


Joget DX

Permission Control

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Prerequisites

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

Content

1. Application Permission Control



Chapter 1

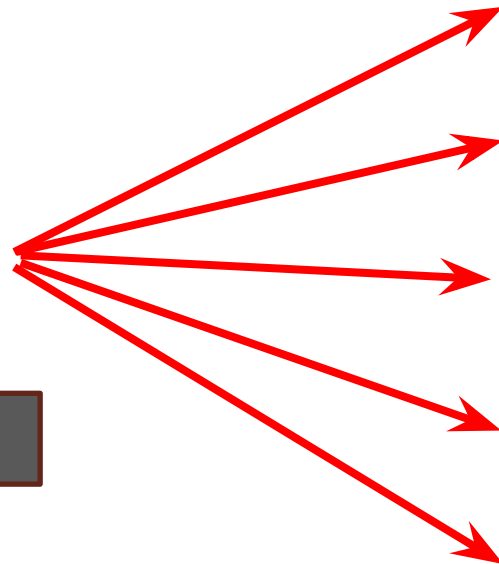
Application Permission Control

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.



PURCHASE REQUISITION PORTAL

 Admin Admin
admin

[Home](#) > [Purchase Requisition](#) > [Submit New Request](#)

Welcome

Purchase Requisition

Submit New Request

Inbox

PURCHASE REQUEST PROCESS - SUBMIT REQUEST

Request Details

Name

Request Date * MM/DD/YYYY

Category Stationery

Name	Quantity
Click to edit	Click to edit

[Add Row](#)

Remarks

Save As Draft
Complete

4 Categories

- Process
- Form
- Userview
- Datalist

8 Permission Layers

- Process
 - Process Start Whitelist
- Form
 - Form
 - Form Section
 - Form Element
- Datalist
 - Action/Column/Filter Element
- Userview
 - Userview
 - Userview Category
 - Userview Menu

Process Start Whitelist

- Controls on who can start/run the Process.
- Available in each Process

[Remove Mapping](#)

System
ID : system [Add/Edit Mapping](#)

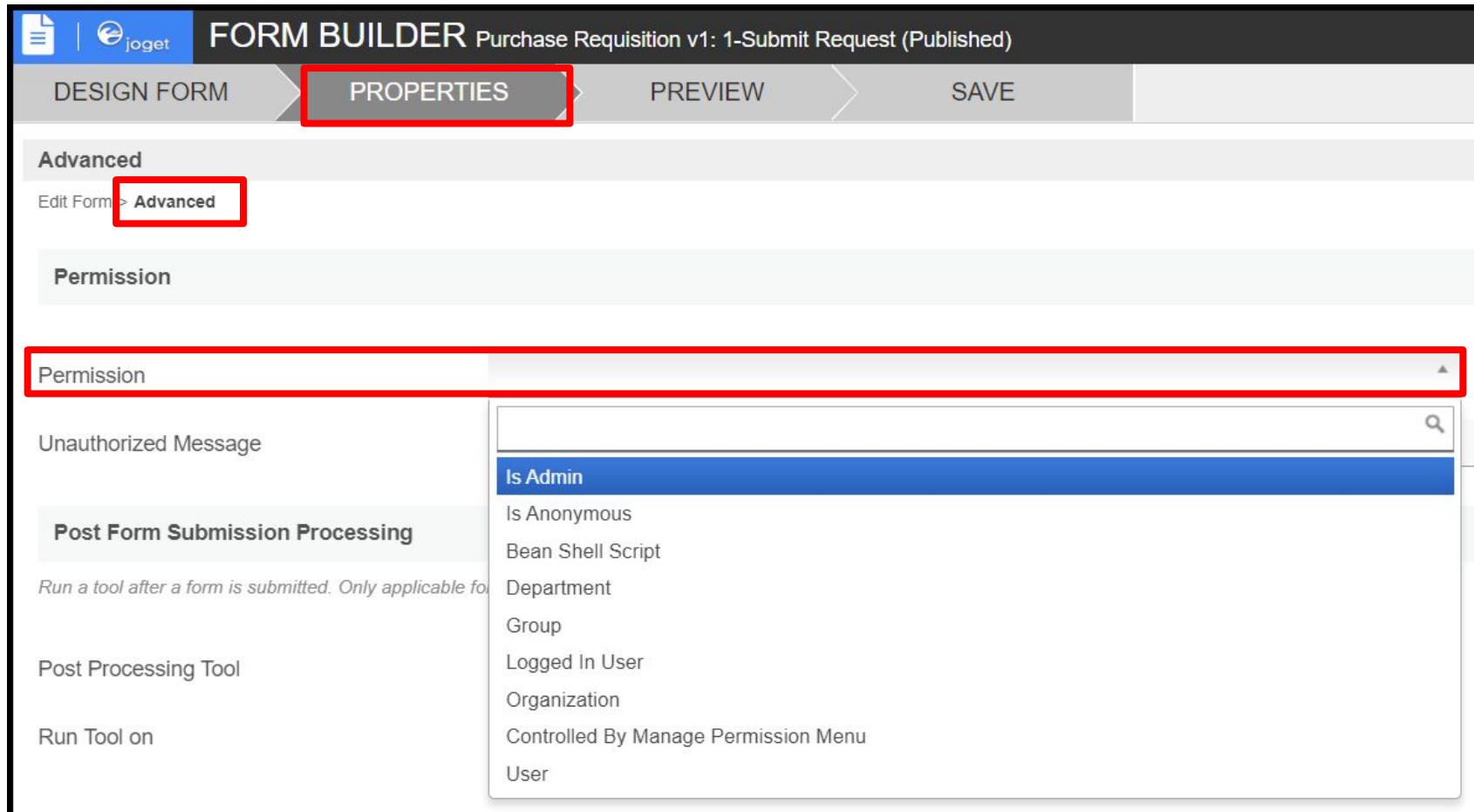
Process Start White List
ID : processStartWhiteList [Add/Edit Mapping](#)

Type	Role
Value	Everyone (Including Anonymous)

By default, this whitelist is set to admin role only, for safety purposes.
Remember to map a participant / role before publishing to production.

