



Content Portal Patch Guidance

Version 4.5.x

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Document Purpose:

This document is aimed at assisting Systems Administrators in the application of their first Jadu Content Portal upgrade patch. Some basic information is also provided for any web developers wishing to extend the platform and how these should be managed through version controlled.

Git repository of Front end templates:

Some customers wish to make changes themselves or use an independent third party. We have an established approach that ensures any changes made by customers or their nominated third parties are done so in a controlled way that all parties can collaborate on a single codebase where necessary. This is achieved using [GitHub](#).

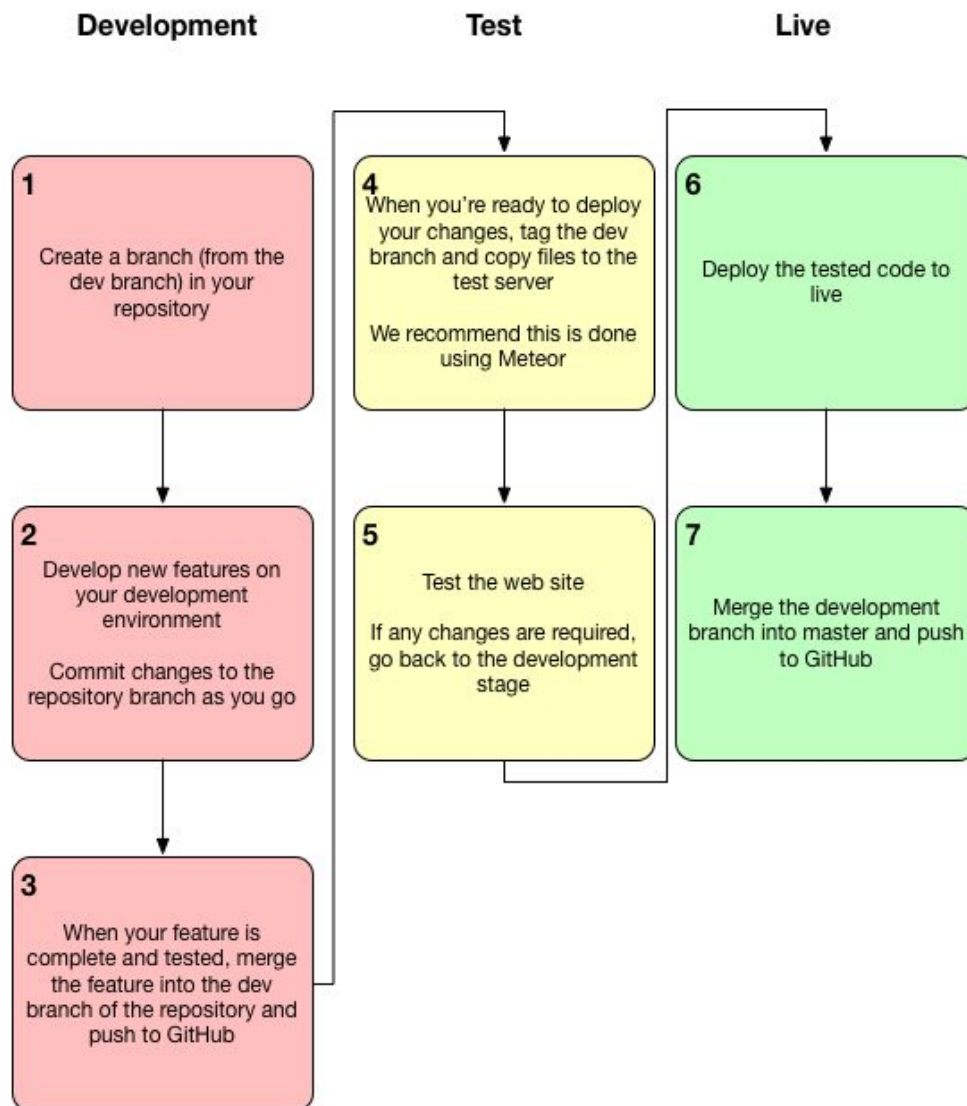
Customer Development process:

Start off by committing the standard provided Front end templates as supplied by Jadu to your project in a 'develop' branch.

