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1. INTRODUCTION

WHAT IS ARTIQVERSE?

Welcome to ArtiQverse, the universal articulation mapping solution. ArtiQverse streamlines the often tedious process of managing virtual instrument articulations by allowing you to create, edit, and convert articulation maps for all major Digital Audio Workstations (DAWs) from a single, powerful interface.

Whether you're building a map from scratch, converting between formats, or capturing articulations directly from a plugin's interface, ArtiQverse is designed to be the central hub for your entire virtual orchestra.

KEY COMPANIONS: IQLENSE & IQSPACE

- **iQLense:** An intelligent OCR (Optical Character Recognition) tool that captures articulation names directly from your screen, dramatically speeding up the process of mapping complex virtual instruments.
- **iQLense Pro** (optional): The supercharged sibling of iQLense that captures articulation names AND their triggers in a semi-automatic process.
- **iQSpace:** A cloud-based community repository where you can upload your own maps to share with others and download maps created by fellow producers for your favorite sample libraries.

SYSTEM REQUIREMENTS

- **Operating System:** Windows 10/11 or macOS 10.11+
- **Memory (RAM):** 4GB (8GB recommended for large projects)
- **Storage:** 1GB of available disk space
- **Internet Connection:** Required for license activation and iQSpace repository access.
- **Permissions (macOS):** Screen Recording permission is required for iQLense functionality.

WHAT FORMATS ARE SUPPORTED?

We intend to support all formats currently offered in any DAW.

- Cubase/Nuendo: .expressionmap
- Dorico: .doricolib, .expressionmap
- Logic Pro: .plist (Articulation Set)
- Studio One: .keyswitch (Sound Variation)
- Digital Performer: .dpartmap (Articulation Map)
- Reaper Rearticulate: Reabank

2. GETTING STARTED

LICENSE ACTIVATION

Your ArtiQverse experience begins with activating your license.

ARTIQVERSE LICENSE

1. Launch ArtiQverse for the first time.
2. When prompted, enter the **ArtiQverse** license key you received via email.
3. Click "Activate License". An internet connection is required for this one-time verification.

iQLENS PRO LICENSE (OPTIONAL UPGRADE)

If you have purchased the iQLense Pro upgrade for automated scanning:

1. Start iQLense by selecting **Tools > iQLense Scanner** or clicking on the **iQS** button in the Toolbox.
2. Select the System Menu App **iQLense > Activate iQLense Pro**.
3. Enter your iQLense Pro key and click the **Verify License** button.

INTERFACE OVERVIEW

The ArtiQverse interface is designed for clarity and efficiency, consisting of four main areas:

- 1. Articulation List (Left):** This is where all articulations in your current map are displayed. You can select, re-order (drag & drop), and manage your articulations here.
- 2. Main Control Area (Center):** This is the primary editing space. When an articulation is selected, its name, triggers (Keyswitches, CC, PC, MIDI channel), groups, and symbol assignments are configured here.
- 3. The Toolbox (Floating Window):** A compact, always-on-top window providing quick access to iQLense, iQSpace, editing modes, and value adjustment controls.
- 4. The Side Panel (Right, Collapsible):** Contains advanced metadata and supplementary file management. Click the arrow widget (< or >) on the right edge of the main window to toggle its visibility.



3. CORE WORKFLOWS

WORKFLOW 1: CREATING AN ARTICULATION MAP MANUALLY

This is the fundamental process of building a map from scratch.

- 1. Create a New Map:** Start with an empty map or go to **File > New Window** (`Ctrl/Cmd+N`).
- 2. Name Your Map:** In the bottom toolbar, enter a descriptive name for your instrument map (e.g., "Spitfire - Albion One Strings").



- 3. Name the first Articulation:** In the **Main Control Area**, click into the "Articulation Name" field and type its name (e.g., "Legato").



- 4. Assign a Remote Trigger:** Next to the articulation name field, define the **Remote** by selecting the trigger source message **[a]** (PC, KS, CC) and specify its value **[b]**. You can also specify the desired **Trigger Mode** **[c]** (Attribute, Direction, Toggle) in the drop-down menu.



- 5. OPTIONAL: Assign a Color:** Select a color from a list of 16 options.



6. Assign an Output Trigger:

- For a Keyswitch [a]:** Go to the **Keyswitches** section. In the **KS 1** box, enter the MIDI note that triggers this articulation (e.g., "C-1"). If left empty, the velocity will default to 120, which is suitable for most cases.
Note that up to 10 keyswitches can be configured, depending on support of the DAW articulation format you wish to export to.
- For a CC Message [b]:** Go to the **Control Changes** section. In the first column (**CC a**), enter the CC number (top box) and the required value (bottom box).
Note that up to 10 control change messages can be configured, depending on support of the DAW articulation format you wish to export to.
- For a PC Message [c]:** Go to the **PC | CH** section and enter the desired program change number.
- For MIDI Channel [d]:** Go to the **PC | CH** section and enter the relevant MIDI channel if you wish to switch articulations based on channel-assignments.



- 7. OPTIONAL: Assign a Symbol:** In the row of DAW dropdowns, find the one for your primary DAW (e.g., "Cubase") or Notation software (e.g. Dorico). Click it and select the symbol that best represents the articulation (e.g., "Legato"). ArtiQverse will automatically find the best matching symbols for all other DAWs.



- 8. OPTIONAL: Assign a Group:** ArtiQverse allows to assign up to 4 groups for supported formats. Group 1 will automatically offer articulations that were already added to the articulation list, but also can be customized. Group 2 to 4 may be customized as well and will display their respective articulations from earlier assignments.



- 9. Add your Articulation:** Click the **Add Articulation (+)** button in the bottom-left toolbar to add the articulation to your map. Repeat steps 2-6 for all your instrument's articulations.



Pro Tip: Notice that ArtiQverse automatically increments the previous keyswitch for you, saving time. If you wish to assign the same keyswitch to multiple articulations, ensure you are in "Absolute" edit mode (**Toolbox > "A"**), select the articulations you wish to change in the articulation list using the SHIFT key, navigate the cursor to the field you would like to apply the changes, enter your desired value, and confirm by pressing SHIFT + ENTER. ArtiQverse will apply the entered value to all selected articulations.*

- 10. Save Your Map:** Go to **File > Save As** (**Ctrl/Cmd+Shift+S**). Choose your desired DAW format from the dropdown menu and save the file.



WORKFLOW 2: OPENING AND CONVERTING AN EXISTING MAP

ArtiQverse is a powerful conversion tool. You can open a map from one DAW and save it for another in seconds.

- 1. Open the Source Map:** Go to **File > Open** (`Ctrl/Cmd+O`) or use the **Open** button in the toolbar. Select the articulation map you want to convert.
- 2. Review and Edit (Optional):** ArtiQverse will load the map. You can now select any articulation to review its settings or make changes. Notice how the DAW Symbol dropdowns are all populated with the closest equivalent symbols.
- 3. Save for the Target DAW:** Go to **File > Save As** (`Ctrl/Cmd+Shift+S`) or use the **Save** button in the toolbar).
- 4.** From the format dropdown at the bottom of the save dialog, select the format for your target DAW.
- 5.** Name the file and click **Save**. You now have a perfectly converted map ready to be imported into your other DAW.

For converting multiple files at once, use the powerful **File > Batch Convert** feature.



WORKFLOW 3: SHARING/DOWNLOADING MAPS WITH IQSPACE

Leverage the community to save time or share your work.

