



# Joget DX 8

# Permission Control

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# Prerequisites

- General understanding of all major Joget components (i.e. Process, Form, List and UI)

# Content

## 1. Application Permission Control



# Chapter 1

## Application

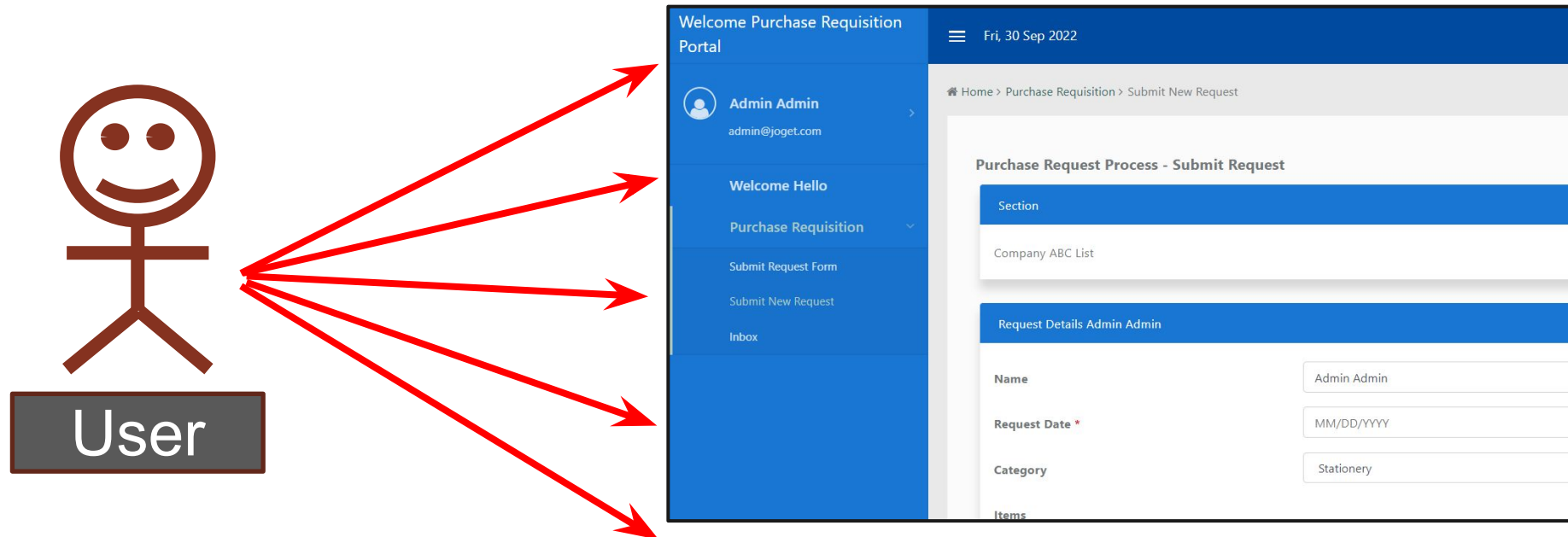
## Permission Control

# Introduction

- Permission Control is used to exert control and manage access to various components in a developed Joget App.

# Reviewing Various Components With Potential Access Control

- How would a user access the app?
- What can a user do after accessing the app?
- List down what the user can explicitly do within the app.



# 4 Categories

- Process
- Form
- UI
- List

# 8 Permission Layers

- Process
  - Process Start Whitelist
- Form
  - Form
  - Form Section
  - Form Element
- List
  - Action/Column/Filter Element
- UI
  - UI
  - UI Category
  - UI Menu



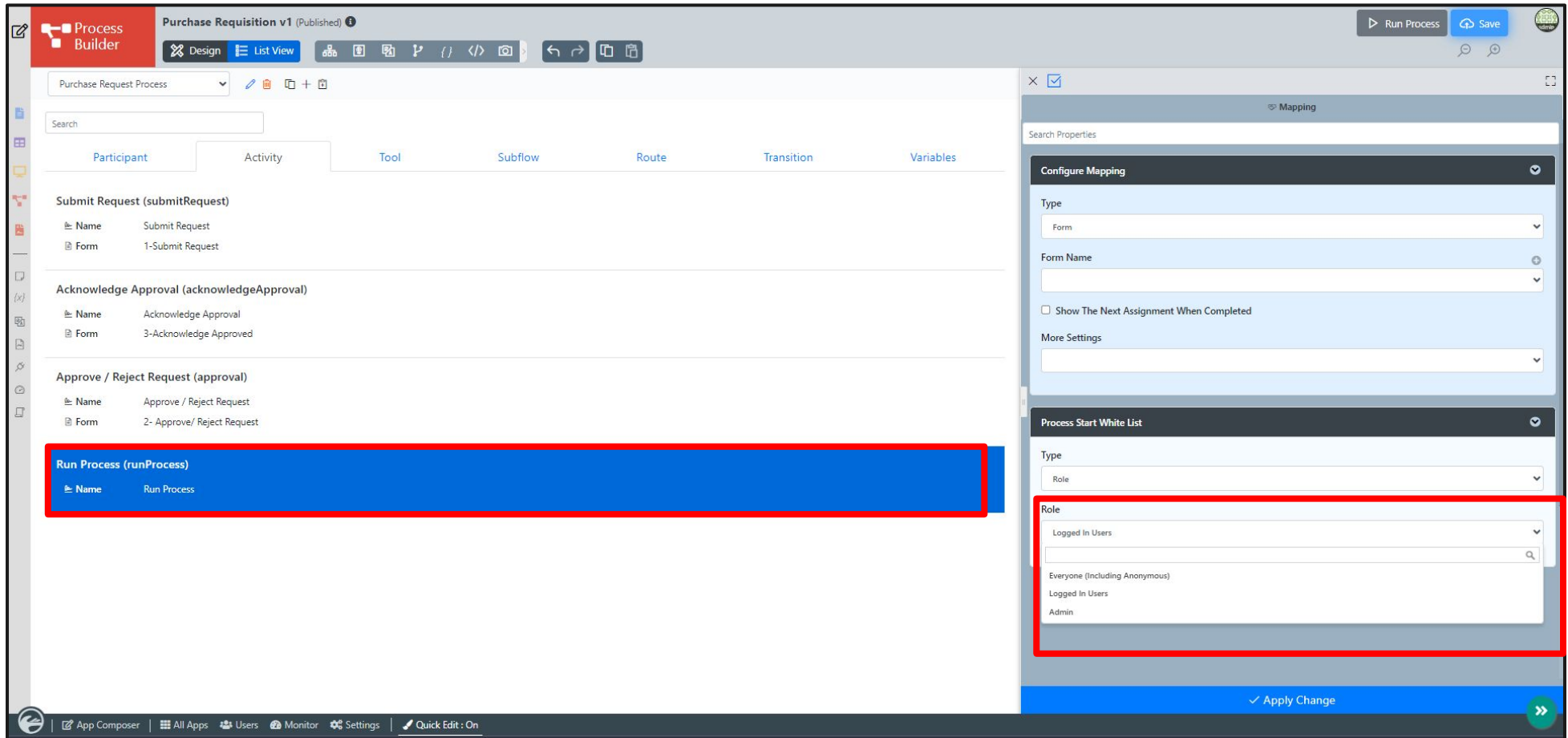
# Process Start Whitelist

- Controls on who can start/run the Process.
- Available in each Process as shown in slide 10

By default, this whitelist is set to admin role only, for safety purposes.

Remember to map a participant / role before publishing to production.

# Process Start Whitelist



The screenshot displays the Joget Process Builder interface for a process named "Purchase Requisition v1". The main workspace shows a list of activities, with the "Run Process (runProcess)" activity highlighted in blue and outlined in red. The right-hand panel is open to the "Mapping" section, specifically the "Process Start White List" configuration.

