

Title: SipXML2Score User Guide  
 Date: January 31, 2004  
 Document version: 4.01 – January 24, 2007.  
 Program conformity: Version 4.0.0.20  
 Author: Jan de Kloe

## Table of Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>2</b>
<b>2</b>	<b>HISTORY OF THIS PROGRAM.....</b>	<b>2</b>
<b>3</b>	<b>RATIONALE FOR VERSION 3.....</b>	<b>2</b>
<b>4</b>	<b>RATIONALE FOR VERSION 4.....</b>	<b>2</b>
<b>5</b>	<b>THE SIP PHILOSOPHY.....</b>	<b>3</b>
<b>6</b>	<b>STARTING UP SIPXML2SCORE.....</b>	<b>3</b>
6.1	GLOBAL SETTINGS .....	3
6.2	SOURCE VIEW.....	4
<b>7</b>	<b>PRIMARY PANEL .....</b>	<b>4</b>
7.1	PRIMARY PANEL MENUS.....	4
7.2	FILE CONTROL.....	4
7.3	FILTERING .....	5
<b>8</b>	<b>SECONDARY PANEL .....</b>	<b>6</b>
8.1	SECONDARY PANEL MENU .....	7
8.2	EXECUTION .....	7
8.3	PROGRAM SETUP .....	8
8.4	OPTIONS .....	8
8.5	SCORE .....	10
8.6	WORDS.....	13
8.7	LYRICS .....	14
<b>9</b>	<b>REPORT.....</b>	<b>14</b>
<b>10</b>	<b>SCRIPT.....</b>	<b>15</b>
<b>11</b>	<b>SUPPORT POLICY.....</b>	<b>15</b>
<b>12</b>	<b>INSTALLATION .....</b>	<b>16</b>
12.1	DELIVERY.....	16
12.2	INSTALLATION VERIFICATION.....	16
<b>13</b>	<b>PRACTICAL ISSUES .....</b>	<b>16</b>
13.1	THE PICKUP BAR ISSUE.....	16
13.2	THE LJ TEST .....	16
13.3	MISSING TIME SIGNATURE .....	16
13.4	IRREGULAR SYSTEM SIZE .....	17
13.5	TOO MANY ITEMS .....	17
13.6	SCORE ERROR MESSAGE ON VJ.....	17
<b>14</b>	<b>ACKNOWLEDGEMENT.....</b>	<b>17</b>
<b>15</b>	<b>CHANGE HISTORY.....</b>	<b>18</b>

## 1 Introduction

MusicXML is a standard for a music encoding language which is being adopted primarily for interchange between computer applications. The interest for SCORE users is that programs such as Finale through the Dolet plug-in optionally produce MusicXML which can be converted to SCORE by SipXML2Score.

It is assumed that the user is familiar with the Dolet plug-in. Details can be found on the website of Recordare, the company which controls the MusicXML standard and maker of the Dolet plug-in for Finale and other engraving tools.

The sample files from this website are referred to in this User Guide, and the user may want to download them as training material.

It must be understood that SipXML2Score is a help in converting to SCORE and that there is always some level of post-editing to be done. Primary functions of SCORE such as barline alignment are not supported by SipXML2Score.

The SIP website at [www.dekloe.be](http://www.dekloe.be) has a number of conversion examples using the Recordare standard files.

Minor editing has been performed on those files with SCORE (barline alignment with LJ and JT).

While the number of user options is impressive, defaults will work in most cases while many functions have tooltips with detailed explanation.

A word of caution is at its place here. MusicXML is a standard which is subject to updates and while some applications closely follow new extensions, others use a subset of the features for a specific tool. It is exactly the flexibility of the language that makes it so attractive to just generate for example the Midi features. Currently, the Dolet plug-in for Finale creates MusicXML which has sufficient detail for graphic interpretation.

The current version of SipXML2Score is only qualified for Finale generated MusicXML by Dolet as well as output generated by SharpEye, and though it cannot be excluded that it will one day be lifted to the level that it will be capable of doing more than that, there is at this moment no guarantee that it will.

## 2 History of this program

Originally, the name of this program was SipXML. Now that a converter from SCORE to XML has been realized, it should be obvious from the program name what it converts to what. To avoid confusion, SipXML was therefore renamed to SipXML2Score. The last published version of SipXML was version 2, build 027.

When a user downloads the current version of SipXML2Score and he still has the old SipXML in his system, the newer program is automatically executed by selecting the SipXML button. The module SipXML.EXE may in that case be deleted.

## 3 Rationale for Version 3

The primary reason for the upgrade is the availability of Dolet 3 which was announced by Recordare. The first paragraph of this announcement follows.

```
LOS ALTOS, CA (August 11, 2005) - Recordare LLC, an Internet music software and publishing company, has released version 3 of its Dolet plug-in for the Finale music notation program. Dolet 3 for Finale reads and writes MusicXML 1.1 files for the highest-fidelity translation available between music notation programs. Dolet 3 also includes batch translation features to automate the process of moving music notation files from one program to another. Dolet 3 supports Finale 2000 to 2006 on Windows and Finale 2004 to 2006 on Macintosh OS X.
```

The additional features of MusicXML 1.1 are numerous and thousands of lines of code had to be added to the converter to process XML files in this format.

In the process of this major update, a number of things were changed or added, the most visible of these are:

- a font equivalence table;
- suppression of staves without notes;
- no need to perform an extra passage for lyrics scanning. This is now automatic;
- extended filtering. Now files can be filtered on group, part, and/or bars;

On top of that, about 50 feature enhancements were added and a few pending corrections were included.

## 4 Rationale for Version 4

One user needed the support of mixed Latin and Cyrillic text. The font equivalence setting has been updated for this and since there is now a single place to equate fonts, the Text and Lyrics panels have been adapted accordingly. The Font Equivalence now has an additional column for script.

One input font name can be equated to more than one output font which is necessary when one XML font can define two scripts such as Latin and Cyrillic.

This update saw a few other additions such as the integration of ACCS (Tom Brodhead's utility for accidental alignment) if that utility is present.

By dragging an XML file name to the 'Select file' button, the names file is automatically created.

## 5 The SIP philosophy

SIP is a collection of utilities for SCORE engravers of which the first tools became available in the early 1990's. New tools have constantly been added to the family, and all share a common approach and user interface.

Originally intended for private use, it became evident from discussions on the forum and meetings with other engravers that there was an interest for at least some of these tools. Currently, SIP is used by SCORE engravers in Europe, North America, and Australia. There are now in excess of 100 licensed SIP utilities installed. The website extensively describes the SIP offering.

The license for SipXML2Score includes a couple of free utilities such as SipAnlib for analysis of fonts and draw symbols, SipEdit, SipRenum, and SipResize for editing, SipThema for incipit extraction, SipValid for MUS file reconstruction, SipXlyr for lyrics extraction, SipFind for locating SCORE and Finale files, SipPMX for generating PMX output, and the structure validation programs SipClef and SipDur. SipRip is included to move bars across files.

