



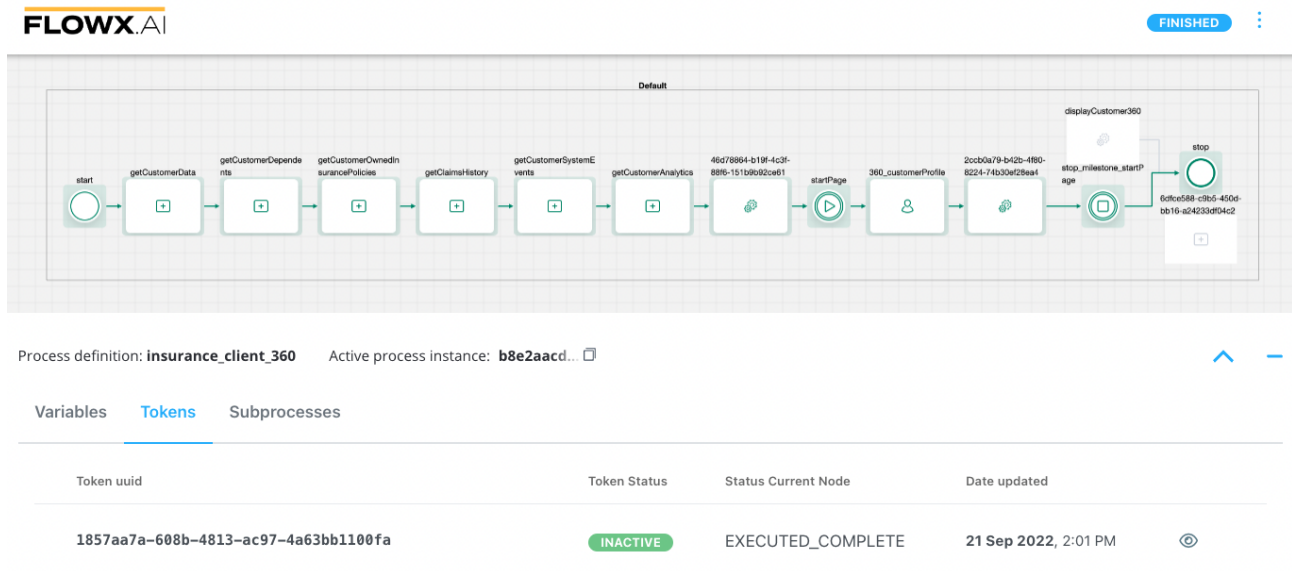
**BUILDING BLOCKS / Process Designer / Active process / process-instance**

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## BUILDING BLOCKS / Process Designer / Active process / Process instance

A process instance is a specific execution of a business process that is defined on the FLOWX.AI platform. Once a process definition is added to the platform, it can be executed, monitored, and optimized by creating an instance of the definition.



## Overview

Once the desired processes are defined in the platform, they are ready to be used. Each time a process needs to be used, for example each time a customer wants to request, for example, a new credit card, a new instance of the specified process definition is started in the platform. Think of the process definition as a blueprint for a house, and of the process instance as each house of that type being built.

The **FLOWX Engine** is responsible for executing the steps in the process definition and handling all the business logic. The token represents the current position in the process and moves from one node to the next based on the sequences and rules defined in the exclusive gateways. In the case of parallel gateways, child tokens are created and eventually merged back into the parent token.

Kafka events are used for communication between FLOWX.AI components such as the engine and integrations/plugins. Each event type is associated with a Kafka

topic to track and orchestrate the messages sent on Kafka. The engine updates the UI by sending messages through sockets.

» [More about Kafka](#)

