Template Builder User Guide

Product Version 1.0

August 11, 2017

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Last Updated

August 11, 2017

Contents

1 Introduction

Template Builder is a web application that allows journalists and content creators to edit and build customized templates based on existing templates.

The templates can be customized with different functionalities described in this guide. The major functionality in Template Builder is the possibility to add custom HTML panels to the forms used to edit the templates which gives the user full control over the template.

1.1 Workflow

The basic workflow from graphics design to a working template is as follows:

- Scenes are made in Viz Artist. Multiple scenes can make up one template, categorized under different variants.
- Objects in the scene, that the graphics designer wants to make editable in the finished template, are given the appropriate control plugins.
- Templates are made in Template Wizard, after importing the scene(s) over.
- These templates are saved within the Pilot system and are available to the Template Builder.
- In Template Builder a template can be opened, edited/customized and previewed.
- The template is saved back into the Pilot system and are made available to the newsroom and control room systems.
- A journalist, editor or other content creator, fills the graphics template with content. This can include: text, numbers, images, videos, websites and maps. The template is saved into the Viz Pilot system creating a data element that is added to the newsroom story.

- The Viz Pilot operator monitors the newsroom playlist (rundown) and plays the graphics on-air at the correct time in the broadcast.

> **Note:** The changes made to a template in Template Builder will not be available in the template in Template Wizard

1.2 Document Structure

This User's Guide is divided into the following chapters:

- Introduction
- Setup
- Using the Template Builder

1.3 Related Documents

The templates customized in Template Builder can be used by other Viz products like Viz Pilot Edge, Viz Story and Viz Multiplay.

For more information about all of the Vizrt products, visit:

- www.vizrt.com
- Vizrt Documentation Center
- Vizrt Training Center
- Vizrt Forum

1.4 Customer Feedback and Suggestions

We encourage suggestions and feedback about our products and documentation.

To give feedback and, or suggestions, please identify your local Vizrt customer support team at www.vizrt.com.

1. Click on **Contact** (top of page).
2. The Vizrt office which is nearest to your location will be shown, or select from the list of Vizrt offices.
3. Click on the **Contact** button for the office you want.
4. Complete the required details in the window that open
5. A Vizrt representative will contact you as soon as possible.

   > **Note:** If this message is for Customer Support, and there is a Support Contract in place, then click on the 'For support requests, please visit our support portal' link in the message window.

1.5 Customer Support Requests

Support Requests are supported by Vizrt if customers have a valid Service Agreement in operation. Customers who do not have a Service Agreement and would like to set up a Service Agreement should contact their regional sales representative (see Customer Feedback and Suggestions).

When submitting a Support Request, relevant and correct information should be given to Vizrt Support, to make sure that Vizrt Support can give the quickest and best solution to your Support Request.

This section contains the following topics:

- Before Submitting a Support Request
- Submitting a Support Request

1.6 Before Submitting a Support Request

Before a Support Request is submitted make sure that you:

Read:

- The relevant User Guide or Guides
- The release notes
  and Check:

- That the system is configured correctly
- That you have the specified hardware, tested and recommended versions
  Always refer to your Vizrt Service Level Agreement document.

1.7 Submitting a Support Request

When completing a Support Request, add as much information as possible.

1.7.1 Content of a Support Request

The report should contain information about these topics:

- **Problem description:** Include a good description of what the problem is and how to reproduce it. Specify your workflow. Remember to use simple English.
- **Screen shots and illustrations:** Use these to simplify the message. These are extremely useful for Vizrt Support.
- **Software configuration:** Add exact versions of software used. This is extremely important information. The version information is available in the log.
- **System log files:** Send the system log file. You can save your log file in the *link to Logs pane*.
- **System locale:** Specify the Region and Language settings of the system.
- **Hardware configuration:** Add exact versions of hardware used, especially for Viz Engine. Optional:

- **System setup:** Describe differences in the installation, if any, from the recommended setup.

- **System Network:** Add a description of how the network, bandwidth, routers, and switches are configured.

  Always refer to your Vizrt Service Level Agreement document.

1.7.2 To submit a Support Request:

1. On the www.vizrt.com page, click on Support.
2. Click on **Report a case**.
3. Click on **LOG IN** to login to the Customer and Partner portal.
4. At the top of the Case Management page, click on **Report a Case**.
5. In the online form complete the required minimum information (shown by a red asterisk) and click **SAVE**.
6. In the saved Support Case that opens, complete the various text boxes and upload any required documents, files, etc. (see Content of a Support Request).

   To **track the status** of open support tickets, login to the Customer and Partner portal. Add information or communicate about the cases directly with the support team.

2 Setup

The Template Builder follows the Pilot Data Server installation and opens as a web application in a browser.

The URL to access Template Builder is:

```
http://pds-host-name:8177/templatebuilder
```

2.1 Graphic Hub Connection

If Graphic Hub functionalities are needed to specify default values for geometries, materials, video, image and font fields, a Graphic Hub URL address must also be provided:

```
http://pds-host-name:8177/templatebuilder?gh=ghhost
```

Info: Enter the Template Builder URL first, and then add ?gh=ghhost afterwards

3 Using the Template Builder

This section will explain the user interface of the Template Builder and how to use it.

In addition to a brief overview of the user interface below, the following topics are explained in more detail:

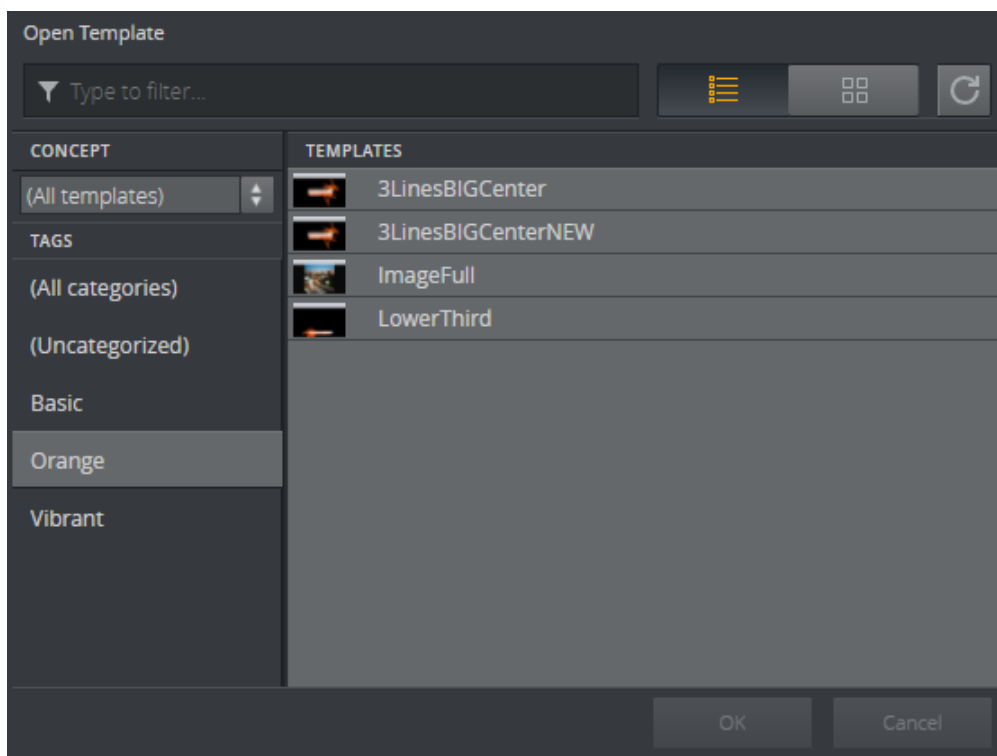The Template Builder Window

The Fill In Form

The Preview Window

3.1 Open a Template

Template Builder is a tool for editing and customizing existing templates.

From the main user interface, select the **Open** button to browse for an existing template available within the Pilot system.

In the **Open Template** dialog, browse the desired template by selecting **CONCEPT** and **TAGS**. The template search can be narrowed down by searching for the template name in the **Type to filter...** field at the top.

3.2 Main User Interface

The main user interface is divided into three main windows.

