration, speed and length, as here may be also defined via Options > Settings... : General [see, see also: Viewpoint, *at sci.*: Chronicle of a basic “Create” experience].

49 Netflix, Inc. a renowned American multimedia production company, recently (2021) acquired by Amazon.



The example here shown is drawn from a—of course non-Netflix—Subtitle of a primary German TV-News service, where this check has found that more than half Subtitle items were non-Netflix compliant, that is at a first SE-default run. Then, at second run, with unchecked “Frame” conditions [see], this amount was drastically reduced.

Line#	Function	Text	Suggested fix
3	Maximum 17 characters per second	00:00:05,680 --> 00:00:09,560 [Original] <f...	00:00:05,680 --> 00:00:10,033 [Original] <
5	Text can fit on one line	00:00:16,160 --> 00:00:19,280 00:00:19,280 <font color=...
17	From 1 to 10, numbers should be ...	00:01:02,880 --> 00:01:07,120 00:01:07,120 <font color=...
26	Text can fit on one line	00:01:37,360 --> 00:01:40,400 00:01:40,400 <font color=...
31	Text can fit on one line	00:01:55,600 --> 00:01:58,480 00:01:58,480 <font color=...
41	Maximum 17 characters per second	00:02:29,400 --> 00:02:32,200 00:02:32,400 <font color=...

Netflix quality check found 6 issues. [Open report in folder](#) OK

Notable points:

Function fault explained

Suggested fix how to possibly fix it

... issues fault count

Open report in folder to get handy detailed description of all faults on a file; e.g.:
 “Original-Tagesschau-tagesschau, 14_50 Uhr-0136664133_NetflixQualityCheck.csv”

```
LineNumber, TimeCode, Context, Comment
3,00:00:05.680, "CPS=19.07", "Maximum 17 characters per second"
5,00:00:16.160, "", "Text can fit on one line"
17,00:01:02.880, "", "From 1 to 10, numbers should be written out:"
```

```

                one, two, three, etc"
26,00:01:37.360,    "",    "Text can fit on one line"
31,00:01:55.600,    "",    "Text can fit on one line"
41,00:02:29.400,    "CPS=18.21",    "Maximum 17 characters per second"
    
```

□

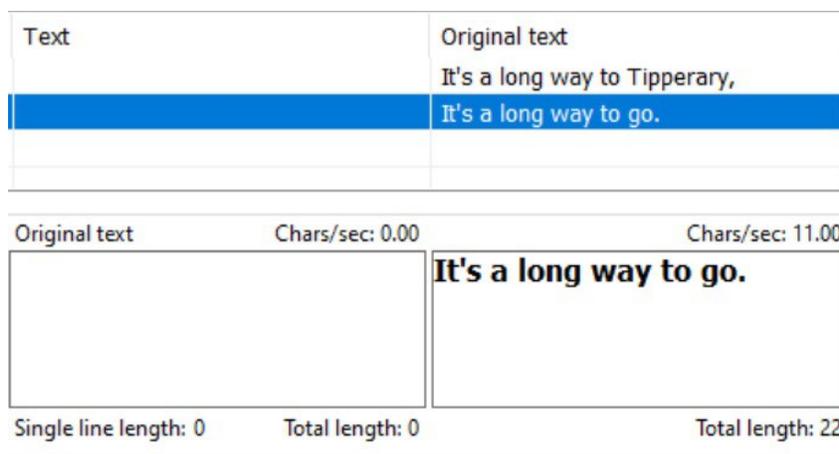
Tools > **Make new empty translation from current subtitle**

Activate a “translation” operating mode for the current Subtitle file, consisting mainly in the creation of a new empty Subtitle file to be shown and edited besides the original one; as illustrated in the figure below, where then it appears evident the hereafter described *Bug* [see].

As a result, at closing of the such SE-session, you'll be permitted to save both the “Original” and its “Translation” new file, to be then conveniently opened into subsequent actual translation SE-sessions. That is: opened in “translation mode”, along with its companion “Original” file.

□

Consider also that “Translate”, with “Create” and “Adjust”, is one of the three Subtitle Edit's “Main Tasks”, deserving an SE tab-page of its own [cf. *sct.s*: BT2 – “Translate” a Subtitle file, multi-lingual, and Main Task: Translate].



Bug: <?> Notice that, in this initial image, “Original text” and new “Text” captions are misplaced on the respective editing text boxes, in contrast with the respective List views, and the common sense.

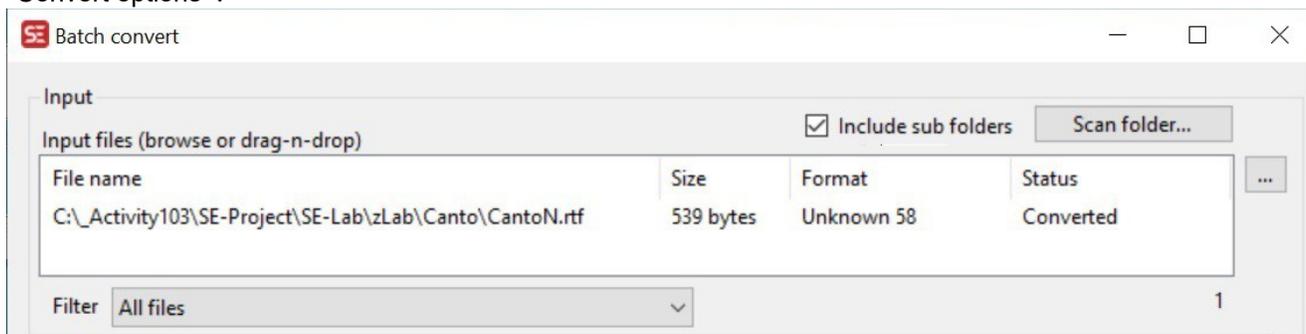
Viewpoint

As a command aimed at creating a new Subtitle file, it seems more appropriate to locate it into the File menu rather than here, in this Tools menu [cf. *anyhow cmd.*: File > Open original subtitle (translator mode)...]. And, anyhow, being not a context command, it should remain well visible in its menu, although disabled when inapplicable; and not disappear as now happens.

□

Tools > **Batch convert...**

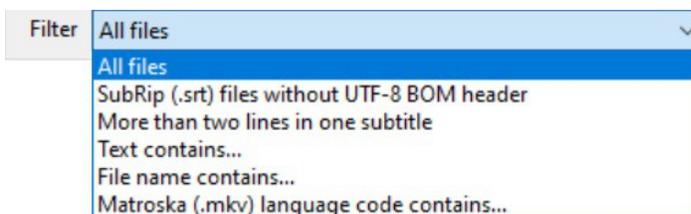
Powerful tool of Subtitle file conversion, possibly acting also on “batch” of files, instead of on a single one, as with “Save as...” and “Export” commands [see]; and that according to a variety of “Convert options”.



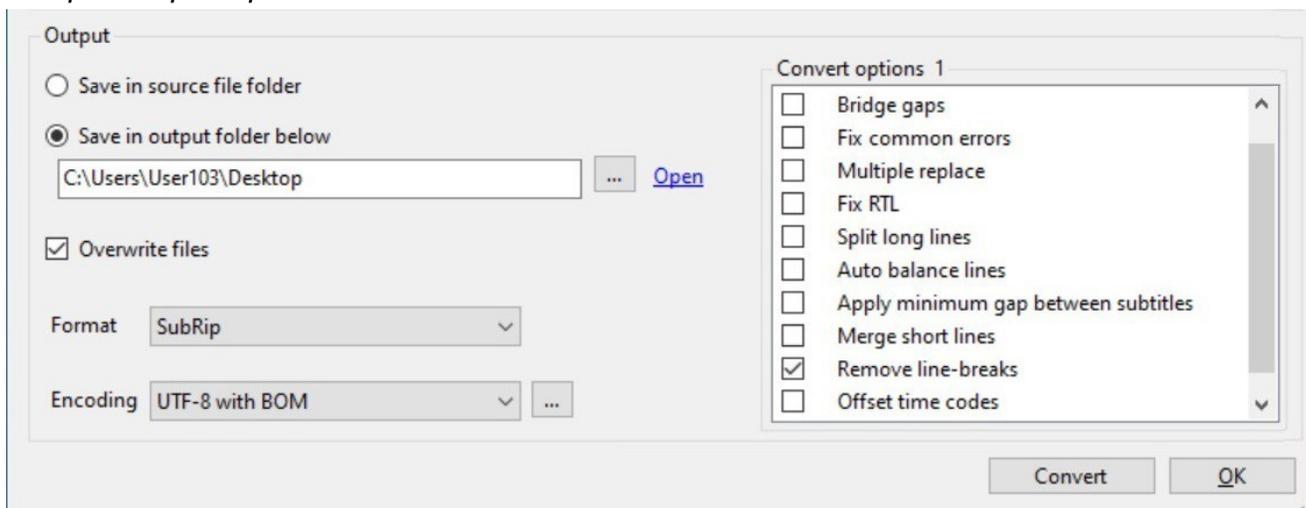
Multiple Input Options:

browse , drag-n-drop

Scan folder..., Include sub folders, and



Multiple Output Options:



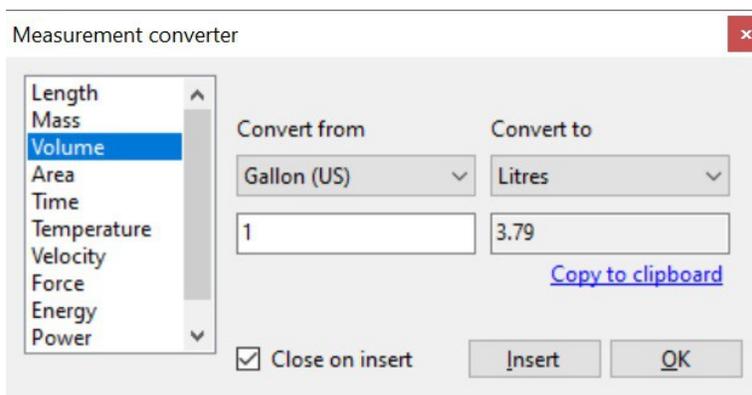
Convert options SE-default: none checked⁵⁰, last user's setup recorded

⁵⁰ No systematic conversion tests are here programmed: user's suggestion/remarks are welcome.

Save choices
 Format, Encoding encompass all variety of choices as with Save as... and Export [cf.]
 Convert single execution, conversion session may continue
 OK end-of-conversion session

□

Tools > **Measurement converter...**



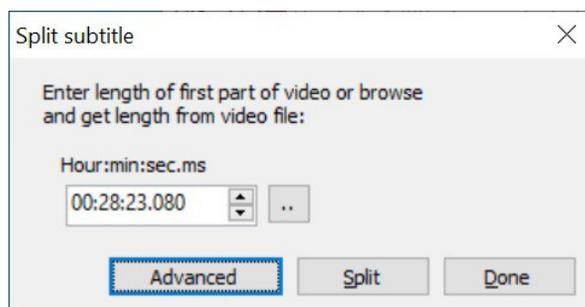
Nice to know it's there, just handy & useful.

□

Tools > **Split subtitle...**

A tool to split a Subtitle file⁵¹ into two or more parts, when for any reason required, e.g. for manageability [cf. *inverse command*: Tools > Join subtitles...].

Basic Control Form



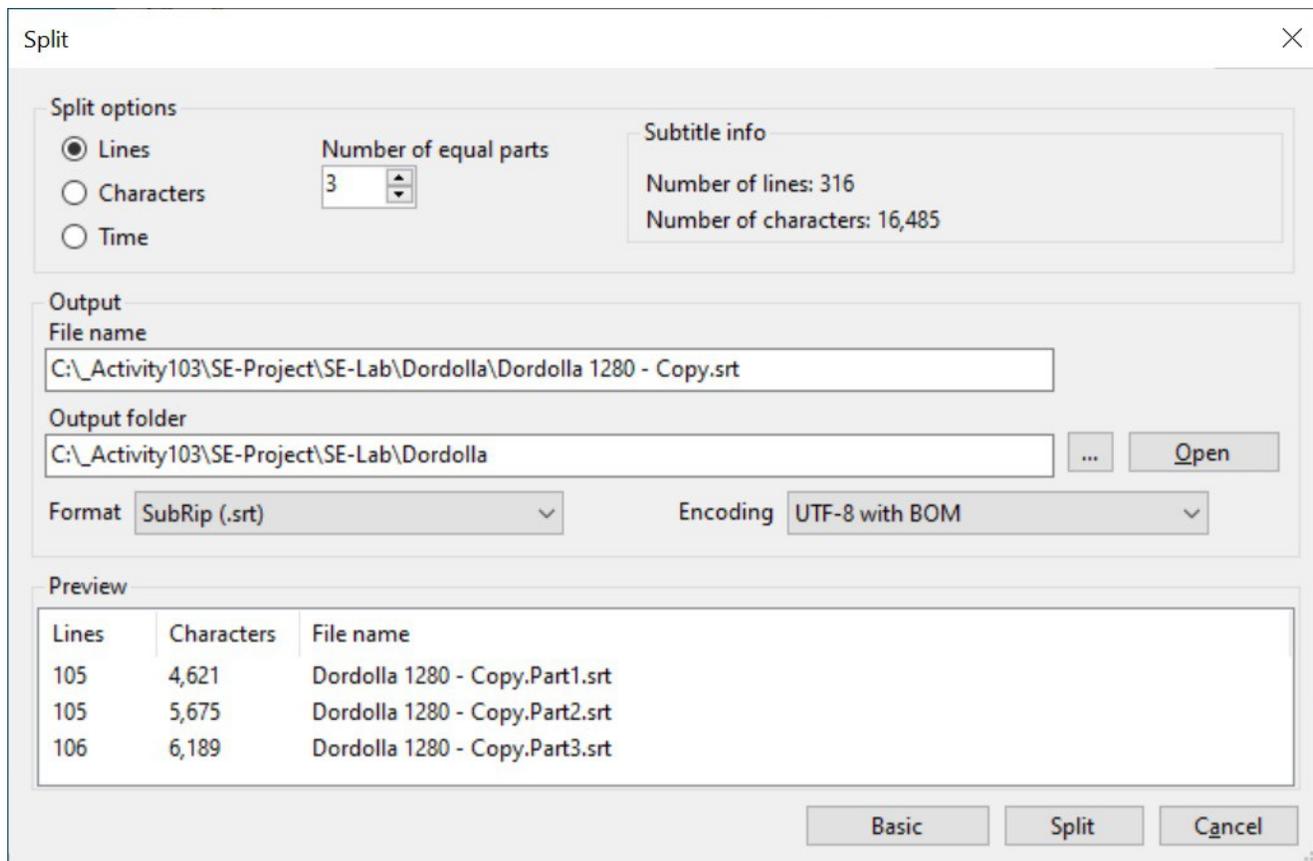
Hour:min:sec.ms initial default: video timing

51 <-> "file", indeed. As already remarked [see: Subtitles: Terms & Concepts], most of the times, as here, the term "Subtitle" in itself is too generic to be significant. Therefore, to be significant, you have to specify whether you are talking about a Subtitle file, or Record, or single record Text, or single record text Line, or Timestamp, or Unit, or Fragment or whatever else; as we are committed doing throughout this Report, and we strongly advocate should be done throughout the entire SE program too.

Advanced (/ Basic) toggle between Split control forms
 Split execute
 Done close session

□

Advanced Control Form



Controls

Split all controls here assumed self-explanatory enough not to require any further description

Remark

By the way, here are shown some rather useful synthetic dimensional data about the Subtitle file [cf. and see also: File > Statistics...].

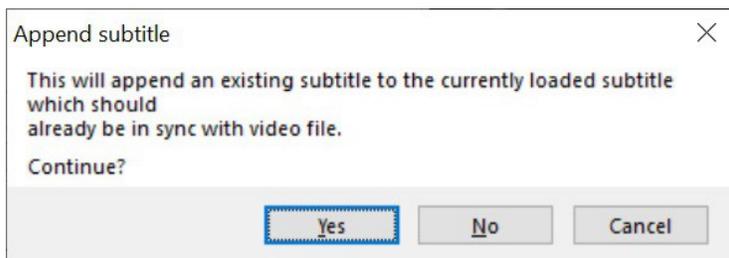
□

Tools > **Append subtitle...**



<Inquiry> – To clarify: When, in which circumstances this Tool may be useful.

