

CONTENT BLOOM INC.

# JW Media Player integration with Tridion 2009

---

by: Nickoli Roussakov

**11/9/2011**

# Contents

---

- Overview ..... 3
  - Features..... 3
- How To ..... 4
  - For Content Authors ..... 4
  - For Techies..... 6
- Configuration ..... 7
  - Summary ..... 7
  - Prerequisites..... 8
  - Setting up Schemas ..... 8
  - Setting up the Building Blocks ..... 10

# Overview

---

Often clients have a need to embed videos such as flash or mp4, within their rich text content fields. Pasting video embed code is one way to deal with this, however, the video would then need to be hosted on a different site, like Vimeo or YouTube, or needs to be published separately in Tridion with the video URL hardcoded as part of the content. This is not an elegant, nor a user-friendly solution. The JW Player Video Renderer module presented here allows the non-technical user to include a video Multimedia Component as a Component Link within their rich text fields by browsing to it. All that is required is a little bit of configuration and a TBB provided here.

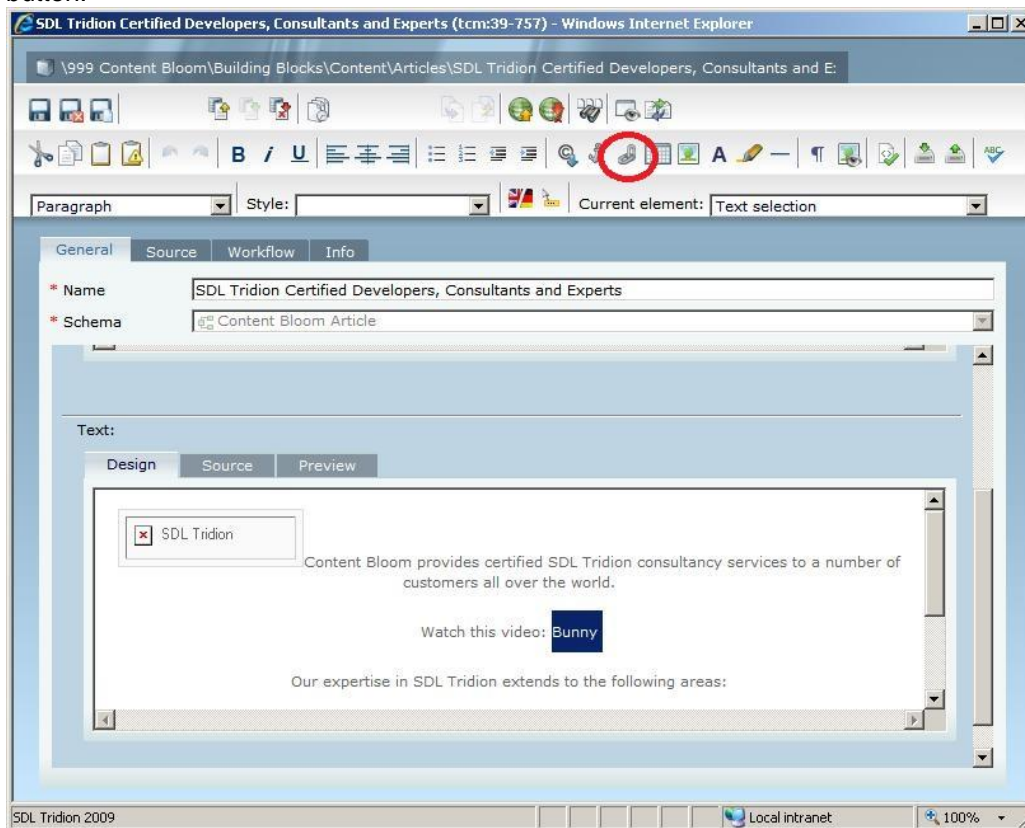
## Features

1. Ability for non-technical users to browse through a list of videos and link to them from within rich text fields.
2. Ability to use any media player with custom embed code
3. Ability to provide any number of parameters/options (e.g. set width/height, etc) without changing code. This is driven by the fields you define for your video schema.