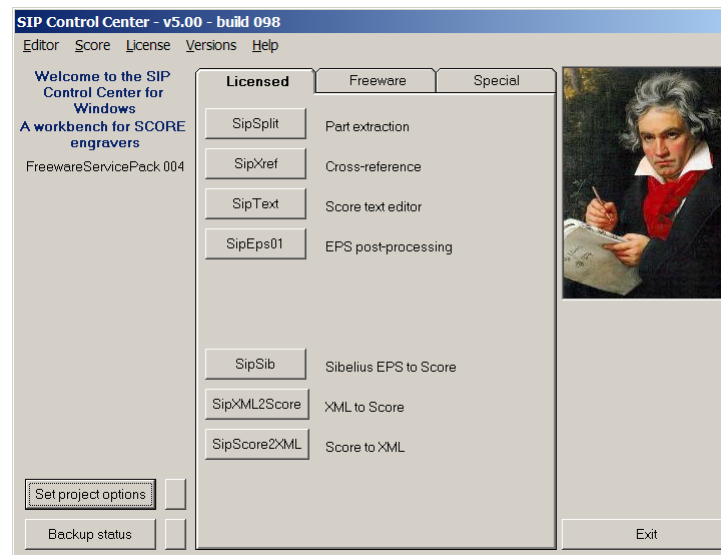
Not included are the licensed programs:

- SipSib – conversion of Sibelius EPS files to SCORE;
- SipSplit – for SCORE files part extraction;
- SipXref – for cross reference listing of SCORE files;
- SipEPS01 – for post processing to create space around in-staff fingering and staff line whitening;
- SipInput family for quick input of staff notation and tablature;
- SipText – text editor for SCORE files with Cyrillic and kerning capabilities.

Refer to the website for additional information.

## 6 Starting up SipXML2Score

The Windows application is called by the 'SipXML2Score' button on the main SIP panel.



There are two main panels to interface with the user, the primary shown here (file selection and filtering), and the secondary (conversion options).

### 6.1 Global settings

Some environmental settings are assumed by SipXML2Score:

- the PSC files must reside in the SCORE LIB folder.
- the global setting for bar number font and size must be set (use 'Set project options' on the main SIP panel).
- PREF.SCR must define the slur thickness, dash width and beam tilt (other values are currently ignored). If not defined, defaults will be used.
- when ACCS is present, define the path such that SipXML2Score can call it.

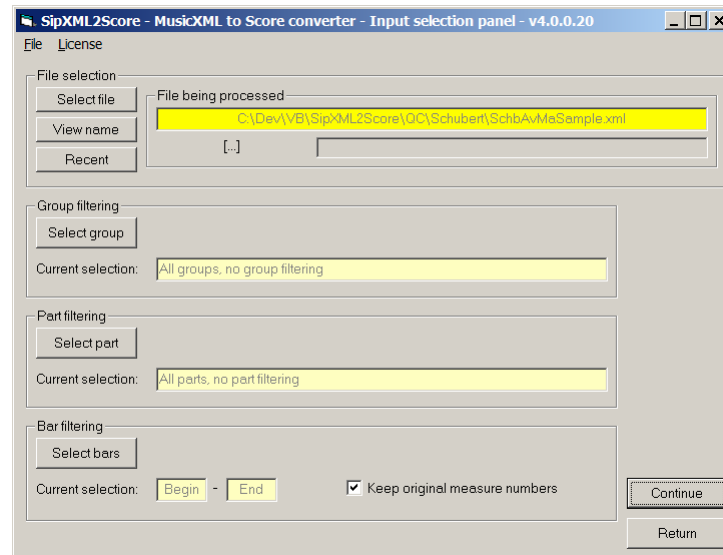
The PSC files are consulted for character widths in text handling for centering, right justification, and for placement of syllables and dashes. AFM files are not yet consulted.

## 6.2 Source view

Both panels have a progress indicating text which is set to '[...]' initially. Double-click this text to view the XML source input.

## 7 Primary panel

Basically, this panel has the following parts: the menus, the upper section for file control, the main section for group, part filtering, and bar filtering, and the right column for program execution.



### 7.1 Primary panel menus

The menu functions are self explanatory.

#### 7.1.1 Renumber

Renumbering is a function which is necessary when the original MusicXML file is unnumbered or has measures without numbers, such as pickup bars. The user will be notified of such situation. Note that a renumbered file is encoded as UTF-8 and hence, characters of other encodings may be lost in the process. A renumbered XML file can only be used by this converter. When it needs to be used by other XML processing programs it can be un-renumbered.

#### 7.1.2 Un-Renumber

Since a renumbered file can only be processed by SipXML2Score (and as such is not a pure XML file), the possibility must exist to bring it back to its original state. Use this un-renumber function for that. Currently, the result is always in UTF-8.

#### 7.1.3 Exit

Identical to pressing the 'Return button'

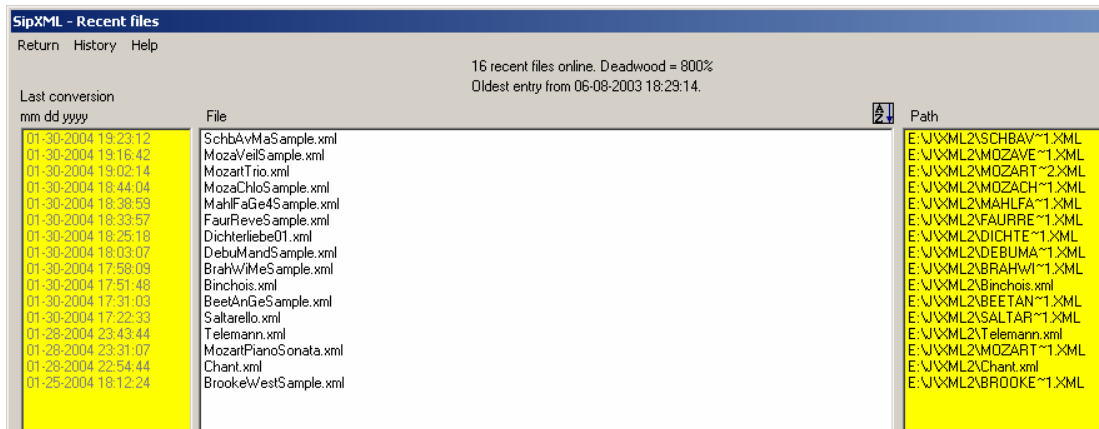
#### 7.1.4 License

This shows the user license information.

### 7.2 File control

Three buttons are used for file selection and selection display. The 'Select file' button brings the user to the standard SIP file selection panel and he can select a single MusicXML file. To speed up localization, the preferred path can be set via the main panel (Set project options). The suffix of XML is assumed and cannot be changed. Selection means that the name of that file is put in a names file of the structure we know from PAGE. Usually, the music files in XML have a typical Windows name and for internal operation, directory names in the path prefix are converted to a DOS format.