Form

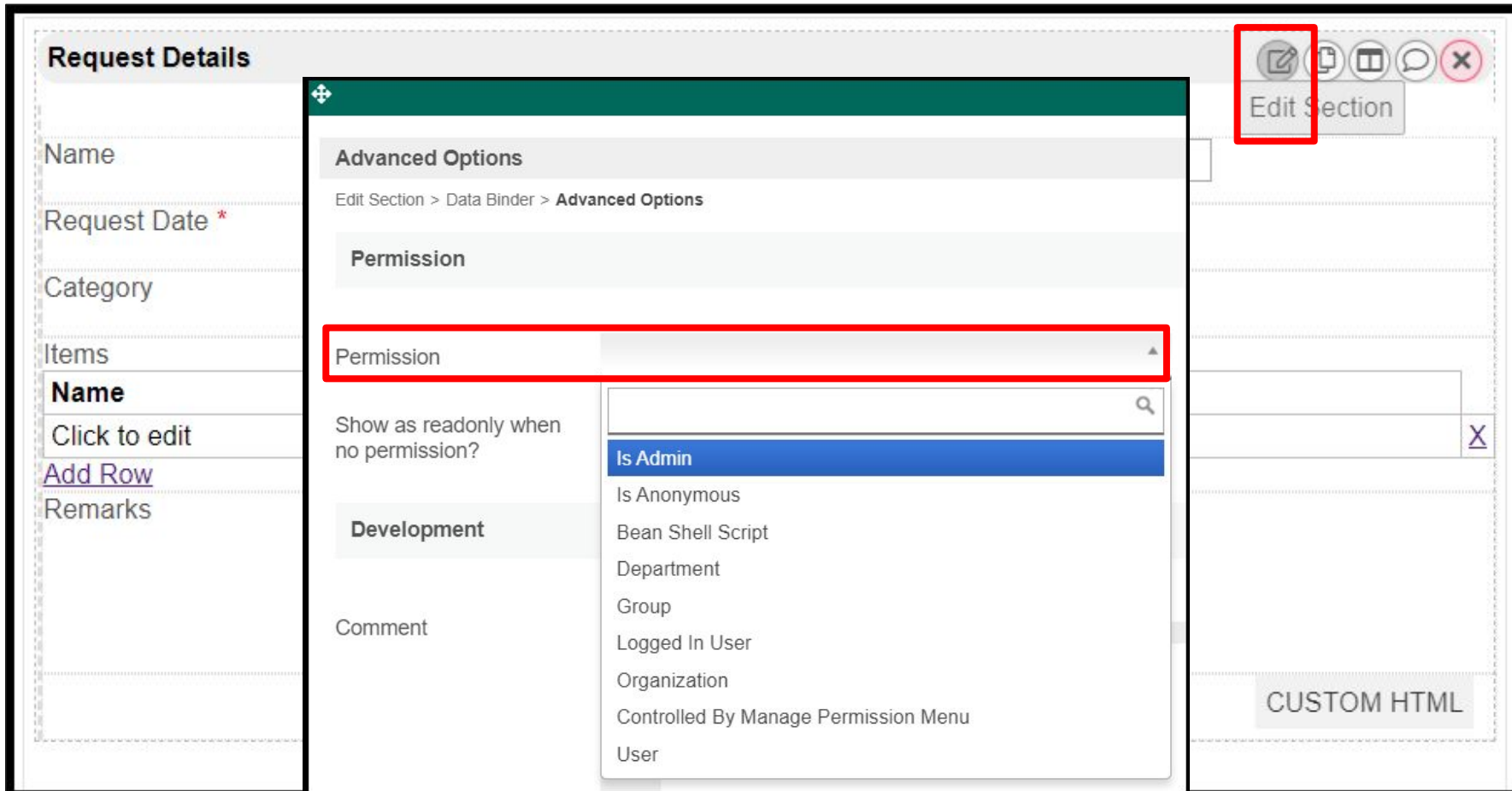
- Controls on who can see the **form**.



The screenshot displays the Joget Form Builder interface for a form titled "Purchase Requisition v1: 1-Submit Request (Published)". The interface includes a navigation bar with tabs for "DESIGN FORM", "PROPERTIES", "PREVIEW", and "SAVE". The "PROPERTIES" tab is selected and highlighted with a red box. Below the navigation bar, the "Advanced" section is visible, with "Edit Form" set to "Advanced", also highlighted with a red box. The "Permission" section is expanded, showing a dropdown menu with the following options: "Is Admin", "Is Anonymous", "Bean Shell Script", "Department", "Group", "Logged In User", "Organization", "Controlled By Manage Permission Menu", and "User". The "Is Admin" option is currently selected and highlighted in blue. The "Post Form Submission Processing" section is also visible, with a "Post Processing Tool" and a "Run Tool on" field.

Form Section

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



The screenshot displays the 'Request Details' form section configuration in the Joget Form Designer. The interface includes a left sidebar with form fields (Name, Request Date, Category, Items, Remarks) and a main configuration area. The 'Advanced Options' section is expanded to show 'Permission' settings. A dropdown menu for 'Permission' is open, listing roles such as 'Is Admin', 'Is Anonymous', 'Department', 'Group', 'Logged In User', 'Organization', 'Controlled By Manage Permission Menu', and 'User'. The 'Is Admin' role is selected. The 'Edit Section' button in the top right corner is highlighted with a red box.

Form Advanced Tools Permission

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

ADVANCED TOOLS

Tree Viewer | **Permission** | Usages | Table | I18N | Tooltip | Diff Checker | JSON Definition

+ Add Permission

	AUTHORIZED	UNAUTHORIZED
Default No Plugin	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Request Details <i>section1</i> Permission: No Plugin	VISIBLE READONLY HIDDEN	READONLY HIDDEN

Name *name*

FORM BUILDER Purchase Requisition v1: 1-Submit Request (Published)

DESIGN FORM | **PROPERTIES** | PREVIEW | SAVE

Advanced
Edit Form: **Advanced**

Permission

Permission

Unauthorized Message

Post Form Submission Processing
Run a tool after a form is submitted. Only applicable fo

Post Processing Tool

Run Tool on

- Is Admin
- Is Anonymous
- Bean Shell Script
- Department
- Group
- Logged In User
- Organization
- Controlled By Manage Permission Menu
- User

Request Details

Name

Request Date *

Category

Items

Name

Click to edit

Add Row

Remarks

Advanced Options
Edit Section > User Binder > Advanced Options

Permission

Permission

Show as readonly when no permission?

