Joget Workflow v5



Getting Started Guide

Revision 1 April 2015

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1. Overview

Jo-get Work flow v5, is an open source platform to easily build enterprise web apps for cloud and mobile.

- Build full-fledged apps, e.g. CRM, HR, Healthcare, et cetera
- Drag and drop forms, lists, UI
- Add **workflow** to automate processes
- Extend via plugins
- Apps are **mobile** optimized and **cloud** ready
- Download ready-made apps from the Joget Marketplace

This guide provides a brief introduction, and more detailed information is available in the Knowledge Base at http://community.joget.org, as well as the official website at http://www.joget.org/. Please note that some of the examples are for the Enterprise Edition, but the basic concepts are similar for the Community Edition.

2. Installation

2.1 Installation on Windows

1. Run the setup file joget-setup-*x.x.x*.exe to launch the Setup Wizard.



- 2. Click on **Next** on the Introduction page, **I Agree** on the License page, **and Next** on the Components page.
- 3. Change the Destination folder if required, then, click on **Install**. Once the installation is complete, click on **Finish**.
- 4. To start the Joget Server, go to Start Menu > Programs > Joget Workflow and click on the green Start Joget Server icon under Joget Workflow. The startup might take some time, so please wait until the message "INFO: Server startup in XXXX ms" appears (XXXX represents the time taken for the startup). Do not close the command window.
- Go to Start Menu > Programs > Joget Workflow and click on App Center. This will launch the App Center in a web browser.
- To stop the Joget Server, go to Start Menu > Programs > Joget Workflow and click on the red Stop Joget Server icon under Joget Workflow.

2.2 Installation on Linux

1. Create a new directory (e.g. /opt/joget) and extract the tar.gz bundle into that directory

- Install the Java Runtime Environment (JRE) or Java Development Kit (JDK) version 6 and above
- 3. Install MySQL Server version 5 and above
- 4. Create an empty database 'jwdb' in the MySQL server
- 5. Execute the setup script to create the required database tables: ./setup.sh
- 6. Execute the bundled Apache Tomcat application server: ./tomcat8.sh run
- 7. Access the App Center at <u>http://localhost:8080/jw</u>

2.3 Upgrading from v4

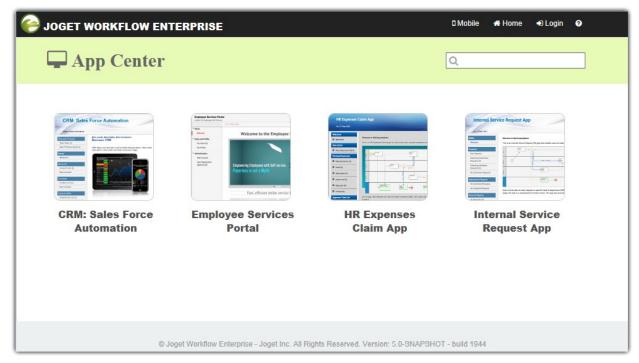
- As with any upgrade, it is strongly recommended that you test the upgrade on a development or test environment first. Please backup your files and perform the necessary tests after the upgrade.
- Extract the v5 Windows ZIP or Linux tar.gz, and locate the v5 jw.war and jwdesigner.war files under the Apache Tomcat webapps directory (e.g. apache-tomcat-7.0.39/webapps)
- 3. It is possible to test run v5 in conjunction with v4. To do this:
 - i. Rename the new jw.war to jw5.war and copy it to the Apache Tomcat webapps directory "[Joget v4 Installation Directory]/apache-tomcat-7.0.52/webapps".
 - ii. Once the war file has finished deploying, you can then access v4 at http://localhost:8080/jw4
- 4. To perform an actual upgrade to replace v4:
 - i. Stop the v4 Apache Tomcat.
 - ii. Delete the existing v4 files in "[Joget v4 Installation Directory]/apache-tomcat-7.0.52/webapps":
 - 1. jw.war
 - 2. jwdesigner.war
 - 3. jw directory
 - 4. jwdesigner directory

- iii. Delete the v4 Apache Tomcat working directories i.e. the "jw" and "jwdesigner" directories in "[Joget v4 Installation Directory]/apache-tomcat7.0.52/work/Catalina/localhost".
- iv. Copy the v5 files jw.war and jwdesigner.war into the Apache Tomcat webapps directory "[Joget v4 Installation Directory]/apache-tomcat-7.0.52/webapps".
- **v.** Start the v4 Apache Tomcat

3. Introducing Apps and the App Center

3.1 Introducing Apps

- 1. Joget Workflow apps can range from a simple database-driven app, to a complex approval process, or even a full-fledged solution (e.g. CRM) which incorporates workflow, data management and reporting.
- 2. The App Center is the default landing page in Joget v5 which displays a grid of published apps. To access the App Center, use a web browser to access the Joget server at http://localhost:8080/jw (Replace localhost and 8080 with the appropriate server host and port if necessary)



3. Click on the **Login** link on the **top right** to login as a user. Each user may have access to different apps depending on permissions.

Username Password Login	
-------------------------------	--

Some sample logins are provided in a standard installation as follows:

Administrator:

Username: admin

Password: admin

Normal User (Employee):

Username: cat

Password: password

Normal User (Manager):

Username: clark

Password: password

4. Use the search box to quickly find an app. For example, type **claim** to look for the sample

HR Expenses Claim App

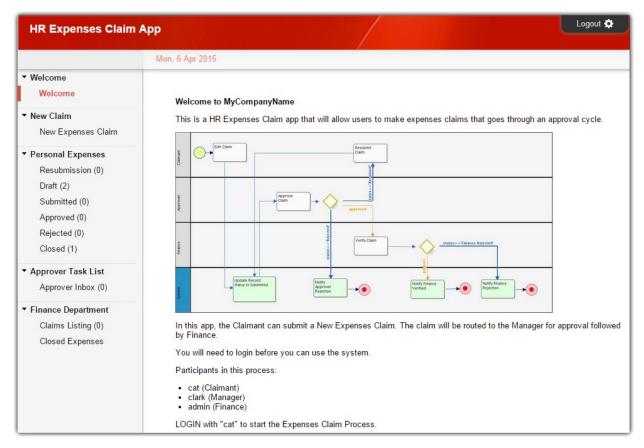
App Center		Q cla	×
	Provide the started?	Published Apps	Marketplace

5. Clicking on the app icon will launch that app in a separate browser window.

3.2 Introducing Userviews, Forms, Lists and Processes

1. A **user view** is a front-end UI for an app. An app may contain 1 or more user views. User views can have different themes, and consist of menu pages that contain forms, lists, reports, HTML content, etc.

HR Expense	s Claim App
Mon, 6 Apr 2015	Logout
Welcome Welcome New Claim New Expenses Claim Personal Expenses Resubmission (0) Draft (1) Submitted (0) Approved (0) Rejected (0) Closed (1) Approver Task List Approver Inbox (0) Finance Department Claims Listing (0) Closed Expenses	<text><text><figure><text><text><text></text></text></text></figure></text></text>
	Powered by Joget



Forms are used to capture and present information. Many form elements are available, ranging from a simple textfield to more complex types such as form grids. In the sample HR Expenses Claim App, login as a normal employee (Cat) and click on the New Expenses Claim to see an expenses claim form. Fill up the form and click on Complete to submit.