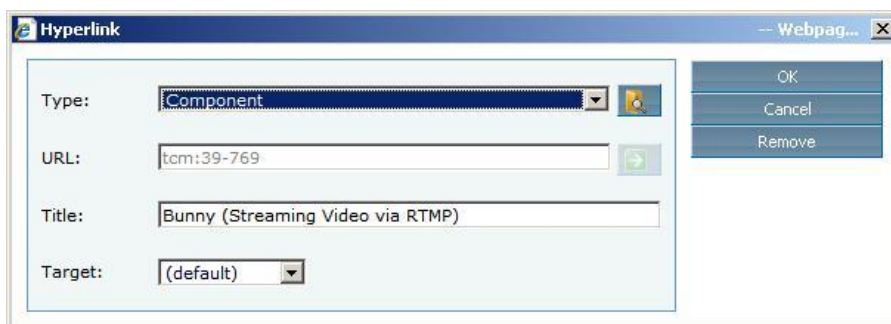
# How To

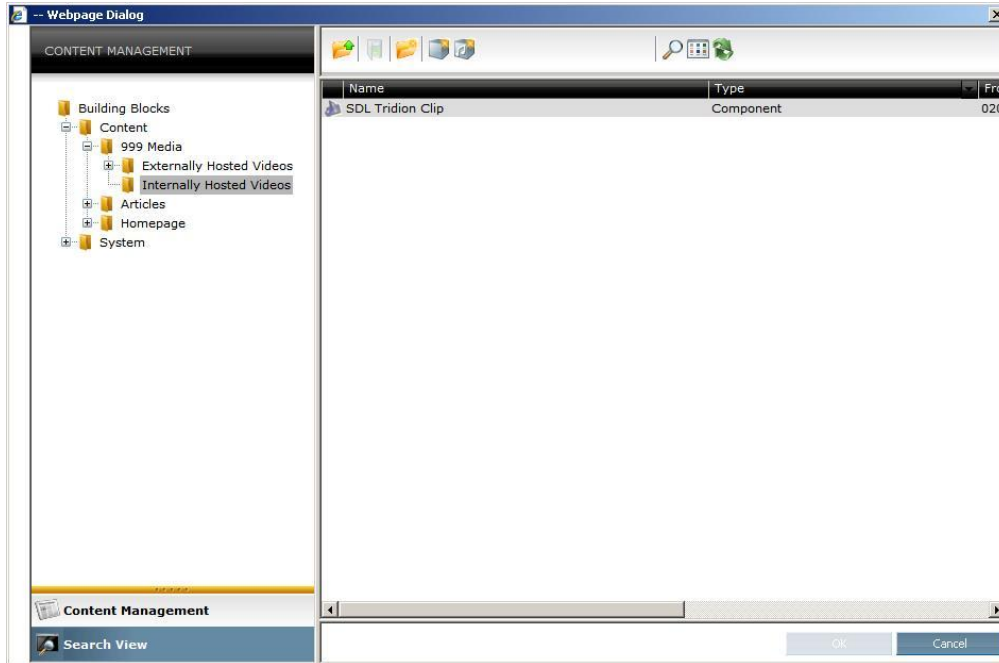
## For Content Authors

When a user wants include a video as part of their rich text content, simply click on the "Insert Link" button:



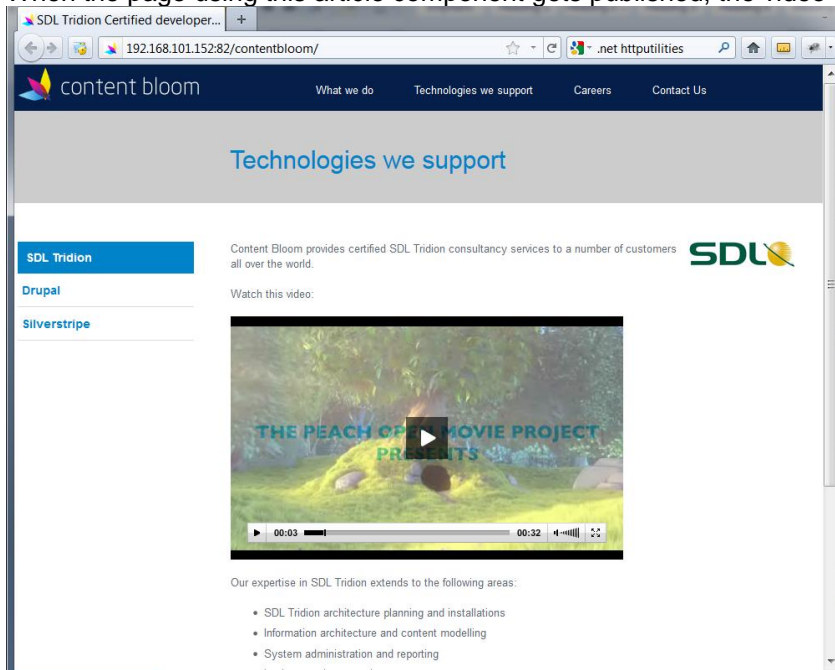
Browse for a video component:





That's it!

