

Release Notes for Mastering Authoring (Advanced Editor)

June 19, 2014

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Overview

These release notes describe the recent features you can use to create assignable items in Mastering products. Release note information is not yet available in the Help system for the Mastering Authoring Tool (Advanced Editor).

For August 2012:

- [New features for the solutionAppletVocabulary answer type](#)

From 2011:

Updates for creating [labeling](#), [ranking](#), and [sorting](#) content

Applicable answer types: solutionAppletLabel, solutionAppletRanking, and solutionAppletSorting

solutionAppletVocabulary Answer Type

These release notes describe updates to the Vocabulary answer type (solutionAppletVocab). Release note information is not yet available in the Help system for the Mastering Authoring Tool (Advanced Editor).

Summary of changes

The solutionAppletVocab answer type provides the following new features:

- You can select one of two predefined sizes for the applet or manually set width and height.
- You can choose to allow student to use a word more than one time in a problem.
- You can choose to display your sentences with or without numbers.
- You can add reordering the sentences to the problem. The student can drag and drop sentences into a correct sequence after the sentences are completed. This feature can be used with or without word blanks.
- You can use multiple blank fields per sentence, and choose to check the sequence of the words within the sentence.
- Sentence randomization is on a per student basis, not on a per answer attempt basis. The new applet will now always display the sentences in the order they come from the server. This allows to perform both shuffling and preservation of shuffled order on the server.
- Support for HTML, TeX, and var formatting in words and sentences.

Student View

Part I

The goal of this vocabulary task is to match all the capital-country pairs. To do this, drag the names on the left into the appropriate blanks in the sentence on the right.

Match the words in the left-hand column to the appropriate blanks in the sentences on the right. Make certain each sentence is completed before submitting your answer.

Lima	1. The capital of Argentina is _____ .
Prague	2. The capital of _____ is Bucharest.
Romania	3. _____ is the capital of Indonesia.
Nairobi	4. The capital of Kenya is _____ .
Jakarta	5. _____ is the capital of Australia.
Canberra	6. The capital of _____ is Budapest.
Hungary	
Buenos Aires	

[reset](#) [help](#)

[Submit](#)

[My Answers](#) [Give Up](#)

Answer Box View

To create Applet with special size add attribute @fullScreen to define mode of sizing: [add @fullScreen](#)

Randomize word order

[add @reusableItems](#) Reuse words

[add @showSentenceNumber](#) Show sentence number

[add @sentenceReordering](#) Check the order of sentences

Randomize sentence order

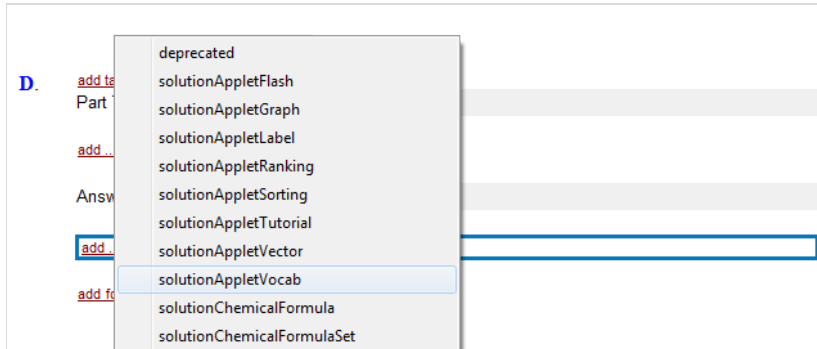
Word ID	Word	Sentence ID	Seq.	Sentence
1	Lima	1	<input checked="" type="checkbox"/>	The capital of Argentina is -----.
2	Prague	2	<input checked="" type="checkbox"/>	The capital of ----- is Bucharest.
3	Romania	3	<input checked="" type="checkbox"/>	----- is the capital of Indonesia.
4	Nairobi	4	<input checked="" type="checkbox"/>	The capital of Kenya is -----.
5	Jakarta	5	<input checked="" type="checkbox"/>	----- is the capital of Australia.
6	Canberra	6	<input checked="" type="checkbox"/>	The capital of ----- is Budapest.
7	Hungary			
8	Buenos Aires			

Correct Answer(s):