	Mon, 6 Apr 2015		·		
Welcome Welcome	Expense App	roval Process - Edit Cl	aim		
New Claim	Expense App	Ioval Flocess - Eult Cl	aiii		
New Expenses Claim	Expense Claim Details				
Personal Expenses	Expense Clair	n Details			
Resubmission (0)	Ref	REF-00000	5		
Draft (1)	Title *	April 2015			
Submitted (0)	THE	April 2015			
Approved (0)	Submitted By	Cat Grant			
Rejected (0)					
Closed (0)	Note: The title sl	hould appear in this format, e	xample, Jan 06		
Approver Task List					
Approver Inbox (0)	-				
	Expenses Item	(s)			
	Date	Category	Purpose	Amount	
	04/06/2015	Mileage	Meeting with Client	\$ 30.00	28
		E	DI NI OR I	\$ 80.00	28
	04/06/2015	Entertainment	Dinner with Client	ψ 00.00	
	04/06/2015	Entertainment	Dinner with Client	00.00	
		Entertainment			
		Entertainment	Total Amount \$ 110		
			Total Amount \$110		
	•				

Datalists (or Lists for short) are tables or reports in tabular format, providing features such as paging, sorting, filtering and exporting. Logout and login as Cat's manager Clark, then click on Approver Inbox in the menu. The page displays a datalist showing the task inbox, in this case Clark will see a pending claim from Cat.

HR Expenses Claim App			/			Logout 💠
	Mon, 6 Apr 2015					
▼ Welcome Welcome						10 V Show
▼ New Claim	Title	Ref	Submitted By	Total	Date Created	
New Expenses Claim	April 2015	REF-000005	Cat Grant	\$ 110.00	2015-04-06 15:19:06.0	Approve Claim One item found.
 Personal Expenses Resubmission (0) Draft (0) Submitted (0) Approved (0) Rejected (0) Closed (0) Approver Task List 					▣] CSV Ձ, E:	xcel 🔚 XML 🛃 PDF
Approver Task List Approver Inbox (1)						

4. The task created shows a **workflow process** in action, where a task is routed to the appropriate person. The process may also involve integration to external systems such as sending emails or updating external databases. As Clark, click on the **Approve Claim** link to view and approve Cat's submission.

HR Expenses Claim	Арр				Logout 🌣
	Mon, 6 ΑβΑ2013 ⁰¹⁵	Mileage	Meeting with Client	\$ 30.00	
Welcome Welcome Velcome New Claim New Expenses Claim	04/06/2015 Receipt	Entertainment	Dinner with Client	\$ 80.00	
 Personal Expenses Resubmission (0) Draft (0) Submitted (0) Approved (0) Rejected (0) 	Approval Status *	Approved Approved Resubmit			
Closed (0) Approver Task List Approver Inbox (1) 	Approver Approver Commen	nts			
	Save As Draft	Complete			

5. The HR Expenses Claim App demonstrates a process driven app. To see a different type of app in action, launch the Simple CRM in the App Center. This app is focused on data management, providing a no-frills approach to manage accounts, contacts, opportunities and cases.

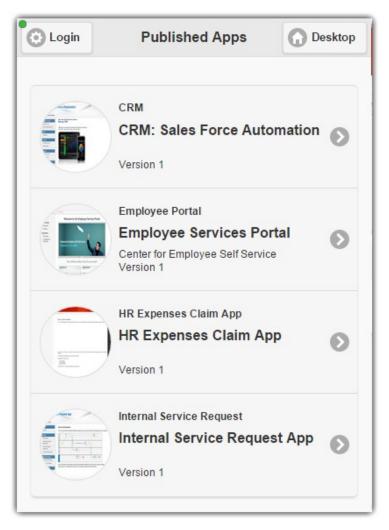


6. The **Simple CRM** also demonstrates more advanced reporting capabilities such as tabular management reports and graphical charts.

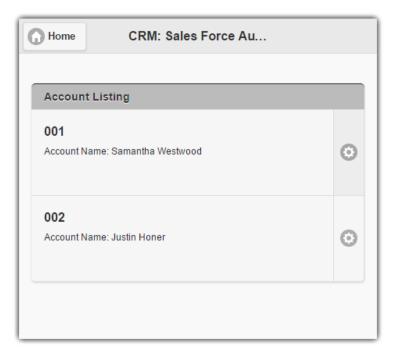
imple CRM 🏾 🏶 Home 🔍 9	o Shortcut 🔻	/							Logou
	All O	pportuniti	es						
O Home									
Welcome	This is	the administrat	tor screen to m	anage all the opp	portunities ent	tered into the CRM.			
Admin and Reports			_	-				-) (
News Feed		10 [Status	- Stage	-	Probability	Account	Title	
All Accounts (1)				Projected Date	From		To		Shor
All Contacts (0)									
All Opportunities (2)		Title	Owner	Account	Amount	Status [‡] Stage	Probability	Projected Date	\$
All Case Reports (0)		Opportunity 2	cat	Client 1	500000	Pending		2013-06-20	🕑 Edit
Monthly Sales Forecast		Opportunity 1	cat	Client 1	1000000	Pending	50%	2013-05-15	C Edit
Yearly Case Status		ifferend -		(2 Berrie fr	und, displaying all its
Accounts & Contacts								a densito	and supering all to
The second s								🖲 CSV 🗟 Excel	
My Accounts (1) New Account									
My Opportunities (0) New Opportunity	s Shortcut ≠								Logout
New Opportunity	_	thly Sales	Forecast						Logout
New Opportunity	Mont			monthly sales fo	recast.				Logout
New Opportunity mple CRM	Mont			monthly sales fo		ly Sales Foreca	ast		Logout
New Opportunity	Mont This is			monthly sales fo		ly Sales Foreca	ast		Logout
New Opportunity	Mont This is	a report that sh		monthly sales fo		ly Sales Foreca	ast		Logout
New Opportunity	Mont This is	a report that sh		monthly seles fo		ly Sales Foreca	ast		Logout
New Opportunity	Mont This is	a report that sh		monthly sales fo		ly Sales Foreca	ast		Logout
New Opportunity	Mont This is	a report that sh		monthly sales fo		ly Sales Foreca	ast		Logout
New Opportunity	Mont This is	a report that sh 000,000 - 750,000 - 500,000 -	hows the year's		Month				
New Opportunity	Mont This is	a report that sh 000,000 - 750,000 - 500,000 - 250,000 -			Month	ly Sales Foreca	ast 8 9		Logout
New Opportunity	Mont This is	a report that sh 000,000 - 750,000 - 500,000 - 250,000 -	hows the year's		Month	5 6 7		10 11	
New Opportunity	Mont This is	a report that sh 000,000 - 750,000 - 500,000 - 250,000 -	hows the year's		Month	5 6 7 Month		10 11	
New Opportunity	Mont This is	a report that sh 000,000 - 750,000 - 500,000 - 250,000 -	hows the year's		Month	5 6 7 Month			
New Opportunity	Mont This is	a report that sh 000,000 - 750,000 - 500,000 - 250,000 -	hows the year's		Month	5 6 7 Month		10 İ1	

3.3 Introducing the Mobile Edition

- 1. When accessing a Joget app from a mobile web browser (smartphone or tablet), the user will automatically be shown the mobile edition.
- 2. The mobile userview is presented in a mobile user experience which includes the look and feel, page transitions, some offline capabilities, etc.