When the page using this article component gets published, the video appears embedded inside:



# For Techies

## (Those who dare to enter the Tridion 'System' folder)

A Tridion Building Block, "JW Video Player Renderer" is provided which works by replacing the tridion anchor tag (has "tridion:href" as an attributes) within the Article component with video embed HTML and video properties such as the URL to the media file, player size, etc.

A parameters schema is provided to this building block with a field holding video embed code (typically includes a call to a javascript that adds the Flash embed markup to the DOM along with some parameters, such as the video file URL, whether to autostart it, etc.)

Each of the parameter values in the embed code should correspond to a field in your video multimedia schema. This value of this field is obtained by surrounding its name with double hash symbols. For example:

If a schema exists that contains fields:

- Streamer
- Width
- Height
- Author
- etc...

Then you would reference these fields in the embed code as follows:

```
</p>
<script type="text/javascript" src="##JavascriptSourcePath##"></script>

<div id="mediaspace">Adobe Flash plug-in is required to play this video.<br />
Please install the plug-in from <a href="http://get.adobe.com/flashplayer"
target="_blank">www.adobe.com</a></div>

<script type='text/javascript'>
  jwplayer('mediaspace').setup({
    'flashplayer': "##PlayerSourcePath##",
    'file': "##VideoFileUrl##",
    'streamer': "##Streamer##",
    'width': "##Width##",
    'height': "##Height##",
    'author': "##Author##",
    'description': "##Description##",
    'title': "##Title##",
    'bufferlength': "##BufferLength##",
    'autostart': "##Autostart##",
    'image': "##PreviewImageUrl##"
  });
</script>
<p>
```

The building block figures out whether the field is a text field and simply replaces the value. If the field is a multimedia field (video preview image as an example), then it adds the binary to the package and replaces the hash-hash tag with the binary's publish URL.

This gives you, the developer, complete flexibility of what Video parameters you need (there is literally a hundred of them).

For more info about configuration options supported by the JW Player visit:

<http://www.longtailvideo.com/support/jw-player/jw-player-for-flash-v5/12536/configuration-options>

Also a handy Wizard is available that generates the JW embed code so you don't have to:

<http://www.longtailvideo.com/support/jw-player-setup-wizard>

# Configuration

---

## Summary

It is assumed here that you are already familiar with what is required to embed JW Player video on a page, without Tridion. For example, you'll need to download the jwplayer.js and jwplayer.swf files and be familiar with the types of parameters that can be used for embedding your video (e.g. autostart, width/height). We will not go into details of that here, and rather focus on what is needed to be configured in Tridion.

Here is a summary of the items that need to be configured in Tridion:

### Schemas:

1. JW Player Include (multimedia schema) - holds the jwplayer javascript and swf multimedia components.
2. JW Player Config (parameters schema) – holds configuration parameters for the player
3. JW Player Media (multimedia schema) – This will allow creating components for media hosted on your website.
4. Externally Hosted Video (component schema) - This will allow creating components for media that is hosted externally on a streaming server of a provider such as Akamai.

This article assumes you have a multimedia schema such as “Content Image” allowing image types. You may want this as an allowed multimedia link schema for the Video Preview Image (i.e. image to show before the video starts playing).

### Building Blocks:

1. JW Player Video Renderer
2. JW Player Video Renderer Main

This package provides the instructions as well as code (tested and used in several Production systems) on how to set this up.

## Prerequisites

Will Price's [Get Linked Components](#) TBB may be needed if your RTF field is nested within a linked component. In this case, this TBB is a prerequisite and must be placed ahead of the [JW Player Video Renderer Main](#) TBB inside the Article Component Templates.

If you do not already have this TBB, it is available for download from [SDLTridionWorld.com](http://SDLTridionWorld.com).

## Setting up Schemas

### Step 1: JW Player Include (multimedia schema)

Create a multimedia schema called "JW Player Include" and set it to only allow JavaScript and Flash.

