

Table of Contents

<u>Variations2 Version 2 User Interface Specification</u>	1
<u>Overview</u>	1
<u>Variations2 Version 2 User Interface Specification</u>	2
<u>Search</u>	2
<u>Variations2 Version 2 User Interface Specification</u>	5
<u>Player</u>	5
.....	5
<u>Variations2 Version 2 User Interface Specification</u>	6
<u>Viewer</u>	6
.....	6
<u>Variations2 Version 2 User Interface Specification</u>	7
<u>Edit Bookmarks</u>	7
.....	7
<u>Variations2 Version 2 User Interface Specification</u>	8
<u>Timeliner</u>	8
<u>Variations2 Version 2 User Interface Specification</u>	12
<u>Opus</u>	12
<u>I. DESCRIPTION</u>	12
<u>II. UI COMPONENTS</u>	12
<u>III. MENU OPTIONS</u>	13
.....	14
<u>Variations2 Version 2 User Interface Specification</u>	15
<u>Record View</u>	15
.....	16
<u>Variations2 Version 2 User Interface Specification</u>	17
<u>Admin – Edit Measure Bindings</u>	17
<u>I. Changes to existing windows</u>	17
<u>II. New windows</u>	17
.....	20
<u>Variations2 Version 2 User Interface Specification</u>	21
<u>Admin – Other</u>	21
<u>Variations2 Version 2 User Interface Specification</u>	23
<u>General</u>	23
.....	23

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Overview

This document specifies the Variations2 Version 2 user interface. Note that this document assumes as a starting point of reference the Variations2 Version 1.1 software. Only changes and improvements from that version are discussed here. Version 2 features changes and improvements to all Variations2 windows, and adds additional functionality through 2 new window types, the Opus window for viewing synchronized score and audio, and the Timeliner window for creating and displaying audio-based form diagrams, as well as new Administrative windows to support the synchronization functionality.

Sections marked **TODO** are still unfinished, and sections marked **NOTE** contain developer's notes or other information.

Change Log

12/19/2002 – Initial version (Jim)
1/9/2003 – Slight revision (Jim)
1/13/2003 – Added link to printable PDF (Ryan)
1/15/2003 – Format change (Jim)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Search

The following changes will be made to the Search window interface.

1. INITIATION OF OPUS WINDOW

In Version 1, the user initiates Players and Viewers from either the Instantiation or Container selection screens. Changes made to those screens will additionally allow Opus windows to be initiated from those screens. Also note that each click on an Opus window link will bring up a new Opus window; unlike Players and Viewers, Opus windows are never reused. This is because for each work, a variety of Opus windows with different Containers and work sections could be created.

From Instantiation selection screen

For some of the works displayed, an additional icon (or link) will be shown, which will initiate an Opus window based on that instantiation. The icon will be shown if the Instantiation has measure level binding to any of its sections, and at least one Instantiation of the opposite type (score or audio) has measure level binding to the same work and work section.

When the user clicks on the Opus window link, one of the following things will happen:

- If the Instantiation only has one section or (contiguous sections) with measure level binding, and only one container of the opposite type also has such binding, then the Opus window will be initiated immediately.
- If more than one noncontiguous work section has measure level binding (but not the whole work), or if more than one Instantiation of the opposite type also has measure level binding to the same work sections, the user will be presented with a dialog box which will allow him or her to choose a work section and a matching Instantiation.

From Container selection screen

The Container selection screen shows, for each Container, the first 3 Instantiations on that Container. For each of these Instantiations, the Opus window selection will work just like the Instantiation selection screen method listed above.

2. STATUS BAR / CANCEL BUTTON

A status bar will be added to the bottom of the each window. The status bar will indicate to the user whether the window is idle, or whether a query is being processed. A cancel button on the status bar will allow queries which are taking too long to be canceled.

NOTE: Queries will be handled in a separate thread; pressing the cancel button will kill the thread.

3. OTHER CONTRIBUTOR SEARCHING

The Other Contributor query field, which is already present in the interface, will become functional. An Other Contributor selection screen will be created. See the Version 1 user interface spec for more details on this feature.

NOTE: A new XSL transform page, which closely resembles the Performer transform page, will need to be created.

4. HIGHLIGHT MATCHING RESULTS

Whenever possible, words (or portions of words) that match a user query will be highlighted. If a user makes a particular selection on a selection screen, that query field will not be highlighted on subsequent screens.

5. SHOW VARIANT NAMES WHEN MATCHING

When a query matches a particular name (person or work) only in a variant name field, that field will be shown in the display, along with the uniform name. If more than one variant matches, only the first one will be shown.

6. WORK SECTIONS

When a query matches a work section, rather than the entire work, the matching section will be shown in the results screen, in addition to the uniform title for the entire work. If the work is clicked on, the Player, Viewer, or Opus window will open directly to that section.

Also, when an instantiation only represents a portion of the work rather than the whole work, the search interface will show the section(s) that are instantiated (up to 3).

7. ADMIN TAB

The Admin Tab was specified in the Version 1 UI document, but was never fully implemented. The basic plan for Version 2 is to finish the UI work on this tab that was begun in Version 1. Specifically, the Admin tab will allow the user to search in 2 ways.

The first way is a search by ID. This currently works, but in Version 2, instead of opening a Record View window immediately, we will display results in the search results pane itself.

The second way to search from the Admin tab is by record status, date and/or record type. Users can search for records with particular status, and/or records created or modified before or after a specific date.