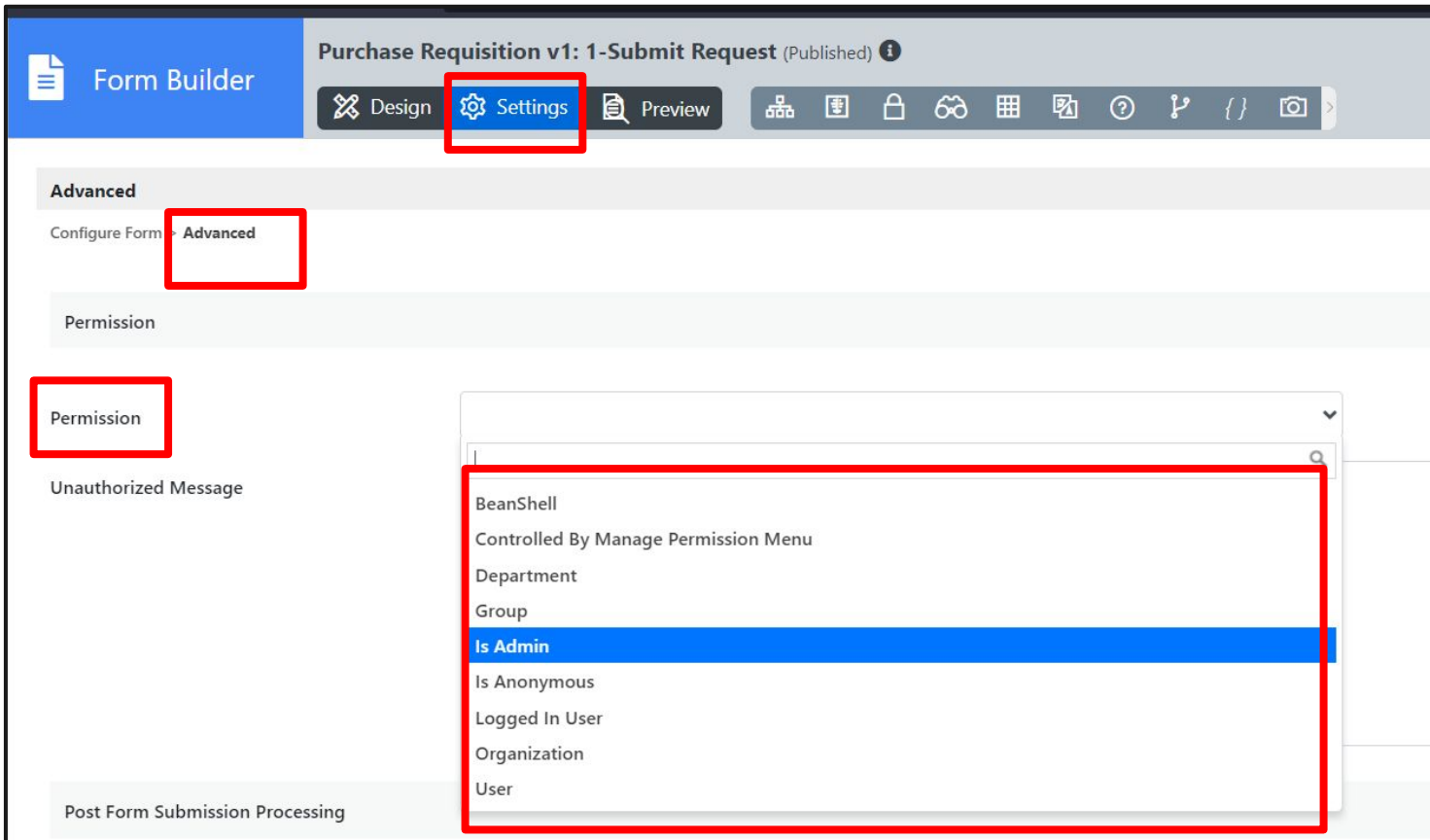
**Process Start White List Configuration:**

- Type:** Role
- Role:** Logged In Users (selected in the dropdown menu, which also shows "Everyone (Including Anonymous)", "Logged In Users", and "Admin")

At the bottom of the right panel, there is a blue button labeled "Apply Change".

# Form

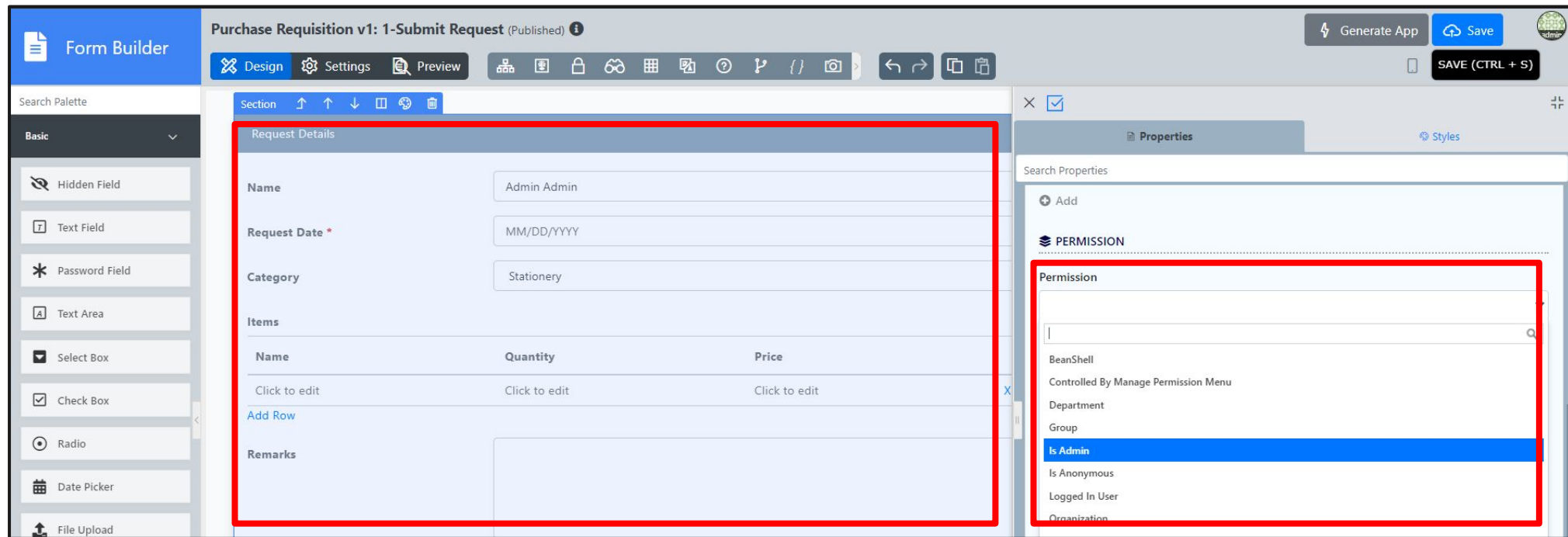
- Controls on who can see the **form**.



The screenshot displays the Joget Form Builder interface for a form titled "Purchase Requisition v1: 1-Submit Request (Published)". The interface includes a top navigation bar with tabs for "Design", "Settings", and "Preview". The "Settings" tab is selected and highlighted with a red box. Below the navigation bar, the "Advanced" section is visible, containing a "Configure Form" dropdown menu with "Advanced" selected, also highlighted with a red box. The "Permission" section is located below the "Advanced" section, with a "Permission" dropdown menu highlighted by a red box. The "Permission" dropdown menu is open, showing a list of permissions: "BeanShell", "Controlled By Manage Permission Menu", "Department", "Group", "Is Admin" (highlighted in blue), "Is Anonymous", "Logged In User", "Organization", and "User". The "Is Admin" option is the selected permission. The "Unauthorized Message" section is visible below the "Permission" section, and the "Post Form Submission Processing" section is at the bottom.

# Form Section

- Controls on who can see the **form section**.



The screenshot displays the Joget Form Builder interface for a form titled "Purchase Requisition v1: 1-Submit Request (Published)". The interface includes a "Form Builder" sidebar on the left with a "Search Palette" and a "Basic" category. The main workspace shows a "Request Details" form section, which is highlighted with a red border. This section contains fields for "Name" (Admin Admin), "Request Date" (MM/DD/YYYY), "Category" (Stationery), and a table for "Items" with columns "Name", "Quantity", and "Price". The "Items" table has a single row with "Click to edit" in each column. Below the table is a "Remarks" field. On the right, the "Properties" panel is open, showing a "Search Properties" field and a "PERMISSION" section. The "PERMISSION" section is highlighted with a red border and contains a list of permissions: "BeanShell", "Controlled By Manage Permission Menu", "Department", "Group", "Is Admin" (highlighted in blue), "Is Anonymous", "Logged In User", and "Organization".

**Form Section: Request Details**

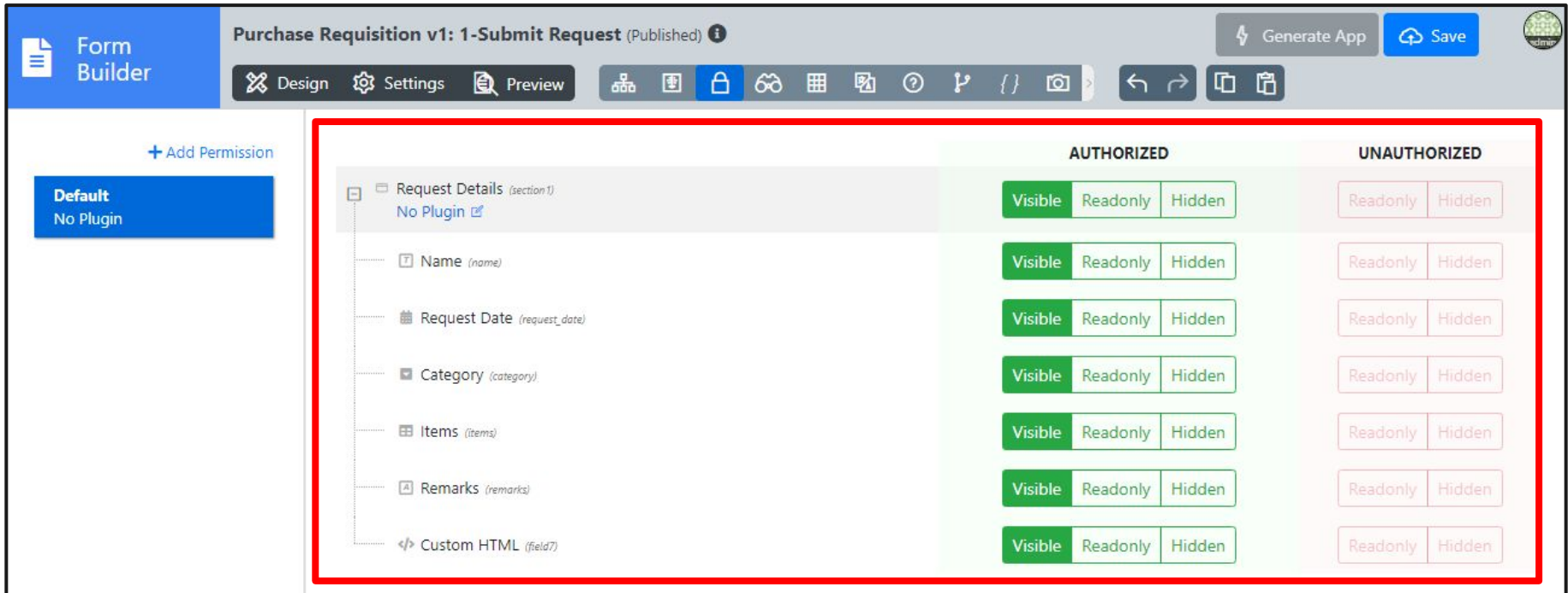
Name	Admin Admin	
Request Date *	MM/DD/YYYY	
Category	Stationery	
Items		
Name	Quantity	Price
Click to edit	Click to edit	Click to edit
<a href="#">Add Row</a>		
Remarks		

**Properties Panel: PERMISSION**

Permission
BeanShell
Controlled By Manage Permission Menu
Department
Group
<b>Is Admin</b>
Is Anonymous
Logged In User
Organization

# Form Advanced Tools Permission

- Fine grain control over each **form element**.