### Step 2: JW Player Config (parameters schema)

Create a parameters schema called "JW Player Config" with the following fields:

|   |   |
|---|---|
| <p><b>Field XML Name:</b> VideoEmbedCode</p> <p><b>Description:</b> Video Embed Code</p> <p><b>Type:</b> Text</p> <p><b>Mandatory:</b> yes</p> <p><b>Height of Text Area:</b> 5 rows</p>      | <p><b>Field XML Name:</b> PlayerSource</p> <p><b>Description:</b> Player Source</p> <p><b>Type:</b> Multimedia Link allowing JW Player Include types</p> <p><b>Mandatory:</b> yes</p> |
| <p><b>Field XML Name:</b> JavascriptSource</p> <p><b>Description:</b> Javascript Source</p> <p><b>Type:</b> Multimedia Link allowing JW Player Include types</p> <p><b>Mandatory:</b> yes</p> |   |

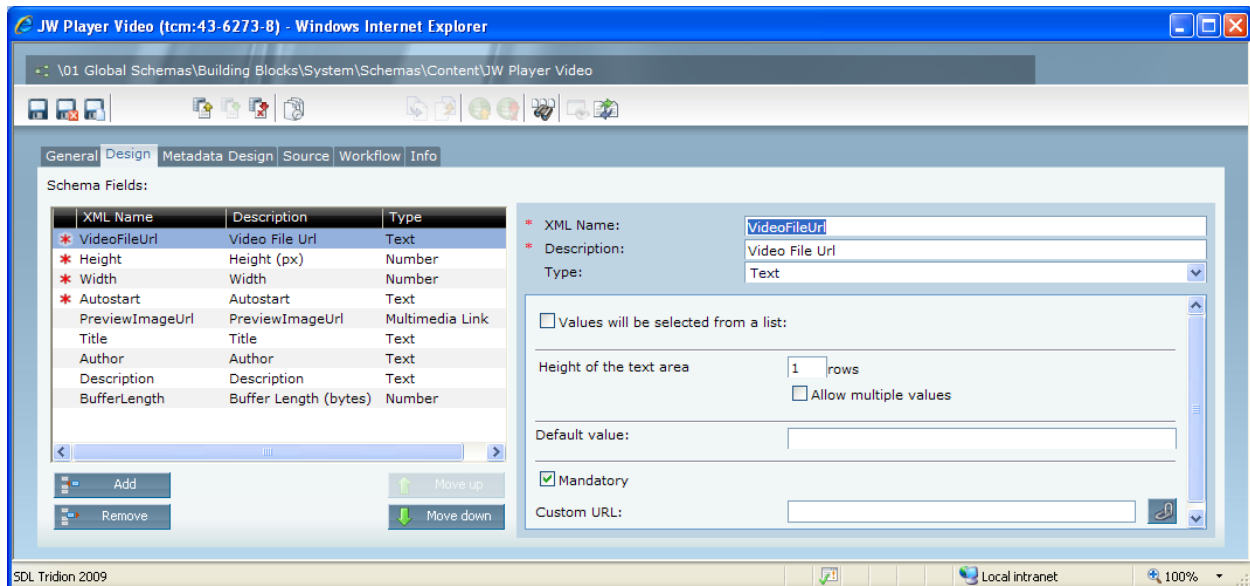
### Step 3: JW Player Media (multimedia schema)

Create a multimedia schema called "JW Player Video" with the following fields. Note, only the required fields are listed below.



You may add any other fields you wish to render as part of your embed code. More on this will follow.