The 'Recent' button brings the user to a panel of filenames which can be reselected for processing. This panel looks like this:



Select a file by clicking the name in the white panel. The order of presentation is that the most recently converted file is shown first. The panel can be sorted alphabetically (ascending) and by last conversion date/time (descending). The 'AZ' button sorts the filenames. When this is done once, the 'ZA' button will appear above the left column.

Lines to this panel are added after a completed conversion.

Filenames can be erased when using the 'History' menu. The information is kept in a local database which grows as SipXML2Score is being used. Growth includes that information is kept which is outdated because the same file was removed or converted again and only the last history is visible. To remove this deadwood from the database, there is the 'Erase deadwood' function in the History menu. When selecting a file with the Alt key pressed, you may remove it individually from the history file.

The right part of the file control area shows the file currently being processed with the program phase and a progress bar.

Note that when SipXML2Score opens a MusicXML file, it validates that it is indeed an XML file. If not, the file is rejected. Currently, three encodings are recognized: UTF-8, UTF-16BE and UTF-16LE.

## 7.3 Filtering

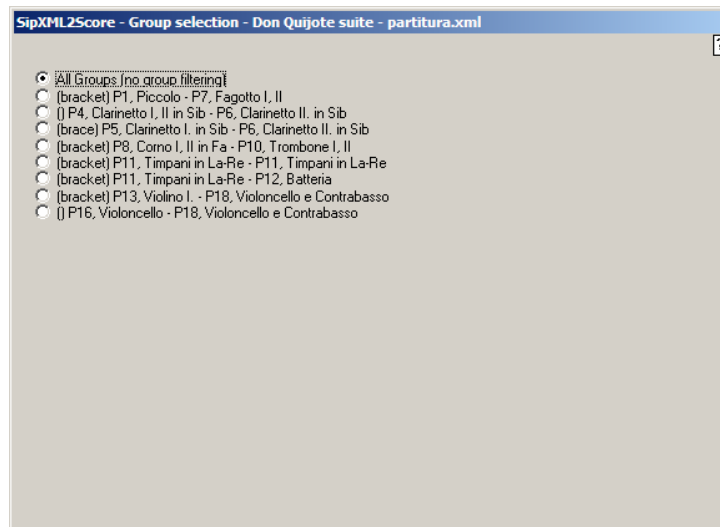
There may be reasons to select a subset of the input XML file. One reason could be the SCORE restriction of size such that tiling becomes necessary. This process is called filtering. The result of a filtering is another MusicXML file with only the information necessary for the subset. The name of the created file is derived from the input filename and has a meaningful structure.

### 7.3.1 Group filtering

The group notion in MusicXML means a collection of adjacent parts in an orchestral score. When identified as such by the producing program, groups such as wind or strings can be selected.

The following is an example of this panel. It shows that parts get an individual 'P-number'.

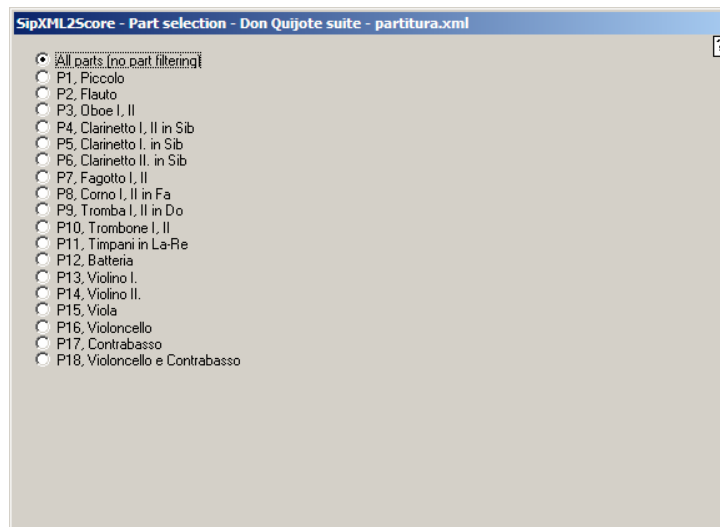
When from this example the group P5-P6 is selected, the filename would get the G3 in its name to indicate that it is the third selection.



### 7.3.2 Part filtering

A part in MusicXML corresponds to ‘Instrument Id’ in SCORE. By filtering you can extract a single part. This is an extremely strong feature of SipXML2Score as it allows you to extract parts before having an orchestral score in SCORE. Note that instruments Id’ are automatically generated by the converter from the ‘P-number’. This number also figures in the filename of the created subset.

Here follows a sample selection panel.



### 7.3.3 Bar filtering

Any number of bars can be selected from an XML file. Bar numbers (lower and upper limit) are prompted.

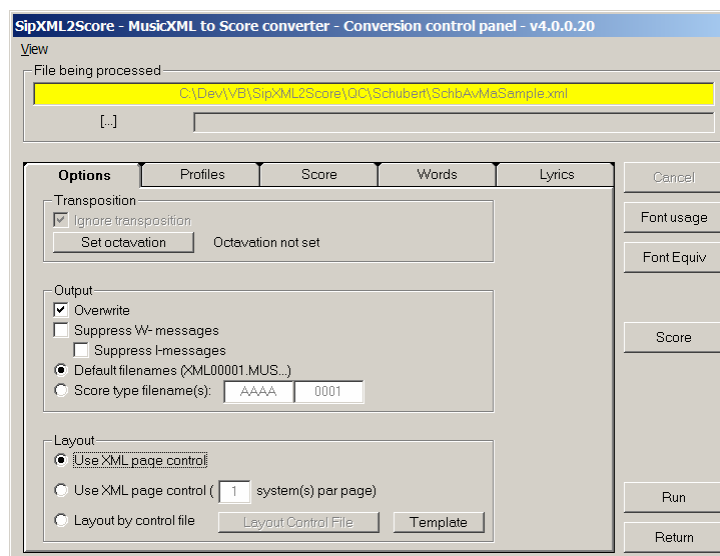
The signatures of a skipped portion are remembered such that the current ones are attached to the first actual bar. It is suggested to set the option ‘Keep original numbering’, unless the result is used by other software than from the SIP family.

### 7.3.4 Combining filtering

There is no limit to the filtering features and with the three filters above, abstract of any part in a score such as bar 33 to 35 from the strings section can be selected.

## 8 Secondary panel

The options for a conversion are controlled by this panel. It has the menus and tab pages offering the features which a user may need to set up specific preferences. The functions are described in detail.



## 8.1 Secondary panel menu

The 'view' menu provides the following choices:

- Last report
- Preferences – those settings from PREF.SCR which SipXML2Score picks up;
- Current profile – text file which has the current SipXML2Score profile. There is no need for the user to manipulate this file as all settings are controlled by panel functions. After the file contents are shown, the user may select to initialize this file to defaults.
- SipXML16.txt – a file which defines XML character conversion. SipXML2Score caters for a number of scripts such as Latin and Cyrillic and basically can handle every script and character defined by Unicode. This file is the table of conversion rules and it is not intended to be maintained by the user. When modified by the user, support of SipXML2Score is no longer guaranteed.