**Purchase Requisition v1: 1-Submit Request (Published)**

**Form Builder** | Design | Settings | Preview | Generate App | Save

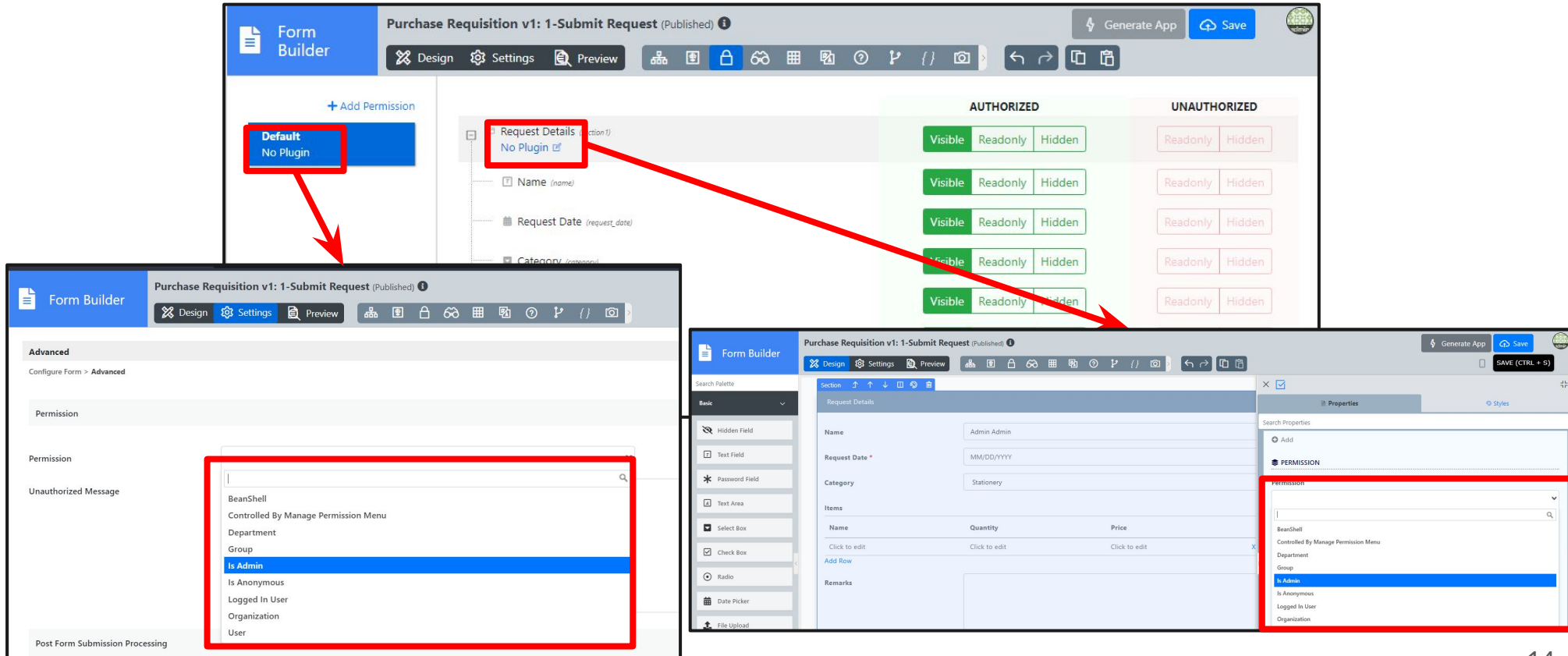
**+ Add Permission**

**Default**  
No Plugin

	AUTHORIZED			UNAUTHORIZED	
Request Details (section1) No Plugin	Visible	Readonly	Hidden	Readonly	Hidden
Name (name)	Visible	Readonly	Hidden	Readonly	Hidden
Request Date (request_date)	Visible	Readonly	Hidden	Readonly	Hidden
Category (category)	Visible	Readonly	Hidden	Readonly	Hidden
Items (items)	Visible	Readonly	Hidden	Readonly	Hidden
Remarks (remarks)	Visible	Readonly	Hidden	Readonly	Hidden
Custom HTML (field7)	Visible	Readonly	Hidden	Readonly	Hidden

# Form Advanced Tools Permission

- Manages **form** and **form section** permission on **Default** permission.



The screenshots illustrate the process of configuring permissions in the Joget Form Builder for a 'Purchase Requisition v1: 1-Submit Request' form.

**Screenshot 1 (Top):** Shows the 'Form Builder' interface with the 'Default' permission selected in the 'Add Permission' dropdown. A red box highlights 'Default No Plugin'. A red arrow points from this box to the 'Request Details' section in the form design view.

**Screenshot 2 (Bottom Left):** Shows the 'Advanced' settings for the 'Request Details' section. The 'Permission' dropdown is open, and 'Is Admin' is selected. A red box highlights the dropdown menu.

**Screenshot 3 (Bottom Right):** Shows the 'Properties' panel for the 'Request Details' section. The 'Permission' dropdown is open, and 'Is Admin' is selected. A red box highlights the dropdown menu.

**Table: AUTHORIZED PERMISSIONS**

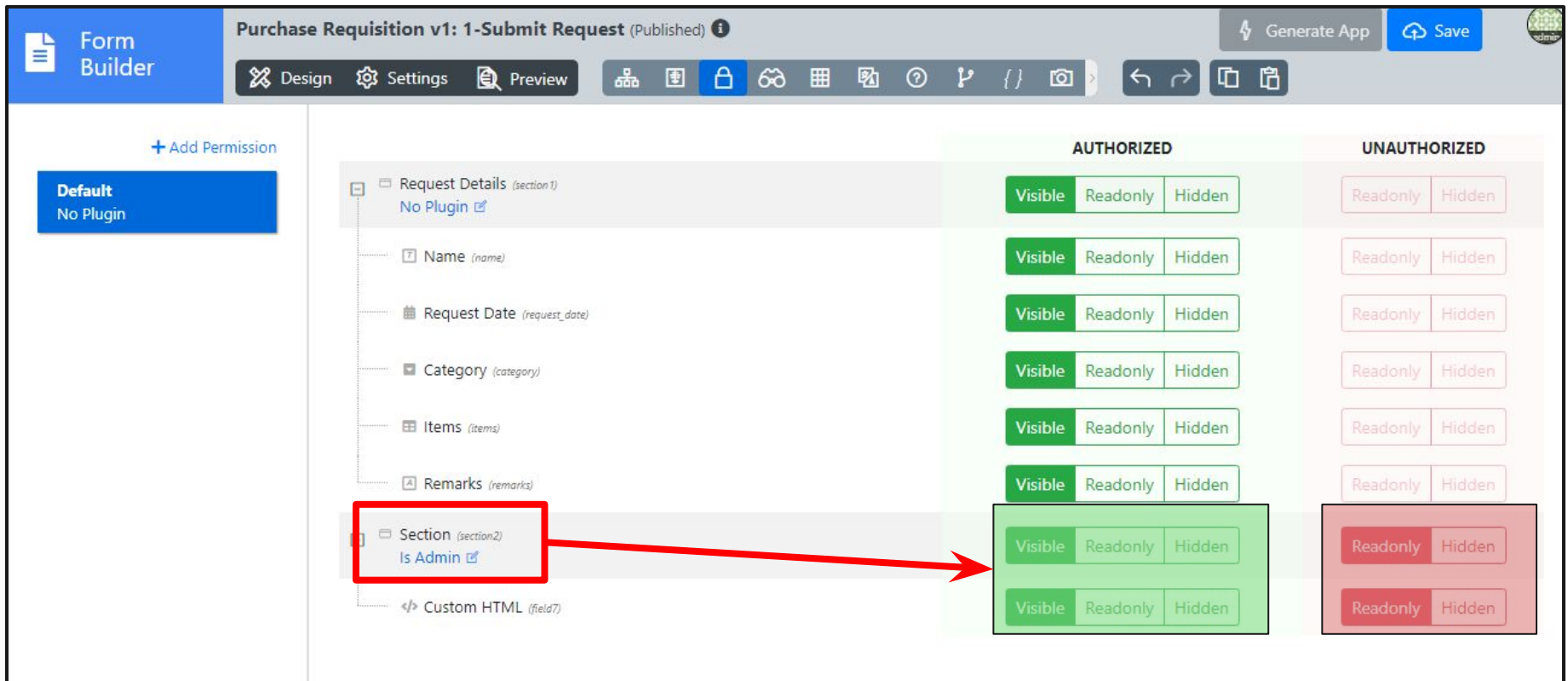
Section	Visible	Readonly	Hidden
Request Details	Visible	Readonly	Hidden
Name (name)	Visible	Readonly	Hidden
Request Date (request_date)	Visible	Readonly	Hidden
Category (category)	Visible	Readonly	Hidden
Items	Visible	Readonly	Hidden

**Table: UNAUTHORIZED PERMISSIONS**

Section	Readonly	Hidden
Request Details	Readonly	Hidden
Name (name)	Readonly	Hidden
Request Date (request_date)	Readonly	Hidden
Category (category)	Readonly	Hidden
Items	Readonly	Hidden

# Form Advanced Tools Permission

- When **form section** permission is set, **unauthorized** section will be enabled.