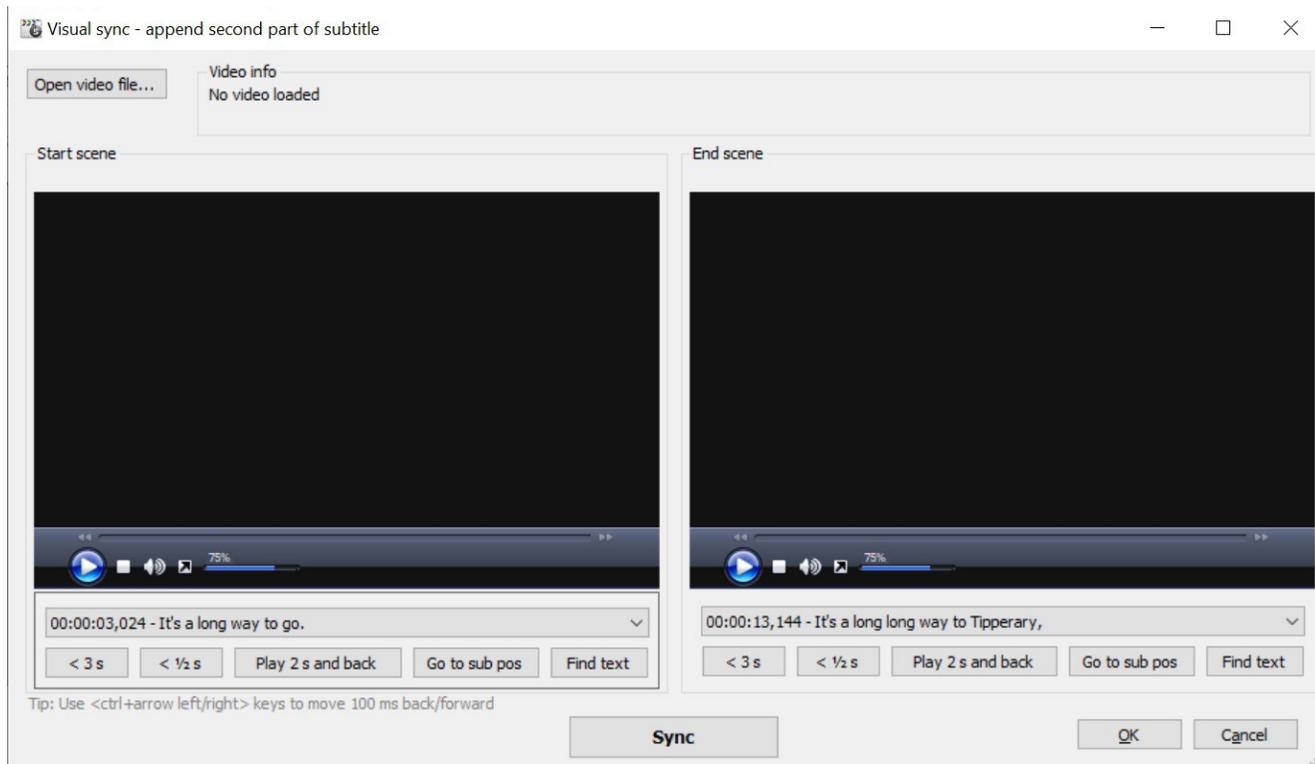
Questionable dialog box instructions



append an existing subtitle	what is to be “appended”, a single Subtitle record or a Subtitle file?
currently loaded subtitle	we don't know what a “loaded subtitle” is – may it be: “Opened”?
be in sync	what does this requisite mean, in real, operative terms?

□

Continue:



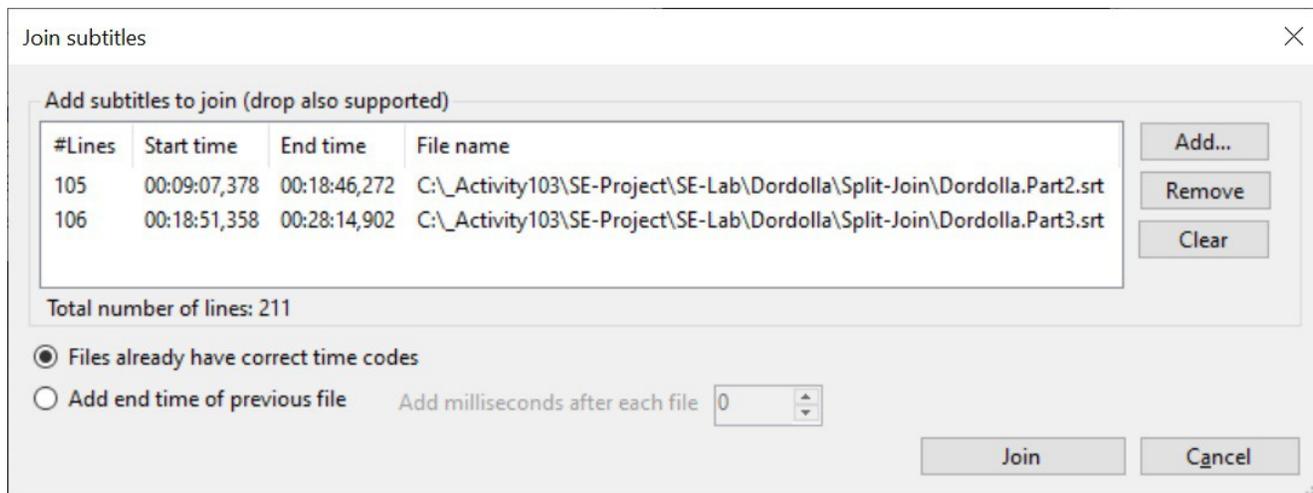
<.?.> Anyway, looking at this control form, it's evident that this is not a plain “Append” tool, and we'd

like to know what it is, even before trying using it. We wonder if it could be considered a sort of command (^) Insert subtitle here... combined with Synchronization > Visual sync... [see].

□

Tools > **Join subtitles...**

It's to join Subtitle files, as inverse of Tools > Split subtitle... [see]. As such, this command is enabled to work also at a fresh File > New condition.

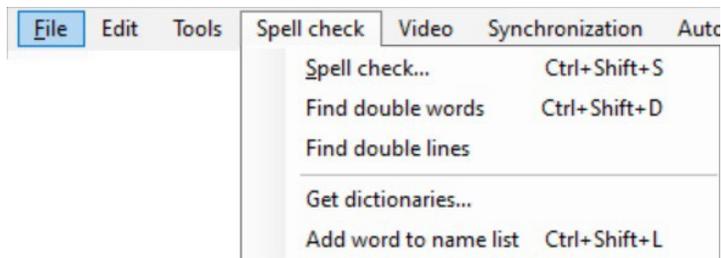


Controls

#Lines Subtitle records count [*<~> original caption rather imprecise*]
 Join execute, then close [*other controls assumed self-explanatory*]

—◇—

Spell check Command Menu



Command List

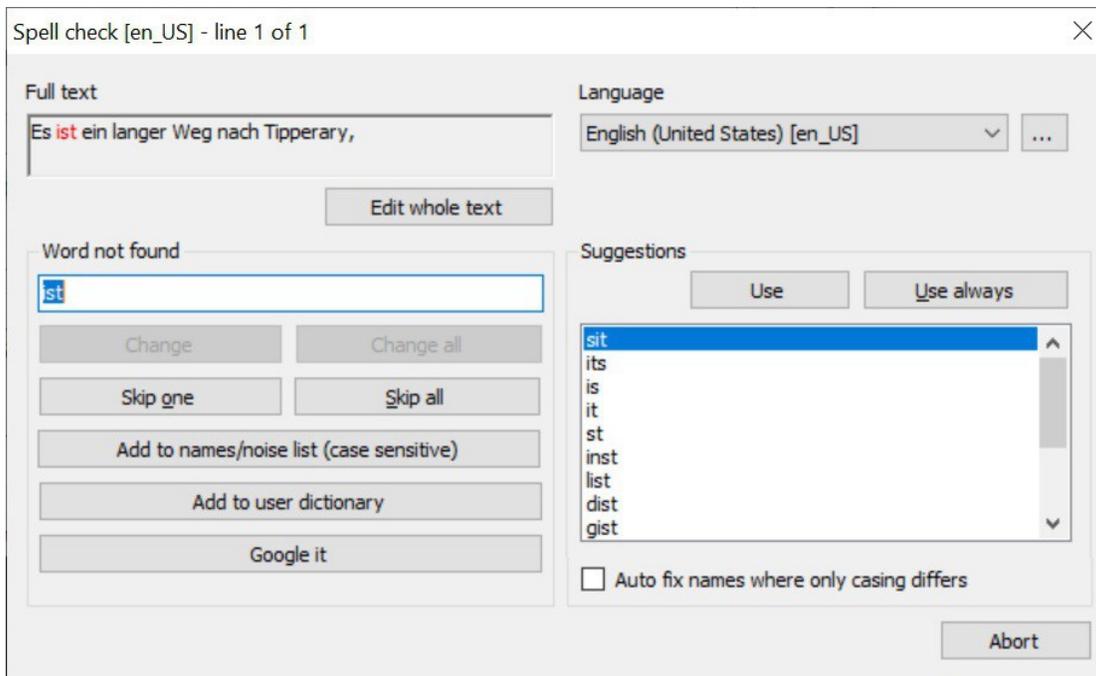
Spell check...	Find double words	Find double lines
Get dictionaries...	Add word to name list	

Requisite: <.> Most of these Spell check commands require to operate on a given Subtitle file.

□

Spell check > **Spell check...**

Perform a spell check on the current Subtitle file, provided the required dictionary is available [*if not, see further on in this sct.*].



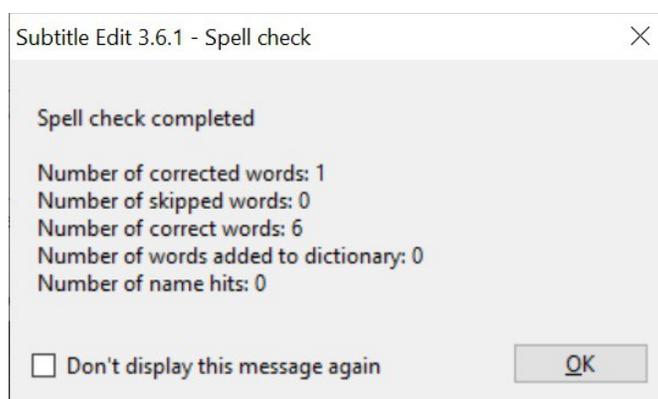
Controls

- Language choose the desired language, or get it via: ... [*see next sct.:* Dictionary Needed]
- Change manual editing
- Add to ... to personalize current dictionary
 <.> Feature available also as a sub-command: Spell check > Get dictionaries... [*see*].

All other controls are here assumed as self-explanatory.

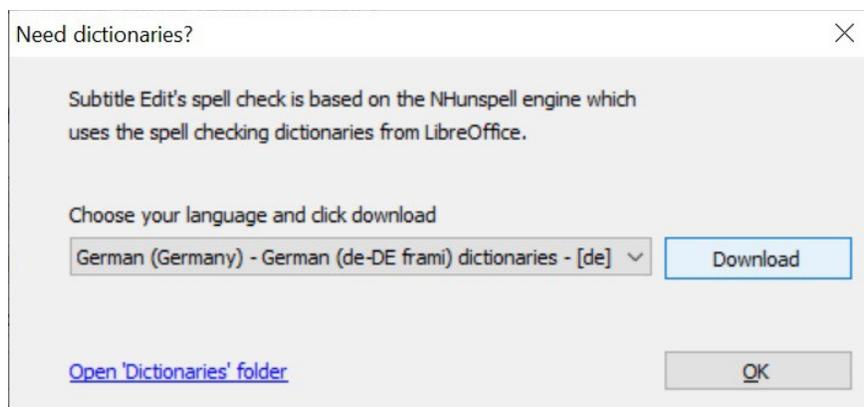
□

Statistics, at End of Job



□

Dictionary Needed



NHunspell engine that is “New Hunspell” (by László Németh, Hungarian biologist and s/w developer)

Choose ... among possibly more than one dictionary; e.g.: Deutsch, English (five varieties: AU, CA, US, ZA [*←South Africa Internet country code*], GB);

Open 'Dictionaries' folder to inspect the already available ones, in:

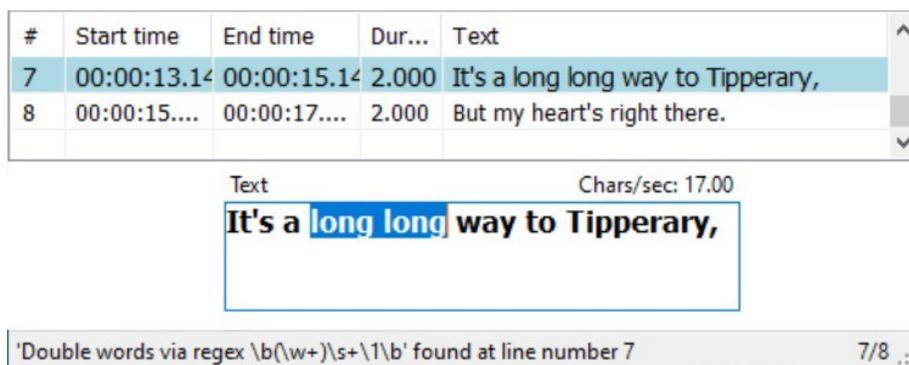
C:\Users\User103\AppData\Roaming\Subtitle Edit\Dictionaries
 [requires "Show hidden folders" system option enabled, to be seen]

<~> Feature available also as a sub-command: Spell check > Get dictionaries... [see].

□

Spell check > Find double words

Just find, what to do then is up to you.



Result given on the bottom Status bar, included the "regex" (regular expression) in use.

□

Spell check > Find double lines

Search of a possible *first* pair of consecutive Subtitle records with identical Text, if any; located *after* a given selected Record, or throughout the entire Subtitle file when no Record selected.

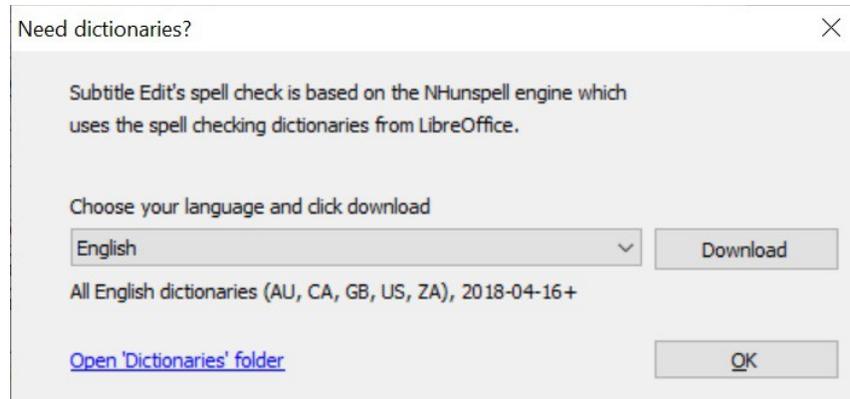
If any found, consequent editing action is left to the user. No automatism.

Remark

<~> This command deals, of course, with Subtitle Records *Texts*, not *Lines* [ref. to: Subtitles: Terms & Concepts]. As already noted, SE User Interface terminology is rather inaccurate, and should be thoroughly revised and mended.

□

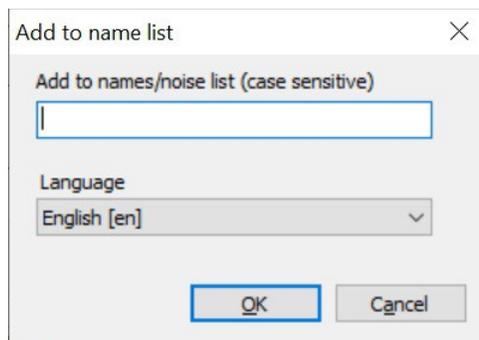
Spell check > **Get dictionaries...**



As with Spell check > Spell check... [see], of which it is a sort of sub-command.

□

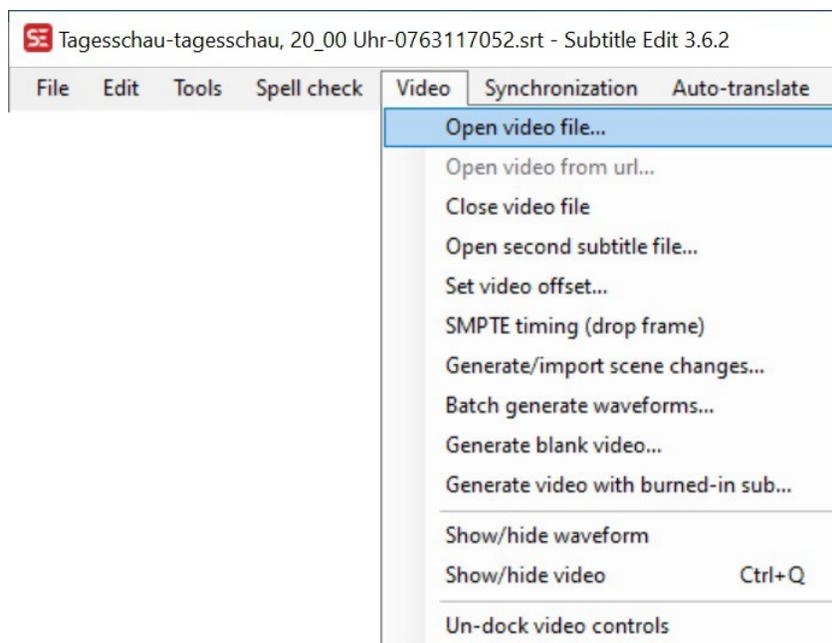
Spell check > **Add word to name list**



As with Spell check > Spell check... [see], of which it is a sort of sub-command.

—<>—

Video Command Menu



Command List

Open video file...	Open video from url...	Close video file
Open second subtitle file...	Set video offset...	SMPTE timing (drop frame)
Generate/import scene changes...	Batch generate waveforms...	Generate blank video...
Generate video with burned-in sub...	Show/hide waveform	Show/hide video
Un-dock / Re-dock video controls		

Requisite

<> For optimal SE performance it is recommended, at the first Video > Open video file... call, to accept to Download and use "mpv" video player library, if suggested by a possible SE-error box. Then a look at the Options > Settings..., to check the current status of Video player \ Video engine.