A third way to search from the Admin tab is to specify a contributor and/or work (or work section) title. The results display for these searches should look something like this:

Mozart, Wolfgang Amadeus 1756–1791	IU/Contributor/4095	Copy ID	Details
Adagios, piano, K. 540, B minor	IU/Work/4241	Copy ID	Details
Fantasien, piano, K. 397, D minor	IU/Work/4238	Copy ID	Details
Fantasien, piano, K. 475, C minor	IU/Work/4231	Copy ID	Details
Gigues, piano, K. 574, G major	IU/Work/4242	Copy ID	Details
Idomeneo	IU/Work/6673	Copy ID	Details

The "Copy ID" button copies the associated ID to the clipboard so it can be easily pasted into the admin windows.

TODO: The results screen for these kind of searches will show ALL record types returned in the record set. This screen still need to be designed, and a new XSL transform page will need to be written. Also, we need to be able to sort the results shown by record type, and possibly other criteria.

8. RESULTS SCREENS VISUAL ENHANCEMENT

Due to a bug in the Windows implementation of Java 1.3, the HTML display of search results was not as elegant as it could be. Version two will be written with Java 1.4 (on Windows at least), so bold, italics, and font sizes can be reinserted.

9. BACK/FORWARD BUTTON SPEED IMPROVEMENT

The back and forward buttons currently resend queries to the database each time they are pressed. In order to speed up performance, Version 2 will use caching of XML files where possible when Back and Forward are pressed.

10. BROWSING

A "Browse" tab will be added to the Search window. This tab will show a screen that looks like this (the "o"s are intended to be radio buttons):

Browse the entire collection by

- Creators
- Works
- Recordings/Scores
- Recording albums/Score volumes

[Browse]

When the user clicks Browse, the system will show an appropriate list, formatted similarly or identically to a search result list, though potentially a very long one. The "Sort by" dropdown list will offer the following options:

* for Creators: name, role

* for Works: name of work, composer

* for Instantiations: work title, composer, performer (recording) or publisher (score)

* for Containers: container title, composer, performer (recording) or publisher (score)

Change Log

12/19/2002 – Initial version (Jim)

1/9/2002 – Revision (Jim)

1/11/2002 – Revision (Jim)

1/13/2003 – More revision (Jim)

1/15/2003 – Format change (Jim)

1/16/2003 – Revision (Jim)

1/19/2003 – Revision (Jim)

1/21/2003 – Browsing specified (Don)

4/15/2003 – Some admin tab details added (Mark)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Player

The Player is in a relatively stable form, and thus will receive only minor changes for this release. These changes include:

1. REPEAT BUTTON

A new feature on the Player will allow users to repeat the currently playing track indefinitely. This feature will be available from a checkbox on the player, and as a toggle on the Player menu. The default value is off.

2. LOW-BANDWIDTH LISTENING

Users will be able to listen to streams at a variety of bandwidth levels, including low-bandwidth levels. The status bar of the Player will now indicate the current streaming rate.

NOTE: This will be accomplished invisibly behind the scenes using QuickTime's multiple bandwidth format.

3. ENHANCED SLIDERS

The Player sliders will receive a visual overhaul in this version. The general appearance will be improved, volume sliders will get a wedge-shaped background, and users can navigate directly to a specific time on the position slider by clicking it directly. Additionally, clicking on a bookmark will navigate directly to that bookmark position.

NOTE: Some of this is already working on Windows, using a similar but custom look-and-feel, but the Mac sliders may retain the default Aqua look-and-feel for now.

4. INITIATION OF TIMELINE WINDOW

– The 'File->New Timeline' menu option will bring up a dialog asking which portion of the current (audio) container to transfer to the Timeline window, then initiate a new Timeline window.

– Right-clicking a work section or container section in the two structure trees will bring up a pop-up menu allowing the user to initiate a Timeline window based on that work or container section. The dialog window will still be brought up, but the appropriate section(s) will be preselected.

Change Log

12/19/2002 – Initial version (Jim)

1/7/2003 – First real draft (Jim)

1/15/2003 – Format change and small revision (Jim)

1/19/2003 – Revision – Timeline window initiation (Jim)

1/26/2003 – Revision of timeline initiation stuff (Jim)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Viewer

The Viewer will retain its Version 1 look and functionality, with the following additions:

1. SCORE PRINTING

Printing will now be accomplished from within the Variations2 program itself. This will be accomplished via a 'Print' option on the file menu.

TODO: Document what the print dialog box will look like and what print functions are available. Also document other options such as 'Print Preview' if we choose to include them.

2. ENHANCED IMAGE LOADING SPEED

Speed of image loading will be improved.

NOTE: Image caching code needs to be rewritten. Other methods may be employed as well to speed up performance, especially on the Mac.

3. ENHANCED SLIDER

The position slider (which indicates the current page) will receive a visual overhaul in this version. The general appearance will be improved and users can navigate directly to a specific page on the position slider by clicking it directly. Additionally, clicking on a bookmark will navigate directly to that bookmark position.

NOTE: Some of this is already working on Windows, using a similar but custom look-and-feel, but the Mac sliders may retain the default Aqua look-and-feel for now.

Change Log

12/19/2002 – Initial version (Jim)

1/7/2003 – First real draft (Jim)

1/15/2003 – Format change (Jim)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Edit Bookmarks

The Edit Bookmarks window will be changed in the following ways:

1. EDITING OF TIME OFFSETS FOR PLAYER BOOKMARKS

For each audio bookmark, the track number and name will be displayed. The track offset, which is displayed but noneditable in Version 1, will be editable. Offsets must stay within the boundary of the current track, however.