The screenshot shows the Joget Form Builder interface for a form titled "Purchase Requisition v1: 1-Submit Request (Published)". The interface includes a sidebar with "Form Builder" and "Default No Plugin" options, and a top navigation bar with "Design", "Settings", and "Preview" tabs. The main workspace displays the form structure, including sections and fields. A red box highlights the "Section (section2)" with the label "Is Admin", and a red arrow points from it to the permission tables.

	AUTHORIZED			UNAUTHORIZED	
Request Details (section1) No Plugin	Visible	Readonly	Hidden	Readonly	Hidden
Name (name)	Visible	Readonly	Hidden	Readonly	Hidden
Request Date (request_date)	Visible	Readonly	Hidden	Readonly	Hidden
Category (category)	Visible	Readonly	Hidden	Readonly	Hidden
Items (items)	Visible	Readonly	Hidden	Readonly	Hidden
Remarks (remarks)	Visible	Readonly	Hidden	Readonly	Hidden
Section (section2) Is Admin	Visible	Readonly	Hidden	Readonly	Hidden
Custom HTML (field7)	Visible	Readonly	Hidden	Readonly	Hidden

# Form Advanced Tools Permission

- This is same as **Form Section > Edit > Show as Readonly when No Permission?** but with granular field level control.

 PERMISSION

Permission

Is Admin

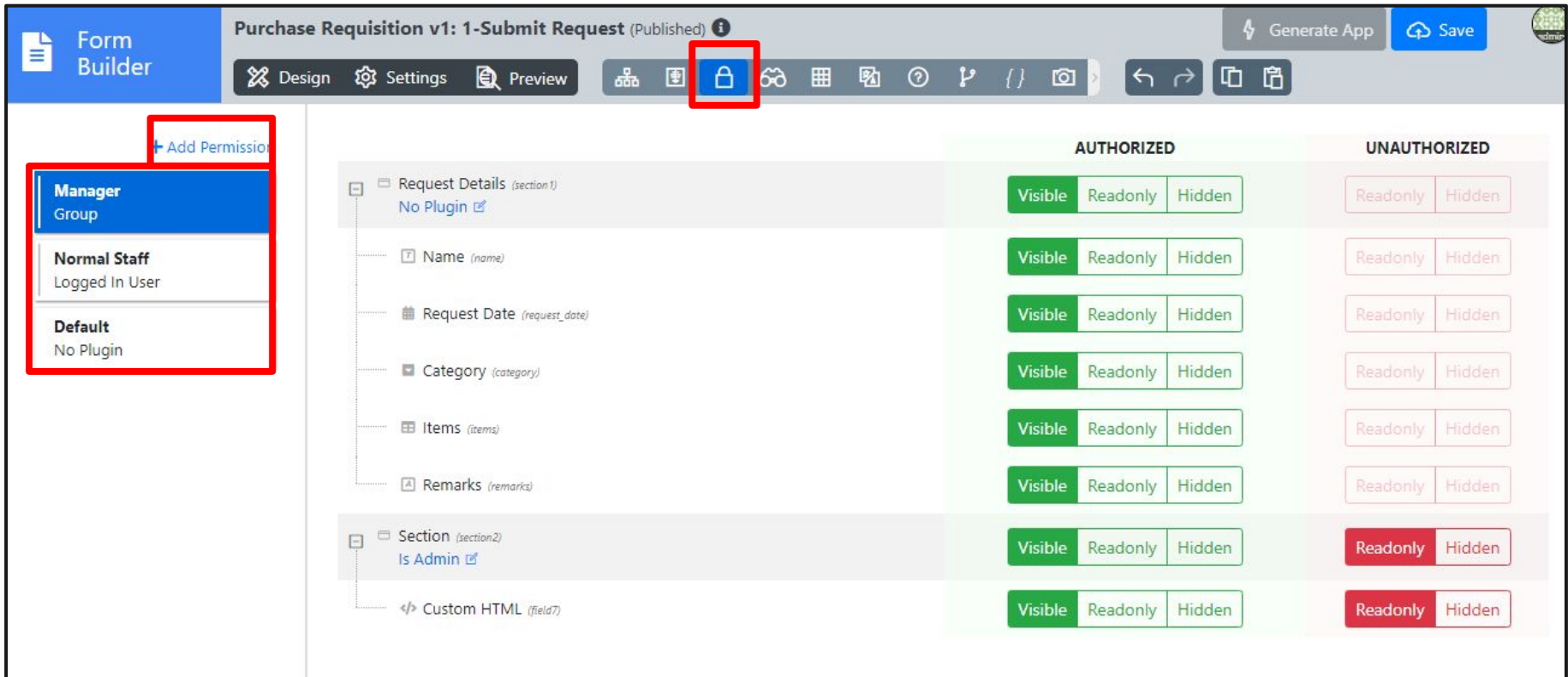
☒ Show as Readonly When No Permission?

Visible	Readonly	Hidden	Readonly	Hidden
Visible	Readonly	Hidden	Readonly	Hidden
Visible	Readonly	Hidden	Readonly	Hidden
Visible	Readonly	Hidden	Readonly	Hidden



# Form Advanced Tools Permission

- Additional **permissions** can be set too.



**Form Builder** | Purchase Requisition v1: 1-Submit Request (Published) | Generate App | Save

Design | Settings | Preview | **Permissions** | ...

**Permissions Panel:**

- Manager Group**
- Normal Staff**  
Logged In User
- Default**  
No Plugin

**Form Structure:**

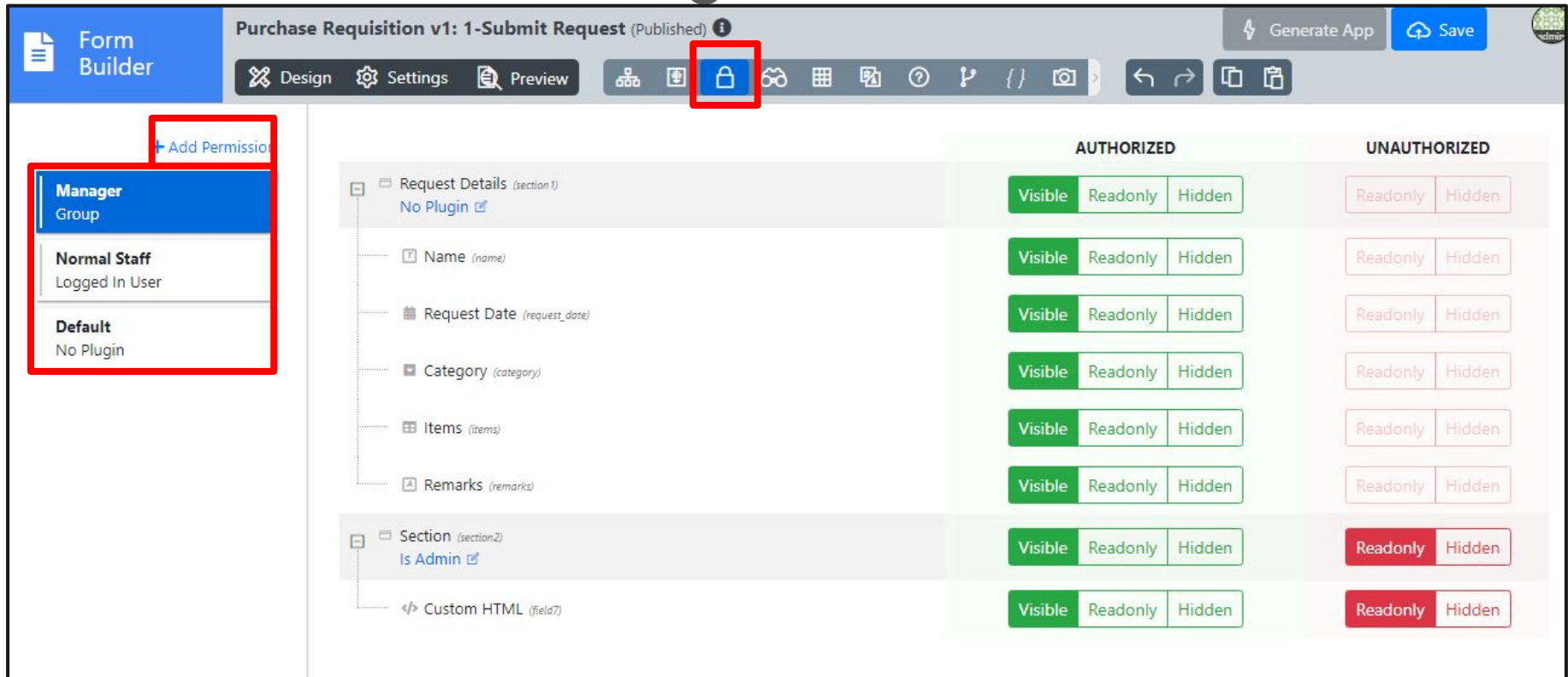
- Request Details (section1)
  - No Plugin
  - Name (name)
  - Request Date (request\_date)
  - Category (category)
  - Items (items)
  - Remarks (remarks)
- Section (section2)
  - Is Admin
  - Custom HTML (field7)

**Permissions Table:**

	AUTHORIZED			UNAUTHORIZED	
Request Details (section1)	Visible	Readonly	Hidden	Readonly	Hidden
Name (name)	Visible	Readonly	Hidden	Readonly	Hidden
Request Date (request_date)	Visible	Readonly	Hidden	Readonly	Hidden
Category (category)	Visible	Readonly	Hidden	Readonly	Hidden
Items (items)	Visible	Readonly	Hidden	Readonly	Hidden
Remarks (remarks)	Visible	Readonly	Hidden	Readonly	Hidden
Section (section2)	Visible	Readonly	Hidden	Readonly	Hidden
Custom HTML (field7)	Visible	Readonly	Hidden	Readonly	Hidden

# Form Advanced Tools Permission

- Each with its set of **form**, **form section**, and **form element** configurations.



