

Perceptive Experience Content Apps

Installation and Setup Guide

Version: 2.4.x

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Date: Wednesday, August 8, 2018



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About Perceptive Experience

Perceptive Experience allows you to view and manage your structured and unstructured content with the use of Apps on any device.

With the flexibility of Perceptive Experience you can take content residing in Perceptive Content and further manage or view it from a desktop browser or mobile device.

Prepare to install Perceptive Experience

These instructions assume that you are installing Perceptive Experience for the first time or that you have no earlier versions of Perceptive Experience running on your computer.

The following steps outline the high-level procedures that you need to perform to install and configure Perceptive Experience, and the information you need to verify before installation.

Installation overview

During the installation of Perceptive Experience, you perform the following procedures.

1. Install prerequisite applications. To work with Perceptive Content related Apps you must have Integration Server and Apache Tomcat installed.
2. Download and copy files to the web server directory.
3. Enable SSL.
4. Disable HTTP pipelining
5. Configure SSO
6. Enable `Expires` header in the web application server.

Download and place files

To download and place files in the web application server directory, complete the following steps.

Prerequisite Stop the web application server service.

1. Go to the **Customer Portal**.
2. Click **Downloads**, and search for all downloadable items for this product.
3. Download the application *ZIP* file to a temporary directory on your computer.
4. Create a subdirectory in the *webapps* directory of the web application server. You may name the subdirectory with any name.

Note: The default location for the *webapps* directory is *[drive:]\Program Files\Apache Software Foundation\Tomcat Installation\webapps*

5. Extract the files to the subdirectory you created in the previous steps.

Next Restart the web application server service.

Set up SSL

You must configure use of SSL when using Perceptive Experience with Perceptive Integration Server version 7.1.5 or higher. To configure use of SSL you must do so on your web application server.

SSL configuration cannot be completed within Perceptive Experience. For more information refer to your specific web server help documentation.

Disable HTTP pipelining

You should disable HTTP pipelining for the Apache Tomcat web server used to access Perceptive Experience Apps. If pipelining is used by a browser accessing the Experience environment, users may encounter errors when loading packages in your environment. To disable HTTP pipelining, complete the following steps.

1. Navigate to the Tomcat *server.xml* file.
The default location for the system configuration file is *[drive:]\Program Files\Apache Software Foundation\[Tomcat Installation]\conf*
2. Add either the `maxKeepAliveRequests` or `restrictedUserAgents` attributes within the `Connector` section of the Tomcat *server.xml* file

Attribute	Valid value
<code>maxKeepAliveRequests</code>	1
<code>restrictedUserAgents</code>	A comma separated list of regular expressions identifying HTTP clients that should not use HTTP/1.1 or HTTP/1.0 Keep Alive even if client support is specified.

Configure Perceptive Experience for single sign-on

Single sign-on (SSO) allows users to access the system by authenticating with an external identity provider. Currently Perceptive Experience is the only Perceptive product that supports Integration Server's SSO configuration. To enable single sign-on for Perceptive Experience, complete the following steps.

Prerequisite You must configure the Integration Server for single sign-on. For Integration Server configuration instructions see the *Perceptive Integration Server Installation and Setup Guide*.

1. Stop the web application server.
2. Navigate to the root folder on the installation directory for **Perceptive Experience**.
3. Protect the *sso* folder found at *rootpath/packages/framework-core/sso*.
4. Open the *config.json* file in a text editor.

The default location for the Perceptive Experience configuration file is *[drive:]\Program Files\Apache Software Foundation\[Tomcat Installation]\webapps\<subdirectory>*.

5. Add the `clientSession` parameter to specify the server connection. The valid entry for sso is `framework-core:SsoClientSession`.

Example

```
"framework-core": {
    "clientSession": "framework-core:SsoClientSession",
    "loggingMethod": "Console"
},
```

Note: When adding parameters to the config.json file, add a comma between each parameter.

6. Restart the application server.

X.509 SSO Certificate Support

Perceptive Experience Apps utilizing Perceptive Integration Server support LDAP authentication with X.509 client certificates.

Using Perceptive Experience Apps in a browser supports the use of multiple client certificates. Perceptive Experience for Windows Desktop supports the import of a single X.509 client certificate.

About using cache headers with Perceptive Experience

To ensure that the web application displayed in a web browser is current, configure the web application server to send an `Expires` header.

Web browsers cache data fetched from the web application server on the initial web page load. On subsequent page loads, the server determines if the browser has the most current content saved in the cache. If the content is current, the server returns a 304 response, and the browser continues to use the cached content. If data on the server has changed since the last request, the content in the browser's cache is considered stale. The server then returns new content and the browser updates the cache with the new content.

