



# Customizing cPanel

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Simplify.



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## About the Presenter

My name is David Grega and I'm the Sales Support Representative for cPanel, Inc. My responsibilities including handling technical pre-sales questions, knowing the capabilities of cPanel/WHM and keeping my hand on the pulse of the user community.

I've been working for cPanel since November of 2006. However, I've been a user of cPanel/WHM since 1998.

Personal interests include code security, documentation and optimization.

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## Presentation Abstract

In cPanel 11 there are many new tools to customize the interface. In addition, third party applications now interface with cPanel/WHM better than ever before!

This presentation will cover the new APIs in cPanel 11 as well as other items of interest regarding the customization of the cPanel interface.

## Topics of Discussion

- »» Creating a Custom Login Page
- »» Branding your user's cPanel Interface
- »» Removing Icons from the cPanel Interface
- »» Adding Your Own Icons to the cPanel Interface
- »» Interfacing your applications with cPanel/WHM
- »» Translating the cPanel Interface
- »» Customizing Service Alerts

## Custom Login Page

In the old days you could simply redirect a user to `http://user:pass@domain.com:2082` to log them into their cPanel interface. However recent security enhancements to web browsers now prevent this.

You can embed a cPanel, WHM or Webmail login on your own web page if you so desire. It's actually fairly simple.

This functionality requires cPanel 9.4.1 or later.

# Custom Login Page :: Continued

```
<?php
// Uncomment the
// lines below
// what you wish to
// login to. Only 1
// section should be
// uncommented.

#cPanel
$protocol = 'http';
$port = 2082;

#Secure cPanel
//$protocol = 'https';
//$port = 2083;

#WHM
//$protocol = 'http';
//$port = 2086;

#Secure WHM
//$protocol = 'https';
//$port = 2087;

#Webmail
//$protocol = 'http';
//$port = 2095;

#Secure Webmail
//$protocol = 'https';
//$port = 2096;
?>
```



```
<!-- Code Listing Continued -->
```

```
<html>
```

```
<b>cPanel Login</b><br>
```

```
<?php
```

```
if ($_GET['failed'] == "1") {
    echo "Your login attempt failed!";
}
```

```
echo "<form action=\"\" . $protocol . "://\" ";
echo $_SERVER['HTTP_HOST'] . ":" . $port . "/login/\" ";
echo "method=POST>";
```

```
?>
```

```
User: <input type=text name=user><br>
Pass: <input type=password name=pass><br>
```

```
<?php
```

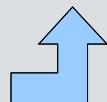
```
echo "<input type=hidden name=failurl value=\"http://\" ";
echo $_SERVER['HTTP_HOST'] . $_SERVER['PHP_SELF'];
echo "?failed=1\">";
```

```
?>
```

```
<input type=submit value=Login>
```

```
</form>
```

```
</html>
```



# Branding

- cPanel® 11 provides you with the ability to very easily brand your servers.
- No longer will your customers need to see cPanel logos in their accounts even though you are using cPanel software.



# Branding :: How-To

## cPanel > Branding Editor

- »» Our live theme editing functionality has been substantially enhanced in the new cPanel 11.
- »» Creating your own theme, even an X3-based theme, is now easy.
- »» Lets your design team focus on design and you don't need to have your technical staff spend time programming a theme.

### tealmadness

Edit Icons

Edit Header/Footer

Edit UI

Edit Logos

 Edit Stylesheet

Edit Preview Images

Edit HTML Pages









Add Interface Elements

(Un)Delete Interface Elements

# Branding :: Show and Tell :: Capabilities

cPanel > Branding Editor > Download/Delete Branding

➤➤➤ Download your custom skin for easy deployment across multiple servers.

Branding Package(s)	Download	Delete Package
Default	 Download (System)  Download (Yours)	
tealmadness	 Download (System)	 Delete Package
black_ice	 Download (System)	 Delete Package
falltheme	 Download (System)	 Delete Package


# Branding :: Show and Tell :: Edit Logo

cPanel > Branding Editor > Skin > Edit Logo

»» **Edit Logo** allows you to upload your own logo.

»» It is strongly recommended you replace our logo with your logo.

Current Style: **tealmadness**

IMAGE	DESCRIPTION	FILE NAME	WIDTH (PX)	HEIGHT (PX)	UPLOAD	RESET TO DEFAULT
	Logo	top-logo variable	variable	variable	<input type="text"/> <input type="button" value="Browse..."/>	<input type="button" value="Reset"/>

# Branding :: Show and Tell :: Edit Icons

cPanel > Branding Editor > Skin > Edit Icons

» **Edit Icons** allows you to edit virtually any icon in the interface and replace it your own icon.