NOTE: The track offset info is currently stored in the Bookmark object, as well as the Container offset. We will be removing the track offset field, and instead be generating that info from the Container structure each time the properties window is invoked.

2. EXPORT SELECTED BOOKMARKS

The user can export only currently selected bookmarks. This will work via a new 'Export Selected' button on the Edit Bookmark window. The user can only export single bookmarks or folders, so the Export Selected button would be grayed out and unavailable otherwise.

3. INCLUDE OPUS WINDOW BOOKMARKS

The Edit Bookmark window will show Opus window bookmarks and selecting one of these bookmarks will bring up an Opus window. The Edit Properties dialog for Opus window bookmarks will look slightly different, displaying the names and offsets for both Containers, as well as uniform title for the Work (or work section(s) if less the the whole work is represented) that this Opus window represents. None of these fields will be editable.

Change Log

12/19/2002 – Initial version (Jim)

1/11/2003 – Revision (Jim)

1/15/2003 – Format change and revision (Jim)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Timeliner

I. DESCRIPTION

The Timeliner allows the user to create and interact with form diagrams (or *timelines*) that are directly linked to audio content. The Timeliner window contains a **display panel** in which the user can work with the timeline and a **control panel** that includes standard audio player controls and a set of controls for manipulating the timeline. These control functions are also available as **menu options**. Certain properties of the timeline can also be edited in **property dialogs**.

For Version 2, the Timeliner window will be audio-based, meaning that the form diagram will be based on a particular instantiation of a work (or portion of a work). The Timeliner window is completely self-contained; it has integrated Player controls and thus does not need to sync to any other windows.

II. UI FEATURES

A. Interaction with the Timeline Component in the Display Panel

The timeline component consists of several parts: (a) the **timeline slider** and slider thumb, (b) **timepoints** that the user creates on the slider to mark important time points in the audio, (c) rounded **bubbles** that are drawn in the time spans between timepoints, and (d) a timeline **resizer** at the end of the timeline that allows the user to drag-resize the timeline

1. Timeline Slider

- ◆ A single-click on the slider repositions the slider thumb.
- ◆ A double-click on the slider adds a timepoint at the click location
- ◆ A right-click on the slider opens a timeline popup menu

Timeline popup menu items:

1. Reset Timeline – resets the timeline to a single bubble, removing all annotations and other customizable properties
2. Show Times – (checkmark menu item) if checked, permanently shows the times (e.g. 0:15.3) below each timepoint
3. Print – opens a print dialog and prints the timeline
4. Edit Properties... – opens the timeline properties dialog (see C below)

- ◆ A click-drag on the slider drags the slider thumb. The current time point is always shown under the slider thumb

2. Timepoints

- ◆ Single-clicking a timepoint selects it
- ◆ Double-clicking a timepoint opens a “Set Timepoint Label” dialog, which includes a single text field, an OK button and a Cancel button—the text submitted is then centered below the timepoint (above the time label)
- ◆ Right-clicking on a timepoint opens a timepoint popup menu

Timepoint popup menu items:

1. Set Label... – opens the “Set Timepoint Label” dialog
2. Add Annotation – opens the annotation window, ready to accept input for the selected timepoint
3. Delete – deletes the timepoint from the timeline and redraws the bubbles, removing any that depended on the timepoint

- ◆ Dragging a timepoint to the left or right moves the timepoint horizontally along the timeline. The current

timepoint time is shown below the dragging timepoint

- ◆ Dragging a timepoint up or down (off of the timeline) removes the timepoint from the timeline

3. Bubbles

- ◆ Single-clicking a bubble selects the bubble. Shift-clicking and control-clicking selects multiple bubbles. Selecting a bubble repositions the slider thumb to the beginning of the bubble
- ◆ Double-clicking a bubble opens a “Set Bubble Label” dialog, which includes a single text field, an OK button and a Cancel button—the text submitted is then centered in the bubble
- ◆ Right-clicking on a single selected bubble opens a bubble popup menu

Bubble popup menu items:

1. Change Color – opens a color chooser and changes the color of the clicked bubble
2. Set Level Color – sets the default color for bubbles at this bubble level
3. Set Label... – opens the “Set Bubble Label” dialog
4. Add Annotation – opens the annotation window, ready to accept input for the selected bubble
5. Zoom to Selection – zooms in to the selected bubble by enlarging the timeline object. The selected region fills the screen and the rest of the timeline runs off either side of the screen.
6. Create Excerpt – creates a new timeliner window with the selected excerpt (selected bubble) as the content.
7. Delete – removes the bubble’s initiating timepoint from the timeline

- ◆ Right-clicking on a bubble when multiple bubbles are selected opens a multiple bubble popup menu

Multiple bubble popup menu items:

1. Group Bubbles / Ungroup Bubbles (if the selected bubbles are not grouped, “Group Bubbles” is displayed, otherwise “Ungroup Bubbles” is displayed) – Group Bubbles adds a grouping bubble above the selected bubbles. Ungroup Bubbles removes this grouping bubble. Grouping bubbles may not have overlapping boundaries—the user may need a popup notification if they attempt this.
2. Change Color
3. Set Level Color – sets the same default color for bubbles at all selected bubble levels
4. Set Label... – opens the “Set Bubble Label” dialog and sets the same label for all selected bubbles
5. Zoom to Selection – zooms in to the range of bubbles by enlarging the timeline object. The selected region fills the screen and the rest of the timeline runs off either side of the screen.
6. Create Excerpt
7. Delete

4. Timeline Resizer

- ◆ Dragging the resizer to the left or right resizes the timeline, if the timeline is resizable. If auto-scaling is turned on in the timeline properties, resizing is done proportionally in both dimensions

5. Other

- ◆ Right clicking in the display panel opens up a popup menu with only a “Change Background Color” option
- ◆ When resizing the window, the timeline object will reposition itself in relation to the bottom-left-hand corner of the window.
- ◆ Vertical and horizontal scrollbars will appear if the bubble diagram becomes larger than the current window size, either through manual resizing or zooming.