|   |   |
|---|---|
| <p><b>Field XML Name:</b> VideoFileUrl<br/> <b>Description:</b> Video File Url<br/> <b>Type:</b> Text<br/> <b>Mandatory:</b> yes</p>  | <p><b>Field XML Name:</b> Height<br/> <b>Description:</b> Height (px)<br/> <b>Type:</b> Number<br/> <b>Mandatory:</b> yes<br/> <b>Default:</b> 320</p>  |
| <p><b>Field XML Name:</b> Width<br/> <b>Description:</b> Width (px)<br/> <b>Type:</b> Number<br/> <b>Mandatory:</b> yes<br/> <b>Default:</b> 470</p>  | <p><b>Field XML Name:</b> Autostart<br/> <b>Description:</b> Autostart<br/> <b>Type:</b> Text<br/> <b>Mandatory:</b> Yes<br/> <b>Default:</b> false<br/> <b>Values will be selected from a list:</b> true/false</p> |
| <p><b>Field XML Name:</b> PreviewImageUrl<br/> <b>Description:</b> Preview Image<br/> <b>Type:</b> Multimedia Link<br/> <b>Allowed Schemas:</b> Content Image (or your custom schema for storing images - note, you will need to update the constant for this schema name in the TBB source).</p> | <p><b>Field XML Name:</b> Title<br/> <b>Description:</b> Title<br/> <b>Type:</b> Text</p>   |
| <p><b>Field XML Name:</b> Author<br/> <b>Description:</b> Author<br/> <b>Type:</b> Text</p>   | <p><b>Field XML Name:</b> Description<br/> <b>Description:</b> Description<br/> <b>Type:</b> Text<br/> <b>Height of Text Area:</b> 2 rows</p>   |
| <p><b>Field XML Name:</b> BufferLength<br/> <b>Description:</b> Buffer Length (bytes)<br/> <b>Type:</b> Number</p>  |   |



## Setting up the Building Blocks

After setting up the schemas, as described in the previous section, follow the next steps to configure the building blocks.

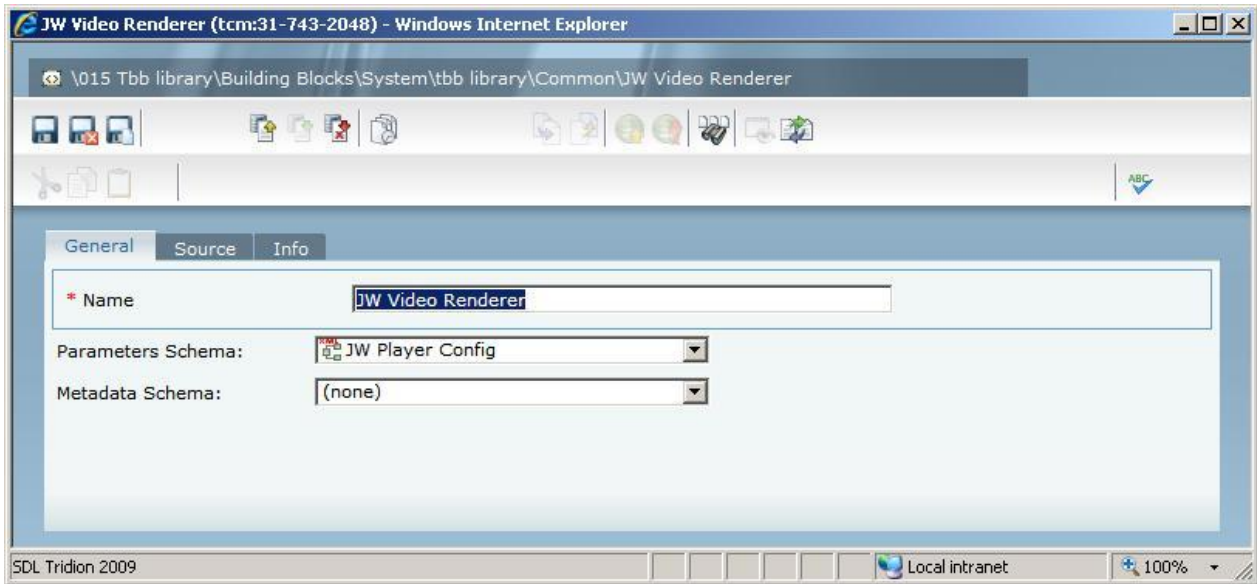
### Step 1: JW Player Video Renderer

This building block allows embedding video components via Component Links into Rich Text Fields. It works by scanning Output of the package for Video component anchor tags, and for each video anchor tag, replaces it with the 'embed video code'.

