

BPMN Stats REST API

All the methods of the REST api will be invoked after the base url.

Base url : `https://<hostname>:<port-name>/bpmn/stats/`

Retrieving statistics about Processes and Tasks

/processTaskServices/

Methods :

- Get the process count of the deployed processes

get: `/deployedProcessCount`

Parameters:

Header Parameter — *Media types acceptable for the response. Default is JSON.*

Return type:

Deployed processes with their process count

Example data:

```
{
  "data": [
    {
      "processDefinitionId": "helloWorldProcess:1:11",
      "deployedProcessCount": 1
    },
    {
      "processDefinitionId": "manualTaskProcess:1:15",
      "deployedProcessCount": 4
    }
  ]
}
```

-
- Get the number of process instances with various states

get: `/processStatusCount`

Parameters:

Header Parameter — *Media types acceptable for the response. Default is JSON.*

Return type:

Count of process instances in each state.
States : Completed , Active , Suspended , Failed

Example data:

```
{
  "data": [
    {
      "count": 2,
      "statusOfProcessOrTask": "Completed"
    },
    {
      "count": 4,
      "statusOfProcessOrTask": "Active"
    },
    {
      "count": 0,
      "statusOfProcessOrTask": "Suspended"
    },
    {
      "count": 0,
      "statusOfProcessOrTask": "Failed"
    }
  ]
}
```

- Get the number of task instances with various states

get: /taskStatusCount

Parameters:

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Count of task instances in each state.
States : Completed , Active , Suspended , Failed

Example data:

```
{
  "data": [
    {
      "count": 4,
      "statusOfProcessOrTask": "Completed"
    },
    {
      "count": 4,
```

```
    "statusOfProcessOrTask": "Active"
  },
  {
    "count": 0,
    "statusOfProcessOrTask": "Suspended"
  },
  {
    "count": 0,
    "statusOfProcessOrTask": "Failed"
  }
]
}
```

- Get the average time duration of completed processes

get: /avgDurationToCompleteProcess

Parameters:

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Completed processes and the average time duration for each process

Example data:

```
{
  "data": [
    {
      "processDefinitionId": "helloWorldProcess:1:11",
      "averageTimeForCompletion": 0.26085
    },
    {
      "processDefinitionId": "manualTaskProcess:1:15",
      "averageTimeForCompletion": 24.555516666666666
    }
  ]
}
```

- Get the average time duration of each task in a completed process

get: /avgTaskDurationForCompletedProcess/{pId}

Parameters:

pId : process Definition Id of the process (required)

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Completed tasks with their average time duration for each completed process

Example data:

Request -> /avgTaskDurationForCompletedProcess/manualTaskProcess:1:15

```
{
  "data": [
    {
      "taskDefinitionKey": "orderConfirmed",
      "averageTimeForCompletion": 722751
    },
    {
      "taskDefinitionKey": "placeOrder",
      "averageTimeForCompletion": 4117232
    },
    {
      "taskDefinitionKey": "statusOfDelivery",
      "averageTimeForCompletion": 7973
    }
  ]
}
```

- Get the task variation over time i.e. tasks started and completed over the months

get: /taskVariation

Parameters:

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Number of tasks started and completed over the months

Example data:

```
{
  "data": [
    {
      "startedInstances": 10,
      "completedInstances": 4,
      "month": "Jan"
    },
    {
      "startedInstances": 6,
      "completedInstances": 3,
      "month": "Feb"
    },
    {
      "startedInstances": 9,
      "completedInstances": 9,
      "month": "March"
    },
    {
      "startedInstances": 2,
      "completedInstances": 4,
      "month": "April"
    },
    {
      "startedInstances": 0,
      "completedInstances": 0,
      "month": "May"
    },
    {
      "startedInstances": 11,
      "completedInstances": 7,
      "month": "June"
    },
    {
      "startedInstances": 14,
      "completedInstances": 12,
      "month": "July"
    },
    {
      "startedInstances": 4,
      "completedInstances": 3,
      "month": "Aug"
    },
    {
      "startedInstances": 2,
      "completedInstances": 1,
      "month": "Sep"
    },
    {
      "startedInstances": 2,
      "completedInstances": 2,

```

```
    "month": "Oct"
  },
  {
    "startedInstances": 0,
    "completedInstances": 0,
    "month": "Nov"
  },
  {
    "startedInstances": 10,
    "completedInstances": 7,
    "month": "Dec"
  }
]
}
```

- Get the process variation over time i.e. process instances started and completed over the months

get: /processVariation

Parameters:

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Number of process instances started and completed over the months