## Checking the Process Status

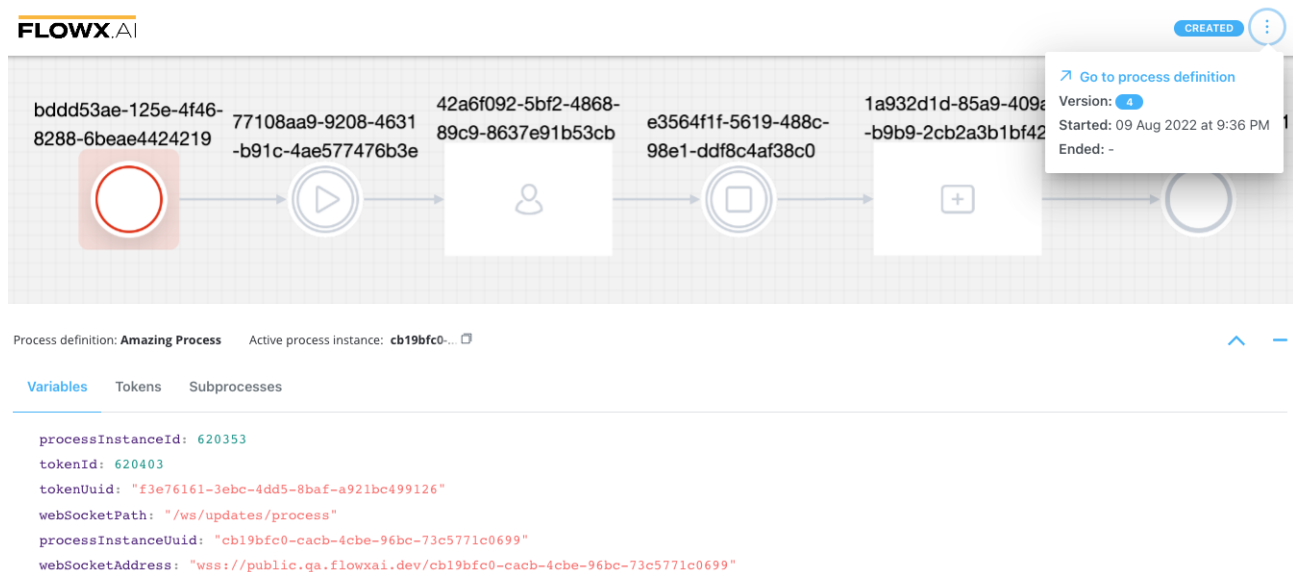
To check the status of a process or troubleshoot a failed process, follow these steps:

1. Open **FLOWX Designer**.
2. Go to **Processes** → **Active Process** → **Process instances**.
3. Click **Process status** button.

Active processes						
						<input type="text" value="Filter by process definition"/>
						<input type="text" value="Search by uuid or key identifier"/>
Process uuid	Definition name	Exceptions	Status	Current Node Name	Start date	
cb19bfc0-cacb-4cbe-96bc-73c5771c0699	Amazing Process	-	CREATED	bddd53ae-125e-4f46-8288-6beae4424219	09 Aug 2022, 9:36 PM	 Process status
abc17f2b-f3fb-48e1-a024-131692ade558	Super Process	-	STARTED	node_name	09 Aug 2022, 8:35 PM	
3a4849fb-85ec-4383-9402-6f14d37d840e	Awesome Process	-	STARTED	user_task	09 Aug 2022, 8:32 PM	
6989a30a-370a-4dc8-9aa8-e605bbe9772e	Incredible Process	-	STARTED	user_task	09 Aug 2022, 8:30 PM	
4a69ff3c-6a48-46c6-9292-877f9bd7cf69	Nice Process	-	EXPIRED	page_1	09 Aug 2022, 7:47 PM	

# Understanding the Process Status Data

The process status data includes the following:



- **Status** - status of the process instance, possible values:
  - **CREATED** - the status is visible if there is an error in the process creation. If there is no error, the "Started" status is displayed.
  - **STARTED** - indicates that the process is currently running
  - **DISMISSED** - the status is available for processes with subprocesses, it is displayed when a user stops a subprocess
  - **EXPIRED** - the status is displayed when the "expiryTime" field is defined in the process definition and the defined time has passed.
  - **FINISHED** - the process has successfully completed its execution
- **Process definition** - the name of the process definition
- **Active process instance** - the UUID of the process instance, with a copy action available

- **Variables** - displayed as an expanded JSON

Process definition: **Awesome Process**    Active process instance: **12156183...** 



**Variables**   Tokens   Subprocesses   Exceptions **10**

```
processInstanceId: 619702
tokenId: 619752
tokenUuid: "147aa0c4-d961-4154-8af6-3422e1d34fb6"
websocketPath: "/ws/updates/process"
processInstanceUuid: "12156183-b40d-4cee-b0e0-e296371cedbf"
websocketAddress: "wss://public.qa.flowxai.dev/12156183-b40d-4cee-b0e0-e296371cedbf"
```