- 1. Registration:** Due to data regulations, we require you to sign-up to iQSpace upon first time use. Enter your email, password, and ArtiQverse serial no. for the registration to complete.
- 2. Launch the Repository:** Click the **iQS** button in the **Toolbox**. This opens the iQSpace Repository browser.
- 3. Find a Map:** Use the search bar to find a map for a specific library (e.g., "Vivid Strings"). You can also filter by developer, library, or instrument and select between *List* view and *Tree* view by clicking the icons to the right of the search bar.
- 4. Download and Import:** Select a map from the list to see its details, rating, and comments. Click the **Import** button. The map will be downloaded and loaded directly into ArtiQverse, ready to be used or saved in your preferred format.
- 5. Upload Your Map (Sharing):** To share one of your own maps, first save it in the native **.artiq** format. Then, in the repository browser, click **Upload**. Fill in the details about your map, attach the **.artiq** file, and submit it to the community.

Pro Tip: You can always edit your maps after having uploaded them to iQSpace. Simply click the **Edit** button. Editing of your maps is restricted to the creator of a map. If you like to *remix* (i.e. edit) another user's upload, you will have to download, edit, and upload this map - preferably giving attribution to the original creator in the *Description* section.

The screenshot shows the iQSpace repository browser. The main table lists various maps with columns for Category, Developer, Library, Instrument, and ArtiQMap. The 'Vivid Strings' library is highlighted. On the right, a details panel for 'VS Violins 1 a4' shows its rating (4.5 stars), creator (Maestro), and description.

Category	Developer	Library	Instrument	ArtiQMap	Trigger
User	VSL	Duality Strings Regular	Double Basses	Duality Double Basses Flow	KS
User	Insanity Samples	OCS	Violin 1	Odeon Chamber Strings V1	KS
User	Insanity Samples	OCS	Violin 2	Odeon Chamber Strings V2	KS
User	Insanity Samples	OCS	Celli	Odeon Chamber Strings Celli	KS
User	Insanity Samples	OCS	Viola	Odeon Chamber Strings Viola	KS
User	Insanity Samples	OCS	Double Bass	Odeon Chamber Strings Double Bass	KS
User	Insanity Samples	OCS	Ensemble	Odeon Chamber Strings Ensemble	KS
User	Insanity Samples	OCS	Violin 1 & 2 Octa...	Odeon Chamber Strings Oct Violins 1-2	KS
User	Insanity Samples	OCS	Octave Cello & B...	Odeon Chamber Strings Oct Cellos & Basses	KS
User	MUSIO	Woodwinds Pro	Alto Flute	Woodwinds Pro Alto Flute MUSIO	CC
User	Orchestra Tools	Woodwinds Soloists 1	Flute	Woodwinds Soloists 1 Solo Flute	KS
Factory	Pulse Audio	Vivid Strings	Basses (a3)	VS Basses a3	PC
Factory	Pulse Audio	Vivid Strings	Cellos (a3)	VS Cellos a3	PC
Factory	Pulse Audio	Vivid Strings	Violas (a3)	VS Violas a3	PC
Factory	Pulse Audio	Vivid Strings	Violins 2 (a3)	VS Violins 2 a3	PC
Factory	Pulse Audio	Vivid Strings	Violins 1 (a4)	VS Violins 1 a4	PC
Factory	Audiobro	LA Scoring Strings 3	Strings	LASS3 - Master Att	PC
Factory	Audiobro	LA Scoring Strings 3	Strings	LASS3 - Master (Att) [without placeholder]	PC
Factory	Spitfire Audio	Abbey Road Orchestra Strings	1st Violins (a16)	ARO 1st Violins a16	PC
Factory	Spitfire Audio	Abbey Road Orchestra Strings	Cellos (a10)	ARO Cellos a10	PC
Factory	Spitfire Audio	Abbey Road One Selections	Cellos (a10), Bas...	AROS Legendary Low Strings	PC
Factory	Spitfire Audio	Abbey Road One Selections	Oboes (a2), Clari...	AROS Mysterious Reeds	PC
Factory	Spitfire Audio	Abbey Road One Selections	Oboe (a1), Clarin...	AROS Vibrant Reeds	PC
Factory	Spitfire Audio	Abbey Road One Selections	Flutes (a2), Picco...	AROS Wondrous Flutes	PC
Factory	Spitfire Audio	Abbey Road Orchestra - High Percussion	Bongos	ARO Bongos	PC
Factory	Spitfire Audio	Abbey Road Orchestra - High Percussion	Darbuka	ARO Darbuka	PC
Factory	Spitfire Audio	Abbey Road Orchestra - High Percussion	Djembe	ARO Djembe	PC
Factory	Sonokinetic	Sonokinetic Orchestral Strings	1st Violins (a9+7)	SOS 1st Violins a16	PC

Details Panel for VS Violins 1 a4:

- Name: VS Violins 1 a4
- Developer: Pulse Audio
- Library: Vivid Strings
- Instrument: Violins 1 (a4)
- Trigger Type: PC
- Creator: Maestro
- Rating: ★★★★★ Avg: 4.5 You: 4.5
- Description: v1.1

Buttons at the bottom: Import, Download, Upload, Edit, Delete

WORKFLOW 4: CAPTURING ARTICULATIONS WITH IQLENSE BASIC

This workflow uses the iQLense companion tool to automatically create articulations by reading them from your screen.

- 1. Arrange Your Windows:** Position your virtual instrument plugin so its articulation list is clearly visible. Position the ArtiQverse window nearby.
- 2. Launch iQLense:** Click the **iQL** button in the **Toolbox**. The iQLense interface will appear.



- 3. Start a Manual Capture:** In the iQLense window, click **Capture and OCR**.



- 4. Select the Region:** Your mouse cursor will turn into a crosshair. Click and drag a rectangle around the name of a single or multiple articulations in your plugin's interface.



- 5. Confirm:** Release the mouse button. iQLense will process the image, recognize the text, and instantly send it to ArtiQverse, creating a new articulations with the captured name.

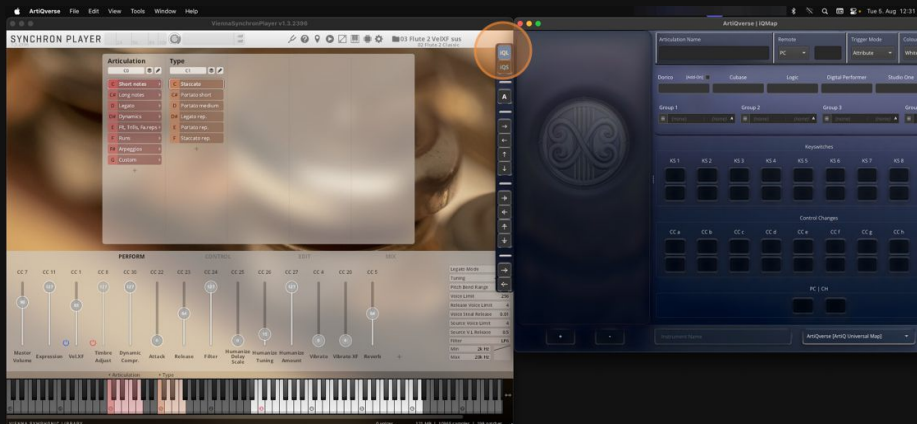


Note: iQLense *Basic* (included with your purchase of ArtiQverse) only captures the articulation names as displayed within the selected screen region. If you like to automatically capture output triggers in addition to articulation names, you may want to use iQLense *Pro* (optional add-on purchase). Read more about the workflow with iQLense Pro below.

