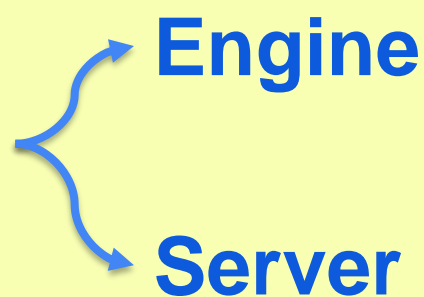Automate user-involved and data business processes in microservices-based architecture and cloud-based projects.

Workflow Engine

Using

optimajet Workflow → **Engine** → **Server**

https://workflowserver.io

Keivan Damirchi

What is a Workflow Engine?

A workflow engine automates and orchestrates tasks, activities, and processes in an organization. It helps to ensure that everything is done in the right order, with the right information and by the right people.

It includes tools for creating, editing, and managing workflows, as well as monitoring and reporting on their progress.

Before implementing a Workflow Engine, you must understand the process that needs to be automated. Identify the steps involved, the decision points, and the people or systems involved.
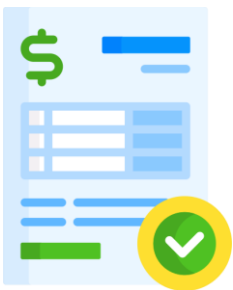
Examples of business processes that can be automated!

Employee onboarding:

Automates onboarding for faster, accurate processing, freeing HR staff for strategic tasks and reducing errors.

Invoice processing:

Automates invoice processing from receipt to payment, streamlining approval and payment procedures.

Customer Service Requests:

Automates customer service requests for quicker resolutions and improved resource utilization.

Purchase Order Management:

Efficiently manages purchase orders, saving time and freeing up staff for other tasks.

Overview of Optimajet WorkflowServer

Optimajet Workflow Server is a powerful BPM software solution for automating tasks and workflows.

It supports task automation, notifications, and workflow design.

WORKFLOWSERVER

https://workflowserver.io

Key Features Of WorkflowServer

Here are the Key Features Of Optimajet WorkflowServer:
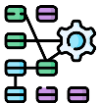
Written in .NET 6 and cross-platform.

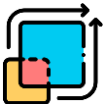Form Manager module for creating and managing forms.

Administrative panel for configuration.

Workflow scheme designer for visualizing processes.

Restful API integration.

LDAP and OpenID integration.

Supports Docker containers.

Multitenancy and horizontal scalability.

Plugin support and localization features.

Considering the mentioned features of Optimajet WorkflowServer, getting familiar with the panel and functionalities of this software will certainly be intriguing. Below, we will briefly and broadly examine the various sections of this software.

Tip:

By referring to software Optimajet Workflowserver github, it is possible to access various code samples and videos for more familiarity.

https://github.com/optimajet/workflowserver

Optimajet WorkflowServer provides developers and system administrators with a comprehensive dashboard to gain an overview of the performance and status of running processes, processes facing errors, and more.

WORKFLOW SERVER > Dashboard

Refresh   Restart   English ∨

Configuration: ⬇ Export ⬆ Import

Developer Mode

The server is running in admin type. Click to open frontend:https://forms.workflowserver.io

1	720	0	47	32
RUNNING	IDLE	TERMINATED	ERROR	FINALIZED

> Schemes ↻

> Instances ↻

> Plugins

Additionally, it allows the creation of new schema instances and the management of system plugins in this section.

Using the APIs offered by Optimajet WorkflowServer, you can virtually manage all activities that are visually presented in the system panel. You can also view addresses, parameters, and even execute and test these APIs.