## 8.2 Execution

Return to the main SIP panel with the 'Return' button.

### 8.2.1 Conversion

Conversion is controlled by two buttons. The 'Run' button performs the conversion. The 'Cancel' button interrupts the process and does not leave a conversion result.

### 8.2.2 Font usage

Prior to a conversion you may want to know which fonts with which sizes are used in the input. This button analyzes the file and generates a report with pertinent information.

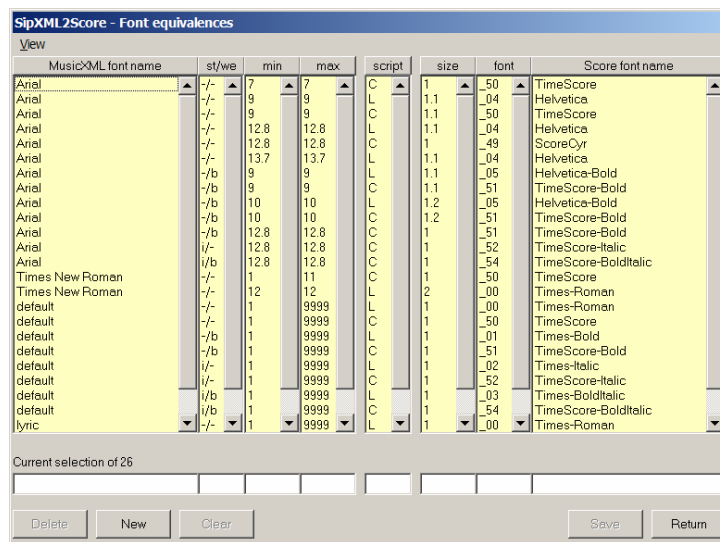
### 8.2.3 Font Equiv

The font equivalences allow a user to define which font generated in the XML corresponds to which SCORE font.

An example line demonstrates its use: the last Arial line defines that the input font with style 'italic' and weight 'bold' of 12.8 in size of the Cyrillic script is converted into font \_54 size 1.

You can add, update and delete entries. When on input an undefined font/size combination is encountered, the default is selected. When the table does not have a default, the converter will assume one.

When input files have lyrics, then they need to be defined by the reserved font name 'lyric' as shown on the bottom line.



### 8.2.4 SCORE

The 'Score' button calls SCORE with the first resulting output page. Note that the NB (previous page) and NX (next page) SCORE commands can only be used when the path is within the SCORE limitation of 24 characters.

## 8.3 Program setup

There are so many options that they have been grouped into panels and sub-panels with tabulation selection. Global settings within a SIP project are maintained via the main SIP panel. Local settings are those specifically for the SipXML2Score application. On the highest level there the following panels:

- Options
- Profiles
- Score
- Words
- Lyrics

Because there are so many selections to set for a conversion, the program keeps your settings for later use in a profile. This saves time setting up conversion of a specific type.

Why are there so many options? This is because MusicXML does not have the information on how something is to be interpreted and the SCORE user has some specific ideas on how his output should look.

## 8.4 Options

The primary panel 'Options' is shown above and has the Transposition frame, the Output frame, and the Layout frame.

### 8.4.1 Transposition frame

Currently, only octavation is provided which can be set through a panel. It is primarily used for guitar which is notated an octave higher than it sounds.

### 8.4.2 Output frame

Select the output options and the reporting level here. By default, output filenames are defined by the program as XML00001.MUS and up. The user should rename the output to his preference. Optionally, the user can define the filenames of his output, the default being AAAA0001.MUS. The alphabetic part and the numeric part can be set as desired. Make sure that the numeric part is big enough. When more output files are generated than there is numeric room, the program will terminate with an appropriate message (ie. when the initial filename is CHOPIN9 and the output is more than one page).

### 8.4.3 Layout

Older versions of the Dolet plugin did not provide sufficient instructions for layout of systems and pages – a file without 'new-system' or 'new-page' XML commands appears as a continuous stream of bars without the information needed for an engraving tool such as SCORE. When using such a version, the user needs to provide layout information.

On the other hand, a user may wish to override the instructions when present and define a layout of his choice. The Layout frame lets the user select between various layout options.

While MusicXML 1.1 has the means to define distances between staves, this information is not considered as yet.

The file containing the layout is SipXMLcf.TXT which you may want to save for later use.



#### 8.4.3.1 Use XML page control

The resulting layout will be identical as defined by the commands in the input. The user will be notified if such commands in the input are missing and then needs to define his own layout.

#### 8.4.3.2 Use XML page control (n system(s) per page)

Use this option to force a number of systems per output page. Set the systems per page to the desired value (1 – 32). The value n can be set when the option is selected. . The user will be notified if ‘new-system’ commands are missing in the input and he then needs to define his own layout.

#### 8.4.3.3 Layout control by file

When the input does not contain layout information or when you want your specific layout, select this option. The button ‘Layout Control File’ brings you to an editor where the instructions need to be edited for the layout of the output.

The control file if not existing will provide a template with explanation. Basically, there is one line per output page with the number of bars per system. An example follows:

```
3,5,4
6,3,3
```

This example defines a two-page output with three systems each. The first system of the first page has 3 bars, the second system has 5 bars, and the third has 4 bars. Then on page 2, the top system will have 6 bars, the next two systems on that page have 3 bars.

It is suggested to insert comment lines (\* in column 1) to relate pages to layout, as shown in the template.

This technique requires that you have a sample output from the XML originating program such as Finale. If you do not have that, there is no way of knowing how the output should look and some experimentation with layouts is necessary.

The Layout Control File must indicate as many bars as the file being processed.

Earlier setup can be made comment as to save the information for later activation.Profiles

#### 8.4.4 Creation of a saved profile

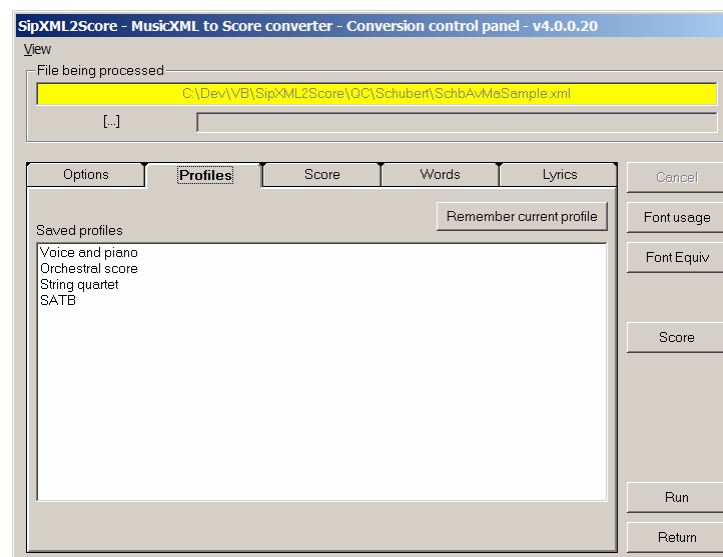
The options are kept in a profile but since a user may want to maintain various setups, multiple profiles can be conserved by SipXML2Score. The layout for a voice and piano piece is different from a string quartet or an orchestral piece.