WORKFLOW 5: CAPTURING ARTICULATIONS AND TRIGGERS WITH IQLENSE PRO

The optional add-on iQLense Pro allows you to semi-automatically capture articulation names and output triggers.

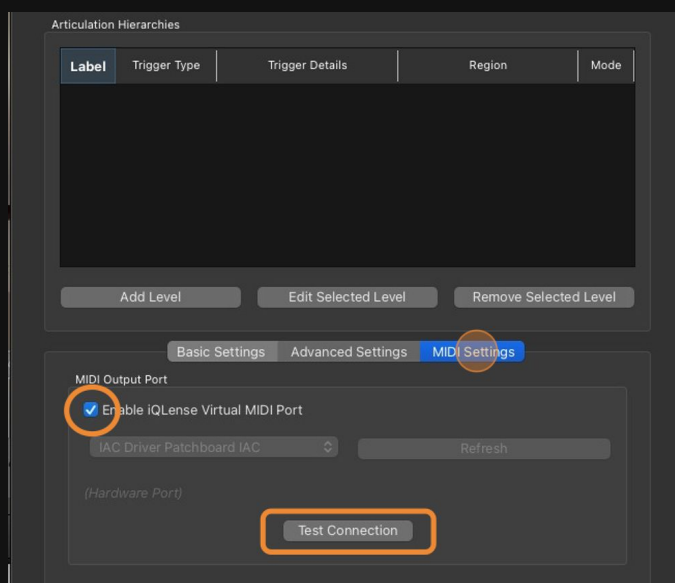
- 1. Launch iQLense:** Click the **iQL** button in the **Toolbox**. The iQLense interface will appear.



- 2. Setup PRO Scan:** In the iQLense System Menu Toolbar select **Setup PRO Scan**. A new dialog window will open.



- 3. Configure MIDI:** Switch to the **MIDI Settings** tab. You can select the internal iQLense Virtual MIDI Port (macOS only) or any other MIDI port available on your system. *Note:* On Windows, due to system restrictions, you will need to set up a virtual MIDI driver, such as loopMIDI by Tobias Erichsen, which you can download at <https://www.tobias-erichsen.de/software/loopmidi.html>



4. Define Articulation Hierarchies: iQLense Pro allows for scanning an infinite number of articulation hierarchies (e.g. LONGS > LEGATO > Legato vib) and automatically capturing their output triggers (e.g. keyswitches, velocity, cc, pc, channel). To configure an articulation hierarchy, click on **Add Level** in the Articulation Hierarchy section.

a) **Label [a]:** Customize the label for an articulation hierarchy for easy identification.

b) **Trigger Event [b]:** Select the desired **Type** (i.e. Keyswitch, Velocity, CC, PC) and channel of the trigger that controls the articulation. If using keyswitches, define the range of triggers by entering the **Start** keyswitch (e.g. C-2) and the **End** keyswitch (e.g. B-2).

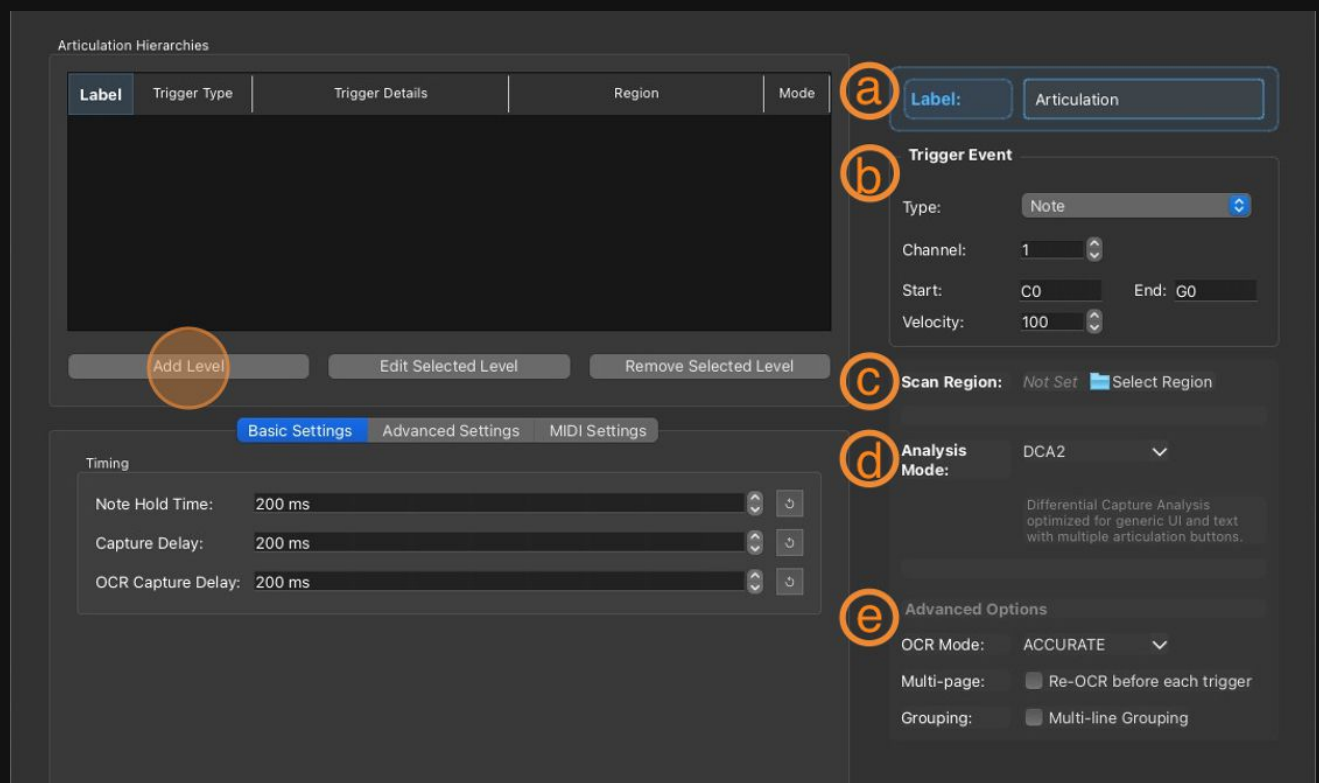
c) **Scan Region [c]:** Click on **Select Region** and draw a selection rectangle around the area where the UI of your virtual instrument displays the articulation names. After making the selection, do not move the window of your VI for the scan to use the correct screen coordinates.

d) **Analysis Mode [d]:** Choose the appropriate analysis algorithm (DCA2, SCA, DCAg).