The screenshot displays the Joget Form Builder interface for a form titled "Purchase Requisition v1: 1-Submit Request (Published)". The interface is divided into three main sections: a sidebar on the left, a central form design area, and a permissions table on the right.

**Sidebar (Left):** The "Form Builder" sidebar contains a list of roles: "Manager Group", "Normal Staff", and "Default". The "Manager Group" role is highlighted with a red box, and the "Add Permission" button is also highlighted with a red box.

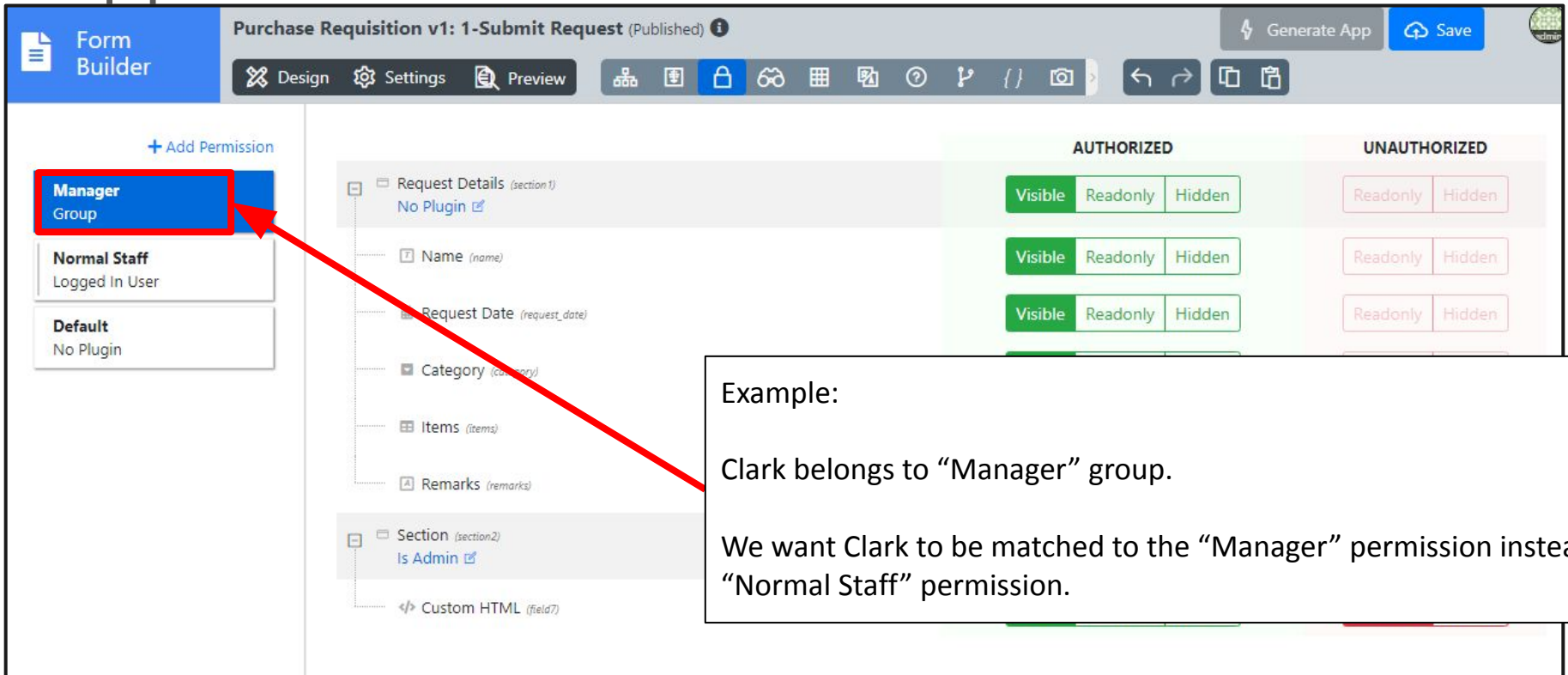
**Central Form Design Area:** This area shows the form structure. It includes a "Request Details" section (section 1) with fields for "Name", "Request Date", "Category", "Items", and "Remarks". Below this is a "Section" (section 2) with a "Custom HTML" field. The "Request Details" section is marked as "No Plugin" and the "Section" is marked as "Is Admin".

**Permissions Table (Right):** The table shows permissions for "AUTHORIZED" and "UNAUTHORIZED" users. The "AUTHORIZED" column has three sub-columns: "Visible", "Readonly", and "Hidden". The "UNAUTHORIZED" column has two sub-columns: "Readonly" and "Hidden".

	AUTHORIZED			UNAUTHORIZED	
Request Details (section 1)	Visible	Readonly	Hidden	Readonly	Hidden
Name (name)	Visible	Readonly	Hidden	Readonly	Hidden
Request Date (request_date)	Visible	Readonly	Hidden	Readonly	Hidden
Category (category)	Visible	Readonly	Hidden	Readonly	Hidden
Items (items)	Visible	Readonly	Hidden	Readonly	Hidden
Remarks (remarks)	Visible	Readonly	Hidden	Readonly	Hidden
Section (section 2)	Visible	Readonly	Hidden	Readonly	Hidden
Custom HTML (field 7)	Visible	Readonly	Hidden	Readonly	Hidden

# Form Advanced Tools Permission

- Permission with **highest privilege** should be set first as the first matching permission will be applied.



Example:

Clark belongs to “Manager” group.

We want Clark to be matched to the “Manager” permission instead of “Normal Staff” permission.

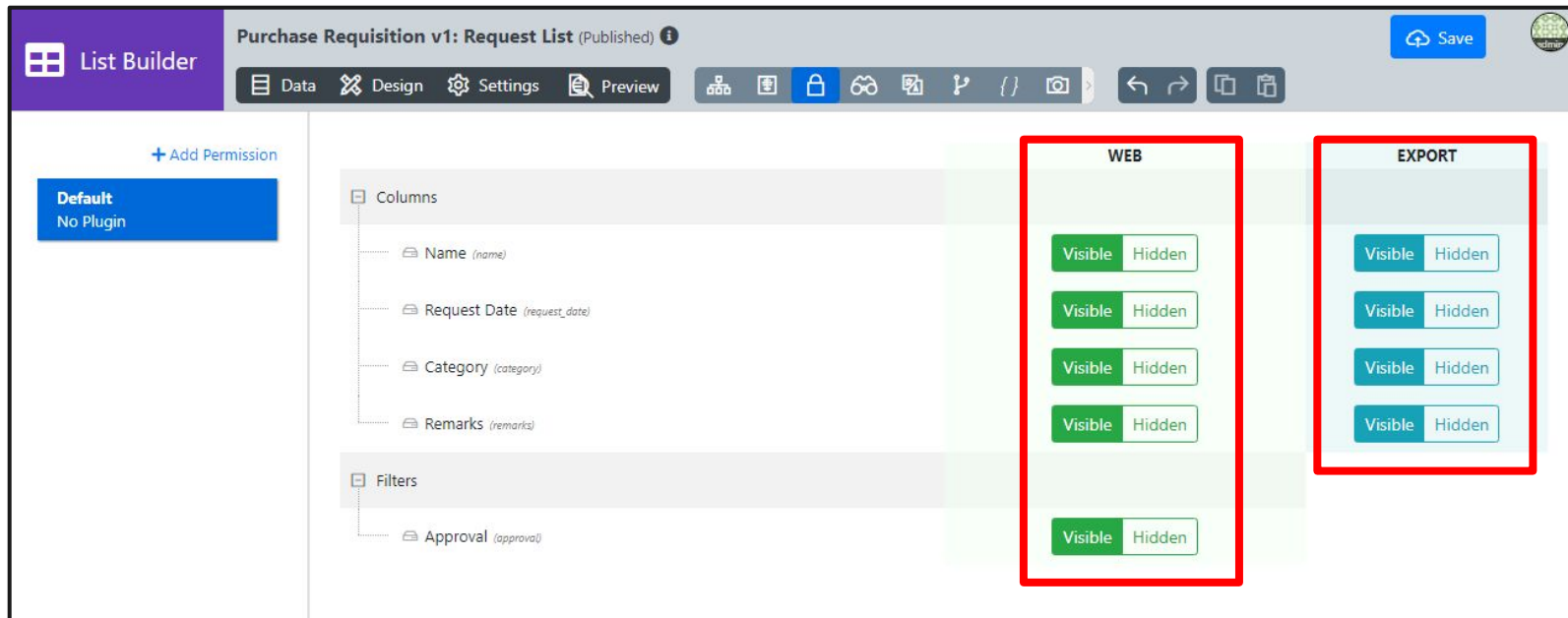
# Form Advanced Tools Permission

- For each **Permission** rule, additional permission layer can be set at the **Section** level
- You can set whether **read-only** or **hidden** under Unauthorized column when section level permission is added

	AUTHORIZED	UNAUTHORIZED
<div>Request Details (section1) No Plugin</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>
<div>Name (name)</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>
<div>Request Date (request_date)</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>
<div>Category (category)</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>
<div>Items (items)</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>
<div>Remarks (remarks)</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>
<div>Section (section2) Is Admin</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>
<div>Custom HTML (field7)</div>	<div>Visible</div> <div>ReadOnly</div> <div>Hidden</div>	<div>ReadOnly</div> <div>Hidden</div>

# List Advanced Tools Permission

- Controls on who can see the **List column**, **List filter** and **List action** elements.
- Permission with **highest privilege** should be set first as the first matching permission will be applied.