Development

Comment

- Is Admin
- Is Anonymous
- Bean Shell Script
- Department
- Group
- Logged In User
- Organization
- Controlled By Manage Permission Menu
- User

EDIT SECTION

CUSTOM HTML

Form Advanced Tools Permission

- Fine grain control over each form element.

ADVANCED TOOLS

Tree Viewer | **Permission** | Usages | Table | I18N | Tooltip | Diff Checker | JSON Definition

[+ Add Permission](#)

Default
No Plugin

	AUTHORIZED			UNAUTHORIZED	
Request Details <i>section1</i> Permission: No Plugin	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Name <i>name</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Request Date <i>from</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Category <i>room</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Items <i>field5</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Additional <i>section2</i> Permission: Bean Shell Script	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Remarks <i>reason</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN

Form Advanced Tools Permission

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

ADVANCED TOOLS

Tree Viewer | **Permission** | Usages | Table | I18N | Tooltip | Diff Checker | JSON Definition

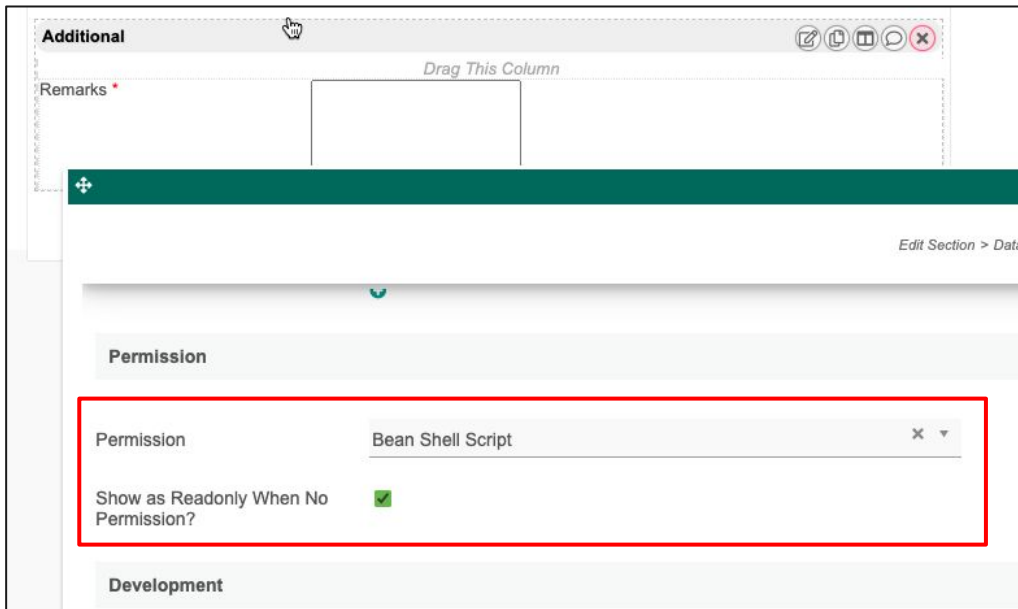
+ Add Permission

	AUTHORIZED	UNAUTHORIZED
Request Details <i>section1</i> Permission: No Plugin	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Name <i>name</i>	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Request Date <i>from</i>	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Category <i>room</i>	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Items <i>field5</i>	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Additional <i>section2</i> Permission: Bean Shell Script	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Remarks <i>reason</i>	VISIBLE READONLY HIDDEN	READONLY HIDDEN

Note: A red box highlights the 'Additional section2' row, and a red arrow points from its permission field to the 'UNAUTHORIZED' column.

Form Advanced Tools Permission

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



Additional

Remarks *

Drag This Column

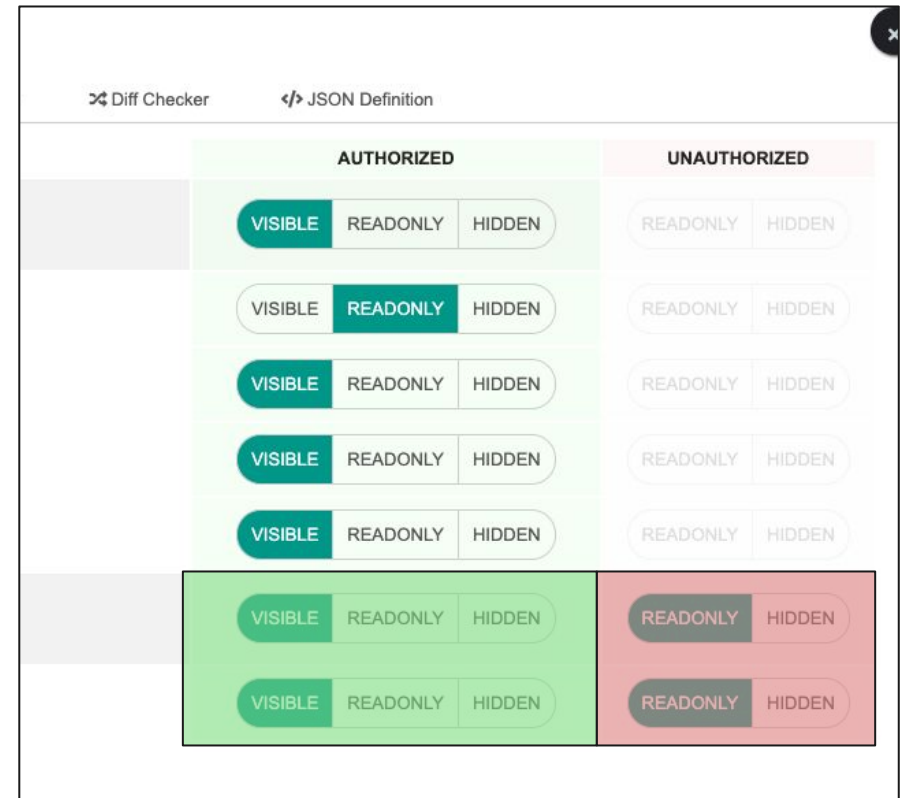
Edit Section > Data

Permission

Permission: Bean Shell Script

Show as Readonly When No Permission?