(1) The Template Builder Window

(2) The Fill In Form

(3) The Preview Window

The Preview Window (3) provides snapshots of the graphics with content. The preview snapshots provide the user with an idea about how the graphics will look like when played on air and are updated as changes are being made in the Fill In Form (2). In the Fill In Form the user fills in/edits content for the graphics. The field information, exposed fields and layout in the Fill In Form can be customized by the user in the Template Builder (1).
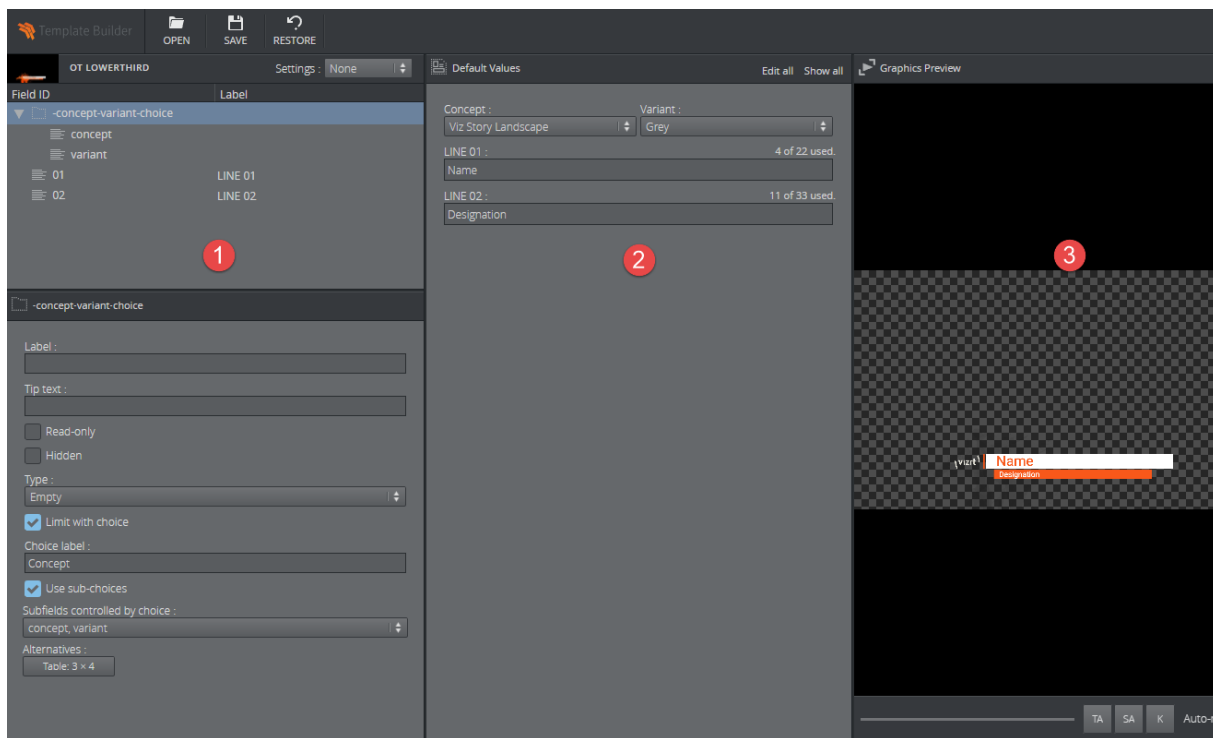
3.3 Save

Saving, [SAVE] , changes made to an open template in the Template Builder will overwrite the template in the Pilot Data Server.
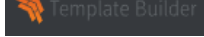
3.4 Restore

The restore button, [RESTORE] will undo all changes since the last save.

3.5 About

Clicking the Template Builder logo [Template Builder] in the top left corner of the application takes the user to the about page.

Here is information about software version, link to local documentation and link to third party licences.

3.6 Template Preparation

The current version of Template Builder relies on templates being generated and organized using Viz Pilot's Template Wizard. The following procedures will give you a quick introduction on how to create and manage a template. For more information on how to work with Template Wizard, please see the Viz Pilot User's Guide.

3.6.1 Creating a Template
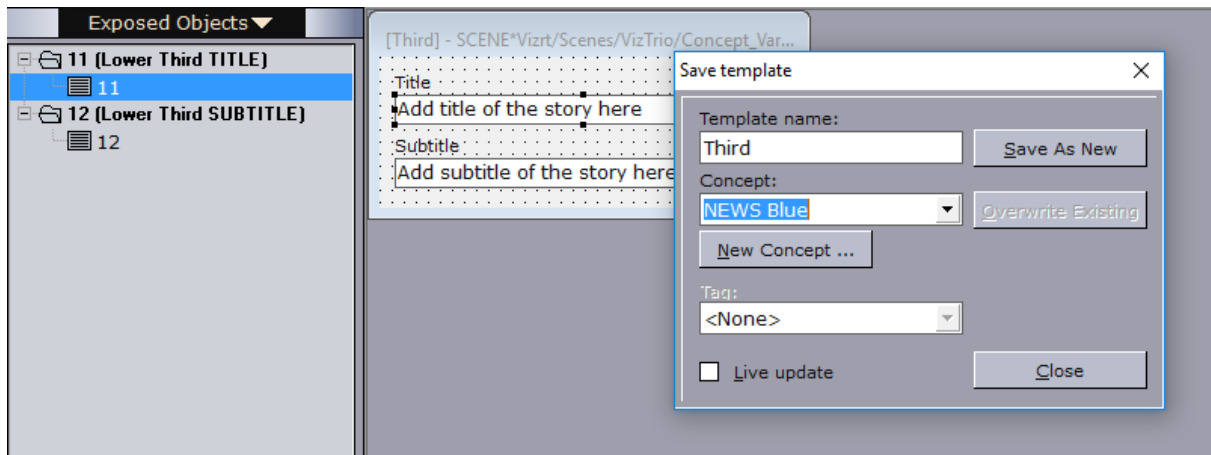
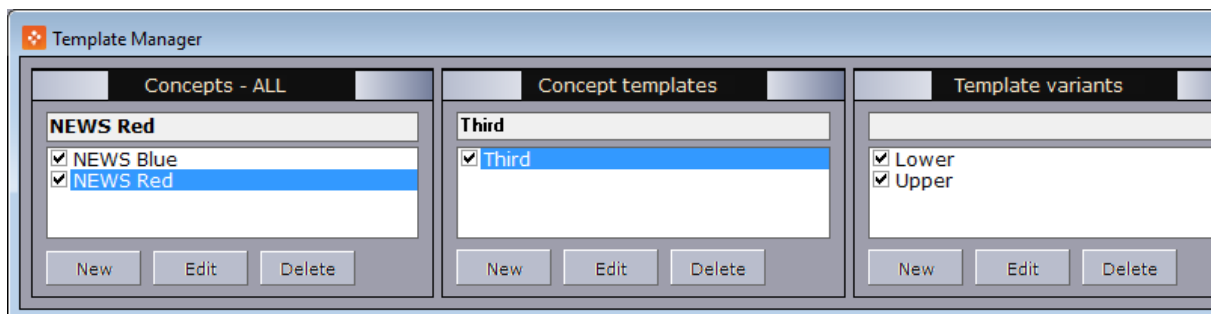The following procedure explains how to create and save a template.

To create a template:

1. Start Template Wizard
2. Connect to your Viz Engine
3. On the File menu, select Wizard
4. Drag and drop the scene to the Selected Scenes pane (right)
5. Click Finish
6. On the File menu, select Save (Ctrl+S)
7. Enter a Template name
8. Select a Concept name (or create a new)
9. Click Save as New

3.6.2 Managing Concepts and Variants

The following procedures explain how to organize a template for use with more than one concept and variant, for example a Blue and Red concept with a lower and upper third graphic. As a prerequisite all scenes should have the same type of data in order to use the same template.