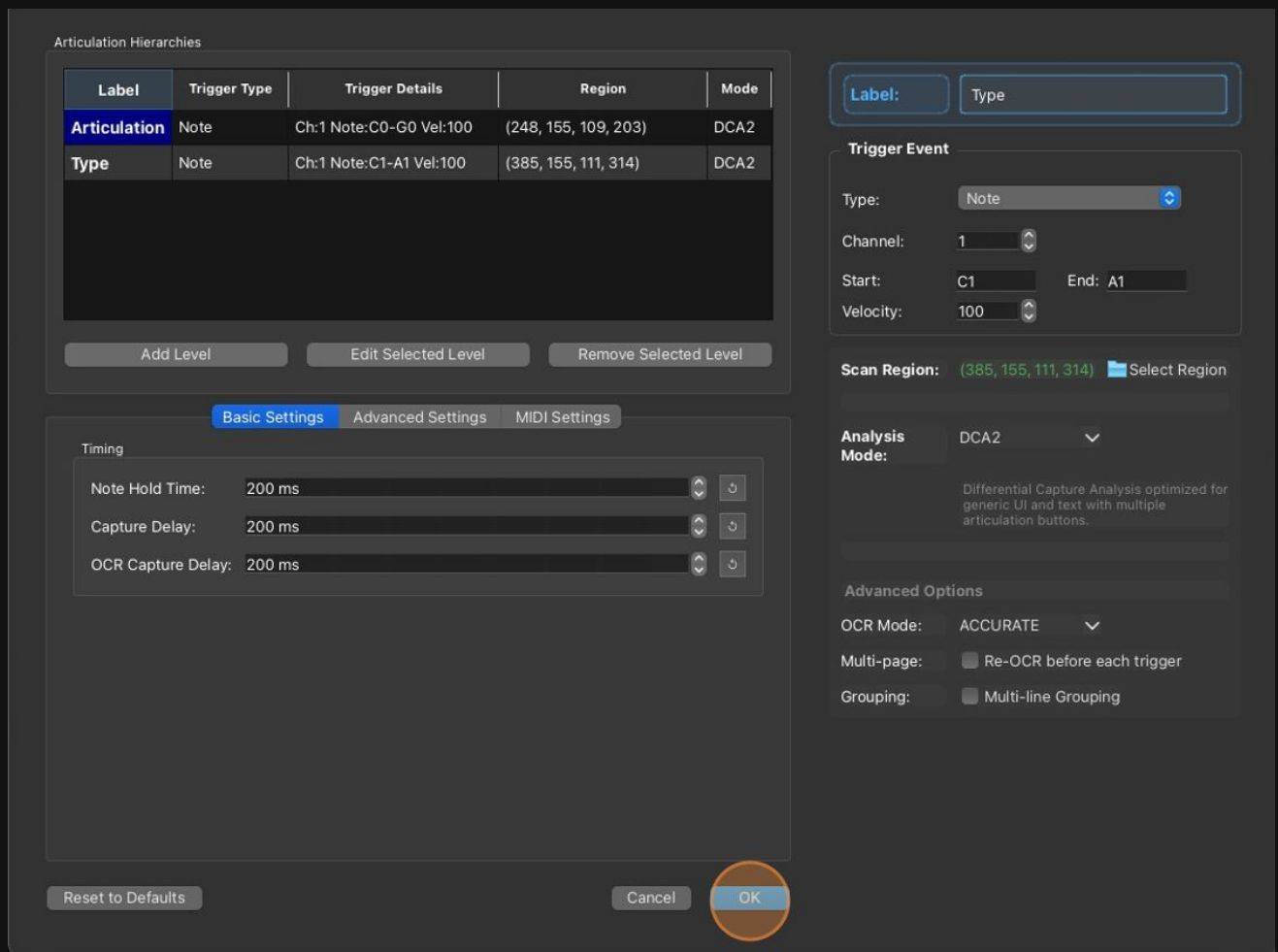
- **DCA2 (Differential Capture Analysis):** Multiple articulation buttons showing articulation names on different locations on screen.
- **SCA (Single Capture Analysis):** Info pane showing articulation information in a single location on screen.
- **DCAg (Differential Capture Analysis graphical):** A variant of DCA optimized for graphical UIs with multiple articulation buttons on different locations on screen.

e) **Advanced Options [e] (OPTIONAL):**

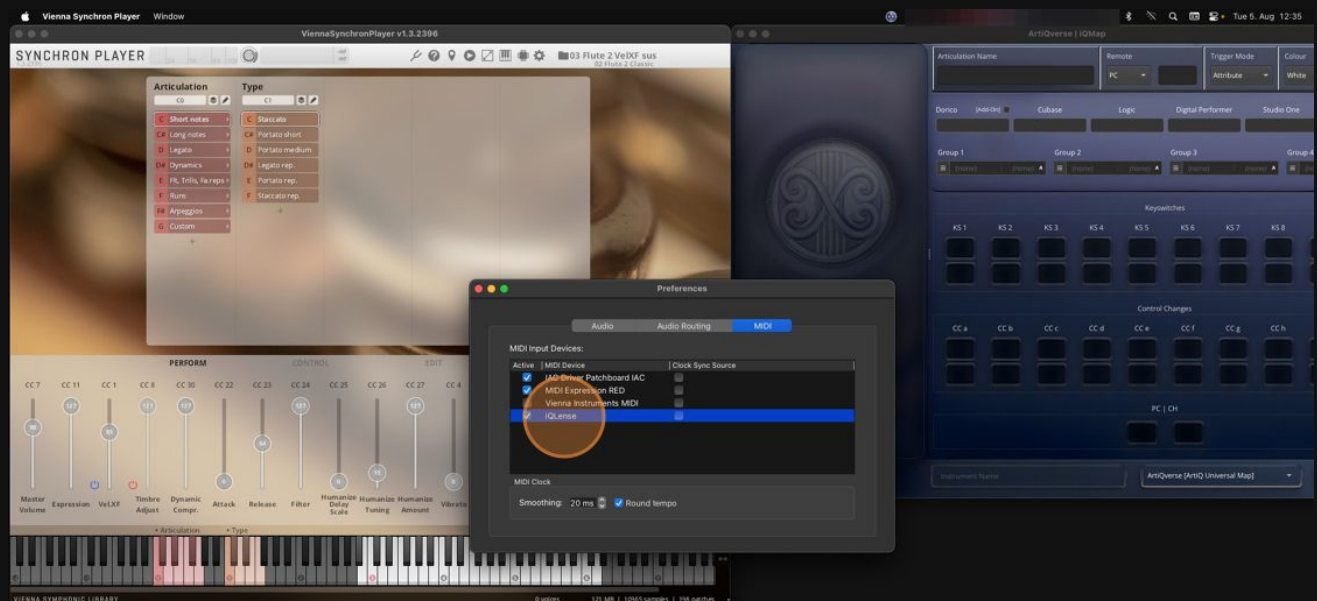
- **OCR Mode:** Selects the model for (OCR) Optical Character Recognition.
- **Multi-page:** Select if the UI of an instrument contains more than 1 page containing articulation names.
- **Grouping:** Select if articulation names are spread across multiple lines.



- 5. Confirm:** Settings are auto-saved upon input. If you wish to add more articulation hierarchy levels, simply click on Add Level and repeat step 4 (a-e). After all settings are in place, confirm by clicking on "OK".