3. Datalists are automatically converted from a tabular format into a more suitable mobile list format.



4. Forms are also automatically formatted accordingly.

Home	CRM: Sales Force Au
Accou	nt Details
Account	ID *
001	
Account	Name *
Saman	tha Westwood
Addres	ss Details
Address	
City	
State	
Country	
	Submit
	Cancel

4. Designing an App

4.1 Introducing the improved Admin Bar

- 1. The **Admin Bar** is first introduced in Joget v4 that provides administrators a consistent (and convenient) way of managing apps and users. In Joget v5, we take it further and improved it making it even more intuitive than ever.
- 2. In the **App Center**, login as an administrator. The default administrator credential in a standard installation is as follows:

Administrator:

Username: admin

- Password: admin
- 3. The Admin Bar is a black panel that appears on the right of the window.



4. At any time, clicking on the **Joget logo** on the top right will bring you back to the App Center, while clicking on any of the other buttons will open an **overlay** over the current window.

📥 Profile (admin)	🕒 Logout 🛛 🕜	$\boldsymbol{\Theta}$
serview	📰 🥲 Refresh	All Apps
s Claim App	Launch	Monitor CC Settings

5. Try clicking on **All Apps**. This opens an overlay showing all the published and unpublished apps.

JC C Design Apps	Design New App Import App		8
	Published Apps	Unpublished Apps	a A BA
All Apps	Q	Q	
	CRM	Version 1	
	Employee Portal	Version 1	Mor
	HR Expenses Claim App Internal Service Request	Version 1 Version 1	Set

6. To close the overlay window, click on the large X button on the top right.



4.2 Designing a New App

- 1. In the Admin Bar, click on All Apps.
- 2. In the All Apps window, click on the **Design New App** button along the top.



3. Key in the details of the new app.

Design New App	
App ID	*
App Name	*
Save Cancel	

App ID: A short and unique ID for each app (no spaces) e.g. travelRequest

App Name: A descriptive name e.g. Travel Request

4. Click on Save. The app will be created and you will be brought to the App design page.

4.3 Designing a Form

1. In the App design page, click on the Create New Form button along the top.

ot 🌍	Design App: Travel Request Version 1 Not Published	Create New Form	Create New Datalist Lists Q	Create New Userview Userview Q	📰 🤁 Refresh	All Apps Users
	1 Forms & UI 2 Processes					Monitor Ø\$ Settings
	3 Properties & Export					
	All Apps					

2. Key in the details of the new form.

Form ID: A short and unique ID for each form (no spaces) e.g. travelRequestForm

Form Name: A descriptive name e.g. Travel Request Form

 Table Name: The database table name to store the form data e.g. travel_requests. Note

 that different forms can share data by pointing to the same table name.

10	C Design Ap	Create New Form	Create New Datalist	Create New Userview	📰 🤁 Refresh
Ę	Travel Request	Create New Form			
		Form Details			
	1 Forms & UI	Form ID	travelRequestForm *		
l	2 Processes	Form Name	Travel Request Form *		
l	3 Properties &	Table Name	travel_requests *		
I		Description			
l	G All Apps				
U					
I					
l					
1		Save Cancel			

3. Click on **Save** to save the form and launch the **Form Builder** in a **new window**. If your browser blocks the popup, click on the form name to launch it.

⊖ _{joget} FORM BU	ILDER	
Design Form Design and Layout	Properties Preview Save Form Form Properties Preview Form Save Form	Generate App App Generator
Basic Hidden Field Text Field Password Field Text Area Select Box Check Box Radio Date Picker File Upload Subform Custom	Section Drop Fields Here ADVANCED: JSON Definition	
Grid	© Joget Workflow - Joget Inc. All Rights Reserved.	

- 4. The first step in the Form Builder is the Design Form page. On the left is the palette containing available form elements. In the middle is the canvas containing one or more sections, and each section may contain one or more columns.
- 5. When you mouseover a section header (or any form element), buttons appear giving you options.

Section	Add Section Add Column Edit Section Delete Section
	Drop Fields Here

6. Click on **Edit Section**. This opens a **Property Editor** showing properties that you can modify. Each form element has different properties that can be configured.

⊖ _{joget} ∣ FO	RM BUILDER	
Design Form Design and La	n Proventies Preview Save Property Editor	Cen [close]
Basic	Edit Section	
Text Field	Edit Section > Data Binder > Advanced Options ID * section1	
Password Fie	Label Section	
Select Box		
Check Box		
Date Picker		
File Upload		
Custom		
Grid		
	< Prev Next >	OK Cancel

- 7. Click on the **OK** at the bottom to save the property changes.
- 8. You can add sections using Add Section, and move sections around by dragging.
- 9. **Drag** form elements from the palette into any section.

Design Form Design and Layout	Properties Preview Save Form Save Form	
Basic o Hidden Field	Travel Request Details	
Text Field	Drag This Column	
Password Field	Travel Date (From)	
🖢 Text Area	Travel Date (To)	
🗹 Select Box	Tethárea	
Check Box	TextArea	
🛃 Radio		
Date Picker	ADVANCED: JSON Definition	
🖌 File Upload		
Subform		
Custom		
Grid	© Joget Workflow - Joget Inc. All Rights Reserved.	

10. Hover any form element to see the **Edit** and **Delete** options. Click on Edit to modify the form element properties.

Travel Request Details	(Add Dection) (Add Coldin	nn Edit Section Delete Section
No	Drag This Column	Edit Column
Name		
Travel Date (From)		
Travel Date (To)		
TextArea	Edit Delete	
DVANCED: JSON Definition		

11. At any time, you may preview the form by clicking on the large Preview button at the

top.

12. Once you have finished designing the form, click on the large **Save** button at the top and you will receive confirmation that the form is saved. You may then continue to design the form, or close the Form Builder window.

4.4 Designing a List

1. In the App design page, click on the Create New Datalist button along the top.

🕑 Design App:	Create New Form		Create New Datalist	Create New Userview	📰 🥲 Refresh
Travel Request	Forms	L	ists	Userview	
Version 1 Not Published	Q	(Q	Q	
1 Forms & UI	Travel Request Form	travel_requests			
2 Processes					
3 Properties & Export					
G All Apps					

2. Key in the details of the new list.

ID: A short and unique ID for each list (no spaces) e.g. travelRequestList Name: A descriptive name e.g. Travel Request List

Description: Optional description.

