

Creating Charts with WebCharts3D and ColdBox

By Luis Majano and Ernst van der Linden



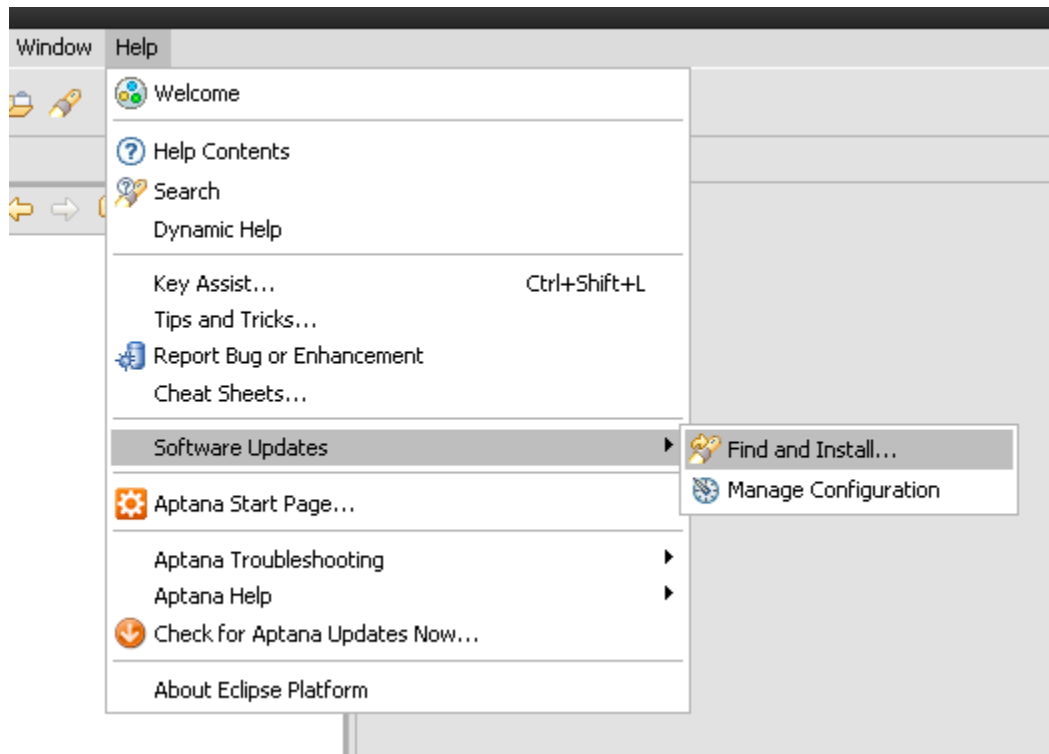
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Software Requirements

- Eclipse and [CFEclipse](#)
- **Coldfusion 7 or higher!** (wc50.jar and WebCharts3D license is required, so it will not run on Blue Dragon or Railo)
- [ColdBox](#)

