

Invisibles Sets and View Tab Commands in the cmdutils Plugin

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In **Sibelius Ultimate 2020.9**, plugins were given variables to get and set most, though not all, of the Ribbon **View** tab **View Invisibles** fields.

I added a set of commands to the **cmdutils.plg** plugin that would let you toggle these settings, or more usefully, set them explicitly on or off, in a command macro or plugin using the **Execute Commands** plugin.

I also added some routines to allow non-toggling access to the **Hide All Accidentals** button and **Panorama On/Off**.

You will need to update to the very most recent version of **cmdutils.plg** (01.49.10) to use these commands. You should also have **Execute Commands** and **Run Command Macro** installed as well.

Invisibles Sets

Michele Galvagno had requested “Invisible sets”, which would let him quickly turn on or off several of the **View** tab Invisibles settings, so he could have different settings while printing or exporting PDF files. I realized that an **Execute Commands** macro I had written, **My View Invisibles**, could serve as one of those sets, and that you could create several macros with different settings to serve as a collection of sets.

Here are the **View Invisible** commands I added to **cmdutils**. The parameter in parentheses can be either on, off, or toggle. **Toggle** is the default, so you will need to edit the parameter if you want to specify on or off.

ViewAnnotations_cu(toggle/on/off)
ViewAttachmentLines_cu(toggle/on/off)
ViewBarNumbers_cu(toggle/on/off)
ViewComments_cu(toggle/on/off)
ViewHandles_cu(toggle/on/off)
ViewHiddenObjects_cu(toggle/on/off)
ViewLayoutMarks_cu(toggle/on/off)
ViewPageMargins_cu(toggle/on/off)
ViewPlaybackLine_cu(toggle/on/off)
ViewReplayMarker_cu(toggle/on/off)
ViewHighlights_cu(toggle/on/off)

- Allows a plugin to set the appropriate **View Invisible** setting to toggle, on, or off. Edit the parameter to “on” or “off”. Leaving it as it is will toggle the setting. The return value for these routines is True or False, reflecting the state of the **Invisibles** setting after the toggle/on/off operation is done.

MyViewInvisibles.dat version 1

Here are the original commands in the macro file **MyViewInvisibles.dat**. This allows me to reset the Invisibles settings to my personal defaults after I had made temporary changes.

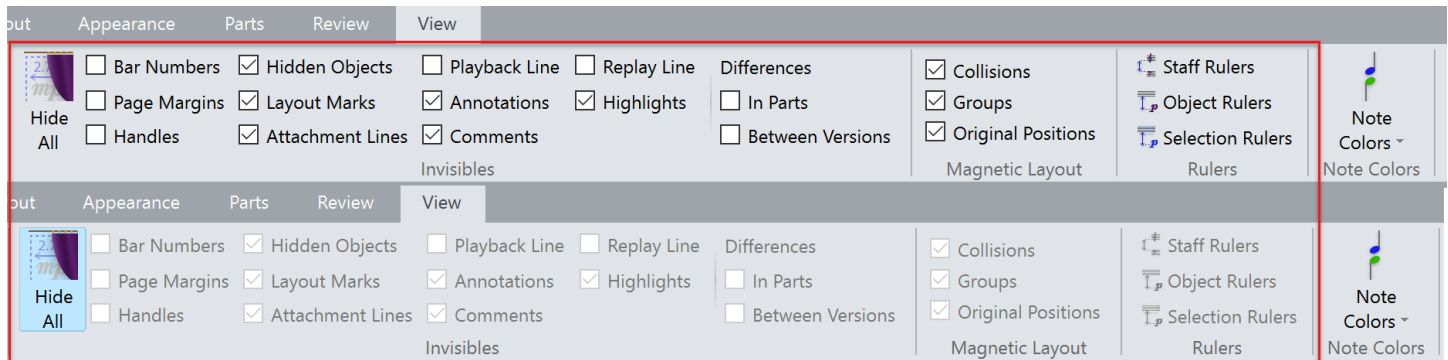
ViewAnnotations_cu(off)
ViewAttachmentLines_cu(on)
ViewBarNumbers_cu(off)

ViewComments_cu(on)
 ViewHandles_cu(off)
 ViewHiddenObjects_cu(on)
 ViewHighlights_cu(on)
 ViewLayoutMarks_cu(on)
 ViewPageMargins_cu(on)
 ViewPlaybackLine_cu(off)
 ViewReplayMarker_cu(off)

Hide All Invisibles commands

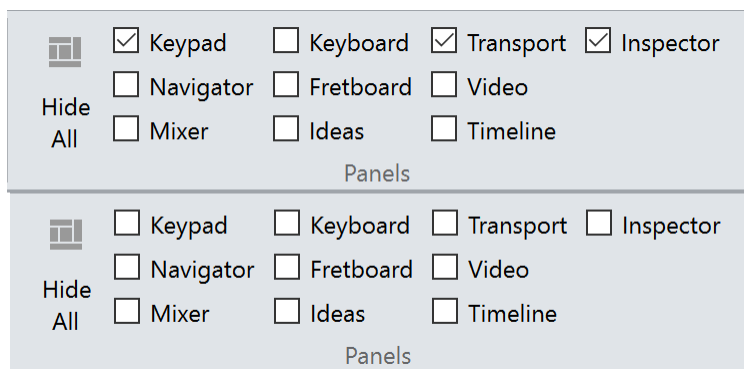
While discussing this with Michele, I realized that these commands depend upon the setting of the **Hide All Invisibles** button, and that there was currently no way to know its current setting or to do anything with a command except toggle it. If **Hide All Invisibles** were active, the above commands would have no effect.

