Making the Most out of uPortal Channel Types

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Topics:

- 1. Overview of uPortal Channel Types
- 2. Image Channel
- 3. Applet Channel
- 4. Inline Frame Channel
- 5. RSS Channel
- 6. XML XSLT Channel
- 7. Web Proxy Channel (up2 Channel)
- 8. Web Proxy Portlet (up3 Portlet)
- Other Options (WSRP, Custom, 3rd party)
- 10.Summary



Overview of uPortal Channel Types



Definitions

- uPortal
 - Portals are about Content and Application Aggregation
- Channel
 - Framework for applications running in uPortal
- Portlet
 - JSR 168 Java Community Process standard for applications running in portals
- WSRP
 - Web Services for Remote Portlets

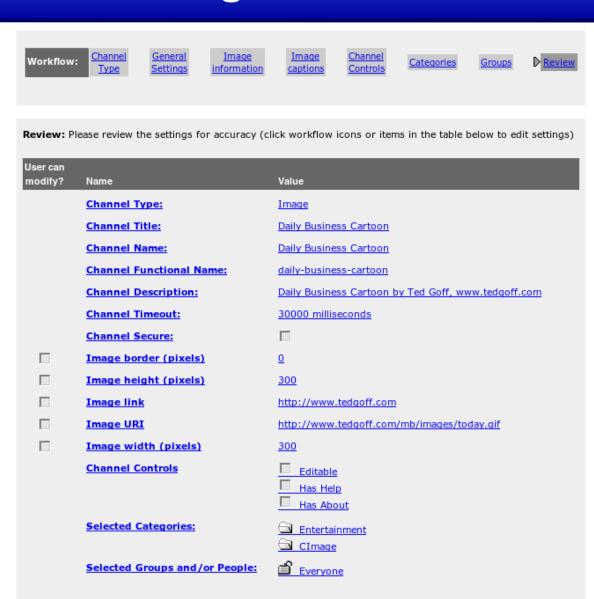
uPortal Pre-defined Channel Types



Channel Type: Select the type of channel to add by clicking a select icon in the option column

Option	Channel Type	Description
(F	Custom	This channel type allows the publication of channels with no accompanying CPD (Channel Publishing Document). It is typically used to publish channels with only one corresponding channel definition.
0	Applet	Displays a java applet
C	Bookmarks Portlet	UWisc Bookmarks Portlet
0	Image	Displays an image with optional caption and subcaption
0	Inline Frame	Renders an HTML page within a frame. Not supported in browsers older than Internet Explorer 5 and Netscape 6.
0	Portlet	Adapter for JSR-168 Portlets
0 (RSS	Renders content provided in the popular RSS (Rich Site Summary) format
C	SQL	Executes a SQL query against a selected DataSource.
C	Version	Displays the version number of a specified portal component.
C	Web Proxy	Incorporates a dynamic HTML or XML application
C	WSRP Consumer	WSRP consumer implementation
C	XML SSL	Transforms an XML document into a fragment of markup language given a set of XSLT stylesheets specified in a uPortal stylesheet list (SSL) file.
C	XML XSLT	Transforms an XML document into a fragment of markup language using a single XSLT.
Next >	Review Cancel	

Image Channel



Cancel

< Back

Finished

Image Chanel

- What do you need?
 - URL to the image

Pros

- Easiest type of channel to set up
- Displays an image very quickly and very simply

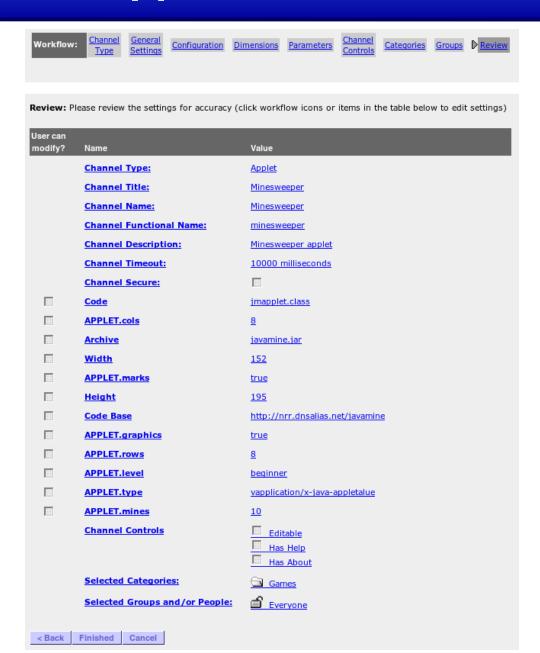
Cons

- Doesn't do anything except display an image
- Doesn't account for any user groups or permissions