We recommend that any changes required to standard templates or to be added to respective "custom" folders are made

in branches taken from the 'develop' branch and that only tested, deployable changes are then merged back into 'develop'. This will ensure that only working code is ever deployed to live, repeating as necessary for any features / changes being introduced. A 'master' repository is then updated from 'develop' once deployments have been successfully released into PROD.

The following flowchart presents a simple development workflow using a 'feature branching model' that we recommend is used either when Jadu provide platform management or when this is carried out by the customer.



Future Content Portal template patch releases can then be diff'd against your repository to merge in all relevant future updates alongside your already committed customizations allowing you to assess any impact and allow you to focus areas of UAT etc as part of patch releases.

Note: At the present time, if customers perform their own platform management, including the application of patches, and you use the Composer dependency manager, then Jadu would then need to produce a package each time a new deployment to the test environment was required (that same package, if it passes testing would then be deployed to PROD). The creation of a release package in this way may incur additional support charges, so please discuss this with us first if you plan to introduce the use of Composer.

Patching Prerequisites:

1. Verify that the PHP version installed is PHP 7.1 or above
2. Take a backup of config/perceptive/constants.xml
3. Take a backup of the /public_html/site/ folder (as the web development team may have customised some of these front end template scripts - see Git repository section of this document)
4. Download the packages listed in the Required packages section below and upload to your web server(s).

Note: It is advisable that you manually add the Jadu Rescheduler task after installation & setup - this will only need to be done once if not already configured - steps have been provided in a later section for this.

Required Packages:

Ordinarily you would need to download the following patch files from the support portal (we are discussing with Lexmark/Kofax/Hyland support about ongoing access to these and later version files through their customer portal or whether this should sit within our own support portal).

1. **JCP-4.5.x.zip** = JCP bundles with XFP and CMS
2. **JCP-4.5.x-Templates.zip** = Full JCP Front end template bundle
3. **Perceptive-2.2.0-WIDGETS.zip** = Latest Widget code (unchanged from v2.2.0)

Upgrade Process:

We would recommend that this process be followed on your UAT environment first with a round of testing prior to application to PROD if currently actively using PROD at this time. Each step mentioned below is described in more detail afterwards:

1. Turn off forms via XForms Pro > Settings in the control centre
2. Install JCP 4.5.x core package via Meteor (see below steps)

Note: You will receive an error at the end of the patch process.

```
PHP Fatal error: Uncaught Symfony\Component\Debug\Exception\FatalThrowableError: Type error: Argument 1 passed to Jadu\PayBridge\AccountBalance\Command\BalanceImportCommand::__construct() must be an instance of Jadu\PayBridge\AccountBalance\BalanceImporter, instance of Jadu\PayBridge\AccountBalance\ImportService given...
```

This error can be safely ignored, continue to step 3.

3. Install JCP 4.5.x template package via Meteor (same process as above)
4. Manually update widget code for those stated below (where not already running the latest version of these already)
5. Reapply your front end templates (where customisations have taken place - ideally from version control)
6. Manually Clear cache (although Meteor does also clear caches)
7. Warm caches using the following 2 CLI commands:

```
su jadu-www -s /bin/bash -c "/usr/bin/php /var/www/jadu/cli.php cache:warmup --kernel=frontend"
su jadu-www -s /bin/bash -c "/usr/bin/php /var/www/jadu/cli.php cache:warmup --kernel=cc"
```

8. Turn on forms via XForms Pro > Settings in the control centre
9. Manually Verify the upgrade / connectivity of the system

Note: Front end template files will be replaced as part of applying step 2 above. Your team may therefore need to reapply manually any front end customisations previously made as a final step, as these changes will have been overwritten during the patching process. See Git Version control section for how you version control such changes better.