Remark

The above cited "Download and use "mpv" as video player" caption [cf.] is somehow misleading, as it would let you think that, accepting to push this button, then you will be using MPV as your video player. Well, it's not precisely so, as then it will be SE using the MPV's ".dll" library to manage video files, not you. Here MPV is not a program that you could use directly, but a nice good ".dll" library, possibly callable by a program using it. For your direct use you'll be possibly using the same media player program you were using before.

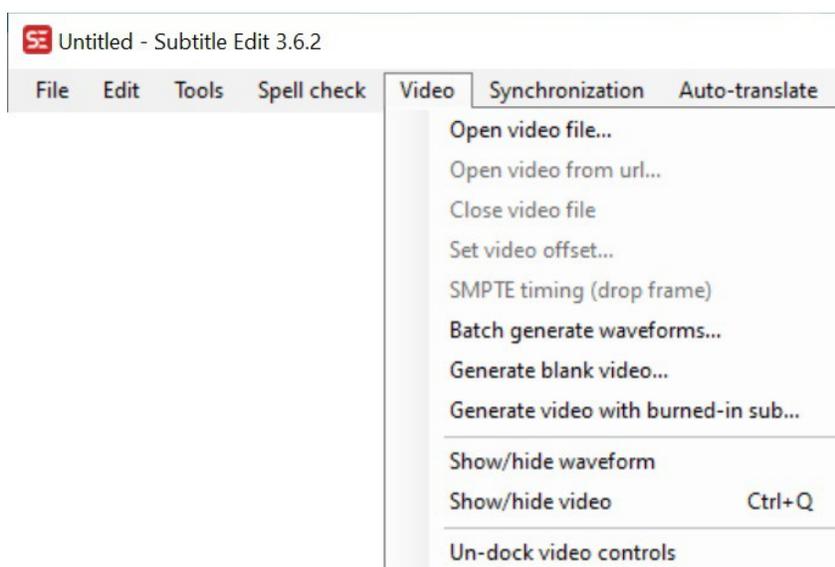
By the way, another possible action for performing the here considered initialization would be to call the menu command Options > Settings...: Video Player / Video engine [see], and choose VLC as your media

player instead, in case you were already using it. But, at the moment, this is not recommended, because of its current poor performances by comparison with MPV's, if evaluated from the SE point of view. That's so, for now.

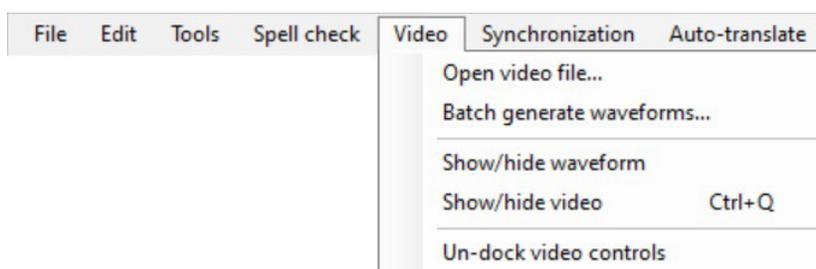
□

Viewpoint

Video menu command as printed at the top of this section is that one appearing *after* opened a video file, rather different from the same you'd get *before*, as you may compare here below [cf.].



Not as much different as it was in the former SE rev. 3.6.1 [cf. here below], but still a different list of eleven command, instead of thirteen.



<~> As said in other similar occasions all over this program, this is a difference that we find rather confusing, therefore we are in favor of the usual way of keeping unaltered the same drop-down list of menu commands, just possibly disabling those for some reason currently unusable.

□

Video > Open video file...**Video > Close video file**

Commands to open / close a video file to work on.

This Open action doesn't perform the usual automatic opening of a Subtitle file possibly available on the same directory, indeed to perform such action you'll have to act on the subsequent Video > Open second subtitle file... [*see – see also the hereafter “Random-Bug” note*], or on the File > Open commands [*see*], which are anyway designed to take precedence over this very Open / Close action, and to act on both Subtitle and Video files too. Reason is that SE is primarily focused on editing Subtitle files, not on playing Media.

Possible “Error playing video file” means that the given file is not recognized as a proper Media file, or simply that SE has not yet been assigned a proper media player⁵², as here suggested in Program Setup & Management, section Management Actions [*see*].

Random-Bugs

With a Video > Open video file... plus Open second subtitle file... sequence, on current SE rev. 3.6.2, we've spotted some erratic/random Bugs:

B1) Sound volume preset to zero-level.

B2) In unchecked “mpv handles preview text” condition [*see sct.: (^) Play selection \ Text Permanence*], subtitles may appear or not, and at bottom on the actual video area, NOT on its bottom-dedicated stripe, as it should in this condition. It will appear if, by chance, the same Subtitle file has been once formerly called at first, via usual File > Open command. That's the typical consequence of inaccurate environmental parameters management.

□

Video > Open video from url...

S-PM 210900



<Insufficient information> – Report suspended

With SE rev. 3.6.2 found always disabled. No further test without proper tech.info.

□

Video > Open second subtitle file...

S-PM 210500

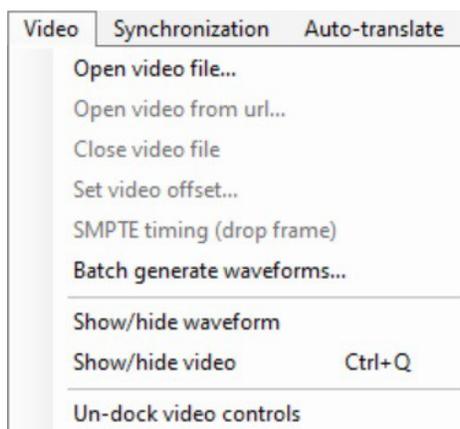
Open a Subtitle file possibly second to the primary one, opened via the usual File > Open main command [*see*].

Remark

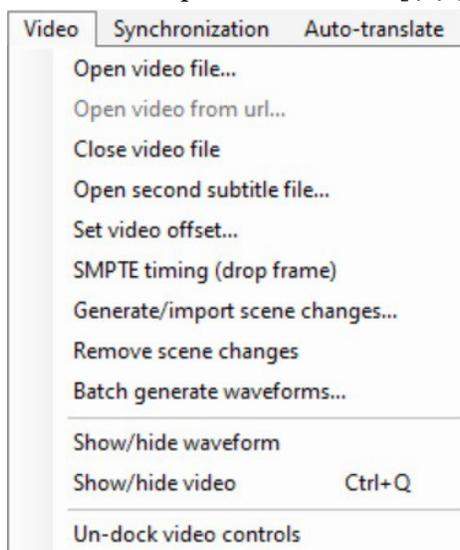
Actually not one, but a set of remarks—along with some “Viewpoints” too—from which to hopefully deduce the sense and utility of this command.

⁵² Or “codec” (Code Decoder), as it is sometimes called by people loving to show how familiar they are with tech.jargon.

- A second Subtitle file presumably is to be compared with the primary one.
- A primary Subtitle file may be opened also *after* a secondary one, in “(keep video)” mode [see].
- Command initially not available as a member of the “Video > ...” menu, that is in SE “File > New” status [cf. figure].



Becoming available only in presence of an opened Video file [cf. figure].



<~> That to our constant perplexity, as the variability of menu composition is specific peculiarity of a context menu, not ordinary main menus'.

- Second Subtitle file to be shown on the media virtual screen only. Title bar, List table, Text box, Soundtrack virtual monitor are all exclusively reserved to the primary Subtitle file.
- In presence of a second Subtitle file only, such “Adjust” push buttons as “Play from just before text” and “Go to sub position and pause” are maintained inexplicably available, as in case of an ordinary primary Subtitle file, although, of course, ineffective.

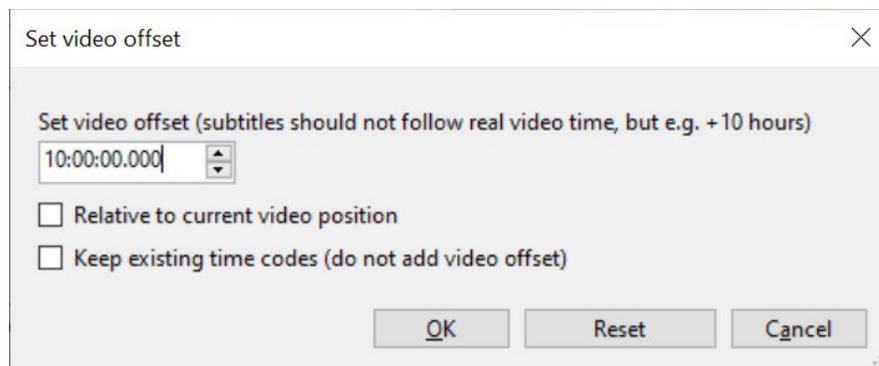
- In presence of an opened second Subtitle file, this “Open second” command remains inexplicably still available, although, of course, ineffective.

□

Video > **Set video offset...**

As already considered [see term “Time”, at sct.: Subtitles: Terms & Concepts], Subtitles run during *intervals of time*, all referred to the Media time. That means that the initial Subtitle time, the initial starting point, is purely conventional, and usually conveniently set to zero. But, would it for any reason be convenient to establish a starting point different from zero, this is the command for doing it.

The case here considered is that of a video-media with a reference time-line not starting from zero, and that's why the time-offset⁵³ here considered is called “video offset”.



video offset format: hh:mm:ss.msec

Relative ... video position that is, not necessarily the beginning of the video

Keep ... codes <~> so said it's confusing, would become clear when used in a real case

□

Video > **SMPTE timing (drop frame)**⁵⁴



<Insufficient information> – Report suspended

□

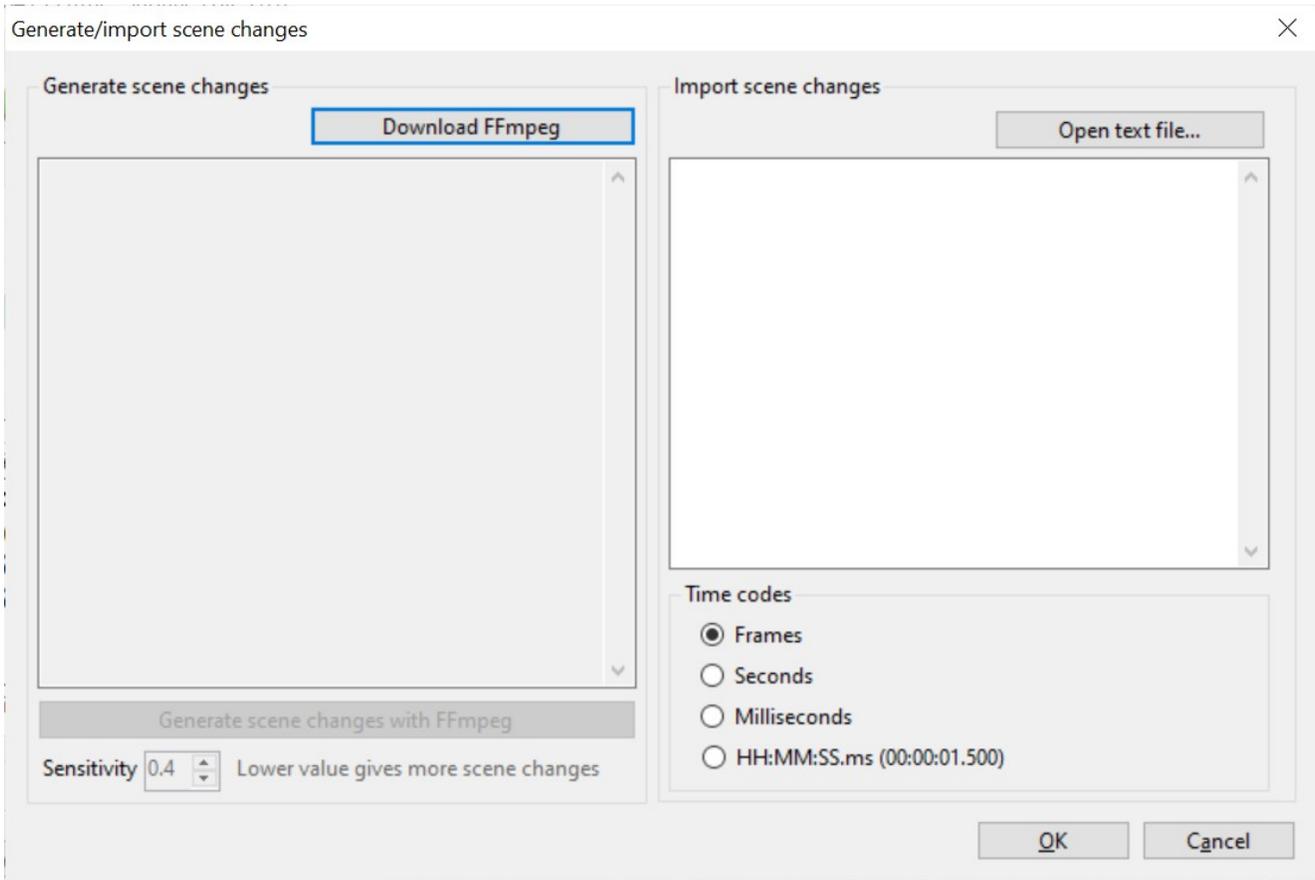
⁵³ *Offset*, literally: *compensation*.

⁵⁴ SMPTE - Society of Motion Picture and Television Engineers is a global professional association of engineers, technologists, and executives working in the media and entertainment industry.

Video > **Generate/import scene changes...**



<Insufficient information> – Report suspended [cf. also: (^) Add scene change]



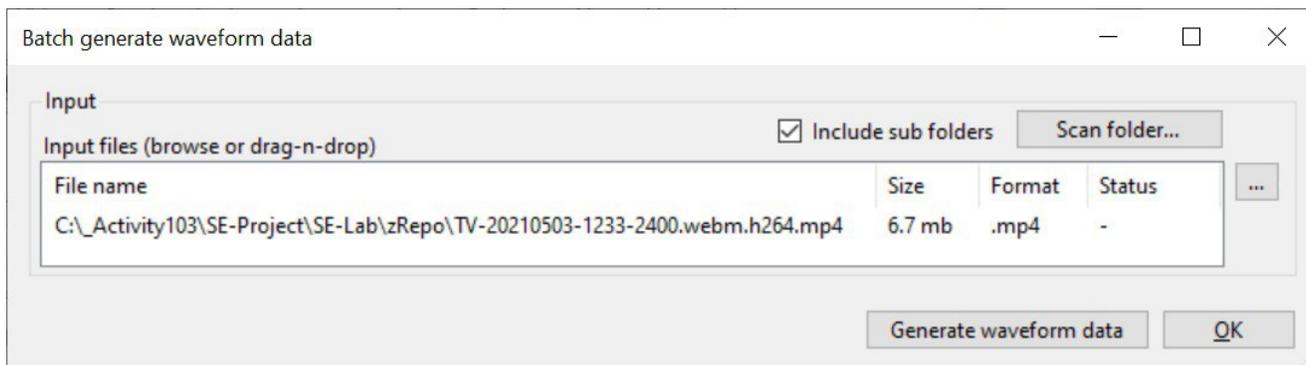
□

Video > **Batch generate waveforms...**



<Insufficient information> – Report suspended

Activate a batch process which is operatively clear, but whose purpose and result is unknown to us.



Input Options:

..., drag-n-drop input aimed at video files

Scan folder..., Include sub folders "

Purpose:

Generate waveform data <?> no idea what kind of data, whereto, what for.

□

Video > **Generate blank video...**

S-PM 210900



<Insufficient information> – Report suspended



Dialog box popping up at first call, citing a “FFmpeg” unknown to us⁵⁵ [cf. next Video > Generate video with burned-in sub...]. To imply that, even before beginning to investigate about this command, we'll need to know some preliminary basic-info about this whole matter, this command purpose, and so.

□

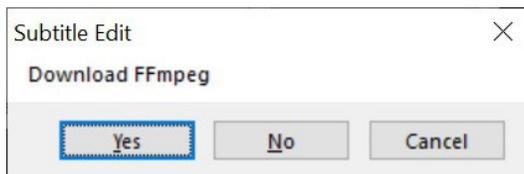
55 FFmpeg – a suite of libraries and programs designed for processing of video and audio files.

Video > **Generate video with burned-in sub...**

S-PM 210900



<Insufficient information> – Report suspended

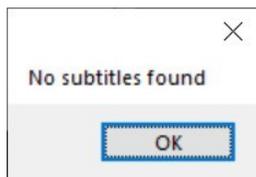


Dialog box popping up at first call, citing a “FFmpeg” unknown to us. Even though the purpose of this command could be fairly guessed from its caption, we’d rather postpone its analysis for the same reason as expressed at the former “Video > Generate blank video...” command [see].

□

Requisite

This command requires to operate on a given Subtitle file. Otherwise:



<~> A requisite that we assume as so obvious that it seems to us more appropriate to simply disable the command when not satisfied.