Your images **must** use the file names below and must be either .jpg, .png, or .bmp.

Current Style: **tealmadness**

IMAGE	DESCRIPTION	FILE NAME	WIDTH (PX)	HEIGHT (PX)	UPLOAD	RESET TO DEFAULT
	Addon Domains	addondomain	33	33	<input type="text"/>	<input type="button" value="Reset"/>

[Upload Images](#)

You can regenerate the sprites file here: [Generate Sprites](#)

[More about sprites](#)

You can also revert all branded icons to the theme's default icons. [Reset All Images](#)

# Branding :: Show and Tell :: Edit UI

cPanel > Branding Editor > Skin > Edit UI

» You can also edit progress bar images and virtually every image in the cPanel interface.

72	72	Getting Started Icon (must be a transparent gif)	getstart-icon	<input type="text"/> Browse...	Reset
					
20	19	Home (must be a transparent gif)	homeb	<input type="text"/> Browse...	Reset
					
2	18	Password Strength Very Weak	passbar-0	<input type="text"/> Browse...	Reset
					
100	10	Password Strength Very	passbar-10	<input type="text"/> Browse...	Reset

# Branding :: Show and Tell :: Edit HTML Pages

cPanel > Branding Editor > Skin > Edit HTML Pages

➤➤ Easily customize headers and footers to include links to portions of your own company's site as desired.

Current Style **tealmadness**

DESCRIPTION	FILE NAME (RIGHT CLICK AND SAVE AS...)	EDIT	UPLOAD	RESET TO DEFAULT
cPanel Parsed Inline CSS	cpanel_parsed_css.html	<input type="button" value="Edit"/>	<input type="text"/> <input type="button" value="Browse..."/>	<input type="button" value="Reset"/>
Getting Started popup Include	getstarted-pop.html	<input type="button" value="Edit"/>	<input type="text"/> <input type="button" value="Browse..."/>	<input type="button" value="Reset"/>
Entry Page	index.html	<input type="button" value="Edit"/>	<input type="text"/> <input type="button" value="Browse..."/>	<input type="button" value="Reset"/>
Option Selection popup Include	optionselect-pop.html	<input type="button" value="Edit"/>	<input type="text"/> <input type="button" value="Browse..."/>	<input type="button" value="Reset"/>

# Branding :: Show and Tell :: Edit HTML Pages

... > Branding Editor > Skin > Edit HTML Pages > Edit

➤ You can also use API2 tags here for advanced functionality.

## Branding Editor

### Edit HTML Pages

You can use the HTML editor below to make changes to the selected template. Be careful as the changes you make can break functionality in the cPanel interface. See [Our Developer Area](#) for more documentation on tags.

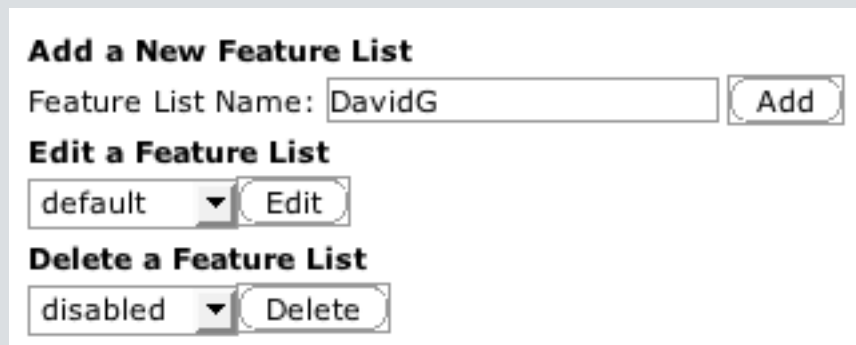
#### Current Style **[default]**

```
1 <!-- START stdfooter.html -->
2 <div class="clearitmed"> </div>
3 </div><!--Close Content Div-->
4
5 <!--Start Footer-->
```

# Feature Manager

WHM > Packages > Feature Manager

- Feature Manager allows you to hide icons from being displayed in the cPanel Interface.
- Any icon (“Feature”) can be enabled or disabled in Feature Manager.
- These customizations are saved as “Feature Lists.”

A screenshot of the Feature Manager interface showing three sections: 'Add a New Feature List' with a text input 'DavidG' and an 'Add' button; 'Edit a Feature List' with a dropdown menu showing 'default' and an 'Edit' button; and 'Delete a Feature List' with a dropdown menu showing 'disabled' and a 'Delete' button.