Development



Diff Checker JSON Definition

	AUTHORIZED	UNAUTHORIZED
	VISIBLE READONLY HIDDEN	READONLY HIDDEN
	VISIBLE READONLY HIDDEN	READONLY HIDDEN
	VISIBLE READONLY HIDDEN	READONLY HIDDEN
	VISIBLE READONLY HIDDEN	READONLY HIDDEN
	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.

ADVANCED TOOLS

Tree Viewer **Permission** Usages Table I18N Tooltip Diff Checker JSON Definition

+ Add Permission

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

	AUTHORIZED			UNAUTHORIZED	
Request Details <i>section1</i> Permission: No Plugin	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Name <i>name</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Request Date <i>from</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Category <i>room</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Items <i>field5</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Additional <i>section2</i> Permission: Bean Shell Script	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Remarks <i>reason</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN

Form Advanced Tools Permission

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

ADVANCED TOOLS

Tree Viewer **Permission** Usages Table I18N Tooltip Diff Checker JSON Definition

+ Add Permission

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

	AUTHORIZED			UNAUTHORIZED	
Request Details <i>section1</i> Permission: No Plugin	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Name <i>name</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Request Date <i>from</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Category <i>room</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Items <i>field5</i>	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Additional <i>section2</i> Permission: Bean Shell Script	VISIBLE	READONLY	HIDDEN	READONLY	HIDDEN
Remarks <i>reason</i>	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.

ADVANCED TOOLS

Tree Viewer | **Permission** | Usages | Table | I18N | Tooltip | Diff Checker | JSON Definition

[+ Add Permission](#)

Manager
Group

Normal Staff
Logged In User

Default
No Plugin

	AUTHORIZED	UNAUTHORIZED
Request Details section1	VISIBLE	HIDDEN
Permission: No	HIDDEN	HIDDEN
Name name	HIDDEN	HIDDEN
Request Dat	HIDDEN	HIDDEN
Category ro	HIDDEN	HIDDEN
Items field5	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Additional section2	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Permission: Bean Shell Script	VISIBLE READONLY HIDDEN	READONLY HIDDEN
Remarks reason	VISIBLE READONLY HIDDEN	READONLY HIDDEN

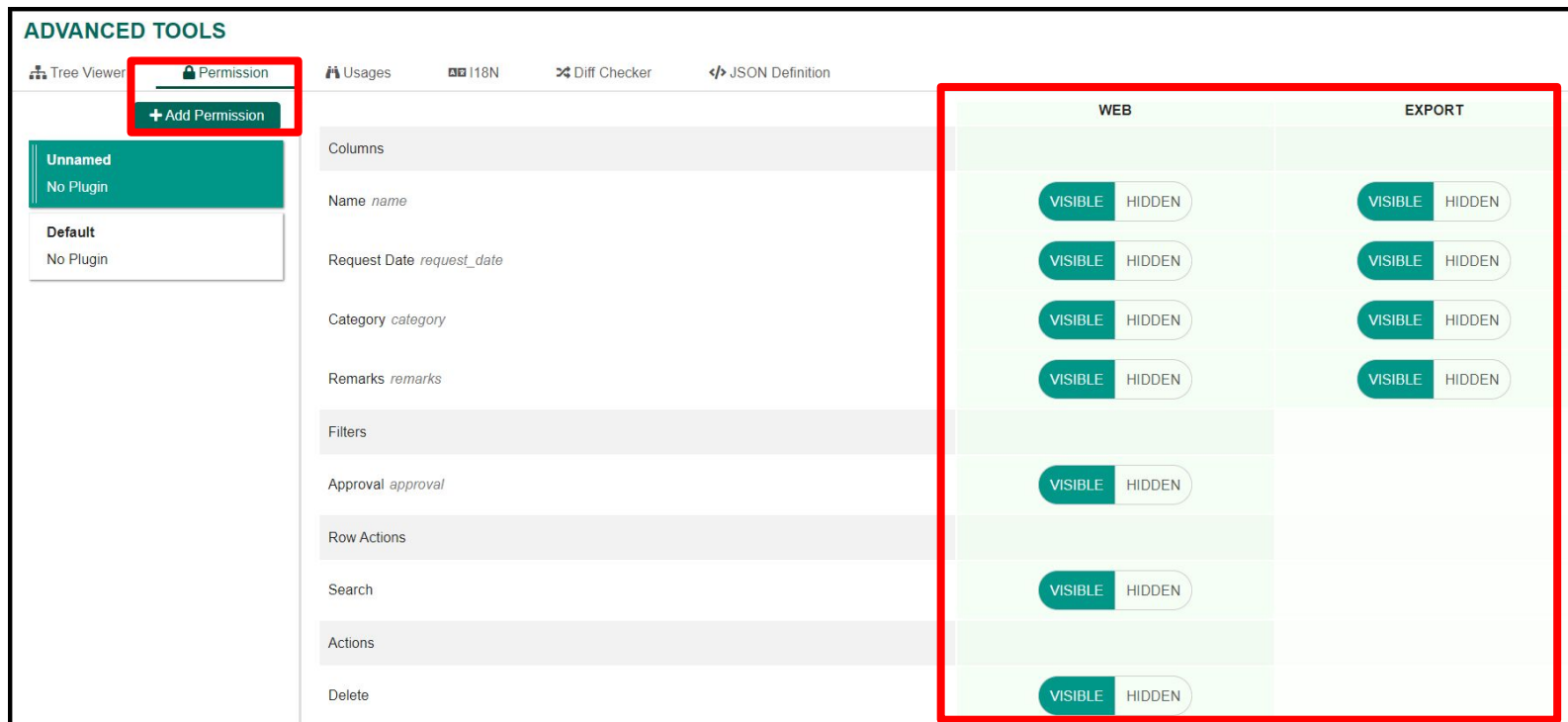
Example:

Clark belongs to "Manager" group.

