

# Progressive Web Application - PWA

- Introduction
- Installing an app
- Compatibility
- Send Notifications
- PWA Properties
  - Edit PWA Offline Settings
- Progressive Web App (PWA) Settings
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## Introduction

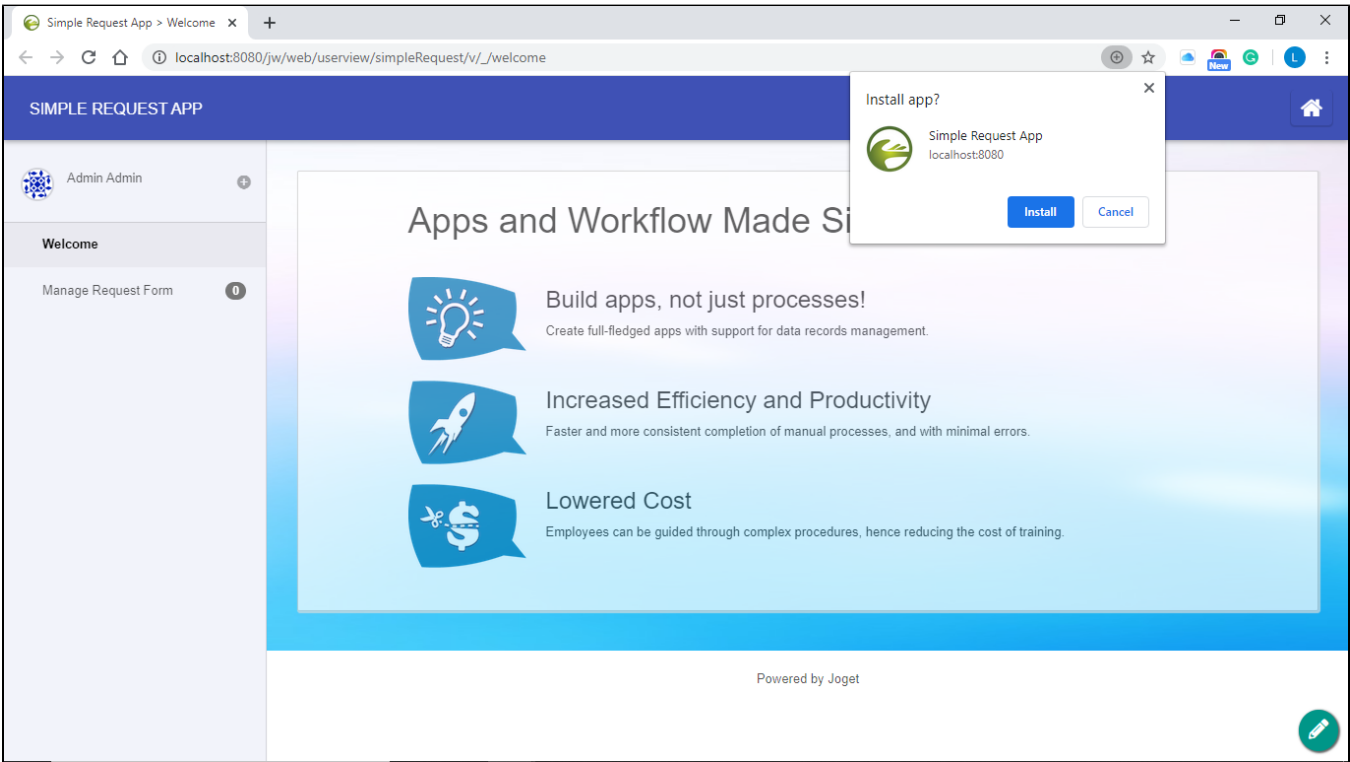
In layman's terms, **Progressive Web Application (PWA)** is a type of application software that is easily installable directly via the web browser, that offers a native-like app experience to end users regardless of device variants. PWA promises many key capabilities as compared to regular web applications, such as:

1. Works in any network conditions, including offline
2. Responsive web design
3. Compatible with any device and screen dimension
4. Background Sync
5. Smooth app interactions
6. Native-like app UI/UX
7. Web push notifications
8. and so much more...

Read here for full details about PWA and its benefits: <https://developers.google.com/web/updates/2015/12/getting-started-pwa>

As a brand new feature of **Joget DX**, Joget apps support PWA features by default.

## Installing an app



Joget allows users to easily install apps into mobile devices through compatible browsers.