Example data:

```
{
  "data": [
    {
      "startedInstances": 3,
      "completedInstances": 3,
      "month": "Jan"
    },
    {
      "startedInstances": 10,
      "completedInstances": 5,
      "month": "Feb"
    },
    {
      "startedInstances": 8,
      "completedInstances": 6,
      "month": "March"
    },
    {
      "startedInstances": 3,
      "completedInstances": 2,

```

```
"month": "April"
},
{
  "startedInstances": 14,
  "completedInstances": 12,
  "month": "May"
},
{
  "startedInstances": 20,
  "completedInstances": 12,
  "month": "June"
},
{
  "startedInstances": 6,
  "completedInstances": 3,
  "month": "July"
},
{
  "startedInstances": 0,
  "completedInstances": 0,
  "month": "Aug"
},
{
  "startedInstances": 6,
  "completedInstances": 1,
  "month": "Sep"
},
{
  "startedInstances": 9,
  "completedInstances": 7,
  "month": "Oct"
},
{
  "startedInstances": 11,
  "completedInstances": 10,
  "month": "Nov"
},
{
  "startedInstances": 6,
  "completedInstances": 3,
  "month": "Dec"
}
]
}
```

- Get all the deployed processes

get: /allProcesses

Parameters:

Header Parameter — *Media types acceptable for the response. Default is JSON.*

Return type:

Deployed processes

Example data:

```
{
  "data": [
    "helloWorldProcess:1:11",
    "manualTaskProcess:1:15",
    "testProcess:1:4",
    "userTaskProcess:1:10"
  ]
}
```

Retrieving statistics about Users

/userServices/

Methods :

- Get all the users from user store

get: /allUsers

Parameters:

Header Parameter — *Media types acceptable for the response. Default is JSON.*

Return type:

User list

Example data:

```
{
  "data": [
    "admin",
    "testClerk"
  ]
}
```

- Get the number of completed tasks of the users

get: /userVsTaskCount

Parameters:

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Users with the number of tasks completed by each of them

Example data:

```
{
  "data": [
    {
      "userName": "admin",
      "taskCount": 4
    },
    {
      "userName": "testClerk",
      "taskCount": 3
    }
  ]
}
```

- Get the average time taken by each user to complete tasks

get: /userVsAvgTimeDuration

Parameters:

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Users with the average time taken by each user to complete tasks

Example data:

```
{
  "data": [
    {
      "userName": "admin",
      "avgTimeDuration": 372.24275
    },
    {
```

```
    "userName": "testClerk",
    "avgTimeDuration": 2740.863
  }
]
```

-
- Get the task variation of each user over time i.e. tasks started and completed by each user over the months

get: /userTaskVariation/{assignee}

Parameters:

assignee : user (required)

Header Parameter — Media types acceptable for the response. Default is JSON.

Return type:

Number of tasks started and completed over the months by the selected user

Example data:

```
{
  "data": [
    {
      "startedInstances": 3,
      "completedInstances": 4,
      "month": "Jan"
    },
    {
      "startedInstances": 10,
      "completedInstances": 8,
      "month": "Feb"
    },
    {
      "startedInstances": 6,
      "completedInstances": 5,
      "month": "March"
    },
    {
      "startedInstances": 4,
      "completedInstances": 2,
      "month": "April"
    },
    {
      "startedInstances": 9,
      "completedInstances": 10,
      "month": "May"
    },
    {
```

```
"startedInstances": 7,  
"completedInstances": 6,  
"month": "June"  
},  
{  
"startedInstances": 5,  
"completedInstances": 2,  
"month": "July"  
},  
{  
"startedInstances": 0,  
"completedInstances": 0,  
"month": "Aug"  
},  
{  
"startedInstances": 1,  
"completedInstances": 1,  
"month": "Sep"  
},  
{  
"startedInstances": 2,  
"completedInstances": 2,  
"month": "Oct"  
},  
{  
"startedInstances": 10,  
"completedInstances": 6,  
"month": "Nov"  
},  
{  
"startedInstances": 5,  
"completedInstances": 4,  
"month": "Dec"  
}  
]  
}
```

Response codes

The response status codes of the api is given in the table below.

Response code	Description
200 - Ok	Indicates that the response was found and returned.
401 - Unauthorized	The operation failed. The operation requires an Authentication header to be set. If this was present in the request, the supplied credentials are not valid or the user is not authorized to perform this operation.
404 - Not found	Indicates the requested details was not found.
405 - Method not allowed	The operation failed. The used method is not allowed for this resource.
415 - Unsupported Media Type	The operation failed. The request body contains an unsupported media type. Also occurs when the request-body JSON contains an unknown attribute or value that doesn't have the right format/type to be accepted.
500 - Internal server error	The operation failed. An unexpected exception occurred while executing the operation. The response-body contains details about the error.