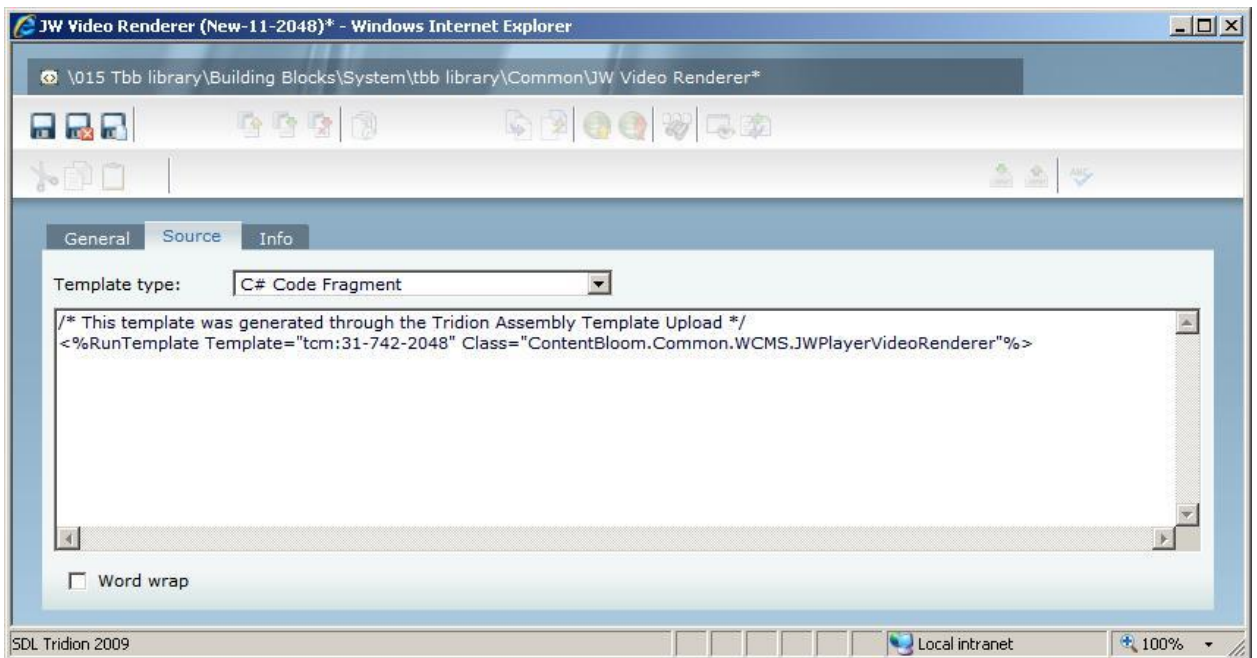
**Step a):** Compile the attached source code in Visual Studio (*ContentBloom.Common.WCMS.zip*) and upload the assembly into Tridion. If you're not sure how to do that, refer to the Tridion Implementation Manual [or your friendly neighbourhood SDL Tridion Consultant].

You may do this by uploading it manually, or use the TCMUpload tool, which will create the assembly TBB and the C# Fragment TBB automatically, and allow for doing remote debugging.

**Step b):** Note: this is only required if you're not using the TCM Upload Assembly tool. Create a new TBB and name it "JW Player Video Renderer" and assign the "JW Player Config" parameters schema to it (which we've created in step 2 of the previous section):



**Step c):** Set the template type of this TBB to *C# Code Fragment* and refer it to the Assembly TBB (from Step a):



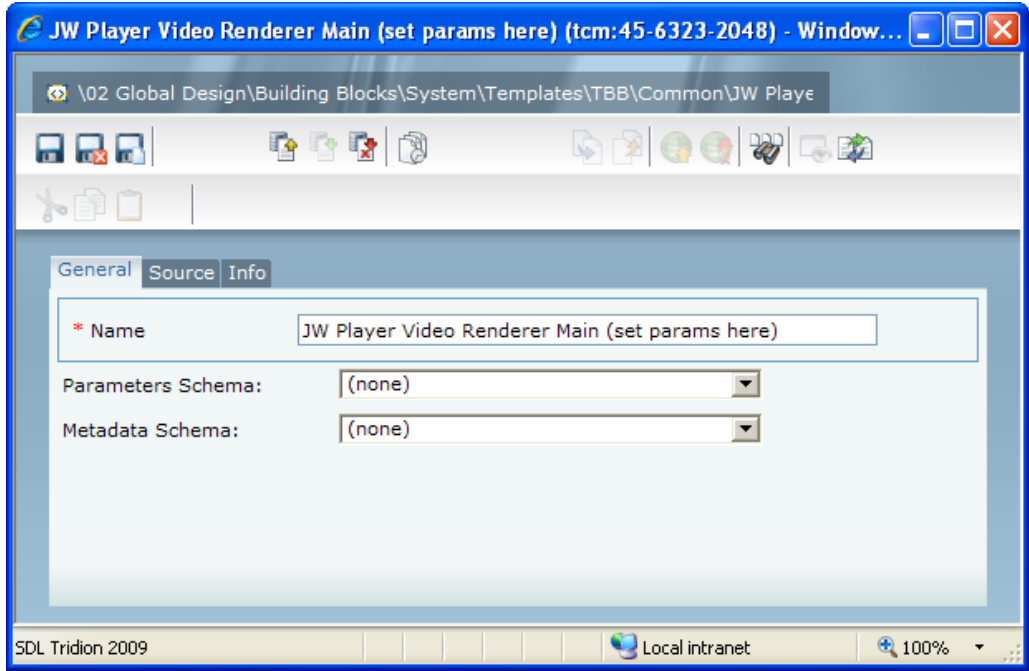
Save and close.