How to install each package with Meteor:

Patches to the Jadu software are applied through our Open Source Meteor tool. Further details on the various capabilities of this tool are covered in more detail at: <http://meteor.jadu.net/guides/patch-apply/>.

In Multi-server / load balanced environments, patches must be applied to all web nodes that part of that environments cluster. Meteor will only run database migrations on the first node and no database migrations are run on subsequent nodes during the patching process.

You will need to repeat this process for each patch package listed previously and in the specified order.

1. Copy and unzip the package to the jadu root folder.
2. From the terminal, cd to the unzipped folder, run the following command and answer yes to run the migrations.

```
php meteor.phar patch:apply --path=<<JADU-HOME>>
```

Should you ever need to revert from the patch, from inside the patch directory run the following command and then clear the system cache:

```
php meteor.phar patch:rollback
```

Manually applying Widget code updates:

Firstly, standard widgets that are supported by Jadu will ordinarily be locked from being edited through the Widget manager provided within the Jadu Control Centre. This is controlled via a flag within the respective database table. You will therefore need to log into your chosen DBMS and run the equivalent of the below SQL to unlock them for editing:

```
UPDATE JaduHomepageWidgets SET standard=0 WHERE id=31
```

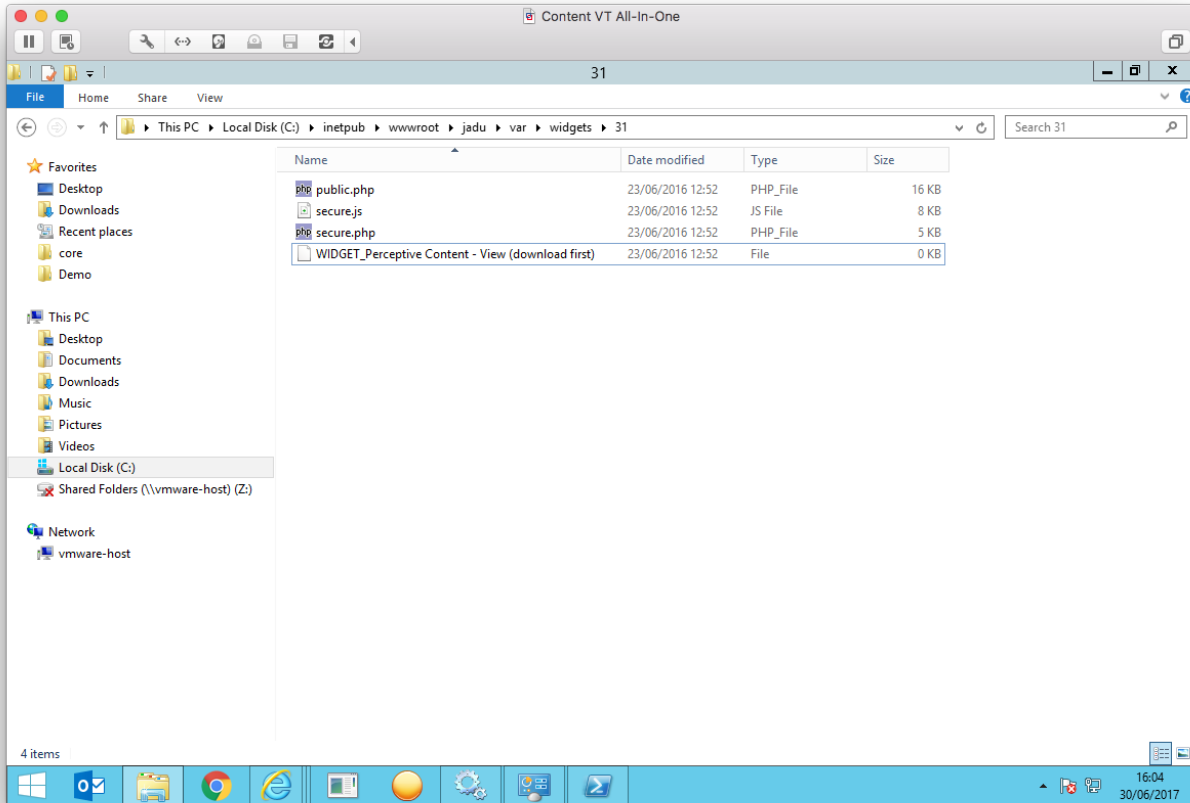
Please repeat the above for each of the widget id's indicated below and then follow the steps to clear the JaduCache around the areas of Homepage Widgets. Following the above changes we then need to replace the Widget code via the Control Centre using the Widget Manager interface.