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

Datalist Advanced Tools Permission

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

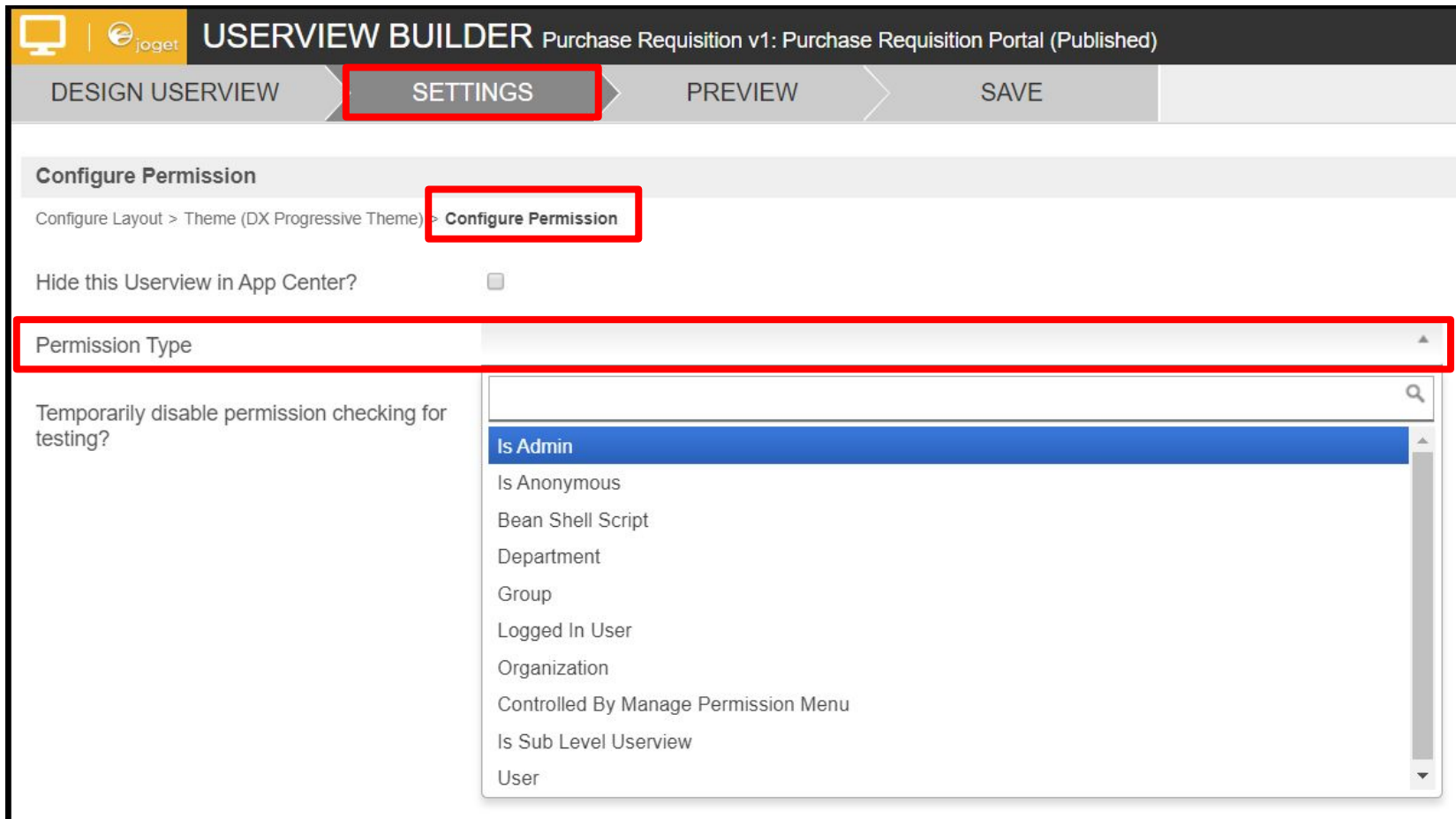


The screenshot shows the 'ADVANCED TOOLS' interface with the 'Permission' tab selected. A red box highlights the 'Permission' tab and the '+ Add Permission' button. Another red box highlights a table of permissions for 'WEB' and 'EXPORT' actions.

	WEB	EXPORT
Columns		
Name <i>name</i>	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Request Date <i>request_date</i>	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Category <i>category</i>	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Remarks <i>remarks</i>	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Filters		
Approval <i>approval</i>	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	
Row Actions		
Search	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	
Actions		
Delete	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	