Some browsers do not make a call to the server to check for new data unless the cached version is considered expired. These browsers only consider data expired if there is an indicator in the web server response, such as an `Expires` header.

To avoid displaying old content when a new version of an application is deployed, the web server should send an `Expires` header in the response. Browsers that rely on an `Expires` header make a call to the server after the specified expiration time and retrieve any updates to an application file.

Enable Expires header

You must use an `Expires` header to ensure the application runs correctly and invalid content is not displayed to users. To configure Apache Tomcat to use an `Expires` header, complete the following steps.

1. Navigate to the Apache Tomcat `conf` directory. The default location is `[drive:]\Program Files\Apache Software Foundation\[Tomcat Installation]\conf`
2. Open the `web.xml` file with a text editor and add the following code to the file.

```
<filter>
```

```

<filter-name>ExpiresFilter</filter-name>

<filter-class>org.apache.catalina.filters.ExpiresFilter</filter-
class>

<init-param>
    <param-name>ExpiresDefault</param-name>

    <param-value>now plus 0 minutes</param-value>

</init-param>
</filter>

<filter-mapping>
    <filter-name>ExpiresFilter</filter-name>

    <url-pattern>/*</url-pattern>

    <dispatcher>REQUEST</dispatcher>
</filter-mapping>

...

```

Result In the example above, content expires immediately, so all browsers will always ask if the cached copies of files need updating. You can modify the `param-value` content to suppress the check for a set amount of time after the web browser saves the data, but the browser will not display updates to the application until the amount of time defined by `param-value` has passed. During the time that the check for new content is suppressed, it is possible that an application will stop functioning properly.

Start Perceptive Experience

To start Perceptive Experience complete the following steps.

Prerequisite Ensure that you have the latest Internet browser installed.

1. Open your browser and enter the **Perceptive Experience** URL. The URL format is `http://<server name>:<port number>/<subdirectory>`, where `<server name>` and `<port number>` are placeholders for the name of the computer and the port number where you installed **Perceptive Experience**. The subdirectory is the location within the web application server where you installed **Perceptive Experience**.

Note: The default port number for the Apache Tomcat web application server is 8080.

2. Enter your `user name` and `password`.
3. Select **Connect**.

View package version information

To view the packages and dependencies installed, complete the following steps.

1. Select **Profile** .

2. Select **Settings** .

3. Select **About**.

Under **Packages and Dependencies**, the name and version number of packages and dependencies are listed.

Choose a logging level

To set the logging level for the current user, complete the following steps.

1. Select **Profile** .

2. Select **Settings** .

3. Under **Global** select one of the following logging levels.

- To set the maximum logging level, select **All Messages**.
- To set the default logging level, select **Warnings and Errors**.
- To set the minimum logging level, select **Errors Only**.

About using Apache Tomcat compression settings

You can implement Apache Tomcat web server compression options to save bandwidth as files are delivered to the browser. Saving bandwidth during file transmission can decrease the initial load time of the framework and packages.

There are several settings you can modify within the Tomcat *server.xml* file to implement file compression. The default location for the *server.xml* file is *[drive:]\Program Files\Apache Software Foundation\[Tomcat Installation]\conf*.

For more information, refer to the Tomcat help documentation on the Apache website.

config.json properties

The following list provides information about the properties defined in the *config.json* file. The *config.json* file contains runtime parameters that can be defined by an administrator.

The default location for the system configuration file is *[drive:]\Program Files\Apache Software Foundation\[Tomcat Installation]\webapps\<subdirectory>*.

The properties listed are in the order they appear within the *config.json* file.

helpUrl

Specifies the URL for online help. Valid values include any URL.

helpPage

Specifies the help landing page for the active module. This page information is appended to the *helpUrl* to form a complete context sensitive URL address.

framework-brand

productName

Specifies the abbreviated name of the product.

productFullName

Specifies the full name of the product.

loginLogo

Specifies the path to the logo that is displayed when logging into the desktop client.

loginLogoMobile

Specifies the path to the logo that is displayed when logging into the mobile client.

headerLogo

Specifies the path to the logo that is displayed in the application header.

headerBackgroundColor

Specifies the hexadecimal color for the application header background.

headerForegroundColor

Specifies the hexadecimal color for the application header foreground.

headerTitleColor

Specifies the hexadecimal color for the application header title.