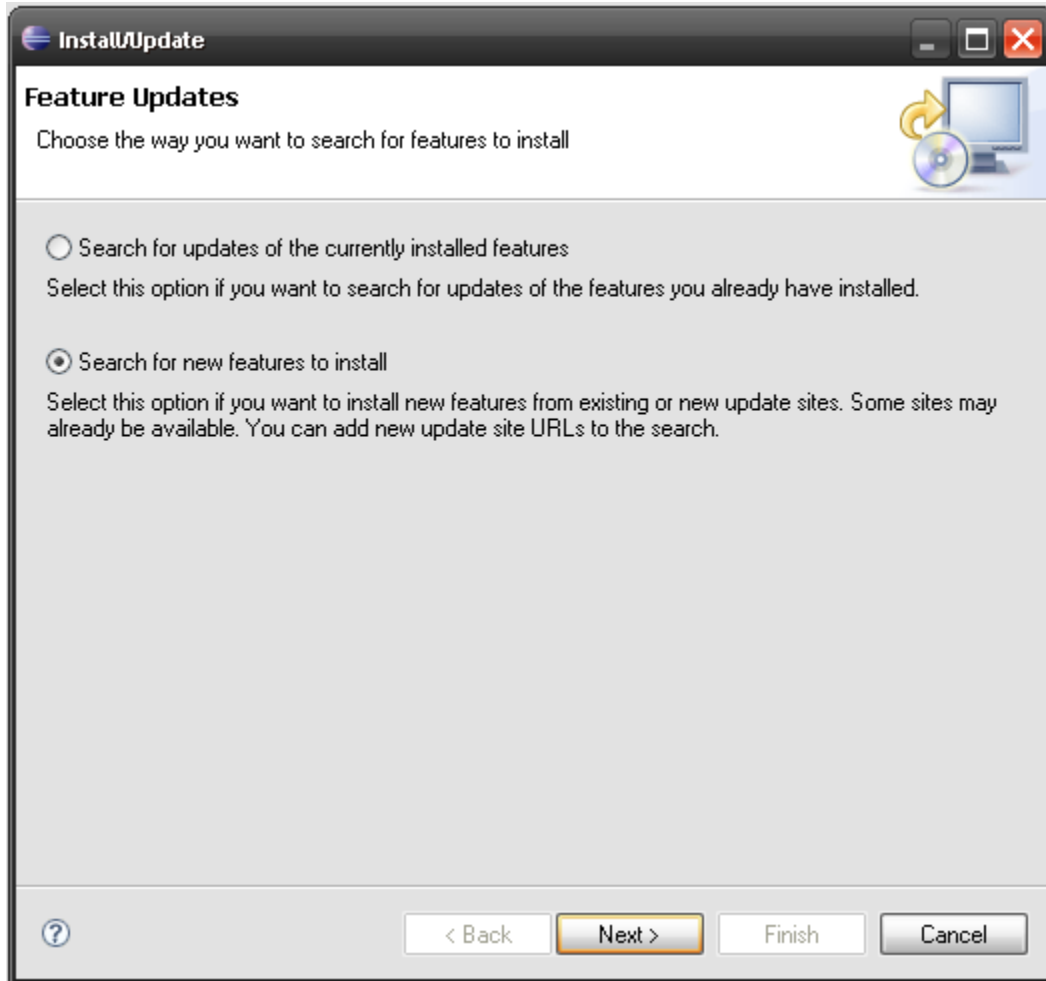
Setup WebChart3D Eclipse plugin

Step 1



Step 2

ClickNext



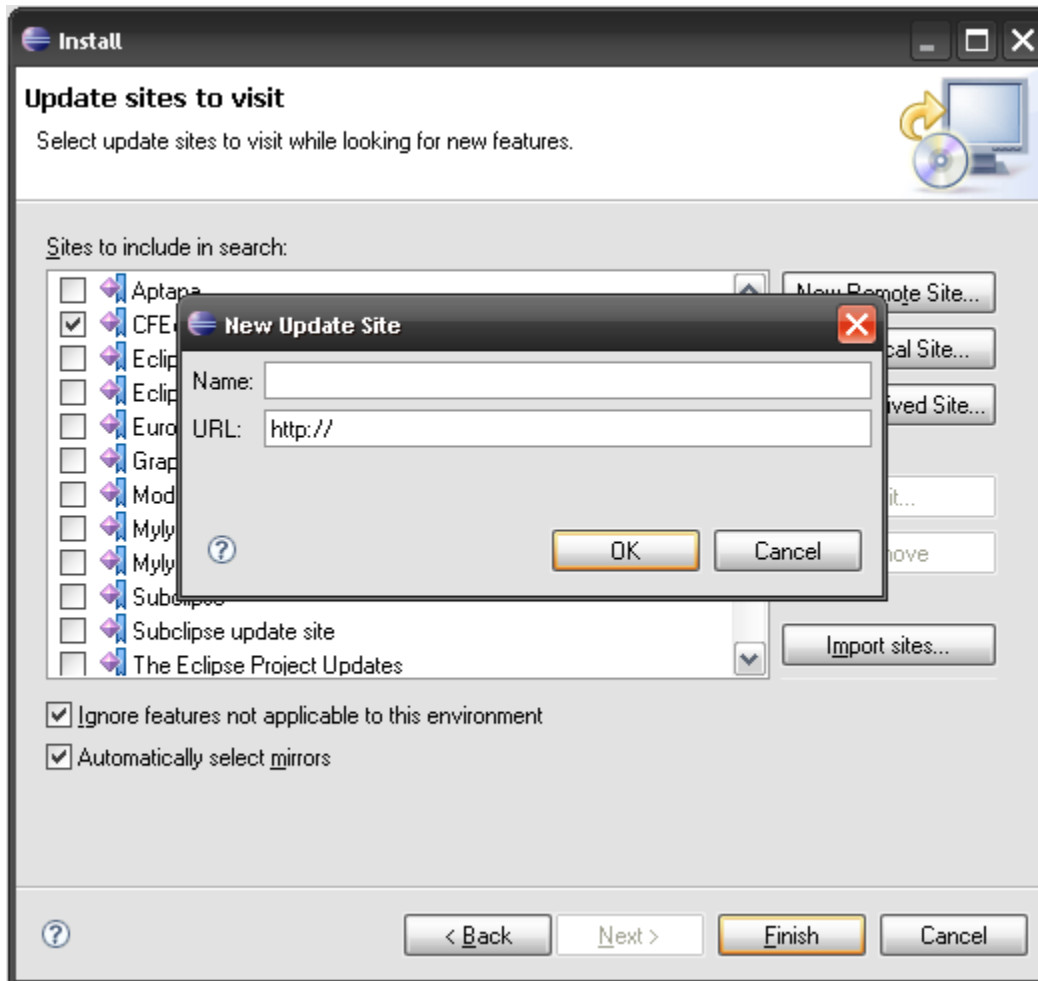
Step 3

Click **New Remote Site** and enter the following:

Name: Webcharts3D

URL: http://www.gpoint.com/website/WebCharts50/download/eclipse_plugin

Click **OK** and **Finish**

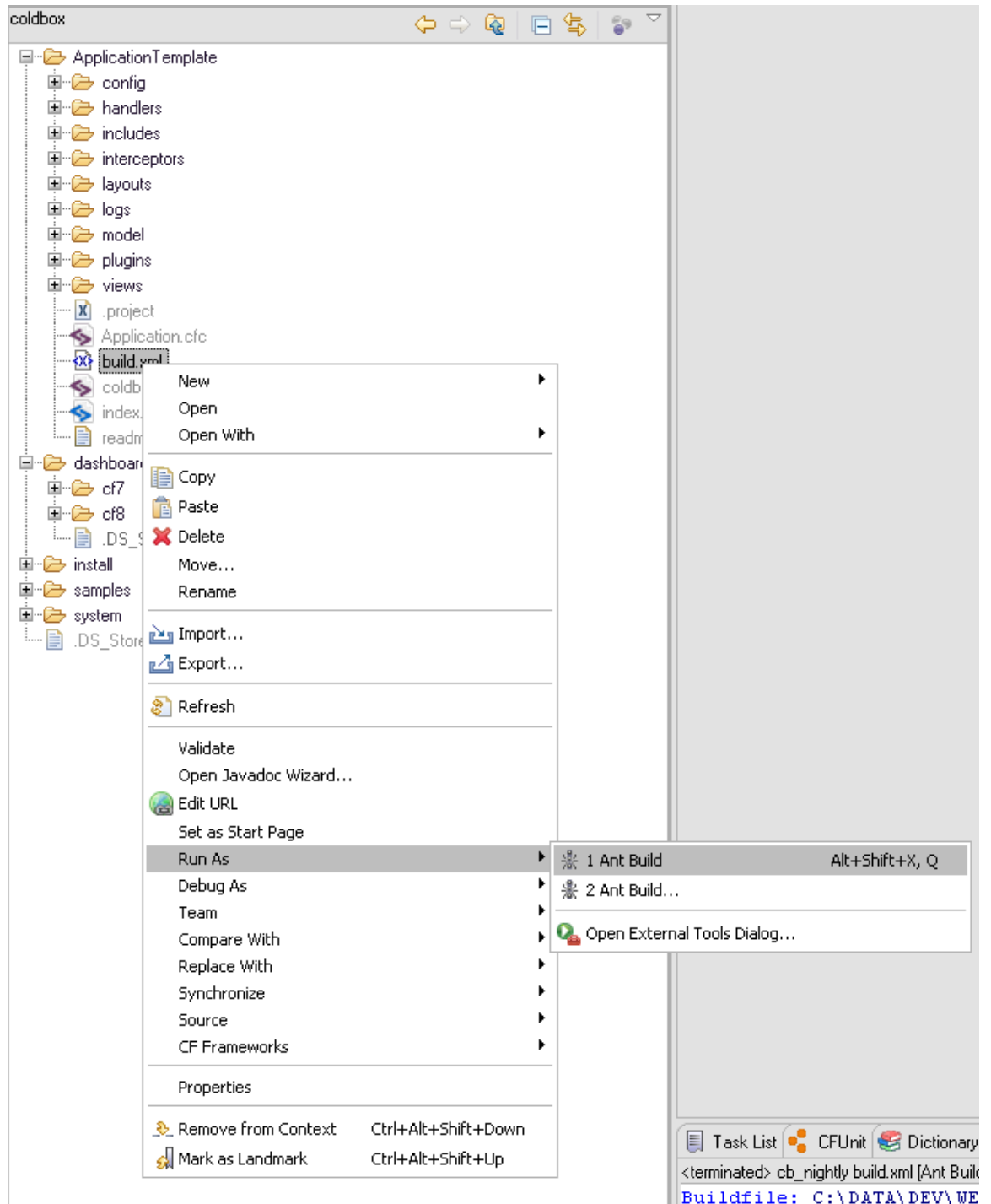


Setup WebChart3D ColdBox plugin

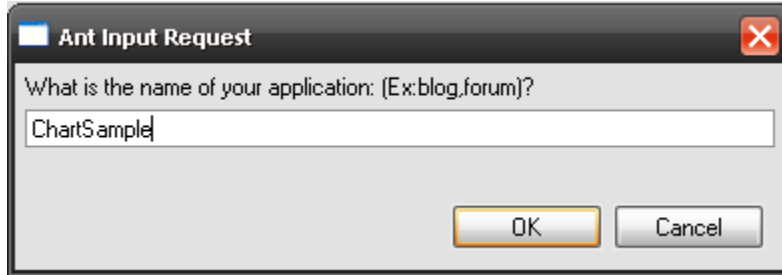
Create a new ColdBox application (in Eclipse)