□

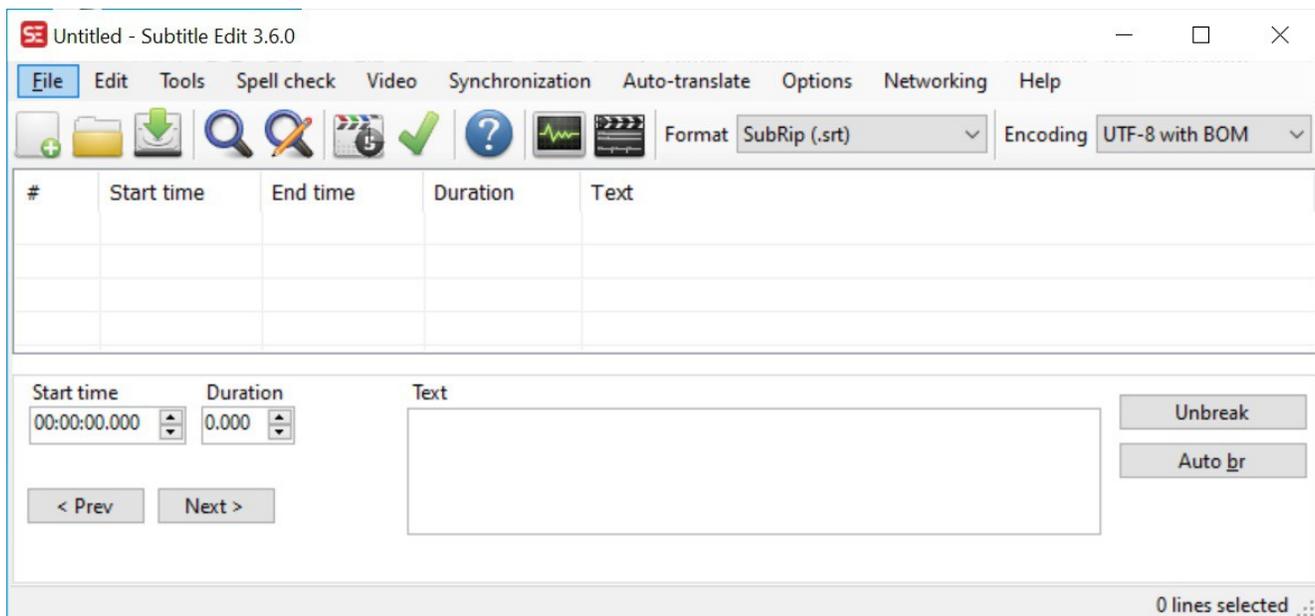
Video > **Show/hide waveform**

Video > **Show/hide video**

Video > **Un-dock video controls**

Video > **Re-dock video controls**

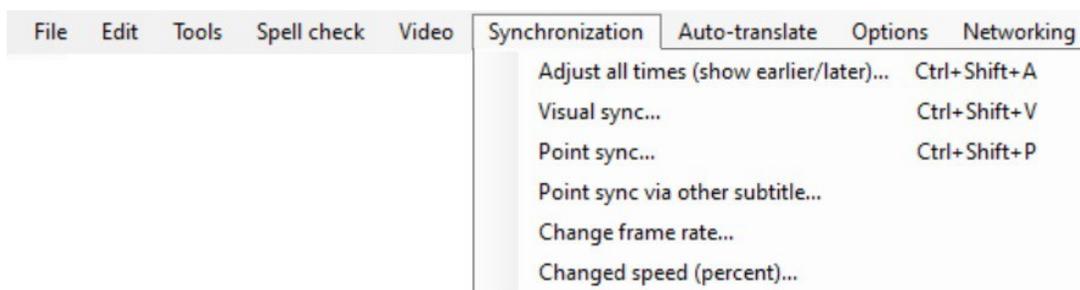
To modify accordingly the named areas in display from the initial default condition [cf. *sct.:* Program Window & Context Menus] up to the new stated condition, and back.



Here is what remains on the SE Program Window when both Virtual Screen and Main Tasks and Soundtrack Monitor area are not in display.

-◇-

Synchronization Command Menu



Command List

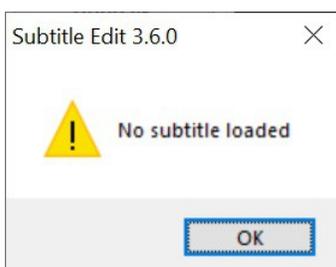
Adjust all times (show earlier/later)...
Point sync via other subtitle...

Visual sync...
Change frame rate...

Point sync...
Change speed (percent)

Requisite

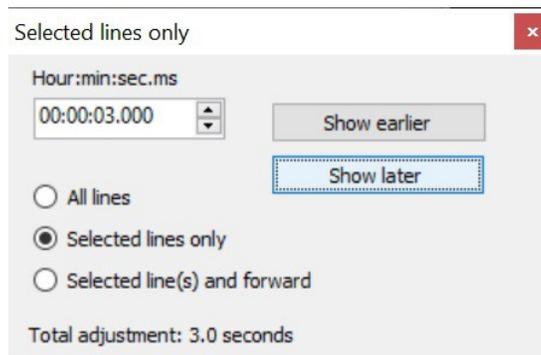
<.> Most of these Synchronization commands require to operate on a given Subtitle file. Otherwise:



□

Synchronization > **Adjust all times (show earlier/later)...**

Open a non-modal form aimed at “adjusting” the synchronization between Subtitles and speech.



S-PM 210500

Non-modal means that this form's functionality is not exclusive, but momentarily added to that of the

SE main window, so that the user may operate on both. This means that resulting effects could be immediately evaluated operating as usual on the SE main window without exiting this command's session [*<~>well, it may be not exactly so*].



Command currently under revision, therefore here described just AsIs [*<~>oddities included*].

Hour:min:sec.ms time interval to be subtracted / added to the Start time of the chosen contiguous set of Subtitle records [*<~>default value may be disconcerting*];

All lines / Selected / Selected and forward
referred contiguous set of Subtitles records⁵⁶ [*<~>default status may be disconcerting*];

Show earlier / later push button to immediately assign the chosen time shift;

Total adjustment algebraic sum of the time intervals possibly entered [*<~>unreliable, unexpected behaviors may happen*].

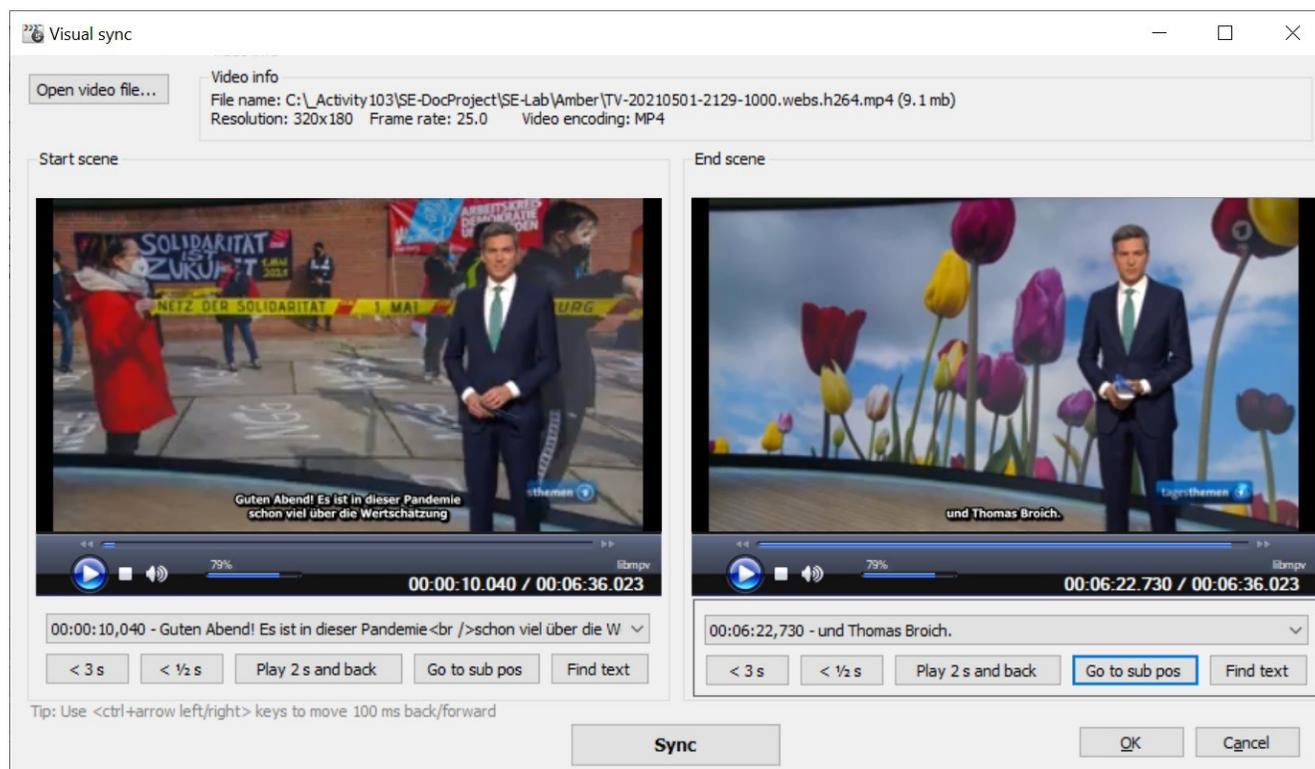
Being so immediate and powerful a feature, here the Undo Ctrl+Z may come real handy.

□

⁵⁶ Of course here we don't deal with “lines”, but “records” [*please cf.: Subtitles: Terms & Concepts; please do*].

Synchronization > **Visual sync...**

Media time, that is: media recording and playback time [*see sct.: Essentials \ Concepts \ Time*], normally is no SE's concern, in the sense that it isn't its business to define it. Its only related concern is, if ever, to position the subtitle's timing—namely Start, Duration and consequent End time—with respect to the media time assumed as a predefined and immutable data reference. Normally. But there may be exceptions to that, in essence due to technical-historical reasons⁵⁷, and generating a cumulative discrepancy between the recording and playback timelines, not precisely identical, as they should be. As a result, subtitles originally tuned, say, with the recording timing will result increasingly shifted at playback execution.



This command is provided to fix such discrepancy simply *measuring* the real playback time elapsing between a scene, assumed as initial, and another, assumed as final. All Subtitle units in between will be conveniently time-adjusted according to the reference interval of time actually measured this way.

Disclaim

The media image here shown doesn't correspond to a real case in which this command could be properly used and tested. Indeed, we haven't even got such a real test-case [*sorry*].

⁵⁷ Here just an hint about such reasons: “Region” specific playback speed, not taking into precise account U.S. (Region 1) recording “frame rate” speed switched from 30 fps (frame/sec) of the Black-and-White films to the nowadays color 29,97 fps films.

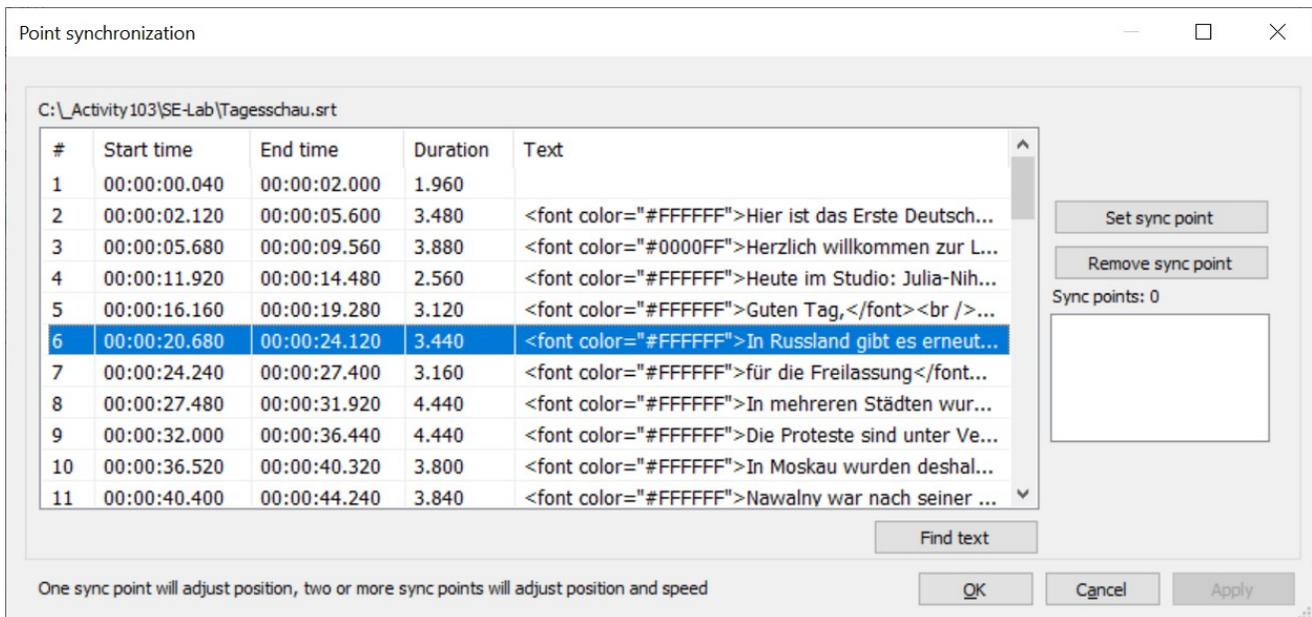
Controls

- 00:00:10,040 - Guten Abend! ... ▾ Subtitle record drop-down list
- Go to sub pos position the “Scene” at exact correspondence with the chosen subtitle record
- Ply 2 s and back short playback test (all other controls here assumed as self-explanatory)
- Sync “synchronize” all intermediate subtitles to the measured interval of time between the so defined Start and End scene.

Remark

The term “*scene*”, in the here-above “Start / End scene” captions, should not be interpreted—as more usual—as interval of time, but instead as “instant of time”⁵⁸, with the role of defining a playback sequence, that is an interval of playback time.

Synchronization > **Point sync...**



<...> Command under investigation. Feature detected, so far:

<.?> No clear idea what a “Sync Point” really is, in principle and functionally. More specifically: what precisely are the actions here described as “adjust position” and “adjust speed”.

Find text will open another “Find subtitle line” window, not requiring any further description being fully self-explanatory. Just a perplexity:

58 <~> Therefore, our opinion, perhaps a more suitable term would have been “*picture*”, or even “*frame*”.

Viewpoint

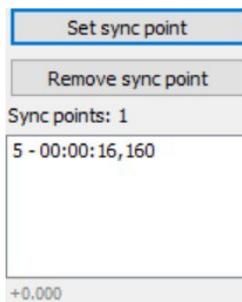
No clear evidence telling whether a given pattern has been found, or not, nor, and, when found, what exactly has been found (e.g. looking for “unter” you may get the word “Untertitelung”). Which is particularly tricky when the search-pattern falls outside of the text display-field, hence even, anyhow, with no way to watch text beyond a rather limited length.

Set sync point (and also double-click on a given Subtitle-line) will open another window with a possibly empty video display pane, where such a “Sync point” can be added, also without any video loaded. Here too this control-window is self-explanatory, but for the “Sync point time code” control, apparently showing what in the Subtitle table is called “Start time”.

Sync point time code is the crucial “spin control” on this second window, where the current “Start time” value could be possibly changed to be then possibly overwritten on the related field.

<.!.> grasped this functional aspect (to be said first...), this command can be fairly and fully explored.

Set sync point push button control set on this second “Set Sync point” window, even with no actual Video loaded, will be accepted with no practical effect whatsoever but a record shown on the “Sync points” text-area.



Showing that, whatever such Sync point is, it is associated to the #-count and Start time value of the pointed line. For what purpose it still to be understood. Figure here seen under text-field is assumed to show the time-difference between original and modified value.

Apply Button that, when pressed, make the just inserted Sync point disappear from its text-area, reason unknown.

□

Synchronization > **Point sync via other subtitle...**

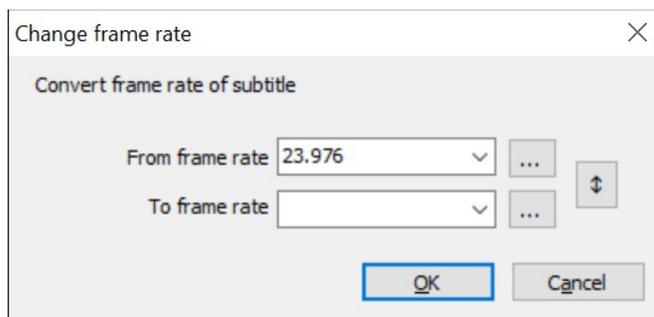
Command to do the same job as with “Point sync...” but with reference to another Subtitle file instead of a Video file <.?.>, all to be confirmed and tested <.?.>.

□

Synchronization > **Change frame rate...**



<Insufficient information> – Report suspended



Command <.?.> all to clarify:

- Convert not “Change”, as in the command name and in the title bar?
- [...] button is to call a Video file, that is two of them: all to clarify & test.

□

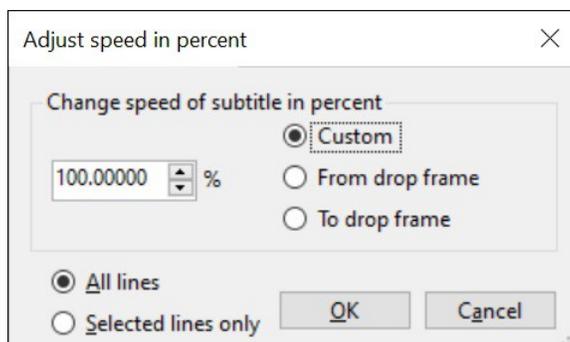
Synchronization > **Change speed (percent)**



<Insufficient information> – Report suspended

All to clarify:

- speed no idea what “speed of subtitle” means. About Subtitle records we know Number, Start/End time, Duration and Text. So, no idea what value/parameter is here going to be Adjust-ed or Change-ed, and for what reason; nor what is its original value.
- frame no idea what “From / To drop frame” means.
- lines presumably it stands for: “Subtitle record” – to be confirmed.