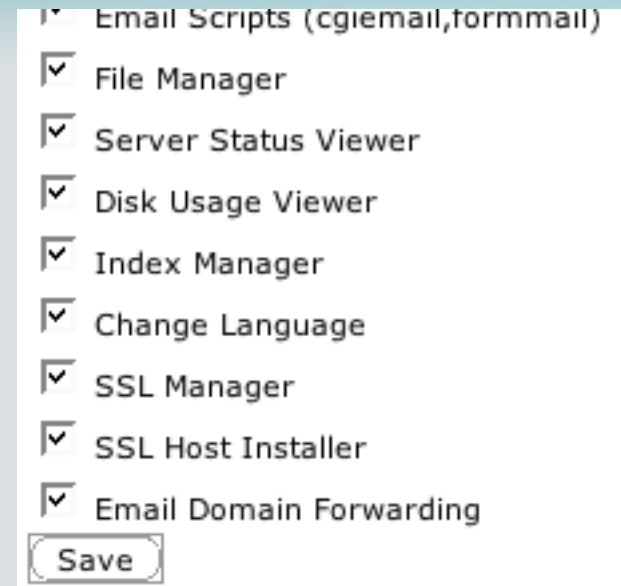
**Add a New Feature List**  
Feature List Name:

**Edit a Feature List**

**Delete a Feature List**

## Creating Feature Lists

- Add a new Feature List by typing a name for your custom Feature List into the text field and clicking “Add.”
- Ensure only the features you want enabled are selected then click “Save” at the bottom of the page.

A screenshot of a cPanel interface showing a list of features with checkboxes. The features listed are: Email Scripts (cgiemail,formmail), File Manager, Server Status Viewer, Disk Usage Viewer, Index Manager, Change Language, SSL Manager, SSL Host Installer, and Email Domain Forwarding. A 'Save' button is located at the bottom of the list.

- Email Scripts (cgiemail,formmail)
- File Manager
- Server Status Viewer
- Disk Usage Viewer
- Index Manager
- Change Language
- SSL Manager
- SSL Host Installer
- Email Domain Forwarding

## Special Feature Lists

- To enable/disable features server-wide for users with no feature list assigned to them, simply edit the “default” Feature List. This can be overridden with other Feature Lists.
- To disable functionality server-wide, disable it in the “disabled” Feature List. This cannot be overridden with other Feature Lists.

# Features and Packages

- » You cannot use a Feature List directly in the creation of accounts.
- » Instead, you must create a Package that uses this Feature List.
- » To do this, go to: [WHM > Packages > Add Packages](#)
- » Create a Package as you normally would, but where it says Feature List, select the Feature List you just created.

## cPanel and WHM Plugins

- This is how you add icons to the cPanel interface.
- Plugins can be used to add functionality to the cPanel Interface.
- One popular Plugin is “Fantastico De Luxe”
- Plugins must be coded in Perl or PHP

## API2

- » You can create Plugins using API2.
- » Plugins were formerly known as Add-ons.
- » API2 allows you to access many portions of the cPanel source indirectly.
- » Not to be confused with cPAddons or the XML API commonly used by billing applications to externally access cPanel and WHM functionality.

# What can be manipulated with API2

- »» Addon Domains
- »» Crontab
- »» Email Settings
- »» File Manager
- »» FTP Sessions
- »» MIME / Apache
- »» MySQL
- »» Network Tools
- »» Non-volatile Data Store
- »» Parked Domains
- »» PostgreSQL
- »» SSH Keys
- »» SSL Certificate
- »» Account Statistics
- »» Sub Domains
- »» User Interface
- »» Web Disks

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# API2 Tag Syntax :: Variables and Functions

```
<?cp Module::function(%, definition) output=output_list || 'message' ?>
```

➤➤ **Module** is the name of the specific Module to access.

➤➤ **function** is the name of the specific function to access.

➤➤ % is used to retrieve a variable from the function. It must have a matching definition.

➤➤ **definition** will tell the API2 tag which variable it should output. See *the specific function's documentation for a list of variable that can be outputted.*

Simplify.

```
<?cp Branding::showpkgs( % % , pkg,previewimg ) ?>
```

## API2 Tag Syntax :: Output

```
<?cp Module::function(% , definition) output=output_list || 'message' ?>
```

➤➤ **output** contains a desired output indicator (e.g. Display) (optional)

➤➤ **output\_list** is a pipe delimited list of input variables for output (if output is used). *See the specific function's documentation for a list of variables that can be inputted.*

➤➤ **//** will output whatever trails **||** if the function fails or no data is outputted (optional).