B. Timeline and Audio Controls in the Control Panel

1. Playback control group

- Play / Pause – begins playing at selected bubble / slider position
- Stop
- Previous – moves to beginning of previous bubble, maintaining play state
- Scan forward and scan backward
- Next – moves to beginning of next bubble, maintaining play state
- Elapsed time: total time
- Mute button

- Volume slider
- 2. **Timepoint control group (enabled if a timepoint is selected)**
 - Add – adds a timepoint at the current slider thumb position (always enabled)
 - Set Label...
 - Delete
- 3. **Bubble control group (enabled if a bubble or multiple bubbles are selected)**
 - Set Label...
 - Change Color
 - Group
 - Ungroup
 - Delete
- 4. **General timeline controls**
 - Edit Properties...
 - Reset
 - Create Excerpt – (enabled if a bubble or bubbles are selected)
 - Fit to Window
 - Zoom to Selection – (enabled if a bubble or bubbles are selected)
 - View Annotations – expands the annotation pane in which the annotation of the currently selected bubble (or timepoint) is displayed. Annotations can be edited and created in this pane. During playback, the annotations of the current bubble(s) or timepoints are displayed in this window.
[Perhaps the user can select the desired bubble level to display in the window (or select the timepoint "level"). Alternatively, the annotation window could display the annotations of multiple levels simultaneously, split into dividing panes, or annotations separated by spaces with descriptive labels (bubble level 2: this section blah blah. bubble level 1 (A'): here the melody blah blah)]

C. Property Dialogs

1. **Timeline Properties**

The buttons and controls in this property dialog are organized into bordered categories

 - a. **Timeline is ...**
 - Editable – checkbox (default value is true)
 - Resizable – checkbox (default value is true)
 - b. **Timeline Appearance**
 - Show Times – checkbox (default value is false)
 - Black and White – checkbox (default value is false)
 - Round Bubbles – radio button (default value is selected)
 - Square Bubbles – radio button (default value is deselected)
 - c. **Timeline Size**
 - Bubble Height – slider with "small" on the left side and "large" on the right side.
 - Auto-scale height on resize – checkbox (default value is true). If this is deselected, resizing the line does not scale the height along with the width.
 - d. **Timeline Level Colors**
 - a row of colored square buttons, each button representing a bubble level, numbered from 1 to 8 (or 10?). Clicking on a button opens a color chooser dialog. The button color is then set to the selected color, and the bubble level is set to the selected color.
 - e. **Audio Settings**
 - Play when bubble is clicked – checkbox (default value is false)
 - Stop playing at end of bubble selection – checkbox (default value is false)
 - f. **OK and Cancel buttons**

III. MENU FEATURES

1. **File menu**
 - **New Timeline** – opens a new timeline window with a default timeline (only available in the player and the opus window)
 - **Open Timeline** – opens a saved timeline from a local file
 - **Save Timeline** – saves the current timeline to a local file
 - **Save Timeline as ...** – saves the current timeline with a different filename

- -----
- **Print** – prints the timeline
- -----
- **Exit**
- 2. **Edit menu**
 - **Undo** – would mainly undo actions that change the structure of the timeline such as delete and add
- 3. **Timeline menu**
 - Timepoint submenu (all options except Add are disabled until a timepoint is selected)**
 - **Add**
 - **Set Label...**
 - **Add Annotation** – opens the annotation window, ready to accept input for the
 - **Delete**
 - Bubble(s) submenu (entire submenu is disabled until a bubble or bubble(s) are selected)**
 - **Set Label...**
 - **Add Annotation (disabled for multiple bubbles)**
 - **Change Color**
 - **Set Level Color**
 - **Group (disabled for single bubbles)**
 - **Ungroup (disabled for bubble selections that are not grouped)**
 - **Delete**
 - **Edit Properties**
 - **Reset**
 - **Create Excerpt (disabled unless a bubble or bubbles are selected)**
 - -----
 - **Zoom to Selection (disabled unless a bubble or bubbles are selected)**
 - **Fit to Window**
 - ----- (the following are checkmark menu options)
 - **Show Times** – default unchecked
 - **Black and White** – default unchecked
 - **Round Bubbles** – default checked
 - **Square Bubbles** – default unchecked
 - -----
 - **View Annotations**
- 4. **Help menu**
 - **Help** – opens Variations2 help, automatically set to the page for the timeliner

Change Log

12/19/2002 – Initial version (Jim)
 1/12/2003 – Revision (Jim)
 1/15/2003 – Format change (Jim)
 1/16/2003 – New content added (Brent)
 1/21/2003 – Revisions (Brent)
 2/17/2003 – Further revisions (Brent)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Opus

I. DESCRIPTION

The Opus window is new to this version of Variations2. Within a single Opus window, the user navigates both score and audio through a single set of controls. Synchronization between the score and the audio is automatic when navigating content in this window. This window is work-based, so much information about the original containers is hidden in the context of this window.