- 3. Click on **Save** to save the list and launch the **List Builder** in a **new window**. If your browser blocks the popup, click on the list name to launch it.
- 4. The first step in the List Builder is the **Source** page. Here, you can select the source of the data, called **Binders**.

$\boldsymbol{\Theta}_{joget} \mid DATALIST$	BUILDER							
Source Datasource	Design Design Columns		Properties Main Properties	\geq	Preview Preview Datalist	\geq	Save Datalist	
Select Binder								
Select Binder								
Select Source of Data (Binder)								
					٩,			
	A	dvanced Fo	orm Data Binder					
	F	orm Data B	linder					
	J	DBC Datalis	st Database Binder					
								OK

5. Select **Form Data Binder**. This binder populates a list based on data captured from Joget forms. Once you select the binder, choose a form then click **OK** at the bottom.

⊖ _{joget} DATALIST BUIL	.DER		
Source Design Datasource Design	gn Properties n Columns Main Properties	Preview Save Save Datalist Save Datalist	
Select Form			
Select Binder > Select Form			
Form		*	
Extra Filter Condition		Q	
	Travel Request Form		
		77 77	
< Prev Next >		OK	-

 This brings you to the **Design** page. Here, all available columns provided by the binder are listed in the **palette** on the **left**. Drag the desired columns into the **canvas** in the **middle**.

Θ_{joget} DATALIST Source Datasource	BUILDER Design Design Columns	Properties Main Properties	Previe Preview		Save Save Datalist	
Columns / Filters			Drag F	ilters Here		
Z Date Modified						
ID ID			Drag Columns Here			Drag Row Actions Here
🗾 Name	Name	Travel Date (From)	Travel Date (To)	Remark	Date Created	
Remark Travel Date (From) Travel Date (To)	 Sample Data 1 Sample Data 2 Sample Data 3 Sample Data 4 Sample Data 5 Sample Data 6 	Sample Data 1 Sample Data 2 Sample Data 3 Sample Data 4 Sample Data 5 Sample Data 5	Sample Data 1 Sample Data 2 Sample Data 3 Sample Data 4 Sample Data 5 Sample Data 6	Sample Data 1 Sample Data 2 Sample Data 3 Sample Data 4 Sample Data 5 Sample Data 6	 Sample Data 1 Sample Data 2 Sample Data 3 Sample Data 4 Sample Data 5 Sample Data 6 	
Actions Hyperlink Delete			Drag A	ctions Here		
	ADVANCED: JSON D	efinition				
		© Joget Workflow - Joget I				

- When you hover over a column, buttons appear giving you options to edit or delete the column. Clicking on **Properties** opens a Property Editor showing properties that you can modify.
- 8. At any time, you may preview the list by clicking on the large **Preview** button at the top.
- 9. Once you have finished designing the list, click on the large Save button at the top and you will receive confirmation that the list is saved. You may then continue to design the list, or close the List Builder window.

4.5 Designing a Userview

1. In the App design page, click on the Create New Userview button along the top.

🕑 Design App:	Create New Form		Create New Datalist		Create New Userview	🔳 🤁 Refresh
Travel Request	Forms		Lists		Userview 6	
Version 1 Not Published	Q		Q]	Q]
1 Forms & UI	🖹 Travel Request Form	travel_requests	🛗 Travel Request List			
2 Processes						
3 Properties & Export						
G All Apps						

2. Key in the details of the new userview and click on the Save button.

ID: A short and unique ID for each userview (no spaces) e.g. travelPortal

Name: A descriptive name e.g. Travel Portal

Description: Optional description.

7 Design App:	Create New Form	Create New Datalist	Create New Userview
Version 1 Not Create 1	Jew Userview		*
Userviev	Details		
Forms & UI		travelPortal *	
Processes Name		Travel Portal *	
Properties & Description	on		
All Apps			
Save	Cancel		
Save	Cancer		

- 3. Click on **Save** to save the userview and launch the **Userview Builder** in a new window. If your browser blocks the popup, click on the form name to launch it.
- 4. The first step in the Userview Builder is the Design Userview page. On the left is the palette containing available menu elements. In the middle is the canvas containing the userview header, footer and one or more menu categories.

€ _{joget} USERVIEW BUILDER			
Design Userview Design Your Menu	Settings Theme & Permission Preview Userview Save Userview		
Basic Form HTML Page Inbox Link Link List	Travel Portal Click to edit #date.EEE, d MMM yyyy# Menu <i class="icon-home"></i> Home	Logout	
Run Process Enterprise CRUD Data List Inbox Import Menu JasperReports SLA Report	Drop menu item here Welcome	<content></content>	
SQL Chart	Powered by Joget ADVANCED: JSON Definition		
© Joget Workflow - Joget Inc. All Rights Reserved.			

- When you hover over the canvas Menu, a button will appear giving you the option to Add Category.
- 6. You can click any category name to edit it, and drag categories up and down.
- 7. Drag menu elements from the palette into any category.
- 8. Hover over any category or menu element to see the available options.

⊖ _{joget} USERVIEW BUILDER				
Design Userview Se Design Your Menu The		view Save Save Save Userview		
Basic Form HTML Page	Click to edit		Logout	
Inbox	Menu	Add Category)	Lugout	
Link	<i class="icon-hর্নিটি" td="" িব<=""><td>Permission Delete Category</td><td></td></i>	Permission Delete Category		
List		menu item here		
Run Process Enterprise CRUD Data List Inbox Import Menu	Welcome	(Properties) (Delete Menu)	<content></content>	
JasperReports				
SLA Report				
SQL Chart	Powered by Joge	t		
	ADVANCED: JSON Definit	ion		

9. Click on **Properties** button to modify each menu element's properties.

	ERVIEW BUILDER		_
Design Uservie Design Your Menu	Edit HTML Page		
Basic	Luttime rage		
Form	Custom ID	welcome	
HTML Page	Label *	Welcome	
Inbox	Content *	🛷 🚥 🤊 (M 👗 🐚 🔠 🐫 🗄 🖅 🏣 🕸	
List		B I U ARC A + 20 + ■ ■ ×, × ⁱ ⊡ ⊙ Ω Heading 1 • Font Family • Font Size • 2 46 ∞ ∞ ∞ 2 ■	
Run Process			
Enterprise		Apps and Workflow Made Simple	
CRUD		Build apps, not just processes!	
Import Menu		Create full-fledged apps with support for data records management.	
JasperReports		Increased Efficiency and Productivity Faster and more consistent completion of manual processes, and with minimal errors.	
SLA Report		▼ Path: h1	
SQL Chart		OK Cancel	
ן נ	ADVANCED: JSON Definition		

- 10. At any time, you may preview the userview by clicking on the large **Preview** button at the top.
- 11. Once you have finished designing the userview, click on the large **Save** button at the top and you will receive confirmation that the userview is saved. You may then continue to design the userview, or close the Userview Builder window.
- 12. Before a userview can be accessed by a normal user, the app needs to be published. To do that, click on the **Not Published** or **Versions** link on the left in the App design page.