Userview

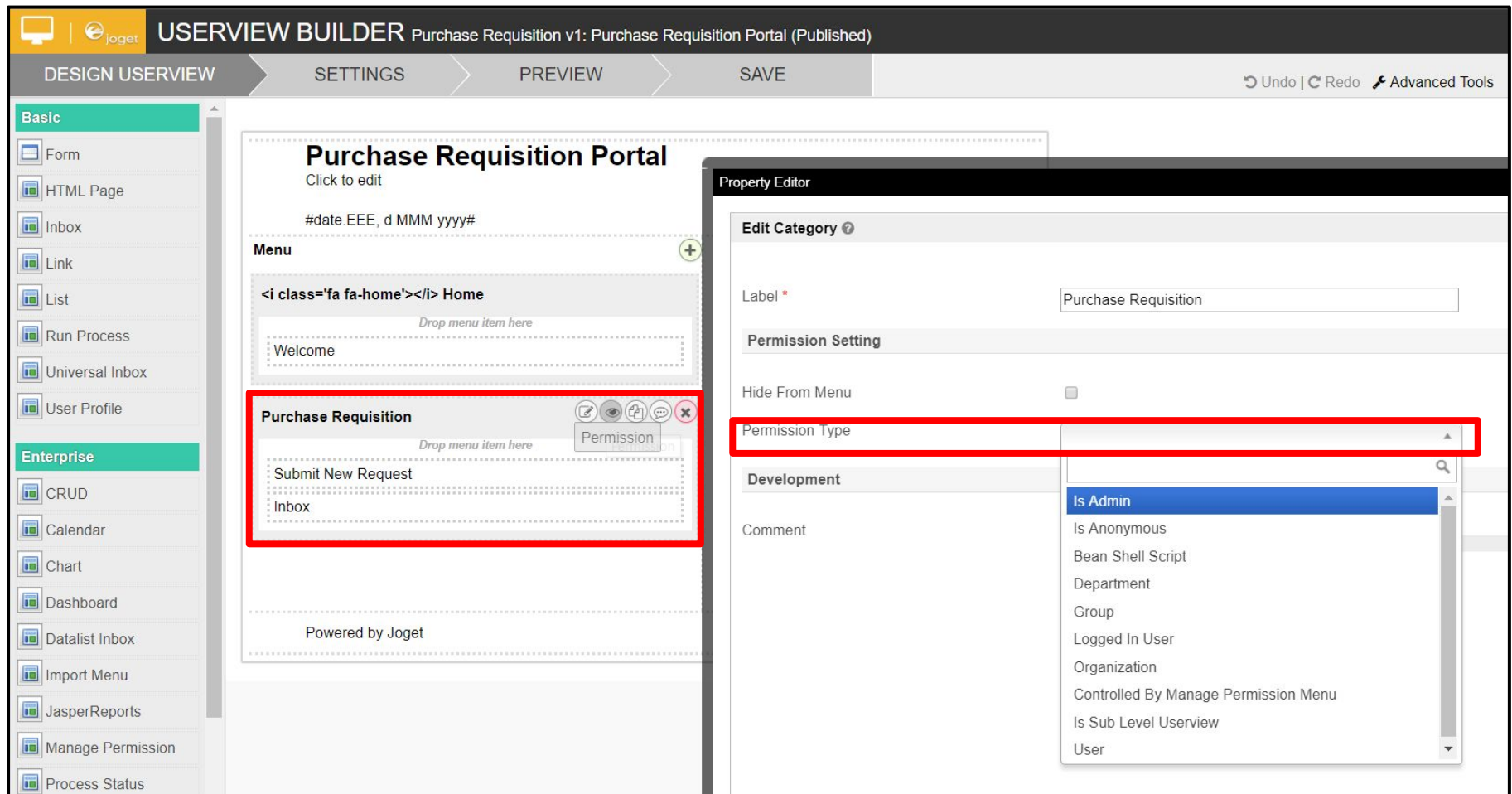
- Controls on who can access the **userview**.



The screenshot shows the 'USERVIEW BUILDER' interface for 'Purchase Requisition v1: Purchase Requisition Portal (Published)'. The 'SETTINGS' tab is selected and highlighted with a red box. Below the navigation bar, the 'Configure Permission' section is active, also highlighted with a red box. It includes a breadcrumb trail 'Configure Layout > Theme (DX Progressive Theme) > Configure Permission'. A checkbox for 'Hide this Userview in App Center?' is present and unchecked. The 'Permission Type' dropdown menu is open, showing a list of options: 'Is Admin' (highlighted in blue), 'Is Anonymous', 'Bean Shell Script', 'Department', 'Group', 'Logged In User', 'Organization', 'Controlled By Manage Permission Menu', 'Is Sub Level Userview', and 'User'. A search icon is visible in the top right of the dropdown list.

Userview Category

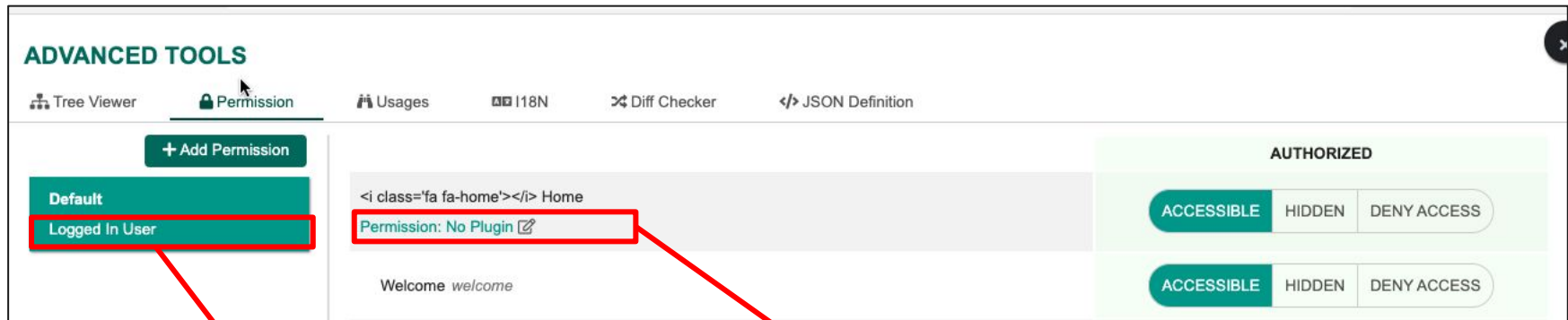
- Controls on who can see the **userview category**.



The screenshot displays the Joget Userview Builder interface for a 'Purchase Requisition Portal'. The main design area shows a menu with items like 'Home', 'Welcome', and 'Purchase Requisition'. The 'Purchase Requisition' item is highlighted with a red box. The 'Property Editor' for this category is open on the right, showing the 'Edit Category' section with a 'Label' of 'Purchase Requisition'. The 'Permission Setting' section is also visible, with the 'Permission Type' dropdown menu open, showing a list of roles including 'Is Admin', 'Is Anonymous', 'Bean Shell Script', 'Department', 'Group', 'Logged In User', 'Organization', 'Controlled By Manage Permission Menu', 'Is Sub Level Userview', and 'User'. The 'Is Admin' role is selected in the dropdown.