Sentence	blank	Word(s)
2 ▾ <i>The capital of is Bucharest.</i>	blank 1 -	3 ▾ <i>Romania</i> add word
4 ▾ <i>The capital of Kenya is .</i>	blank 1 -	4 ▾ <i>Nairobi</i> add word
3 ▾ <i>is the capital of Indonesia.</i>	blank 1 -	5 ▾ <i>Jakarta</i> add word
5 ▾ <i>is the capital of Australia.</i>	blank 1 -	6 ▾ <i>Canberra</i> add word
6 ▾ <i>The capital of is Budapest.</i>	blank 1 -	7 ▾ <i>Hungary</i> add word
1 ▾ <i>The capital of Argentina is .</i>	blank 1 -	8 ▾ <i>Buenos Aires</i> add word

Creating a Vocabulary Answer Type

In the Item Editor, under Answer Instructions, click **add...** and then select **solutionAppletVocab**.



To create Applet with special size add attribute @fullScreen to define mode of sizing: [add @fullScreen](#)

Randomize word order
[add @reusableItems](#) Reuse words
[add @showSentenceNumber](#) Show sentence number
[add @sentenceReordering](#) Check the order of sentences

Randomize sentence order

Word ID	Word	Sentence ID	Seq.	Sentence
add word			<input checked="" type="checkbox"/>	

Correct Answer(s):

Sentence: - Word(s)

[add word](#)

Wrong Answer(s): [add expression](#)

Note: For new items, the solutionMultipleChoiceRadio answer box displays in Part A by default. To change this to another answer type, right-click in the box and select **Remove > solutionMultipleChoiceRadio**.

Select the Parameters

	Description
Applet size	The standard applet size is 800x425px. You can change the size to small (475x425px), or enter a custom size. To change the applet size, click add @fullScreen , and select an option from the drop-down list. Acceptable values are 320-1000 for width and 270-1500 for height.
Randomize word order	This parameter shuffles the order of the words per student. It's recommended to randomize word order and sentence order. However, if answers are a series of numbers or other elements that make more sense in a specific order, you may not want to randomize. To randomize word order, click the Randomize word order check box.
Reuse words	By default, a word can be used only one time in a vocabulary problem. To allow students to reuse words more than once, click add @reusableItems , and then click the Reuse words check box.

	Description
Show sentence number	This parameter is selected by default. To omit sentence numbers, click add @showSentenceNumber and then clear the Show sentence number check box.
Check the order of sentences	This parameter allows the student to drag and drop sentences into correct sequence. You can use this feature with or without word blanks. With word blanks, the student completes the sentences first, and then reorders the sentences. Without word blanks, the problem is a simple sequencing problem. To allow the student to reorder sentences, click add @sentenceReordering , and then click the Check the order of sentences check box.
Randomize sentence order	This parameter shuffles the order of the sentences per student. It's recommended to randomize word order and sentence order. However, if answers are a series of numbers or other elements that make more sense in a specific order, you may not want to randomize. To randomize sentence order, click the Randomize sentence order check box.

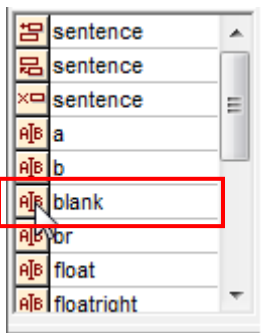
Enter Words and Sentences

1. Enter a **Word ID** integer and **Word** for each correct answer.

Tip: To make the item more challenging, add more words than sentences. You can enter a maximum of 8 words.

2. For each correct word, enter a **Sentence ID** integer and a corresponding phrase or sentence under **Sentence**.

To add lines as blank spaces, as shown in the Student view above, put the cursor where the lines should go and click the **blank** icon in the Entity window.



You can add multiple blanks per sentence. To check for correct sequence of the words in the sentence, click the **Seq.** check box.

Word ID	Word	Sentence ID	Seq.	Sentence
1	lower	1	<input type="checkbox"/>	The addition product that is formed by the nucleophilic attack on the carbon that bears most of the positive charge in the allylic cation and is closer to the nucleophile has a ----- energy of activation and will therefore be formed at a -----rate.
2	higher		<input checked="" type="checkbox"/>	
3	faster	2	<input type="checkbox"/>	In the given allylic cation, this is the product formed by the nucleophilic attack on the -----carbon.
4	slower		<input type="checkbox"/>	
5	C1		<input type="checkbox"/>	
6	C2		<input checked="" type="checkbox"/>	
7	C3			
8	C4			

Tip: The vocabulary tool supports HTML, TeX, and var formatting.