- Go to the core ColdBox directory (Eclipse project)
- Open applicationTemplate directory
- Right click build.xml and select **Run as -> Ant Build**

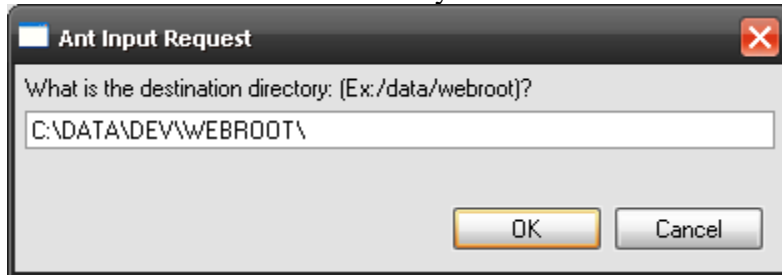
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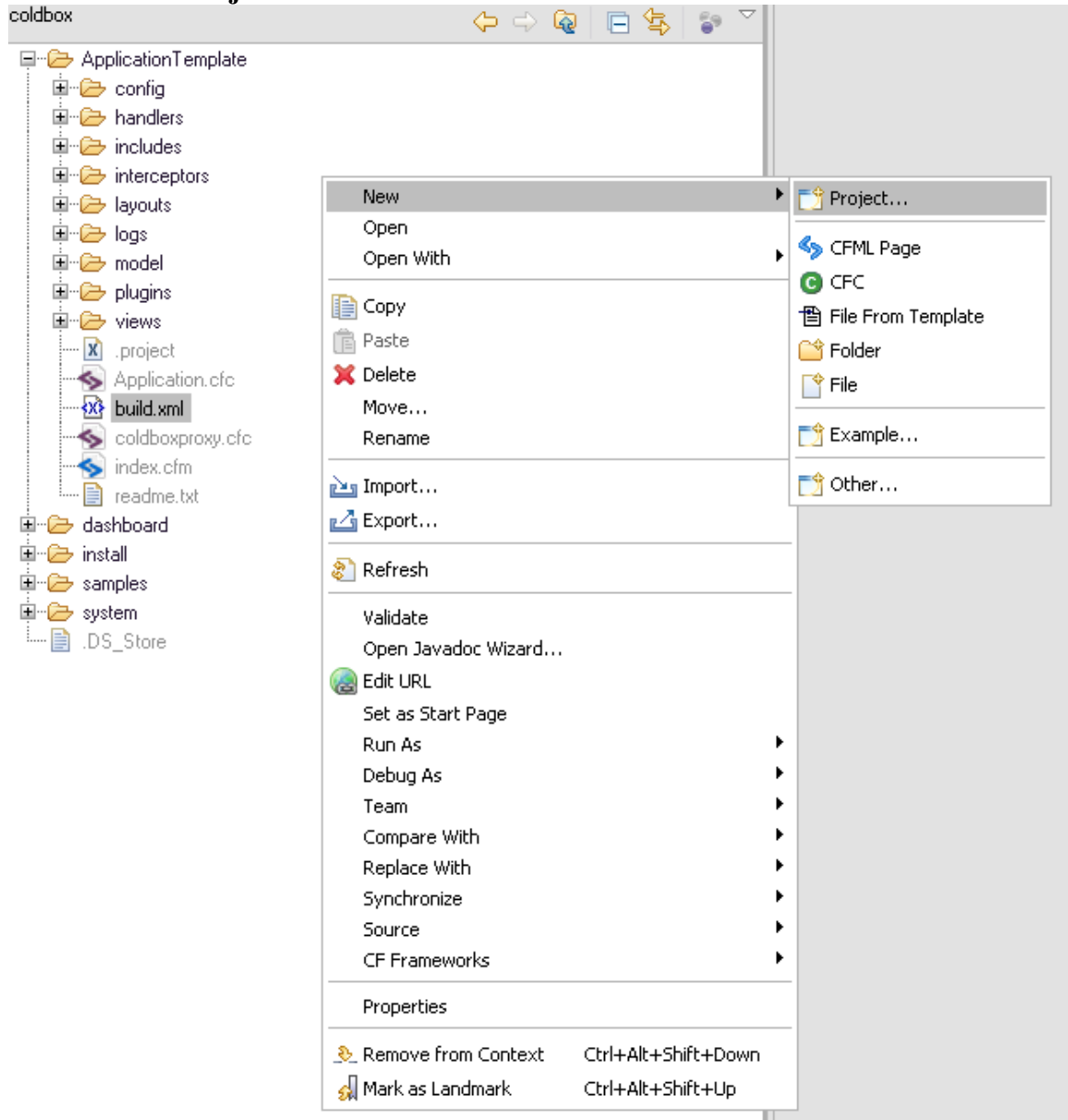
- Enter application name