➤➤ **'message'** is what should be returned should the tag return null (if **||** is used).

# API2 Tag Character Substitutions

Old Character                      Becomes...

[[                      (

]]                      )

[                      <

]                      >

\{colon}                      :

\{comma}                      ,

\{leftbracket}                      (

\{rightbracket}                      )

Simplify.

## Nesting API2 Tags

```
<cpanel langprint="">
```

➤➤ This tag is typically used to display text in the user's language. Between the quotes is the language variable (more on this later).

➤➤ The `<cpanel langprint="">` tag must be used as `$LANG{""}` inside an API2 tag.

?

➤➤ The `? tag (as in <?cp ... ?>) must be used as $CPDATA{""} when inside an API2 tag.`

## Example of Character Substitutions and Nesting API2 Tags

```
<?cp Branding::showpkgs(i [tr] [td  
align="center">%[/td] [td  
align="center"][a href="%"][img  
src="previewicon.jpg" /][a][td] [/tr]  
,pkg,previewimg) || '[tr][td  
colspan="2"]$LANG{'NoPackages'}[/td][/  
r]' ?>
```

# Creating an Installation File

## cPanel Plugins Install File Generator

**Plugin Name:**

*Name of the Plugin.*

**Module Description:**

*Description of the module (used for branding).*

**Feature Manager?**

*If enabled, the feature will be an option in the feature manager.*

**Display Name:**

*Name displayed in the cPanel Interface.*

**Display Group:**

*What cPanel icon group the icon should appear in. (Currently only in x3).*

**Display Order:**

*Order within the group.*

**Access URL:**

*URL used to access the plugin in cPanel (relative to /usr/local/cpanel/base/frontend/<theme\_name>/).*

**Plugin Icon:**

*Icon to be displayed in cPanel (jpg, gif, or png).*

# Installation

Once you've generated the install file, you'll need to install it, to do so, follow these steps:

➤➤ Place the installation file in `/usr/local/cpanel/bin/`

➤➤ Run `/usr/local/cpanel/bin/register_cpanelplugin <name of install file>`

This registers your Plugin with the themes and branding packages installed on the server.

Upon completion, your Plugin should appear as an icon in the cPanel interface.

# Uninstallation

Uninstalling a Plugin is as easy as installing it, simply run:

```
/usr/local/cpanel/bin/unregister_cpanelplugin <name of install file>
```

## Update Icons

If you change the icon for your Plugin and the cPanel interface does not reflect this, simply run the following command:

```
/usr/local/cpanel/bin/rebuild_sprites
```

## XML API

You can easily have external applications make use of cPanel/WHM's accounting mechanisms through our new XML API.

This new XML API is far ahead of the old WHM API as it now can be used with any language that can use XML, not just Perl and PHP.

# XML API Functionality

**Red Bold** indicates functionality not available in previous versions of cPanel/WHM

## Account Functions

- \* Create an Account
- \* List Accounts
- \* Suspend an Account
- \* Unsuspend an Account
- \* Terminate an Account
- \* **Upgrade/Downgrade and Account (Change Package)**

## Package Functions

- \* **Add a Package**
- \* **Edit a Package**
- \* List Packages
- \* **Delete a Package**

## SSL Functions

- \* **Generate a SSL Certificate**

## Reseller Functions

- \* **Add Reseller Privileges**
- \* **Remove Reseller Privileges**
- \* **List Reseller Accounts**
- \* **Create a Reseller ACL List**
- \* **List Current Reseller ACL Lists**
- \* **Set a Reseller's ACL List**
- \* **List Reseller's Accounts' Information**
- \* **Terminate a Reseller and All Accounts Owned by Reseller**

## Server Information

- \* **Display Server Hostname**
- \* Display cPanel and WHM version

## Service Functions

- \* **Restart Service**

## Using the XML API

`/xml-api/name_of_api?variable=data&variable=data`

Example: `/xml-api/setupreseller?user=bob&makeowner=1`

- **name\_of\_api** is the name of the API
- **?** indicates that input data required by the API is to follow
- **variable=data** is how data is inputted to the API, variable/data pairs.
- **&** separates variable/data pairs. A truncating & is not required.

# Processing Output from the XML API

Output is returned in raw XML with the root tag being the name of the API you called.