- To add more words or sentences, right-click within a **Word** or **Sentence** row and click either:

- **Insert before > word > word** or **Insert after > word > word**
- **Insert before > sentence > sentence** or **Insert after > sentence > sentence**

Tip: To add a word or sentence after the last one, put the cursor in the last row and press the **Tab** key.

Note: To avoid making students scroll, and potentially miss seeing correct answers, code a maximum of 6 two-line sentences, or 8 single-line sentences.

Add Correct Answers

At least one correct answer is required.

- Enter the correct **Word ID** and **Sentence ID** for each sentence.
- To add more correct answers, click **Insert after > expression > expression** or **Insert before > expression > expression**.

Add Wrong Answers

Wrong answers are recommended but not required.

1. Click **add expression** next to the Wrong Answer(s) heading.
2. Select ID(s) for the wrong word/sentence pair.

Note: Enter more specific wrong answers first, followed by less specific ones. To indicate that a student submission did not include an answer, click the NOT box beside the answer. If the word/sentence pair does not fulfill the criteria, students see the associated wrong answer response (WAR).

3. Click **add response**, and enter the text to display when the student submits this incorrect answer.
4. To add more wrong answers or responses, right-click in the applicable area and select **Insert after > expression > expression** or **Insert before > expression > expression**.

Tip: To add a row after the last one, you can place the cursor in the last row and press the Tab key.

Labeling

Summary of changes to solutionAppletLabel:

- Support for HTML, var, and TeX formatting in labels.
You can change colors and use subscripts, superscripts, bold, italic, and
. You apply extended formatting to HTML items the same way that apply formatting to other text items in the Advanced Editor.
- Ability to remove the version numbers from the production view.
To view the version: Right-click on the applet.
- More sizing options:

Standard (850 w x 425 h)	Displays in a one-pane layout. Standard is the default setting for newly created items. If you copy an item, the size will reflect the size of the item you are copying.
Small (475 w x 425 h)	Can display in a two-pane layout. (The layout depends on all of the assets in the item.)
User-defined	Author specifies the width and height.

Click add@fullScreen to open the size fields: standard, small, and user defined

To create Applet with special size add attribute @fullScreen to define mode of sizing: **add @fullScreen**

Randomize label order
 Reuse labels

Item ID	Label
	add ...
	add ...

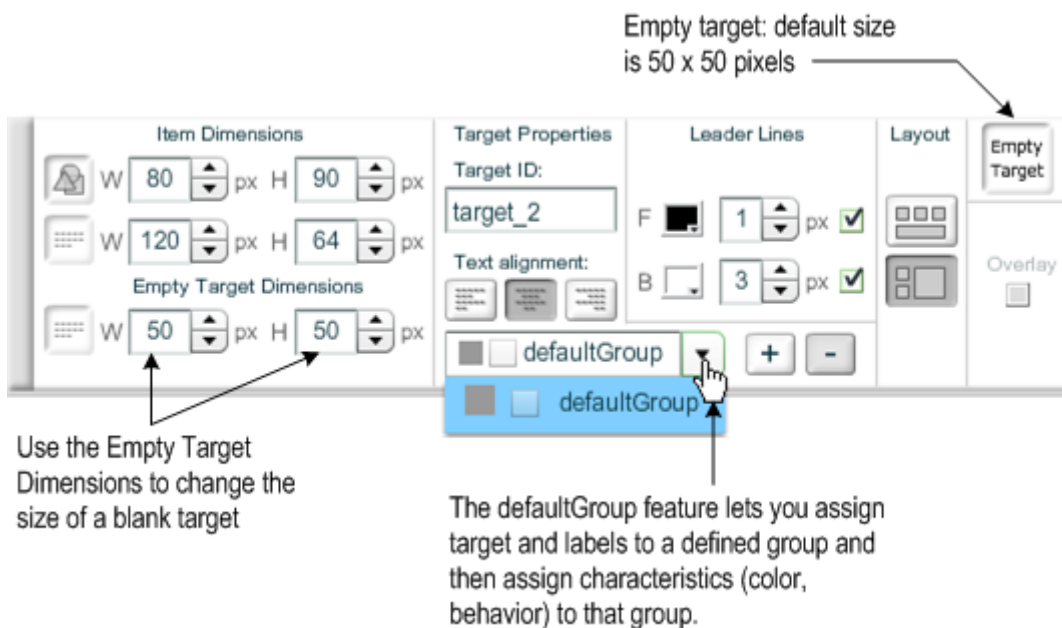
Background Image: [add backgroundImage](#)
Author Overlay Image: [add authorOverlayImage](#)
Correct Answer:

Wrong Answer(s): [add expression](#)

- Provide larger size options for background and labels.
Allow labels greater than 150 x 150 pixels and increase the background size so that the background image occupies more of the HTML width.

- Allow images and text to be used as labels for targets that are all the same size using the new empty target feature.
- The new groups feature lets you:
 - Define label behavior. - Authors can prevent certain labels from being placed in particular targets by assigning them to a group.
 - Color code labels by group.

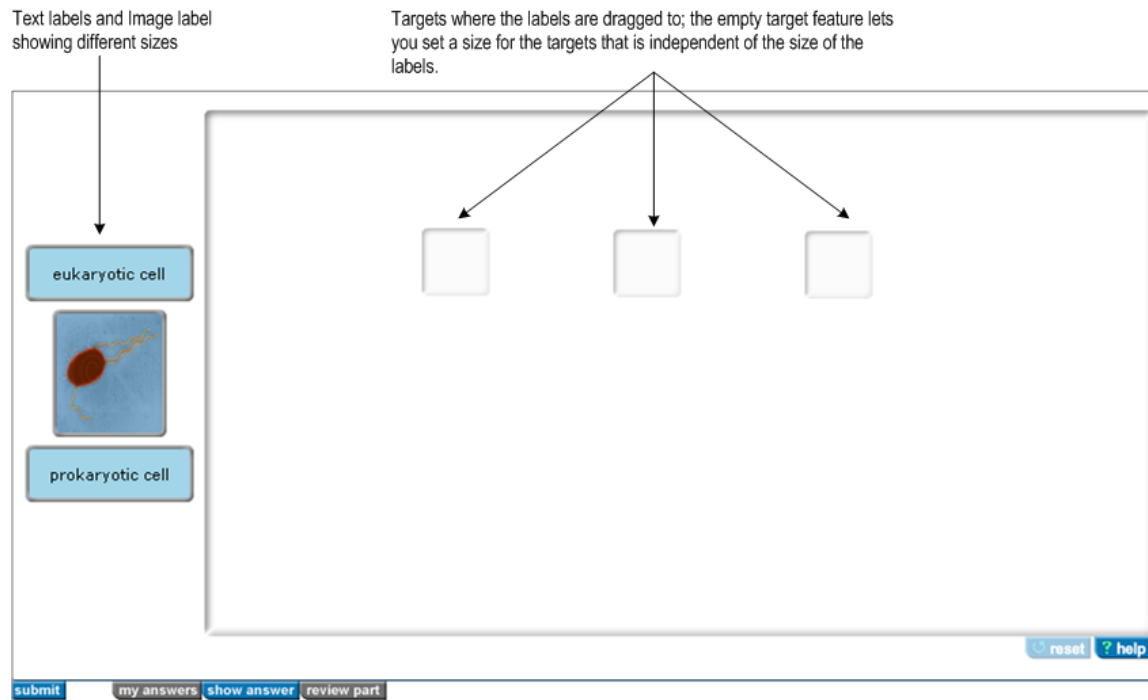
Labeling applet control panel (solutionAppletLabel)



Empty target panel (solutionAppletLabel)

The empty target feature lets you create targets that are a different size than the size of the text and image labels. The Empty Target icon is a visual component that authors drag from the control panel to create a new empty target on the labeling area.

When to use this feature: When you are creating a problem with both text and images labels, and you want the target area to be a neutral size—not reflecting the size of either the text or image.



To use the empty target feature:

1. Drag an Empty Target icon into the labeling area.
The default size is 50 x 50 pixels.
2. [Optional] If needed, use the up/down controls in the Empty Target Dimensions area to change the size.
3. Drag the text or image label to the empty target to associate the label to the correct target position.
4. Click **Save**. Copy the correct answer string into the Correct Answer field in Altova

Groups feature (solutionAppletLabel)

The Groups feature lets authors assign items and targets to a group, and then define certain behaviors by group (for example, whether labels are reusable or not). When an item is assigned to a group, it can only be placed on target(s) belonging to that group. Groups can also be color-coded.