Controls



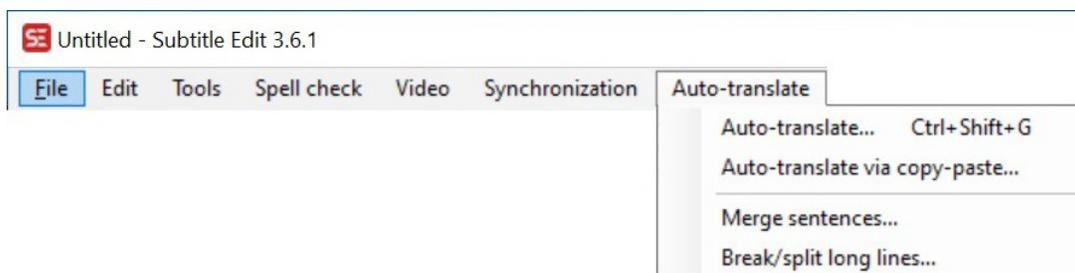
<Insufficient information> – Report suspended

<...>

<...>

—◇—

Auto-translate Command Menu



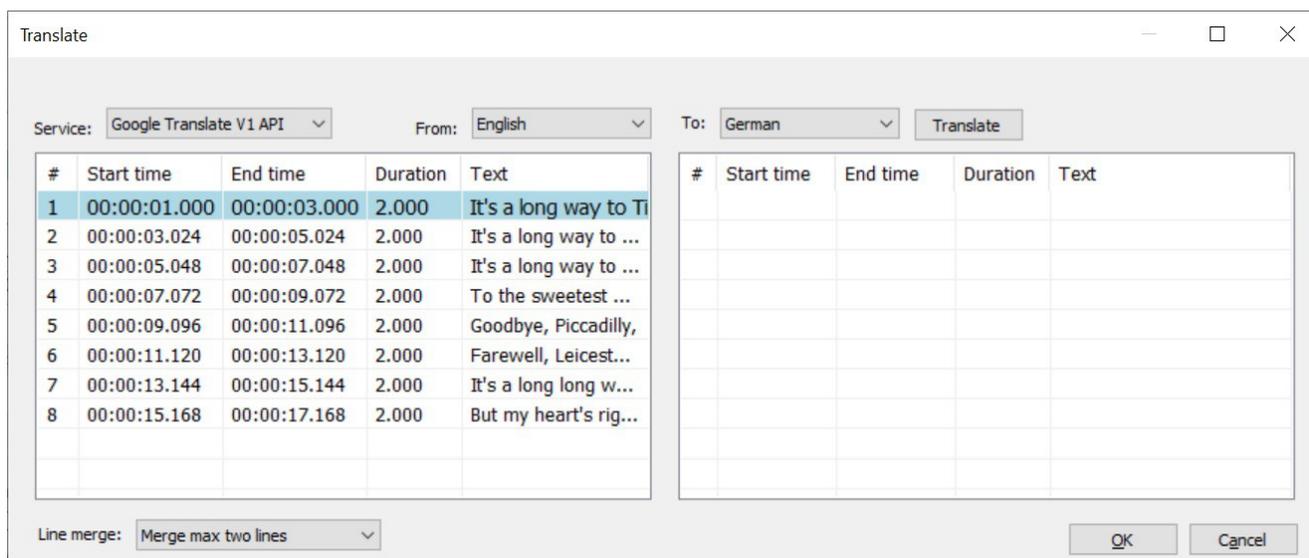
Command List

- Auto-translate...
- Auto-translate via copy-paste...
- Merge sentences...
- Break/split long lines...

□

Auto-translate > **Auto-translate...**

Auto-translate control form, requiring an active Internet connection.



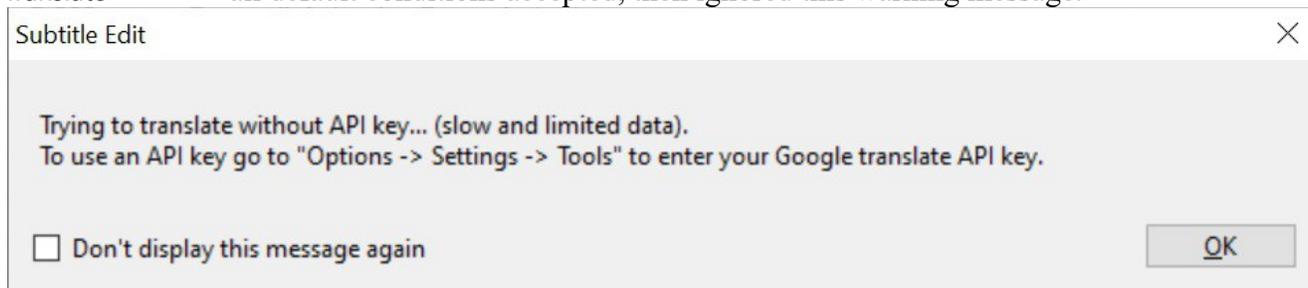
Service

- Google Translate, combined free and “V1 API key” pricing policy, 80-odd languages;
- nikse.dk Multi Translator, from Swedish to Danish; crashes if no Internet connection [known bug, fixing is under way].

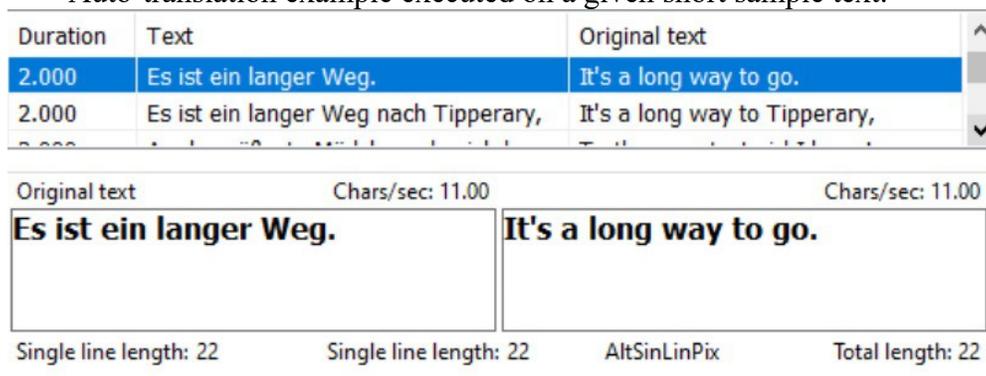
Line merge

it's to make life easier to automatic translators, usually not liking sentences subdivided into distinct Records just for Subtitle's format reasons. Text sentences that, after translation, may be split again between distinct Subtitle records just for the usual good reasons.

Translate all default conditions accepted, then ignored this warning message.

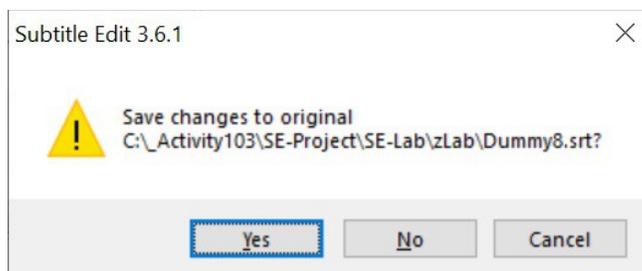


Auto-translation example executed on a given short sample text.



<~> Text-boxes captions may appear inaccurate, as in the above example with: “Original text” on the wrong box, and a spurious “AltSinLinPix” label [notified bugs, fixing under way].

<~> Original Subtitle file, even not edited at all, is curiously declared as modified



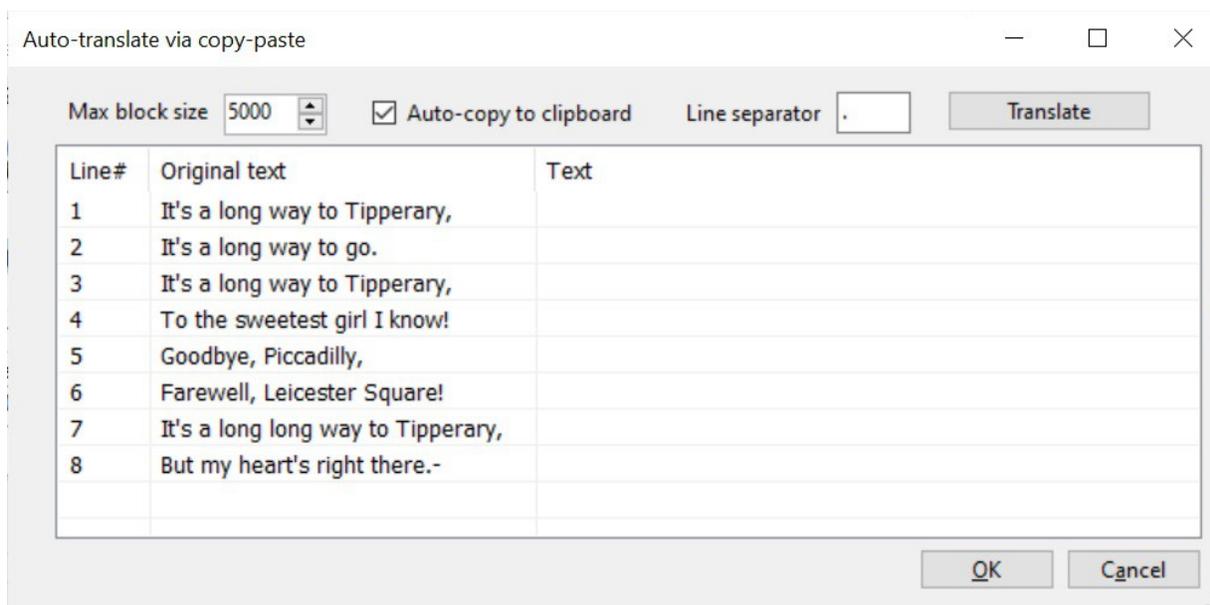
[notified bug, fixing under way].

<.> At SE-Exit, translated Subtitle file is saved ok with a default name “video.de.srt”.

□

Auto-translate > **Auto-translate via copy-paste...**

Similar to the preceding “Auto-translate...” command [cf.], provided to permit “manual” utilization of possibly different automatic translators.



Controls

Max block size max. char.s extension of text-block to be submitted to automatic translators, in account of related possible limits.

Line separator proposed char. to be assigned the role of Subtitle text unit separator⁵⁹, to the benefit of the automatic translation process.

<~> Well, it works, but with a rather obscure and unfriendly UI, that should be drastically improved.

□

⁵⁹ As already stated throughout this Report, here too “line” is rather an unacceptably ambiguous, imprecise term [see *sect.*: Subtitles: Terms & Concepts].

Auto-translate > Merge sentences...

Merge into one single Subtitle unit all sentences possibly spitted into distinct Subtitle text records, with usual punctuation as full-stop “.” or note of exclamation “!” are taken as End-Of-Sentence markers.

For instance:

#	Start time	End time	Text
1	00:00:01.000	00:00:03.000	It's a long way to Tipperary,
2	00:00:03.024	00:00:05.024	It's a long way to go.
3	00:00:05.048	00:00:07.048	It's a long way to Tipperary,
4	00:00:07.072	00:00:09.072	To the sweetest girl I know!
5	00:00:09.096	00:00:11.096	Goodbye, Piccadilly,
6	00:00:11.120	00:00:13.120	Farewell, Leicester Square!
7	00:00:13.144	00:00:15.144	It's a long long way to Tipperary,
8	00:00:15.168	00:00:17.168	But my heart's right there.-

will become:

#	Start time	End time	Text
1	00:00:01.000	00:00:05.024	It's a long way to Tipperary, It's a long way to go.
2	00:00:05.048	00:00:09.072	It's a long way to Tipperary, To the sweetest girl I know!
3	00:00:09.096	00:00:13.120	Goodbye, Piccadilly, Farewell, Leicester Square!
4	00:00:13.144	00:00:17.168	It's a long long way to Tipperary, But my heart's right there.-

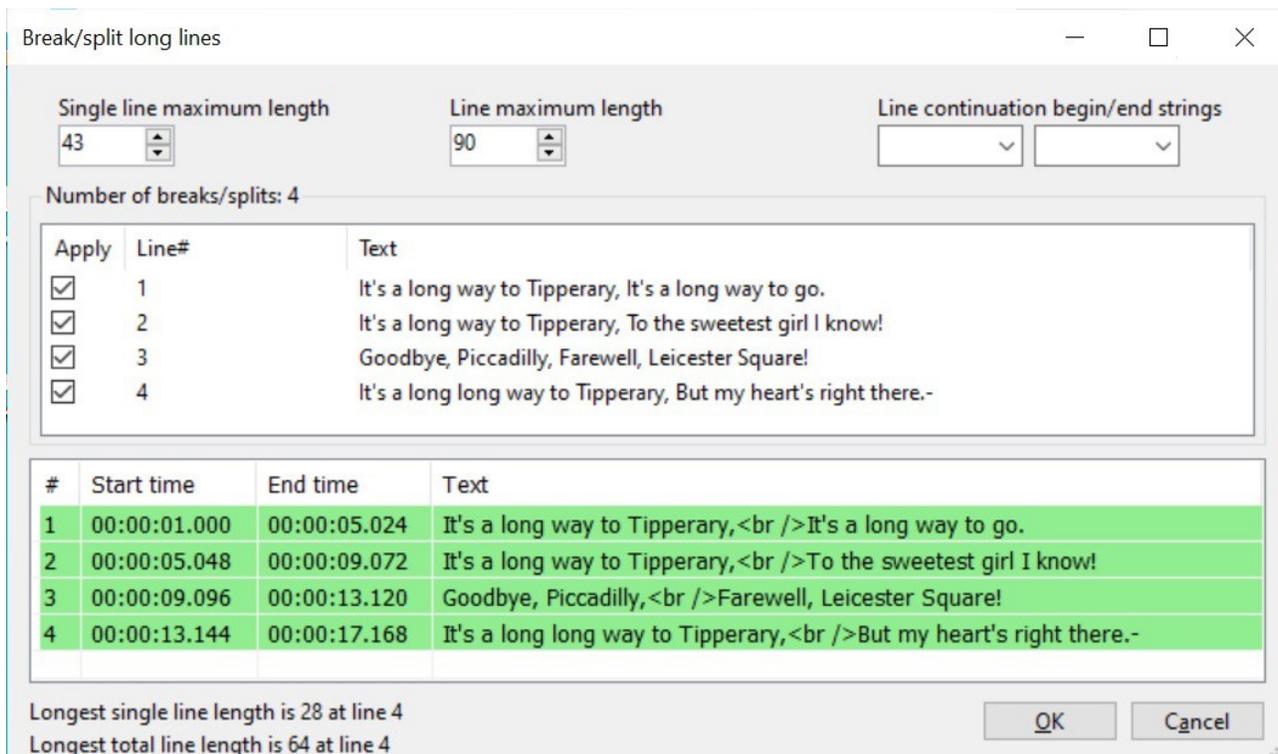
Remark

Then, for a possibly inverse action, see next “Auto-translate > Break/split long lines...” command, all that intended to the possible benefit of an automatic translation process.

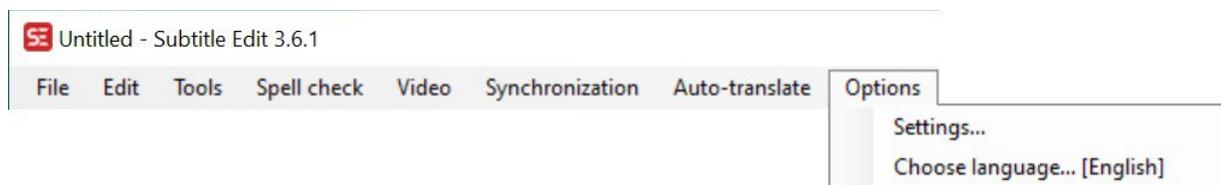
□

Auto-translate > **Break/split long lines...**

Inverse action of the preceding command [see], possibly useful to adapt automatic translations to the usual Subtitle text formats [cf. first "Viewpoint" at sct.: Chronicle of a basic "Create" experience].



Options Command Menu



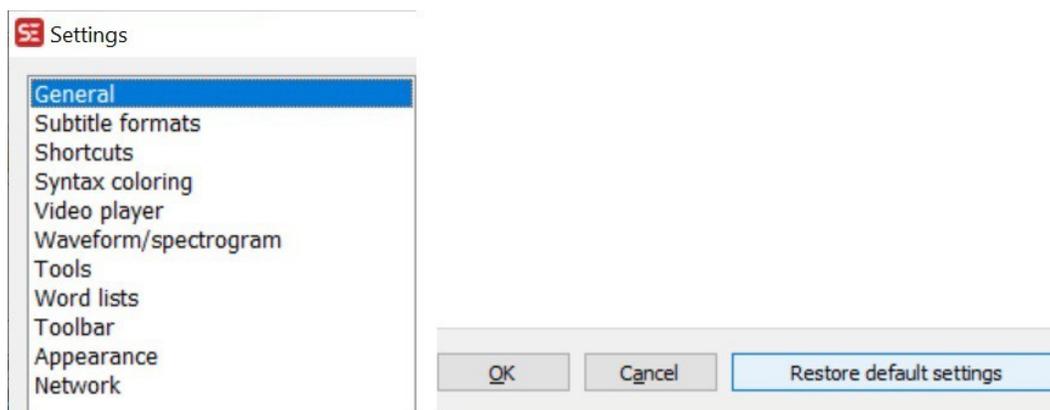
Command List

Settings...

