CPSSkins — a WYSIWYG Theme editor for CMF, CPS and Plone

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Introduction

Installing CPSSkins

Requirements:

- CMFActionIcons[1]

  this product is optional but it is highly recommended to install it to display action icons.

CPSSkins can be installed:

1. from the ZMI (the Zope Management Interface) by selecting CPSSkins Installer in the Zope product list.

2. with CMFQuickInstaller (recommended)

INSTALLATION THROUGH THE ZOPE MANAGEMENT INTERFACE

In /Control_Panel/Products:

- Make sure that the CPSSkins product is correctly installed (i.e. not broken)

From the Zope product list add "CPSSkins Installer"

IMPORTANT:

- Select the source skin. It must be a skin that works already without CPSSkins. It is usually called Basic under CMF, CPS2 and CPS3, or Plone Default under Plone.

- The portal type (CMF/CPS2/CPS3/Plone/Plone2) will be automatically detected. If the installation fails, make sure that the portal was correctly detected. Look for a 'Detected portal type is ...' message at the start of the installation log.

  Check the reinstall default themes option if you want to reinstall CPSSkins default themes. The default themes will be installed by default if this is a first installation.

INSTALLATION WITH CMFQUICKINSTALLER

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1 http://zope.org/Members/tseaver/CMFActionIcons

CMF

- Go to portal_quickinstaller
- Select CPSSkins and click on Install

Plone2

- Go to Plone Setup
- Choose Add/Remove Products
- Select CPSSkins
- Click on Install

CPSSkins can be also be deinstalled and automatically upgraded with CMFQuickInstaller.

Getting started with CPSSkins

EDITION MODES

"WYSIWYG" mode

"Layout" mode

"Mixed" mode

EDITING THEMES THROUGH THE ZMI

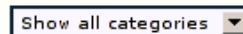# Creating your own themes

▎PALETTES

A site rarely uses more than 5 or 10 colors. The `Plone` theme for instance uses only 6 colors. It is therefore a good idea when designing a theme to begin by defining the colors that you are going to use often and store them in a central place. This is what CPSSkins palettes have been designed for. If you are working for a company or a university it is very likely that these colors have already been defined in a graphic profile for the Web.

To edit a theme's palettes click on the `Palettes` button in the control panel.

| Layout mode | Mixed mode | WYSIWYG mode | Styles | Images | Palettes | Themes manager | Cache manager | ZMI | Exit |

Simulate this URL ...

The different categories of palettes will be displayed. There are at the time of writing this document only two types of palettes, namely colors and borders.
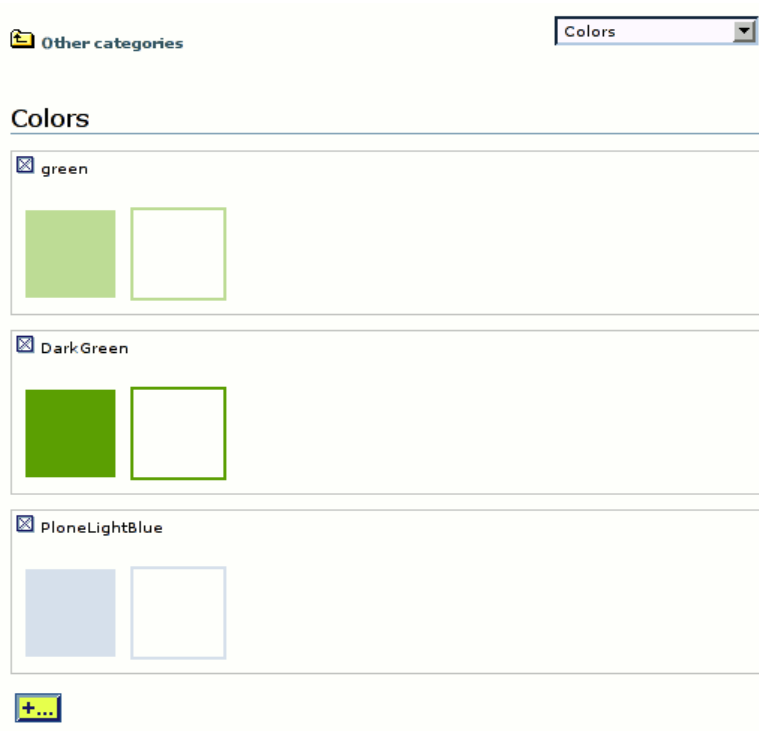
Show all categories