For example:

```
"framework-brand": {  
  "en": {  
    "productName": "perceptive",  
    "productFullName": "Perceptive Experience Content Apps 2.4.0",  
    "loginLogo": "./resources/images/perceptive_login_258.png",  
    "loginLogoMobile": "./resources/images/perceptive_login_258.png",  
    "headerLogo": "./resources/images/perceptive_header_96.png",  
    "headerBackgroundColor": "#ffffff",  
    "headerForegroundColor": "#000000",  
    "headerTitleColor": "#118dcd"  
  }  
}
```

framework-runtime**preloadModules**

These entries are required system settings. Do not modify entries in the `preloadModules` section of the *config.json* file.

modules

Specifies the modules currently loaded into the application that users can access from the launcher.

inactiveModules

Specifies any Apps that should not be available to users from the Experience Home page. If you do not want the icon for an App that is provided by default at installation to appear on the Home page, move the full name of the desired package from the `modules` section to this section.

lesrdl-content-integrationserver**serverUrl**

Specifies the URL to Integration Server, which should be a relative path.

heartbeatIntervalInSeconds

Specifies how often, in seconds, the application verifies its connection to ImageNow Server.

lesrdl-content-search-controls

vsl-extended-operators-enabled

Specifies whether Perceptive Content adds the “contains” and “ends with” operators in the quick search options.

The default value is `false`.

Note: When set to true, Perceptive Content includes the additional search operators.

framework-core

clientSession

By default, this property is not defined. Specifies the current server connection that the application is using.

Valid values for `clientSession` include `framework-core:SsoClientSession`, `lesrdl-content-integrationserver:ClientSession`.

sessionTimeoutInSeconds

Specifies the duration of time, in seconds, that a session can remain inactive before the system logs the current user out of the application.

Valid values are any integer. If set to 0 or -1, the system disables automatic logout.

loggingMethod

Specifies the way users can review log contents.

Valid entries include the following values.

- `externalwindow` - Use this property for web-based applications to display the log in a new browser tab or window.
- `console` - Use this property for web-based applications to display the log in the browser console.

loggingLevel

Specifies the messages that displays to the user in the application log.

Valid entries include the following values.

- VERBOSE
- INFO
- WARNING
- ERROR
- CRITICAL

logoutRedirect

Specifies the URL the system redirects to upon log out for systems utilizing single sign on. The URL can be a relative or absolute path.

framework-shell

defaultHomeRoute

Specifies the default home route for URL navigation. If unset, the value is `home`.

disableSslWarning

By default, this property is not defined. Add this property and populate it with a `true` value to disable the warning that displays when the application uses a non-secure connection. Setting this property to `true` transmits unencrypted user names and passwords.

routeTimeout

Specifies the time in milliseconds to wait before determining navigation has failed. If unset, the value is 5000.

lesrdl-content-properties

displaySettings:

These optional settings are divided into subsections that correspond to the App presenting the Properties pane such as Documents, Folders, Tasks or Workflow. Modify settings in the appropriate subsection.

This version of Perceptive Experience Content Apps implements the Properties pane display settings as defined in the `config.json` file regardless of the current user's privileges. User privileges are enforced when a document is saved.

Property values

Valid values for all properties include `enabled`, `disabled` and `hidden`.

- `enabled`- Input is visible on the user interface and can be modified by the user
- `disabled`- The input is visible on the user interface but cannot be modified by the user.
- `hidden` - The input is not visible on the user interface.

name

Specifies the display of the Name field in the Document Properties pane.

The default value is `disabled`.

location

Specifies the display of the Drawer or Path field in the Document Properties pane.

The default value is `disabled`.

keys

Specifies the display of the Field1 through Field5 fields in the Document Properties pane.

The default value is `disabled`.

type

Specifies the display of the Type field in the Document Properties pane.

The default value is `disabled`.

customProperties

Specifies the display of the Custom Properties pane in the user interface.

The default value is `disabled`.

notes

Specifies the display of the Notes pane in the user interface.

The default value is `disabled`.

pageProperties

Specifies display of the Page Properties pane in the user interface.

`pageProperties` is always disabled unless the value is set to `hidden`

contentCapture

The properties you can define in the `contentCapture` section of the `config.json` file are listed below.

postSaveScriptName

Specifies the post-save iScript file.

toolkitDownloadLocation

Specifies the URL of the Perceptive Web Scan installer.

sourceProfileToScannerPageSizeMapping

Specifies the Perceptive Content source profile page size available for mapping.

```
"contentCapture": { "sourceProfileToScannerPageSizeMapping": [
  "letter:/letter/i", "legal:/legal/i", "a4:/a4/i", "a5:/a5/i", "a6:/a6/i",
  "b5:/b5/i", "b6:/b6/i", "executive:/executive/i", "us check:/check/i",
  "custom:/custom/i", "business card:/card/i", "scanner maximum:/maximum/i"
] }
```

profileNameToSource

Specifies mapping between a capture profile name and capture source identifier.

les-rdk-fpa-indocumentviewer

The property you can define within les-rdk-fpa-indocumentviewer in the lesrdl-content-documents section of the *config.json* file is listed below.

buttons

Specifies if the buttons are disabled or hidden in the viewer. Buttons include ANNOTATION, SAVE, DELETE, ADDREPLACE, and EXIT. Valid values include `disabled` and `hidden`.