Choose language... [English]

□

Options > **Settings...**



Here shown the list of all Settings... sections, with contents left to the direct User's experience, but for some items treated in this Report where specifically required. As, for instance, in sct.s: Shortcut Commands, or Management Actions – Options > Settings... : Video player \ Video engine \ mpv [see].

Remark

Enter Options > Settings... > Restore default settings > OK to restore SE's initial defaults.

□

Options > **Choose language... [English]**

Choose the SE's User Interface language, and alphabet, among 30-odd; with shown current [default].

—◇—

Networking Command Menu



Requisite

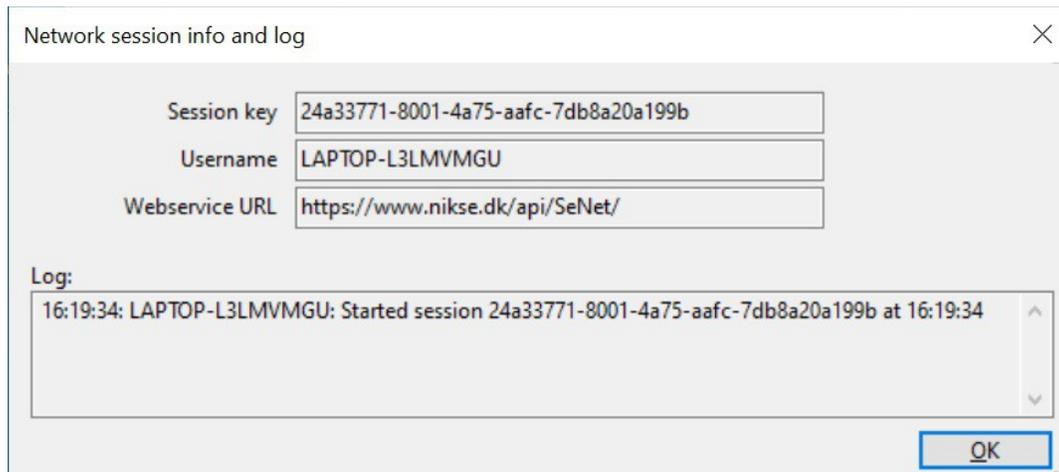
<.> An active Internet connection.

SE-Networking then provides a collaborative tool among SE-users, connected in Internet.

□

Typical SE-Networking Session

As initial Networking action enter a “Start new session” command [for or all details about this and other Networking commands see next sections], just accepting all default values shown on the “Start network session” control box. This way, current SE-workstation assumes a Master role on the just born SE-Networking session: let's call it the “Session Starter” workstation. A look at the “Show session info and log”, so to verify all about it.



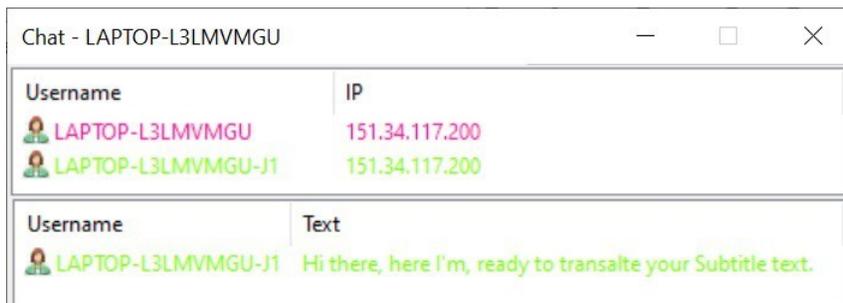
Then you may activate a *second SE-instance* on the same computer as a convenient way for emulating, and testing, an actual SE-Networking operative condition. On it, preset a nice clean “File > New” status, then enter a “Join session” command accepting all default parameters offered, but the Username to which a “-J1”—standing for “Joiner 1”⁶⁰—should be post-fixed, so to conveniently characterize it. Then possibly a “Show session info and log” on each SE-instances, so to verify all about the new configuration.

<.> Here, in particular, one crucial parameter is to be considered: the “Session key”. That is, the logical link for the hand-shaking process between the two SE-workstations now connected in Network.

⁶⁰ Here we'd rather talk of “Session Starter” and “Session Joiner”, instead of using the standard Master–Slave terms.

In a “real” case, with physically distinct and remote SE-Workstations, this crucial parameter should be communicated by means of such a media as E-mail, or so. Anyway, now the two SE-Workstations enjoy the following condition: now Mr. “Starter” and “Joiner can:

<!!> communicate via “Networking > Chat” [see];



<!!> share the very same SE-Subtitle job, so to collaborate, for instance—and typically—on a translation [cf.: ToggleTranslationMode (Control+Shift+O), sct.: Shortcut Commands List].



Indeed, as said, a nice collaborative tool among SE-users, connected in Internet.

—◇—

Command List

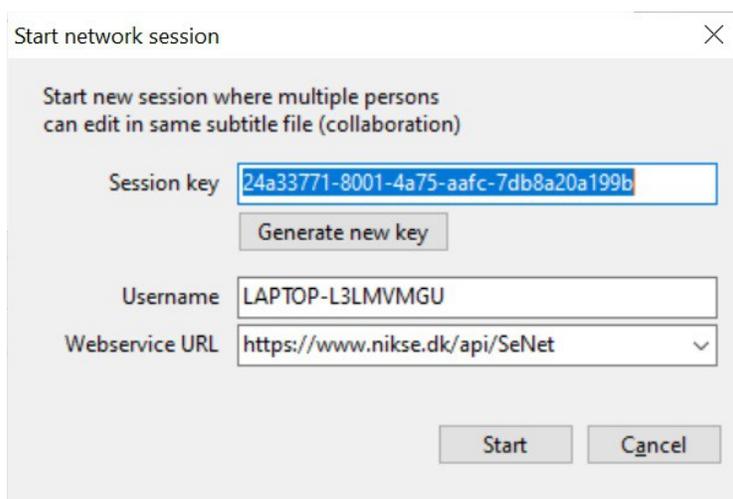
Start new session

Join session

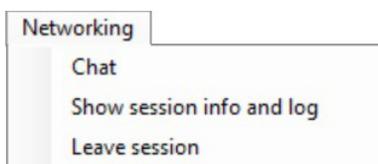
□

Networking > Start new session

Made an initial (and necessary) test-experience with the “Join session” command [see above], now we endeavored this “real” one,



where the only remarkable difference we see is the “Generate new key”, whose role is now so obvious that there is no need to test it. So then, a nice “Start” and what we see is that the Networking menu changes this way:



Command List

Chat

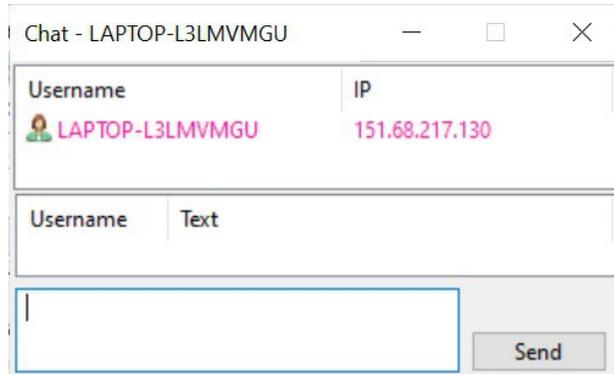
Show session info and log

Leave session

□

Networking > Chat

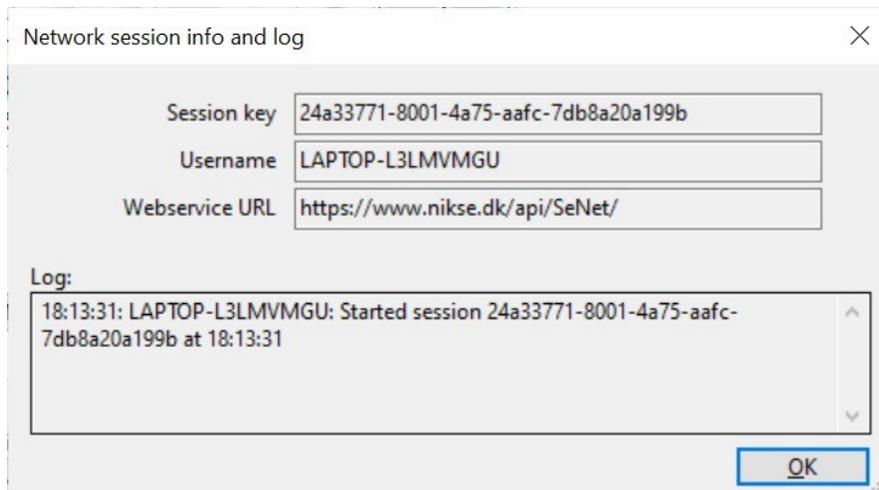
Started a new SE-Networking session, entered this command, here the resulting situation:



<~> about which we observe:

- From what so far seen, it seems that a “Chat” is the only SE-Networking activity available. We presume it is not so, therefore further investigation is in order.
- Besides, here a “Chat” seems permitted with only one interlocutor. Obviously here too further investigation is in order:
 - <.o> It's what we intend to do and describe with the next “Two SE-Instances” section [see].

Networking > **Show session info and log**



This is how to inspect all about an SE Networking session under way.

Networking > **Leave session**

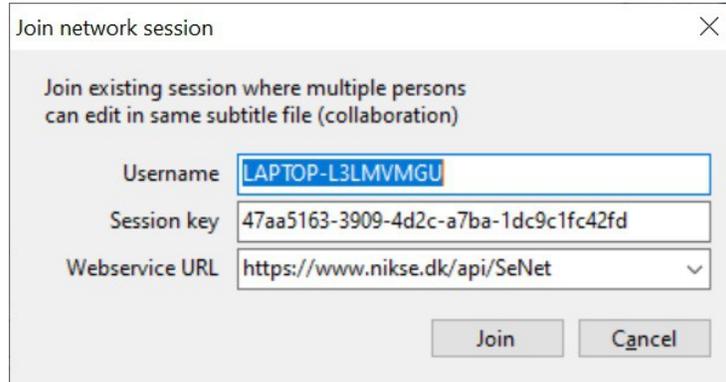
Reset condition as before entering “Start new session” command⁶¹.

61 <.> As all “Sorcerer's Apprentice” should know, the first thing to learn about a new and unknown operative condition is

□

Networking > Join session

First command we'd endeavor to test.



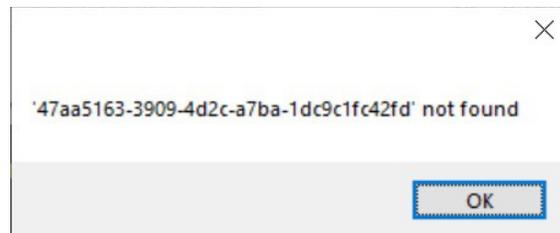
- Username we'd take it as automatically proposed by SE, so to identify the connecting user.
- Session key same as above, for the current operative session.
- Webservice URL drop-down list offering two choices, beyond an initial default one.



Here is what happened trying to use each one of them.

<https://www.nikse.dk/api/SeNet>

This is what happened trying to “Join” this default URL:



From which we infer:

- A valid “Session key” should be known in advance. No “search” available.
- The “Session key” here offered as default is presumably for initiating a new session.

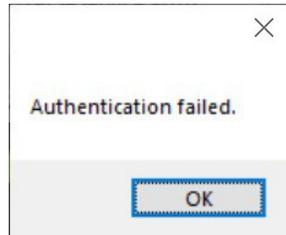
<~> Anyhow, an initial default URL that curiously “despairs” after possibly selecting one of the other item in list. To regain it we had to undergo a general Options > Settings... > Restore default settings > OK

how to safely leave it.

□

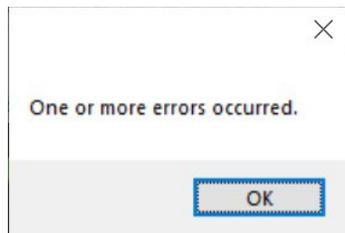
<https://www.nikse.dk/se/SeService.aspx>

This is what happened trying to “Join” this one:



<https://se-net.azurewebsites.net/SeService.aspx>

and here trying to “Join” the other:



Obvious conclusion:

<.> We'll proceed our inquiry relying only on the initial default URL.

<?> Support anyhow badly needed about this entire subject.-

-<>-

Help Command Menu



Command List

Check for updates...

Help

About

□

Help > **Check for updates...**

Command requiring an active Internet connection, so to check if there is available any SE program version / revision more recent than that currently in use.

□

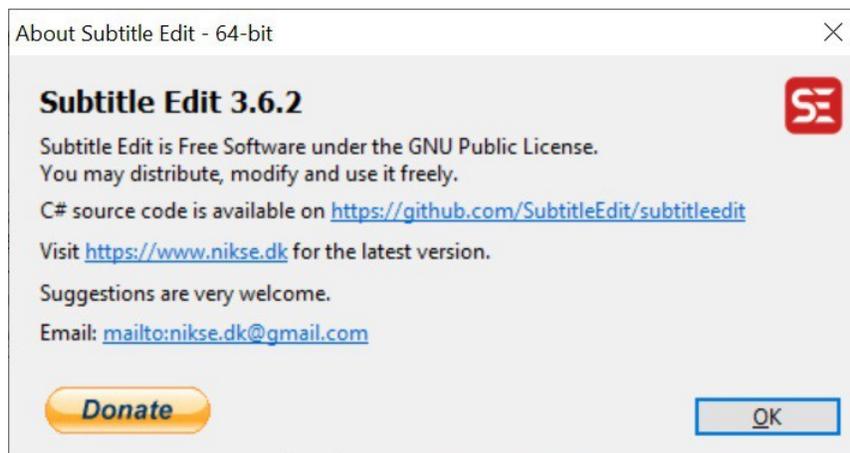
Help > **Help**

Command requiring an active Internet connection, so to display the SE-Help tech. info as currently available on the <https://www.nikse.dk/SubtitleEdit/Help> web site page.

□

Help > **About**

S-PM 210800



Designed to display this SE program's identity card, with some basic reference information⁶².

—<>—

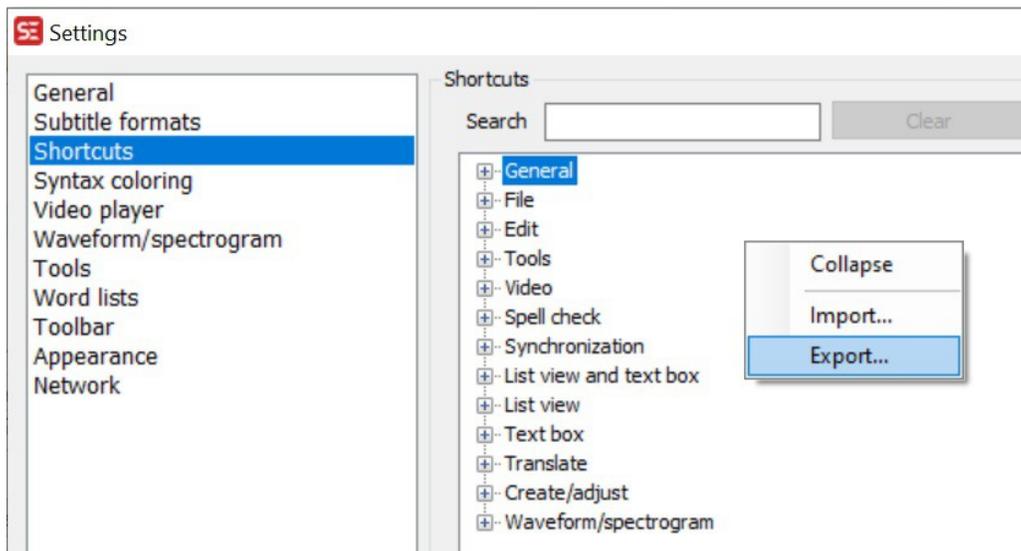
⁶² Just a reminder: SE program and SE Tech.Report authoring references can here be found at sct. Essentials [see].

Shortcut Commands

S-PM 210800

Not all is “Object Oriented” interaction with SE, there are also some old-fashion “Command Oriented” interactive actions that the user may require via precise keyboard stroke combinations, of course provided he knew them in advance, given the fact that such sort of textual commands are not kindly offered to be chosen within a drop-down Menu command list [*cf. sct.*: Main Command Menu], or a pop-up Context command list [*cf. sct.*: Program Window & Context Menus].

Here we are not talking about such sort of shortcuts as, for instance, a “Ctrl+N”, shown beside its parent “File > New” command [*see*], simply as a convenient quick alternative for calling its very same parent command. What we are considering in this section are commands for which there is *no other way to call them*, but via the keystroke sequence as hereafter described⁶³. Keystroke sequences defined in the Options > Settings... : Shortcuts form [*see*], there available to be explored, and possibly customized⁶⁴,



and also Export-ed as a markup “SE_Shortcuts.xml” file [*cf.*: Shortcuts *pop-up menu*].