Userview Advanced Tools Permission

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



ADVANCED TOOLS

Tree Viewer **Permission** Usages I18N Diff Checker JSON Definition

+ Add Permission

Default

Logged In User

<i class="fa fa-home"></i> Home

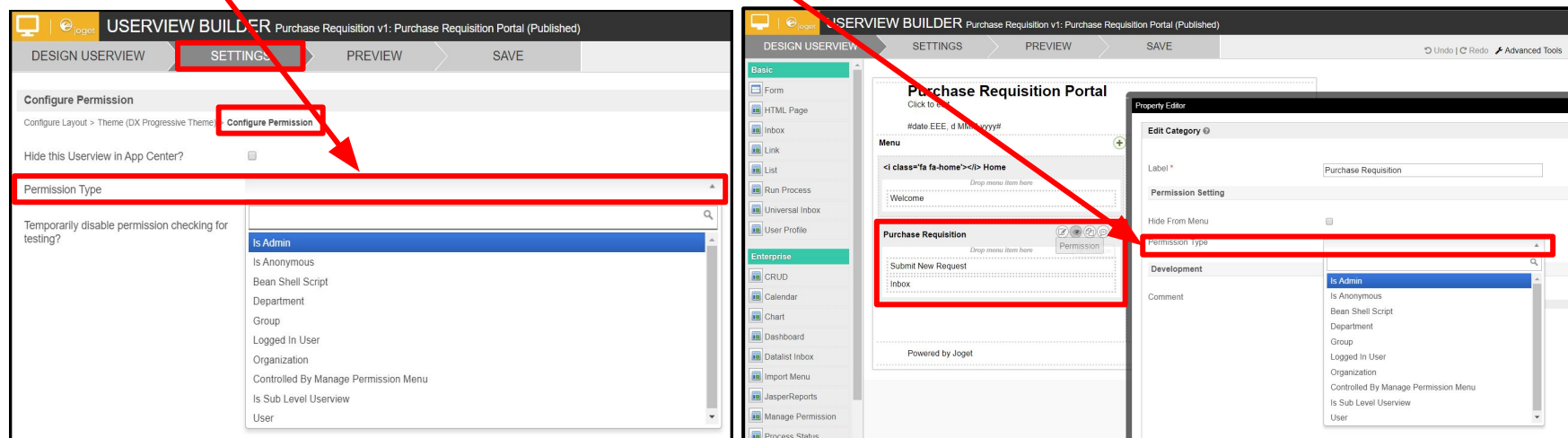
Permission: No Plugin

Welcome welcome

AUTHORIZED

ACCESSIBLE HIDDEN DENY ACCESS

ACCESSIBLE HIDDEN DENY ACCESS



USERVIEW BUILDER Purchase Requisition v1: Purchase Requisition Portal (Published)

DESIGN USERVIEW **SETTINGS** PREVIEW SAVE

Configure Permission

Configure Layout > Theme (DX Progressive Theme)

Hide this Userview in App Center?

Permission Type

Temporarily disable permission checking for testing?

- Is Admin
- Is Anonymous
- Bean Shell Script
- Department
- Group
- Logged In User
- Organization
- Controlled By Manage Permission Menu
- Is Sub Level Userview
- User

USERVIEW BUILDER Purchase Requisition v1: Purchase Requisition Portal (Published)

DESIGN USERVIEW SETTINGS PREVIEW SAVE

Basic

- Form
- HTML Page
- Inbox
- Link
- List
- Run Process
- Universal Inbox
- User Profile

Enterprise

- CRUD
- Calendar
- Chart
- Dashboard
- Datalist Inbox
- Import Menu
- JasperReports
- Manage Permission
- Process Status

Purchase Requisition Portal

Menu

<i class="fa fa-home"></i> Home

Welcome

Purchase Requisition

Submit New Request

Inbox

Powered by Joget

Property Editor

Edit Category

Label *

Permission Setting

Hide From Menu

Permission Type

Development

- Is Admin
- Is Anonymous
- Bean Shell Script
- Department
- Group
- Logged In User
- Organization
- Controlled By Manage Permission Menu
- Is Sub Level Userview
- User

Userview Advanced Tools Permission

- Fine grain control over each userview menu.