Instance
Create instance
Get instances
Get instance information
Set instance parameter
Get instance parameter
Get available commands
Command execution
Get available states to set
Set State
Resume
Check for a process existence
Single instance scheme update
Multiple instance scheme update
Single instance deletion
Multiple instance deletion

Scheme
Get scheme model
Get scheme codes

Folders
Inbox folder
Outbox folder
Inbox folder recalc

Logs
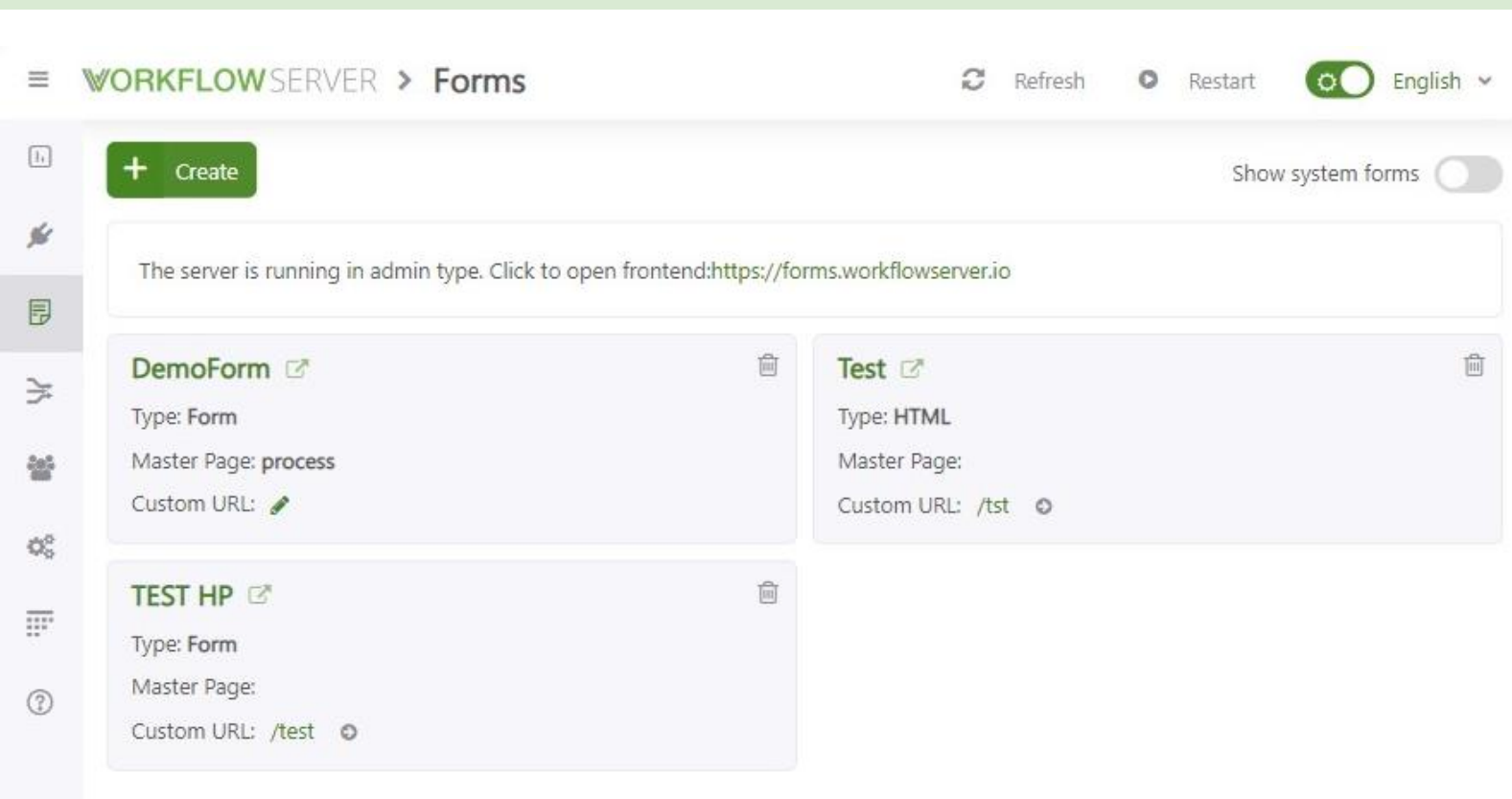Info log
Error log
Debug log

Server
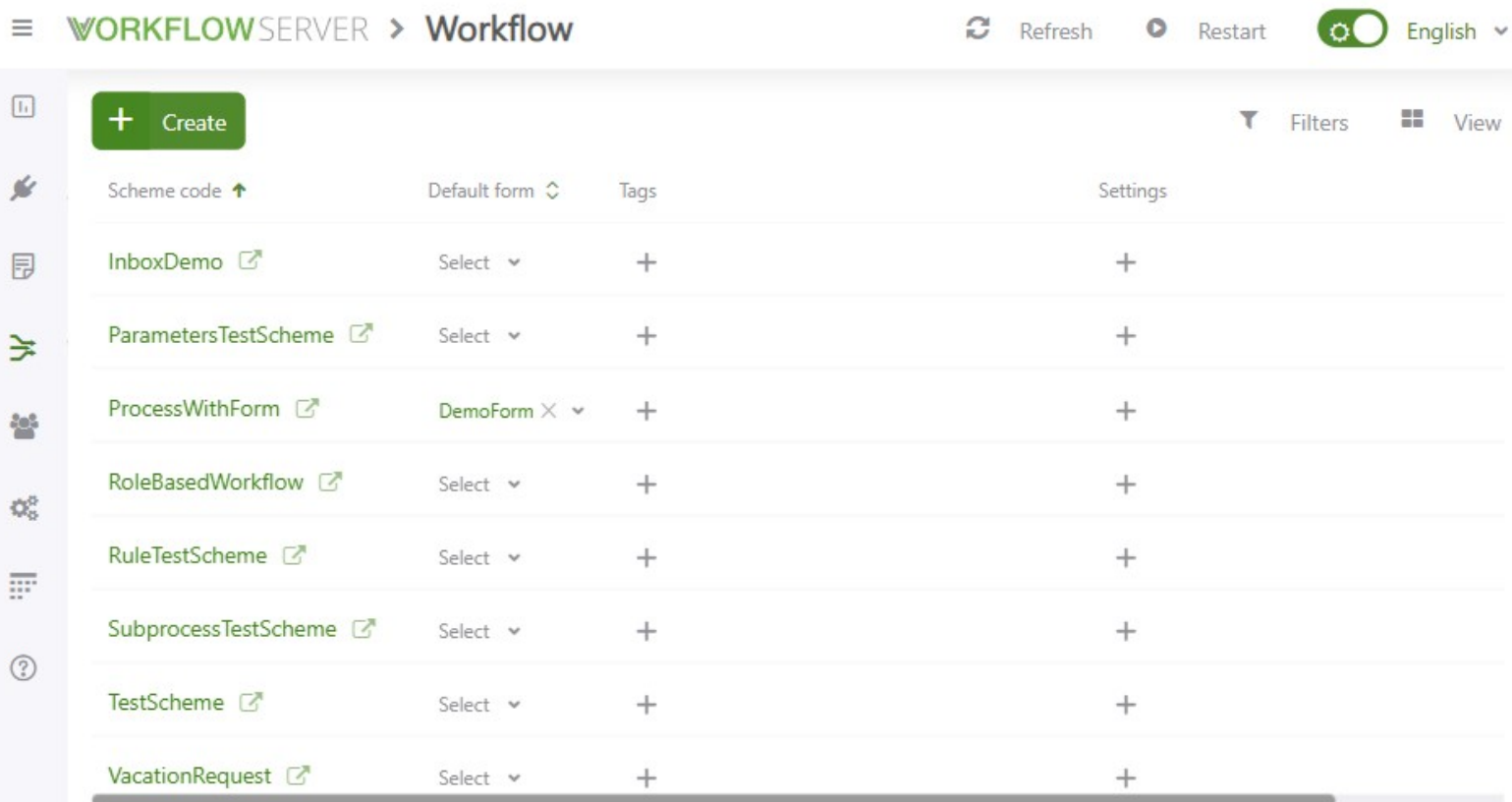Start processes and timers
Stop processes and timers
Check for a server started

One of Optimajet WorkflowServer remarkable and interesting features is the form builder tool, which makes working with it extremely simple. It enables the definition of URLs and validations on each field of a form.