## Step 2: JW Player Video Renderer Main

This building block simply wraps the JW Video Renderer TBB. Its purpose is to store configuration parameters for the JW Player separately from the player renderer TBB. This allows keeping one set of

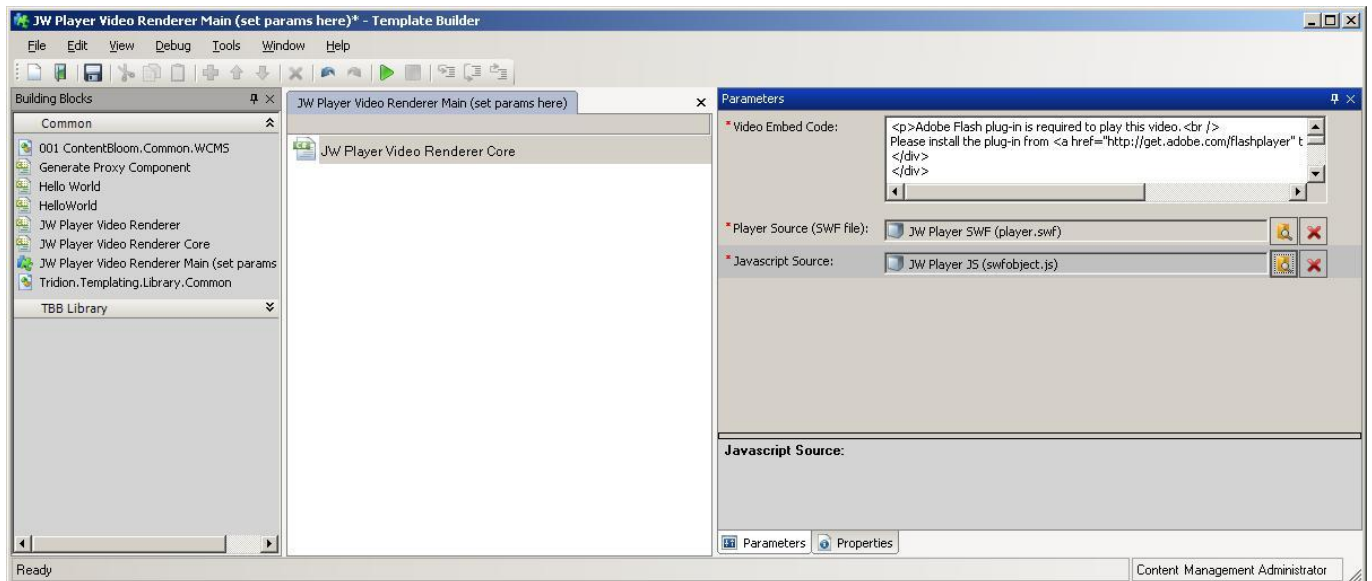
parameters across all inherited publications instead of re-entering them within each Compound Component Template and maintaining them in each separate publication.

Create a new TBB with Template type Compound Template in whatever location your TBBs are stored (e.g. \02 Global Design\Building Blocks\System\Templates\TBB\Common\):



Save and close.