As the default setting, all items and targets belong to the default group. New groups are created by clicking the add (+) control. (See next section for more instructions.)

- You cannot delete the default group, nor change any of its default settings.
- You cannot change the color, the name, or the "reusableItems" parameter of the default group.

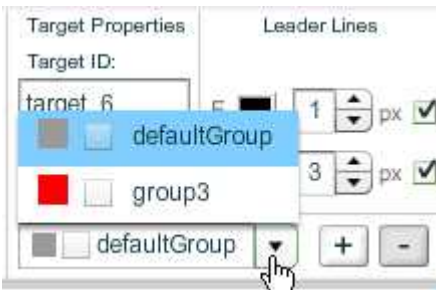
- The “reusableItems” parameter for the default group is always the same as the “reusableItems” FlashVar parameter value.
- The controls and drop-down list of the Groups feature are disabled unless you have selected an item or a target.

To add a group:

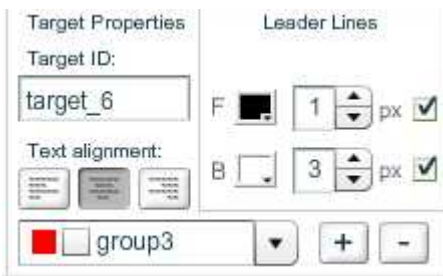
1. Define the labels and targets as you normally would.
2. Select a label or a target.
A selected label or target has a red border around its edges.
3. Click the add (+) control.
A new group is created with a unique name “group1”, “group2”, etc., and a color chosen from the hard-coded list of pre-defined colors. The group is not automatically selected in the list.



4. Click the arrow to select the new group you just created (in this example, “group3”).

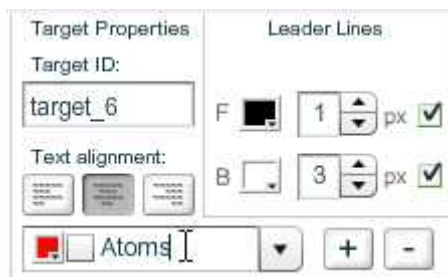


5. Continue to add more groups, making changes to each, as needed.
See below for instructions on how to rename a group, delete a group, make a group reusable, and assign color to a group.



To rename a group:

1. Select the label or the target that belongs to the group you need to rename.
The group name appears in the Group's name field.
2. Place your cursor in the field and rename the group:



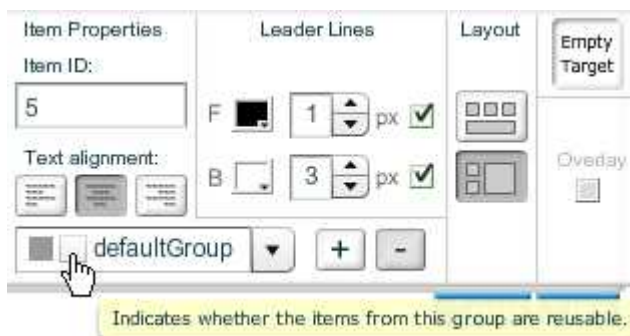
To delete a group:

1. Select the label or the target that belongs to the group you need to delete.
2. Click the remove (-) control.
The label or target are not deleted—the group that the label or target was associated with is deleted. When a group is removed, all items and targets formerly assigned to it become assigned to the default group.

The “defaultGroup” cannot be removed. (If you select defaultGroup, the remove (-) control becomes disabled.)

To make labels in a group reusable:

Each group contains a checkbox indicating whether the labels in this group are reusable or not. Click the checkbox to make a label reusable.



By default, the checkbox corresponds to the value set by the Reuse checkbox in Altova. You can define the labels for a particular group to be reusable independent of the reuse of the other labels in the problem. The reusable setting for groups overrides the setting in Altova, shown here. (The only exception is that the “reusableItems” parameter for the default group is always the same as the “Reuse Labels” parameter set in Altova.)

