

# RADS

## Permission Control

<https://github.com/radservice/rad-community/fork>

# Prerequisites

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

# Content

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## 1. Application Permission Control



# Chapter I

# Application Permission Control

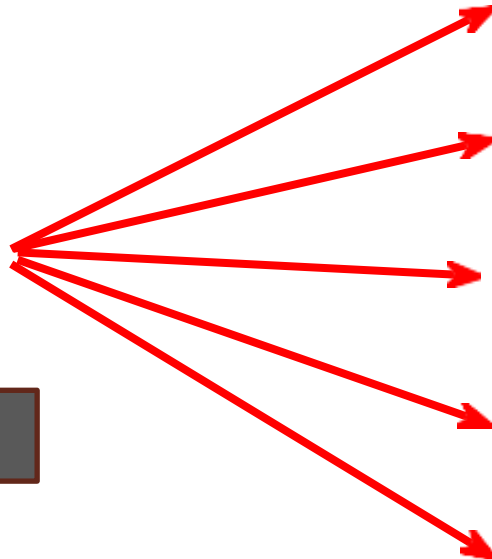
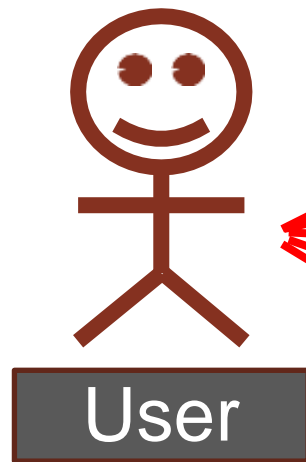
# Introduction

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

Welcome

Purchase Requisition

Submit New Request

Home > Purchase Requisition > Submit New Request

### PURCHASE REQUEST PROCESS - SUBMIT REQUEST

Request Details

Name

Request Date

Category

Items

Name	Quantity
Click to edit	
Add Row	

Remarks

Save As Draft

Complete

# 4 Categories

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- Process
- Form
- Userview
- Datalist

# 8 Permission Layers

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- 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

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 FORM BUILDER interface for a form titled "purchaseRequisition v1: 1 - Submit Request (Published)". The interface includes a top navigation bar with tabs for DESIGN FORM, PROPERTIES (highlighted with a red box), PREVIEW, and SAVE. Below the tabs, the "Advanced" section is visible, with "Edit Form" set to "Advanced" (highlighted with a red box). The "Data Binder" section shows "Load Binder" and "Store Binder" both set to "Workflow Form Binder". The "Permission" section is highlighted with a red box, and a dropdown menu is open, showing a search bar and a list of options: "Bean Shell Script" (highlighted in blue), "Department", "Group", "Logged In User", "Organization", and "User". The "Post Form Submission Processing" section is also visible, with a "Run Tool on" dropdown set to "Data creation".

FORM BUILDER purchaseRequisition v1: 1 - Submit Request (Published)

DESIGN FORM PROPERTIES PREVIEW SAVE

Advanced

Edit Form - Advanced

Data Binder

Load Binder Workflow Form Binder

Store Binder Workflow Form Binder

Permission

Permission

Unauthorized Message

Post Form Submission Processing

Run a tool after a form is submitted. Only applicable for primary form.

Post Processing Tool

Run Tool on Data creation

Bean Shell Script

Department

Group

Logged In User

Organization

User

# Form Section

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

The screenshot shows the 'Request Details' form editor in RAD Service. The left sidebar contains fields for Name, Request Date, Category, Items, and Remarks. The main area displays the 'Advanced Options' section, which includes a 'Permission' dropdown menu. This menu is currently open, showing a list of permissions: 'Is Admin' (highlighted), 'Is Anonymous', 'Bean Shell Script', 'Department', 'Group', 'Logged In User', 'Organization', 'Controlled By Manage Permission Menu', and 'User'. The 'Edit Section' button in the top right corner is highlighted with a red box.

**Request Details**

Name

Request Date \*

Category

Items

**Name**

Click to edit

Add Row

Remarks

**Advanced Options**

Edit Section > Data 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

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

ADVANCED TOOLS

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

+ Add Permission

Default  
No Plugin

Request Details section?

Permission: No Plugin

Name Name

AUTHORIZED

VISIBLE READONLY HIDDEN

VISIBLE READONLY HIDDEN

UNAUTHORIZED

READONLY HIDDEN

READONLY HIDDEN

FORM BUILDER

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

Advanced

Edit Form > Advanced

Data Binder

Load Binder Workflow Form Binder

Store Binder Workflow Form Binder

**Permission**

Permission

Unauthorized Message

Post Form Submission Processing

Run a tool after a form is submitted. Only applicable for primary form.