In general, having a simple form builder is one of the strengths of a workflow engine, and WorkflowServer incorporates this feature.
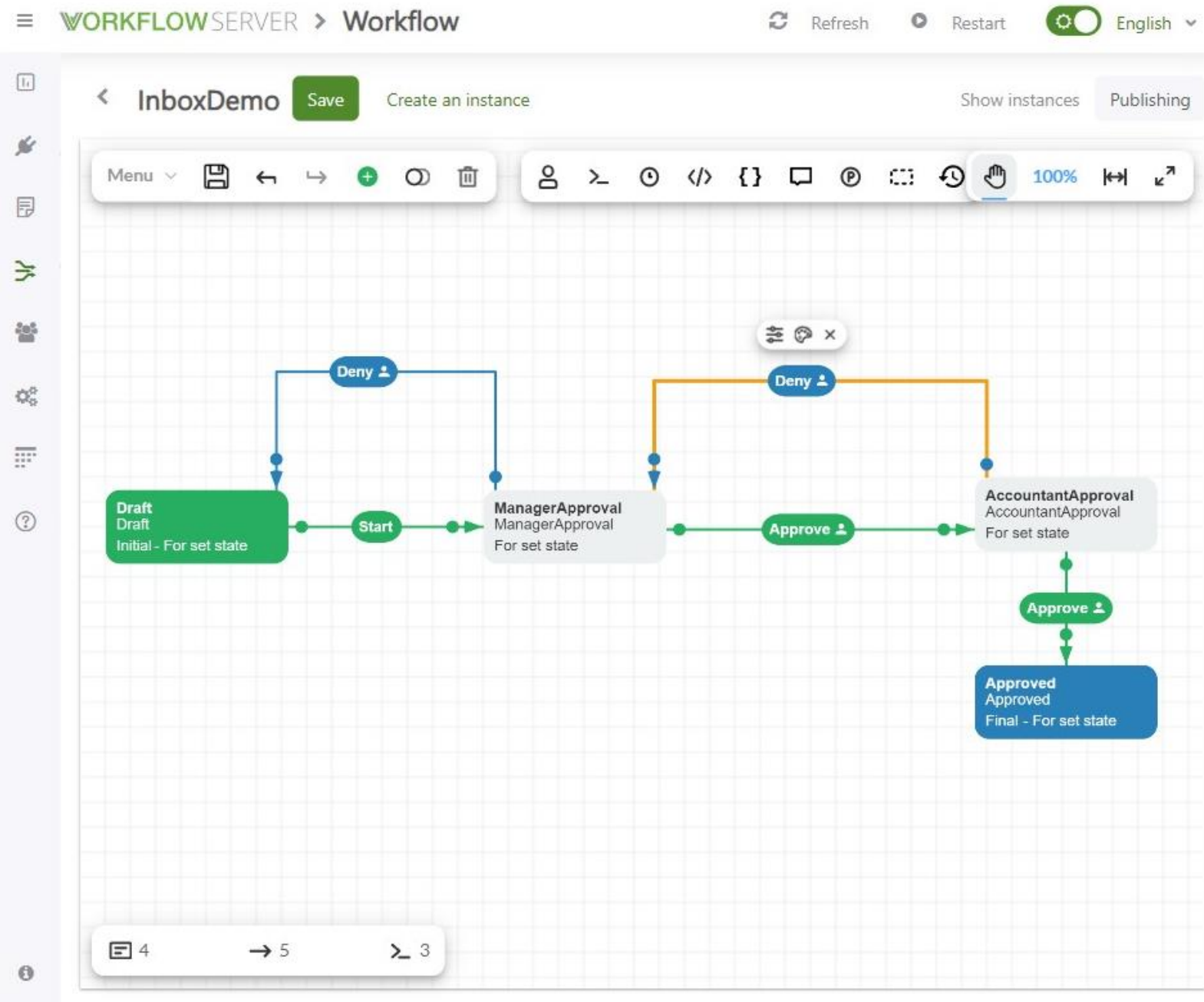
The core part of the Optimajet WorkflowServer system is the creation of workflows. Users, programmers, and administrators can easily create various workflows using the built-in tools in this section, such as adding activities, establishing connections between activities, diverse components, and more.