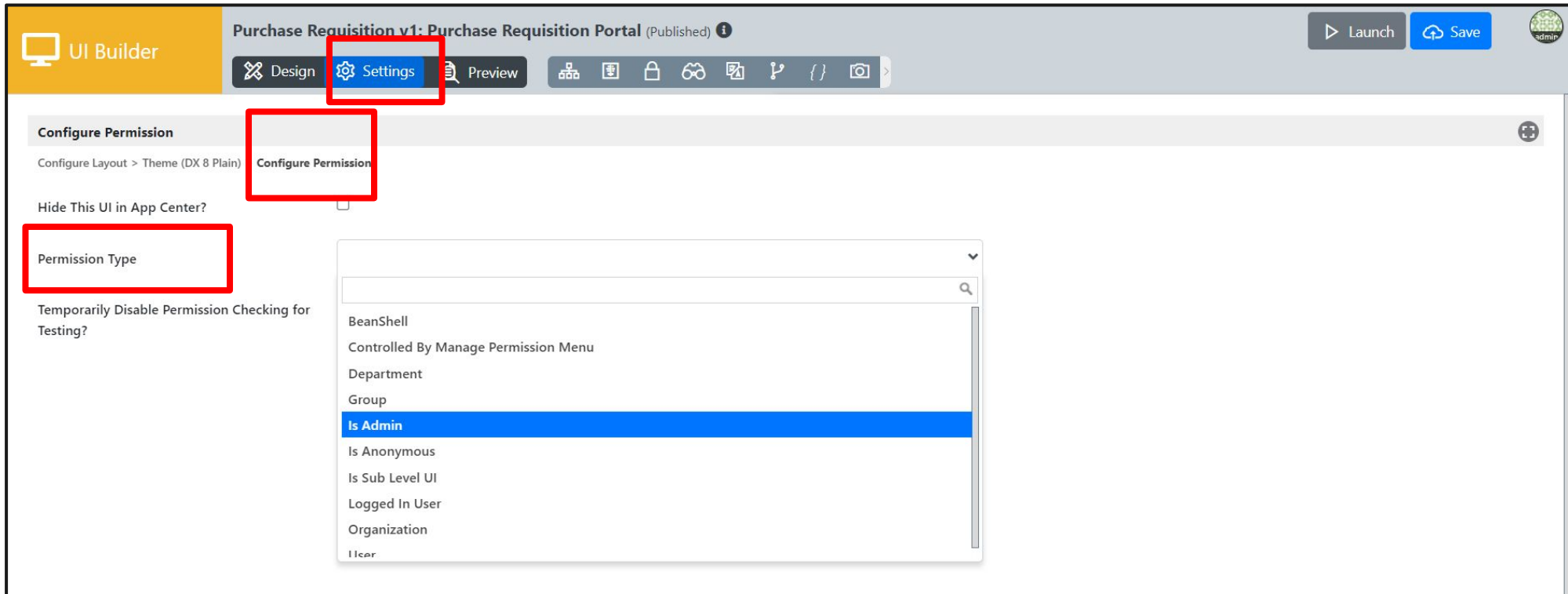


The screenshot displays the Joget List Builder interface for a 'Purchase Requisition v1: Request List' (Published). The interface includes a sidebar with a '+ Add Permission' button and a 'Default No Plugin' button. The main area shows a list of columns and filters. The 'Columns' section lists: Name (name), Request Date (request\_date), Category (category), and Remarks (remarks). The 'Filters' section lists: Approval (approval). On the right, there are two panels for permissions: 'WEB' and 'EXPORT'. Each panel contains a table of permissions with 'Visible' and 'Hidden' buttons. The 'WEB' panel has 5 rows, and the 'EXPORT' panel has 4 rows. The 'Visible' buttons are green in the 'WEB' panel and blue in the 'EXPORT' panel. The 'Hidden' buttons are white in both panels. The 'WEB' and 'EXPORT' panels are highlighted with red rectangles.

Action	Visible	Hidden
WEB	Visible	Hidden
	Visible	Hidden
	Visible	Hidden
	Visible	Hidden
	Visible	Hidden
EXPORT	Visible	Hidden
	Visible	Hidden
	Visible	Hidden
	Visible	Hidden

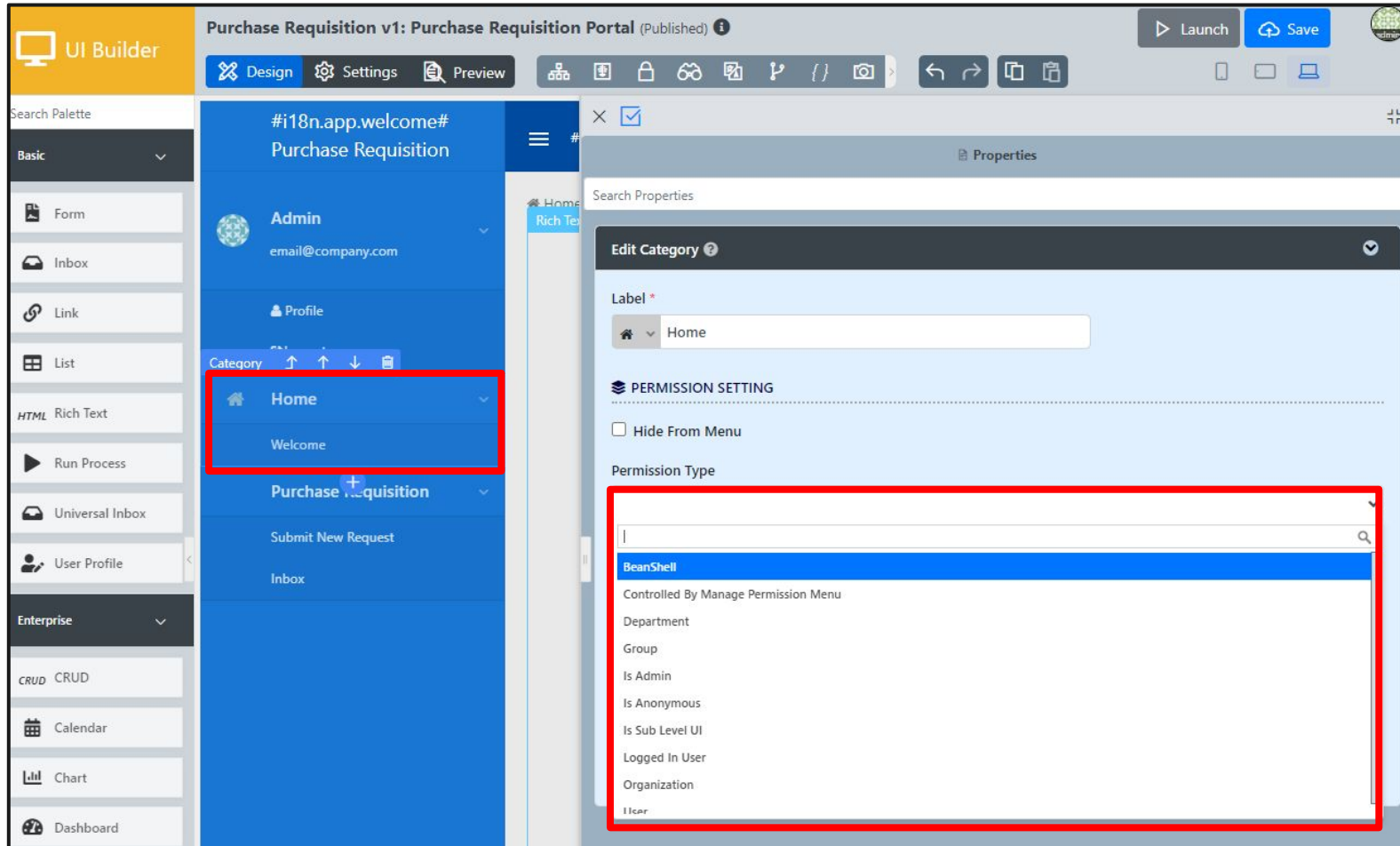
# UI

- Controls on who can access the **UI**.



# UI Category

- Controls on who can see the **UI category**.