Design App: Travel Request Version 1 Not Published	Create New Form	
1 Forms & UI	🖹 Travel Request Form	travel_requests
2 Processes		
3 Properties & Export		
All Apps		

13. A popup displays all versions of the app. Select the radio button next to the latest version and click on the **Publish** button. Once an app is published, its userviews will be available in the App Center.

🕑 Design Ap	p:	Create New Fo	rm	Create New Datalis	st	Create New Userview	
Travel Request	Mar	nage App Version					×
		Version	Published	Notes	Date Created	Date Modified	
1 Forms & UI	۲	1			2015-04-07 18:39:19.0	2015-04-07 18:39:19.0	
2 Processes							- 1
3 Properties &							
3 All Apps							
	10	▼ 4 Page 1	of 1 🕨 🔰 🤹 Dis	splaying 1 to 1 of 1 items			
	_			_			
	Nev	v Version Publish U	npublish View Delete				

4.6 Designing a Process

- 4.6.1 Introducing the new Process Builder
 - In the App design page, click on the Processes menu on the left, and then on the Design Processes button along the top.

Design App: Travel Request Version 1 Published	Design Processes Update via Saved XPDL
1 Forms & UI	
2 Processes	
3 Properties & Export	
G All Apps	

 The Process Builder is one of the main highlights in Joget v5 replacing the older Workflow Designer.

Participant Activy Subfor Subfor	Process 1	vel Request		O Undo	C Redo Q (🎗 🛈 Launch Workflow Designer 🏟 Debug	📤 Deplo
Activity Tool Subflow	ninant						
Active Active Tool Suffer	apant						
Activity Tool Rector Sunforw Sinforw Sinforw							
	<u> </u>						
	tivity CO						
	Avity 0						
	301						
	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
	aute a constant a constant						
	flow						
	fait.						
	A state in the initial stat						
▼							

3. There are 3 main areas in the Process Builder. On the top (red), the **Navigator** panel contains a list of processes together with the action buttons on the right.

On the left (blue), this is where the element palette is placed by default. One can move it around to suit one's style.

The main panel in the middle is the **Graph** area (green) that contains the actual process diagram.

	trave Proce	Travel Red	quest				obnU C	C Redo Q	🍳 🛈 Laun	ch Workflow I	Designer •	🌣 Debug	
Participant													
	1 2												
	Participant												
	8												
	Ξ.												
Activity	L L												
)													
Tool	1 2 2 2												
Route													
House													
\sim													
Subflow													
Start													
End													

4. Click on the edit icon under the process name in the Navigator. This brings up the properties dialog where you can edit the process details.

-	elRed	1		 	 99	 •			
XProc	ess 1	- 6	•						
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	è ·								
	φ :								
	1.1								
_	1	1. A	- C.						
5	1								
8	1.1.1.1								
articipaı	1.1		-						
	1.1.1.1								
	1.1								
E	1.1.1.1								
on on	1.1								
<u> </u>	11111								
	1.1.1.1								
	1.1.1.1								

Process Properties			
Process Properties > Sub	flow Properties > SLA Options		
ID *	brocess1		
Name *	Process 1		
Workflow Variables	Variable ID		
	status	0 0 <mark>0</mark>	
	•		

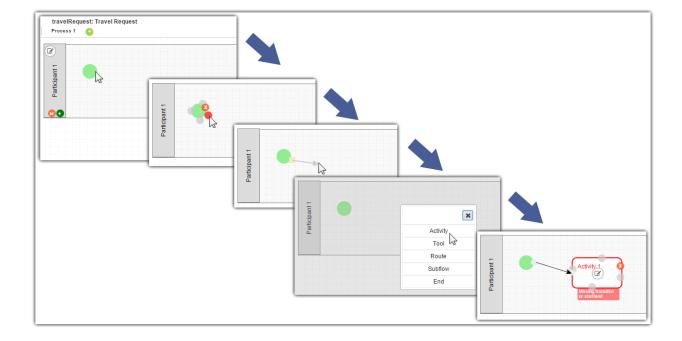
5. Add **Participants** into the process by clicking on the green add button under current Participant. Participants represent users or roles that perform a certain task. Click on the edit button while hovering over the participant name to set its properties.

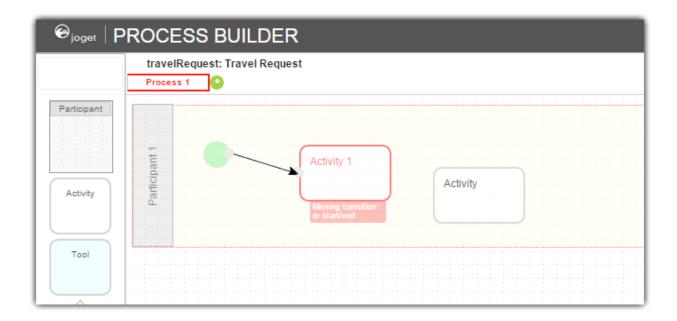
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201																		
140	111111	1	<u> </u>															
Participant	1.1																	
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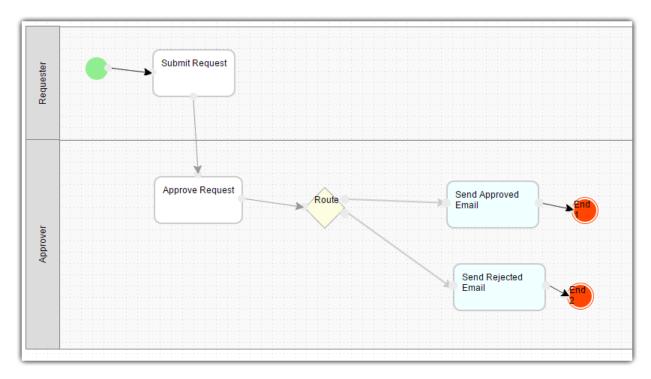
6. Add **activities, tools** and **routes** into the process diagram. Activities represent forms which require human interaction. Tools represent system or automated tasks, and routes

are decision points. Use transitions to link them all together in a flow.

You may either expand your design by connecting from existing nodes or by dragging the required nodes from the element palette into the process diagram.





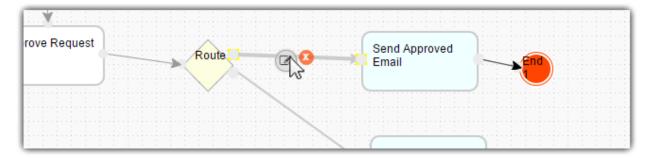


7. To handle routing (for example approval conditions), use **Routes** in combination with workflow variables. To create a workflow variable, double click on the process name in the Navigator to bring up the process dialog. Click on the first small icon under the Workflow variable heading, and key in the ID of the variable e.g. status.