Edit palettes

☐ Colors
☐ Borders

Click on the category of palette that you want to create or edit. A list of already existing palette entries will be displayed.

Colors

The color palette contains only colors. These colors can be used in CPSSkins Styles as background colors, as border colors, as font colors, etc.
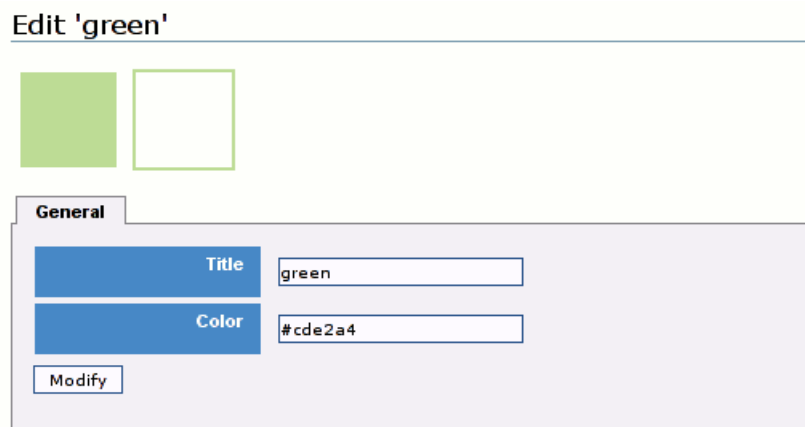
To edit an existing entry simply click on its name.

To delete an entry click on the x icon displayed before the entry's title.

To add a new entry click on the +... button at the bottom of the palette.

Editing color palette entries

Color palettes contain colors represented by a title and CSS color value.

The title can be chosen freely.

The CSS color value can be specified:

- using the hexadecimal notation as #rrggbb: #FFCC00, #666666

- as #rgb - #FC0, #666

- using standard color names (transparent, White, Black)

  Note: Only 16 color names are supported by the W3C CSS standard (aqua, black, blue, fuchsia, gray, green, lime, maroon, navy, olive, purple, red, silver, teal, white, and yellow)

- using rbg values as: rgb(255,0,0), rgb(0,255,255), rgb(100%, 0%, 0%)

For more information see the W3C CSS2 specification[2]

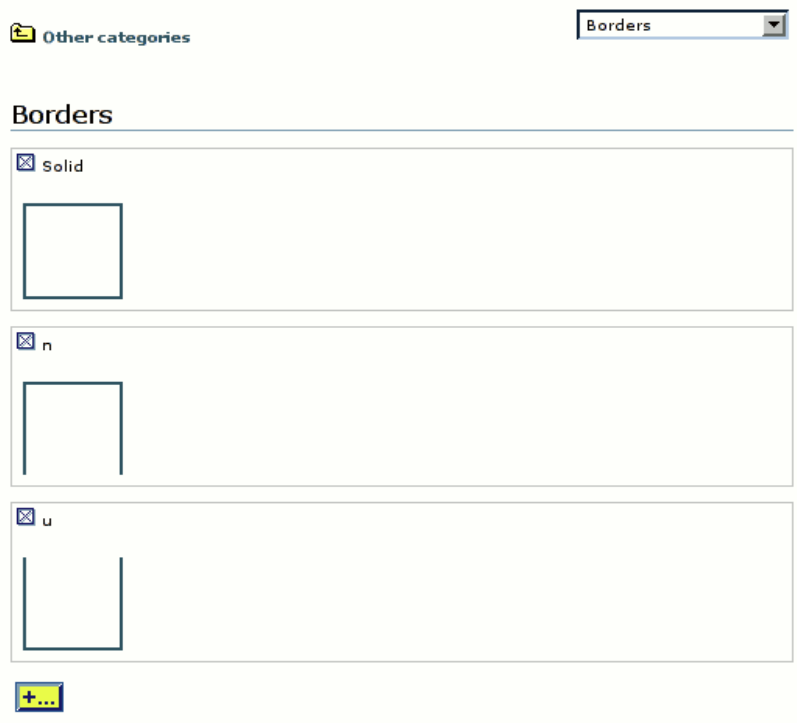**TIPS**: you can combine CSS colour values to draw borders with different colours:

Borders

The border palette only contains borders. Borders are used to create box frames or the decoration around text headings etc.

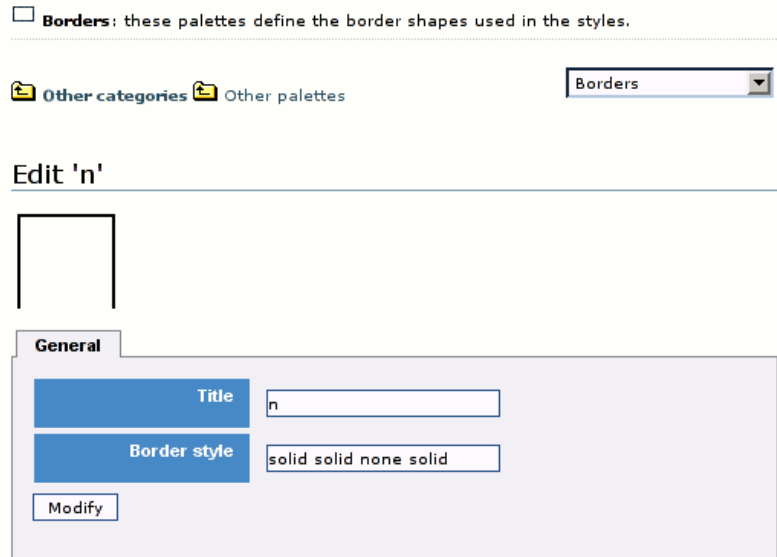2   http://www.w3.org/TR/CSS21/syndata.html#color-units

To edit an existing entry simply click on its name.

To delete an entry click on the x icon displayed before the entry's title.

To add a new entry click on the +... button at the bottom of the palette.

Editing border palette entries

Border palettes contain border styles represented by a title and CSS border style value.

The title can be chosen freely.

The CSS border style value can be specified as:

- none : no border; the border width is zero.

- dotted : the border is a series of dots.
- dashed : the border is a series of short line segments.
- solid : the border is a single line segment.
- double : the border is two solid lines.
- groove : the border looks as though it were carved into the canvas.
- ridge : the opposite of 'groove': the border looks as though it were coming out of the canvas.
- inset : the border makes the box look as though it were embedded in the canvas.
- outset : the opposite of 'inset': the border makes the box look as though it were coming out of the canvas.

For more information see the W3C CSS2 specification[3]

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3   http://www.w3.org/TR/CSS21/box.html#propdef-border-style

IMAGES

Icons

backgrounds

STYLES

Area color

Description: this style defines the background, border and text colors of an area

Icon:

Area shape

Description: this style defines the border style and thickness of an area

Icon:

Font color

Description: this style defines the font, link and decoration colors

Icon:

Font shape

Description: this style defines font sizes, links and decoration styles

Icon:

Portal box color

Description: this style defines the colors of portal boxes

Icon:

Portal box shape

Description: this style defines the shapes of portal boxes

Icon:

Portal tab style

Description: this style defines the appearance of portal tabs

Icon:

Calendar style

Description: this style defines the calendar's visual appearance

Icon:

Collapsible menu style

Description: this style defines the visual appearance of collapsible menus

Icon:

▌TEMPLETS

Main content area

Description:

Icon:

Applicable styles: area color, area shape, font color, font shape.