ADVANCED TOOLS

Tree Viewer **Permission** Usages I18N Diff Checker JSON Definition

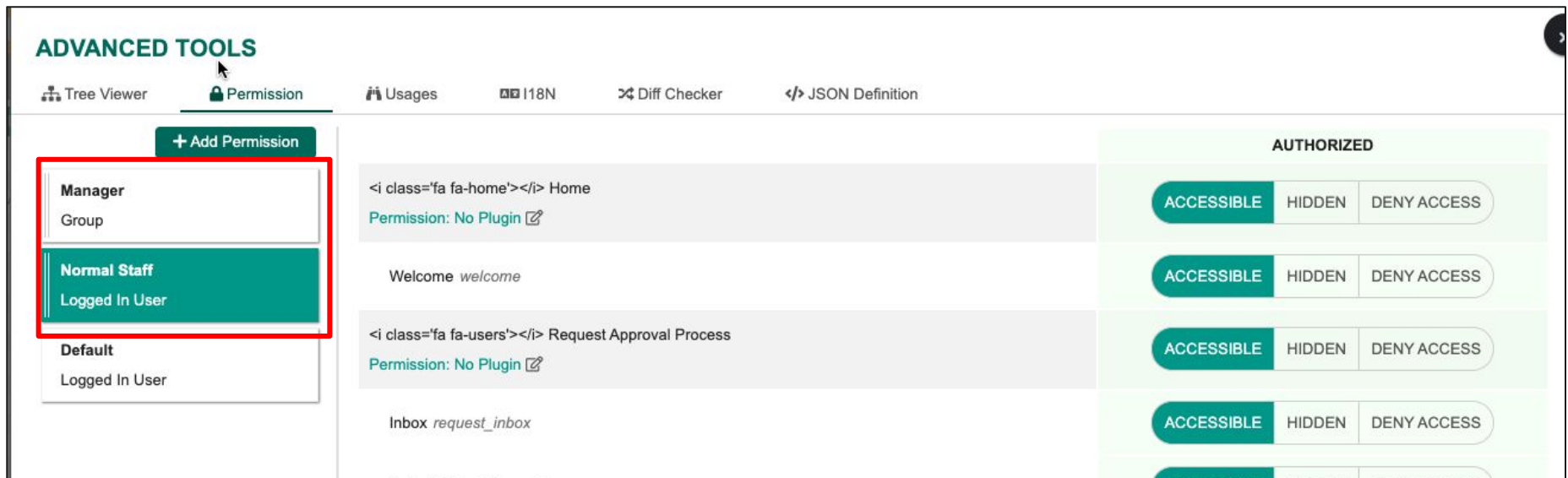
+ Add Permission

Default
Logged In User

	AUTHORIZED		
<i class='fa fa-home'></i> Home Permission: No Plugin ?	<input checked="" type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> HIDDEN	<input type="checkbox"/> DENY ACCESS
Welcome <i>welcome</i>	<input checked="" type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> HIDDEN	<input type="checkbox"/> DENY ACCESS
<i class='fa fa-users'></i> Request Approval Process Permission: No Plugin ?	<input checked="" type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> HIDDEN	<input type="checkbox"/> DENY ACCESS
Inbox <i>request_inbox</i>	<input checked="" type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> HIDDEN	<input type="checkbox"/> DENY ACCESS
Submit Quick Request	<input checked="" type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> HIDDEN	<input type="checkbox"/> DENY ACCESS
Submit Regular Request <i>request_submit</i>	<input checked="" type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> HIDDEN	<input type="checkbox"/> DENY ACCESS
Submit Purchase Order	<input checked="" type="checkbox"/> ACCESSIBLE	<input type="checkbox"/> HIDDEN	<input type="checkbox"/> DENY ACCESS

Userview Advanced Tools Permission

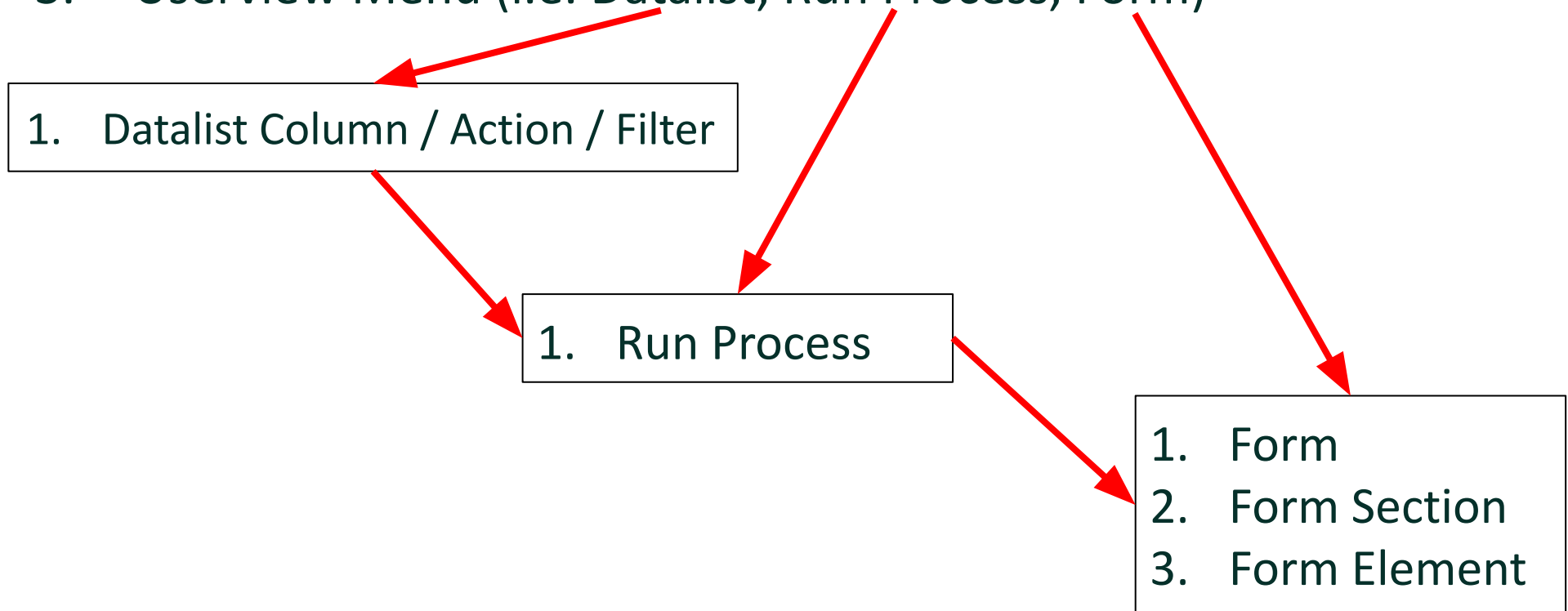
- Additional permissions can be set with its own set of **userview**, **userview category**, and **userview menu** configurations.
- Permission with **highest privilege** should be set first as the first matching permission will be applied.



The screenshot displays the 'ADVANCED TOOLS' interface for configuring permissions. The top navigation bar includes 'Tree Viewer', 'Permission' (selected), 'Usages', 'I18N', 'Diff Checker', and 'JSON Definition'. A '+ Add Permission' button is visible. On the left, a list of groups is shown, with 'Normal Staff' highlighted in a red box. The central pane shows code snippets for 'Home', 'welcome', 'Request Approval Process', and 'request_inbox', each with a 'Permission: No Plugin' status. The right pane, titled 'AUTHORIZED', shows three columns: 'ACCESSIBLE', 'HIDDEN', and 'DENY ACCESS', with 'ACCESSIBLE' selected for all items.

Typical Permission Control Precedence

1. Userview (top)
2. Userview Category
3. Userview Menu (i.e. Datalist, Run Process, Form)



Typical Permission Control Precedence

	Example: Form Menu	Example: Run Process Menu	Example: List / CRUD Menu
Uerview Level			
Uerview Category Level			
Uerview Menu Level	Form	Run Process Process Start Whitelist	Datalist Datalist 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.

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...

<http://dev.joget.org/community/display/DX7/Permission+Control>

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

Module Review

1. Application Permission Control

Stay Connected With Joget

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- youtube.com/jogetworkflow