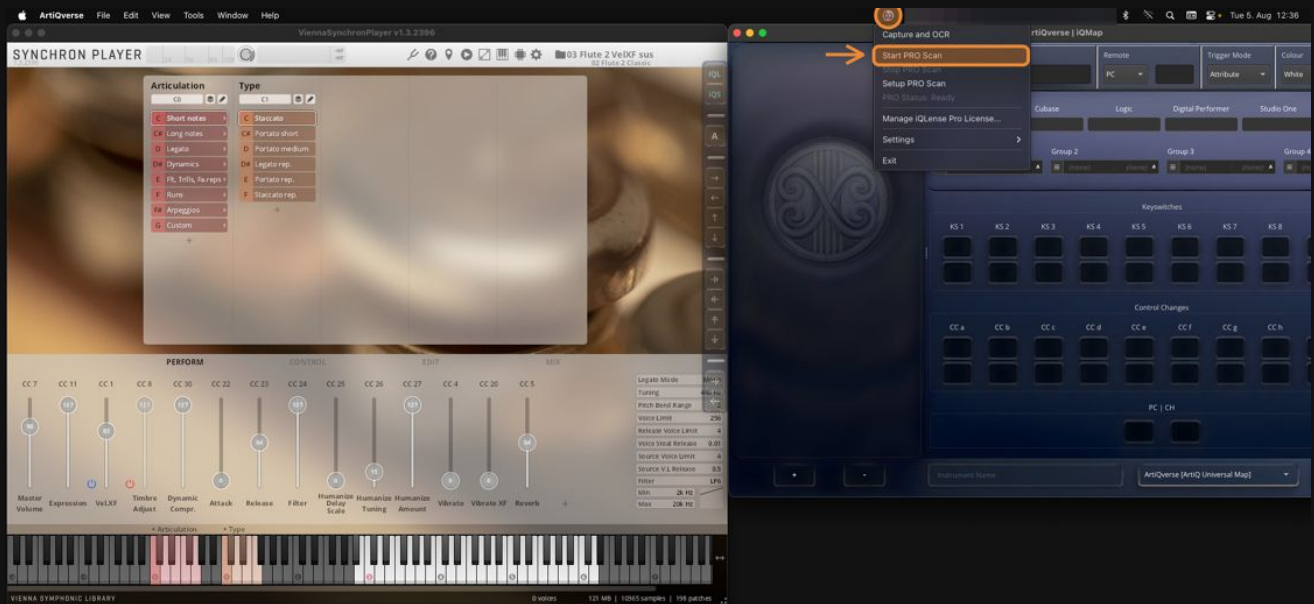


- 6. Verify Instrument MIDI Settings:** In your virtual instrument (e.g. VSL Vienna Synchron Player), ensure that you have enabled the MIDI input port configured at step 4 (e.g. iQLense Virtual MIDI Port).

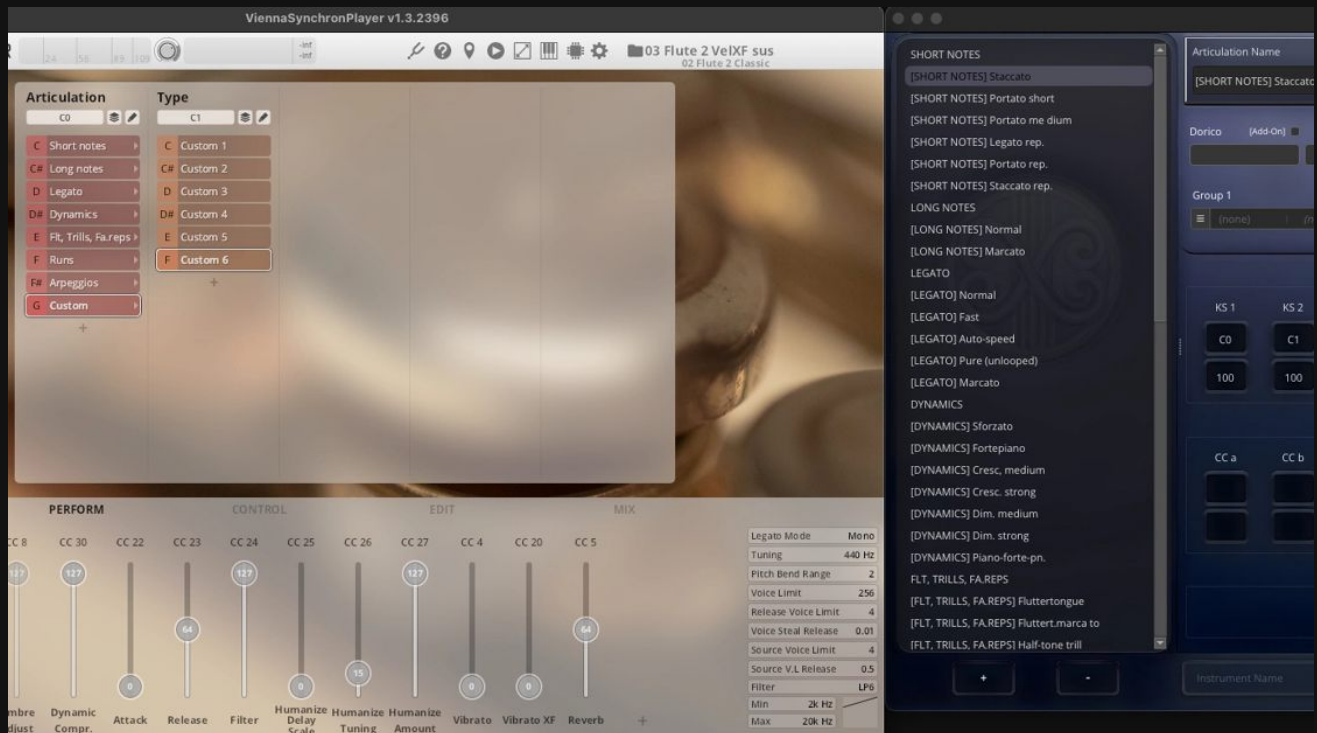


- 7. Start PRO Scan:** The PRO Scan will send out the configured MIDI trigger ranges, capture and detect the articulations, and send your ready-made articulation map to ArtiQverse.

Note: Make sure that the instrument UI is visible on screen and located in the same position where you defined the region during setup.



- 8. Done:** Your ready-made articulation map (with hierarchical structure and formatting) is automatically sent to ArtiQverse.



4. FEATURE REFERENCE

ARTICULATION LIST

This is the panel on the left of the main window where all your articulations are listed.

- **Selection:** Supports single and multi-selection (`Ctrl/Cmd+Click`).
- **Reordering:** Click and drag articulations to change their order in the map.
- **Context Menu:** Right-click on an articulation to access Cut, Copy, Paste, Delete, and Select All commands.

MAIN CONTROL AREA

This central area contains the core settings for the selected articulation(s).

DESCRIPTORS & TRIGGERS

- **Articulation Name:** The primary display name for the articulation.
- **Remote:** Define the remote trigger by which you select the articulation inside your DAW. These fields automatically update based on the remote mode (PC, KS, CC) and their respective values.
- **Trigger Mode:** Defines how the articulation behaves in certain DAWs (Attribute, Direction, Toggle). "Attribute" is the most common setting.
- **Color:** Assign a color to the articulation for visual organization in supported DAWs.

DAW SYMBOL SELECTORS

A row of dropdown menus, one for each major DAW or notation app. Selecting a symbol in one dropdown will cause ArtiQverse to automatically select the best equivalent symbol in all other DAW menus.

GROUPS

Each articulation can hold up to four Groups (available for DAWs that support grouping, e.g. Cubase/Nuendo, Reaticulate). This is managed by a custom dual-display widget.

- **Left Side (Group Assignment):** Shows the assigned group. Click to open a menu to select an existing group or add a new one.
- **Right Side (Group Symbol):** Shows the Cubase symbol specifically for that group. Click to select a symbol.
- **Trigger (A/D):** A small dropdown to the right to set the group's trigger type (Attribute/Direction).

OUTPUT SECTIONS

- **Keyswitches:** Assign up to 10 MIDI keyswitches (top row) and their corresponding velocities (bottom row) to trigger the articulation.
- **Control Changes:** Assign up to 10 CC messages. Top row: CC number (e.g., 1 for Modulation), bottom row: value (0-127).
- **PC | CH:** The left field ("PC") is for Program Change messages. The field next to it ("CH") sets the MIDI channel (1-16) for all outputs of this articulation.