The following widgets should be reviewed as a minimum:

- Widget ID 31 = "Perceptive Content - View"

- Widget ID 32 = "Perceptive Content - Search"
- Widget ID 38 = "Perceptive Content - Worklist View"

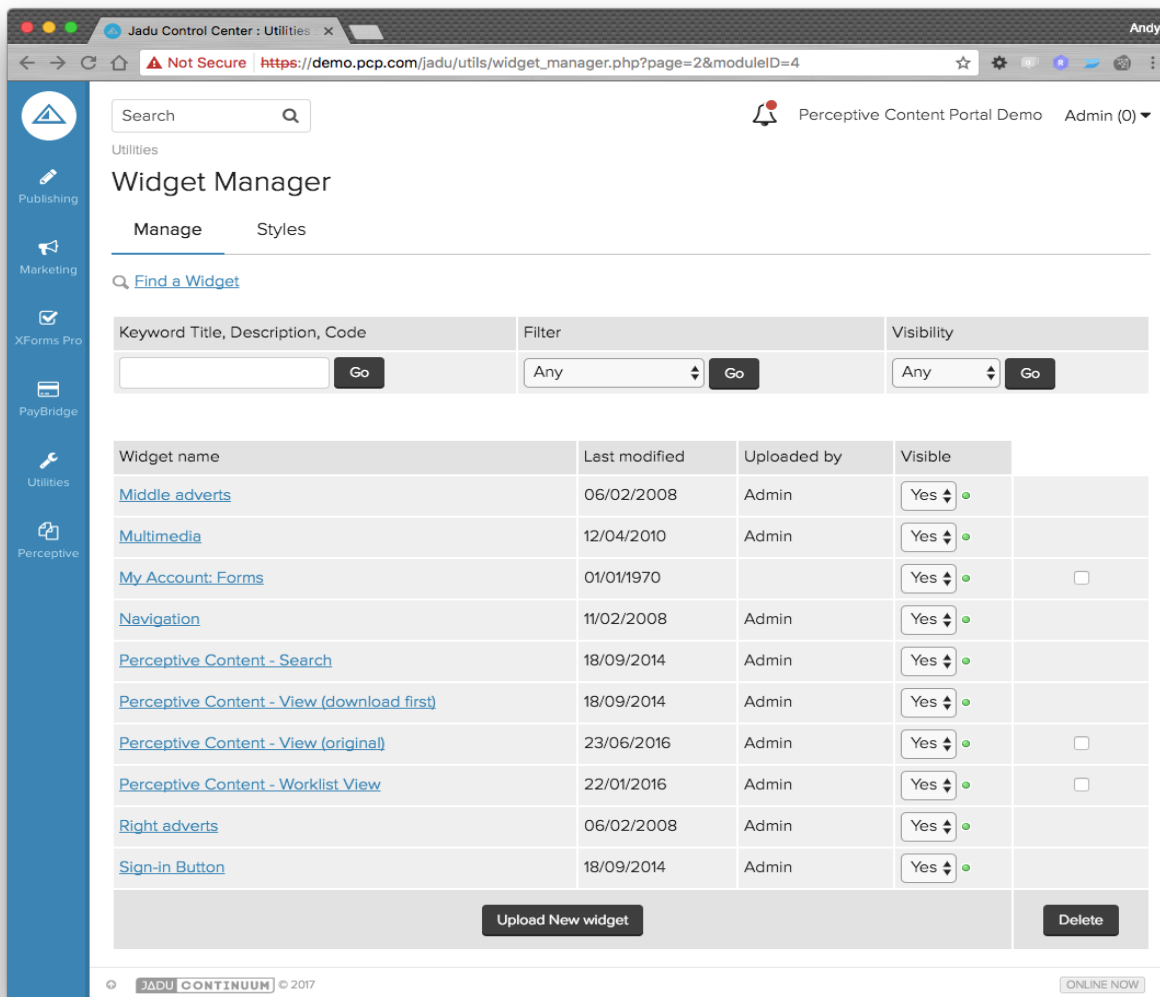
Within each of the widget identifier folders listed as requiring patching, look at the contents of the folder for the “WIDGET_” file name e.g. in the below example this would be “Perceptive Content - View (download first)”. The below screenshot would be applicable for a Windows system.