To manage concepts:

1. On the Tools menu, select Template Manager
2. Under the Concepts - All pane, click New
3. Enter a name for the new concept and save it
4. Open the other concept
5. Drag and drop the template from the old to the new concept (and confirm the operation)
6. Open the new concept
7. Edit the template by selecting the correct Scene folder for your new concept
8. Save and confirm the operation

To manage variants:

1. On the Tools menu, select Template Manager
2. Select your concept, then the template
3. Under the Template variants pane, click New
4. Enter a Description of the variant
5. Select the Scene name that is a variant of the other
6. Save and confirm the operation

3.7 The Template Builder Window

The Template Builder window is located to the left in the window and is where all the customization of the template is done.

3.7.1 Settings

At the top of the Template Builder Window a **Settings** drop down list is available, which allows for the following template settings:Limit With Choice Option
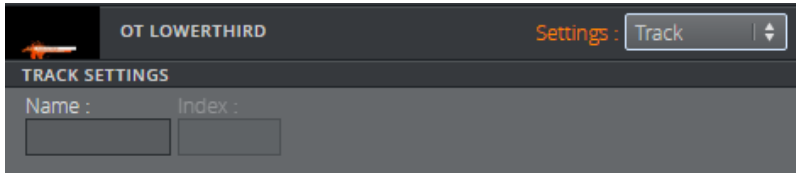
Duration

The duration setting can be used to specify the duration of the item. A default value is used when unspecified. Minimum and maximum duration values may also be specified. If these are set to the same number the item will get a fixed duration.
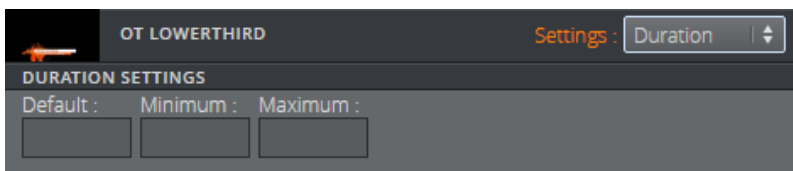
Track

Setting a **Name** in the track settings allows for grouping of graphics in the timeline editor, see Track settings displayed in the timeline editor. The **Index** sets the position of the group in the timeline editor, where 0 is the lowest position.

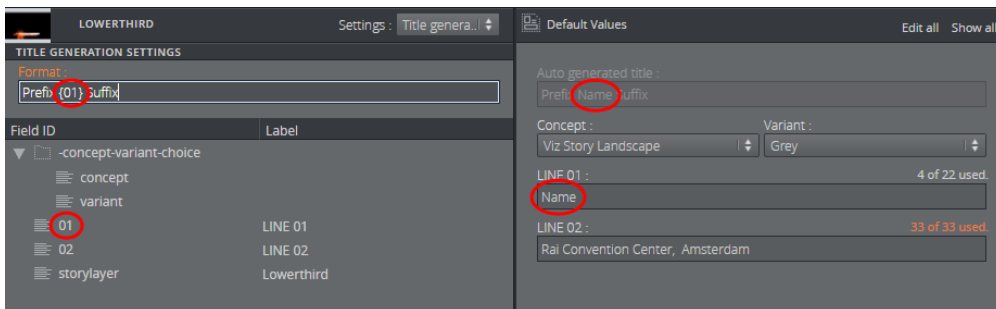**Warning:** Make sure to use the same index for the same name in all modified templates


Track settings displayed in the timeline editor
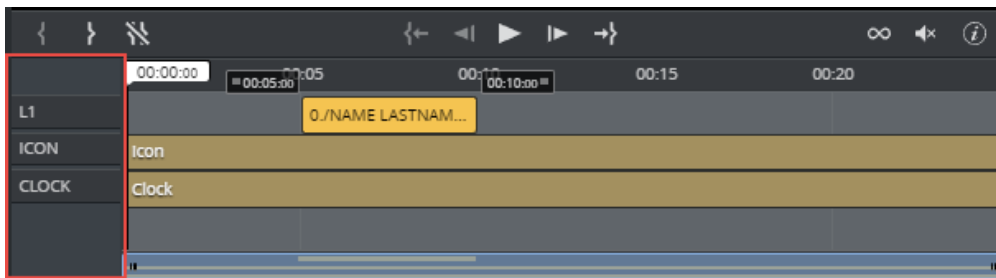
Title generation

The title generation setting allows for auto-generation of the title. The title can for example be text with a placeholder for a Field ID. The placeholder is the {field ID path}. An example is shown below:

3.7.2 Field Tree

Each line in the Field Tree displays the ID and the label of a field in the template. It also contains an icon indicating the type of the field.
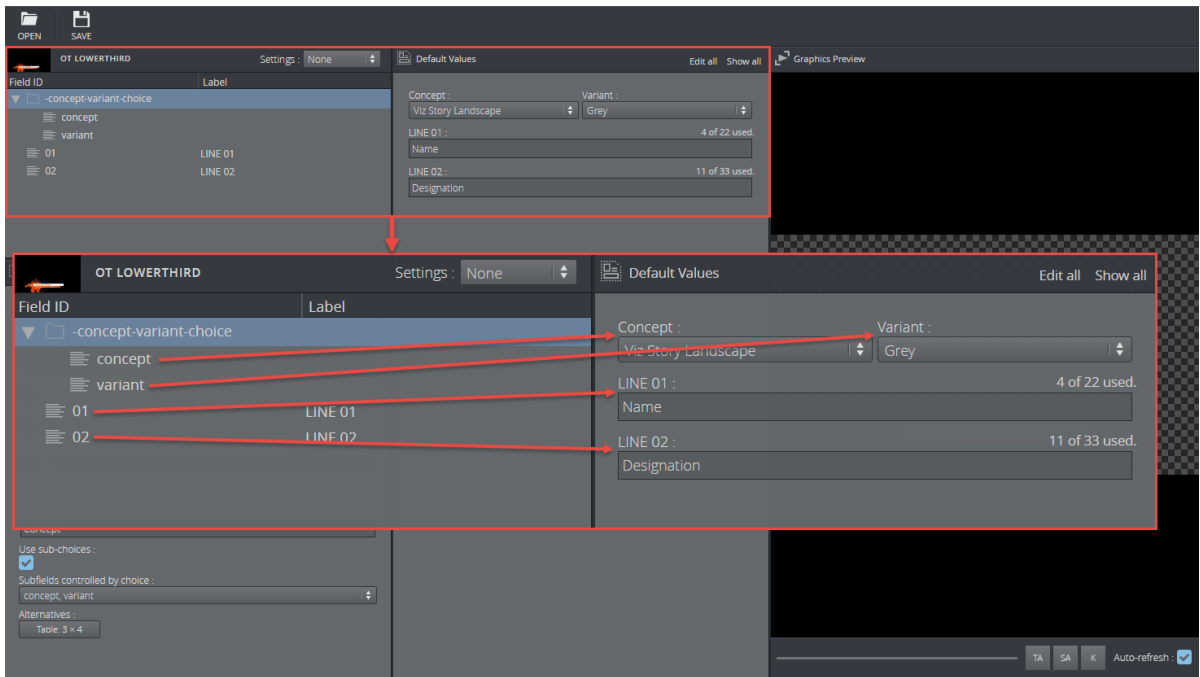
The Field listing can be rearranged by drag-and-drop within the Field list.

Right clicking a field a list of choices appear. From here fields can be added/removed, HTML panel can be added, Field ID can be changed and the selected field can be deleted.

The Fill In Form will always immediately update upon any change.