THE TOOLBOX

This floating palette provides quick access to essential tools.



- **iQL Button:** Launches the iQLense OCR tool.
- **iQS Button:** Opens the iQSpace Repository browser.
- **A/R Toggle:** Toggles the editing mode for value adjustments.

- **A (Absolute):** When you edit a value for multiple selected articulations, the *same value* is applied to all of them.

Example A1: In **Absolute** mode, changing the octave of KS1 (e.g. C-2 > C0) will apply the same value to KS1 in all selected articulations (e.g. C#-2 > C0).

Example A2: In **Absolute** mode, raising KS1 by a minor third (e.g. C0 > D#0) will apply the same same value to KS1 in all selected articulations (e.g. C#0 > D#0).

- **R (Relative):** When you edit a value for multiple selected articulations, the *difference* is applied to all of them, preserving their relative offsets.

Example R1: In **Relative** mode, changing the octave of KS1 (e.g. C-2 > C0) will relatively adjust the octave of KS1 in all selected articulations (e.g. C#-2 > C#0).

Example R2: In **Relative** mode, raising KS1 by a minor third (e.g. C0 > D#0) will relatively shift KS1 by a minor third in all selected articulations (e.g. C#0 > E0).

- **Adjustment Controls:** Buttons for nudging values up/down by small or large increments, or for applying sequential values across a selection.

Pro Tip: The most powerful way to use the adjustment controls is with keyboard shortcuts. With a value field selected, use:

- **Alt + Up/Down Arrow** : Adjust value by +/- 1.
- **Alt + Left/Right Arrow** : Adjust note value by +/- 1 semitone.
- **Alt + Shift + Arrow** : Adjust values by larger increments (+/- 20 for values, +/- 12 for semitones).

- **Sequential Adjustment:** Buttons for sequential increment (+1) and sequential decrement (-1).

Workflow:

1. Select the articulation where to start the sequential adjustment from.
2. Select all articulations that you wish the adjustment to apply to.
3. Place the cursor inside the target field (e.g. KS1: C0)
4. Click on Button **Sequential Increment +1** or **Sequential Increment -1** to sequentially adjust the focused field across the selected articulations. The changes will be automatically applied (e.g. Art 1: C0, Art 2: C#0, Art 3: D0, etc.)

THE SIDE PANEL

The image shows a side panel with two tabs: 'Details' and 'Supplementary File'. The 'Details' tab is active, displaying a form for editing metadata. The 'Supplementary File' tab is also visible, showing a 'Download' button and an 'Add Files' button at the bottom.

Details Tab:

- Name: VDS Violins 1 (a8)
- Developer: Vienna Symphonic Library
- Library: Vienna Dimension Strings
- Instrument: Violins 1 (a8)
- Trigger Type: KS
- Creator:
- Category:
- Description: Customized patch extending section size to a8.

Supplementary File Tab:

- VDS Violins 1 (a8).vsynpreset
- Download
- Add Files

Collapsible panel on the right for metadata and file attachments.

- **Details Tab:** Edit metadata for your articulation map, such as Developer, Library, and a Description. This information is saved with the `.artiq` format and is displayed on iQSpace.
- **Supplementary File Tab:** Attach related instrument files (e.g., Kontakt `.nksn` snapshots, vsynpreset, VST presets, etc.) directly into your `.artiq` file. This creates a complete, portable package for your instrument setup.

MENU BAR

- **File:** New Window, Open, Save As, Batch Convert, and access to Preferences.
- **Edit:** Undo/Redo, Cut/Copy/Paste, and shortcuts for value adjustments.
- **View:** Options for adjusting UI appearance, like increasing contrast.
- **Tools:** Quick access to iQLense and iQSpace.
- **Window:** Manage multiple open ArtiQverse windows.
- **Help:** Check for updates and view the "About ArtiQverse" dialog.

APPLICATION PREFERENCES

Accessed via **File > Preferences** (Windows) or **ArtiQverse > Preferences** (macOS).

- **General:** Manage your license keys, see a list of activated devices, and toggle automatic update checking.
- **Logging:** Control the level of application logging, which is useful for troubleshooting with technical support.
- **iQSpace:** View your iQSpace account status, log out, or manage your account.

5. ARTIQVERSE: PRO TIPS & BEST PRACTICES

- **Use Multi-Selection + Relative Mode:** To transpose an entire section of keyswitches, select them all, toggle the Toolbox to **R (Relative) Mode**, and change the first keyswitch. All other selected keyswitches will be transposed by the same interval.
- **Organize for Batch Conversion:** When running a batch conversion, you have two options: a) Either you place all your source files in a single folder or b) you simply task the app to mirror the folder structure. This keeps the process clean and organized.
- **Leverage the Side Panel:** When preparing a map for sharing on iQSpace, fill out the metadata in the **Side Panel's Details Tab** and add your instrument configuration as a supplementary file. A good description makes your map much more useful to the community.

6. IQLENSE USER GUIDE

OVERVIEW

Welcome to iQLense, the intelligent screen capture and OCR companion for ArtiQverse. iQLense is designed to streamline the creation of articulation maps by extracting articulation text directly from your virtual instrument interfaces.

This guide covers both iQLense Basic, included with every copy of ArtiQverse, and the powerful features of the iQLense Pro upgrade.

- **iQLense Basic:** Provides essential manual screen capture and OCR.
- **iQLense Pro:** Unlocks advanced, automated scanning workflows for professional use.

■ IQLENS BASIC ■

■ INSTALLATION ■

iQLense Basic is automatically installed alongside ArtiQverse. After installation, you will find the iQLense icon in your system tray (usually at the bottom-right on Windows) or system menu bar (at the top-right on macOS).

On macOS, please ensure that you have successfully completed the onboarding process in ArtiQverse before using iQLense. This pertains particularly to the screen recording permissions required for iQLense to function. If screen recording permissions have not been set, iQLense will give a prompt to enable them in system preferences. If you wish to do this manually, follow these steps:

1. Open System Settings > Privacy & Security > Screen Recording
2. Ensure ArtiQverse is enabled in the list
3. Click the lock icon in the bottom left to make changes
4. Enter your password
5. Click the lock icon again to confirm
6. Restart ArtiQverse

■ YOUR FIRST CAPTURE ■

1. Locate the **iQLense icon** in your system menu bar (macOS) or system tray (Windows).
2. **Click** the icon to open the context menu.
3. Select "**Capture and OCR**". Your screen will dim, indicating capture mode is active.
4. **Click and drag** to draw a selection box around the text you wish to capture.
5. Release the mouse button. The captured text will be automatically processed and sent to ArtiQverse.

■ KEYBOARD SHORTCUTS ■

For even faster access, use the global keyboard shortcut:

- **Windows/Linux:** `Ctrl+Shift+L`
- **macOS:** `Cmd+Shift+L`

MANUAL CAPTURE WORKFLOW

The manual capture process is simple and effective for quickly grabbing one or more articulations.

- 1. Prepare Your Screen:** Make sure the instrument's interface is visible and the articulation text is clear. Good contrast between the text and its background will improve OCR accuracy.
- 2. Initiate Capture:** Use the keyboard shortcut or the system tray menu option ("Capture and OCR"). Your screen will dim and a crosshair cursor will appear.
- 3. Select a Region:** Click and drag to draw a rectangle around the text. The selected area will be highlighted. You can adjust the selection by moving your mouse before releasing the button.
- 4. Processing:** Upon releasing the mouse, iQLense processes the selected image in the background. A notification will appear confirming a successful capture.
- 5. View Results:** The recognized text will automatically appear in the ArtiQverse application, ready to be used in your map.