Post Processing Tool

Run Tool on

Bean Shell Script

Department

Group

Logged In User

Organization

User

Data creation

Request Details

Name

Request Date \*

Category

Items

Name

Click to edit

Add Row

Remarks

Advanced Options

Edit Section > Advanced Options

Permission

Show as readonly when no permission?

Development

Comment

In Admin

Is Anonymous

Bean Shell Script

Department

Group

Logged In User

Organization

Controlled By Manage Permission Menu

User

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 #performer.runProcess.firstName# #performer.runProcess.lastName# section1 Permission: 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

# 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**

**Default**  
No Plugin

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

# Form Advanced Tools Permission

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

The screenshot shows a form titled 'Additional' with a 'Remarks' field and a 'Permission' section. The 'Permission' section is highlighted with a red box and contains the following configuration:

Permission	Bean Shell Script
Show as Readonly When No Permission?	<input checked="" type="checkbox"/>

The screenshot shows a form titled 'JSON Definition' with a 'Diff Checker' button and a 'JSON Definition' button. The form displays a table of permissions for various fields, categorized into 'AUTHORIZED' and 'UNAUTHORIZED' sections.

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

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

**Manager Group**

**Normal Staff**  
Logged In User

**Default**  
No Plugin

# 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

**Example:**

Clark belongs to "Manager" group.

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

Request Details section1

Permission: No

Name name

Request Date

Category root

Items field5

Additional section2

Permission: Bean Shell Script

Remarks reason

**AUTHORIZED**

**UNAUTHORIZED**

**VISIBLE** **READONLY** **HIDDEN**

**VISIBLE** **READONLY** **HIDDEN**

**VISIBLE** **READONLY** **HIDDEN**

**READONLY** **HIDDEN**

**READONLY** **HIDDEN**

**READONLY** **HIDDEN**

**READONLY** **HIDDEN**

# 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 displays the 'ADVANCED TOOLS' interface. The 'Permission' tab is selected, showing a list of permissions. A red box highlights the 'Add Permission' button. The table below shows the permissions for 'WEB' and 'EXPORT' actions.

	WEB	EXPORT
Columns		
Name name	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Request Date request_date	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Category category	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Remarks remarks	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN	<input checked="" type="checkbox"/> VISIBLE <input type="checkbox"/> HIDDEN
Fileis		
Approval approval	<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 displays the 'USERVIEW BUILDER' interface for 'purchaseRequisition v1: #18n.app.welcome# to Purchase Requisition Portal (Published)'. The top navigation bar includes 'DESIGN USERVIEW', 'SETTINGS' (highlighted with a red box), 'PREVIEW', and 'SAVE'. Below this, the 'Configure Permission' section is active, with its title also highlighted by a red box. The breadcrumb trail shows '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 search bar and a list of options: 'Bean Shell Script' (highlighted in blue), 'Department', 'Group', 'Logged In User', 'Organization', and 'User'. A checkbox for 'Temporarily Disable Permission Checking for Testing?' is located below the dropdown.

# Userview Category

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

The screenshot displays the USERVIEW BUILDER interface for a purchaseRequisition v1: #i18n.app.welcome# to Purchase Requisition Portal (Published). The interface includes a top navigation bar with tabs: DESIGN USERVIEW, SETTINGS, PREVIEW, and SAVE. A left sidebar lists various components: Form, HTML Page, Inbox, Link, List, Run Process, Universal Inbox, and User Profile. The main workspace shows a design canvas with a menu structure. A red box highlights the 'Purchase Requisition' category in the menu, which includes a 'Permission' button. An 'Edit Category' dialog box is open, showing the 'Label' as 'Purchase Requisition' and the 'Permission Type' dropdown menu. The 'Permission Type' dropdown is highlighted with a red box, and the 'Bean Shell Script' option is selected. The dialog box also includes a 'Permission Setting' section with a 'Hide From Menu' checkbox and a 'Development' section with a 'Comment' field. The 'OK' and 'Cancel' buttons are at the bottom right of the dialog box.

USERVIEW BUILDER purchaseRequisition v1: #i18n.app.welcome# to Purchase Requisition Portal (Published)

DESIGN USERVIEW SETTINGS PREVIEW SAVE

Basic

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

#i18n.app.welcome# to Purchase Requisition Portal  
Click to edit

#date.EEE, d MMM yyyy#

Menu

- Home
- Welcome
- Purchase Requisition
- Submit New Request
- Inbox
- List All

Permission

Auto save when close? ☐

Edit Category ?