- **Tokens** - a token represents the state within the process instance and describe the current position in the process flow

Process definition: **Awesome Process**    Active process instance: **12156183...** 

Variables   **Tokens**   Subprocesses   Exceptions **10**

Token uuid	Token Status	Status Current Node	Date updated	
147aa0c4-d961-4154-8af6-3422e1d34fb6	ACTIVE	EXECUTED_COMPLETE	09 Aug 2022, 4:06 PM	 







### INFO

For more information about token status details, [here](#).

- **Subprocesses** - **!** displayed only if the current  
The fallback content to display on prerendering  
generated a **subprocess** instance

- **Exceptions** - errors that let you know where the process is blocked, with a direct link to the node where the process is breaking for easy editing

Process definition: **Awesome Process**    Active process instance: **12156183...** Variables   Tokens   Subprocesses   **Exceptions 10**

Source	Message	Type	Timestamp	
NODE (start Node)	Outgoing node for process instance not fo...	Node Definition	09 Aug 2022 at 4:06 F	 
NODE (start Node)	Outgoing node for process instance not fo...	Node Definition	09 Aug 2022 at 4:06 F	 
NODE (start Node)	Outgoing node for process instance not fo...	Node Definition	09 Aug 2022 at 4:06 F	 




**! INFO**

For more information on token status details and exceptions, check the following section:

[» Failed process start](#)

- **Audit Log** - the audit log displays events registered for process instances, tokens, tasks, and exceptions in reverse chronological order by timestamp

Variables   Tokens   Subprocesses   **Audit Log**   Exceptions **1**

Timestamp	User	Subject	Event	Subject Identifier	Status	
06 Oct 2022, 1:54 PM	john.doe@email.com	Exception	View	-	-	
06 Oct 2022, 1:54 PM	system	Exception	Created	714951	-	
06 Oct 2022, 1:54 PM	john.doe@email.com	Process Instance	Start	a310c7b5-fb1c-4cfd-9b61-6badd174	success	

[» Audit](#)

## Process menu

In the breadcrumb menu (top-right corner), you can access the following:

- **Go to process definition** - opens the process for editing
- **Version** - version of the process definition
- **Started** - timestamp for when the process instance started
- **Ended** - timestamp for when the process instance ended

The screenshot shows a process instance card with the ID '409a bf42'. A blue 'CREATED' button is visible. A menu is open, displaying the following options and information:

- [Go to process definition](#) (with an external link icon)
- Version: **4**
- Started: 09 Aug 2022 at 9:36 PM
- Ended: -