Info: Only fields created in Template Builder can be deleted and given a new ID.
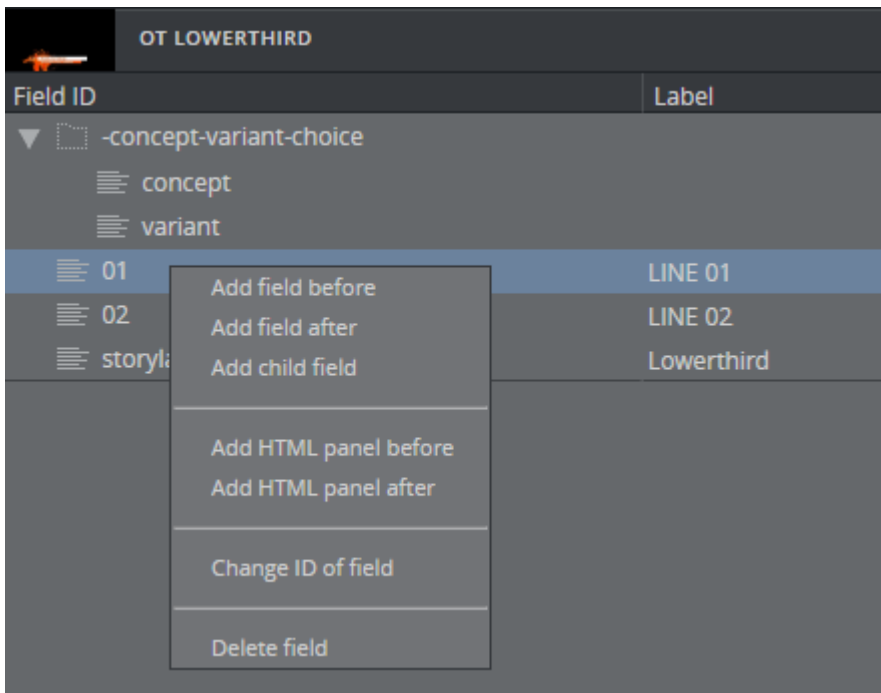
Each field line can be customized using a set of properties which are displayed in the bottom half of the Template Builder window. Mark the desired Field in the top window, and the following properties can be set:
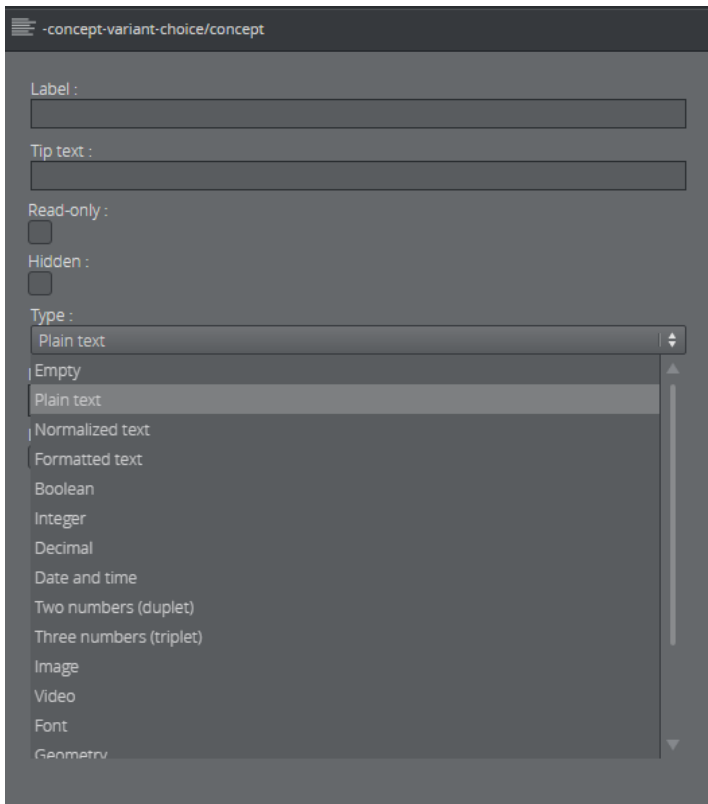
Label

Specifies the label of the field in the Fill In Form.

Tip text

A tool tip text can be entered to give more information about the field.

Read only

Selecting the **Read-only** check box will keep the field visible, but greyed out in the Fill In Form.

Hidden

Selecting the **Hidden** check box will hide the field in the Fill In Form.

Type

The type of content allowed in the field in the Fill In Form are set using the drop down list under **Type**. Depending on the type selected different choices are available:

Type	Icon	Description
Empty		Will make the field unavailable. Typically used as a contained for other fields.

Type	Icon	Description
Plain text		The field is a text field.
		Max length: Set the number of maximum characters in the field.
		Limit with choice.
Normalized text		Normalized text.
		Max length: Set the number of maximum characters in the field.
		Limit with choice.
Formatted text		A text that allows formatting.
		Max length: Set the number of maximum characters in the field.
		Single-line: Check this box to specify that the rich-text editor should only allow one line of text.
		Limit with choice.
Boolean		Creates a check box which have two states; true and false.
		Limit with choice .
Integer		The field is an integer field.
		Minimum: Set the minimum value allowed.
		Maximum: Set the maximum value allowed.
		Limit with choice .
Decimal		The field allows decimal numbers.
		Minimum: Set the minimum value allowed.
		Maximum: Set the maximum value allowed.
		Limit with choice .
Date and time		Use the **Date Chooser** in the Fill In Form to select date and time in this field.

Type	Icon	Description
Two numbers (duplet)		The field allows two numbers (decimal numbers are allowed). Minimum: Set the minimum value allowed for both numbers. Maximum: Set the maximum value allowed for both numbers.
Three numbers (triplet)		The field allows three numbers (decimal numbers are allowed). Minimum: Set the minimum value allowed for all three numbers. Maximum: Set the maximum value allowed for all three numbers.
Image		Will make the field available for an image.
Video		Will make the field available for a video.
Font		Will make the field available for a font.
Geometry		Will make the field available for a geometry.
Material		Will make the field available for a material.
Map		Will make the field available to present and edit a map.
Custom		

Type	Icon	Description
		Using the custom type the media- and XSD- type can be freely specified.
		Limit with choice .
List		There is not support for making lists in Template Builder, but lists can be available in the template from Template Wizard.

Note: The user must be aware of the control plugins that have been exposed by the scene designer in Viz Artist.

3.7.3 Limit With Choice Option

All the available content types in the drop down list in the Template Builder Window have a check box option called **Limit with choice**. The purpose of limiting the choice of a field is to make it easier and less error prone to fill in the right content when present in a drop down list.

An example where the **Limit with choice** functionality can be useful is when a Control Object moving (Omo) plugin is accessible in the template. Scenes using Omo plugins will originally be presented as integer values for the different elements in the Fill In Form. The **Limit with choice** option can assign text to these values to make it easier to select the right element.

An example of how this can be done in the Template Builder is explained below. In this example there is a scene that can be displayed at the top, in the middle or at the bottom in the graphics. For the Omo plugin these positions correspond to the values 0, 1 and 2 respectively. To assign text to these values, do the following:

- Mark the Omo Field ID in the Template Builder.
- Select the **Limit with choice** option.
- When clicking on the **Alternatives** button, a new window appears. Right click to design the table by inserting or removing rows. Click in a selected row or press F2 to do inline edits.
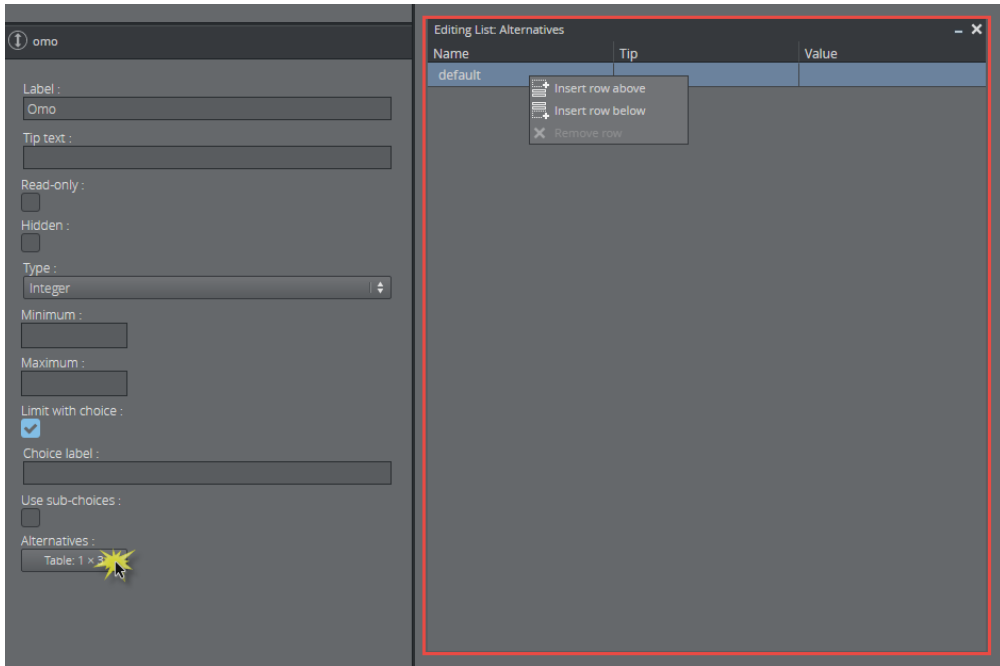
- Double click the table or press Return to insert **Name**, **Tip** and **Value**. Click **Next,** tab or Ctrl + down, to continue filling the table.
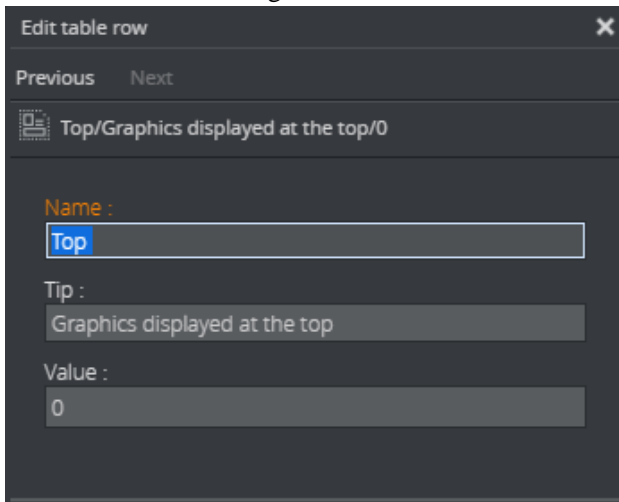
- In the table below the values now correspond to text. Exit the table when it is filled out
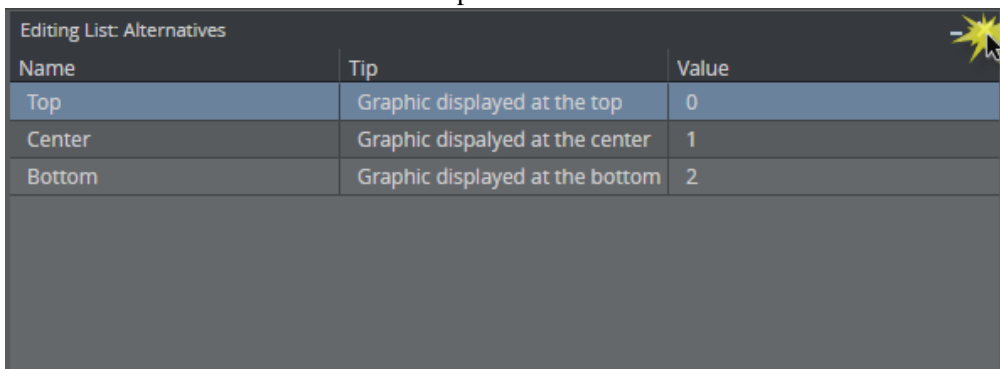
- The Omo field in the Fill In Form now contains a drop down list containing the alternatives created above as text, as oppose to an integer field where the user would have to remember which integer corresponds to which position.
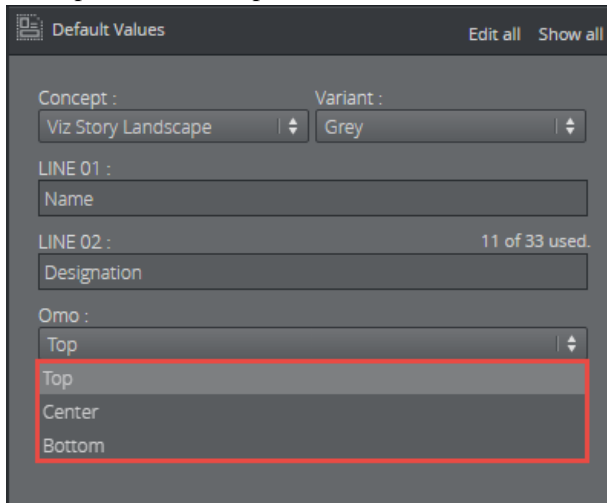
Use Sub-Choices

Selecting the **Limit with choice** option, a new check box is made available called **Use sub-choices**. This functionality allows the set-up of several sub-choices for each choice.

For example, if the choices list different countries, sub-choices could list cities in each of the countries. See example below:

- Mark the desired Field ID in the Template Builder.
- Select both **Limit with choice** and **Use sub-choices** options.
- When clicking on the **Alternatives** button, a new window appears. Right click to insert or remove rows.
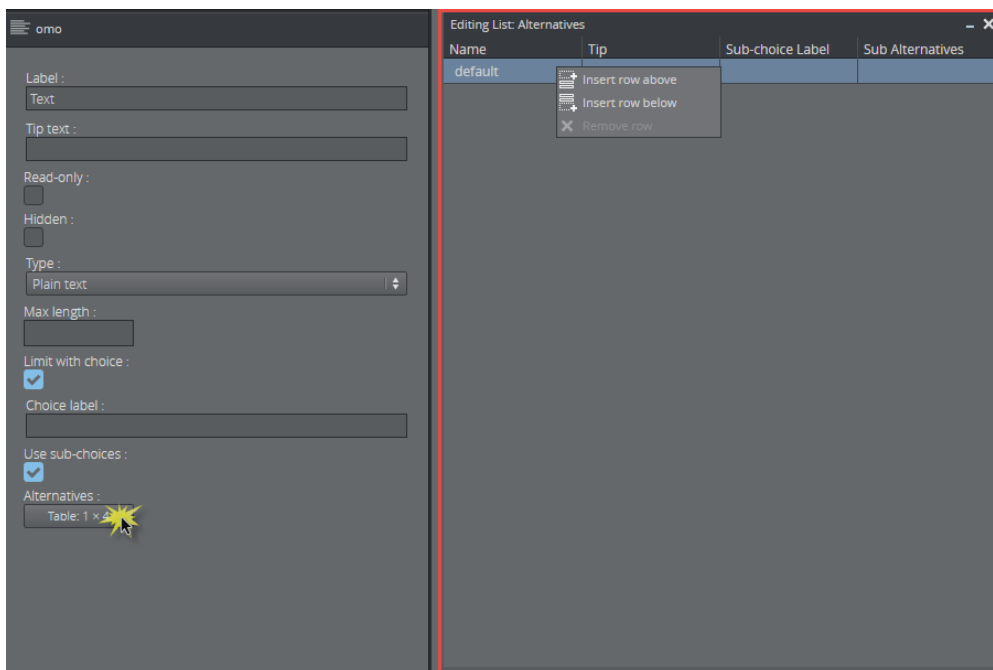
- Double click the table to insert **Name**, **Tip** and **Sub-choice Label** which in this case is *Cities*.
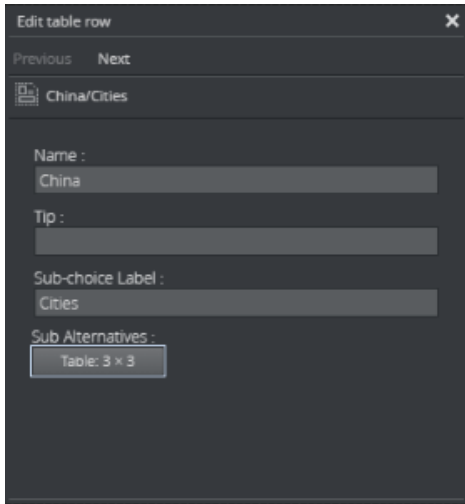
- Click the **Sub Alternatives** button to add the sub alternatives.
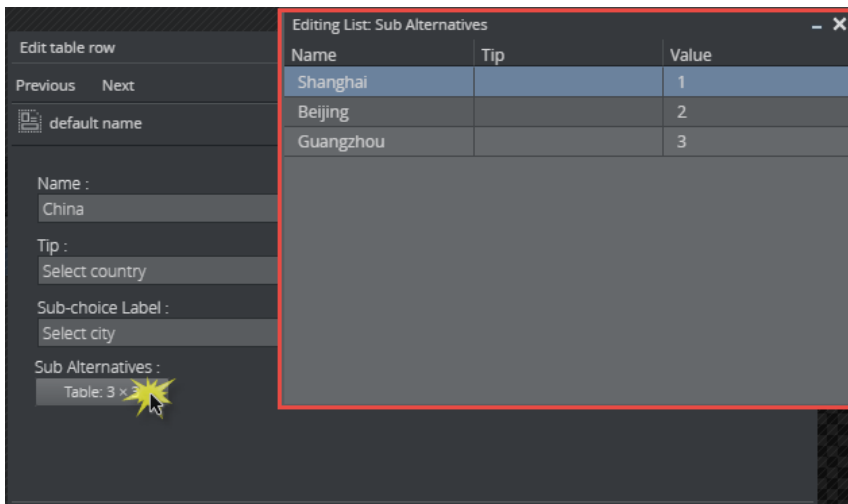
- Exit the tables when they are filled out.
- Instead of a text field in the Fill In Form, the field now contains two drop down lists; the main choices, which in this case is a list of countries, and sub-choices with corresponding cities.
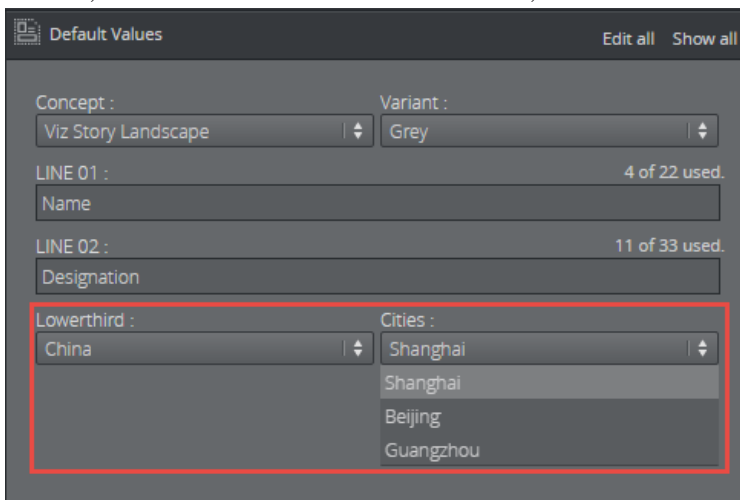
3.7.4 The HTML Panel