Preview:

Text box

Description:

Icon:

Applicable styles: area color, area shape, font color, font shape.

Preview:

Image box

Description:

Icon:

Applicable styles: area color, area shape, font color, font shape.

Preview:

Flash™ box

Description:

Icon:

Applicable styles: area color, area shape, font color, font shape.

Preview:

Search box

Description: a box with an input field to search the portal. In the advanced mode, a link to the advanced search form is shown below the input field.

Icon:

Layouts: compact, advanced.

Applicable styles: area color, area shape, font color, font shape.

Preview:

Breadcrumbs

Description: a navigation trail from the top level of the site to the current page.

Icon:

Applicable styles: area color, area shape, font color, font shape.

Preview:

Calendar box

Description: a calendar displaying monthly events.

Icon:

Applicable styles: area color, area shape, font color, font shape, calendar style.

Preview:

Collapsible menus

Description: a collapsible menu displaying portal folder items

Icon: ▤

Applicable styles: area color, area shape, font color, font shape, collapsible menu style.

Preview:

Action box

Description: a toolbar containing action buttons with icons.

Icon: ⚙

Applicable styles: area color, area shape, font color, font shape.

Preview:

[CMFActionIcons]

Portal boxes

Description: a generic box that displays portal actions, portal folders, an about box, a login box, an info box, etc.

Icon: ▤

Applicable styles: area color, area shape, font color, font shape, portal box color, portal box shape.

Layouts: see the list of box layouts as described below.

Preview:

Box content

Portal actions

Portal folders

About this object

Information text

Login form

Language selector

Recent documents

Related documents

Title source

Templet title

Workflow state

Username

Folder title

Box layouts

Portal boxes are composed of a box title and of a box body.

Several layouts are available in which the title and the body are arranged differently. Selecting a layout is done under the Templet's Layout tab in the Portal box layout field.

General	Visibility	**Layout**	Style	Folders

Horizontal alignment	Left ▼
Templet padding	0.5em
Templet margin	0.5em
Templet height	
Portal box layout	Drawer box ▼
List orientation	Vertical ▼

Modify

Standard box

Object actions
- View
- Edit

Frame box

Object actions
- View
- Edit

Frame box without title

- View
- Edit

No frames

Object actions
- View
- Edit

No frame no title

Drawer box

A drawer box can be opened and closed by users that are not necessarily authenticated. The box state (open / closed) is a saved in a session cookie.

Drawer box without title

The drawer box without title is displayed like a drawer box except that the box title is not shown.

This box layout can used to hide the items contained in a folder:

Box orientation

The items inside boxes can be displayed either horizontally (side by side) or vertically (on top of another).

The selection is done by selecting Vertical or Horizontal in the List orientation field under the Templet's Layout tab.

Horizontal orientation

Vertical orientation

Portal tab

Description: horizontal tabs displaying folder contents, actions, etc.

Icon: ⬜

Applicable styles: area color, area shape, font color, font shape, portal tab style.

Preview:

Log out | Calendar | My stuff | Site map

Portal box group

Description: a slot that displays CPS' or Plone's original portal boxes

Icon: ⬜

Applicable styles: area color, area shape, font color, font shape.

Preview:

Document information

Description: a text string displaying information about the current document, i.e. its title, the date of last modification, the name of the creator, etc.

Icon: ⓘ

Applicable styles: area color, area shape, font color, font shape.

Preview:

Creator

Last modified date and time

Document title

Theme chooser

Description: a theme selector for anonymous visitors (cookies must be enabled)

Icon: ⬛

Applicable styles: area color, area shape, font color, font shape.

Preview:

Language selector

Description: a language selector

Icon: 🇫🇷

Applicable styles: area color, area shape, font color, font shape.

Layouts: country flags, dropdown list, language names

Preview:

LAYOUT

Visibility

Always

Only in ...

Everywhere except in ...

Starting from ...

Up till ...