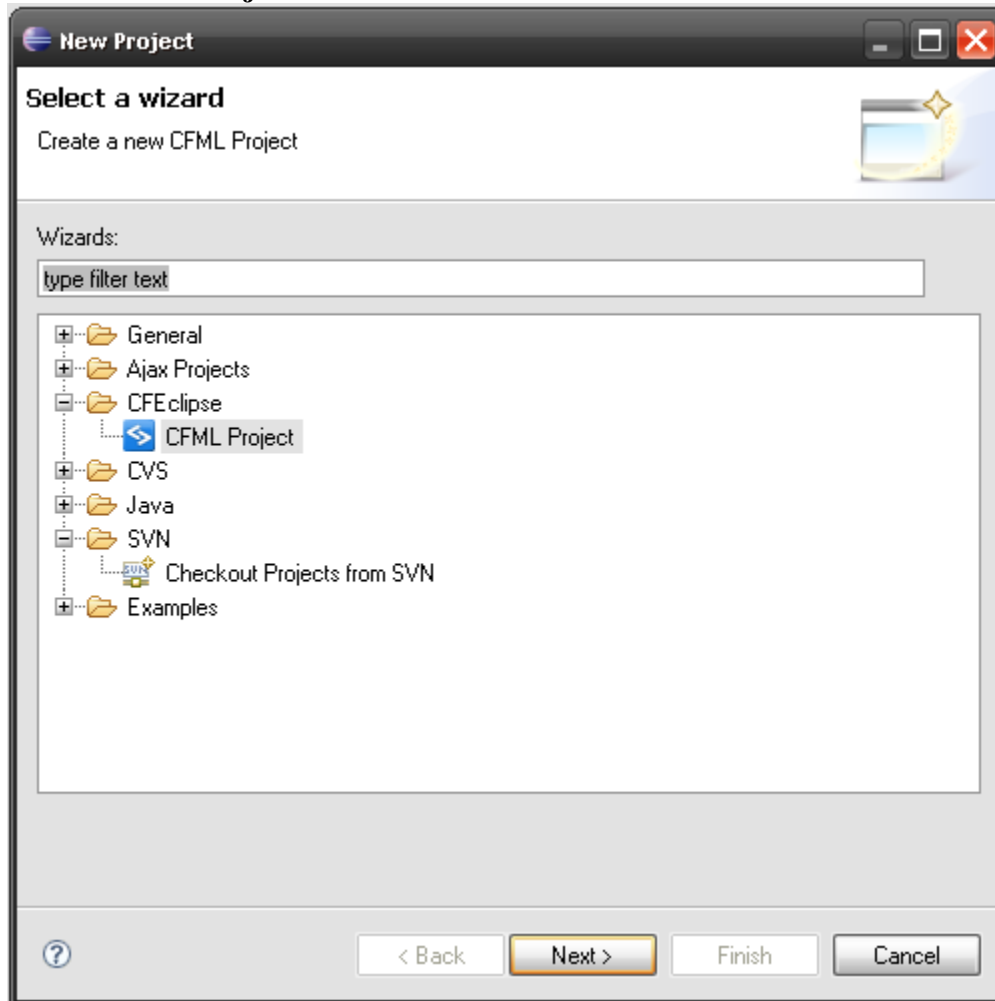
- Enter **YOUR** destination directory



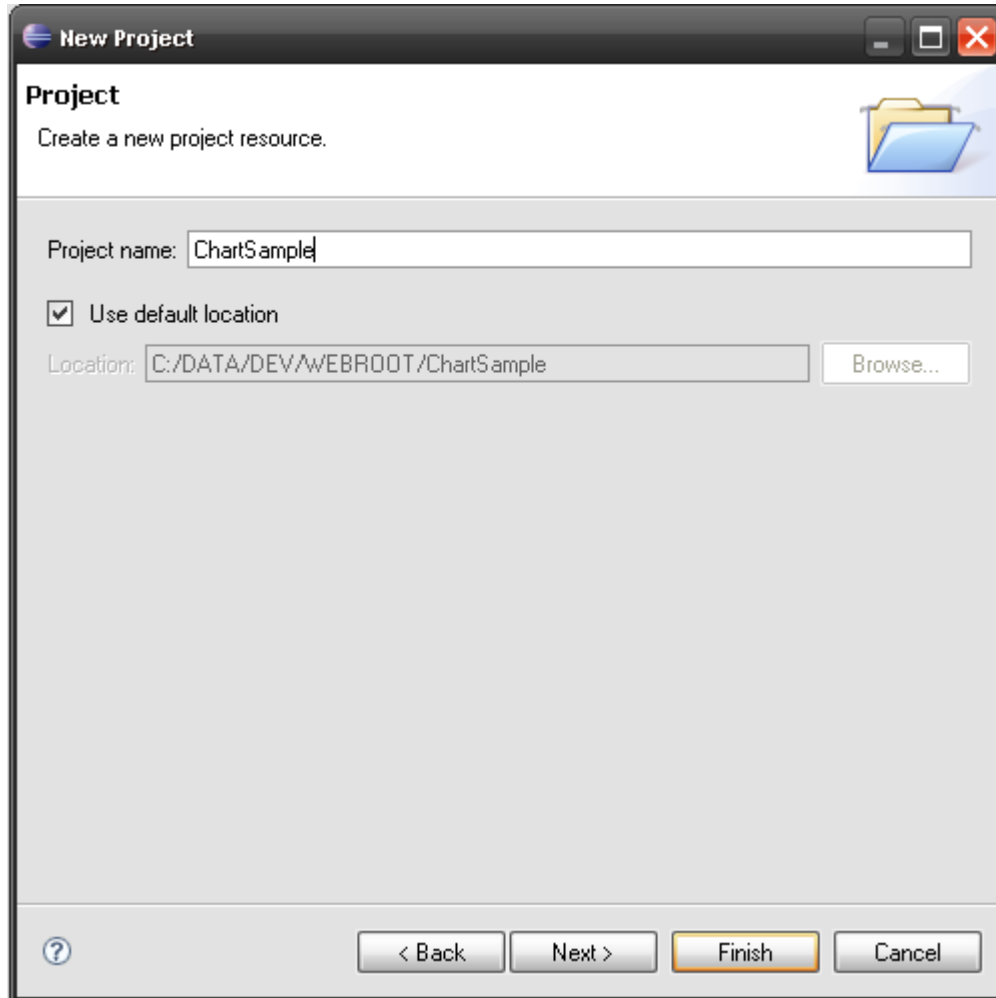
- Select New -> Project



- Select **CFML Project** and click Next



- Enter project name (**same name** as the application name you entered before) and click finish



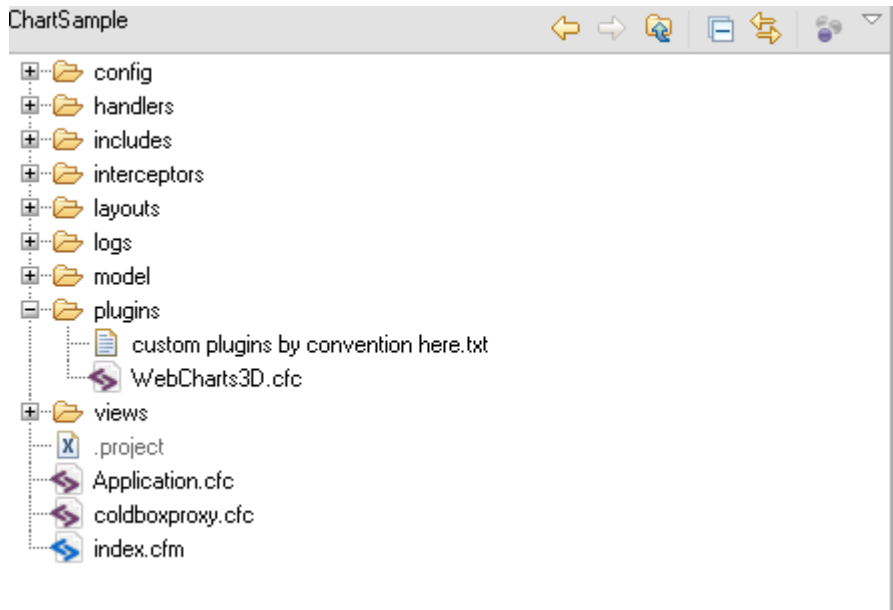
- Go to your **web browser** and enter the following url <http://localhost/ChartSample/> or `http://{ YOURSERVER }/{ YOURAPPNAME }`

Welcome to ColdBox!