II. UI COMPONENTS

TODO: Insert picture of Opus window here

1. Synchronization Slider

The sync slider controls the synchronized audio and score, together as one unit. The slider represents the entire work or, for Opus windows that only represent a section of a work, the entire work section. The slider is audio-based, and so will continue to scroll forward even when pages aren't moving or are going backwards (such as for a repeat). Ticks below the slider will show work sections, similar to the way ticks on the Player show tracks. If a work section is repeated for some reason in the audio, that section will be shown twice on the slider. Opus window bookmarks will be displayed, similar to the way bookmarks work in other windows. Note that Opus window bookmarks represent a particular combination of audio and score; if only one or the other is in the current window, bookmarks will not be displayed. Player or Viewer bookmarks will not be shown on this slider. When automatic page turning is disabled, this slider will control only audio.

2. Audio Controls

The following components control the audio portion of the Opus window. If synchronization is enabled, the score and related components will also move to the appropriate position to match the audio. The audio controls are:

- Pause/Play
- Previous (Back to beginning of current work section)
- Rewind
- Fast forward
- Next (Forward To beginning of next work section)
- Volume slider
- Mute button
- Time indicator for total and section

3. Score Controls

The following components control the score portion of the Opus window. If synchronization is enabled, the audio and related components will also move to the appropriate position to match the score. Note that if the measure at the beginning of the page is bound to more than one place in the audio (such as for repeats), the audio will jump to the first occurrence of this measure. The score controls are:

- 2-page view / 1-page view toggle button
- Back page button
- Forward page button
- Go to page combo box – works same as in Viewer
- Zoom options combo box – works same as in Viewer

4. Score image pane

This pane, which will grow and shrink depending on the size of the window, merely displays the score image(s).

5. Status bar

The status bar, at the bottom of the window, will work similarly to the Player window status bar.

6. Bookmark controls

The standard Add, Edit, and Clear Bookmark buttons will be displayed. They will work similarly to the Player and Viewer bookmark buttons. If automatic page turning is disabled, adding a bookmark will add a bookmark at the current audio position, and the score page that corresponds to that audio position (regardless of whether that score page is currently being displayed).

7. Other controls

Other components on the Opus window include:

- Loop controls – a set of radio buttons for controlling looping (repeats). These options will only be available if synchronization is turned on. The three options are no repeat, current section, and arbitrary measure selection (example: from measure 4 to measure 67). Measures are entered via editable combo boxes; entering measure numbers which are not present in the current work section is not allowed.
- A toggle to enable or disable automatic page turning. The default is for automatic page turning to be enabled.
- A combo box which allows the user to move to a specific measure; entering measure numbers which are not present in the current work section is not allowed.
- A display of the work structure. ONLY the portions of the work that are represented in the current Opus window are enabled; other sections are grayed out. Selecting a particular work section navigates both audio and score to the beginning of that section. Also available from this tree is the 'View Work Details' link, similar to the way the Work trees work in the Player and Viewer. Right-clicking a work section will bring up a pop-up menu allowing the user to initiate a Timeline window based on that work section. The 'New Timeline' dialog window will still be brought up, but the appropriate section(s) will be preselected.
- A 'New Timeline' button. Clicking will bring up a dialog asking which portion of the current (audio) container to transfer to the Timeline window, then initiate a new Timeline window.

If automatic page turning is disabled, navigating via to a specific measure or place in the work structure via the above controls will still move both audio and score to the appropriate location. Also note that when automatic page turning is enabled, it is still possible to move turn pages manually; however, when a page turn occurs while listening to audio, the score will snap back to the appropriate location.

III. MENU OPTIONS

An Opus menu in the menu bar will have the following options:

Audio submenu

Pause/Play

Prev

Next

RW

FF

Volume submenu

Up

Down

Mute (checkbox)

Score submenu

Back

Forward

2-page view (checkbox)

Zoom options submenu

Bookmarks submenu

Add

Edit

Clear

Synchronization on/off toggle

Information submenu

III. MENU OPTIONS

Show audio info – bring up Record View window for audio container
Show score info – bring up Record View window for score container
Substitute submenu
 Substitute audio
 Substitute score

 Only enabled if alternates are available; brings up a dialog box allowing the user to substitute other audio or score containers. Note that a single Opus window will always only represent the same portion of a work.

Additionally, the 'File->Print' menu option will be enabled for the Opus window, allowing users to print whatever score is currently loaded in the Opus window. Printing will work similarly to the way it works in the Viewer window. Also, the 'File->New Timeline' menu option will bring up a dialog asking which portion of the current (audio) container to transfer to the Timeline window, then initiate a new Timeline window.

TODO: Timeline initiation dialog specified.

Change Log

12/19/2002 – Initial version (Jim)
1/13/2003 – Revision (Jim)
1/15/2003 – Format change (Jim)
1/16/2003 – Revision (Jim)
1/19/2003 – Revision (Jim)
1/26/2003 – Revision (Jim)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Record View

The Record View window will be altered in the following ways:

1. REMOVE FULL/BRIEF VIEWS AND IMPROVE HTML DISPLAY

The HTML display of record data will be cleaned up and modified to make it more readable. We will get rid of Full and Brief views, and instead organize the page so as to put the most important information at the top. For Container records, anchor links at the top for each Instantiation will allow easy navigation to Instantiation records (which are displayed on the same page).