If authenticated

If anonymous

If secure connection

Time limited

Page Blocks

Cells

Cell stylers

Cell sizers

Cell hiders

▍THEME RENDERERS

The themes created with CPSSkins are displayed by theme renderers. [...]

Default mode (CSS2)

Compatible mode (Netscape 4)

Text mode

Hiding Templets in text mode

When designing themes for text mode browsers it is important to not clutter the top of the page with useless information since users often have to scroll down a lot before they reach the content of the page. To avoid displaying a given Templet in text mode check the Hidden in text mode option located under the Visibility tab of the Templet that you wish to hide. This option only applies to text mode rendering.

Profiler mode

ACCESSIBILITY

Integration

CPS3

Displaying CPS3 portal boxes inside CPSSkins

Displaying CPS3 sections and workspaces

PLONE

Displaying Plone's Portlets inside CPSSkins

Managing themes

THE CPSSKINS THEME FORMAT

The CPSSkins theme format has been designed to be simple and modular. A theme is composed of elementary objects like *Page Blocks*, *Templets*, *Styles*, *Palettes*, *Cell modifiers*. It is the interaction of all these elements that makes a theme.

The theme structure

A *Templet* is an element of the User Interface that can be positioned on a canvas. In order to be visible *Templets* must be present within *Page Blocks*.

Page Blocks are rectangular blocks with a number of columns that determine the underlining structure of a page. *Page Blocks* can contain *Templets*, layout elements (*Cell Sizers*), style elements (*Cell Stylers*) and visibility elements (*Cell Hiders*)

A *Portal Theme* is a collection of *Page Blocks* and a set of *Styles* (AreaColor, AreaShape, PortalBoxColor, PortalBoxShape, FontColor, FontShape, ...)

Styles consist of CSS properties and *Images* (icons, backgrounds). They can be associated to *Portal Themes*, to *Page Blocks*, to *Templets* and to *Cell Stylers*.
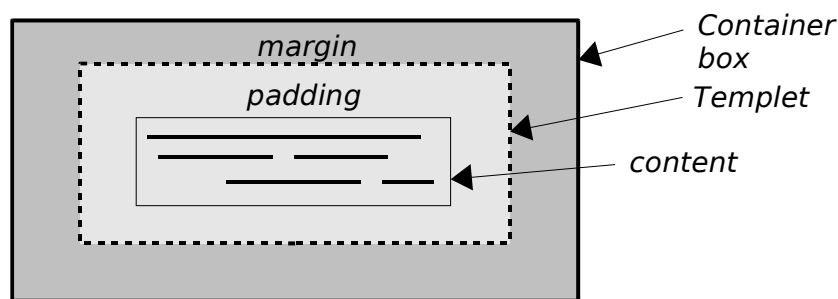
Some CSS properties can be stored inside *Palettes*.

The Templets

A *Templet* is a box with a content. It is placed inside a container box.

The *Templet*'s margin is the space between the container box and the *Templet* box.

The *Templet*'s padding is the space between the *Templet* box and its content.

The Page Blocks

The Cell Modifiers

The Theme

The Styles

The Images

The Palettes

OPTIMIZING YOUR THEMES

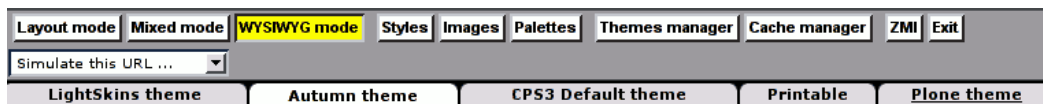**Profiling**

Caching

ESI (Edge-Side-Includes)