WORKFLOWSERVER > Workflow

Refresh | Restart | English ∨

+ Create | ▼ Filters | ▦ View

Scheme code ↑	Default form ↕	Tags	Settings
InboxDemo	Select ∨	+	+
ParametersTestScheme	Select ∨	+	+
ProcessWithForm	DemoForm ✕ ∨	+	+
RoleBasedWorkflow	Select ∨	+	+
RuleTestScheme	Select ∨	+	+
SubprocessTestScheme	Select ∨	+	+
TestScheme	Select ∨	+	+
VacationRequest	Select ∨	+	+

An example of the workflow design environment in Optimajet WorkflowServer

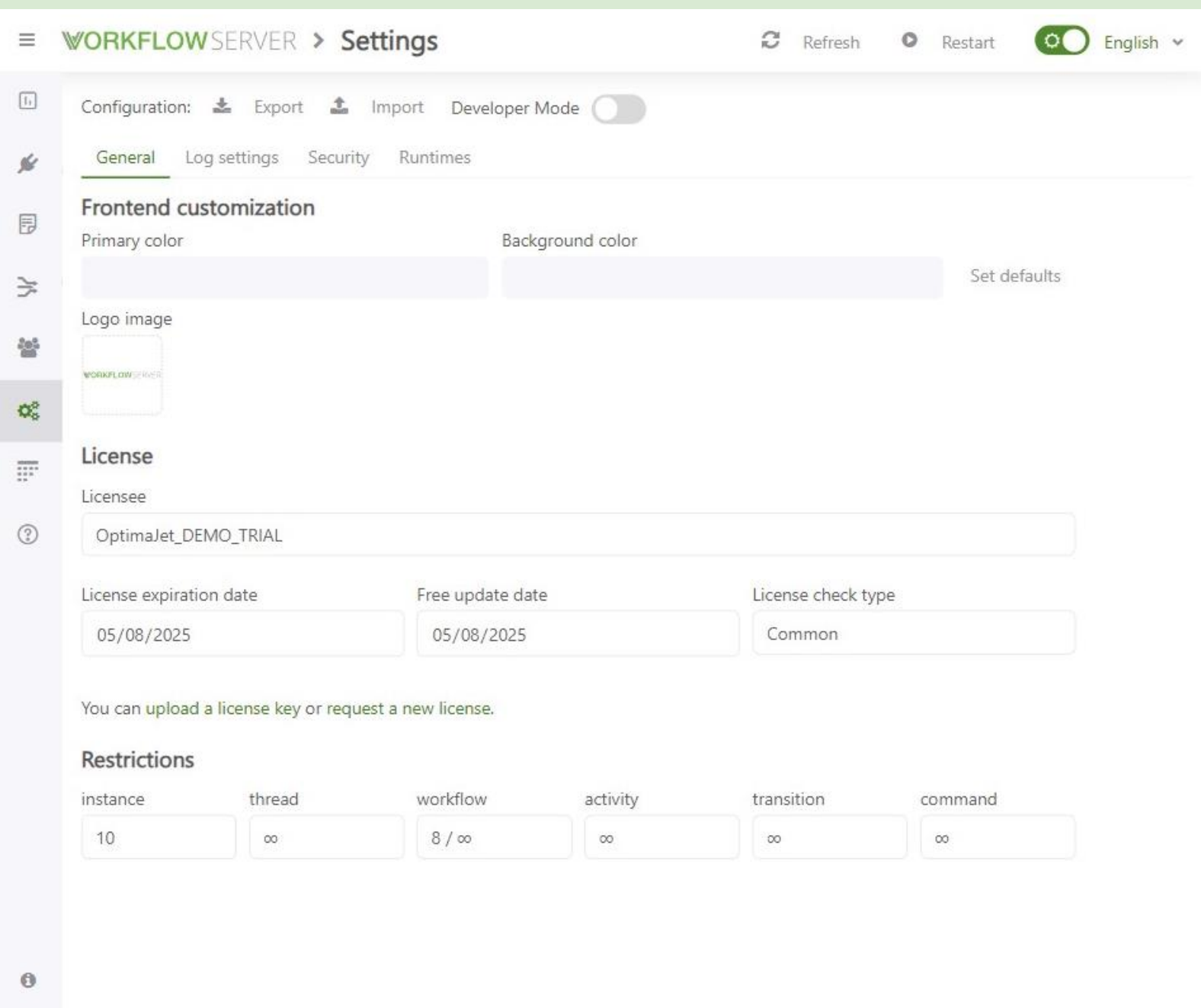**https://demo.workflowserver.io/?apanel=workflow&aid=InboxDemo**