TODO: Insert pic of improved HTML display sample?

For **administrative users**, the views for works and contributors will differ from the normal views.

Admin Contributor View:

- Uniform Name
- ID
- Type
- Status
- Dates
- Variant Names
- Notes (all types)

Admin Work View:

- Uniform Title
- ID
- Type
- Status
- Contributors
- Variant Titles
- Subject Headings
- Notes
- Work Structure (make more compact)

2. IMPROVED HANDLING OF NOTE FIELDS

Note fields will be displayed in a more useful way, and note with status marked as 'hidden' will be displayed only to administrators.

3. INITIATE PLAYER/VIEWER/OPUS WINDOWS

The Record View window will contain links to allow direct access to the Player, Viewer, and Opus windows (for Container/Instantiation records).

Change Log

12/19/2002 – Initial version (Jim)

1/15/2003 – Format change and revision (Jim)

4/15/2003 – Added Admin views (Mark)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Admin – Edit Measure Bindings

Supporting the Opus Window requires entry of measure–level bindings for both scores and recordings. This will be done with changes and additions to the existing administrative interface.

I. Changes to existing windows

- Edit Work Record, Work Structure Tab.** On the Work Structure tab of the Edit Work Record window, below the "Type" field, a new field should be added: "Measures: [Edit...]". The work structure tree display area should be shortened to make room for it. When a measure range has been defined for a given work section and that section is highlighted, a range indicator (e.g., "(1–278)") should appear to the right of the "Edit..." button, showing that a measure range already exists for that section. The Edit button should be grayed out when a non–leafnode section is highlighted in the work structure (so that measure–level bindings can only be added for "chunks").
- Edit Structure Bindings.** In the Edit Structure Bindings window for both scores and recordings (separate windows), a button will be added for either creating or modifying measure–level bindings on a per–work–section basis. This button should be added beneath the "Specify Custom Bindings" grouping but still within the "Bindings for Selected Section" grouping. If measure–level bindings already exist for this section, the button should be labeled "Edit Measure Bindings...". If no bindings have been created for this work section, the button should be labeled "Create Measure Bindings...". If no measure range has been defined for the manifested work section, the button should be labeled "Create Measure Bindings..." but should be grayed out.

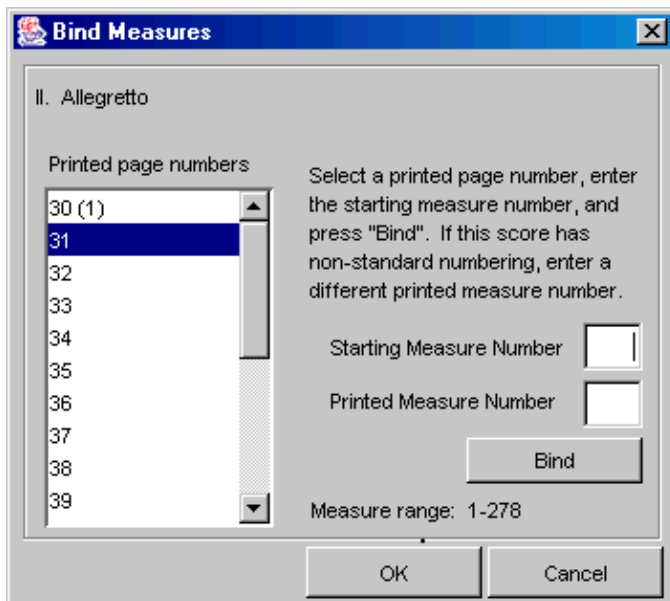
II. New windows

- Edit Measures.** When the "Edit..." button is pushed in the Edit Work Record window, an edit dialog (following the standard behavior of all Edit dialogs) should appear:



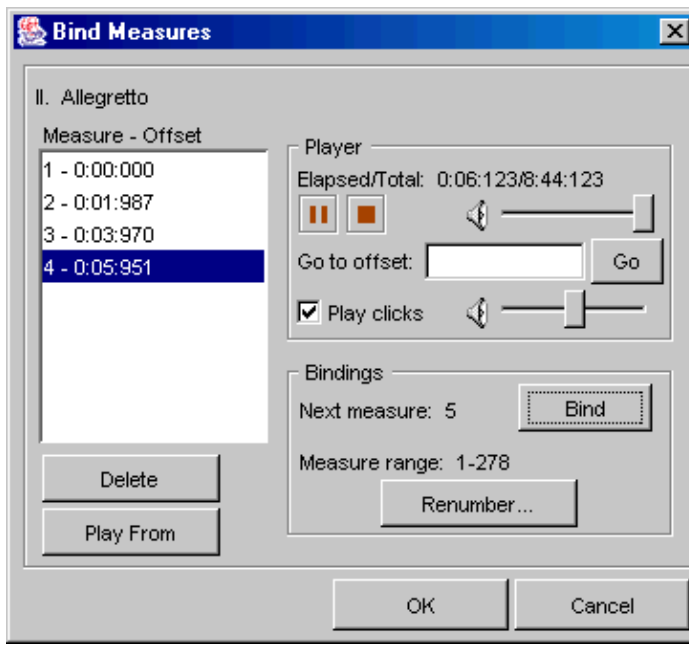
- Title: Edit Measures
- Fields:
 - ◆ Section: <section title> (read–only text field)
 - ◆ Beginning measure: [1] (editable, right–justified text field)
 - ◆ Ending measure: [1] (editable, right–justified text field)
- Control buttons: OK & Cancel
- Dialog should be modal.