Output for calls that perform an action:

```
<name_of_XMLAPI_call>  
    <result (status of the request) />  
</name_of_XML_API_call>
```

Example:

```
<setupreseller>  
    <result status="1" statusmsg="" />  
</setupreseller>
```

# Processing Output :: Continued

Output for calls that request information:

```
<name_of_XMLAPI_call>
```

`<item` (information about the item) `/>`. (Where the item is the item request, i.e. a package, acct, etc)

```
</name_of_XML_API_call>
```

Example:

```
<listpkgs>
```

```
<package name="gold_1000MB" BWLIMIT="1000" CGI="y" CPMOD="x3"  
  FEATURELIST="default" FRONTPAGE="n" HASSHELL="n" IP="n"  
  MAXADDON="3" MAXFTP="5" MAXLST="5" MAXPARK="3" MAXPOP="30"  
  MAXSQL="5" MAXSUB="10" QUOTA="1000"/>
```

```
</listpkgs>
```

## Internationalization

You can also customize the cPanel Interface by translating it to other languages. You can do this by:

➤➤ Downloading an existing language file and installing it using the WHM interface.

~ OR ~

➤➤ Creating your own language file through the WHM interface or manually.

# Downloading Language Files

Language files are available for free from:

<http://lang.cPanel.net>

**Other languages available from 3rd parties**

Romanian

- Romanian
- Catalan
- Dutch
- French
- German
- Polish
- Portugues
- Portuguese
- Russian
- Spanish
- Swedish
- Turkish
- Spanish-ES

**Language File**

**3rdparty language 11**

Language Name	Spanish
Language File	<a href="http://www.demontech.net/cplang/spanish.asc">http://www.demontech.net/cplang/spanish.asc</a>
Support Url	<a href="http://demontech.net/mod.php?mod=mail&amp;m">http://demontech.net/mod.php?mod=mail&amp;m</a>
Maintained By	Demontech Hosting


Please report broken links to [billing@cpanel.net](mailto:billing@cpanel.net)

[\[Back\]](#)

- Open Link in New Window
- Open Link in New Tab
- Bookmark This Link...
- Save Link As...
- Send Link...
- Copy Link Location
- Properties
- Note this (Google Notebook)

# Installing Language Files

To install a language file, simply upload it to your server in the WHM interface.

A screenshot of the WHM interface showing the 'Language File Upload' page. The breadcrumb trail at the top reads 'Main >> Languages >> Upload a Language File'. Below this, the title 'Language File Upload' is displayed in a bold, dark blue font. The main content area contains a form with the label 'Language File:' followed by an empty text input field. To the right of the input field are two buttons: 'Browse...' and 'Upload'.

# Create a Language File

1

Main >> Languages >> Clone/Create a New Language

## Clone/Create a New Language

Select a language to clone

english **spanish** target polish

2

Main >> Clone/Create a New Language

## Clone/Create a New Language

### Language Selection

Please enter a name for the new language:

MySpanish

Submit

3

Main >> Languages >> Edit a Language File

## Please select a language to edit.

**MySpanish**  
spanish  
target  
polish

4

Main >> Language Editor

## Language Editor

Variable	English	MySpanish Translation
ACAdmin	Admin User Name:	Nombre de Usuario de Admin:
ACAgora	Agora Shopping Cart	Carrito Agora
ACHint	The Agora Cart is a free shopping cart program. Support can optionally be obtained through a mailing list setup specifically for Agora Users for a small fee of \$25.00 per year. You can join the list by visiting: <a href="http://www.agoracgi.com/">http://www.agoracgi.com/</a>	Agora es un programa gratuito de carrito de la compra. Pa
ACInstall	Install an Agora Shopping Cart	Instalar Carrito Agora
ACInstallExampleNonValidPost	is not.	no lo es.

# Service Manager

WHM > Service Configuration > Service Manager

- » Allows you to control which services are monitored and which are not.
- » Services are checked once every 8 minutes.

## Service Manager :: Customizing

» You can monitor additional services if you're willing to edit some configuration files at the command line.

» Monitoring configuration is stored in:

```
/etc/chkserv.d/chkservd.conf
```

» The monitoring system supports two types of monitoring:

- Connection Based Monitoring
- Command Based Monitoring

# Connection Based Monitoring

```
service[serviceName] = port, send, response, restart
```

»» serviceName = Name of service

»» send = What data to send

»» response = Expected Response

»» restart = Full path to restart service

# Command Based Monitoring

```
service[serviceName] = , , , restart, command, owner
```

»» **serviceName** = Name of service

»» **restart** = Full path to restart service

»» **command** = Regular expression of what to look for in the process list

»» **owner** = Process Owner

## Questions & Answers

- »» If you have any questions specific to this presentation, you may now ask them.
- »» General questions can be asked during our Mass Q&A Session at the end of the day.