Label \* Purchase Requisition

Permission Setting

Hide From Menu ☐

Permission Type

Development

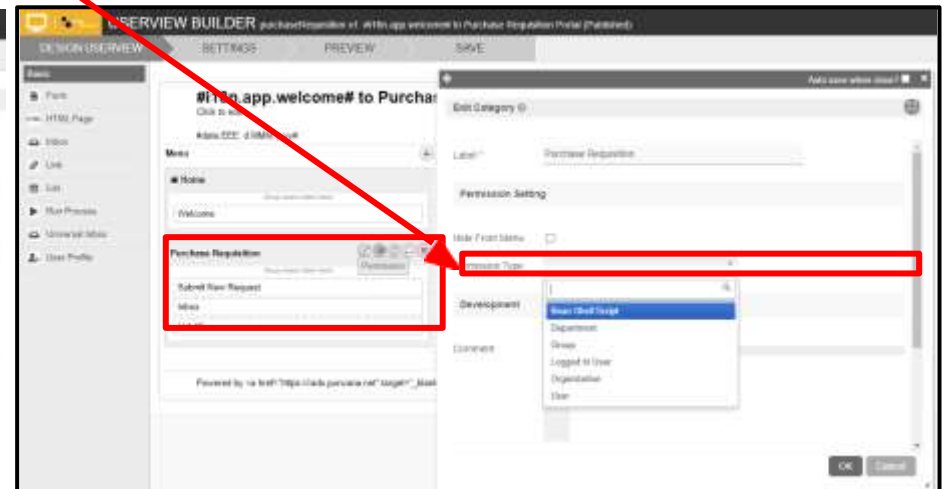
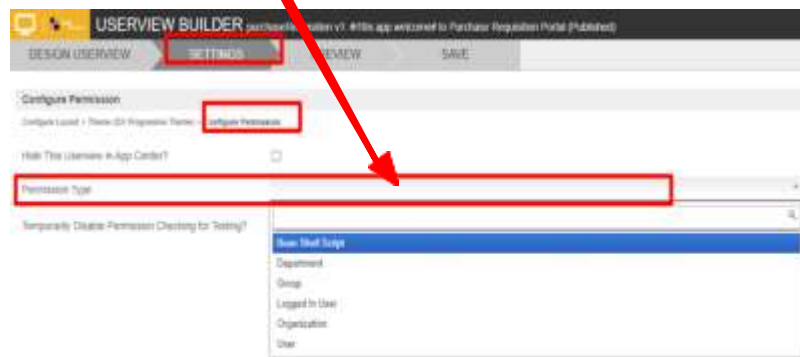
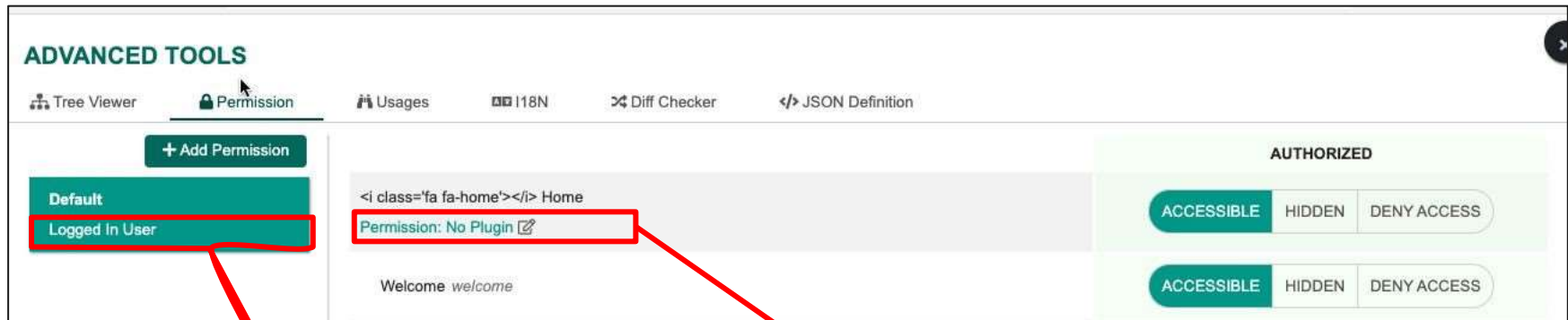
- Bean Shell Script
- Department
- Group
- Logged In User
- Organization
- User

Comment

OK Cancel

# Usserview Advanced Tools Permission

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



# Uview Advanced Tools Permission

- Fine grain control over each uview menu.