Tip: For best results, draw the selection box tightly around the text. Avoid capturing large areas of empty space or GUI elements that are not text.

■ SETTINGS & CUSTOMIZATION ■

You can customize iQLense Basic's behavior via the system tray menu.

■ REGION SELECTOR COLOR ■

Change the color of the selection rectangle for better visibility against different backgrounds.

- **Path:** Right-click icon → Settings → Region Selector Color
- **Options:**
 - **Bright Blue** (Default)
 - **Bright Cyan**
 - **Red**

■ DEBUGGING & LOGGING ■

For troubleshooting, you can control logging levels and save captured images.

- **Path:** Right-click icon → Settings → Debug
- **Options:**
 - **Logging Level:**
 - **No Logging:** Best performance, minimal output.
 - **Standard Logging:** Records basic operational information.
 - **Detailed Logging:** Comprehensive data for troubleshooting with support.
 - **Enable Debug Images:** When checked, saves a copy of every captured image to a debug folder for analysis.

■ TROUBLESHOOTING (BASIC) ■

- **No Text Detected:** This can happen if the text is too small, blurry, has poor contrast, or uses a highly stylized font. Try zooming in on your instrument's GUI or selecting a smaller, clearer portion of text.
- **Can't See Selection Rectangle:** The color of the selection rectangle may be blending in with your screen's background. Change the **Region Selector Color** in the settings.
- **Results Not Appearing in ArtiQverse:** Ensure the main ArtiQverse application is running. If the problem persists, try restarting both ArtiQverse and iQLense.

■ iQLENS PRO

iQLense Pro is the ultimate upgrade for power users, replacing tedious manual capture with sophisticated, automated scanning technology.

■ ACTIVATING iQLENS PRO

To unlock Pro features, you need an active iQLense Pro license in addition to your base ArtiQverse license.

1. **Purchase a License:** Visit artiqverse.com to purchase an upgrade.
2. **Activate:** Click on the iQLense menu bar or tray icon and select "**Activate iQLense Pro...**". Enter your license key when prompted.
3. **Check Status:** The iQLense menu will display your license status.
 - **PRO Status: Unlicensed:** The Pro license is not active. The menu will show an "Upgrade..." option.
 - **PRO Status: Ready:** The Pro license is active and all features are unlocked. The menu will show "Manage iQLense Pro License..."

■ INTRODUCTION TO AUTOMATED SCANNING

iQLense Pro analyzes your instrument's interface using one of three powerful analysis methods, which you can set for each step of your scan.

- **DCA2 (Differential Capture Analysis v2):** The most versatile mode. It detects changes anywhere within a selected region, making it perfect for interfaces with multiple buttons or text elements that change position.
- **SCA (Single Capture Analysis):** Highly efficient for simple interfaces where the articulation name always appears in the exact same location. It only monitors that one spot for text changes.
- **DCAg (Differential Capture Analysis - Graphical):** Designed for icon-based interfaces. It detects changes in graphical elements (like a button lighting up) rather than relying on text.

THE PRO SCAN WORKFLOW: A STEP-BY-STEP GUIDE

The power of Pro Scan lies in its hierarchical approach. You can build a multi-level scan that mimics how you use the instrument (e.g., Level 0 selects a bank, Level 1 selects an articulation).

STEP 1: OPEN PRO SCAN SETUP

First, open the main configuration window.

- **Path:** Right-click icon → **"Setup PRO Scan"**

This opens the "Differential Capture Analysis Settings" dialog. This is your command center for all Pro features.

STEP 2: UNDERSTANDING THE HIERARCHY

The "Articulation Hierarchies" section is where you define the steps of your automated scan. Each row in the table represents one level of the scan. A simple scan might only have one level (e.g., stepping through keyswitches). A complex scan could have multiple levels (e.g., first sending a CC message to change banks, then stepping through keyswitches).

STEP 3: CONFIGURING A HIERARCHY LEVEL

Click **"Add Level"** to begin. The editor pane will appear on the right. Here's how to configure a level:

1. **Label:** Give the level a descriptive name (e.g., "Instrument Select", "Keyswitches").
2. **Trigger Event:** Define what MIDI event iQLense should send to trigger a change in the instrument.
 - **Type:** Choose the MIDI event type:
 - **Note:** Scans a range of MIDI notes (keyswitches).
 - **Note with Velocity Range:** Sends a single note repeatedly while scanning a range of velocities.
 - **Control Change (CC):** Scans a range of values for a specific CC number.
 - **Program Change (PC):** Scans a range of Program Change messages.
 - **Parameters:** Fill in the specific values for your chosen type (e.g., Start Note, End Note, CC Number).
 - **Channel:** Set the MIDI channel (1-16).
3. **Configuration:** Define how iQLense should analyze the screen after sending the trigger.
 - **Scan Region:** Click **"Select Region"** to draw a box on the screen where the articulation name is expected to appear for this level.
 - **Analysis Mode:** Choose DCA2, SCA, or DCAg based on the instrument's interface.
4. **Advanced Options:** Fine-tune the behavior.
 - **OCR Mode:** Choose between **ACCURATE** (slower, more precise) and **FAST** (quicker, for clear text).
 - **Multi-page (Re-OCR):** (*DCA2 only*) Check this if each trigger completely changes the UI layout (like switching pages).
 - **Grouping (Multi-line):** Check this to group vertically adjacent text into a single articulation name.

The editor uses an **auto-save** feature. Your changes are saved as soon as you make them.

STEP 4: CONFIGURING MIDI

Before you can run a scan, you must tell iQLense where to send the MIDI triggers.

1. Navigate to the **"MIDI Settings"** tab in the Pro Scan Setup window.
2. Choose your MIDI output:
 - **Hardware Port:** Select your physical or software MIDI interface from the dropdown list. Click "Refresh" if your port isn't visible.
 - **Virtual Port (macOS only):** Check **"Enable iQLense Virtual MIDI Port"**. This creates a dedicated virtual output that you can route to in your DAW.
 - **Virtual Port (Windows only):** On Windows due to system restrictions, you will need to use a virtual MIDI driver, such as loopMIDI by Tobias Erichsen, which you can download at <https://www.tobias-erichsen.de/software/loopmidi.html>. After setup you can select the loopMIDI port as your virtual port in iQLense.

Note: Ensure that you have set up the correct MIDI port in both iQLense and your VI Host (Sampler, DAW, etc.)

3. Click the **"Test Connection"** button to send a test note and confirm your routing is correct.

STEP 5: RUNNING THE SCAN

Once your hierarchy and MIDI are configured, you're ready to go.

1. Click **"OK"** to close the setup dialog.
2. Right-click the tray icon and select **"Start PRO Scan"**.
3. iQLense will now automatically execute the hierarchy you defined, sending MIDI triggers and capturing the resulting articulation names. The results are sent to ArtiQverse in real-time.

To stop a scan in progress, right-click the icon and select **"Stop PRO Scan"**.

PRO FEATURE REFERENCE

THE HIERARCHY EDITOR (DETAILED)

This pane is where you define each step of the scan.

- **Trigger Types:**

- **Note:** `Start Note` , `End Note` , `Velocity` .
- **Note with Velocity Range:** `Note` , `Start Vel` , `End Vel` .
- **Control Change (CC):** `CC #` , `Start Val` , `End Val` .
- **Program Change (PC):** `Start Prog` , `End Prog` .

