

# Layouts

## Overview

The majority of plugins will not have view files. Occasionally, however, a plugin will return HTML and it is considered best practices to have a more MVC structure to your plugin and put all HTML and display code into view files. This allows for separation of the logic from presentation. There is a second advantage to this, however, which is that it will allow the presentation to be overridden easily by any template for optimal integration into any site.

Overriding plugin, module, and component presentation in templates is further explained in the [Templates: Overrides](#) section.

## Directory Structure & Files

Plugins, like components and modules, are set up in a particular directory structure.

```
/plugins
  /groups
    /forum
      forum.php    (the main plugin file)
      forum.xml    (the installation XML file)
    /views
      /browse
        /tmpl
          default.php    (the layout)
          default.xml    (the layout installation XML file)
```

Similar to components, under the views directory of the plugin's self-titled directory (in the example, forum) there are directories for each view name. Within each view directory is a /tmpl/ directory. There is usually only one layout file but depending on who wrote the plugin, and how it is written, there could be more.

## Implementation

### Loading a plugin view

```
class plgExamplesTest extends HubzeroPluginPlugin
{
    ...
}
```

```
    public function onReturnHtml()
    {
// Instantiate a new view
$view = new HubzeroPluginView(array(
    'folder'=>'examples',
    'element'=>'test',
    'name'=>'display'
));

// Set any data the view may need
$view->hello = 'Hello, World';

// Set any errors
if ($this->getError())
{
    $view->setError( $this->getError() );
}

// Return the view
return $view->loadTemplate();
    }
}
```

In the example, we're instantiating a new plugin view and passing it an array of variables that tell the object where to load the view HTML from. `folder` is the plugin group, `element` is the plugin, and `name` is the name of the view that is to be loaded. So, in this case, it would correspond to a view found here:

```
/plugins
  /examples
    /test
      /views
        /display
          /tmpl
            default.php    (the layout)
            default.xml    (the layout installation XML file)
```

Also note that we're returning `$view->loadTemplate()` rather than calling `$view->display()`. The `loadTemplate()` method captures the HTML output of the view rather than printing it out to the

screen. This allows us to store the output in a variable and pass it around for later display.

### The plugin view file

Our view (default.php) is constructed the same as any module or component view file:

```
<?php defined('_JEXEC') or die('Restricted access'); // no direct access ?>
<p>
  <?php echo $this->hello; ?>
</p>
```

### Sub-Views

Loading a sub-view (a view within a view, also commonly called a "partial") can now be done via the `view()` method. This method accepts three arguments: 1) the view name, 2) the parent folder name and 3) the plugin name. If the second and third arguments are not passed, the parent folder is inherited from the view the method is called from (i.e., `$this`).

Example (called from within a plugin view):

```
... html ...
<?php
  $this->view('layout')
        ->set('foo', $bar)
        ->display();
?>
... html ...
```