The collection of settings belonging to one type of conversion is called a profile. When you convert a piece for the first time, the result may not have the format you desire and by experimenting with the various options, you come to the ideal format.

Examples of such options are the staff size, bar number setting on the first or on all bars, etc.

Once you are happy with the options you may want to keep that profile for future use. SipXML2Score has a database of profiles which the user maintains.

There is an action button called ‘Remember this profile’. When you hit it, the current profile is saved in the database. The default name it gets is the first file path of the input file selection. When an entry with that name existed, the older version of the earlier saved profile is no longer available. There is no practical limit to the number of profiles that can be stored in the database.



#### 8.4.5 Recall of a saved profile

The names of saved profiles are displayed in a list. By left-clicking a name, that profile becomes the current profile.

### 8.4.6 Rename of a saved profile

It is not handy to work with names of profiles which are made from long paths. It is much easier to give a meaningful name such as 'string quartet'. Simply select the name from the list by Alt+left click (alter) and a new name is prompted.

When an entry with that name already exists, the older entry is replaced.

### 8.4.7 Delete of a saved profile

When you are sure that a saved profile no longer serves a purpose you can delete it by selecting it from the list with Ctrl+left click. Then reply to OK/Cancel.

### 8.4.8 Maintenance of the database

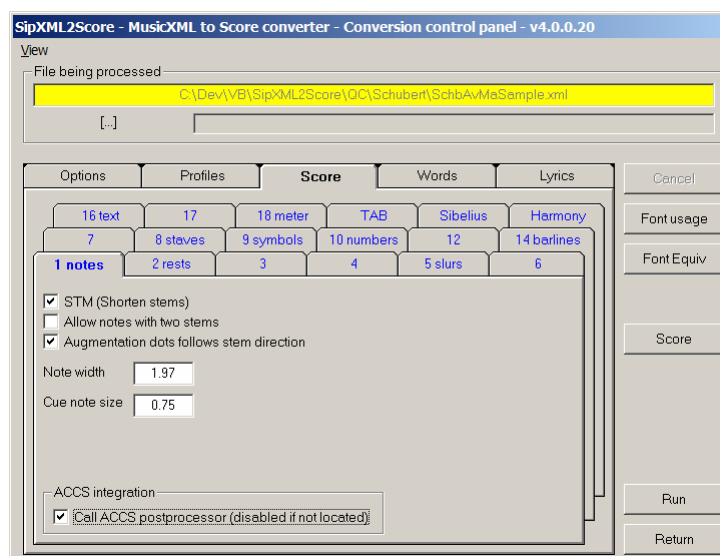
After a while, the database may need some reorganization. This is not really a concern of the user as it will be done automatically whenever the 'Erase deadwood' for the history file is executed, described earlier with the 'Recent' button in file selection.

## 8.5 Score

Several SCORE items codes allow for specific user preference handling. The sub-tabs have the Code number and a short name if settings have been foreseen.

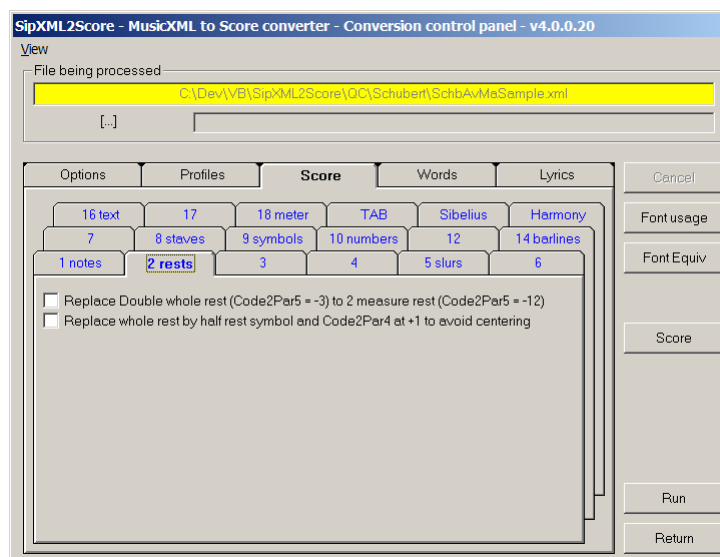
### 8.5.1 1 notes

The note width is used to influence the left end of a slur on an offset note. The other options are self-explanatory.



### 8.5.2 2 rests

Two options are primarily provided for renaissance music which uses the breve.



The upper option replaces the double whole rest by the narrow rest symbol which is preferred by some engravers.

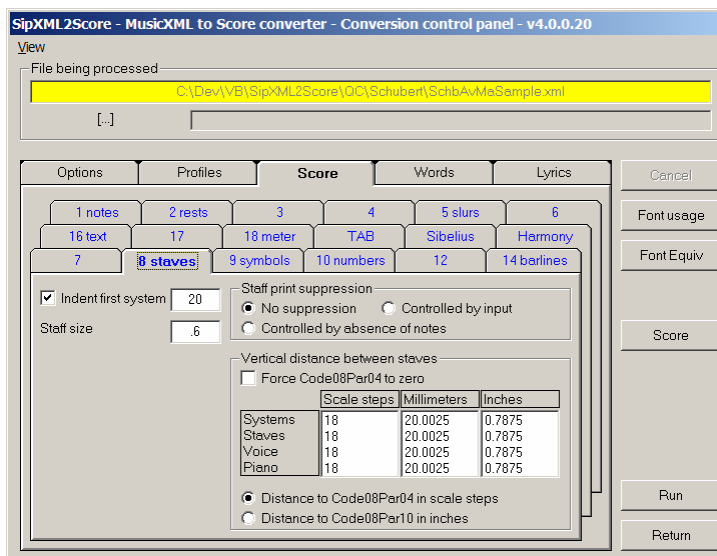
The lower option is only effective when there is a time signature with an upper value higher than the lower value, ie. 4/2. In that case, a whole rest should not be centered when the LJ-command is executed. The symbol for the whole rest is replaced by the half rest but moved up one step. The duration is not affected.

### 8.5.3 5 slurs

Tuplet groups receive the value as part of the beam when there are only notes in the group. By setting the option, a tuplet is represented by a bracket. A tuplet group with a rest automatically assumes a bracket. The difference can be seen in the sample file of Schubert's *Ave Maria*. The input shows a six-tuplet (bar 1) and triplets (bar 6) which on conversion receive brackets.

### 8.5.4 8 staves

You can influence indentation of the top system and staff size. The size of tablature is controlled by the TAB tab.