Process Properties		
Process Properties > Sub	flow Properties > SLA Options	
D *	brocess1	
Name *	Process 1	
Workflow Variables	Variable ID	

8. Once a workflow variable has been defined, hover over on a transition and click on the

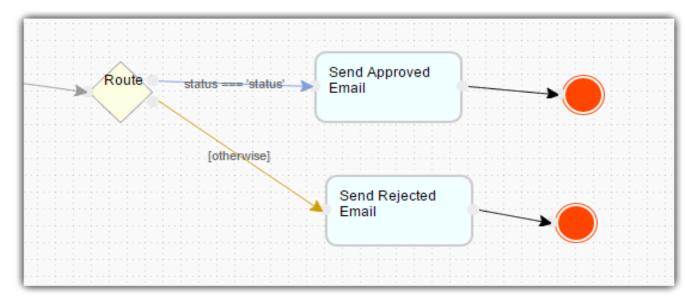
edit icon to open the transition dialog.



 In the transition dialog, select type Condition, select the variable status in Variable and key in Approved into the Value field. This means that this transition will occur if the value of status is "Approved".

Transition Properties					
Name					
Style	Straight				
	Orthogonal				
Туре	Condition		W		
Use Condition Helper					
Use Condition Helper	Yes		Ψ		
Conditions *	Join	Variable	Operation	Value	
	AND 🔻	status 🗙 💌	Equal To 🔹	Approved	000
	•				
					OK Cancel

10. Set the transition type to **Otherwise** to indicate that it is the default path to take when other conditions are not met. The Otherwise transition is shown in orange. An example of a simple routing process is as shown below:



- 11. Ensure that the process has a proper **Start** and **End**. Click on **Deploy** to deploy the process to the server.
- 4.6.2 Mapping Participants to Users
 - 1. Once a process has been successfully deployed, return to the previous tab/window. The new process diagram will be generated after you click on **OK**. Joget will interpret the process diagram and load the process details.

 Forms & UI Processes Properties & Export All Apps 	
Properties & Export All Apps	
All Apps	
All Apps	
Show Additional Info	
Map Participants to Users Map Activities to Forms Map Tools to Plugins Variable List	
This is the list of participants defined in the Workflow design. Requester ID : requester	Add/Edit Mappin

2. Participants defined in the process are listed in the **Map Participants to Users** tab, and you can map each participant to specific people. Click on **Add/Edit Mapping** to map to specific groups, users, organization chart, etc. If no mapping is done for a participant, any tasks are automatically defaulted to the current user instead.

Maj	p to User or Group	Map to Org Chart Map	to Workflow Variable Ma	ap to Plugin	
Ma	p to Group Map to	User			
ilter iearcl	By Organization	▼			
	Username	First Name	Last Name	Email	
	admin	Admin	Admin		
	cat	Cat	Grant		
	clark	Clark	Kent		
	david	David	Cain		
	etta	Etta	Candy		
	jack	Jack	Drake		
	julia	Julia	Kapatelis		
	roy	Roy	Harper		
	sasha	Sasha	Bordeaux		
	tana	Tana	Moon		
10	▼ 	of 2 🕨 🔰 🤹	Displaying 1 to 10 of 12 items		

- 4.6.3 Mapping Activities to Forms
 - 1. In the **Map Activities to Forms** tab, all process activities are listed.
 - 2. For each activity, click on Add/Edit Form to select from a list of current forms in the app.

Map Activities to For	ms - Submit Request ((submitRequest)		×
Map to a Form Exter	nal Form			
Search				
Form Name	Table Name	Date Created	Date Modified	
Travel Request Form	travel_requests	2015-04-07 18:44:44.0	2015-04-07 20:45:30.0	
10 🔻 🚺 🖣 Page 1	of 1 🕨 🔰 🦈	Displaying 1 to 1 of 1 items		
Create New Form				

- As an example to handle an approval process, click on Create New Form to create a new Approval form. In this new form, add a Subform that displays the original submitted form, and radio buttons to capture the approval status.
- 4. Configure this subform to select the original request form.

⊖ _{joget} ∣ FORM BL	JILDER					
Design Form Design and Layout	Properties Form Properties	Preview Preview Form		Save Save Form		
Basic						
Hidden Field	Section					
Text Field	Subform		Drag This Co	lumn		
Password Field						
🖢 Text Area	ADVANCED: JSON Defini	lion				
Select Box		roperty Editor				
Check Box		Edit Subform				
Radio		Edit Subform > UI > Data &	Binder			
Date Picker		ID *		field1		
File Upload		Label		SubForm		
Subform		Form *		Travel Re	quest Form	× •
Custom						

5. Configure the status radio button to have Approved and Rejected options.

		perty Editor				[cl
Travel Request Details	1910	peny Editor				
Name		Edit Radio				
Travel Date (From)		Edit Radio > Advanced Options				
Travel Date (To)		ID *	approval			
Remark		Label	Approval			
		Options (Hardcoded)	Value	Label	Grouping	
			Approved	Approved		000
			Rejected	Rejected		000
adio 🔍 C	Option		0			
		Or Choose Options Binder		Ŧ		
10105D-10011D-5-7						
VANCED: JSON Definition						
© Joget Workflow -	- Joget In					
		< Prev Next >				OK Cancel

 For routing purposes, an important setting in the radio button is the mapping to a workflow variable under Advanced Options. In this case, setting the mapping to status means that the value will be stored in the status workflow variable.

Advanced Options		
Edit Radio > Advanced Options		
Dependency		
Field ID to control available options based on Grouping		
UI		
Read-only	0	
Display field as Label when read-only?		
Workflow		
Workflow Variable	status	
Workflow Variable	status	

7. After all the configuration, the new approval form should look similar to the following screenshot:

Basic Image: Hidden Field Image: Travel Approval Image: Travel Request Details Image: Travel Request Details Image: Travel Date (From) Image: Travel Date (From) <	Design Form Design and Layout	Properties Form Properties	Preview Preview Form	Save Save Form	
Text Field Password Field Text Area Travel Request Details Name Travel Date (From) Travel Date (From) Travel Date (To) Travel Date (To) Radio Date Picker File Upload Subform Approval Approved Approved		Travel Approval	Dran This C	aluma	
Password Field Name Text Area Select Box Check Box Check Box Radio Date Picker File Upload Approval Approved Rejected ApvAnCED: JSON Definition		Travel Request Det			
Select Box Check Box Check Box Radio Date Picker File Upload Subform Approval Approval Approved Rejected					
Check Box Remark Remark Approval Approved Rejected					
Date Picker File Upload Subform Approval Approved Rejected	Check Box				
File Upload Approval Approved Rejected Subform ADVANCED: JSON Definition					
Subform Approval Approved Rejected Custom ADVANCED: JSON Definition				<u>_</u>	
ADVANCED: JSON Definition		Approval	Approved	C Rejected	
	Custom	ADVANCED: JSON Definition			
Grid	Grid 🗸				

- 4.6.4 Mapping Tools to Plugins
 - 1. In the **Map Tools to Plugins** tab, you can map tools defined in the process to plugins.