As a part of the customization workflow the user can add an HTML panel to the template, which is a functionality that gives the user full control over the template by using custom scripting and logic to build the template. The template can host a webpage by entering a web address in the Template Builder. Normally the aim is not to host a single webpage, but rather make a data integration HTML template.

A simple example showing how to connect a custom HTML template to a pilot template is shown below. Keep in mind that this example shows a limited possibility of what can be done using the customized workflow. Using it in more advanced ways opens up to possibilities where the user has 100% control over the template.

Add HTML panel

The option of adding a HTML panel is available by right clicking in the field ID list in the Template Builder window. Selecting the HTML panel field ID, its properties become available in the bottom window.

The size of the HTML panel shown in the Fill In Form is set in the **Height** field.

In the **Source URL** type in the web address.

The **Hidden fields** drop down list allows the user to hide available fields in the Fill In Form.

Custom HTML template

Using the custom HTML template opens up to full user control of the template using custom scripting and custom logic.

The following example will show how to create a simple custom HTML template in Template Builder.

In this example we are working with a simple custom html template showing the message **Hello world** when opened in a browser:
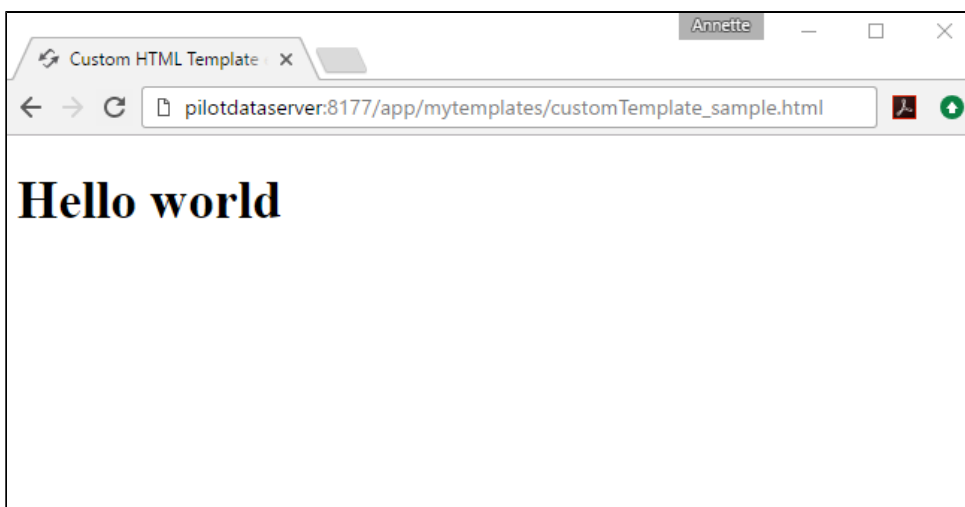
How to see the custom HTML template inside Template Builder

- Open a template in Template Builder and add an HTML panel to the template as explained above
- In the URL field enter the URL of the custom html template
- Now the message **Hello world** should appear in the Fill In Form:
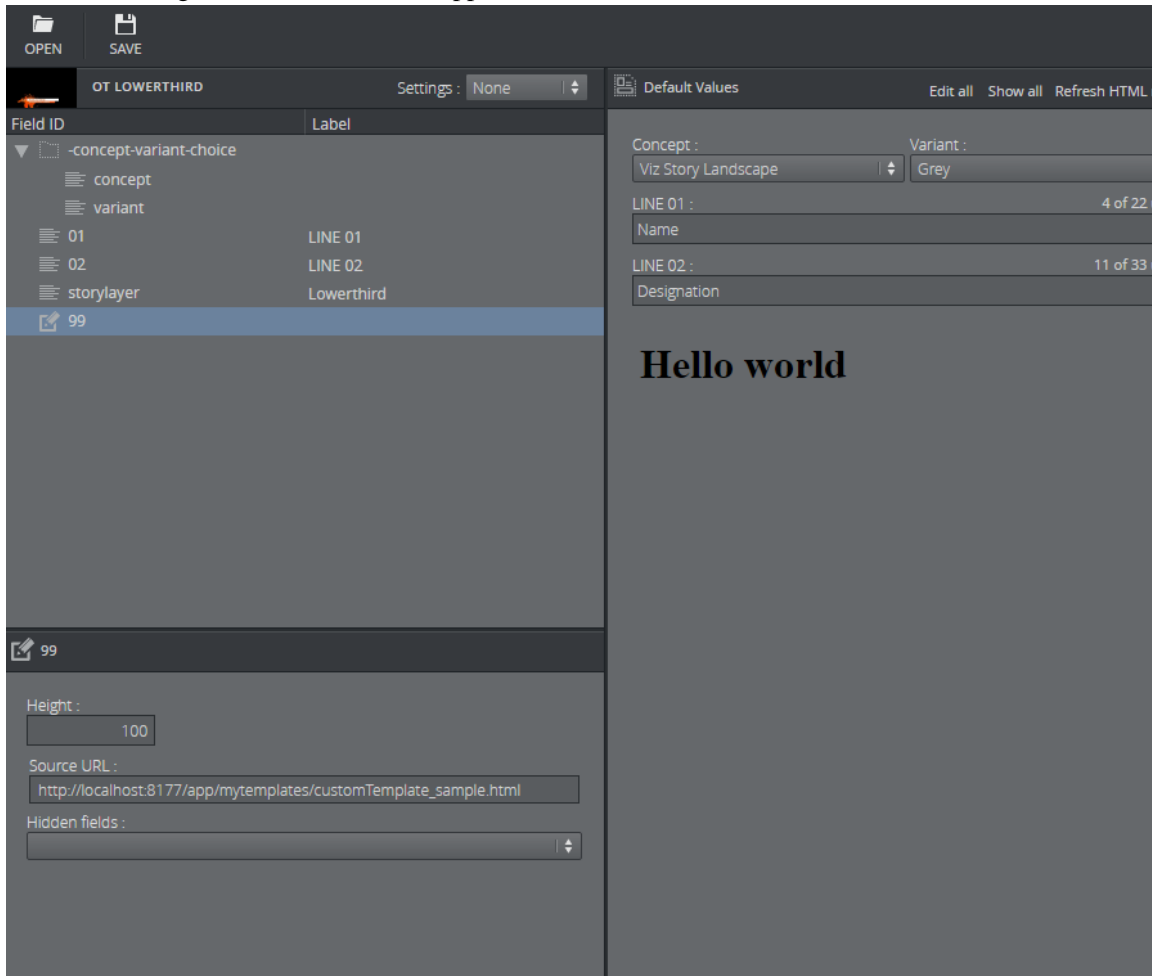
How to connect the custom HTML template to the pilot template