- **Analysis Modes:**

- `DCA2` : For generic UIs with multiple changing text elements.
- `SCA` : For UIs with a single, static location for articulation text.
- `DCAg` : For graphical/icon-based UIs.

- **Advanced Options:**

- `OCR Mode` : `ACCURATE` (default, desktop models) or `FAST` (mobile models).
- `Re-OCR before each trigger` : (DCA2 only) Rescans the entire region for text before analyzing changes. Essential for paginated UIs.
- `Multi-line Grouping` : When enabled, combines text on multiple lines into one result. Default is `Disabled` .

GLOBAL PRO SCAN PARAMETERS

These settings, found in the "Basic" and "Advanced" tabs, affect all scans.

Parameter	Tab	Default	Description
Note Hold Time	Basic	200ms	How long a MIDI note is held down. Increase for slow-loading samples.
Capture Delay	Basic	200ms	Delay after sending MIDI before capturing the screen. Increase for slow UI animations.
OCR Capture Delay	Basic	100ms	Additional delay specifically for OCR processing to handle fading text.
Difference Threshold	Advanced	10.0	(DCA2/SCA) Sensitivity to pixel changes. Lower is more sensitive.
Min Contour Area	Advanced	100.0	(DCA2/SCA) The minimum size (in pixels) of a changed area to be considered.
OCR Confidence	Advanced	0.6	The minimum confidence score (0.0-1.0) for an OCR result to be accepted.
HSV Value Threshold	Advanced	30	(DCA2/SCA) Sensitivity to changes in brightness.
HSV Saturation Threshold	Advanced	25	(DCA2/SCA) Sensitivity to changes in color intensity.
DCAg Grayscale Diff	Advanced	25	(DCAg) Sensitivity to graphical changes.
DCAg Min Contour Area	Advanced	50.0	(DCAg) The minimum size of a changed graphical area.
Vertical Grouping Factor	Advanced	0.2	Controls how close text lines must be to be grouped.

PRACTICAL USE CASES & EXAMPLES

- **Simple Keyswitch Library:** Create a single hierarchy level. Set **Trigger Type** to "Note" and define the `Start Note` and `End Note` of your keyswitches. Use the **DCA2** Analysis Mode.
- **Complex Orchestral Library with Banks:**
 1. **Level 0:** Create a level to select the instrument bank. Set **Trigger Type** to "CC", define the `CC #`, and set `Start Val` and `End Val` to step through the articulations.
 2. **Level 1:** Create a second level for the articulations within each articulation. Set **Trigger Type** to "Note" to scan the keyswitches. In this level's advanced options, check **"Re-OCR before each trigger"** to ensure iQLense re-reads the interface after each articulation change and thus also captures page changes of the UI.

TROUBLESHOOTING (PRO)

- **Activation Fails:** Ensure you have an active internet connection for the first activation. Verify that both your ArtiQverse and iQLense Pro licenses are valid.
- **Scan Detects Nothing:**
 - Check your **MIDI Settings** with the "Test Connection" button.
 - Change the **Analysis Model** to the appropriate alternative (DCA2, SCA, DCAg)
 - Increase the **Capture Delay** if the instrument's UI has slow animations.
 - Adjust the **Scan Region** to be more precise.
 - For subtle text changes, try lowering the **Difference Threshold**.
- **MIDI Not Working:**
 - On macOS, try using the **iQLense Virtual MIDI Port**.
 - Ensure no other application is using the selected hardware MIDI port exclusively.
 - Check that the MIDI **Channel** in your hierarchy level matches the instrument's listening channel.
- **Configuration:** All Pro Scan settings are saved to `dca2_config.json` in your application data folder, preserving your setups between sessions.

7. IQSPACE REPOSITORY GUIDE

WHAT IS IQSPACE?

iQSpace is the online, community-driven hub for ArtiQverse users. It's a cloud-based repository where you can discover, download, and share articulation maps. All uploads and downloads are handled through the native `.artiq` format, ensuring that rich metadata and any supplementary files are preserved.

ACCESSING THE REPOSITORY

You can open the iQSpace Repository browser in two ways:

- 1. From the Toolbox:** Click the `iQS` button on the floating Toolbox.
- 2. From the Menu Bar:** Navigate to **Tools > iQSpace Repository** (`Ctrl/Cmd+Shift+R`).

Registration: Upon first access, a login dialog will appear, integrated within the ArtiQverse interface. An active internet connection is required. Please note that due to the inclusion of a commentary and upload system in our repository, Austrian law requires us to impose a user account system. Thus, you will be prompted to enter your desired login data alongside your serial number during **Sign Up**.

Note: While the raison d'être of a registration may be puzzling to some (as are so many other issues in politics), rest assured that we will handle your registration data with utmost care and thus reduce data collection to the absolute minimum (email, login, serial). We do not track your IP nor usage of the repository. However, we ask our users to respect our Terms of Service (ToS) and refrain from uploading copyrighted content, such as articulation maps from other vendors. To avoid accidental uploads of copyright content, we implement checks during upload that will inform the user in case of an uploaded articulation map not meeting this requirement.

BROWSING AND FINDING MAPS

The repository browser provides powerful tools to help you find the exact map you need.

- **Search Bar:** Performs a real-time search across all visible columns as you type.
- **View Modes:** Switch between Flat View (simple, sortable list) and Tree View (hierarchical organization).
- **Customizing Columns:** In Flat View, right-click any column header to show or hide columns (e.g., "Creator" and "Rating").

IMPORTING AND DOWNLOADING MAPS

- **Importing a Map to ArtiQverse:** Select the map you want from the list and click the **Import** button. The map will be downloaded and loaded directly into ArtiQverse.
- **Downloading a Map:** Select one or more maps from the list and click the **Download** button to save the `.artiq` file(s) to your computer.

UPLOADING YOUR MAP

Sharing your work is handled via a convenient slide-out side panel.

1. Click the **Upload** button to slide out the **Upload Side Panel**.
2. **Select File or Folder:** Choose the `.artiq` file or folder you wish to upload.
3. **Fill Metadata:** The metadata fields (Name, Developer, etc.) will be pre-filled from the data in your `.artiq` file. You can override or complete this information here.
4. Click **Upload**.

MANAGING YOUR UPLOADS

You can only edit or delete articulation maps that you have created and uploaded yourself.

- **Editing:** Select one of your own maps and click the **Edit** button to update metadata or replace the file.
- **Deleting:** Select one of your own maps and click the **Delete** button. A confirmation dialog will appear.

MANAGING YOUR IQSPACE ACCOUNT

Navigate to **File > Preferences** and select the **iQSpace** tab to view your account status, log out, or delete your account.

8. TROUBLESHOOTING & FAQ

- **Q: iQLense doesn't work or says it needs permissions on my Mac.**
 - **A:** iQLense requires Screen Recording permission to see your screen. Go to **System Settings > Privacy & Security > Screen Recording**. Make sure ArtiQverse is in the list and its toggle is enabled. You may need to restart ArtiQverse for the change to take effect.
 - **Q: I uploaded a map to iQSpace but now I can't find it.**
 - **A:** Make sure you are logged into your iQSpace account. You can check your status in **Preferences > iQSpace**. Also, try clearing any active search filters in the repository browser.
 - **Q: I pasted a list of articulation names, but they didn't get keyswitches.**
 - **A:** When pasting plain text, ArtiQverse creates the articulations but does not know what their triggers are. You must assign the keyswitches or CCs manually after pasting. For automated capture of triggers and names, you need iQLense Pro.
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