- Bind Measures (for scores)**



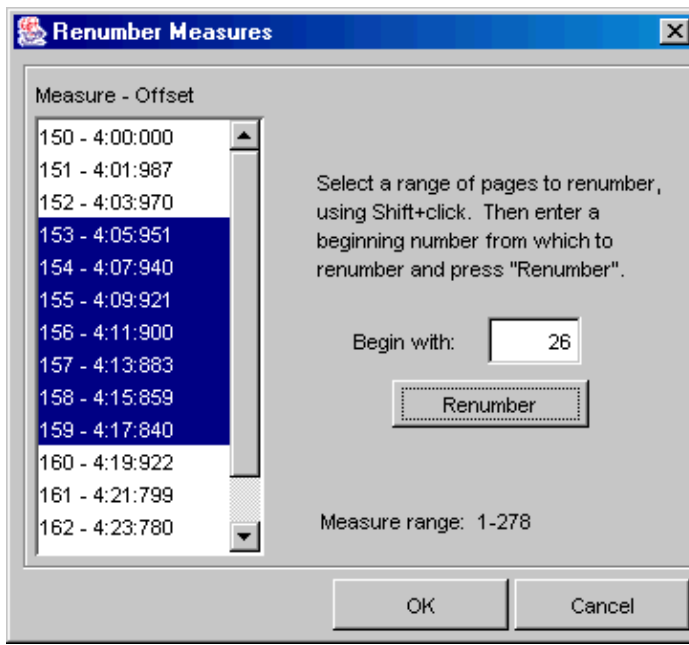
- Title: Bind Measures
- Fields:
 - ◆ <section title> (label--truncates)
 - ◆ Printed page numbers (a single-selection list of the printed page numbers associated with this work section. When a starting measure number is bound to a page, the measure number shows up in parentheses next to the printed page number. The printed measure number, if specified, appears after the measure number in square brackets, e.g., " 32 (105) [34]").
 - ◆ Starting Measure Number [] (editable, right-justified text field)
 - ◆ Printed Measure Number [] (editable, right-justified text field)
 - ◆ [Bind] (push button)
 - ◆ Measure range: n-*nnn* (measure range determined from the work section).
- Control buttons: OK & Cancel
- Dialog should be modal
- When this window first appears, if there are no bindings, the first text field should be filled in with "1" and the second one should be blank. After [Bind] is pressed, and the list is updated, the highlight should move down to the next page number, both text fields should be empty, and the focus should be in the first text field.

3. Bind Measures (for recordings)



- Title: Bind Measures
- Fields:
 - ◆ <section title> (label--truncates)
 - ◆ Measure – Offset (a single–selection list of measure number bindings associated with this work section. Once a binding is created, it shows up in the list. The highlight should stay visible and not scroll off the bottom when the "Bind" button is pushed)
 - ◆ Elapsed/Total: <elapsed/total> (elapsed is the current time offset for this work section on this recording; total is the total length of this work section for this recording)
 - ◆ Player controls (pause/play, stop, mute & volume slider work just as the ones in the player window do)
 - ◆ Go to offset: [] (left–justified text field for entering a 0:00:000 formatted time offset to go to)
 - ◆ [Go] button (goes to the specified time offset in the previous field; if the field is blank or the data bad, does nothing)
 - ◆ [x] Play clicks (checkbox is off by default; setting this will play a click at the beginning of every bound measure)
 - ◆ Next measure: <measure number> (label displays the measure number that will be bound if the "Bind" button is pressed at that moment.)
 - ◆ [Bind] (push button--see below for behavior)
 - ◆ Measure range: n–nnn (measure range determined from the work section).
 - ◆ [Renumber...] button (brings up the Renumber Measures dialog (see below)).
 - ◆ [Delete] button (deletes the binding for the currently highlighted measure; if no binding exists, does nothing)
 - ◆ [Play From] button (starts audio at the beginning of the highlighted measure; if no binding exists for the highlighted measure, this button should be grayed out...or it could just do nothing)
- Control buttons: OK & Cancel
- Dialog should be modal
- Pressing [Bind] creates a new binding at the current time offset. In effect, it "inserts" a new binding. Existing bindings are always in time–ordered sequence, starting at the beginning of the measure list. Adding a new binding increments all subsequent measure numbers (if any).

4. Renumber Measures (for recordings)



- Title: Renumber Measures
- Fields:
 - ◆ <section title> (label--truncates)
 - ◆ Measure – Offset (a single–interval selection list of all the measures defined for this instantiation of the work section.)
 - ◆ Begin with: [26] (editable right–justified text field where user enters the number to begin renumbering with)
 - ◆ [Renumber...] button (starting with the "begin with" number, renumbers the range of selected measures; if nothing is selected, or if "begin with" number is blank or not a number, does nothing.)
 - ◆ Measure range: n–nnn (measure range determined from the work section).
- Control buttons: OK & Cancel
- Dialog should be modal

Change Log

- 12/19/2002 – Initial version (Jim)
- 12/23/2002 – test for editability (Mark)
- 1/12/2003 – revision (Jim)
- 1/15/2003 – Format change (Jim)
- 1/29/2003 – Initial draft of content (Mark)
- 1/30/2003 – Added "printed measure number" field for score measure bindings and added some details on what happens in each "Bind Measures" window when the Bind button is pressed. (Mark)
- 1/31/2003 – Repaired logic for Bind buttons and added the Renumber Measures dialog. Added volume for clicks.
- 2/5/2003 – sadly, got rid of Hello Kitty (Mark)
- 2/26/2003 – fixed bad image reference introduced with last change (Mark)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

Admin – Other

1. SEARCH ADMIN TAB

This is discussed on the [Search](#) page.

