#### **Petriflow**

## **Petriflow: Actions API**

Created by Juraj Mažári, last modified on 04 Sep, 2018

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#### **Actions**

## make <Field f>,<Closure behaviour> on <Transition t> when <Closure<Boolean> condition>

Changes *behaviour* of given data field *f* on transition *t*, iff *condition* returns true. Behaviour can be one of:

- visible.
- editable,
- required,
- optional,
- hidden.

#### **Example**

```
garage_check: f.garage_check,
garage_cost: f.garage_cost,
garage: t.garage;
```

```
make garage_cost,visible on garage when {
    return garage_check.value == true;
}
```

#### change <Field> about <Closure>

Deprecated

See change value.

#### change <Field f> value <Closure calculation>

Sets new value to <u>data field</u> f returned by <u>calculation</u> closure. If the returned value is null, fields value is set to default value. If the returned value is *unchanged*, fields value is unchanged and actions with a trigger set on given field are not triggered.

```
period: f.108001,
sum: f.308011;
change period value {
   def limit = 20.0;
        if (period.value == "polročná")
        limit = 40.0;
   if (period.value == "štvrtročná")
        limit = 80.0;
   if ((sum.value as Double) < (limit as Double))
        return "ročná";
   return unchanged;
}
```

## change <Field> choices <Closure choices>

Sets a new set of *choices* to <u>data field</u> *f*.

```
Example

other: f.410001,
field: f.this;
change field choices {
   if (other.value == "Nehnutelnost")
      return field.choices + ["rozostavaná stavba"];
   return field.choices;
}
```

#### generate <String method,Closure repeat> into <Field f>

Calls *method* and saves generated value into <u>data field</u> *f*. The field can be only of type *Text* or *File*. If repeat is equal to always new value is generated on each run of action. If repeat is equal to once new value is generated only if fields value is null.

```
self: f.this;
generate "Insurance.offerPDF", always into self
```

#### changeCaseProperty <String property> about <Closure supplier>

Changes the *property* of the current <u>case</u>, the new value is generated by *the supplier*.

```
Example
trans: t.this;
```

```
changeCaseProperty "icon" about { trans.icon }
```

# Case createCase(String identifier, String title = null, String color = "", User author = userService.ystem)

Creates a new <u>instance</u> of the newest version of <u>net</u> identified by the <u>identifier</u>. If the <u>title</u> is not specified, nets default case name is used. If the <u>colour</u> is null, the default colour is used (black at the moment).

```
createCase("create_case_net", "Create Case Case", "green");
createCase("create_case_net", "Create Case Case");
createCase("create_case_net");
```

# Case createCase(PetriNet net, String title = net.defaultCaseName.defaultValue, String color = "", User author = userService.loggedOrSystem)

Creates a new <u>instance</u> of the given <u>net</u>. If the <u>title</u> is not specified, nets default case name is used. If the <u>colour</u> is null, the default colour is used (black at the moment).

```
Example
todo
```

#### **List<Case> findCases(Closure<Predicate> predicate)**

Finds all the <u>cases</u> that match the given *predicate*. The predicate is a groovy closure that accepts QCase object and returns QueryDSL Predicate.

# Example List<Case> cases = findCases( { it.title.eq("Case 1") } ); ... List<Case> cases = findCases( { it.dataSet.get("name").value.eq("Jozko") } );

#### **Case findCase(Closure<Predicate> predicate)**

Finds the first <u>case</u> that matches the given *predicate*. The predicate is a groovy closure that accepts QCase object and returns QueryDSL Predicate.

```
Example

Case useCase = findCase( { it.title.eq("Case 1") & it.processIdentifier.eq("insurance") } );
...

Case useCase = findCase( { it.dataSet.get("name").value.eq("Jozko") & it.processIdentifier.eq("insurance") } );
```

#### **List<Task> findTasks(Closure<Predicate> predicate)**

Finds all <u>tasks</u> that match the given *predicate*. The predicate is a groovy closure that accepts QCase object and returns QueryDSL Predicate.

```
Example

def useCase = findCase(...)
Task task = findTask( { it.caseId.eq(useCase.stringId) & it.transitionId.eq("edit_limit") } );
```

#### Task findTask(Closure < Predicate > predicate)

Finds the first <u>task</u> that matches the given *predicate*. The predicate is a groovy closure that accepts QCase object

and returns QueryDSL Predicate.

```
Example

List<Task> tasks = findTasks( { it.transitionId.eq("edit_limit") } )
...

def useCase = findCase(...)
List<Task> tasks = findTasks( { it.caseId.eq(useCase.stringId) } );
```

#### close <List<Transition>>

Deprecated

See <u>cancel</u>.

