

Notation Software for Jazz

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Notation software has always focused on 19th century practices and treated modern music, including jazz as an afterthought. As a result, it has changed jazz notation practices, not always for the better. In this comparative study, we'll look at four notation programs, Finale, Sibelius, Notion and MuseScore and examine first the general features and then support each provides specific for jazz.

BASIC OPERATION

Score Setup

All of the programs except Notion use a score setup system which lets you add instruments, titles and credits, initial meter, key, and tempo, pickup measures, and number of measures. All programs come with templates of varying utility. Templates are easy to create in all of the programs, but you need to know how to edit packages on a Mac to add them to the MuseScore menu.

SCORE SETUP	Finale	Sibelius	Notion	MuseScore
Setup Wizard	Yes	Yes	No	Yes
Jazz Templates	2	6	3	3
Create Templates	Yes	Yes	Yes	Advanced

Note Entry

All of the programs support mouse entry and step-time entry. Finale and Sibelius both are designed to use full-size computer keyboards with keypads. While they do have alternative shortcuts for laptops, it does make it a little less intuitive and requires learning more shortcuts.

MuseScore and Notion both work in the same way on desktop and laptops. MuseScore shortcuts are work on either the keypad and keyboard and Notion doesn't really use the keypad at all, instead using alphabetic shortcuts.

All of the programs except MuseScore also support real-time entry. I mention this only in passing as I know of no composers or engravers who really find the function useful for any but the most rudimentary music.

NOTE ENTRY**	Finale	Sibelius	Notion	MuseScore
Note Value Shortcuts	Numeric	Numeric	QWERTY	Numeric
Laptop Shortcuts	Yes	Yes	N/A	N/A
Pitch shortcuts (Kbd)	Yes	Yes	No	Yes
Other Entries	Yes	Yes	Yes	No
Real-time Entry	Yes	Yes	Yes	No

Page Layout

Each program handles spacing and layout differently. All have some level of automatic spacing, but in truth, all will also require manual adjustments as well. The ability to manually adjust the layout is in inverse proportion to the level of automation. Notion controls almost all spacing--it's impossible to have entries overlap—but it has very limited tools for changing the layout which sometimes results in unbalanced pages or systems. Sibelius has “Magnetic Layout” which also prevents most collisions. There is control over systems and pages and global spacing, but editing individual systems is not easy and moving things with the mouse is generally not recommended. MuseScore also handles spacing automatically, but also has tools which allow control of spacing of individual systems and staves. Finale does the least automatically, more or less keeping things readable, but requiring manual layout for the final product. It offers the most precise control of virtually any element using numbers or the mouse.

LAYOUT	Finale	Sibelius	Notion	MuseScore
Manual Note Spacing	Yes	Limited	No	No
Auto Staff Spacing	No	Yes	Yes	No
Manual Staff Spacing	Yes	Yes	No	Yes
Control	Advanced	Good	Limited	Good
Hide Empty Staves	Yes	Yes	Yes	Yes

Finale tip: Set Page Margins before using Space Staves Evenly

Notion Tip: Notion's numbers are only suggestions. Type any number you want

Playback

Playback has never been a strong suit for notation software, which of course focused mainly on the printed page. But over the years the sound has improved and one program, Notion, has made it a focal point. Notion's playback uses excellent sample libraries that respond musically to most dynamics, articulations, including jazz articulations, phrasing and hairpins. (As noted above, jazz instruments are a sample bundle that must be purchased as an add-on), Swing is adjustable and realistic and you can easily edit note length and velocity independent of the visible note. It also has the best mixer and best integration with DAWs and third party libraries.

Sibelius' playback has also improved dramatically and nearly rivals that of Notion, though its response to phrasing, dynamics and articulation is more limited and less musical. The included jazz instrument library is good, not great. Numerous styles of swing playback, such as Bebop or Cool, can be selected, but it's not always clear what the differences are nor how closely they resemble the indicated style.

Finale includes the Garritan Personal Orchestra and includes some nice sampled jazz instruments. However, Finale doesn't respond very musically to dynamics as the changes tend to be quite abrupt, articulations aren't very musical and jazz articulations for the most part don't affect playback at all. Finale include a human performance function that improves the overall sound, but in general, playback is not realistic.