You are running ColdBox 2.6.0 (Beta 2: FAITH)

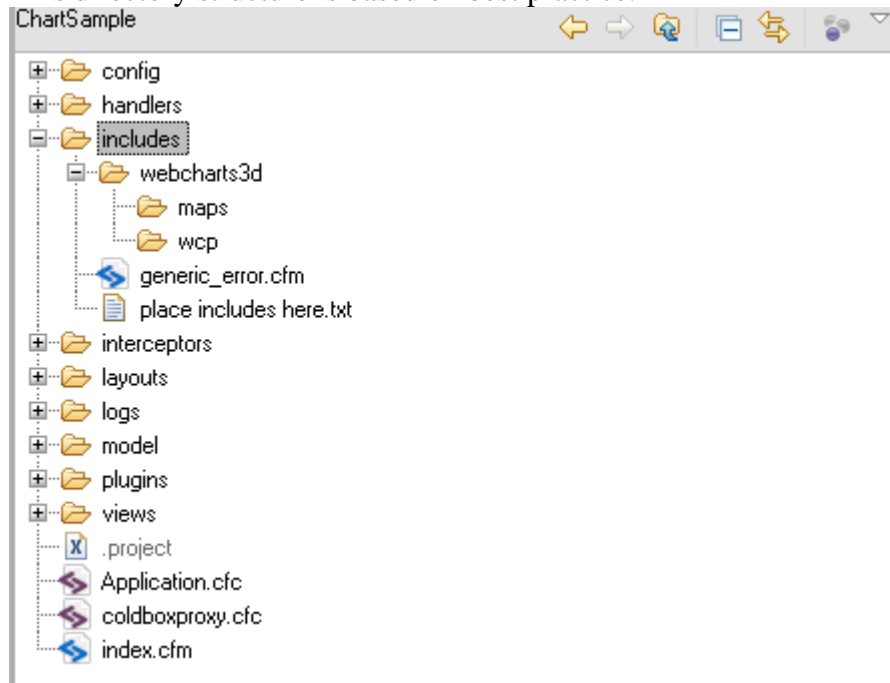
Installing the WebChart3D ColdBox plugin

[Download](#) the plugin and put in your ColdBox plugin directory.



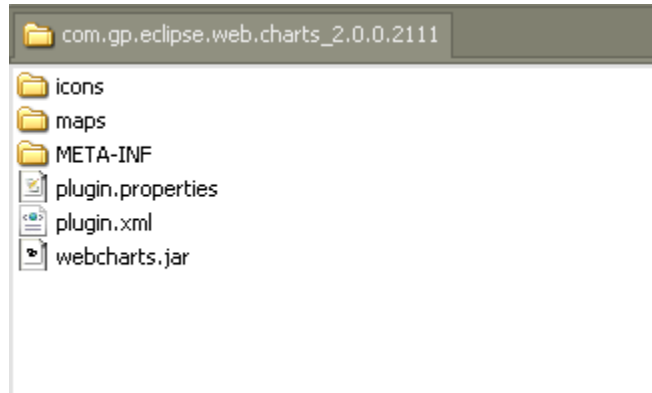
Creating includes directory structure

This directory structure is based on best practice.

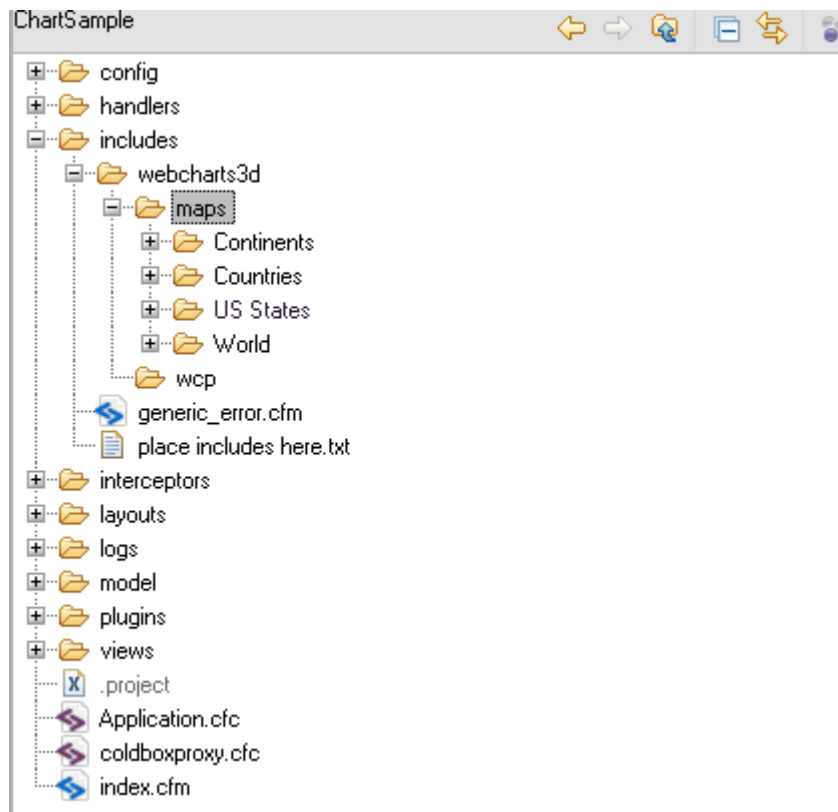


Copy WebCharts3D maps directory to includes directory

- Go to your **Eclipse** plugin directory and go into the **com.gp.eclipse.web.charts_xxxx** folder. (e.g. C:\eclipse 3.3\plugins\com.gp.eclipse.web.charts_2.0.0.2111)



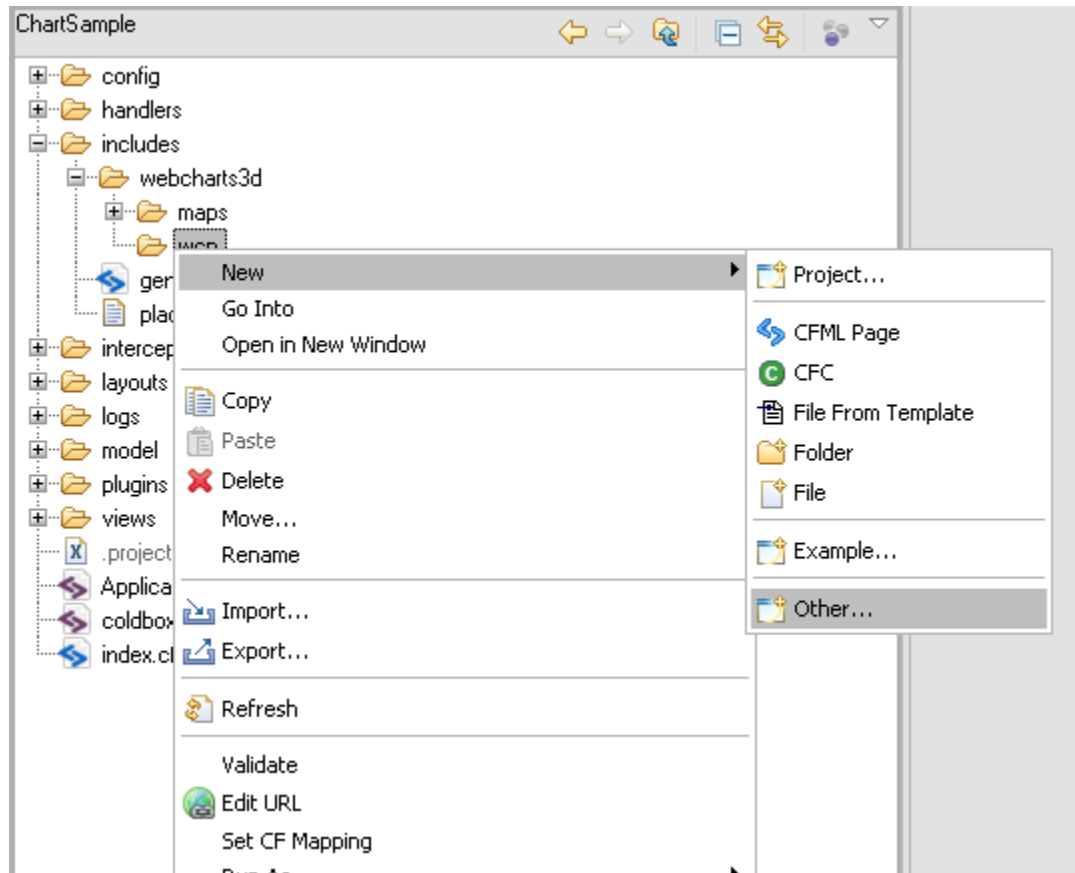
- Copy maps directory and paste it in your webcharts3d includes directory.