Similarly for a CentOS system, the files would look like this.

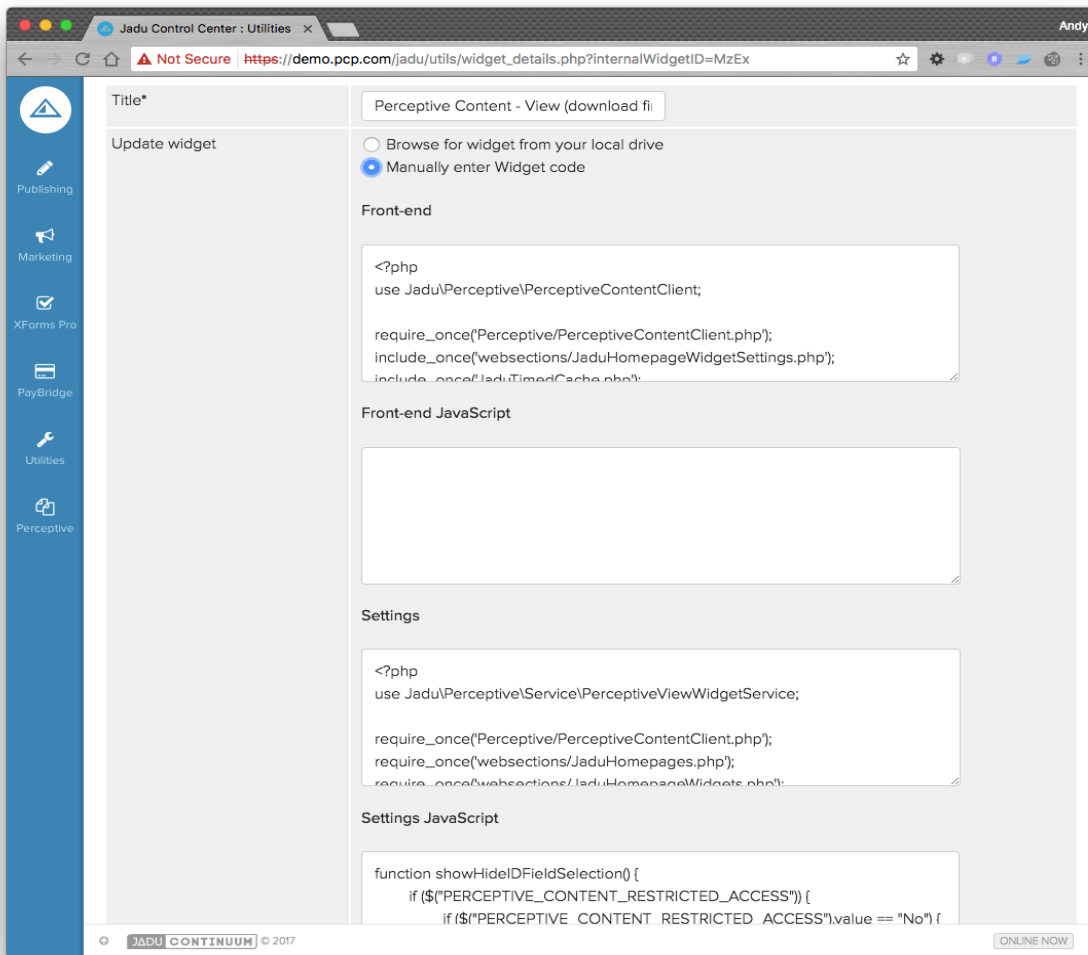
```
[[root@localhost ~]# ls -al /var/www/jadu/var/widgets/31
total 36
drwxrwx---. 2 jadu jadu-www 4096 Sep 19 15:44 .
drwxrwx---. 30 jadu jadu-www 4096 Sep 19 15:44 ..
-rw-rwx---. 1 jadu jadu-www    1 Sep 19 15:44 public.js
-rw-rwx---. 1 jadu jadu-www 7029 Sep 19 15:44 public.php
-rw-rwx---. 1 jadu jadu-www 7758 Sep 19 15:44 secure.js
-rw-rwx---. 1 jadu jadu-www 4173 Sep 19 15:44 secure.php
-rw-rwx---. 1 jadu jadu-www    0 Sep 19 15:44 WIDGET_Perceptive Content - View
-rw-rwx---. 1 jadu jadu-www    0 Jul 25 15:39 WIDGET_Website statistics
```