The option to suppress the generation of staves with just rests is best demonstrated by the Mozart sample file *Das Veilchen* from the Recordare demo set. The top staff is defined in MusicXML as all rests. It is customary to suppress empty staves for *tacet* instruments. Sometimes, the input has the commands to suppress printing, if not the user can base this decision on the absence of notes.

The vertical distance table allows values to be modified by scale step, in millimeters, or in inches. The metrics indicator of the output file is always set to inches (the PREF setting is ignored). Click a value to change it and the other values on the same horizontal plane will be computed automatically. You can define the space between systems and between staves. The voice distance overrides the space between staves and is needed to create the space for multiple verses. The piano setting overrides the staves value for piano music.

The distance between staves is usually expressed in Code08Par04 but optionally, the Par10 value may be used.

### 8.5.5 9 symbols

By default, the pedal end star is set to Code09Par06 = 71. When set, this option generates the much nicer character “i” from the ZapfDingbats font.

By default, fermatas are generated as parts of Code01 and Code02 items. When the option is set, they will become separate Code09 items.

### 8.5.6 10 numbers

There are two frames, one for fingering and one for bar numbers.

Fingering – select the size and font for fingering. Fingers always generate Code10 items and the selected font becomes Code10Par07.

Bar numbering – Output can be at the beginning of each system, at each bar (centering is assumed for those barlines which are not the system barline), or suppressed altogether. The size and font is taken from the global setting. A value can be entered which is added to the output bar numbers. This value may be negative.

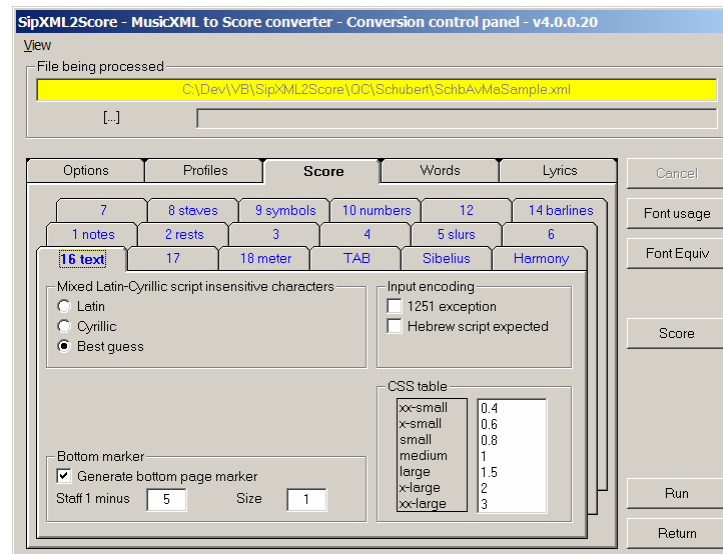
Page numbers: The definition for MusicXML 1.1 has a provision for a page number attribute. Due to lack of sample files this was not yet implemented.

### 8.5.7 14 barlines

Add braces to system – when set, this will generate a Code14Par05 = 9.

Suppress system barline – by default, a system barline is generated but it may not be suppressed for single staff notation.

### 8.5.8 16 text



#### 8.5.8.1 Mixed Latin-Cyrillic script insensitive characters

When a space or a period occurs in a text item when both Latin and Cyrillic are applied (in the same item, or in the same file), then the user must specify which is the preferred output script. When a Cyrillic character does not have an equivalent in the target font (such as the period in ScoreCyr), it will automatically revert to Latin script for that character only.

#### 8.5.8.2 Bottom marker

The bottom marker provides the original filename, the SCORE filename and path, the date and time stamp, and the program version. When the size of this marker exceeds 200 scale steps it will be reduced to fit.

#### 8.5.8.3 Input encoding

SipXML2Score automatically detects UTF-8, UTF-16LE, or UTF-16BE encoding. The 'Code page 1251' (Cyrillic encoding) is supplied for compatibility with older versions of Dolet. Around mid-2003, this encoding scheme was abandoned.

Yet, the current version of Finale/Dolet still produces non-Unicode characters in some situations for Cyrillic and Hebrew. Therefore, if such encoding is contained in the input, set the appropriate switch.

#### 8.5.8.4 CSS table

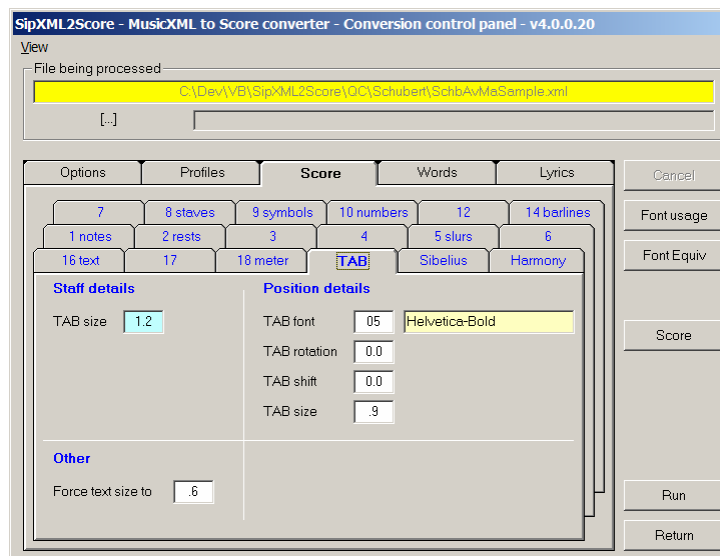
When text size is defined as CSS (Cascading Style Sheets), the converter needs to know the numeric interpretation of the size names. This table allows setting of equivalents.

### 8.5.9 18 meter

When an input page does not have a time signature at the first bar, the converter cannot work. You have to specify one here. Optionally you can override the input time signature.

### 8.5.10 TAB

When the input file contains tablature, some parameters must be set to help the converter. The panel is shown here:

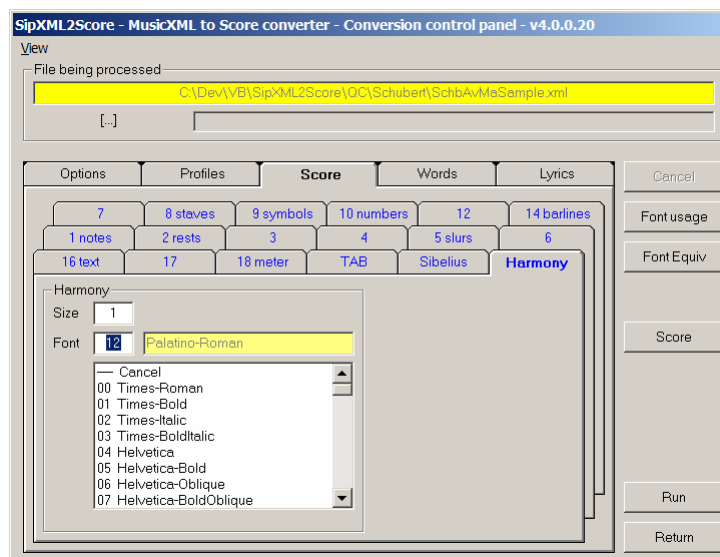


### 8.5.11 Sibelius

Input generated by the Dolet plugin for Sibelius is at this stage not at a level which allows automatic conversion. This panel is provided for future enhancement in situations where Sibelius files may need special options.