To create Applet with special size add attribute @fullScreen to define mode of sizing: [add @fullScreen](#)

Randomize label order

Reuse labels

Item ID	Label
1	Hydrogen
2	Oxygen
3	Nucleus
4	Cell Wall
5	Skeleton
6	Muscle

Background Image: [add backgroundImage](#)

Author Overlay Image: [add authorOverlayImage](#)

Correct Answer:

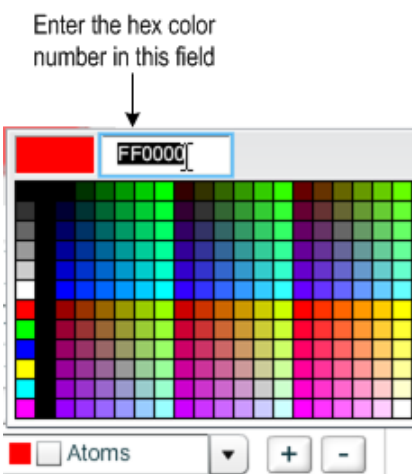
Wrong Answer(s): [add expression](#)

To assign color to a group:

1. Select the label or the target that belongs to the group you need to color-code.
2. Click the color-picker box. The color picker opens.



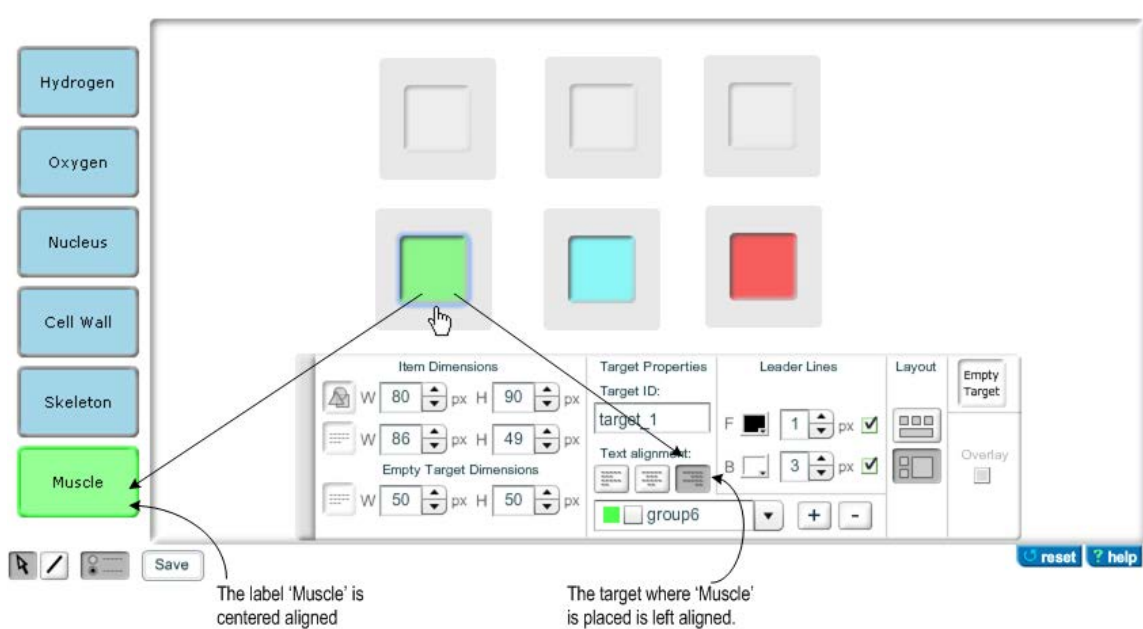
3. Select the color from the picker or enter a hexadecimal color number.



To change the text alignment in a label or target:

You can align label text independently of the alignment of the same text in its target. This is useful when you want the alignment of the text for a completed problem to appear differently to students than the alignment of the text in the labels before the student begins a problem.

1. Select the label or the target. Click the appropriate Text alignment control, whether to left align, center align, or right align.
2. Align other labels or targets, as needed.



Ranking

Summary of changes to solutionAppletRanking

- Support for HTML, var, and TeX formatting in labels.
You can change colors and use subscripts, superscripts, bold, italic, and
. You apply extended formatting to HTML items the same way that apply formatting to other text items in the Advanced Editor.
- Ability to remove the version numbers from the production view.
To view the version: Right-click on the applet.
- Prevent overlap of Pre- and Post-text. (No authoring changes required.)
- More sizing options:

Standard (850 w x 425 h)	Displays in a one-pane layout. Standard is the default setting for newly created items. If you copy an item, the size will reflect the size of the item you are copying.
Small (475 w x 425 h)	Can display in a two-pane layout. (The layout depends on all of the assets in the item.)
User-defined	Author specifies the width and height.

