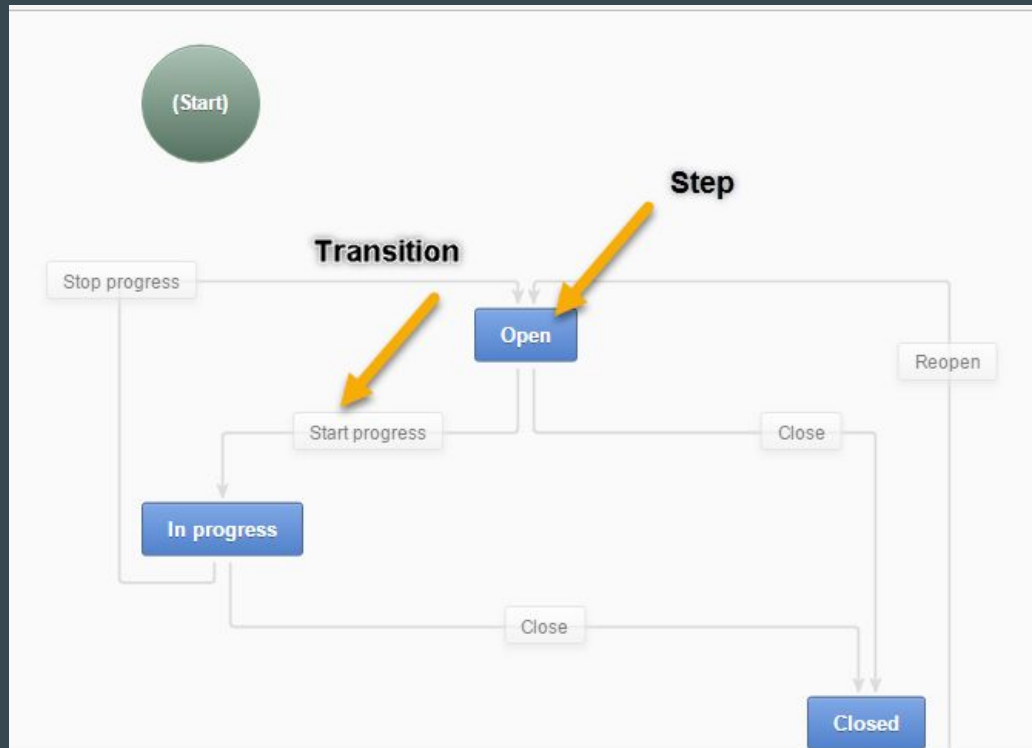


Workflows

Overview

- Representation of a business process
 - checkout with approval, closing opportunity, status



General information

- State machine
- Assigned to entity
- States = steps
- Internal data = attributes
- Changes of states = transitions
- Actions and conditions = transition definitions
- Data restrictions = entity restrictions

Demonstration UI + CLI >>>

Workflow Definition

- Resources/config/oro/workflows.yml
 - Includes are allowed (imports)
- oro:workflow:definitions:load
- oro:debug:workflow:definitions
- WorkflowDefinition entity
- Translations for labels are in a separate file
 - oro:workflow:translations:dump
- User may add simple definitions from UI
- Developer may add custom definitions from YML

Workflow Item

- Represents started workflow on an entity
- Stores all data not related to entity
- Data is serialized
- WorkflowItem entity

Demonstration >>>

UI -> manually start workflow

DB -> new record

Steps

- Represent state of a workflow
- WorkflowStep entity
- Steps are ordered
- Steps know about possible transitions
- Workflow may have one start step
- Workflow may have one or more final steps

https://github.com/oroinc/crm/blob/3.1/src/Oro/Bundle/SalesBundle/Resources/config/oro/workflows/opportunity_flow/steps.yml

Attributes

- Represent data of workflow
- Data is stored inside WorkflowItem
- Main entity has an attribute
- Attributes might be separate or refer to field of the entity (via property path)

https://github.com/oroinc/crm/blob/3.1/src/Oro/Bundle/SalesBundle/Resources/config/oro/workflows/opportunity_flow/attributes.yml

Attributes

- `$.data.status`
 - attribute “status”
- `$status`
 - attribute “status” (same as above)
- `$.result.status`
 - temporary data (not persistent), useful for dependent actions but in case when there is no need to store this information in an attribute
- `$.status`
 - `PropertyAccessor->getValue(WorkflowItem, status)`
 - Will throw exception

Variables

- Changeable configuration values on a workflow level
 - Data is serialized
- Accessed like attributes
- [\[example\]](#)
- [\[docs\]](#)

System / Workflows

[Workflows](#) / [Alternative Checkout](#) / **Configuration** ● Active

Created At: Oct 17, 2018, 8:59 AM | Updated At: Oct 17, 2018, 9:00 AM

Configuration

ⓘ Order Approval Threshold*

Entity Restrictions

- Restrict modification of attribute fields
- Might be assigned to step
 - restriction will be applied only in this step
- Mode: full, disallow, allow
 - Default: full
- Example
- Docs

Transitions

- Represent change of state
- Lead to one workflow step
- Workflow has one or more start transitions
- Might have a form with attribute fields
- Might have ACL restriction
- Might have assigned conditions
- Might have related actions

https://github.com/oro-inc/crm/blob/3.1/src/Oro/Bundle/SalesBundle/Resources/config/oro/workflows/opportunity_flow/transitions.yml

Transition Definitions

- Represent transition conditions and actions
- Pre-actions, pre-conditions (can be displayed)
- Actions, conditions (can be performed)
- Might be empty
- Several transitions might use the same transition definition

https://github.com/oroinc/crm/blob/3.1/src/Oro/Bundle/SalesBundle/Resources/config/oro/workflows/opportunity_flow/transition_definitions.yml

Actions

- Small block of functionality
- Might have parameters
- Might have conditions
- Developers might add custom actions
 - DIC tag `oro_action.action`

<https://github.com/oroinc/platform/blob/3.1/src/Oro/Bundle/ActionBundle/Resources/config/actions.yml>

Conditions

- Small check that returns true/false
- Might have parameters
- Developers might add custom conditions
 - DIC tag `oro_action.condition`

<https://github.com/oro-inc/platform/blob/3.1/src/Oro/Bundle/ActionBundle/Resources/config/conditions.yml>

Translations

- *workflows* translation domain
 - Resources/translations/workflows.<en>.yml
- Translation for steps, attributes and transitions
- [\[example\]](#)

Additional features

- Scopes
 - Documentation