USING SEVERAL THEMES INSIDE THE SAME PORTAL

CPSSkins stores all the themes under /.../portal_themes. Every theme has a human-readable title and an identifier which is its Zope ID. Only IDs are used to refer to themes. To change a theme's ID simply rename it.
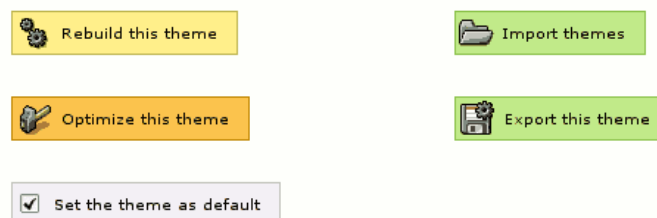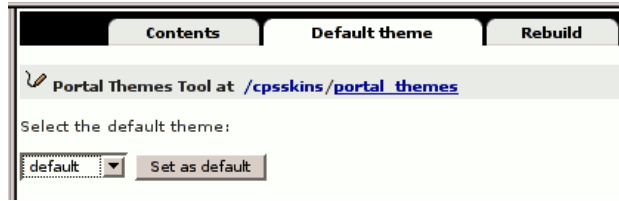

Setting the default theme

You can design several themes in parallel but only one will be seen by the users by default, it is called the default theme. In the theme edition screens the default theme's name is underlined:

To set a theme as the default theme select the theme's tab and click on the Set the theme as default button.

Experienced users can also select the default theme in the ZMI with the Default theme tab.

To display a theme other than the default theme you must specify its inside a URL or by setting a cookie value that CPSSkins will understand.

Selecting a theme by a URL parameter

A theme can be explcitly selected by specifying the theme's ID in the URL as a parameter by calling ?theme=theme_id where theme_id is the theme's ID. For instance http://www.mysite.com/?theme=intranet will display the intranet theme.

The theme called printable (usually used to display the printer-friendly version of a page) can also be selected by writing ?pp=1 in the URL.

This method does not make site navigation easy however since the theme parameter must be specified in every URL. Setting a cookie is a better method.

Selecting a theme by setting a cookie

CPSSkins will check the value of a given cookie (called cpsskins_theme). If the cookie's value is set to one of the themes' ID, the default theme information will be ignored and the ID contained in the cookie will be used instead.

Cookies can be set globally at the site's root (recommended) or be set locally starting from a given URL.

To get the cookie's ID use the getThemeCookieID() method.

Then set the cookie with REQUEST.RESPONSE.setCookie(cookie_id, theme_id)

For example you can run the following script to set the current theme to intranet

```
##parameters=REQUEST=None

theme_id = 'intranet'
tmtool = context.portal_themes
cookie_id = tmtool.getThemeCookieID()

if REQUEST is not None:
    REQUEST.RESPONSE.setCookie(cookie_id, theme_id)
```

IMPORTING AND EXPORTING YOUR THEME

REBUILDING THEMES

DELEGATING THE THEME MANAGER ROLE

▍DEPLOYING THEMES INSIDE AN ORGANIZATION

To establish brandmark identification it is important that all websites in an organisation comply to certain graphic standards. These are defined in the university's or the company's graphic standards manual in the form of general guidelines that need to be implemented.

This chapter describes how to implement design guidelines by deploying themes across an organization while maintaining high visual consistency.

Installing themes from a remote server

A theme created with CPSSkins for a given site can be exported and saved on the computer's harddisk as a file and be imported into another site.

But it is also possible to import themes directly from the Internet without first saving them on the harddisk. Themes can be automatically downloaded and installed from a remote WWW or FTP server.

This option is available in the portal_themes tool under External Themes. It offers the possibility to centrally deploy and manage themes inside an organization that has a large quantity of sites.

Each participating site (client) can be configured to update its themes from a central theme repository where all the themes are stored. The technique can be compared to a "pull"-type strategy since the server never sends information to the participating sites unless they first send a request for a theme update.