Applet Size: **user defined** width: height:

Hide "Randomly Determined" control

Random

Avoid Text/Image Overlap

Item ID	Items
	add ...
	add ...

Pre-Text: Post-Text:

Background Image: [add backgroundImage](#)

Correct Answer(s):

Wrong Answer(s):

- Allow the items to be as large as possible for student readability.
If an item shrinks when a student sorts it into a bin, then the student can double-click the item in the bin to enlarge it. The enlarge algorithm only works if the item shrinks upon being sorted into a bin.

Sorting

Summary of changes to solutionAppletSorting

- Support for HTML, var, and TeX formatting in labels. You can change colors and use subscripts, superscripts, bold, italic, and `
`. You apply extended formatting to HTML items the same way that apply formatting to other text items in the Advanced Editor.
- Ability to remove the version numbers from the production view.
To view the version: Right-click on the applet.
- More sizing options:

Standard (850 w x 425 h)	Displays in a one-pane layout. Standard is the default setting for newly created items. If you copy an item, the size will reflect the size of the item you are copying.
Small (475 w x 425 h)	Can display in a two-pane layout. (The layout depends on all of the assets in the item.)
User-defined	Author specifies the width and height.

The screenshot shows the configuration interface for the solutionAppletSorting. At the top, there are options for 'Applet Size' with radio buttons for 'standard', 'small', and 'user defined'. The 'user defined' option is selected, and there are input fields for 'width' and 'height'. Below this are checkboxes for 'Random' and 'Avoid Te' (partially visible). There are also links for 'add @centerItems' and 'Center items'. Below the options are two tables:

Bin ID	Bin	Item ID	Item
			add ...
			add ...

Below the tables are two dropdown menus for 'Bin:' and 'Items:', both with a green arrow icon and the text 'Select a binID' and 'Select a itemID' respectively. At the bottom, there is a section for 'Wrong Answer(s):' with the text 'add expression'.

- Allow the items to be as large as possible for readability. If an item shrinks when a student sorts it into a bin, then the student can double-click the item in the bin to enlarge it. The enlarge algorithm only works if the item shrinks upon being sorted into a bin.

- Optimize the spacing of items in bins (minimize the blank space).
Use CenterItems attribute= 1

The logic of positioning of the items inside a bin depends on the values of the centerItems and avoidTextImageOverlap parameters, as described in this table:

Settings	Rules/Logic
<p>When centerItems = 0 and avoidTextImageOverlap= 0</p> <p>Note: When the avoidTextImageOverlap parameter is set to 0, then there is no difference in the item positioning logic between text and image items.</p>	<ul style="list-style-type: none"> If there is only one item placed to the bin: The item is centered vertically and horizontally inside the bin. If there is more than one item in the bin: Odd items are left-aligned – This is true, even if items are right-aligned inside the bin. <p>Items are arranged vertically so that the vertical distance between neighboring item top/bottom edge is uniform. – Applies only if the arrangement allows all the items to fit into the bin.</p> <p><i>If this arrangement does not allow all the items to fit into the bin:</i> The items are arranged so that the distance between neighboring items' centers is uniform and all the items fit into the bin (this implies that the items may overlap).</p>

Settings	Rules/Logic
<p>When centerItems=0 and avoidTextImageOverlap=1</p> <p>Note: When avoidTextImageOverlap parameter is set to 1, image items and text items are arranged separately in separate parts of the bin.</p> <p>Image items occupy the top part of the bin and text items occupy the bottom part of the bin.</p>	<ul style="list-style-type: none"> ▪ If there is only one item placed to the bin: The item is centered vertically and horizontally inside the bin. ▪ If there is more than one item: The text items and image items inside their parts are arranged the same as above except that text items are arranged in a vertical direction, from bottom to top.
<p>When centerItems=1</p> <p>In this case, the avoidTextImageOverlap parameter value is ignored.</p>	<ul style="list-style-type: none"> ▪ If there is only one item placed to the bin: The item is centered vertically and horizontally inside the bin. ▪ If there is more than one item: All items are arranged in rows from left to right, and rows are arranged from top to bottom.