The screenshot displays the 'ADVANCED TOOLS' interface for configuring permissions. The top navigation bar includes tabs for 'Tree Viewer', 'Permission', 'Usages', 'I18N', 'Diff Checker', and 'JSON Definition'. The 'Permission' tab is active, showing a list of permissions on the left and a table of authorized actions on the right.

**Permissions List:**

- Default**  
No Plugin
- Purchase Requisition**  
Permission: No Plugin
- Submit New Request**  
submit
- Inbox**
- List All**

**Authorized Actions Table:**

AUTHORIZED		
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	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' section of the Userview interface. The 'Permission' tab is selected, showing a list of permissions on the left and a table of authorized permissions on the right.

**Left Panel (Permissions):**

- Manager** (Group)
- Normal Staff** (Logged In User) - This item is highlighted with a red box.
- Default** (Logged In User)

**Right Panel (AUTHORIZED Table):**

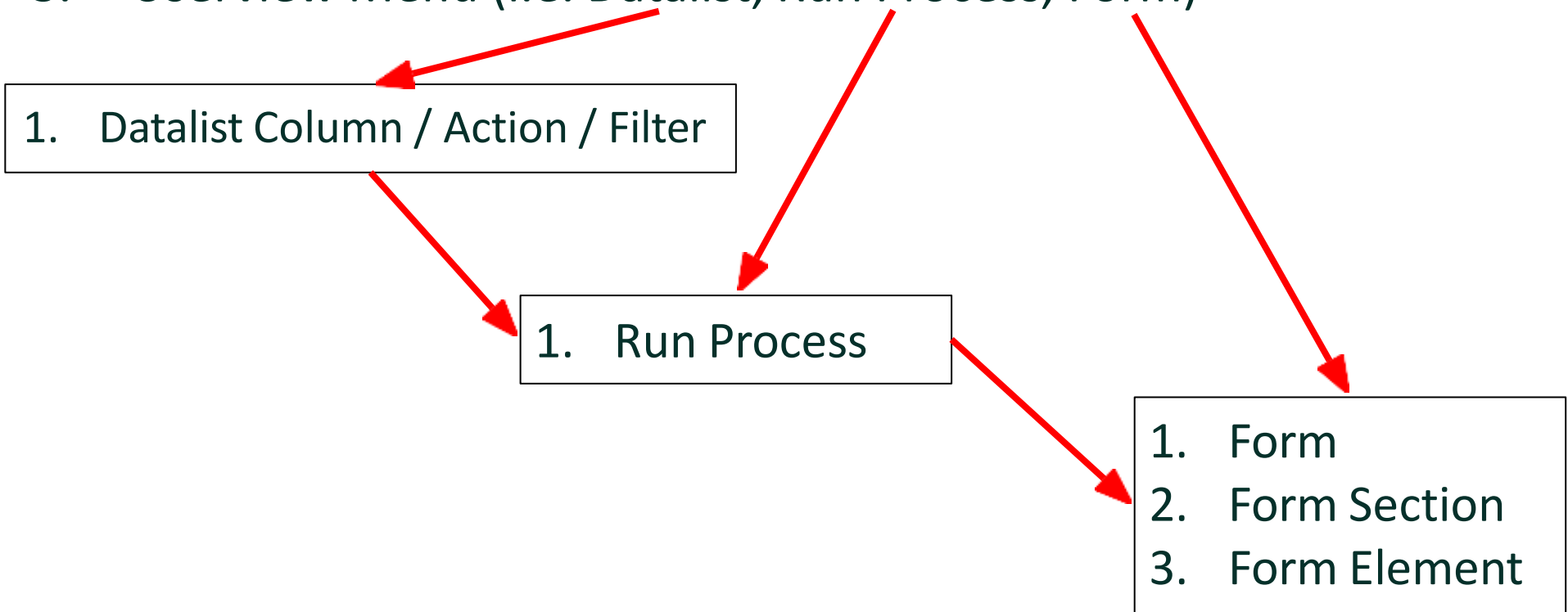
AUTHORIZED		
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	DENY ACCESS
ACCESSIBLE	HIDDEN	DENY ACCESS

The table lists permissions for various UI elements, such as 'Home', 'Request Approval Process', and 'Inbox', all currently set to 'ACCESSIBLE'.



# 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
Usvewiew Level			
Usvewiew Category Level			
Usvewiew Menu Level	Form	Run Process	Datalist
		Process Start Whitelist	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

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- 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

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- 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...

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- Visit...

<https://docs.rads.purwana.net/Permission+Control>

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

# Module

## Review

### 1. Application Permission Control

# Stay Connected With RADS

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- [rads.purwana.net](https://rads.purwana.net)
- <https://github.com/radservice/rad-community>