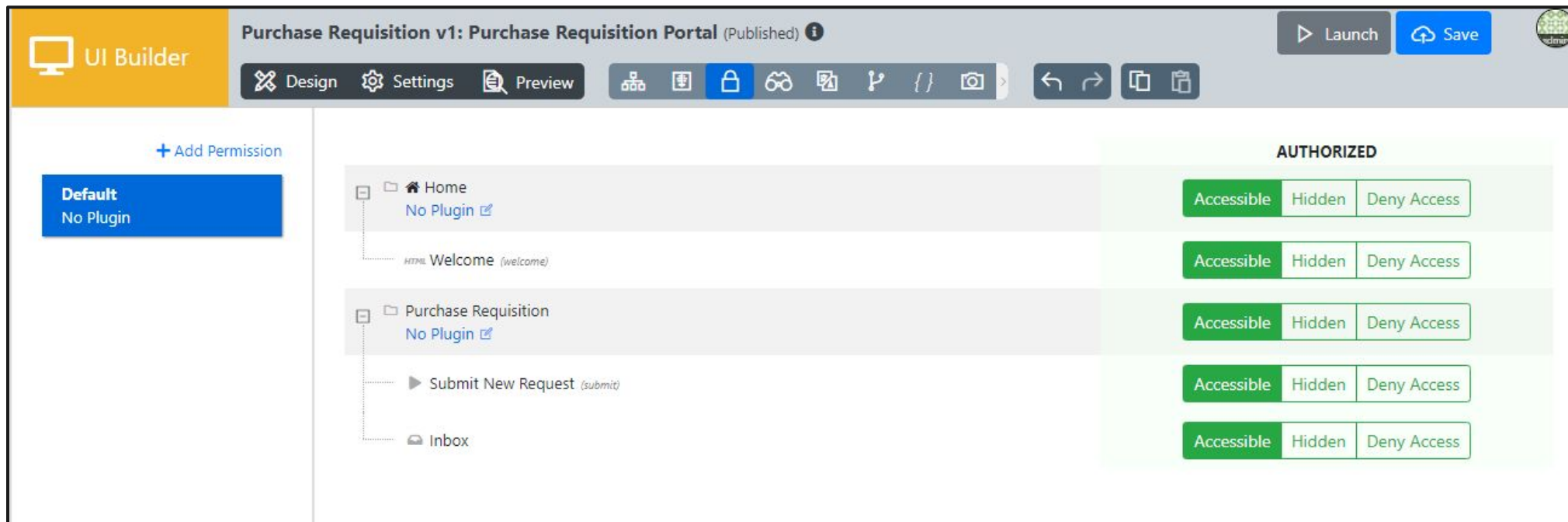


The screenshot displays the Joget UI Builder interface for a 'Purchase Requisition v1: Purchase Requisition Portal'. The main workspace shows a sidebar menu with categories like 'Home', 'Welcome', and 'Purchase Requisition'. A red box highlights the 'Home' category in the sidebar. On the right, the 'Edit Category' dialog box is open, showing the 'Label' as 'Home' and the 'PERMISSION SETTING' section. A red box highlights the 'Permission Type' dropdown menu, which lists various permissions such as 'BeanShell', 'Controlled By Manage Permission Menu', 'Department', 'Group', 'Is Admin', 'Is Anonymous', 'Is Sub Level UI', 'Logged In User', and 'Organization'.



# UI Advanced Tools Permission

- Fine grain control over each **UI menu**.



**Purchase Requisition v1: Purchase Requisition Portal** (Published) Launch Save

**UI Builder** Design Settings Preview Icons Lock Unlock View Code Camera Undo Redo Copy Paste

[+ Add Permission](#)

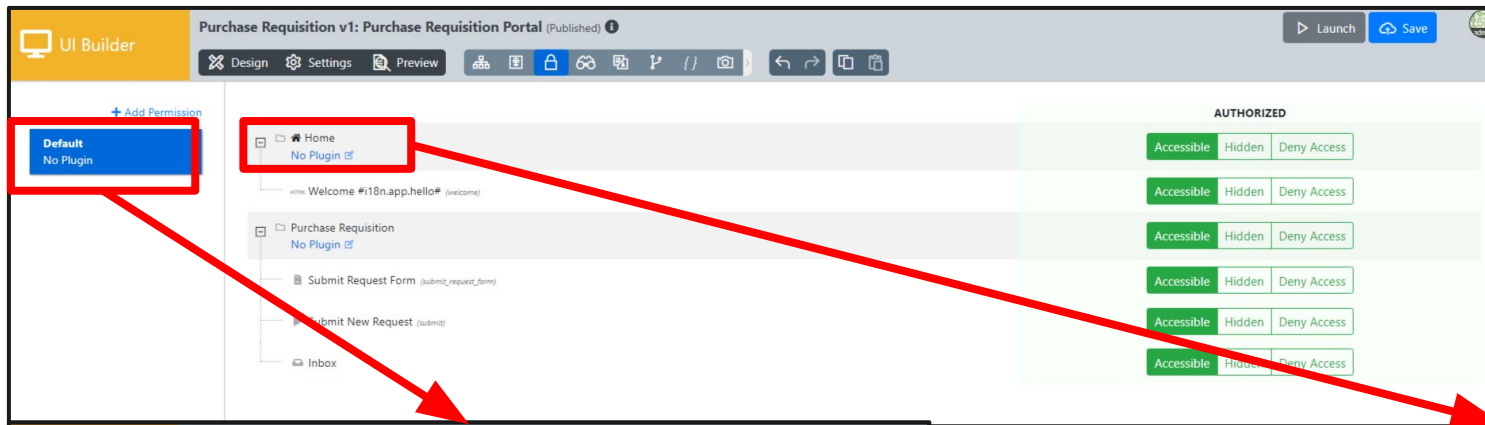
**Default**  
No Plugin

		AUTHORIZED		
		Accessible	Hidden	Deny Access
Home	No Plugin	Accessible	Hidden	Deny Access
HTML Welcome (welcome)		Accessible	Hidden	Deny Access
Purchase Requisition	No Plugin	Accessible	Hidden	Deny Access
Submit New Request (submit)		Accessible	Hidden	Deny Access
Inbox		Accessible	Hidden	Deny Access



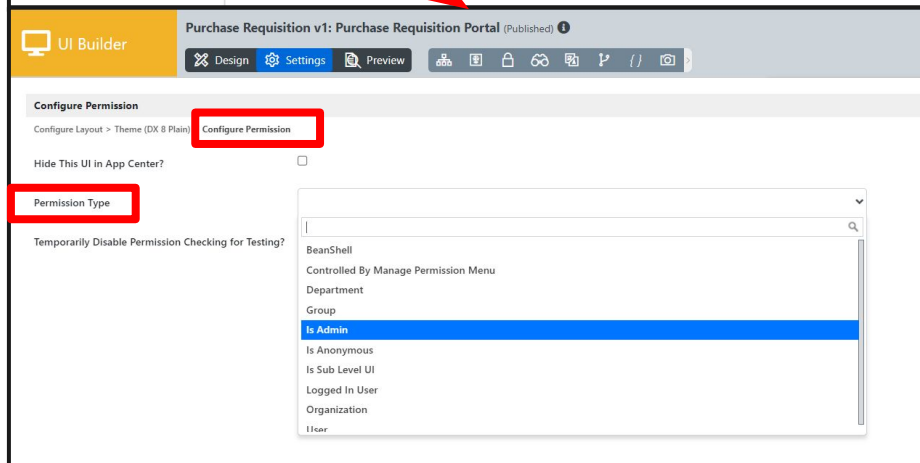
# UI Advanced Tools Permission

- Manages **UI** and **UI category** permission on **Default** permission.

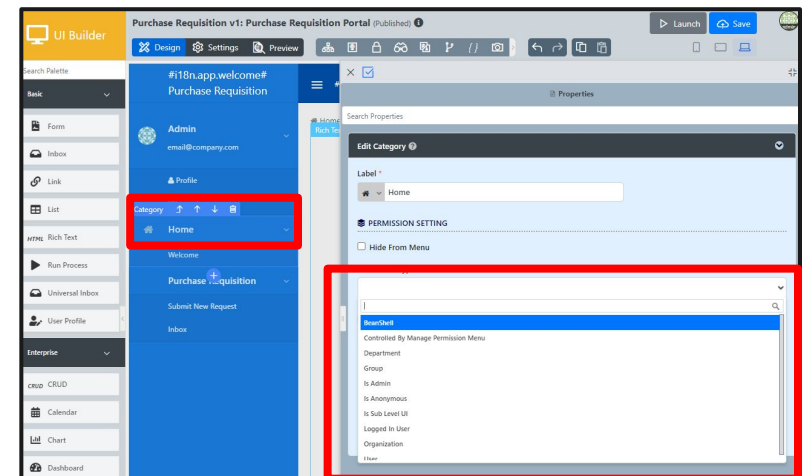


The screenshot shows the Joget UI Builder interface for a 'Purchase Requisition v1: Purchase Requisition Portal'. On the left, the 'Default' permission is highlighted with a red box. In the center, the 'AUTHORIZED' table is displayed, showing permissions for various UI elements. Red arrows point from the 'Default' permission box to the 'AUTHORIZED' table and from the 'Default' permission box to the 'Configure Permission' dialog in the bottom-left screenshot.