Submit Request				
Aprove Request	Roule 1 statur statur	Send Approved Email	•	
now Additional Info Map Participants to Users	Map Activities to Forms	Map Tools to Plugin	s Variable List	
		Map Tools to Plugin	s Variable List	
Map Participants to Users		Map Tools to Plugin	s Variable List	Add/Edit Plugi

2. For each tool, click on Add/Edit Plugin to select and configure a plugin.

Plugin Name	Plugin Description	Plugin Version	
Bean Shell Tool	Executes standard Java sy	3.0.0	
Counter Increment Tool		3.0.0	
Csv Import Tool		3.0.0	
Database Update Tool	Executes SQL INSERT an	3.0.0	
Email Tool	Sends email message to ta	3.0.0	
Export Form Email Tool	Export form to pdf and sen	3.0.0	
Form Data Update Tool	Used to update form data i	3.0.0	
Id Generator Tool		3.0.0	
Json Tool	Reads a JSON feed URL, a	3.0.0	
Preset Form Data Tool	Create or fill form data in a	3.0.1	

- 4.6.5 Test Driving the Process
 - 1. To perform a test run on a process, click on the **Run Process** button along the top of the App design process page.

🕑 Design Ap	Design Process	Update via Saved XPDL Run Process	
	Travel Request Process - Subm	it Request	×
Version 1 P	Travel Request Details		
2 Processes	Name		
3 Properties	Travel Date (From)		
G All Apps	Travel Date (To)		
	Remark		
	Save As Draft Complete		

- 4.6.6 Incorporating the Process into the Userview
 - 1. In the App design page, click on the name of an existing userview to launch the Userview Builder.
 - 2. Drag a **Run Process** element into a menu category. This menu element allows the user to start a process from the userview.

Design Userview Design Your Menu	Settings Preview Salve Theme & Permission Preview Userview Save Userview	
Basic Form HTML Page Inbox	Travel Portal Click to edit #date.EEE, d MMM yyyy#	Logout
Link List Run Process Enterprise	Menu (Add Category) <i class="icon-home"></i> Home Drop menu item here Welcome	
CRUD Data List Inbox Import Menu JasperReports	Applications Edit Label Permission Delete Category) Drop menu item here List All Run Process Propaties Delete Menu	
SLA Report SQL Chart	Powered by Joget	

3. Click on **Properties** of the Run Process element and select the process to run.

Edit Run Process		
Edit Run Process > Redirection > Advance	d	
Custom ID		
Label *	Submit Travel Request	
Process *	Travel Request Process (travelRequestProcess) × *	
Run process without confirmation screen?		
Show in popup dialog?		
< Prev Next >		OK Cancel

4. Drag an **Inbox** element into a menu category. This menu element provides the user with an inbox to manage their assigned workflow tasks.

Form	Travel Porta Click to edit	I
HTML Page	#date.EEE, d MMM yyy	v#
Inbox	Menu	Add Category
Link	<i class="icon-home"></i> Ho	ome
List	Drop menu ite	em here
Run Process	Welcome	
terprise	Applications Edit Label Pe	ermission Delete Category
CRUD	Drop menu ite	em here
Data List Inbox	List All	
Import Menu	Submit Travel Request	
JasperReports	Inbox (Properties Delete Menu
SLA Report	· · · · · · · · · · · · · · · · · · ·	N2.
SQL Chart		

5. Save the userview, and you will be able to run and perform assigned tasks in the published userview.

Travel Portal 🛛 希 Home	
Home Welcome Applications List All	Travel Request Process - Submit Request Travel Request Details Name
Submit Travel Request	Travel Date (From)
	Remark
	Save As Draft Complete

5. Managing Apps using the Quick Edit Mode

- 1. **Quick Edit Mode** is a new feature in v4 that allows administrators to identify forms, lists and menus directly from the front-end user view.
- 2. If you are logged in as an administrator, you will see a minimized **Admin Bar** on the right with buttons to toggle Quick Edit Mode **On** or **Off**.

avel Portal 🛛 🏾 🕯 Hor		Logout
Home Welcome	Travel Request Process - Submit Request	
pplications List All	Name	
Submit Travel Request nbox	Travel Date (From)	
	Remark	
	Save As Draft Complete	
	Powered by Joget	

3. Once Quick Edit Mode is enabled, elements within the userview page are highlighted with green Quick Edit buttons. Clicking on the button will launch the respective Builder in a new window.

Java VM Heap Used: 191MB, Total: 295MB, Max: 494MB		Logout
Menu: Travel Portal	227ms Page: Submit Travel Request Travel Request Process - Submit Request Form: Travel Request Form	
Applications	Travel Request Details	
List All Submit Travel Request	Name	
Inbox	Travel Date (From)	
	Travel Date (To)	
	Remark	
	Save As Draft Complete	
	Powered by Joget	

6. Generating Apps from a Form Using the App Generator

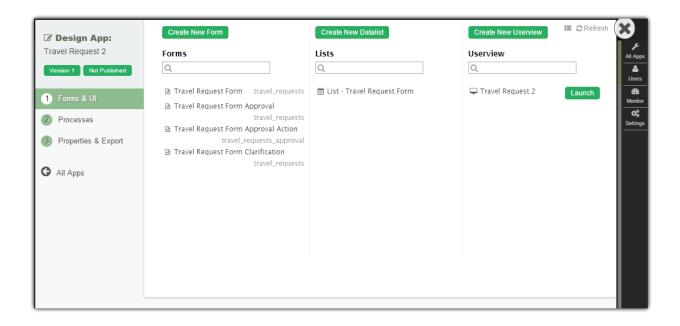
- The App Generator is a new feature in v4 that greatly accelerates the building of an app. Using the App Generator, you can generate lists, CRUD (Create-Read-Update-Delete), a generic approval process and a Twitter Bootstrap themed userview directly from a form.
- 2. To use the App Generator, click on the large **Generate App** button on the top right of the Form Builder. Make sure that the form is saved first.

⊖ _{joget} ∣ FORM B	UILDER				
Design Form Design and Layout	Properties Form Properties	Preview Preview Form	Save Save Form		Generate App App Gen
Basic Alden Field	Travel Request De	tails			
Text Field	Name		Drag This Column		
Password Field	Travel Date (From)				
🖢 Text Area	Travel Date (To)				
Select Box	Remark				
Check Box					
Radio	na Maranananananananananananananananananana			สารการการการการการการการการการการการการกา	
Date Picker	ADVANCED: JSON Definition				
File Upload					
Subform					
Custom					
Grid 🗸	l ©	oget Workflow - Joget Ind	:. All Rights Reserved.		

3. The App Generator dialog will offer options to Generate List, Generate CRUD and Generate Approval Process. Select each one and click on **Generate**. You may try to click on **Advanced Generation** to refine its options.

i ❷ _{joget} ∣ F	ORM BUILDER	
Design Fo Design and I Basic	App Generator	Senerator
Hidden Field	Generators:	
Text Field	Generate A List More Info Advanced Generation	
Text Area	Generate CRUD More Info Advanced Generation	
Check Box	Generate Process - Approval Process ● ⊕ More Info ≫ Advanced Generation	
Radio	Generate	
File Upload		
Custom		

4. Once the generation is complete, reload the App design page and you will see a number of auto generated forms, lists, userviews and a process.