## Compatibility

Feature / Device	Chrome Browser on Android	Chrome Browser on iOS	Safari Browser on iOS	Joget Mobile App on Android	Joget Mobile App on iOS
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<b>PWA Offline Storage and Sync</b>	Yes (15 May 2020, Android 9)	No (15 May 2020, iOS 13.1.2 iPhone X)	Yes (15 May 2020, iOS 13.1.2 iPhone X)	Yes	Not Supported
<b>PWA Push Notification</b>	Yes (15 May 2020, Android 9)	No (15 May 2020, iOS 13.1.2 iPhone X)	No (15 May 2020, iOS 13.1.2 iPhone X)	Not Applicable	Not Applicable
<b>Native App Push Notification</b>	Not Applicable	Not Applicable	Not Applicable	Yes	Yes

## Send Notifications

If you require sending notifications to Joget PWA users, you can use these plugins to do so:

- [Push Notification Tool Plugin](#) as a [Process Tool](#) in the Joget Marketplace.
- [User Notification Audit Trail Plugin](#) in [Plugin Default Properties](#) in app properties.
- [User Notification \(Customizable\) Audit Trail Plugin](#) as [Plugin Default Properties](#) in the Joget Marketplace. (This plugin allows per-activity customization)

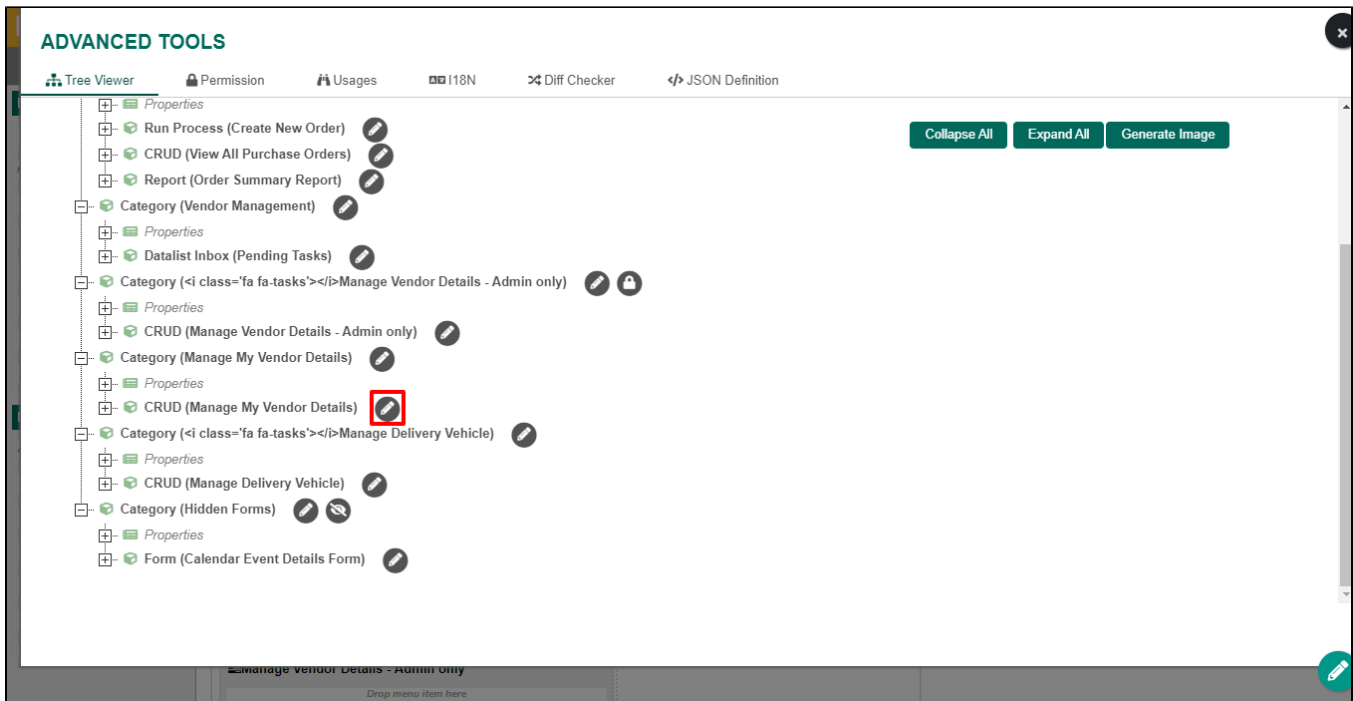
## PWA Properties

Most userview menus support offline caching.