## Color coding

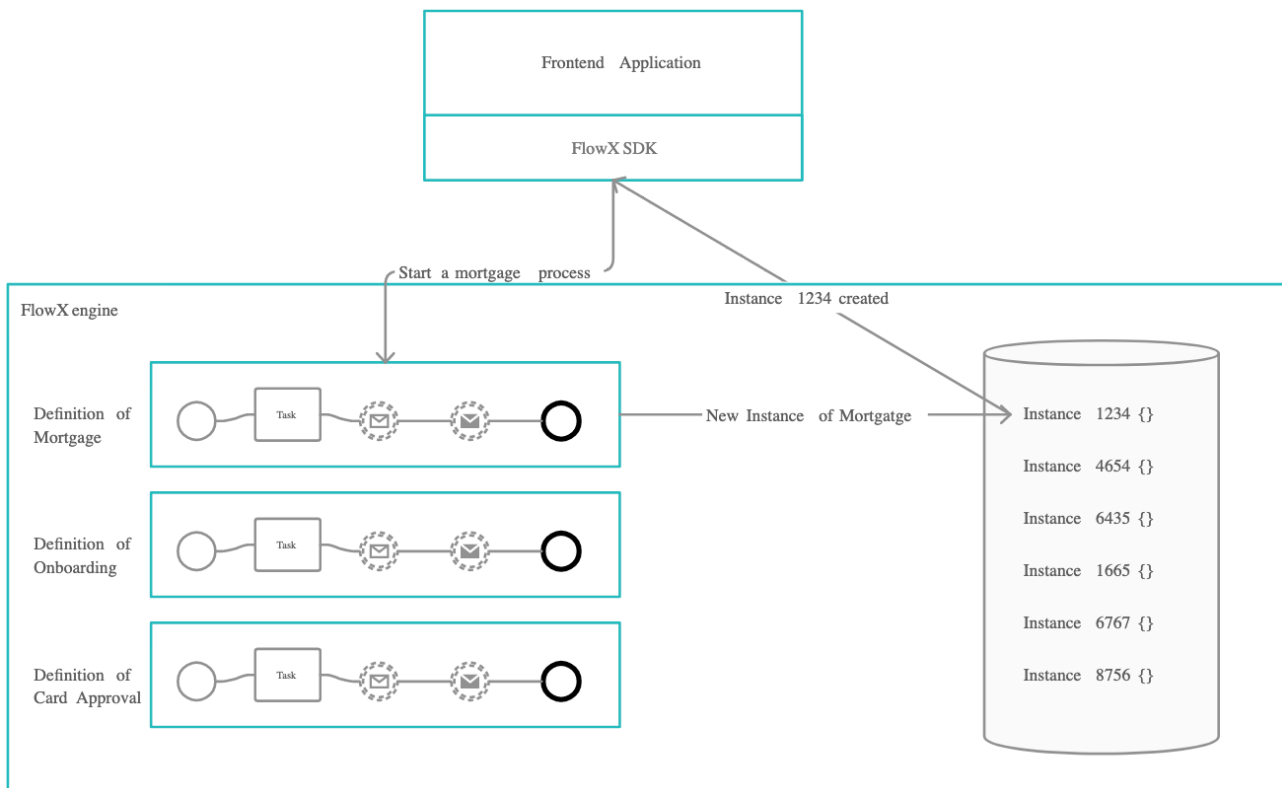
In the **Process Status** view, some nodes are highlighted with different colors to easily identify any failures:

- **Green** - nodes highlighted with green mark the nodes passed by the **token**
- **Red** - the node highlighted with red marks the node where the token is stuck (process failure)

Process uuid	Definition name	Status	Current Node Name	Start date
a2f7f1ef-ad39-4c00-8e58-492059f6e670	test_render_proc_instance	STARTED	Step	22 Jul 2022, 4:41 PM
e14bcfd3-a10e-4599-b0b4-e76669685fed	test_render_proc_instance	CREATED	Start	22 Jul 2022, 4:37 PM
037a6efe-0949-4f2b-ac8e-a94afe88d287	test_render_proc_instance	FINISHED	End	22 Jul 2022, 4:34 PM
0df92b59-6195-472a-bb7e-cb9cd98e0ad0	test_render_proc_instance	STARTED	Step	22 Jul 2022, 4:33 PM
2d403707-c480-48d0-a7ce-1d1603fa0ebc	test_render_proc_instance	STARTED	Step	22 Jul 2022, 4:31 PM
4fbe4e81-09a6-49d0-9f0b-aba566b896d8	test_render_proc_instance	CREATED	Step	22 Jul 2022, 4:04 PM

## Starting a new process instance

To start a new process instance, a request must be made to the **FLOWX Engine**. This is handled by the web/mobile application. The current user must have the appropriate role/permission to start a new process instance.



To be able to start a new process instance, the current user needs to have the appropriate role/permissions:

» [Configuring access roles for processes](#)

When starting a new process instance, we can also set it to [inherit some values from a previous process instance](#).

## Troubleshooting possible errors

If everything is configured correctly, the new process instance should be visible in the UI and added to the database. However, if you encounter issues, here are

some common error messages and their possible solutions: Possible errors include:

Error Message	Description
<i>"Process definition not found."</i>	The process definition with the requested name was not set as published.
<i>"Start node for process definition not found."</i>	The start node was not properly configured.
<i>"Multiple start nodes found, but start condition not specified."</i>	Multiple start nodes were defined, but the start condition to choose the start node was not set.
<i>"Some mandatory params are missing."</i>	Some parameters set as mandatory were not included in the start request.
HTTP code 403 – Forbidden	The current user does not have the process access role for starting that process.
HTTP code 401 – Unauthorized	The current user is not logged in.

**Was this page helpful?**