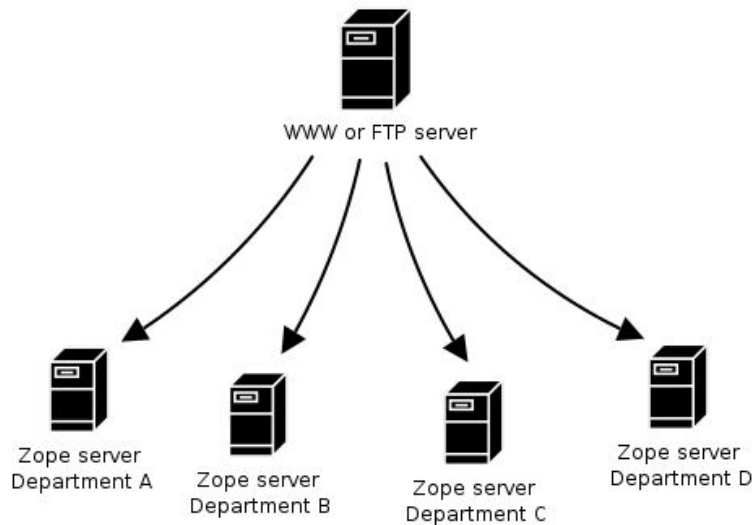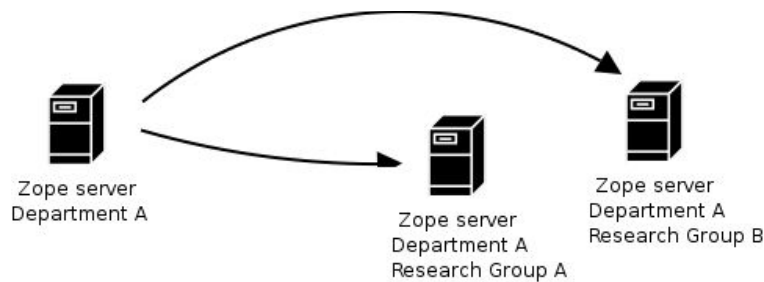A same theme can be used for many sites:

WWW or FTP server

Zope server
Department A

Zope server
Department B

Zope server
Department C

Zope server
Department D

Illustration 1Central site configuration

It is also possible to configure some sub-sites (for instance research groups inside a department) so that they will import their theme directly from another site running CPSSkins by using CPSSkins' theme export function (see "Performing automatic updates").

Installation

An *external theme* has a *theme ID* (its Zope Id in .../portal_themes) and a *theme URL* which is the address of a CPSSkins theme in .zexp format located on a remote server. The current implementation supports URLs beginning with http://___, https://___ and ftp://___.

Adding new themes

New external themes can be added by writing a theme ID and a URL and by clicking on the Add button.

Newly added themes will appear in the external themes list.

Their URL can then be modified, (Modify URL) but not their ID. They can also be removed from the list (Remove from list).

Performing manual updates

Checking for updates

When checking for updates (Check for updates button), all the themes get downloaded and their checksum is compared with the checksum of the themes already installed. If a newer version is available a status message (New theme available!) will be written.

Installing newer themes

To perform an update click on Install updates

Themes will be downloaded from the specified addresses and be imported into the site. Already existing themes with the same IDs as the ones configured will be overwritten.

All imported themes are rebuilt. If this step fails a status message (THEME REBUILD FAILED) will be written.

Only the newer versions of a theme will actually get installed.

Reinstalling all themes

When reinstalling all themes (`Reinstall all themes` button), all external themes get downloaded and installed even if they are strictly identical to the themes already installed.

Performing automatic updates

It is possible to let the client sites perform unattended updates on a regular basis. The simplest solution is to use UNIX's cron mechanism combined with a non-interactive network downloader `wget` or `curl`

For instance to run an update on a daily basis, add the following line to `/etc/cron.daily/`

```
#!/bin/sh
wget -q http://root:pass@www.site.com:8080/cpsskins/portal_themes/manage_updateExternalThemes
```

or:

```
#!/bin/sh
curl -s --user root:pass http://www.site.com:8080/cpsskins/portal_themes/manage_updateExternalThemes
```

where:

– `www.site.com:8080` is the name and the port of the Zope server

– `cpsskins` is the name of the site instance

– `root` is the site administrator's account name and `pass` is its password.