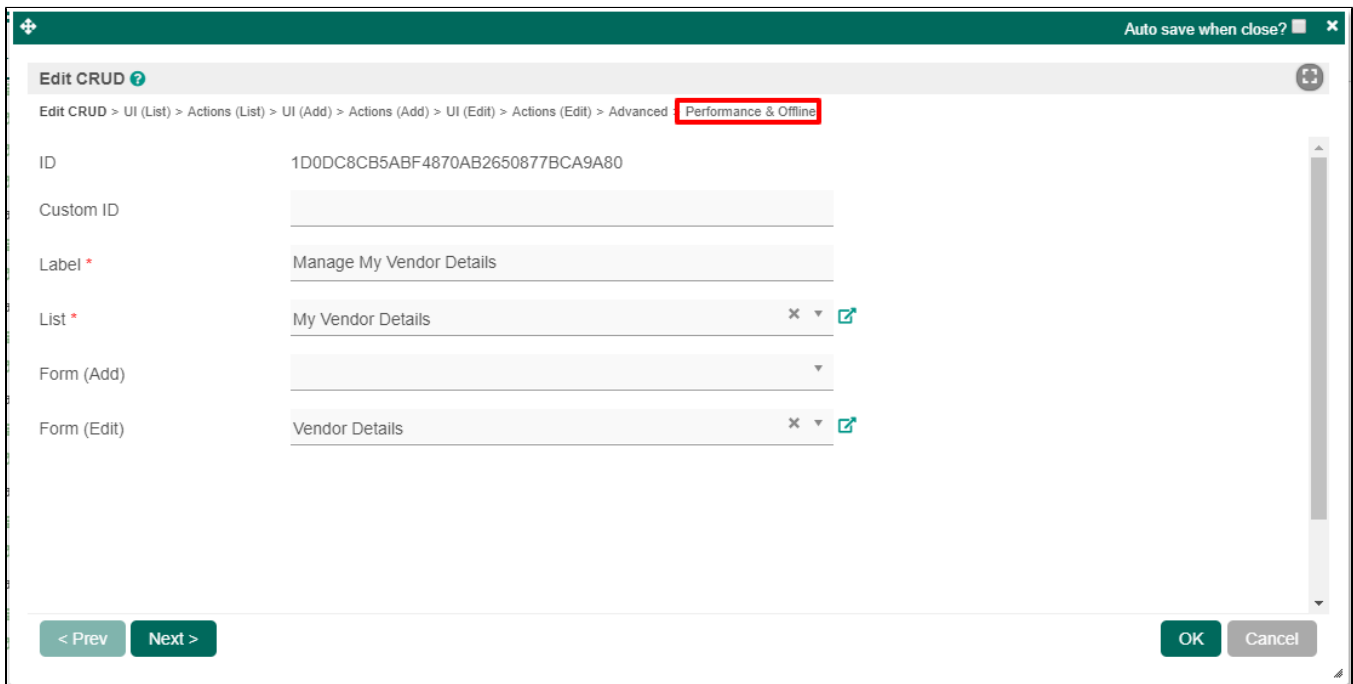
To configure them, you can directly edit the userview menu, or via the [Builder Advanced Tools](#) in the userview builder.

The screenshot displays the Joget Userview Builder interface for a 'Vendor Management v1: Vendor Management (Published)' application. The top navigation bar includes 'DESIGN USERVIEW', 'SETTINGS', 'PREVIEW', and 'SAVE' tabs, along with 'Undo', 'Redo', and a highlighted 'Advanced Tools' button. The left sidebar shows a menu structure with 'Basic' and 'Enterprise' categories. The main workspace shows a 'Vendor Management' menu with items like 'Home', 'Dashboard', 'Calendar for Purchase Orders', 'Procurement Management', 'Vendor Management', 'Pending Tasks', and 'Manage Vendor Details - Admin only'. A large '<Content>' watermark is visible in the center of the workspace.

1. Select **Advanced Tools** in the userview builder.



2. Edit the userview menu you wish to configure PWA settings for.



3. Select the "Performance & Offline" tab, and you can configure PWA offline settings here.

## Edit PWA Offline Settings

✕

Auto save when close?

✕

Edit CRUD > UI (List) > Actions (List) > UI (Add) > Actions (Add) > UI (Edit) > Actions (Edit) > Advanced > Performance & Offline

Cache Settings

Scope ?

None

Duration (s) ?