Following the example above, it is now ready to establish a two-way communication, or bind fields, between the HTML template and the opened pilot template. A new field is therefore added to the template:

- Right-click on your HTML panel field, and choose **Add field after**
- Give it the id **50**
- Change the fields type to **Plain text**

- A new field appears:

To connect the custom html template to the newly created field, the custom HTML template is opened in an editor.

The payloadhosting.js file must be included in the HTML template. This file is located in the js folder in the template builder folder.

The entire `<body>` block is replaced with:

```html
<body onload="vizrt.payloadhosting.initialize()">
     <label for="field_50">My input field:</label>
     <input name="field_50" type="text" id="field_50">
 </body>
```
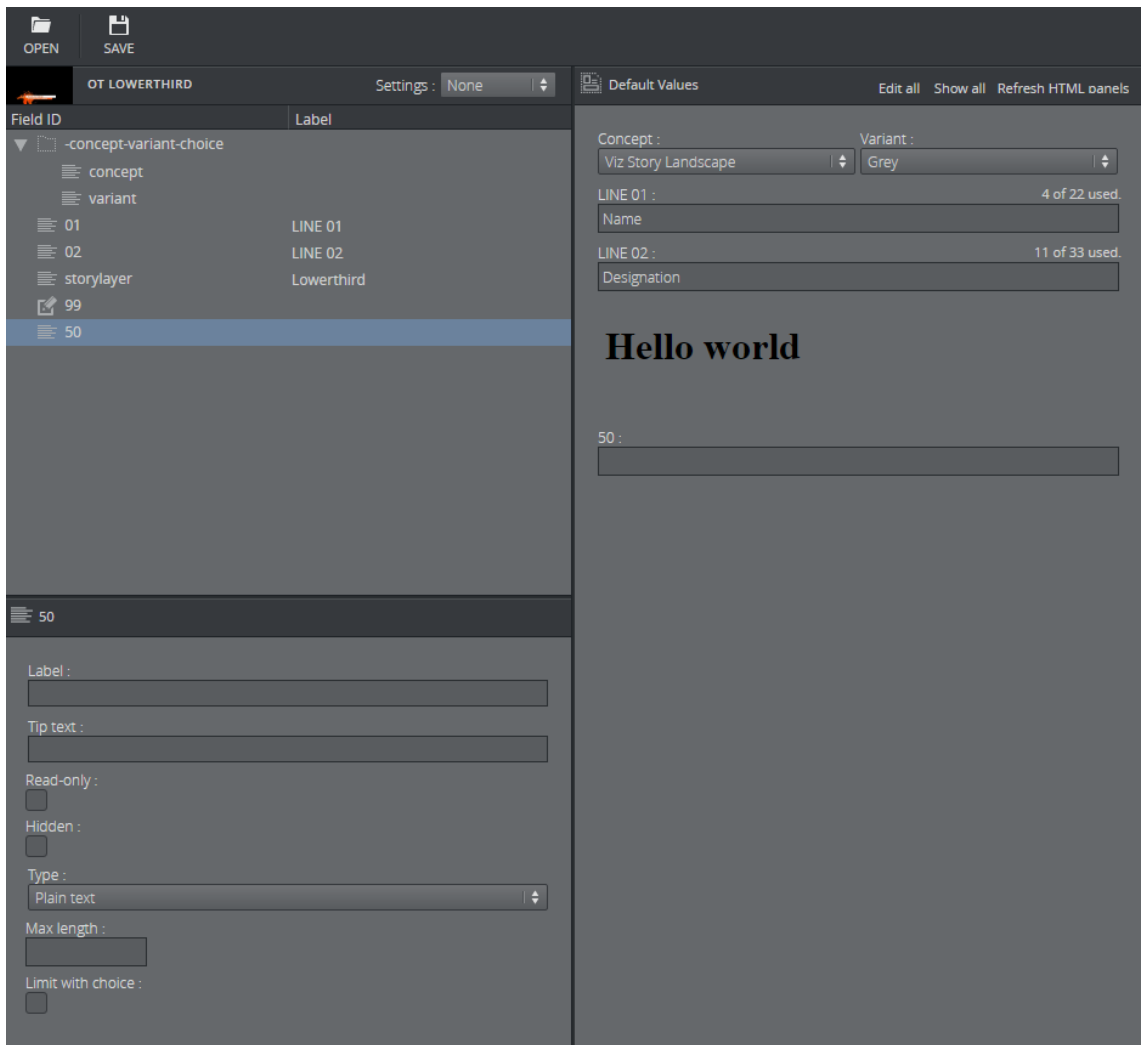
Saving the html file and clicking **Refresh HTML panels**, reloads the custom html template with the changes just made. Now a bi-directional connection between the editor and the custom template have been established. When typing either inside the template or inside the field with id 50, both fields should be updated at the same time. This way of binding fields will work for any HTML fields that have value support, which is typically `<input>` types and `<textarea>`.
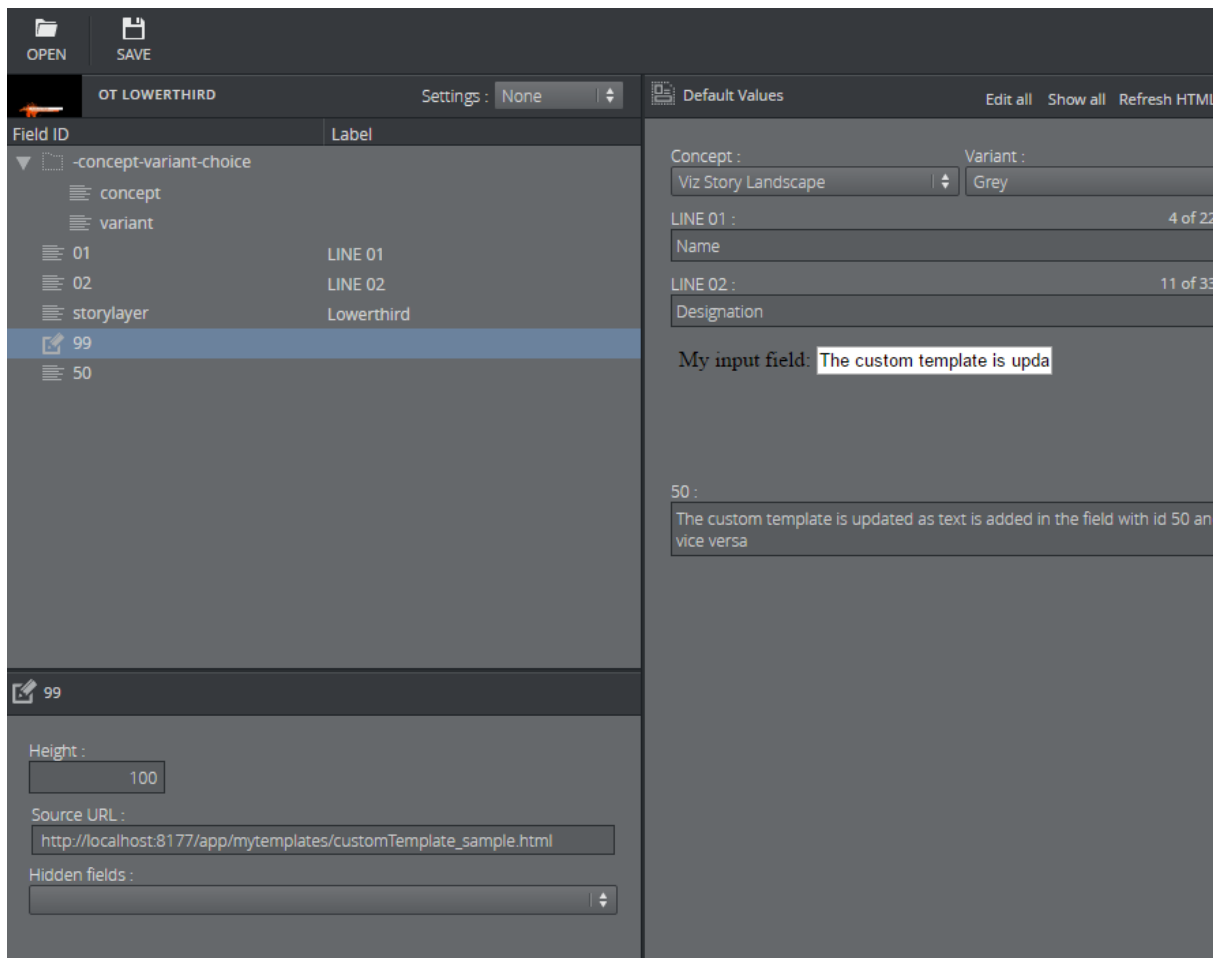
Adding the `id="field_50"` to the `<input>` element inside the HTML template is all that is needed for the two-way communication to be set up, since we added a field with the id of 50. Any amount of these binding fields can be established the exact same way; the way they are mapped are via id.