Defining users and determining their access levels is essential for a workflow engine. This feature is integrated into the Users section of the WorkflowServer software, allowing for easy and quick user definition and role assignment.

As a user, you need to set your account's logo, information, and some settings related to the visual aspects. This can be done by visiting the Settings section of Optimajet WorkflowServer.

WORKFLOWSERVER > Settings   Refresh   Restart   English ⌄

Configuration: Export   Import   Developer Mode

General   Log settings   Security   Runtimes

Frontend customization

Primary color   Background color

                                                                              Set defaults

Logo image

WORKFLOWSERVER

License

Licensee

OptimaJet_DEMO_TRIAL

License expiration date   Free update date   License check type

05/08/2025   05/08/2025   Common

You can upload a license key or request a new license.

Restrictions

instance	thread	workflow	activity	transition	command
10	∞	8 / ∞	∞	∞	∞

After defining processes, users, and executing these processes, you will need comprehensive reports on events and system status. The Reports section in WorkflowServer allows you to filter and display information in the system in a segregated manner.

WORKFLOWSERVER > Reports

Refresh   Restart   English ∨

From	To	Period	
2023-10-08 00:03:41	2023-11-08 00:03:41	Day	Apply

Scheme report (all time)

Scheme	Process count	Transition count
InboxDemo	210	123
ParametersTestScheme	51	64
ProcessWithForm	337	1168
RoleBasedWorkflow	14	15
RuleTestScheme	21	31
SubprocessTestScheme	14	78
TestScheme	98	64
VacationRequest	56	2

13

1- What is the primary goal or objective of workflow?

The primary goal of a workflow is to streamline and optimize a series of tasks or processes to achieve specific objectives efficiently.

2- Who are the key stakeholders involved in workflow?

Key stakeholders involved in a workflow typically include employees, managers, clients, and any relevant parties who participate in or oversee the workflow.

3- What are the key steps or stages in the workflow?

The key steps or stages in a workflow often encompass planning, execution, monitoring, and evaluation to ensure the smooth progression of tasks.

4- How is information or data shared within the workflow?

Information or data is commonly shared within a workflow through communication tools, digital platforms, emails, documents, and collaborative software to facilitate effective collaboration and information flow.

5- Is Docker container support available for Workflow Engine and Workflow Server?

Yes, Docker container support available for Workflow Engine and Workflow Server.

6- Are there benchmarks or load test results for software that use Optimajet Workflowengine?

Yes, check out this link : https://workflowengine.io/blog/workflow-performance/

7- How can Workflow Server be extended or customized?

Key stakeholders involved in a workflow typically include employees, managers, clients, and any relevant parties who participate in or oversee the workflow.

8- What are some available sample applications for Workflow Engine?
(At least 2 items)

The key steps or stages in a workflow often encompass planning, execution, monitoring, and evaluation to ensure the smooth progression of tasks.

9- How can users and roles be managed in the workflow schemes?

Information or data is commonly shared within a workflow through communication tools, digital platforms, emails, documents, and collaborative software to facilitate effective collaboration and information flow.

WORKFLOWSERVER

Ultimately, one of the most effective ways to become acquainted with various tools, including WorkflowServer software, is to give it a try. Visit the Optimajet WorkflowServer website at your earliest convenience and experience its features firsthand.

https://workflowserver.io

Close();

Keivan Damirchi