Log into your Jadu Control Centre and navigate to the Utilities > Widget Manager area. Select the widget of the same name from the Widget list presented.



Once navigated into the correct Widget of the same name, select the “Manually enter Widget code” option. This will now display 4 areas within which to update widget code using the public.php, secure.php, secure.js, public.js files provided. These files should have their contents pasted into the following input fields:

- Front-end = public.php
- Front-end Javascript = public.js
- Settings = secure.php
- Settings Javascript = secure.js



How to manually add the Jadu Rescheduler (one time only):

On ONE of your web nodes (ONLY) use the Windows Task Scheduler to add a daily task for a quiet local time in the day (e.g. 04:00am), to run the following command (where "F:\inetpub\wwwroot\jadu" is your root Jadu installation directory):

F:\inetpub\wwwroot\jadu\var\scheduled_tasks\run_rescheduler.bat

Note: Please check that the path to the PHP executable is correct within the above .bat file when setting up this process.

How to clear cache:

CentOS System:

1. Clear the Jadu Cache via the /jadu/maintenance/cacheBash.php page in the Jadu Control Centre.
2. In a terminal running as an administrator user on a web node, run the following to warm the cache again:


```
php -d memory_limit=-1 /var/www/jadu/bin/warm-cache cc  
php -d memory_limit=-1 /var/www/jadu/bin/warm-cache frontend
```

3. Then run the command to restart httpd

```
service httpd restart
```

Windows System:

1. Clear the Jadu Cache via the /jadu/maintenance/cacheBash.php page in the Jadu Control Centre
2. In a terminal running as an administrator user on the database node, run the following (you may need to specify the full path to redis-cli.exe):

```
redis-cli.exe flushall
```

3. In a terminal running as an administrator user on a web node, run the following to warm the cache again:

```
php -d memory_limit=-1 F:\inetpub\wwwroot\bin\warm-cache cc  
php -d memory_limit=-1 F:\inetpub\wwwroot\bin\warm-cache frontend
```