For example, "lesrdl-content-documents": { "les-rdk-fpa-indocumentviewer": { "buttons": { "ANNOTATION": "disabled", "DELETE": "hidden", "SAVE": "disabled", "ADDREPLACE": "hidden", "EXIT": "disabled", "TASK": "hidden" } } }

Note: Inclusion of this property is optional and is subject to the requirement of the consuming module.

lesrdl-content-forms

The property you can define in the psw-content-forms section of the *config.json* file is listed below.

loadByDefault

Specifies whether the first form in the list displays by default when viewing the Forms pane. The default setting is false.

les-rdk-fpa-inpageviewer

The properties you can define in the `les-rdk-fpa-inpageviewer` section of the `config.json` file are listed below. These properties are not defined by default but can be set when an App utilizes the `les-rdk-fpa-inpageviewer` package.

maxWidth

Specifies the width of the image rendition in pixels.

maxHeight

Specifies the height of the image in pixels.

Note: The values of `maxHeight` and/or `maxWidth` can only be positive integers.

noRenditionFileTypes

Helps bypass rendition calls for certain file types. You may not use rendition calls for some browser-supported file types as they can utilize the browser capabilities.

Note: Browsers such as Microsoft Internet Explorer, Microsoft Edge, and Safari natively support the rendering of TIFFs. Use the latest version of `file-image-service` when using the latest version of Perceptive Content.

In the example mentioned below, rendition call is bypassed for JPEG and JPG files.

```
"noRenditionFileTypes" : ["JPEG", "Jpg"]
```

Note: Values of this property are not case-sensitive.

pageCacheSize

Specifies the cache size that the viewer holds.

The default value of `pageCacheSize` is "50". If `pageCacheSize` is set lower than the default value, the viewer renders the specified value. For example, `"les-rdk-fpa-indocumentviewer" : {"pageCacheSize" : 25}`.

If `"pageCacheSize"` is set higher than the default value, the viewer overlooks the value and considers the default value of 50.

If `"pageCacheSize"` is set higher than the default value, the viewer overlooks the value and considers the default value of 50.

les-rdk-fpa-action-print-document

Property details

The properties you can define in the `les-rdk-fpa-action-print-document` section of the `config.json` file are listed below.

preferenceWindow

Specifies the printing preferences. Displays a window for taking print preferences from the user. The default value is `true`.

Note: Other print configuration options are overlooked if `preferenceWindow` value is `true`.

pdfConversion

Converts all the pages into a single PDF file and displays it in your web browser. The default value is `false`.

enableAnnotations

Specifies if the annotations are printed. Valid values include `true` or `false`.

hideAnnotationTypes

Hides the annotations where the user has “hide” privilege. Expected values are `all` or `false`. When `hideannotationtypes = all`, annotations where the user has “hide” privilege are hidden. Setting any other value defaults to `false` and displays all annotation types.

coverPage

Specifies if the cover page of a document is to be printed. The default value is `false`.

pageSize

Specifies the paper size printed. The default value is `letter`.

maxWidth

Specifies the maximum width in pixels of pages that are printed.

maxHeight

Specifies the maximum height in pixels of pages that are printed.

les-rdk-fpa-action-email-document

The properties you can define in the `les-rdk-fpa-action-email-document` section of the `config.json` file are listed below. This action allows the user to email a link to a Perceptive Content document.

to

Specifies the email address of the recipient.

cc

Specifies a carbon copy of an email when the user wants to include someone other than the direct recipient.

bcc

Specifies a blind carbon copy of an email when the user does not want the other recipients to see who else is included in the email.

subject

Specifies a subject of an email where the user can add a short description of the main content.

preBody

Specifies the section where the user can add any content before a workflow item link.

postBody

Specifies the section on complimentary closure, such as “Thanks & regards”.

les-rdk-fpa-action-email-workflow

The properties you can define in the les-rdk-fpa-action-email-workflow section of the config.json file are listed below. This action allows the user to email a link to a workflow item.

to

Specifies the email address of the recipient.

cc

Specifies a carbon copy of an email when the user wants to include someone other than the direct recipient.

bcc

Specifies a blind carbon copy of an email when the user does not want the other recipients to see who else is included in the email.

subject

Specifies a subject of an email where the user can add a short description of the main content.

preBody

Specifies the section where the user can add any content before a workflow item link.

postBody

Specifies the section on complimentary closure, such as “Thanks & regards”.