Design App: Travel Request 2 Version 1 Published		ia Saved XPDL Run Process		(
 Forms & UI Processes Properties & Export All Apps 	Recover Recover Agenval	abin edus - Confução Repar Unidas - Version Balan - Version Enzi de Report Enzi de Report)• }•	
	Show Additional Info	Map Activities to Forms Map Tools to Plugins	Variable List	
	This is the list of participants de Applicant ID : travelRequestForm_applicant	fined in the Workflow design.		Add/Edit Mapping
	Type Value	Performer Activity Definition ID : <u>runProcess</u> Remove Mapping		
	Approver ID : travelRequestForm_approver			Add/Edit Mapping
	Type Value	Performer's HOD Activity Definition ID : <u>runProcess</u> Remove Mapping		

5. The generated app is automatically published, and you will be able to launch the app from the App Center.

ravel Request 2 • Home	Apps Made Simple uses on providing the simplest way for you to manage your data.	
O Home Welcome	Apps and Workflow Made Simple	
Manage Travel Request Form	Build apps, not just processes!	
Manage Travel Request Form (0)	Create full-fledged apps with support for data records management.	
Approval Process	Increased Efficiency and Productivity Faster and more consistent completion of manual processes, and with minimal errors.	
Submit Travel Request Form for Approaci	Lowered Cost Employees can be guided through complex procedures, hence reducing the cost of training.	

7. Importing and Exporting Apps

7.1 Importing an App

- Joget apps are packaged files that contain form, datalist, userview and process definitions. Apps can be exported from another Joget installation, or downloaded from the Joget Marketplace.
- 2. To import an app, first login to the App Center as an administrator.
- 3. Click on Import App while hovering over the Add New App icon.

	0 Mobile	🖶 Home	🖨 Inbox	🔺 Profile (admin)	🕞 Logout	0	
			٩				الج Apps الح Isers
Interi				Published App	s Marketplad		AB onitor O [©] tttings

4. In the Import App dialog, select the app file, and click on Upload.

Import App	
Import App	
Select File	Choose File No file chosen
Show Advanced Opti	ons
Upload	

7.2 Exporting an App

- 1. To export an app, first login to any userview in the current app as an administrator.
- 2. In the Admin Bar on the right, click on App, and select Properties & Export on the left.

Design App: Travel Request Version 1 Published	Add Environment Variable Add Message Set Plugin Default Properties Export Notes Environment Variable Message Plugin Default Properties
 Forms & UI Processes 	
Properties & Export All Apps	
	Submit

3. Click on the **Export** button along the top, and the exported app will be downloaded as a ZIP file.

8. Monitoring Apps

- 1. For monitoring purposes, administrators are able to track state of all processes.
- 2. In the Admin Bar on the right, click on Monitor.
- 3. The **Running Processes** and **Completed Processes** menus on the left show a list of running and completed processes respectively.

🕸 Monitor Apps	Filter by /	Арр	▼ Search	Proce	ssld ▼	
Running Processes	P	rocess ID	Start Time	Process name	Requester	Process Version
	4	_travelRequest2_travelRe	Thu Apr 09 10:10:22 SGT	Travel Request Form Appro	admin	1
Completed Processes	3	_travelRequest2_travelRe	Thu Apr 09 10:09:48 SGT	Travel Request Form Appro	admin	1
Audit Trail	2	_travelRequest_travelReq	Wed Apr 08 18:27:33 SGT	Travel Request Process	admin	2
Tomcat Logs	1	_travelRequest_travelReq	Wed Apr 08 18:23:11 SGT	Travel Request Process	admin	2
	4					•
	10 🔻	Page 1	of 1 🕨 🔰 🧔 Dis	playing 1 to 4 of 4 items		
	Delete					

4. Clicking on a specific process brings up the details of the process, along with a list of all the past and current process activities.

🕸 Monitor Apps	View Graph Abort Insta	ance Remove Instance	Re-evaluate		
Running Processes	Process ID	4_travelRequest2_trav	velRequestForm_approver_pro	cess	
	Process Definition ID	travelRequest2#1#trav	/elRequestForm_approver_pro	cess	
Completed Processes	Process Version	1			
Audit Trail	Process name	Travel Request Form A	Approval Process		
	State	open.running			
Tomcat Logs	Service Level Monitor	-			
	Requester	admin			
	Start Time	Thu Apr 09 10:10:22 S	GT 2015		
	Limit				
	Due Date				
	Delay				
	Finish Time				
	Time From Date Started				
	Activity List				
	Activity ID	Activity Name	State	Service Level Monitor	
	5_4_travelRequest2_travel	Email on Received	closed.completed	-	
	6_4_travelRequest2_travel	Approval	open.not_running.not_start	-	
	10 ▼ I¶ ¶ Page 1	of 1 🕨 🔰 🥰	Displaying 1 to 2 of 2 items		

- 5. The **Audit Trail** menu on the left displays a list of audit trail information which includes user authentication.
- 6. The **Tomcat Logs** menu on the left provides a way for administrators to directly download the Tomcat log files for troubleshooting purposes.

9. Managing Users

- Joget allows the setup of one or more organizations which contain departments, grades, and reporting structure. Groups are also available as an informal grouping or categories of users.
- 2. In the Admin Bar on the right, click on Users.
- 3. There are menu options on the left to Setup Users, Setup Groups and Setup Organizations.

Setup Organization	Filter	By Organization	▼ Search				
Setup Groups		Usemame	First Name	Last Name	Email	Status	
		admin	Admin	Admin		Active	
etup Users		cat	Cat	Grant		Active	
		clark	Clark	Kent		Active	
		david	David	Cain		Active	
		etta	Etta	Candy		Active	
		jack	Jack	Drake		Active	
		julia	Julia	Kapatelis		Active	
		roy	Roy	Harper		Active	
		sasha	Sasha	Bordeaux		Active	
		tana	Tana	Moon		Active	
	10 Del	▼ I Page 1	of 2 🕨 🔰 🥞	Displaying 1 to 10 of 12 items			

4. Integration to external directory systems such as LDAP or Active Directory are also available via plugins. This can be configured by selecting Directory Manager Settings after clicking on the **Settings** button of the Admin Bar.

10. Additional Resources

Joget Official Website

http://www.joget.org

Joget Knowledge Base and Community Forums <u>http://community.joget.org</u>

Joget Blog http://blog.joget.org

Joget Marketplace

http://marketplace.joget.org

Joget Translation Site

http://translate.joget.org

Joget on Facebook

http://www.facebook.com/jogetworkflow

Joget on Twitter

http://www.twitter.com/jogetworkflow

Joget on YouTube

http://www.youtube.com/jogetworkflow