Next, open this TBB with Template Builder and add the JW Player Video Renderer TBB, which you've just created above, into it:



You will now see that there are 3 mandatory parameters required:

1. Video Embed Code
2. Player Source
3. Javascript Source

For **Video Embed Code** add something like the code below. I recommend that you use the JW Player Embed Code Wizard to get this:

```
<script type='text/javascript' src='jwplayer.js'></script>
<div id='mediaspace'>This text will be replaced</div>
<script type='text/javascript'>
  jwplayer('mediaspace').setup({
    'flashplayer': 'player.swf',
    'file': 'bunny.flv',
    'streamer': 'rtmp://edge01.fms.dutchview.nl/botr',
    'controlbar': 'bottom',
    'width': '470',
    'height': '290'
  });
</script>
```

Now, paste this into your favourite text editor and replace the actual values with the schema fields names that correspond to them surrounded by double hashes. E.g.:

```
<script type="text/javascript" src="##JavascriptSourcePath##"></script>
<div id="mediaspace">Adobe Flash plug-in is required to play this video.<br />
Please install the plug-in from <a href="http://get.adobe.com/flashplayer"
target="_blank">www.adobe.com</a></div>

<script type='text/javascript'>
  jwplayer('mediaspace').setup({
    'flashplayer': "##PlayerSourcePath##",
    'file': "##VideoFileUrl##",
    'streamer': "##Streamer##",
    'width': "##Width##",
    'height': "##Height##",
    'author': "##Author##",
    'description': "##Description##",
    'title': "##Title##",
    'bufferlength': "##BufferLength##",
    'autostart': "##Autostart##",
    'image': "##PreviewImageUrl##"
  });
</script>
```

You should also add a closing </p> tag at the top and an opening one at the bottom <p>. This is because when you're inside a rich text field, you're most likely inside a <p>. So to keep the HTML proper, we should close the existing <p>, embed our code, and open it back up.

### For **Player Source:**

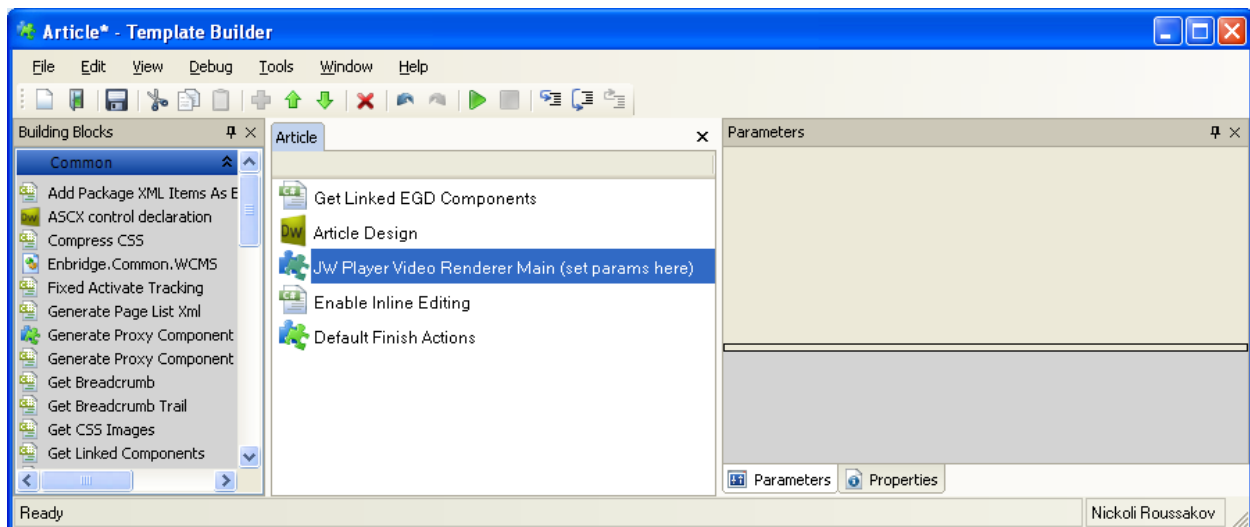
Create a Multimedia component of schema type "JW Player Include" and upload the *player.swf* file (JW Player binary).

### For **JavaScript Source:**

Create a Multimedia component of schema type "JW Player Include" and upload the *swfobject.js* file (JW Player JavaScript).

## Step 3: Use the TBB in Component Templates

As the heading implies, add the JW Video Player Render Main TBB into your Article Component template(s) or templates for which to allow rendering of videos in. Make sure that it is placed right after the DWT component and that the Get Linked Components TBB is the first one in the template:



Congratulations, you can now create Video components specifying the preview image, width and height, whether to autostart playing the video on the page, and etc.; and add them into rich text fields of your article components.

Business users are gonna love it!