Unlike the others, MuseScore uses Sound Fonts for playback. Unfortunately, it's a technology that is dated and no longer supported, so there aren't very many good fonts available. As a result, MuseScore's playback sounds the most synthetic, though it does allow for adjusting the level of swing.

PLAYBACK	Finale	Sibelius	Notion	MuseScore
GM Sounds	Yes	Yes	No	Yes***
Sampled Sounds	Yes	Yes	Yes	No
Jazz Articulations	Limited	Limited	Yes	No
Dynamics	5/10	7/10	9/10	3/10
Phrasing	No	No	Yes	No
External Libraries	Yes	Yes	Yes	Yes***
Swing Control	No	Auto	Yes	Yes
ReWire Support	No	Slave	Master/slave	No

*** Sound fonts

MusicXML Import/Export

MusicXML files are transportable files that include graphic information unlike standard MIDI files. Many publishers are now accepting scores as musicXML files. All of the programs import and export musicXML files.

Functions

The following functions while general in nature may be of particular interest to jazz composers and arrangers. The ability to split chords from a single staff to multiple staves (explode) is particularly useful when writing soli or tutti passages.

FUNCTIONS	Finale	Sibelius	Notion	MuseScore
Implode/Explode	Yes	Yes	No	Yes
Record Audio	Yes	Add-on	No	No
Attach Audio	Yes	Yes	Yes	No
MP3 Export	Yes	Yes	Yes	Yes
Graphic Export	Yes	Yes	No	Yes

Price (USD)

Finale and Sibelius are comparably priced and both offer academic pricing. Subscription pricing is a popular trend in the software industry, but so far only Avid has joined the club. Notion's base price is considerably less, but jazz composers will want to add the jazz sample library. Notion does not offer academic pricing on the program or the add-on libraries. MuseScore is the hands-down winner on price as it is free and open-source.

	Finale	Sibelius	Notion	MuseScore
List	\$600	\$599	\$149*	Free
Academic	\$350	\$299 (8/mo)	No	Free
Site License	Yes	Yes	Yes	Free
Subscription	No	\$20/mo	No	N/A
Entry Level	Yes	Yes	No	No

* Jazz Playback Library extra (\$80)

JAZZ SPECIFIC FEATURES

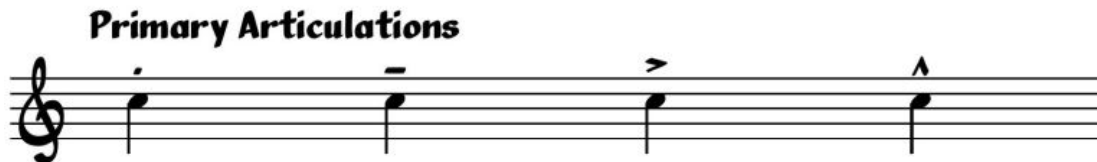
Fonts

All of the programs support handwritten fonts. Finale and Sibelius allow you to choose fonts other than the default. The fonts have changed over the last several versions and seem to look a little less handwritten and in the case of the Finale font include fewer articulations. MuseScore and Notion are limited to built-in fonts for notation, but can select any font for text.

FONTS	Finale	Sibelius	Notion	MuseScore
Handwritten font	Yes	Yes	Yes	Yes
Select Notation font	Yes	Yes	No	No
Select Text fonts	Yes	Yes	Yes	Yes

Jazz Articulations

All of the programs support these primary articulations, however playback varies. The last one in particular, does not correspond to standard jazz performance practice.



The following articulations from Tim Davies article, *The Jazz Default*, are suggested as a basic library for jazz specific articulations.



N.B. the text is for academic purposes, these are all obvious, do not label in real world!

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To these, I would also add the flip, though the turn is an acceptable substitute.



JAZZ ARTICULATIONS	Finale	Sibelius	Notion	MuseScore
Fall	√	x	√	x
Short Fall	√	√	√	√
Shake	√	x	√*	x
Glissando	√	√	√	√
Rip	√	x	√	x
Doit	√	√	√	√
Scoop	√	√	√	√
Bend	√	x	x	x
Flip	√	x	x	x

*Graphic only

Chord Symbols

All of the programs support typing chord symbols directly into the score. Chord symbols are attached to notes, beats or bars and can be transposed along with notes.