### 8.5.12 Harmony

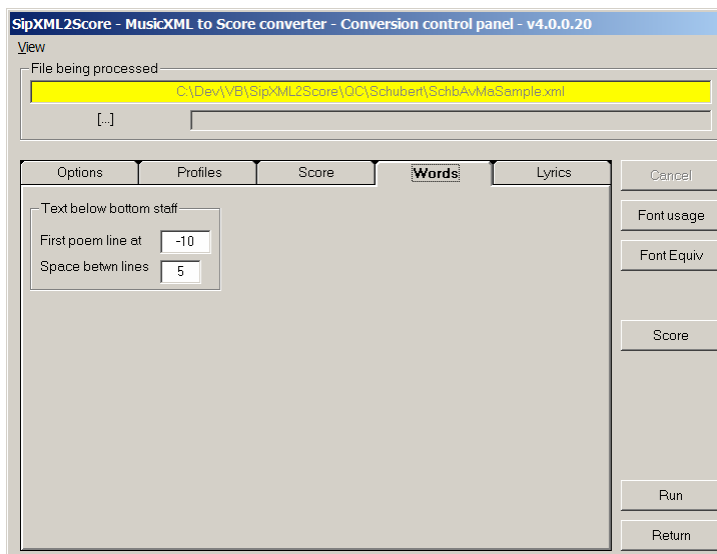
You can define font and size for harmony text. Select the harmony font by selecting the font from the list of all on-line SCORE fonts. This list rolls out by hitting the font number field.



## 8.6 Words

Formerly, this tab was called 'Text'. It has been renamed because in MusicXML, the term 'words' is used for text which is not lyrics. Also some confusion could arise because under the Score tab, there is also a '16 text' tab.

The panel allows you to define where bottom page poems are to be placed. It is shown here:



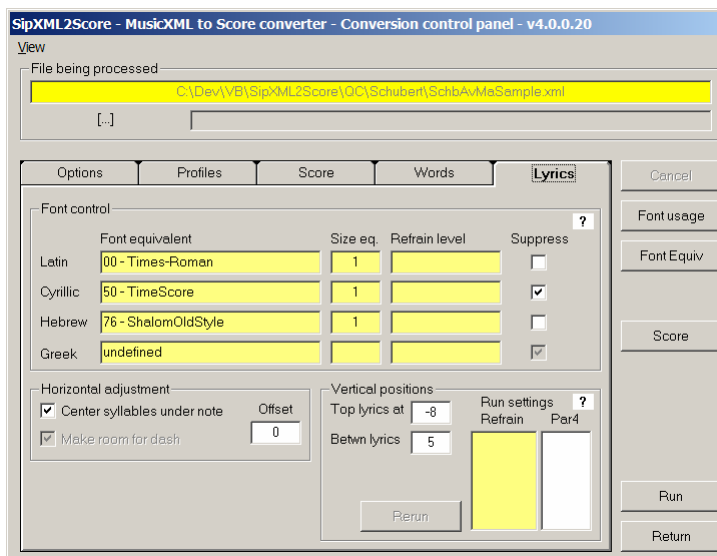
Note that SCORE is unfriendly to text below staff 1. When there is extremely low text, after loading the result file into SCORE, first move all staves upward and introduce a dummy staff 1 (invisible).

## 8.7 Lyrics

The panel to control conversion of lyrics has the feature to select one font per script. Output of refrains in that script can be suppressed.

An additional license is required for Hebrew and Greek script. When such license is missing, the 'Suppress' checkbox is disabled, as is the case here for Greek.

Refrain levels are assigned within MusicXML. They need not necessarily be 1, 2, 3 as we have seen 3, 6, 9. Refrains will be vertically placed at the user's vertical position. After a first pass, the settings of individual refrains can be modified and you can do a Rerun with these changed settings.



## 9 Report

Identification and conversion results are provided in the form of a report. The report is always produced. This report contains some statistical values and warnings or error messages. Messages with E are errors (situations which SipXML2Score cannot handle), with W are warnings, with I are informational. Here is the example of the *Ave Maria* conversion:

```
SipXML2score v4.0.0.20 - Conversion report 24-01-2007 13:11:16
```

```
Long name . . . . . SchbAvMaSample.xml
Full path . . . . . C:\DEV\VB\SipXML2Score\QC\Schubert\SchbAvMaSample.xml
Date/Time stamp . . . . . 2/5/2004 12:16:08 PM
```

```

Encoding . . . . . UTF-8
Work number . . . . . D. 839
Work title . . . . . Ave Maria (Ellen's Gesang III) - Page 1
Composer . . . . . Franz Schubert
Rights . . . . . Copyright © 2002 Recordare LLC
Software . . . . . Finale 2002 for Windows
Software . . . . . Dolet for Finale 1.3
Encoding date . . . . . 2002-06-19
Number of XML-lines . . . . 8482
Score license . . . . . 3101073
Parts . . . . . 2
    P1 - Voice
    P2 - Piano
    Refrain 1, Par4=-7 (Font=00 Times-Roman, size=1)
        A-ve Ma-ri-a!
        Jung-frau mild!
        Er-hö-re_ ei-ner Jung-frau Fle-hen!
        Aus die-sem Fel-sen,
        starr und wild,
        soll mein Ge-bet_ zu dir_ hin we-hen.
        Wir
    Refrain 2, Par4=-12 (Font=00 Times-Roman, size=1)
        A-ve Ma-ri-a!
        Un-be-fleckt!
        Wenn wir auf die-sen Fels hin-sin-ken zum Schlaf,
        und uns dein Schutz be-deckt,
        wird weich der har-te Fels uns dün-ken.
        Du
    Refrain 3, Par4=-17 (Font=00 Times-Roman, size=1)
        A-ve Ma-ri-a!
        Rei-ne_ Magd!
        Der Er-de_ und der Luft Dä-mo-nen,
        von dei-nes Au-ges Huld ver-jagt,
        sie_ kön-nen hier nicht bei uns woh-nen!
        Wir
Created file . . . . . C:\DEV\VB\SipXML2Score\QC\Schubert\XML00001.mus (bars 1-8).
Number of items/words . . . 773/7650
Duration of conversion . . . 00:02
Number of messages . . . . . 0

```

The measure number given with messages is the one originally provided in the MusicXML file. In situations where a bar has no number (such as pickup measures and the last half of mid-measure repeats), the relative number will be provided, indicated by 'r'.