20

PWA Offline Settings

PWA Offline support is dependent on the theme used.

Enable cache for offline support

☒

Cache list actions (Non post action)

☒

Cache all datalist links in first page

☒

< Prev

Next >

OK

Cancel

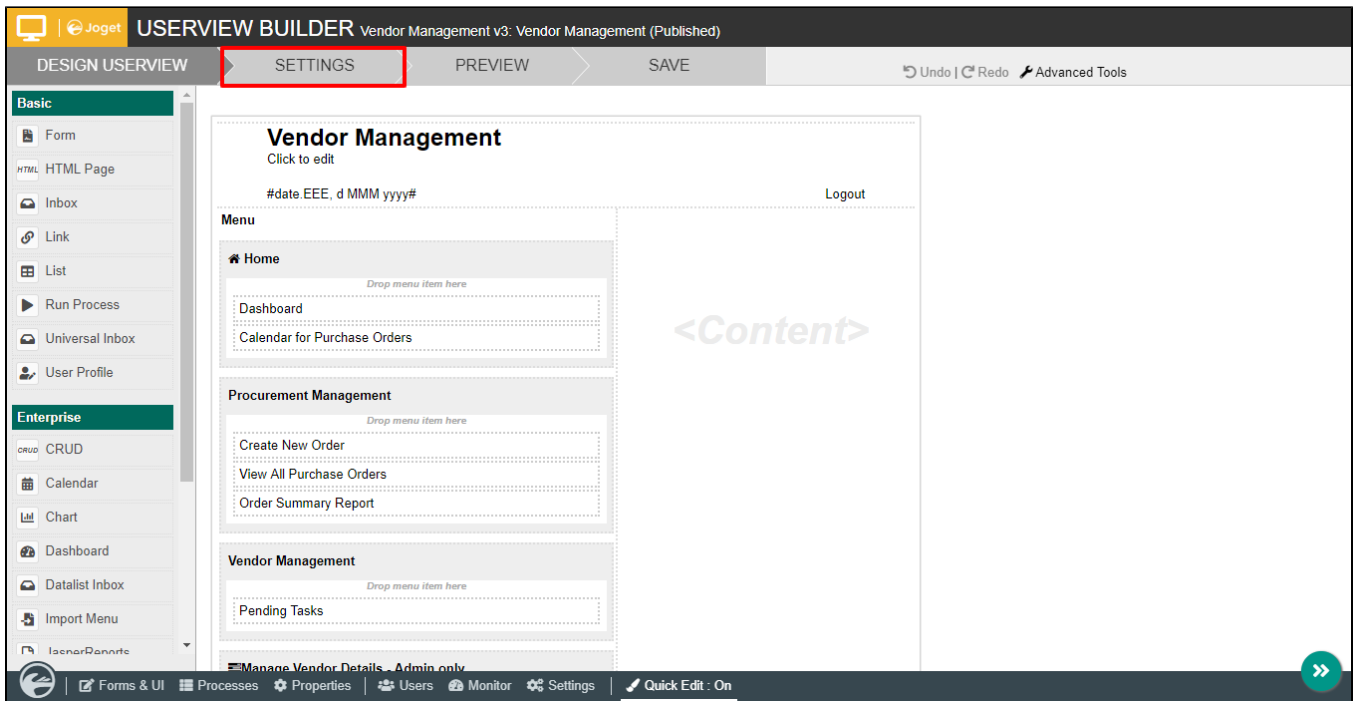
Name	Description
Enable cache for offline support	<p>This option allows users to cache for offline support for userview elements.</p> <p>Scope: Available in all Userview Menu</p>
Cache list actions (Non POST action)	<p>This option allows users to cache datalist actions but it does not include any POST actions.</p> <p>Scope: Only available in Userview Menu that makes use of Datalist such as CRUD, List, Datalist Inbox</p> <p>Example of what will be cached:</p> <ol style="list-style-type: none"> <li>1. New Button in CRUD</li> </ol> <p>Example of what will NOT be cached:</p> <ol style="list-style-type: none"> <li>1. Delete Button in CRUD</li> <li>2. JDBC Datalist Action in List / CRUD</li> </ol>
Cache all datalist links in first page	<p>This option allows users to cache all links found on the first page of the datalist links when they are offline. (i.e. Hyperlink Datalist Action)</p> <p>Scope: Only available in Userview Menu that makes use of Datalist such as CRUD, List, Datalist Inbox</p> <p>Example of what will be cached:</p> <ol style="list-style-type: none"> <li>1. Hyperlink Datalist Action in List / CRUD</li> </ol>