□

Viewpoint

To investigate, test and then describe this particular set of commands we had first to overcome some structural difficulties that we consider worth describing in detail [*see next sct.*: Marshalling Shortcuts File], so to hopefully attract the attention of the SE developers possibly interested in remedying the situation, being convinced that a remedy is badly needed.

⁶³ Actually, more a quirky combination of keys than a clean textual string, or abbreviation.

<> By the way, consider in particular that “Fn” Function Keys may require an extra key stroke to use them as SE-Shortcut, instead of as a so called system “Hotkey”.

⁶⁴ A possibility here not described, as off-scope for this Report.

Shortcut Commands List

List of “pure” SE interactive commands, extracted from the currently standard “SE_Shortcuts.xml” file⁶⁵, excluding all shortcuts associated to a parent Menu or Context command, keeping the original order and “.xml” tag-sections [*that is:* <General, <Main, <Waveform].

<General

GoToFirstSelectedLine Control+L

Scroll the List view table so to display the first Subtitle row of a possibly long sequence of selected rows.

ToggleTranslationMode Control+Shift+O

A “Translation Mode” not so so simple to enter, as far as we could see. In wait for better tech. info [*<.> investigation is under way*] this is how we managed it.

- Assuming to have got an original Subtitle file, say Dummy8.srt, that we'd like to translate into a different language, say German, first action was to create a target Subtitle file conveniently named “Dummy8.De.srt”.

- Our first idea was to create an empty “...De.srt” file on which then to work upon operating, indeed, in SE “Translation Mode”. But that revealed impossible, for many curious reasons. Just one: SE disdains either creating or opening empty or short Subtitle file, with such reason as: “File is empty or very short!” [*“So what, it's none of your business”, our reaction was*].

- Anyway, to circumvent such difficulty we simply copied just the first original Subtitle record into the new file, and translated it off-line. Then, opened it, we entered the here considered shortcut command so to activate the desired “Translation Mode”, successfully. Here the result:

Duration	Text	Original text
2.000		It's a long way to Tipperary,
2.000	Es ist ein langer langer Weg	It's a long way to go.
2.000		It's a long way to go.
2.000		It's a long way to Tipperary,

Text	Chars/sec: 14.00	Original text	Chars/sec: 11.00
Es ist ein langer langer Weg		It's a long way to go.	

Single line length: 28	Total length: 28	Single line length: 22	Total length: 22
------------------------	------------------	------------------------	------------------

Not bad, one can begin translating ok. But we're not sure that's how we are really supposed to operate. *<.>* Therefore a related investigation is still underway.

⁶⁵ Currently, that is: rev. 3.6.2

Remark

Apart from the “Toggle” aspect [*<~>* and the naming difference: Translation vs. translator], this Shortcut command seems identical to the Main menu File > Open original subtitle (translator mode)... command [*see*], included the odd meaning assigned to the “original” qualification, as there expressed, and here confirmed.

□

MergeOriginalAndTranslation Control+Alt+Shift+M

It is to “merge” original and translated texts into a different Subtitle file, so to possibly display subtitle texts of both languages together.

GoToNextSubtitle Shift+Return

Go to next Subtitle row on the List view, select it and scroll [*List view only, not the Soundtrack's Waveform, alas*].

<?> But then, if you try to start playback, say via a “Control+P” action [*see*], record selection will be reset back to the position before this “Shift+Return” action.

<?> Sounds as a bug.

GoToNextSubtitlePlayTranslate / GotoPrevSubtitlePlayTranslate

Alt+Up / Down [*▲ / ▼ arrow*] scroll select one row up / down⁶⁶

<OpenDataFolder> Control+Alt+Shift+D

<?> No idea what it is about – sounds as cast off.

□

<Main

ToolsFixCommonErrorsPreview Control+P

Operates only at Step 2/2–“Verify fixes” of command Tools > Fix common errors... [*see*].

<?> Besides: this same “Control+P” shortcut is here assigned also to the command “VideoPlayPauseToggle”. Sounds as a bug. *<?>*

EditInverseSelection Control+Shift+I

Invert current Subtitle Record selection on the List view and Soundtrack's Waveform.

VideoPause Control+Alt+P

Pause video playback. *<~>* Forget it, use instead the *much more convenient toggles*:

<!> Control+P, or the equivalent (^)-“Click-action” directly *on the very Virtual Screen*.

VideoPlayFromJustBefore Shift+F10

Start Playback just before the currently selected Subtitle Record [*about 1/2 sec*].

VideoPlayPauseToggle Control+P Toggle Playback (play/pause).

<?> This same “Control+P” shortcut is here assigned also to command “ToolsFixCommonErrorsPreview” [*cf.*]. Sounds as a bug. *<?>*

66 *<.>* Same selection performed on the Soundtrack too, a double-click to synchronize Position marker.

Video500MsLeft	Alt+Left	[◀ <i>arrow</i>]	Shift Position marker
Video500MsRight	Alt+Right	[▶ <i>arrow</i>]	"
Video3000MsLeft	F7		"
VideoGoToStartCurrent	F6		Shift at Start of 1 st selected Unit
VideoToggleStartEndCurrent	F4		" toggle at Start/End of 1 st selected Unit
VideoPlaySelectedLines	F5		should Playback all possibly selected contiguous Units, but it

is still  <Under Revision>, as it doesn't operate as designed do to.

VideoFullscreen	Alt+Return		Toggle Virtual Screen Full/normal (equivalent “esc” to normal)
VideoReset	Control+D0	[<i>Decimal 0</i>]	Reset Virtual Monitor status: 100% Zoom and Play rate (speed).
ListViewGoToNextError	F8		Go and select next faulty Subtitle record after the currently selected one, if any. No wrap-around.
TextBoxSplitAtCursor	Control+Alt+V		Split current Subtitle record at the current text insertion point on the Text box.
TextBoxSelectionToLower	Control+U		selected text on the Text box to: lower case
TextBoxSelectionToUpper	Control+Shift+U		" to: UPPER case
TextBoxSelectionToggleCasing	Control+Shift+F3		" toggle to: UPPER/lower/Proper case ⁶⁷
CreateInsertSubAtVideoPos	Shift+F9		insert a Subtitle record at current Position marker (take care: not within an existing Subtitle).
AdjustSetStartAndOffsetTheRest	Control+Space		set Start time of current selected Subtitle record at Position marker, and shift accordingly all the subsequent ones.
AdjustExtendToNextSubtitle	Control+Shift+E		extend End time of current selected Subtitle record to the next one.
AdjustExtendToPreviousSubtitle	Alt+Shift+E		extend Start time of current selected Subtitle record to the previous one.
InsertAfter	Alt+Insert		insert a Subtitle record after the currently selected one.
TextBoxAutoBreak	Control+R		same as with “Auto <u>br</u> ” button on the Text box [<i>see</i>].
WaveformInsertAtCurrentPosition	Insert		insert a Subtitle record at current Position marker (avoid withing an existing one).

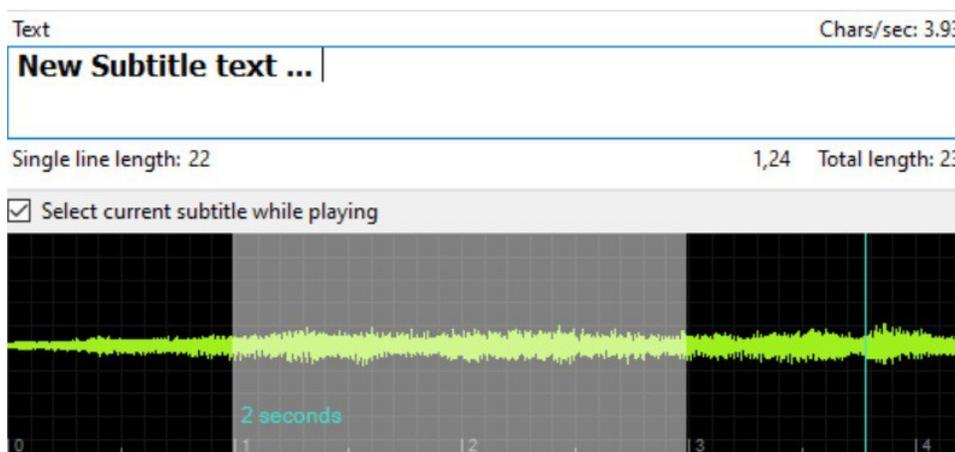
⁶⁷ “Propercase”: First letters Up, all other low. Ctrl+Z to regain original format.

InsertBefore Control+Shift+Insert
 insert a Subtitle record before the currently selected one.

□

<Waveform

VerticalZoom Shift+Add Vertical Zoom commands for Waveform [*presumably*],
 VerticalZoomOut Shift+Subtract it requires a Numeric pad [*that we don't have*].
 AddTextHere Return [*←just “Return”, simple and powerful*]



Insert a new Subtitle, and text, on a selected void Timeline segment.

100MsLeft Shift+Left [◀arrow] Shift Position marker
 100MsRight Shift+Right [▶arrow] "
 1000MsLeft Left [◀arrow] "
 1000MsRight Right [▶arrow] "

Viewpoint

It's rather odd that so similar [◀arrow ▶] commands are located into so different sections “<Main” and “<Waveform” [*see*].

□

Other Shortcut Commands

SE recognizes a few other useful shortcuts commands beyond those defined into the “SE_Shortcuts.xml” file—as here above considered [*see*—and those associated to ordinary menu and context commands.

On the List view:

Ctrl+V single or multiple [*via: kept pressed*] insert of a previously copied Record [*via: Ctrl+C or (^) Copy as text to clipboard*], with all Records time fields conveniently recalculated. Of all traditional and well known shortcuts—such as: Ctrl+X, +Y, +Z—we'd here recall this one, as particularly powerful and useful for appending dummy Records at

the bottom of a Subtitle file.

Beware: Overflow condition not detected [*cf.*: (^) Insert subtitle after this line...].

Shift+Up / Down [▲ / ▼ *arrow*] add select one row up / down

Ctrl+A select all Subtitle rows, and records [*hint, to deselect all:*
EditInverseSelection (Control+Shift+I), *or even simpler: click an empty row*]

□

Viewpoint

As said, “SE_Shortcuts.xml” markup file holds mixed sets of both “traditional” shortcuts, that is those associated to a parent Menu or Context command—such as “Ctrl+N”, shortcut version of its parent “File > New” command—together with sets of “pure” SE interactive commands, that is those described in the above “Shortcut Commands List” section. Well, we find it rather confusing, and would suggest to introduce two distinct “.xml” tag-sections for such rather distinct sets.

Besides, we realized that the set of “pure” Shortcuts here considered are rather useful in two distinct SE-operative areas: Subtitle editing [*e.g.*: CreateInsertSubAtVideoPos (Shift+F9)] and playback [*e.g.*: VideoPlayPauseToggle (Control+P)]. Therefore, instead the inexpressive current subdivision in: <General, <Main, <Waveform, we'd rather adopt a more rational <Editing and <Playback tag-sections.

□

Final Remark

There can be counted five different ways of user interaction with SE, as described in different sections of this Tech.Report.

- 11) Usual Menu commands [*see sct.*: Main Command Menu]
- 12) Context commands [*see sct.*: Program Window & Context Menus]
- 13) Shortcut commands [*see this very sct.*: Shortcut Commands]
- 14) Extra Shortcut commands [*just last sub-sct., here above*]
- 15) Usual manual control actions, as: push, drag, resize, click, ...; [*examples offered throughout this Report, particularly with sct.s: Basic Tasks and Main Tasks and Soundtrack Work Area*].-

□

Marshalling Shortcuts File

Of course there is a substantial difference between shortcuts corresponding to ordinary “full size” commands [*e.g.*: “File > New”, *shortcut*: “Ctrl+N”] and “pure” shortcuts commands [*e.g.*: VideoReset “Control+D0”] for which the very shortcut is the only way to execute them. It is therefore obvious that to intermix them into the same “SE_Shortcuts.xml” file—as it is now⁶⁸—is an annoying and error-prone source of confusion. To overcome this basic difficulty we carried on the following “Marshalling” actions:

M0) Export... the original “SE_Shortcuts.xml” file, made then a work-copy to be conveniently edited.

⁶⁸ That is: SE rev. 3.6.2

- M1) Delete all “unnecessary” markup tags, keeping then only the section names [*as: <General>*], shortcut captions [*as: GoToFirstSelectedLine*] and codes [*as: Control+L*]; all in the original list order.
- M2) Delete all entries ending with a trailing “ />”, that is entries with no shortcut code associated [*e.g.: <Plugins />*].
- M3) Mark with a leading “-” minus all items associated with ordinary SE menu or context commands [*e.g.: - Help F1, or: - FileNew Control+N*]; and that done “simply” scanning all of them, hoping not to have overlook any one.
- M4) Collect only and all “pure” shortcut into a dedicated list, as the subject of this very “Shortcut Commands” section.

□

Anyway,

here is the resulting table, where some residual minor oddities can be spotted, as captions out-of-place, [*as: WaveformInsertAtCurrentPosition not into <Waveform section, but in <Main instead>*], or such similar [◀*arrow* ▶] items split between such different sections as <Main and <Waveform; and the like.

<General	
	GoToFirstSelectedLine Control+L
-	MergeSelectedLines Control+Shift+M
	ToggleTranslationMode Control+Shift+O
	MergeOriginalAndTranslation Control+Alt+Shift+M
	GoToNextSubtitle Shift+Return
	GoToNextSubtitlePlayTranslate Alt+Down
	GoToPrevSubtitlePlayTranslate Alt+Up
-	ToggleBookmarksWithText Control+Shift+B
?	<OpenDataFolder> Control+Alt+Shift+D
-	ToggleView F2
-	Help F1
<Main	
-	FileNew Control+N
-	FileOpen Control+O
-	FileSave Control+S
-	EditUndo Control+Z
-	EditRedo Control+Y
-	EditFind Control+F
-	EditFindNext F3
-	EditReplace Control+H
-	EditMultipleReplace Control+Alt+M
-	EditGoToLineNumber Control+G
-	EditRightToLeft Control+Shift+Alt+R
-	ToolsFixCommonErrors Control+Shift+F
	ToolsFixCommonErrorsPreview Control+P
-	ToolsRenumber Control+Shift+N
-	ToolsRemoveTextForHI Control+Shift+H

-	ToolsChangeCasing	Control+Shift+C
	EditInverseSelection	Control+Shift+I
	VideoPause	Control+Alt+P
	VideoPlayFromJustBefore	Shift+F10
	VideoPlayPauseToggle	Control+P
-	VideoShowHideVideo	Control+Q
	Video500MsLeft	Alt+Left
	Video500MsRight	Alt+Right
	Video3000MsLeft	F7
	VideoGoToStartCurrent	F6
	VideoToggleStartEndCurrent	F4
	VideoPlaySelectedLines	F5
	VideoFullscreen	Alt+Return
	VideoReset	Control+D0
-	SpellCheck	Control+Shift+S
-	SpellCheckFindDoubleWords	Control+Shift+D
-	SpellCheckAddWordToNames	Control+Shift+L
-	SynchronizationAdjustTimes	Control+Shift+A
-	SynchronizationVisualSync	Control+Shift+V
-	SynchronizationPointSync	Control+Shift+P
-	ListviewItalic	Control+I
	ListviewGoToNextError	F8
	TextBoxSplitAtCursor	Control+Alt+V
	TextBoxSelectionToLower	Control+U
	TextBoxSelectionToUpper	Control+Shift+U
	TextBoxSelectionToggleCasing	Control+Shift+F3
	CreateInsertSubAtVideoPos	Shift+F9
-	CreateSetStart	F11
-	CreateSetEnd	F12
	AdjustSetStartAndOffsetTheRest	Control+Space
-	AdjustSetStartAndOffsetTheRest2	F9
-	AdjustSetEndAndGotoNext	F10
	AdjustExtendToNextSubtitle	Control+Shift+E
	AdjustExtendToPreviousSubtitle	Alt+Shift+E
	InsertAfter	Alt+Insert
	TextBoxAutoBreak	Control+R
	WaveformInsertAtCurrentPosition	Insert
	InsertBefore	Control+Shift+Insert
<Waveform		
	VerticalZoom	Shift+Add
	VerticalZoomOut	Shift+Subtract
	AddTextHere	Return
	100MsLeft	Shift+Left
	100MsRight	Shift+Right
	1000MsLeft	Left
	1000MsRight	Right
<Main		
-	AutoTranslate	Control+Shift+G

□

<.> This is the list of “pure” interactive SE shortcut commands on which we've based this section's drafting. Of course, we're not sure it's perfect, therefore SE people's evaluation here is more welcome than ever.

-<>-

Program Setup & Management

S-PM 210500

Reference section for SE program setup and management.

□

Environment and Resources

Reference platform Microsoft Windows⁶⁹ and program Subtitle Edit are as detailed in section Essentials, table Version Reference [see]. About other required resources:

- ◆ Internet connection, not only for the initial SE program down-loading, and possibly successive Help > Check for updates..., but also for such usual operative circumstances as with: Auto-translate > Auto-translate... and Help > Help commands [see].
- ◆ Rather useful, practically indispensable, an auxiliary media player program such as the popular  VLC media player [our choice]. That beyond the “MPV Media Player” (a “.dll” library) as in next Management Actions section [see].