#### execute <String transitionId> where <Closure<Predicate>> with <Map>

Executes all fireable transitions identified by the *transitionId* in all case where the predicate returns true. For each task following actions are called:

- 1. assign to the system user
- 2. save new data values
- 3. finish.

The predicate is a list of Querydsl queries. Every case property can be used in a query. For more info see <u>querydsl doc</u> and QCase javadoc.

```
"field": [
    value: 128.0,
    type: "number"
    ]
] as Map)
```

#### Task assignTask(String transitionId, User user = userService.loggedOrSystem)

Assign the <u>task</u> in current case with given *transitionId*. Optional parameter *user* identifies actor who will perform assign.

```
Example

<action>
    <!-- @formatter:off -->
    selectedUser: f.select_controler,
    if (selectedUser.value) {
        def user = userService.findById(selectedUser.value.id, false)
        assignTask("control", user);
    }
    <!-- @formatter:on -->
    </action>
```

#### Task assignTask(Task task, User user = userService.loggedOrSystem)

Assign the <u>task</u> to user. Optional parameter <u>user</u> identifies actor who will perform assign.

```
Example <action>
```

# assignTasks(List<Task> tasks, User assignee = userService.loggedOrSystem) cancelTask(String transitionId, User user = userService.loggedOrSystem)

Cancels the <u>task</u> in current case with given *transitionId*. Optional parameter *user* identifies actor who will perform cancel.

```
def taskId = "work_task";
cancelTask(taskId);
```

cancelTask(Task task, User user = userService.loggedOrSystem)
cancelTasks(List<Task> tasks, User user = userService.loggedOrSystem)
finishTask(String transitionId, User assignee = userService.loggedOrSystem)
finishTask(Task task, User finisher = userService.loggedOrSystem)
finishTasks(List<Task> tasks, User finisher = userService.loggedOrSystem)
setData(Task task, Map dataSet)

Sets values of <u>data fields</u> on given <u>task</u>. Values are mapped to data fields in <u>dataSet</u> using data fields import Id as key.

```
Example

def usecase = findCase({ it.title.eq("Limits") }).first()
  def task = findTask({ it.caseId.eq(usecase.stringId & it.transitionId.eq("edit_limit")) })
  setData(task, [
        "new_limit": [
            "value": "10000",
            "type": "number"
        ],
        ])
```

#### setData(Transition transition, Map dataSet)

Sets values of <u>data fields</u> on task of <u>transition</u> in current case. Values are mapped to data fields in <u>dataSet</u> using data fields import Id as key.

```
transition: t.edit_limit;
setData(transition, [
    "new_limit": [
        "value": "10000",
        "type": "number"
    ],
])
```

#### setData(String transitionId, Case useCase, Map dataSet)

Sets values of <u>data fields</u> on task identified by *transitionId* of given <u>case</u>. Values are mapped to data fields in <u>dataSet</u> using data fields import Id as key.

#### Map<String, Field> getData(Task task)

Gets all <u>data fields</u> on given <u>task</u>, mapped by its import Id.

```
Example

actual_limit: f.actual_limit;
def usecase = findCase({ it.title.eq("Limits") }).first()

def task = findTask({ it.transitionId.eq("view_limit") & it.caseId.eq(usecase.stringId) })

def data = getData(task)
change actual_limit value {
    data["remote_limit"].value
}
```

#### **Map<String, Field> getData(Transition transition)**

Gets all data fields on the task of *transition* in the current case, mapped by its import Id.

```
view_limit: t.view_limit;
actual_limit: f.actual_limit;
def data = getData(view_limit)
change actual_limit value {
    data["remote_limit"].value
}
```

#### Map<String, Field> getData(String transitionId, Case useCase)

Gets all <u>data fields</u> on the task defined by its *transitionId* in given <u>case</u>, mapped by its import Id.

```
view_limit: t.view_limit;
def usecase = findCase({ it.title.eq("Limits") }).first()
def data = getData("view_limit", usecase)
change actual_limit value {
   data["remote_limit"].value
}
```

### User assignRole(String roleId, User user = userService.loggedUser)

Assigns role identified by *roleId* to *user*. User is optional parameter, default value is currently logged user. Returns updated object of user.

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## **Example**

transition: t.task;
assignRole(transition.defaultRoleId);

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