Notes

The user's browser will request the image (not the server)

Applet Channel



Applet Channel

- What do you need?
 - URL to the Applet

Pros

- Nearly as easy to set up as the Image Channel
- Some Applets work great inside a Channel "Window"

Cons

- Doesn't work for anything except Applets
- Doesn't account for any user groups or permissions

Notes

The user's browser will request the applet (not the server)

Inline Frame Channel



General Settings Inline frame parameters

Channel Controls

Categories

Groups



Review: Please review the settings for accuracy (click workflow icons or items in the table below to edit settings)

User can		
modify?	Name	Value
	Channel Type:	Inline Frame
	Channel Title:	uPortal Home Page
	Channel Name:	uPortal Home Page
	Channel Functional Name:	uportal-home-page
	Channel Description:	uPortal Home Page channel
	Channel Timeout:	20000 milliseconds
	Channel Secure:	
	Frame Height (pixels)	800
	URL	http://uportal.org/
	Channel Controls	Editable
		Has Help
		Has About
	Selected Categories:	<u>□</u> uPortal
	Selected Groups and/or People:	<u>Everyone</u>
< Back	Finished Cancel	

Inline Frame Channel

- What do you need?
 - URL to a web site

Pros

- Easy to set up
- Allows lot of websites, even with complicated Javascript to still work

Cons

- Inline Frames are frowned upon (e.g., nested scrollbars)
- Doesn't account for any user groups or permissions
- Portal can not track user's state within the frame

Notes

The user's browser will talk to the framed site (not the server)

RSS Channel



Review: Please review the settings for accuracy (click workflow icons or items in the table below to edit settings)

User can modify?	Name	Value
	Channel Type:	RSS
	Channel Title:	Salon.com
	Channel Name:	Salon.com
	Channel Functional Name:	salon.com
	Channel Description:	Salon.com channel
	Channel Timeout:	10000 milliseconds
	Channel Secure:	
	RSS URL	http://www.salon.com/feed/RDF/salon_use.rdf
	Channel Controls	Editable Has Help
	Selected Categories:	Has About News
	Selected Groups and/or People:	<u>Everyone</u>
< Back	Finished Cancel	

RSS Channel

- What do you need?
 - URL to an RSS feed

Pros

- Easy to set up
- RSS feeds are extremely common these days

Cons

- Limited customization for displaying the feed data
- Will not display images associated with feed data
- RSS is not an official standard

Notes

The uPortal server will request the RSS feed

XML XSLT Channel



Review: Please review the settings for accuracy (click workflow icons or items in the table below to edit settings)

User can modify?	Name	Value
	Channel Type:	XML SSL
	Channel Title:	CSS Viewer
	Channel Name:	CSS Viewer
	Channel Functional Name:	<u>css-viewer</u>
	Channel Description:	CSS Viewer channel
	Channel Timeout:	5000 milliseconds
	Channel Secure:	
	Stylesheet list file (.ssl) URI	CGenericXSLT/CSSViewer/CSSViewer.ssl
	XML URI	CGenericXSLT/CSSViewer/cssViewer.xml
	Channel Controls	Editable Editable
		Has Help
		Has About
	Selected Categories:	□ uPortal
	Selected Groups and/or People:	<u> Developers</u>
< Back	Finished Cancel	

XML / XSLT Channel

What do you need?