UI Element	Accessible	Hidden	Deny Access
Home	Accessible	Hidden	Deny Access
Submit Request Form	Accessible	Hidden	Deny Access
Submit New Request	Accessible	Hidden	Deny Access
Inbox	Accessible	Hidden	Deny Access



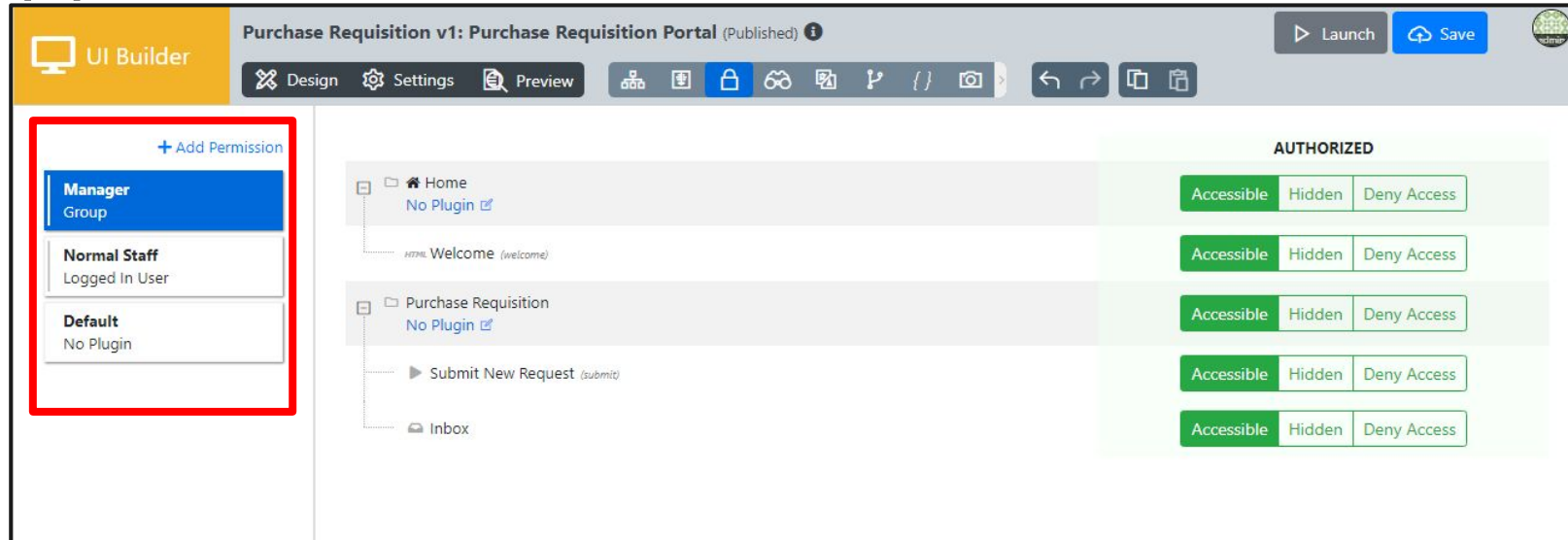
The screenshot shows the 'Configure Permission' dialog in the Joget UI Builder. The 'Permission Type' dropdown is highlighted with a red box, and the 'Is Admin' option is selected in the list. The dialog also includes a 'Temporarily Disable Permission Checking for Testing?' checkbox.



The screenshot shows the 'Edit Category' dialog in the Joget UI Builder. The 'Category' dropdown is highlighted with a red box, and the 'Home' option is selected. The dialog also includes a 'PERMISSION SETTING' section with a 'Hide From Menu' checkbox. A red box highlights the 'Is Admin' option in the list.

# UI Advanced Tools Permission

- Additional permissions can be set with its own set of **UI**, **UI category**, and **UI menu** configurations.
- Permission with **highest privilege** should be set first as the first matching permission will be applied.



The screenshot shows the Joget UI Builder interface for a project titled "Purchase Requisition v1: Purchase Requisition Portal (Published)". The interface includes a top navigation bar with "Design", "Settings", and "Preview" tabs, and a right sidebar with "Launch" and "Save" buttons. The left sidebar, highlighted with a red box, shows a list of permissions: "Manager Group", "Normal Staff Logged In User", and "Default No Plugin". The main area displays a tree view of the portal structure with a table of authorized actions for each node.

AUTHORIZED			
Home	Accessible	Hidden	Deny Access
Welcome (welcome)	Accessible	Hidden	Deny Access
Purchase Requisition	Accessible	Hidden	Deny Access
Submit New Request (submit)	Accessible	Hidden	Deny Access
Inbox	Accessible	Hidden	Deny Access

# UI Advanced Tools Permission

- For each **Permission** set, additional permission layer can be set at the **UI Category**

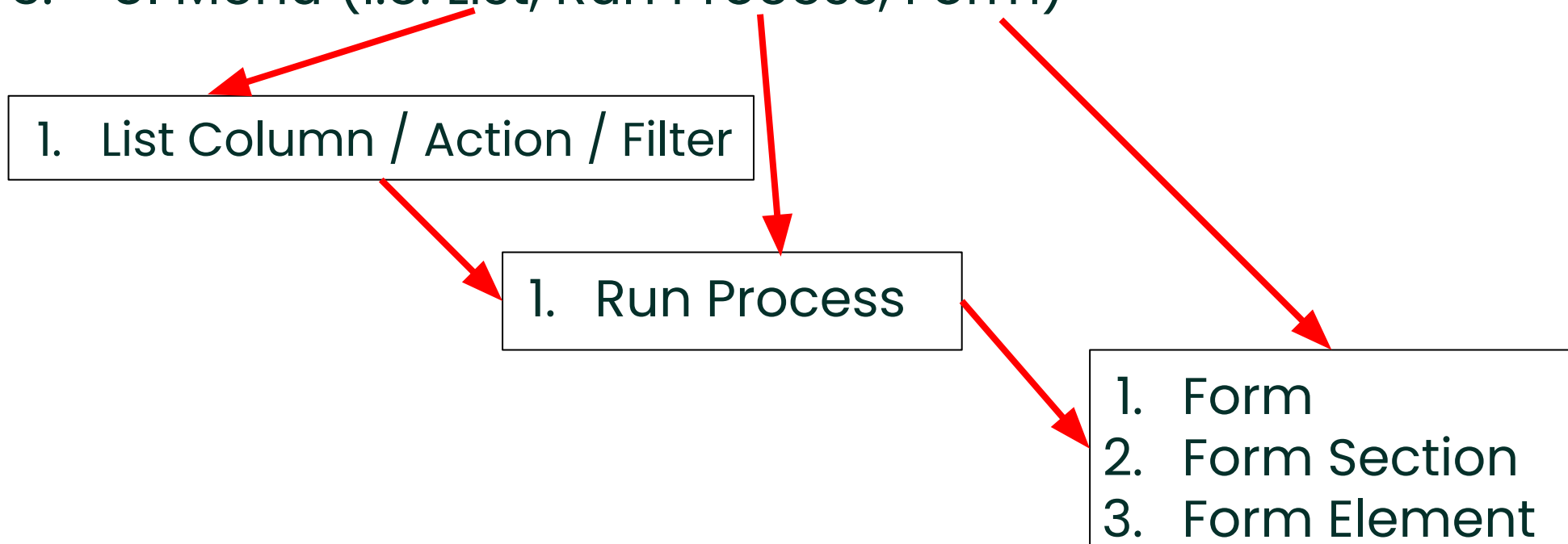


The screenshot displays the 'UI Advanced Tools Permission' configuration interface. On the left, a tree view shows the UI structure. The 'Home' category is highlighted with a red box, showing its sub-items: 'Is Admin' (with a link icon) and 'Welcome (welcome)' (with a 'HTML' tag icon). Below this, the 'Purchase Requisition' category is shown with sub-items 'No Plugin' (with a link icon) and 'Submit New Request (submit)' (with a play icon). At the bottom, an 'Inbox' item is visible. On the right, an 'AUTHORIZED' table lists permissions for each UI item. The table has three columns: 'Accessible' (green), 'Hidden' (white), and 'Deny Access' (white). The 'Accessible' column is selected for all items.

	AUTHORIZED		
Home Is Admin	Accessible	Hidden	Deny Access
HTML Welcome (welcome)	Accessible	Hidden	Deny Access
Purchase Requisition No Plugin	Accessible	Hidden	Deny Access
Submit New Request (submit)	Accessible	Hidden	Deny Access
Inbox	Accessible	Hidden	Deny Access

# Typical Permission Control Precedence

1. UI (top)
2. UI Category
3. UI Menu (i.e. List, Run Process, Form)



# Typical Permission Control Precedence

	Example: Form Menu	Example: Run Process Menu	Example: List / CRUD Menu
UI Level			
UI Category Level			
UI Menu Level	Form	Run Process	List
		Process Start Whitelist	List Column / Action / Filter
Form Level	Form	Form	Form
Form Section Level	Form Section	Form Section	Form Section
Form Element Level	Form Element	Form Element	Form Element

# Exercise 1

- Modify your App in such a way that:-
  - Anonymous user will not be able to see anything except for the landing page “Home”.
  - Only users from the “Managers” group can see the “List All” menu item.

Tip: A group may / may not belong to an organization.

# Materials

Completed App with the optional exercises can be obtained from the file 10.1.jwa.

# Discussion

- What would you want anonymous users to see when they visit the App Center?  
Should all the apps be made secure at the first place?



# More...

- Visit...

<https://dev.joget.org/community/display/DX8/Permission+Control>

...for list of permission plugins and up-to-date documentation.

# Module Review

## 1. Application Permission Control

# Stay Connected With Joget

- [www.joget.org](http://www.joget.org)
- [community.joget.org](http://community.joget.org)
- [twitter.com/jogetworkflow](https://twitter.com/jogetworkflow)
- [facebook.com/jogetworkflow](https://facebook.com/jogetworkflow)
- [youtube.com/jogetworkflow](https://youtube.com/jogetworkflow)