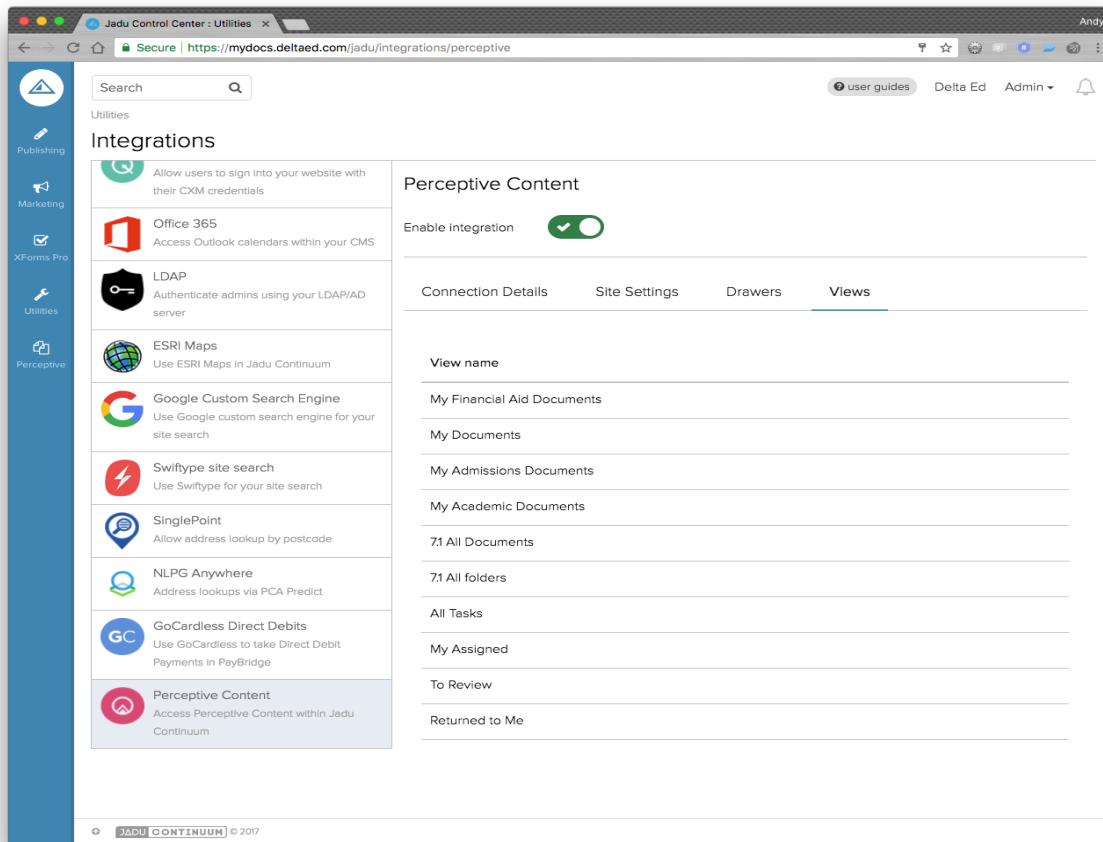
4. In a terminal running on each web node, run the following to restart IIS:

```
iisreset
```

How to verify the upgrade:

Where Perceptive Content / ImageNow integration has been in use prior to patch application, it would be best to check that connectivity has not been impacted by this upgrade.

This can be done by logging into the Jadu Control Centre, going to the Utilities > Integrations page and selecting “Perceptive Content” from the list of systems on the left. If all configuration is still in place, then you will be able to click on the “Drawers” or “Views” tabs in order to see a list of these resources displayed (permissions permitting to the nominated system user account). This will show that connectivity between the systems is still active.



Content Portal V4.x & Doctrine ORM:

Content Portal V4.x uses Doctrine ORM for some database interactions in XFP. The configuration of Doctrine ORM in the products is not currently extensible, and therefore we strongly advise against using this when building any of your own customisations until further notice.

Patch Migrations & Troubleshooting:

If there are existing forms in the system with identical question names when applying a patch to an existing environment, then the XFP migrations may report an issue. This requires resolving in the database before then resuming the patch. Contact us if you hit this particular issue when trying to apply this patch and we'll try to assist you in how to resolve this.

JADU

EVERYTHING / POSSIBLE