- URL to an XML document
- Path to an XSL stylesheet

Pros

- Allows the Portal to control the look and feel
- uPortal is already heavily XSL based (including the skin/theme)

Cons

- Generally requires you to control both sides of the content
- Hard to do multi-page applications

Notes

The uPortal server will request the RSS feed

Web Proxy Channel

- What do you need?
 - Application URI (cw_xml)
 - This is the main URL/URI you want to proxy
 - Pass-through Type (cw_passThrough)
 - Use the value all to allow links clicked on to stay within the portal
 - Use the value none to force any links clicked on to go to that URL
 - Application SSL (cw_ssl)
 - The default value of XHTML.ssl is fine for most situations.
 - Enable HTML Filter? (cw_tidy)
 - The value on should be used unless it causes problems
 - Use the value off only if the on value does not work

Web Proxy Channel



Review: Please review the settings for accuracy (click workflow icons or items in the table below to edit settings) User can modify? Name Value Channel Type: Web Proxy **Channel Title:** Tomcat's Servlet Examples Channel Name: Tomcat's Servlet Examples **Channel Functional Name:** tomcat-serviet-examples **Channel Description:** Tomcat's Servlet Examples **Channel Timeout:** 10000 milliseconds Channel Secure: Application URI (cw xml) http://localhost:8080/servlets-examples/index.html Pass-through Type (cw_passThrough) all Info URI (cw info) examples/servlet info.html Edit URI (cw edit) examples/servlet edit.html Application SSL (cw ssl) XHTML.ssl Help URI (cw help) examples/servlet help.html Enable HTML Filter? (cw tidy) <u>on</u> **Channel Controls** Editable Has Help Has About Selected Categories: uPortal **Developers** Selected Groups and/or People: Finished Cancel

Web Proxy Channel

Pros

- Allows the Portal to track a user's state in the proxied application
- Allows for user data to be passed to proxied application

Cons

- Might require you to control both sides of the content
- Look and Feel of the content may not blend with Portal
- Javascript can severely impact the channel
- Proxying is more prone to cross-site scripting attacks

Notes

The uPortal server will request the proxied web application

Web Proxy Portlet

- Originally created for the University of Wisconsin Portal
- Made available to the uPortal 3 project as a replacement for the uPortal 2 Web Proxy Channel
- Due to its standards compliant portlet nature, the uPortal 3 Web Proxy Portlet is usable in uPortal 2

Even More Web Proxy

- PortletBridge Portlet (Sourceforge)
 - No release for over 1 year
 - http://www.portletbridge.org/
- WebClipping Portlet (Jahia)
 - http://www.jahia.org/jahia/page825.html

Custom Channel

- What do you need?
 - Channel Class
 - Your channel class will either need to produce HTML or produce
 XML and specify the XSL stylesheet to use
- Useful if you need access to uPortal Framework APIs

Custom Portlet

- What do you need?
 - A custom Portlet war file deployed with the uPortal deployPortletApp task
 - Portlet Definition ID

```
web application name + . + portlet name (portlet.xml file)
```

- Any Portlet Preferences that may be required
- Does the Portlet need the EDIT or HELP modes to function?

Other uPortal 2.6 Channel Types

- Bookmarks Portlet
- JSP
- SQL
- Version
- WSRP Consumer
- XML SSL
- Toro Gateway SSO Portlet
 - http://code.google.com/p/toro-portlets/



Summary (1)

- Use Image, RSS or Applet Channel Types if that is what you are aggregating. Other then the small scope of what they can support there is very little downside to aggregating with these channel types.
- Only create a custom channel or portlet if absolutely necessary. Quite often you can accomplish what you need without writing any Java code.

Come to the **Portlet vs Channel Smackdown** talk on Wednesday at 9:45am to find out which one you should use.

Summary (2)

- Consider using XML XSLT channel type if the content you are aggregating is already XML or can be converted to XML easily and the data is limited to only one URL.
- Use an IFRAME channel type if you must support Javascript for the proxied application
- Use CWebProxy channel type if you do not need to support Javascript
- Use a WebProxy Portlet if you are comfortable creating your own Portlet Web Application Archives
- Write a custom portlet or channel when nothing else meets your needs

Summary (3)

 uPortal can be used to create a compelling portal destination aggregating a lot of content without writing any code

Questions?