Importing themes from another CPSSkins instance

In order to import a theme from another CPSSkins instance simply write in the theme URL:

```
http://root:pass@www.site.com:8080/cpsskins/portal_themes/themeid/manage_exportObject?download:int=1
```

where:

– www.site.com:8080 is the name and the port of the Zope server

– cpsskins is the name of the site instance

– themeid is the ID of the theme to export

– root is the site administrator's account name and pass is its password.

Advanced

▎TRANSLATING CPSSKINS INTO YOUR OWN LANGUAGE

CPSSkins has been entirely internationalized which means that all the messages displayed in the user interface can be translated into other languages.

To translate the CPSSkins user interface into your own language you only need to edit three files called cpsskins-xx.po, cpsskins-default-xx.po and cpsskins-plone-xx.po where xx is the language code (en for English, it for Italian, sv for Swedish, ...). Language codes are defined in the ISO 639-1 standard[4]. They consist of two letters.

These files should be placed in the CPSSkins/i18n directory.

The messages are categorized into three message catalogs called cpsskins, default and plone

cpsskins-xx.po contains the messages of the cpsskins catalog. These are the messages used by CPSSkins.

cpsskins-default-xx.po and cpsskins-plone-xx.po contain the messages of the default and of the plone catalogs respectively. These are used by CMF, CPS (default i18n domain) or by Plone (plone i18n domain). Apart from the i18n domain declaration the contents of these files are exactly the same.

Po files consist of a header with some information about the translators, the language code, the domain name (...) and the actual translations (msgid "..." and msgstr "...") .

The files called cpsskins.pot, cpsskins-default.pot and cpsskins-plone.pot are used as a reference since they are always up-to-date. They contain the latest message ids (msgid) of each catalog with empty translation strings (msgstr).

(...)

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4   http://www.w3.org/WAI/ER/IG/ert/iso639.htm

PACKAGING CPSSKINS THEMES INSIDE YOUR PRODUCT

EXTENDING CPSSKINS: WRITING YOUR OWN TEMPLETS

This chapter explains how to create custom *Templets* and *Styles* for CPSSkins.

The standard *Templets* included CPSSkins are the *Text box*, the *Image box*, the *Search box*, the *Language selector*, the *Breadcrumbs*, the *Action box*, the *Portal box*, and the *Portal box group*, the *Theme chooser*, the *Flash^{TM} box*, the *Calendar box*, the *Collapsible menu*. These are all derived from the BaseTemplet Python class.

New *Templets* based on the BaseTemplet class can be created with only a few lines of code.

The default properties inherited from `BaseTemplet` are:

Property	Description	Type	Default
title	Title of the Templet	string	
closed	State : open / closed	boolean	0
cacheable	Makes the Templet cacheable in RAM	boolean	0
hidden_in_text_mode	Makes the Templet invisible in text mode	boolean	0
display_title_in_text_mode	Makes the Templet's title visible in text mode	boolean	1
visibility	Visibility criteria	string	always
visibility_paths	The paths in which the Templet is visible	multiple selection	
languages	The languages in which the Templet is visible	multiple selection	
xpos	Horizontal position in the Page Block (0, 1, 2 ...)	int	
align	Horizontal alignment (left, center, right)	string	
padding	Padding	string	
margin	Margin	string	
templet_height	Templet height	string	
fontshape	Font shape	selection (string)	
fontcolor	Font color	selection (string)	
shape	Area shape	selection (string)	
color	Area color	selection (string)	

The actions inherited from `BaseTemplet` are:

– view the default view method, only practically used in theme edition mode.

– edit the edit method, updates the Templet's properties.

– moveup moves the Templet upwards on the canvas, possibly into another Page Block.

– moveleft moves the Templet to the left.

– movedown moves the Templet downwards on the canvas, possibly into another Page Block.

– moveright moves the Templet to the right.

– toggle changes the Templet's visibility state.

– delete deletes the Templet.

– isportaltemplet used internally to recognize Templets from other Zope objects.

[...]