Hide All Invisibles will effectively uncheck all the checkboxes in the **Invisibles**, **Differences**, **Magnetic Layout**, and **Rulers** regions of the **View** Tab. While it is active all those settings are turned off, and when you turn off **Hide All Invisibles** the original settings are restored.



*If setting **all the View Tab Invisibles** to be unchecked before exporting or printing and having an easy way to restore the original settings is adequate, then there is no need to run any commands. Just enable the **Hide All Invisibles** button on the **View** Tab before exporting to uncheck everything, and disable it afterward.*

The similar-looking **Hide Tool Windows** command (the **Panels Hide All** button) does not behave the same way. If you click the button, all the settings in **Panels** are unchecked for real, and you need to manually re-check any settings you want. Here are **Panels** before and after pressing **Hide All**.



There are Sibelius commands to toggle each of the **Panels** checkboxes, so to get a custom set of these settings you can run **Hide Tool Windows** to clear everything, then rub any of the toggling commands. In **Execute Commands** most of these are found in the **View tab** category, but **Inspector** is in **Home tab** and **Mixer** is in **Play tab**. **Find** can be your friend here. A macro made of the following commands will clear then check all the **Panel** checkboxes, regardless of their original state, so make a custom set by running **Hide Tool Windows** and then only the commands for what you want to have checked. Note that these are “normal” Sibelius commands, not **cmdutils** commands.

Hide Tool Windows

Keypad
Transport
Inspector
Navigator
Fretboard
Video
Mixer
Ideas
Timeline

I wrote some additional commands that would let you explicitly set **Hide All Invisibles** on or off, and to save and restore the previous Invisibles **Hide All** button settings. I also added commands to let you explicitly turn **Panorama** mode on or off. Here are those commands.

HideAllInvisibles_Hide_cu()

- Sets the state of the Hide All Invisibles button to “hide”

HideAllInvisibles_Show_cu()

- Sets the state of the Hide All Invisibles button to “show”
- **HideAllInvisibles_Toggle_cu()**
- Toggles the state of the Hide All Invisibles button by running the command View ► Invisibles ► Hide All.

HideAllInvisibles_Store_Current_Setting_cu()

HideAllInvisibles_Restore_Setting_cu()

- These store the current setting of Hide All Invisibles (for the current Sibelius session only) or restore any store setting. These are comparable to Store Current Selection and Restore Selection, and allow you to change the setting as needed and then restore the original setting.

PanoramaOff_cu()

- Sets View Panorama off. Provides non-toggling setting.

PanoramaOn_cu()

- Sets View Panorama on. Provides non-toggling setting.

MyViewInvisibles.dat version 2

After adding some of these commands, **MyViewInvisibles.dat** now looks like this:

```
HideAllInvisibles_Store_Current_Setting_cu() // store the current Hide All Invisibles button settings to restore later
```

```
HideAllInvisibles_Show_cu() // turn off Hide All Invisibles so the next commands will have an effect
```

```
ViewAnnotations_cu(off)
```

```
ViewAttachmentLines_cu(on)
```

```
ViewBarNumbers_cu(off)
```

```
ViewComments_cu(on)
```

```
ViewHandles_cu(off)
```

```
ViewHiddenObjects_cu(on)
```

```
ViewHighlights_cu(on)
```

```
ViewLayoutMarks_cu(on)
```

```
ViewPageMargins_cu(on)
```

```
ViewPlaybackLine_cu(off)
ViewReplayMarker_cu(off)
```

```
HideAllInvisibles_Restore_Setting_cu() // restore the original Hide All Invisibles button settings
```

The only new command required is **HideAllInvisibles_Show_cu()**, which allows the following commands to change settings, but I like to leave things as I found them, so I added the **Store** and **Restore** commands before and after the other commands so that the **Hide All Invisibles** button state is unchanged.

Once you have one macro (dat) file like this, you can make copies with new names and change the settings in a text editor to have different custom settings.

When you have a set of macros, you can put them into the **Execute Commands** subfolder of your **default Scores** folder and then run them with the **Run Command Macro** plugin. You can also turn these macros into plugins and use them like any other plugin. Run **Execute Commands**, press **Import List**, and import one of the macro files. Now you can press **New Plugin** and generate a plugin automatically from these commands.

After creating the plugins, close and restart Sibelius and you will be able to run them as plugins.

More Information

A general description of using **Execute Commands** and **Run Command Macro** can be found in this **Scoring Notes** post:

<https://www.scoringnotes.com/tutorials/using-commands-in-plugins-in-sibelius-ultimate/>

More documentation on these plugins, including tutorials, can be found at

<https://bobzawalich.com/execute-commands-plugin-documentation/>

Execute Commands, **Run Command Macro**, and **cmdutils** call all be installed using **File>Plug-ins>Install Plug-ins**.