CHORD SYMBOLS	Finale	Sibelius	Notion	MuseScore
Type into score	Yes	Yes	Yes	Yes
Diagrams	Yes	Yes	Yes	Yes
Transpose	Yes	Yes	Yes	Yes
Attached	Beats	Beats	Bars	Beats
Alternate Symbols	Lib req.	Yes	Yes	Yes
Playback	Yes	Slashes	Slashes	No

Jazz Drum Parts

Jazz drum parts consist of slashes for time with cue notes indicating ensemble and section rhythms. Each program has a unique way of handling this.

Finale	Sibelius
<ul style="list-style-type: none"> ● Doc Options ● Layer 4 stems up, Rests offset 6 steps ● Create Staff Style Slash with Cues> <ul style="list-style-type: none"> ○ Slashes Layer 1 ○ show notes and articulations other layers. ● Add Cue Notes Plug-in - Layer 4, 75% ● Single Pitch Plug-in (G5) ● Apply Staff Style 	<ul style="list-style-type: none"> ● Enter quarters in voice 2. ● Notations > Noteheads > Large Stemless Slash ● Copy and Paste Cue ● Note Input > Make Pitches Constant Plug in ● Set to G5, Move Rests. ● Fill Voice 2 with quarters. Beat without Stem
Notion	MuseScore
<ul style="list-style-type: none"> ● Copy from Part > Paste Special. ● Repitch to G5 ● Right-click Notes>Show as Cues. ● Enter quarter notes in voice 2. ● Select Special>Select Voice 2 ● Right-click Notes>Show as Rhythm Slashes. ● Right-click Notes > Hide Stems 	<ul style="list-style-type: none"> ● Copy and Paste Cue. ● Exchange Voice 1>3. ● Edit>Tools>Toggle Rhythmic Notation ● Edit>Tools > Fill with Slashes

Leadsheets

Leadsheets generally consist of a melody and chord symbols with the clef and key signature on the first system only. Most will require repeats and endings and the ability to adjust the number of measures per system. Each of the programs handle this differently.

	Finale	Sibelius
Pros	<ul style="list-style-type: none"> ● Template has clef and key on first system only ● Adjust measures with menu command and manually ● Space Systems evenly ● Move items by pixel 	<ul style="list-style-type: none"> ● Autospacing ● Easy layout

Cons	<ul style="list-style-type: none"> ● Doesn't learn enharmonics ● Manually adjust endings and chords to avoid collisions. 	<ul style="list-style-type: none"> ● Multiple steps to create endings
Tips	<ul style="list-style-type: none"> ● Create chord suffix library 	<ul style="list-style-type: none"> ● Preferences>Other>Use legacy chord symbol input ● Hiding Clefs and Keys after first system <ul style="list-style-type: none"> ○ Clef (Q) uncheck show on subsequent systems ○ Select Bar 2 to End. ○ Select Filter > Bar Numbers. ○ Select Inspector (No right-click) ○ Deselect Key sigs ○ Engraving Rules > Barlines > Barline at start of single staves
	Notion	MuseScore
Pros	<ul style="list-style-type: none"> ● One step ending and repeats ● Auto layout and spacing 	<ul style="list-style-type: none"> ● Auto layout and spacing ● Manual spacing available ● Hide individual elements
Cons	<ul style="list-style-type: none"> ● Can't hide clef and key sig ● Measures per system can't easily be adjusted. 	<ul style="list-style-type: none"> ● Can't select and copy chord symbols ● Hiding clefs and key sigs leaves a space ● No Global Hide clef/key ● No left barline at beginning of system
Tips	<ul style="list-style-type: none"> ● Chord symbols enter, enter symbol, enter, arrows to next chord ● Enter and hide articulations and dynamics to enhance playback 	<ul style="list-style-type: none"> ● Use Shift-Arrow to extend lines like endings ● Triplets - Select the TOTAL value of the triplet first

Wish List

- Col instrument function (graphic, parts, playback)
- Easy Lead sheet style
- Easier template creation
- Choose accidentals based on chords instead of keys
- MusicXML includes music font or font family

References

Davies, Tim (2014). *Jazz Notation-The Default*, <http://www.timusic.net/2014/01/jazz-notation/#.V3GAjZMrJE4>

Wells, Mark (2013) Finale Tutorial - Drum Set Horn Cues Over Slash Notation (Big Band Chart) (Video)
<https://www.youtube.com/watch?v=RhsjadTlj2Y>