## How to Check What is Being Cached?

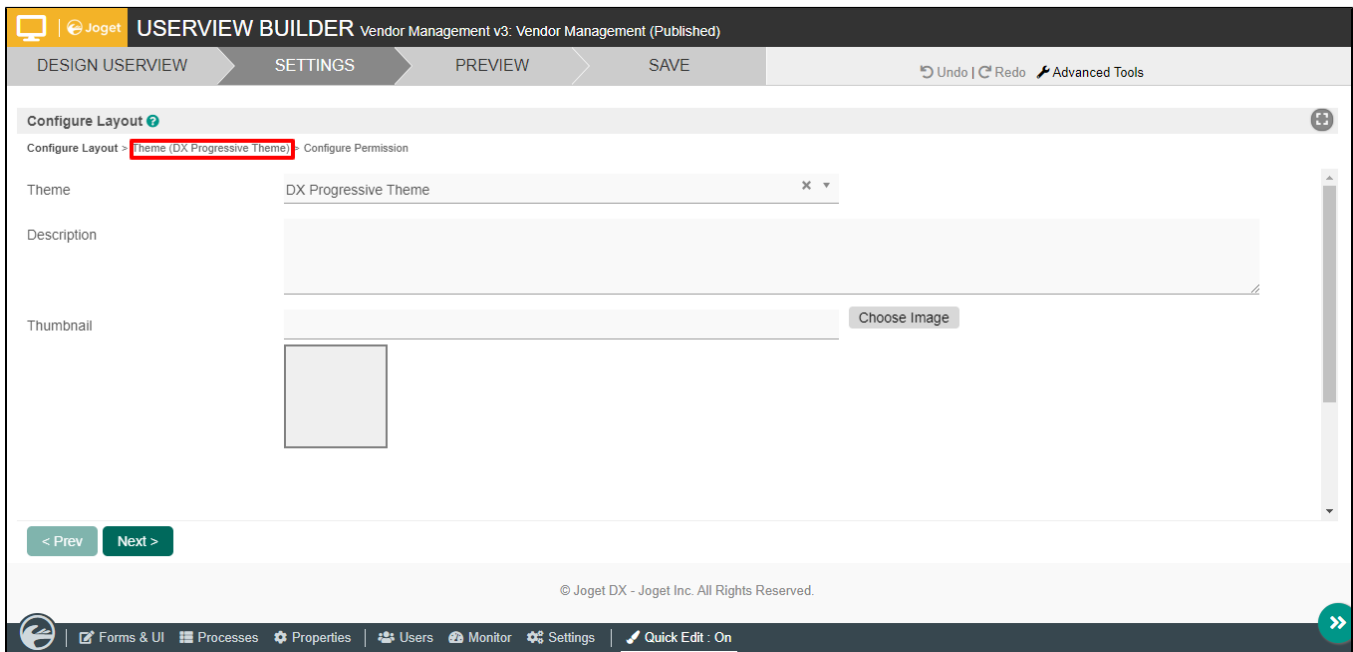
If your runtime URL is [http://localhost:8080/jw/web/userview/leaveApp/v/\\_/welcome](http://localhost:8080/jw/web/userview/leaveApp/v/_/welcome), you can change "welcome" to "cacheUrls" in order to see the list of URLs that will be cached.

## Progressive Web App (PWA) Settings

Users can access this setting by going through the "Settings" tab in the userview builder.



1. Click on **Settings**.



2. Click on **Theme** and then click on **Progressive Web app (PWA) Settings**.

Progressive Web App (PWA) Settings

Joget

USERVIEW BUILDER

Vendor Management v3: Vendor Management (Published)

DESIGN USERVIEW

SETTINGS

PREVIEW

SAVE

Undo | Redo | Advanced Tools

Configure Layout ?

Configure Layout > Theme (DX Progressive Theme) Configure Permission

Theme

DX Progressive Theme

Description

Thumbnail

Choose Image

< Prev

Next >

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Forms & UI

Processes

Properties

Users

Monitor

Settings

Quick Edit : On

Name	Description
Disable Progressive Web App (PWA) Support	If checked, this will disable PWA support for the current app.
Disable Web Push Notifications	If checked, this will disable Web Push Notifications.
Additional URLs to Cache	This option allows users to cache additional URL(s) that is relative to the Context Root.