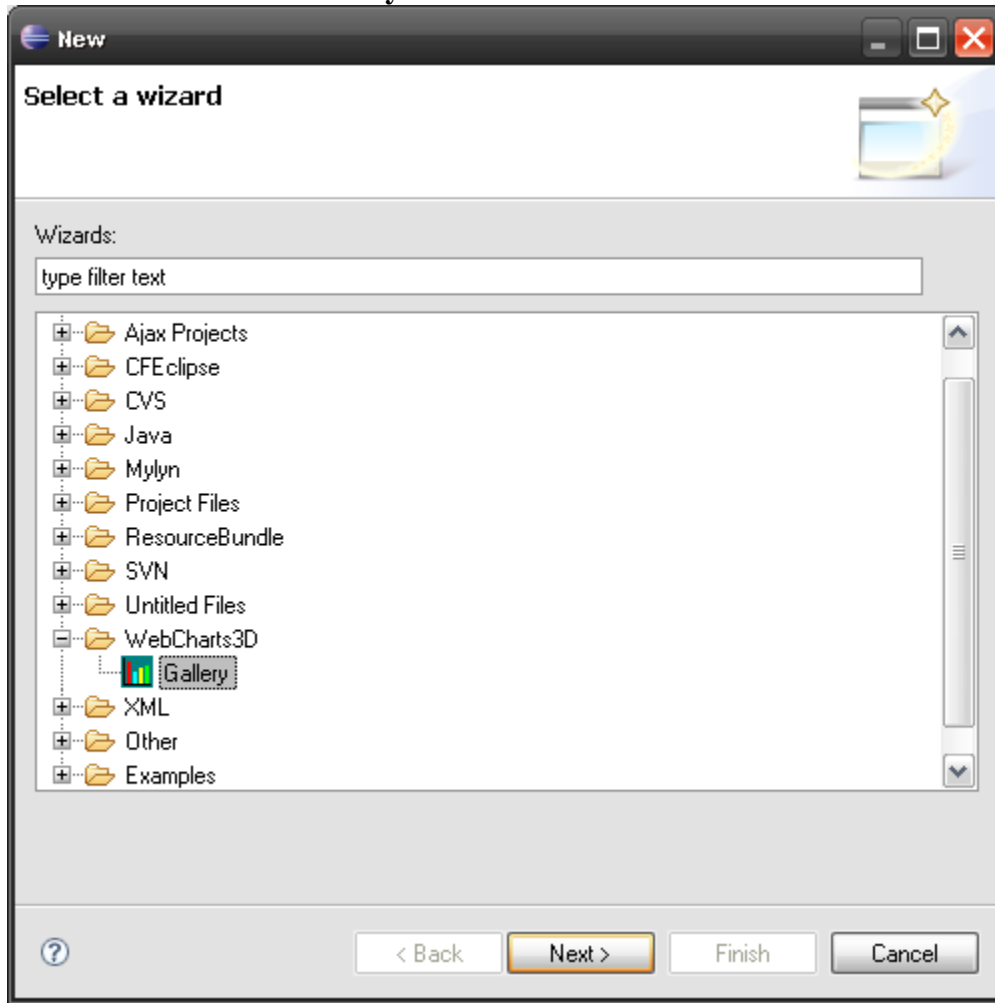
Let's create a map chart!