2. RECORD DELETION

A [Delete] button will be placed at the bottom of the each of the three main record editing window types (Name, Work, Container). The button order will be OK, Cancel, Delete, Apply. A warning dialog will appear, requiring confirmation prior to the delete with the following message template:

<p>Variations2 will attempt deletion of record <record id>.</p> <p>This record will be deleted ONLY if no other records reference this record. Otherwise, an error message will display the records referencing this record.</p> <p>WARNING: Deletion is permanent.</p> <p>[Proceed] [[Cancel]]</p>
--

Cancel will be the default button.

If the deletion fails, an error message will display the reason for the failure. If the failure results from existing references in the database, the IDs of the referencing records will be displayed in a scrollable text area so they can easily be copied and pasted.

3. ENHANCEMENTS TO WORK STRUCTURE EDITING

See [Admin – Edit Measure Bindings](#).

4. OTHER EASE-OF-USE ENHANCEMENTS

- **Built-in check of container structure.** When users press the Apply or OK buttons in the Edit Container Window, a consistency check on the container structure will run and, if it fails (i.e., if the container structure is bad), it will provide an error message to the user and will not save the record. The error message should indicate the nature and location of the error so that it is easier to fix. [More detailed design of the error message will have to await the design of the consistency checker itself.]
- **Initial cursor placement.** In dialogs or on tabs where a list is being built up from entry fields, and where that list is blank, the cursor should initially be placed in the first entry field and should subsequently be put there after a "new", "add", or "update" action.
- **Caret position set to 0.** All text fields in edit dialogs should always have their caret position set to zero. Otherwise, if the field's contents are longer than the field, the field is initially scrolled to the end.
- **Automatic stripping of trailing blanks.** When an ID is dropped on a drop target, any trailing white space will automatically be stripped.
- **Keyboard accelerators** will be defined for the following window control buttons:

Button	Access Keys
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OK	Alt + O
Cancel	Alt + C
Apply	Alt + P
Z39.50	Alt + Z
File (MARC import from)	Alt + F
Add	Alt + A
Update	Alt + U
Delete	Alt + D
New	Alt + N
Move to	Alt + M
Add Grouping	Alt + G
Edit Structural Bindings	Alt + B
Bind	Alt + B

- **MARC Import Window Status Update.** A Refresh button will be added to the MARC import window so that, after an unrecognized name or work has been added, a press of the refresh button will cause the new item(s) to appear in the recognized list(s).
- **Container Structure Grouping.** The existing "Add Grouping" button will be replaced with a "Group Selected" button, which will create a grouping out of the selected items (typically, pages in a score), expand the new grouping, select just the new grouping, and give the grouping the label "New grouping." It will also put the cursor in the label field, highlight all the content in the field, and set the Update button as the default so the user can type the new label and press Enter to label the new grouping.

5. NOTE TYPES

Since lists of note types will differ based on record type, the "Edit Notes Field" dialog will have to distinguish which record type it is invoked from and display the appropriate list ([click here for details on the data model change](#)).

Change Log

12/19/2002 – Initial version (Jim)

1/12/2003 – Revision (Jim)

1/15/2003 – Format change (Jim)

1/30/2003 – Added an item 4 w/preliminary content, linked item 3, added question for item 2. (Mark)

2/3/2003 – Added some details under #4. (Mark)

2/4/2003 – Completed initial draft. (Mark)

2/5/2003 – Added details for record deletion and a new item, #5 (Mark)

Variations2 Version 2 User Interface Specification

[Overview](#) | [Search](#) | [Player](#) | [Viewer](#) | [Edit Bookmarks](#) | [Timeliner](#) | [Opus](#) | [Record View](#) | [Admin – Edit Measure Bindings](#) | [Admin – Other](#) | [General](#)

[Printable PDF version](#)

General

1. IMPROVED HELP

The help system will be improved by adding additional help information (e.g. for Timeliner and Opus Window), and by splitting topical information up into separate pages. The Help menu will provide access to multiple help pages, each of which will open in a separate window. Each page opened in a new window will have HTML links to other help topics, a link to the Variations2 User Guide, and a print option. Most windows will have window-specific help pages, which will be the first help item on the help menu for that window. Secondly, the help menu will contain a link to the comprehensive Variations 2 User Guide.

2. SINGLE SIGN-IN

Users on UITS machines, who have already authenticated to gain access to the machine, will not need to sign in again when initiating the program. If the user is an administrator, he or she will be given the opportunity to log in as an administrator if that is desired.

3. EXCEPTION HANDLING

Exception handling will get an overhaul in this version, and the end effect for the user will be better and more clearly explained error messages, with suggestions on how to avoid the error in the future if possible.

4. BOOKMARKS AND BOOKMARK MENU

This version will have a new type of bookmark – the Opus window bookmark. When an Opus window bookmark is selected, a new window will open and the 2 appropriate containers will be loaded and queued to the appropriate locations. Note that a new Opus window will open each time an Opus window bookmark is selected.

Change Log

12/19/2002 – Initial version (Jim)

1/9/2003 – First real version (Jim)

1/15/2003 – Format change and small revision (Jim) 6/17/2003 – Help section revised (Maggie)