## 10 Script

While the majority of users will only be interested in Latin script, there are some users of Cyrillic and Hebrew in the SIP community of users. The handling of Cyrillic is described in a separate article available on the website. See *Conversion of Cyrillic script to SCORE with SipXML2Score*. This article also explains more about the Unicode encoding and the transliteration of uncommon and non-Latin scripts with examples of setups. Hebrew conversion is described in the document *Hebrew character set for Score* which describes the Shalom font. Personally I now use the font Narkisim obtained from Matanya Ophee.

## 11 Support policy

As implementation of the MusicXML standard into music applications is a dynamic world, it is expected that the program will undergo frequent updates.

The mechanism of support is that it is user reporting based. When users report problems, these are solved following best effort practice and new versions will be uploaded to the website and announced on the SCORE forum. There is no cost for downloading updates. Downloads will only work for licensed users as the license mechanism is part of the initial delivery. Support includes directions for a temporary work-around if one is available.

Problem reporting must be as follows:

- an email describing the problem;
- the email must contain the name of the Windows version and the SCORE version;
- the MusicXML file which causes the problem;
- a PDF file of the page causing the problem.

In addition to problem reports, change requests if properly documented will be seriously considered.

## 12 Installation

### 12.1 Delivery

The product comes on a CD together with the main SIP program, the free utilities, and when applicable with the current release of programs for which the user already has a license.

SipXML2Score itself consists of the following delivery units:

```
SIPXML2SCORE.EXE
SIPXML05.EXE
SIPXML07.EXE
SIPXML16.TXT
SIPXMLEQ.TXT
SIPXML15.EXE (if Hebrew license)
SIPXML25.EXE (if Greek license)
```

The program cannot run without the SIP environment. Though it is not required to have SCORE on the same system, the program expects the SCORE library (LIB) to be.

The program SIPXML07.EXE is for accidental alignment. This routine only handles the simplest of cases. It may be deleted in which case it will not be called. For proper alignment of accidentals, use Tom Brodhead's program ACCS which when integrated will be run during XML conversion.

New versions of any of these modules can be distributed (downloaded from the website) as they become available. Announcement is on the SCORE forum and SIP Newsletters.

### 12.2 Installation verification

To check that the installation of SipXML2Score is successful, or as an exercise, follow the procedures given here.

#### 12.2.1 Conversion of a song

- Download the Schubert Ave Maria XML file from Recordare (if it is not on the delivery medium);
- Select the file after starting SipXML2Score;
- In the Options tab>Layout frame: set the 'Use XML page control' option;
- In the Score tab>8 Staves tab:
  - Set the indentation option with a distance of 15.
  - Set staff size to .6.
  - Set print suppression, either option.
  - Set vertical distance to 18, 18, 24, 12 scale steps.
- In the Font Equivalence table, assure you have a text font and a lyrics font.
- Run.

Inspect the report and conversion to SCORE.

## 13 Practical issues

### 13.1 The pickup bar issue

Files with pickup bars cannot be handled. When one is encountered, the user is prompted to renumber the file such that internally, the pickup bar will receive number 1. The original measure numbers will still be shown in the conversion, the statistics, and the diagnostics.

### 13.2 The LJ test

LJ is the SCORE command to align bars in a system and execute the spacing algorithm. The converter signals those measures that do not contain the duration of the current time signature and as such may not properly align. The way Dolet handles more than one voice per staff is not very well implemented. When a voice is incomplete, ie. there are less notes in the second voice in a part staff than indicated by the time signature, the SCORE user would use invisible rests to assure proper alignment. Dolet just positions the notes in relation to the first voice. In most cases, the LJ will still work but SipXML2Score does not generate the invisible rests. In a piano piece such as the sample file of Debussy's *Mandoline*, there are no rests between the piano left and right hand. An error message is issued to signal this and invisible spaces need to be introduced by the SCORE user prior to doing an LJ.

### 13.3 Missing time signature

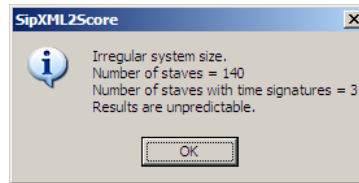
The converter cannot work on music without time signature. You either have to define one in the source before exporting XML or to set one in the Score tab>18 Meter tab.



When there are no barlines such as in the Recordare sample file CHANT.XML (*Quem queritis*) this poses a problem. Force the measure to 8/1 as this is sufficient for the 27 quarter notes in this line of music. When the measure you provide is insufficient, the error message 'Attempt to generate note beyond right end of measure' will be given.

### 13.4 Irregular system size

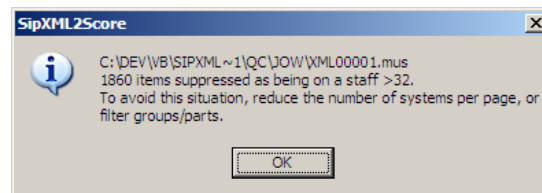
The following message may appear when irregular input is presented:



The total number of staves is not a multiple of the number of staves with a time signature. To find the reason for this, filter groups or parts until obvious which part causes this irregularity. It is at this stage not clear if this is a problem with Dolet or with SipXML2Score. Please report the situation.

### 13.5 Too many items

SCORE is limited to 32 staves per file. Through an incorrect option setting, the user may have forced more staves than possible in an output file. This situation is signaled by the following message box.



The extraneous items are not generated but the created MUS file, though readable, is incomplete.

### 13.6 SCORE error message on VJ

The following error message is given by SCORE when there are too many staves above the displayable area and you do a VJ command: '\*\*\* P4 of Staff out of range' followed by some obscure values and 'Press any key to continue'. The number of times you need to press is supposedly the number staves it cannot display.

To remedy this, make layout such that the staves fit on the page.

## 14 Acknowledgement

The finest support in the development of SipXML2Score was obtained from Timo Leskelä. I also thank Deb Herman for the numerous test files and Recordare's Michael Good for clarifications on Dolet behavior. Sergei Lebedev and Matanya Ophee delivered Cyrillic and Hebrew testing material. Many other individuals have been helpful to a lesser extent in providing test material which has contributed to the current state of this program.

## 15 Change history

Version of document	Reason for change	Date
1.04	Added multipage support (Layout control table)	March 19, 2004
1.05	Adapted to panel changes (introduction of menu)	March 25, 2004
1.07	Information on line conversion	July 17, 2004
1.08	Bar filtering added. The program was upgraded to handle large orchestral scores	September 30, 2004
1.09	Score output filename definition supported (screenshot)	October 4, 2004
2.00	Layout now supports 'new-system' over multiple pages. Paragraphs on pickup bar and LJ check	November 2, 2004
2.01	Bar numbering issues adapted	November 23, 2004
2.02	TAB panel and conversion added	April 17, 2005
2.03	Improved Layout Control File description, new screen shots. Modified description of SIPSIB07.EXE.	June 16, 2005
3.00	Entirely revised for Version 3.00	September 20, 2005
3.01	Build 010 changes	February 7, 2006
4.00	Build 011-017 changes (Font equivalence, Text & Lyrics panel, ACCS integration)	January 17, 2007
4.01	Build 020 changes	January 24, 2007