Create a new WebChart in Eclipse

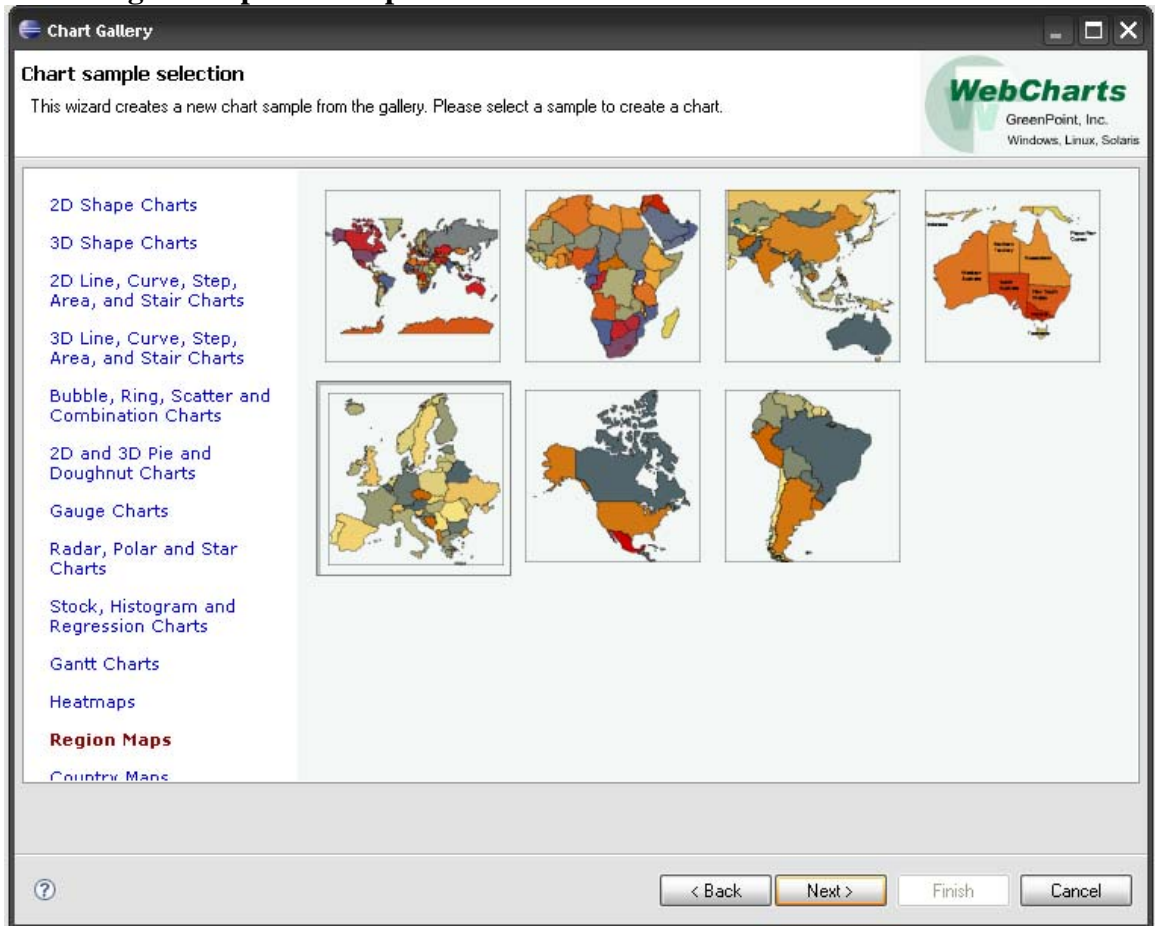
- Select **New-> Other**



- Select **WebCharts3D Gallery**

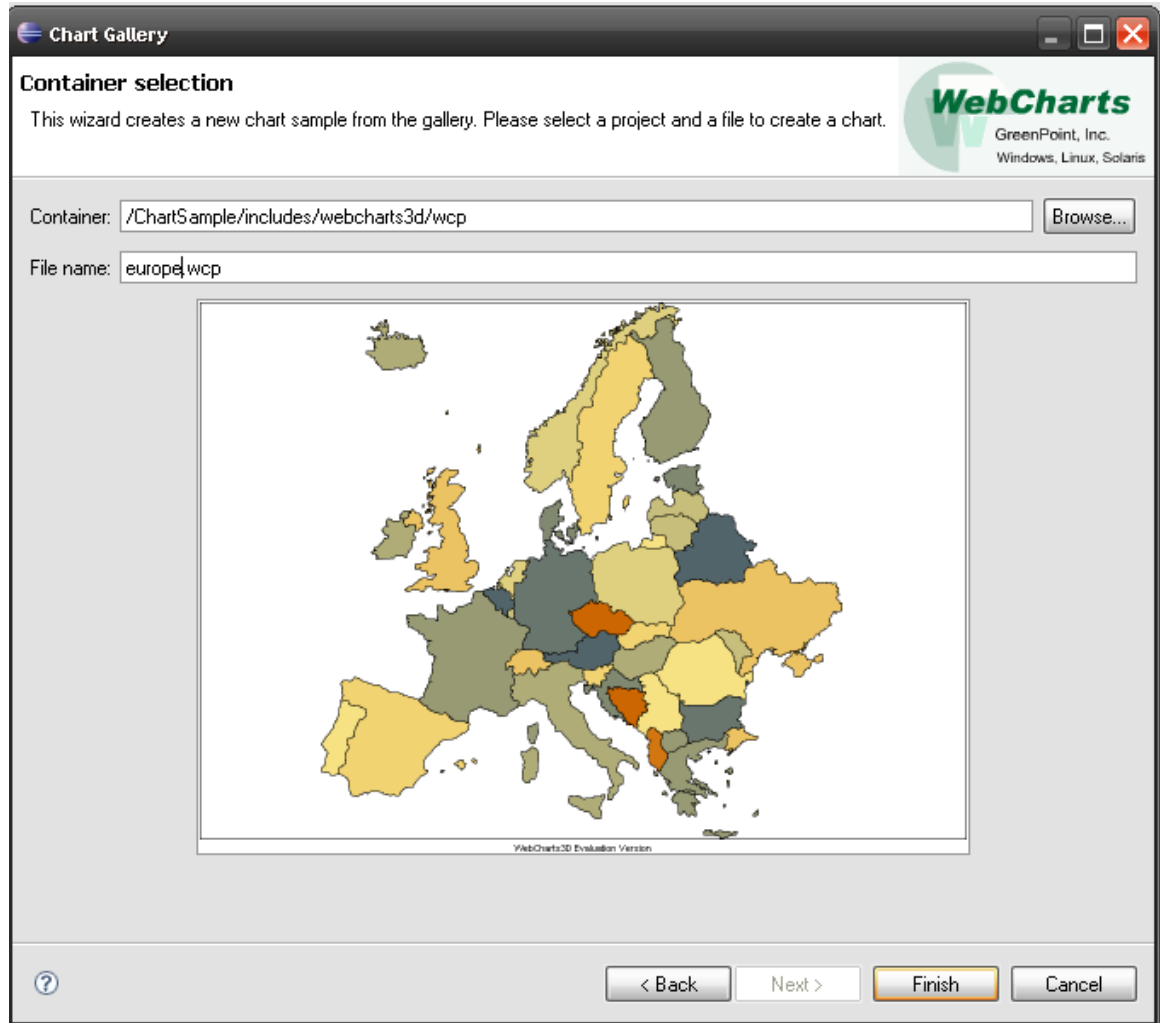


- Select **Region Maps** -> **Europe**

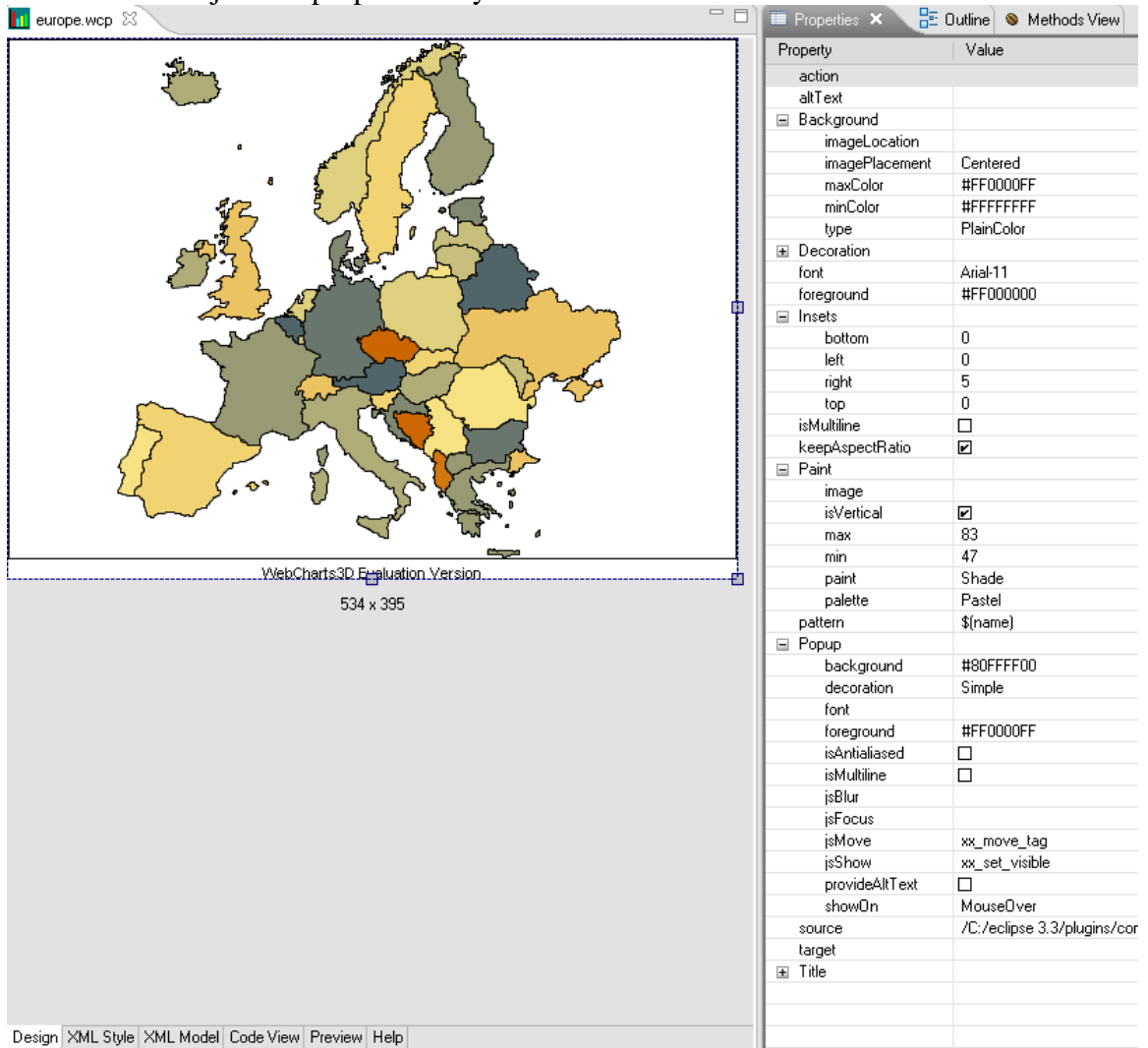


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- Enter filename **europa.wcp**.
Make sure you save it your app's **includes/webcharts3d/wcp** directory
Click **Finish**



- You can now adjust the properties if you like



The screenshot displays the WebCharts3D software interface. On the left, a map of Europe is shown with various countries colored in shades of yellow, orange, and green. The map is titled "europe.wcp" and has a resolution of 534 x 395. Below the map, it says "WebCharts3D Evaluation Version". On the right, a "Properties" panel is open, showing a list of properties and their values. The properties are organized into categories like Background, Decoration, Insets, Paint, and Popup.

Property	Value
action	
altText	
Background	
imageLocation	
imagePlacement	Centered
maxColor	#FF0000FF
minColor	#FFFFFF
type	PlainColor
Decoration	
font	Arial-11
foreground	#FF000000
Insets	
bottom	0
left	0
right	5
top	0
isMultiline	<input type="checkbox"/>
keepAspectRatio	<input checked="" type="checkbox"/>
Paint	
image	
isVertical	<input checked="" type="checkbox"/>
max	83
min	47
paint	Shade
palette	Pastel
pattern	\$(name)
Popup	
background	#80FFFF00
decoration	Simple
font	
foreground	#FF0000FF
isAntialiased	<input type="checkbox"/>
isMultiline	<input type="checkbox"/>
jsBlur	
jsFocus	
jsMove	xx_move_tag
jsShow	xx_set_visible
provideAltText	<input type="checkbox"/>
showOn	MouseOver
source	/C:/eclipse 3.3/plugins/cor
target	
Title	

Create ColdBox Handler action

- Open the handler **general.cfc**
- Create the following new action dspEuropeChart:

```
<cffunction name="dspEuropeChart" access="public" returntype="void"
output="false">
  <cfargument name="Event"
type="coldbox.system.beans.requestContext">
  <cfset var rc = Event.getCollection()>
  <!--- Get the webcharts3d plugin --->
  <cfset var webCharts3D = getPlugin("WebCharts3D",true)>
  <!--- Hold chart data (width,height,type,model,style) --->
  <cfset var chartData = StructNew()>

  <!--- START: Set chart data --->
  <cfset chartData.width = 350>
  <cfset chartData.height = 250>
  <cfset chartData.type = "PNG">
  <cfsetting enablecfoutputonly="false">
  <cfsavecontent variable="chartData.model">
    <!--- Chart Model XML --->
  </cfsavecontent>
  <cfsavecontent variable="chartData.style">
    <!--- Chart Style XML --->
  </cfsavecontent>