□

Initial Setup Actions

Extremely smooth, no hassle initial setup and start up actions [ver.: 3.6.0]. As a result you'll get a “Subtitle Edit” directory into the standard Windows “Program Files” directory, and a “Subtitle Edit” folder available under the usual Desktop > Start button; to run the very “SubtitleEdit.exe” program:  Subtitle Edit [see also inside: Changelog, Online Help, Subtitle Edit on the Web, and Uninstall Subtitle Edit].

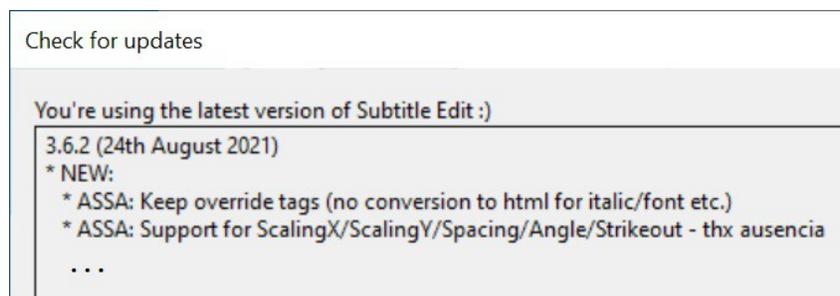
Then we've found convenient to create also an usual “Pin to Start” shortcut.

□

Experience of Subsequent Updating

S-PM 210800

SE Help > Check for updates... to get news about the availability of subsequent SE revised issues, such as the currently latest SE rev. 3.6.2⁷⁰ (24th Aug 2021), “Changelog” included.



⁶⁹ About possible other platforms, on its very web site SE is declared “a Windows program [that] runs (mostly) well on Linux via [Mono](#).” [see].

⁷⁰ Distinct terms: “Version” and “Revision”, with such abbreviations as: ver. 3.6, rev. 3.6.2

Viewpoint

“Changelog” certainly useful for evaluating announced novelties, just a little cryptic for ordinary users, possibly not SE-program developers. For instance, probably here not everybody knows what “ASSA” stands for [*probably: “Markup Tags”, but we don't know for sure*].

□

Actions

On the SE web site <https://www.nikse.dk/>, section Download, a Subtitle Edit 3.6.*n* link brings us to: <https://github.com/SubtitleEdit/subtitleedit/releases>, where we may choose to download: SubtitleEdit-3.6.*n*-Setup.zip

That is, an 8 MB file, with practically no size difference between the “.zip” and the expanded “Setup.exe” file. Then, with Internet disconnected, now not required:

- ▶ As (Local) Admin, “over” the currently installed SE program (that is, no need to Uninstall it);
- ▶ Run Setup, Select: English, all components & defaults accepted, but the desktop shortcut, refused.
- ▶ Associate SubRip Text (.srt) files with Subtitle Edit.
- ▶ A short waiting, then Finish and Restart. That's all.-

This way, last SE rev. 3.6.(2) is up and running, with the preceding SE “pinned” start icon still working ok. What may be not working is the expected SE–“.srt” file Open-automatism. Easily fixed by hand.

□

Current Setup Details

- ◆ As a rule, this Report is about final SE release, not “alpha” nor “beta” preliminary versions. About precisely *which* release version, please see sct.: Planned Revision and Update. That is to realistically say that current Report may be not updated up to the latest SE rev. in use.
- ◆ SE is compiled “Any CPU”, where *Any* means that it can run as well on a 64 or 32 bit Microsoft h/w platform [*appreciable compatibility*].
- ◆ Both the usual “... Setup.zip” Installer [*our choice*] and a “SEnnn.zip” Portable [*declare also Linux compatible*] version are available.
- ◆ Notice that SE command Help > Check for updates... offers information only, no automatic update actions.

□

Management Actions

In this section we'll take note of the management actions subsequently suggested, or required, by our experience of use.

Options > Settings... : Video player \ Video engine \ mpv

to enable “mpv” as the SE Video media player⁷¹, as here suggested. An action that cannot be possibly performed before installing SE.

71 Or “codec” (Code Decoder), as it is sometimes called by people loving to show how familiar they are with tech.jargon.

<.> Other choices may be: VLC (Media Player) or LAV filters.

Options > Settings... > Restore default settings > OK buttons⁷²,
to reset the initial default setting and condition, File> Reopen history included [see].
Same result can be obtained deleting the “Settings.xml” file you'll find in:
...\Users\myUserName\AppData\Roaming\Subtitle Edit

S-PM 210800

<...> Nothing else, to date.-

-<>-

72 “Restore” button acts on the Settings form only, “OK” is to transmit the action to the SE program.

Table of Contents

Foreword	3
Essentials	4
Subtitles: Terms & Concepts	5
What, How and Why	10
Basic Tasks	13
BT0 – “Adjust”, Subtitle synchronization	13
BT1 – “Create” a Subtitle file, from scratch	18
BT2 – “Translate” a Subtitle file, multi-lingual	22
Program Window & Context Menus	27
SE Program Window, “exploded”	27
Subtitle View and Video Work Area	31
Subtitle View Context Menus	31
(^) On: List View (non-empty Row)	33
(^) Delete	34
(^) Insert before	34
(^) Insert after	34
(^) Insert subtitle after this line...	34
(^) Copy as text to clipboard	35
(^) Column	35
(^) Column > Delete text	35
(^) Column > Delete text and shift cells up	36
(^) Column > Insert empty text and shift cells down	36
(^) Column > Insert text from subtitle...	36
(^) Column > Import text and shift cells down	36
(^) Column > Paste from clipboard...	38
(^) Column > Text up	39
(^) Column > Text down	39
(^) Toggle bookmarks - add comment	40
(^) Go to source view	40
(^) Split	40
(^) Merge with line before	40
(^) Merge with line after	40
(^) Merge selected lines	40
(^) Merge selected lines as dialog	40
(^) Extend to line before	41
(^) Extend to line after	41
(^) Remove formatting	41
(^) Bold	41

(^) Italic	41
(^) Underline	41
(^) Color...	41
(^) Font name...	41
(^) Alignment	41
(^) ♪	41
(^) Typewriter effect...	42
(^) Karaoke effect...	42
(^) Show selected lines earlier/later...	43
(^) Translate selected lines...	43
(^) Adjust durations for selected lines...	44
(^) Fix common errors in selected lines...	44
(^) Change casing for selected lines...	45
(^) On: Text Edit Form	46
Main Tasks and Soundtrack Work Area	47
Soundtrack Virtual Monitor	48
Soundtrack Controls and Actions	49
Soundtrack Context Menu	50
Context on Soundtrack Segments: Selected, Active and Gap	50
(^) Add text here	51
(^) Add text from clipboard here	51
(^) Focus text box	51
(^) Go to previous subtitle	51
(^) Go to next subtitle	51
(^) Delete text	51
(^) Split	52
(^) Merge with previous	52
(^) Merge with next	52
(^) Extend to previous	52
(^) Extend to next	52
(^) Play selection	52
(^) Add scene change	54
(^) Remove scene change	54
(^) Guess time codes...	55
(^) Seek silence...	56
(^) Insert subtitle here...	57
Main Task: Translate	58
Main Task: Create	59
Main Task: Adjust	60
Main Command Menu	61
Menu Bar, and Commands	61
File Command Menu	62

File > New	63
File > Open	63
File > Open (keep video)	63
File > Reopen	64
File > Save	64
File > Save as...	64
File > Restore auto-backup...	65
File > Timed Text properties...	65
File > Open original subtitle (translator mode)...	66
File > Save original subtitle	66
File > Save original subtitle as...	66
File > Close original subtitle	66
File > Open containing folder	66
File > Compare...	67
File > Statistics...	67
File > Plugins...	68
File > Import	68
File > Export	68
File > Exit	68
Edit Command Menu	69
Text Edit Area	69
Edit > Undo	70
Edit > Redo	70
Edit > Show history (for undo)	70
Edit > Insert Unicode symbol	71
Edit > Find	71
Edit > Find next	71
Edit > Replace	71
Edit > Multiple replace...	72
Edit > Go to subtitle number...	72
Edit > Right-to-left mode	72
Edit > Fix RTL via Unicode control characters (for selected lines)	72
Edit > Remove Unicode control characters (from selected lines)	72
Edit > Reverse RTL start/end (for selected lines)	72
Edit > Modify selection...	73
Edit > Select all	73
Tools Command Menu	74
Tools > Adjust durations...	75
Tools > Apply duration limits...	76
Tools > Bridge gaps between subtitles...	76
Tools > Apply minimum gap between subtitles...	78
Tools > Fix common errors...	79

Tools > Renumber... ..80

Tools > Remove text for hearing impaired... ..81

Tools > Change casing... ..82

Tools > Merge short lines... ..83

Tools > Merge lines with same text... ..84

Tools > Merge lines with same time codes... ..85

Tools > Break/split long lines... ..85

Tools > Sort by89

Tools > Netflix quality check... ..89

Tools > Make new empty translation from current subtitle91

Tools > Batch convert... ..92

Tools > Measurement converter... ..93

Tools > Split subtitle... ..93

Tools > Append subtitle... ..95

Tools > Join subtitles... ..96

Spell check Command Menu97

Spell check > Spell check... ..97

Spell check > Find double words99

Spell check > Find double lines99

Spell check > Get dictionaries... ..100

Spell check > Add word to name list100

Video Command Menu101

Video > Open video file... ..103

Video > Close video file103

Video > Open video from url... ..103

Video > Open second subtitle file... ..103

Video > Set video offset... ..105

Video > SMPTE timing (drop frame)105

Video > Generate/import scene changes... ..106

Video > Batch generate waveforms... ..107

Video > Generate blank video... ..107

Video > Generate video with burned-in sub... ..108

Video > Show/hide waveform109

Video > Show/hide video109

Video > Un-dock video controls109

Video > Re-dock video controls109

Synchronization Command Menu110

Synchronization > Adjust all times (show earlier/later)... ..110

Synchronization > Visual sync... ..112

Synchronization > Point sync... ..113

Synchronization > Point sync via other subtitle... ..114

Synchronization > Change frame rate... ..115

- Synchronization > Change speed (percent)115
- Auto-translate Command Menu117
- Auto-translate > Auto-translate...117
- Auto-translate > Auto-translate via copy-paste...119
- Auto-translate > Merge sentences...120
- Auto-translate > Break/split long lines...121
- Options Command Menu122
- Options > Settings...122
- Options > Choose language... [English]122
- Networking Command Menu123
- Typical SE-Networking Session123
- Networking > Start new session125
- Networking > Chat125
- Networking > Show session info and log126
- Networking > Leave session126
- Networking > Join session127
- Help Command Menu129
- Help > Check for updates...129
- Help > Help129
- Help > About129
- Shortcut Commands130
 - Shortcut Commands List131
 - Other Shortcut Commands134
 - Marshalling Shortcuts File135
- Program Setup & Management139
- Table of Contents142
- Appendices147
 - Graphical User Interface (GUI) Glossary147
 - Typographical Conventions148
 - Planned Revision and Update149

□

Cross-reference

<.> With this Tech.Report available as a “.pdf” file it is rather convenient to use the usual Search / Find text commands as Cross-reference tool. So convenient, that we haven't considered worth adding also a traditional Cross-reference section to this Table of Contents.-

=<>=

Appendices

S-PM 210400

Graphical User Interface (GUI) Glossary

Glossary of specific terms used throughout this Report⁷³ referring to items on the SE program Window, here listed in inclusion order. Terms usually written with initial capital letter, so to recall their conventional meaning and role as element of the Graphical User Interface (GUI) language.

□

<i>Window</i>	top graphic operative structure of an application on the <i>Desktop</i> , that is the computer screen.
<i>Area</i>	generic term for a specifically identifiable subdivision into a Window. Term particularly useful to identify a coherent set of task-oriented elements.
<i>Bar</i>	Window frame stripe, for such elements as: Title, Icon-Tools, Menu.
<i>Pane</i>	main adjustable rectangular subdivision of the work area within a Window, to host specific Controls and Forms.
<i>Control</i>	Generic name for such elements as: button, command, selection check-box, option round-box, list-box, ...
<i>Caption</i>	visible title or name assigned to a Control, a term derived from journalistic jargon. With menu items there is no distinction between the Control in itself and its title, as they are the same thing.
<i>Dialog Box</i>	or simply <i>Box</i> , a secondary Window for specific user interactions. Likewise, just a bit more specific: <i>Control-</i> , <i>Error-</i> , <i>Tool-</i> , <i>Alarm-</i> , <i>Hint-Box</i> .
<i>Form</i>	Homogeneous area of a Window, sub-Window or Pane, organized for a specific task; typically with controls and labeled fields to be filled with data. <> Functional hierarchy recognized in this Report: <i>Window</i> > <i>Form</i> > <i>Box</i> .
<i>Text Form</i>	Where to write texts by means of a so called <i>Text Editor</i> .
<i>Tab</i>	A control for selecting one among possibly different overlapping Forms. In a Tab, if the case, you may distinguish <i>Tab-label</i> and <i>Tab-page</i> areas.

-◇-

73 Whose number we feel committed to contain in fair balance between clarity and redundancy.

Typographical Conventions

Prevalent typographical conventions here adopted to increase readability.

S-PM 210400

Arial	titles as: Technical Report, names as: SE – Subtitle Edit, section headings as: Typographical Conventions
Times New Roman	standard Report's sections text, including in-text notes
Source Code Pro	inscriptions, such as page number “- 106 -” and section's edition date-code S-PM 210400 ⁷⁴
Segoe UI	standard User Interface items, such as: URLs https://www.nikse.dk , file paths C:\Dir\Subdir\fileneme.ext, captions Video position, command buttons Open;
<i>Italics</i>	for special text-segments, as short in-text [<i>notes</i>], or within a Segoe UI string, referring to a replaceable/variable item, such as a generic <i>filename.ext</i> into a standard path: C:\Dir\Subdir\fileneme.ext
Capitalized	terms with the initial capitalized not only for proper names, such as: Windows, Subtitle Edit, but also to qualify terms to be intended in a specific technical sense, such as: Gap, Tag, Record.

Remark

<~> To be extra-precise such “Options > Settings...”, when intended as an SE command, should be typed with font Segoe UI, whereas, when intended as the title of the related Report's section, should be typed with font Arial. But, frankly, our love for formal accuracy doesn't go so far, and we'll generally go in favor of a generic Arial, leaving to you the burden of interpreting it strictly as a command, or as the section describing it, or both.

□

Viewpoint ← special section expressing a specific Author's opinion, such as:

Unfulfilled requisite could be a nice good reason to dim-disable the related command [*an Author's opinion, disputable*].

□

- > Separator for menu command path, e.g.: Help > About
- : \ \ subsequent separators within a form, as with Options > Settings... : Video player \ Video engine \ mpv – actually, a path to a given control within a form.
- ... \ leading path left implicit, as with standard Windows ... \ Program Files
- (^) “click” action symbol, for context pop-up menu, e.g.: (^) Play selection

74 <▷ Just to recall how relevant this convention is: sections marked with a successive edition date-code are intended to supersede all preceding ones.

<.>	Point deserving special attention – as:
<!>	Remarkable point
<?>	Questionable point
<~>	Perplexity, doubt, suggestion
<...>	Ellipsis, for topic still to be completed
<.?.>	Questionable point, still under investigation
<ToBeCompleted>	– self-explanatory disclaim

□

Icons for: Obstacles to the authoring of a valid Tech.Report



<Under revision> – Report left AsIs



<Insufficient information> – Report suspended



<Not covered> – Off-Report

□

Abbreviations:	cf.	<i>confer</i> – compare with
	cmd	command
	e.g.	<i>exempli gratia</i> – for example
	i.e.	<i>id est</i> – which is to say
	ref.	reference / refer to
	sct.	section [<i>symbol</i> : §]. The term “section” is here deliberately adopted to signify any generic subdivision of text, be it chapter, paragraph, or sentence.

[*see: ...*] typical in-text short note, intentionally more immediate than a traditional footnote.-

–◇–

Planned Revision and Update

S-PM 210500

SE Technical Report has been conceived as a “dynamic” structure, with a planned mechanism of revision and updating. Reasons for that are:

- ◆ SE evolves with time;
- ◆ SE deals with too many and different aspects to be all well covered just in one shot;
- ◆ Community of SE users is a continuous source of remarkable experiences and news worth knowing.

This the envisioned mechanism of revision and update.

- ◆ SE Tech.Report is made available on-line [*see*: What & Where in the Internet, *sct.* Essentials], so to constantly offer its current version, no delay;
- ◆ Single sections may be prefixed with such a code-mark: *S-PM 210500* [*cf.*]
that is, the Author's ref. acronym “*S-PM*” followed by a “*yyymmdd*” numeric date-code, to signify that a section marked with a more recent date-code is intended to supersede the preceding one. As simple as that.
- ◆ Some section can currently be nothing more than a place holder, that is just a title followed by such disclaim as:
 *<Insufficient information>* – Report suspended
- ◆ New and different sections may be added to the Report. In that case the very first code-mark on top of the Report cover page [*see*] will be updated.

There is a reason for all that: *To make anyhow available in time a hopefully valid Report, even though not perfect, without waiting to make it perfect in a far and improbable future*⁷⁵.

=<>=

⁷⁵ In that inspired by the wise statement: “*Well, nobody's perfect.*”