This gives a simple way of setting up a binding field. Note that updating the `<input>` elements programmatically will still send data back and forth; which is great for automated data integration such as fetching live sports data.

....
Note: To prevent two editors for the same field being visible at the same time, use the **Hidden fields** setting inside the HTML panel settings.
....

Browser Caching

The user might experience browser caching behavior when trying to update and display changes in the custom HTML template in Template Builder. This is standard browser behavior and Template Builder does not have control over caching resources that the HTML file itself includes.

To prevent this browser behavior, following actions can be made:

1. Make sure the URL's to the resources are unique upon reload.

2. The web server serving the resources could be configured to send Expiry headers set to 0. More detailed information on how caching works and how to modify these is out of scope for this documentation

3. Disable caching on the browser side. This is done differently per browser.

3.8 The Fill In Form

The window placed in the middle in the Template Builder is the auto generated fill in form for the graphics. It displays editable fields that are given the appropriate control plugins by the designer in Viz Artist where the user can add content to the graphic. What type of content that are allowed in the fields are controlled in the Template Builder Window. Fields can be restricted to contain e.g. only text with a certain amount of characters, numbers within a specific range, media placeholders for media assets, or it can be a set of choices in a drop-down list.

As long as the fields in the Fill In Form are exposed controls made by the designer the added content will be shown in the Preview Window .

At the top of the Fill In Form there are three options **Edit all, Show all** and **Refresh HTML panels**.

Edit all is an option to edit all fields in the Fill In Form. This is to provide a way to edit default values of fields that are set to read-only.

Selecting **Show all** displays all fields in the Fill In Form, even if the fields are set in hidden mode.

Selecting **Refresh HTML panels** will reload the HTML panel(s) in the Fill In Form.

3.9 The Preview Window

The Preview Window is located to the right in the Template Builder, which displays snapshots of the final output in an ongoing preview process, providing the user an idea about the how the graphics will look like when played out in high resolution on a Viz Engine.

The Template Builder sends requests to the Preview Server which manages Viz Engines that provides the snapshots.
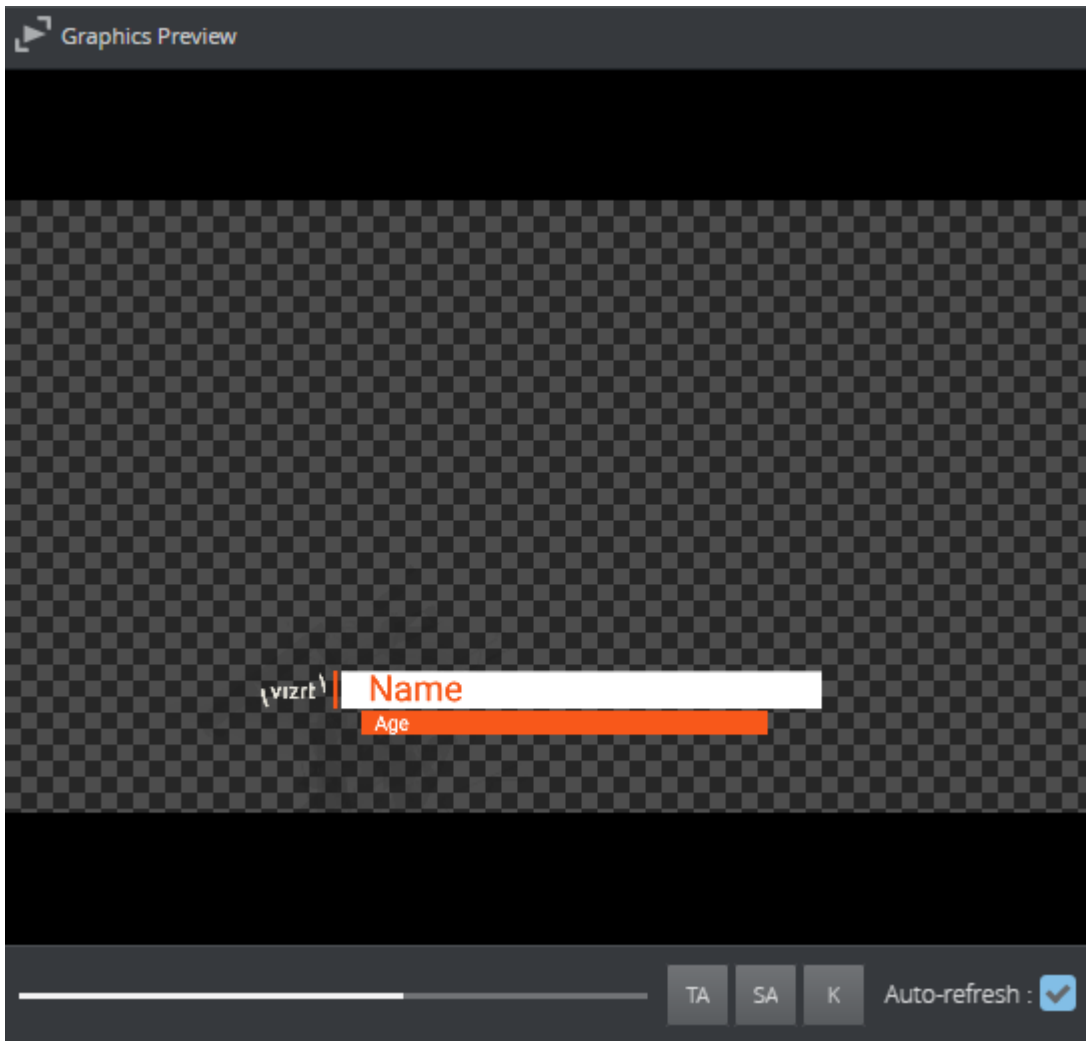
The toolbar at the bottom of the Preview Window allows you to adjust how to view the preview of the element graphics:

- **TA**: Show/hide the Title Area
- **SA**: Show/hide the Safe Area
- **K**: Show the key signal for the graphics
- **Scrub** the timeline back and forth using the slider.

The user can scrub the timeline of the graphic located at the bottom of the Preview Window by clicking on it. If the graphic contains stop points these will be marked on the timeline.

3.9.1 Auto-refresh

Auto-refresh is located at the bottom of the Preview Window and is by default toggled on which means that the Preview Window updates once there are any changes in the Properties Editor.

Toggle off **Auto-refresh** to turn this functionality off. To refresh the Preview Window in this mode click the Refresh button or click inside the Preview Window.