  <cfsetting enablecfoutputonly="true">
  <!--- END: Set chart data --->

  <cfset rc.europeChart =
webCharts3D.getChartImage(chartData.model,chartData.style,chartData.type,
chartData.width,chartData.height)>
  <cfset Event.setView("europechart")>
</cffunction>
```

Between the cfsavecontent tags, we need to put the **model XML** and the **style XML** of our Europe chart.

The model XML is used for the data you want to display. In this case the colors of countries in Europe. The style XML is needed if you want to override the default properties of a chart e.g. the background color.

So how do we get the proper XML data from a chart? Easy, here is where the plugin comes in.

- Open Europe.wcp again
- **See those tabs at the bottom?** Design / XML Style / XML Model / Code View
- Click XML Model
- Select All, copy and paste it between the cfsavecontent tags of chartData.model in the general.cfc handler
- Click XML Style in Europe.wcp

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- Select All, copy and paste it between the cfsavecontent tags of chartData.style in the general.cfc handler
- Look at the **attribute source** of the XML style tag MAP

```
<?xml version="1.0" encoding="UTF-8"?>
<map keepAspectRatio="true" source="/C:/eclipse
3.3/plugins/com.gp.eclipse.web.charts_2.0.0.2111/maps/Continents/eur
ope.map">
  <decoration style="Simple"/>
  <paint palette="Pastel" isVertical="true" min="47" max="83"/>
  <insets right="5"/>
</map>
```

- **Replace the source value** with:
`#ExpandPath('includes/webcharts3d/maps/Continents/europe.map')#`
so you get something like below:

```
<?xml version="1.0" encoding="UTF-8"?>
<map keepAspectRatio="true" source="#ExpandPath('includes/
webcharts3d/maps/Continents/europe.map' )#">
  <paint palette="Pastel" isVertical="true" min="47" max="83"/>
  <insets right="5"/>
</map>
```

Create ColdBox View

- Create a new view in your ColdBox views folder and name it **europechart.cfm**
- Copy and paste the following code in it:

```
<h3>Europe Chart</h3>
<cfoutput>
#rc.europeChart#
</cfoutput>
```

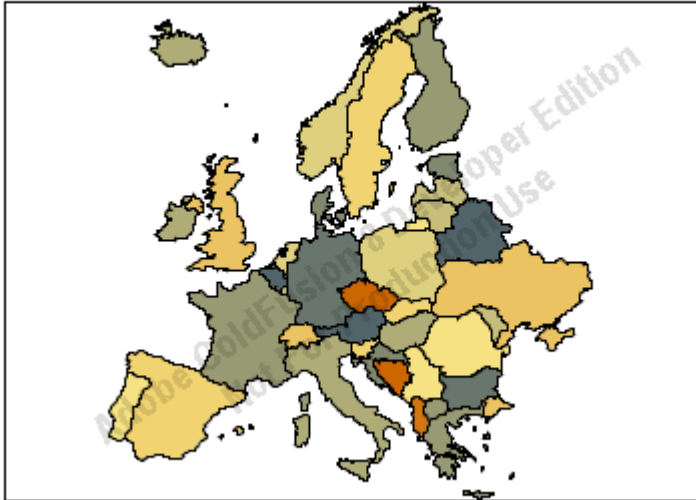
See the results

<http://localhost/ChartSample/index.cfm?event=general.dspEuropeChart>

or

<http://{ YOURSERVER }/{ YOURAPP }/index.cfm?event=general.dspEuropeChart>

Europe Chart



Where to go from here?

You can now start to make the colors of the map variable, so the map colors will change depending on the input.

Play around with other charts and chart properties. HAVE FUN!

If you have any remarks or questions, post them in the ColdBox forums or write an email to evdlinden@gmail.com