Title:	SipSystem – System formatter
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Introduction

SipSystem is a Score utility which assures that all systems have an identical instrument layout. Rest staves are inserted for missing instruments. This utility is used to prepare files for SipScore2XML and SipSplit. It can be used for Score and PAGE(4) as long as the physical limitations of these programs are not exceeded.

SipSystem is SIP freeware. That means that licensed SIP users do not pay a license fee.

File name convention

For this program to work, input files must be named with a sequential numeric part. Multifile pages must also have a sequential letter starting with A. The file names are put in the names file NAMES.SIP, customary to SIP practice. The easiest way to select files is by dragging names from the Explorer to the 'Select files' button.

Example of a two page orchestral piece with three files per page:

BACH001A.MUS BACH001B.MUS BACH001C.MUS BACH002A.MUS BACH002B.MUS BACH002C.MUS

Program start

After file selection, the output path is to be defined. The program suggests a default. The first filename is to be defined and must end with a numeric group such as WORK0001.PAG. Then push the 'Analyze' button. The program then verifies the input for abnormal situations. When the input is correct, the outcome is one of these:

- the input is consistent and there are no multifile pages, ie. all systems are of an identical layout. There are no systems with missing instruments. The input file selection can serve without any change as input to subsequent programs SipScore2XML, SipSplit, or PAGE(4).
- The input is not consistent and/or it has multifile pages. Conversion is necessary to one system per file.

When not consistent or there are multifile pages, then the program asks if it needs to convert. When yes, it creates the output. Using the above sample setting it would create the files

WORK0001.PAG WORK0002.PAG

These files are in Score format but they may exceed the physical limits of Score and PAGE(4) because they have:

- more than 32 staves
- too many items
- too many parameters

For SipScore2XML and SipSplit these are not a limitation, but of course for Score and PAGE(4) they are.

Input validation

The following conditions are checked by the analysis phase of SipSystem:

- filenames must have a numeric part
- filenames of multifile pages must have a single letter following the numeric part, and these letters must be consecutive
- all staves must have an instrument identifier
- no two staves in one system may have an identical instrument identifier
- instrument order conflict
- a rest refers to the current instrument
- a rest refers to an undefined instrument

How SipSystem works

Following the analysis, the program will read system per system and create a file for each system.

The missing instruments are added in the order in which they have previously appeared. It is therefore suggested to have the first system defining all instruments. When an instrument is entered which was not defined before, and later systems miss this instrument, it is put at the bottom.

Rest duration is taken from parallel rest bars by copying it to the inserted staff. When there are none, the current time signature is used to create a whole rest where necessary. Staff, signatures and barlines are copied according to a previous occurrence of the instrument (number of staff lines, size, and thickness).

User options are the 'Overwrite' switch which is self-explanatory and the 'Show instrument id.' which when set generates a Code 10 item with the instrument number left of each staff.

Requirements

Users of SipScore2XML (as of version 2.0.0.21) or SipSplit (as of version 6.1.0.18) *must* have this utility as it is used to check for consistency of the input. This check is not visible to the user but when conversion to single system files is necessary, the user needs to perform SipSystem from the freeware panel.

The SIP Control Center must be version 5.0.0.133 or later.

Licensed users can download these updates from <u>www.dekloe.be</u> and new users will automatically receive these on the installation CD.

Restriction

SipSystem requires that instrument identification numbers (Code8Par9) are integers.

Document history

Date	Version	Remark
June 4, 2010	1.0	Initial availability