

A photograph of a person's hand pointing at a laptop screen, overlaid with a semi-transparent blue filter. The hand is wearing a black wristband. The laptop screen shows some data or a map. The background is blurred, showing what appears to be a desk and some office equipment.

Process board REST API V1

Staufen ValueStreamer GmbH

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1. Introduction

1.1 REST-API & basic technical knowledge

- The Process board API allows customers to fetch or insert process activities via **REST** and **JSON**
- The API specification contains all endpoints and JSON formats in **.yaml** files as **OpenAPI 3** format
- We recommend to view the file via **Swagger UI** / Editor.
- All access to the API is done via **HTTPS**
- The API uses appropriate **HTTP methods** for each action.
 - GET: For retrieving resources.
 - POST: For creating resources
 - PUT: For updating resources.
 - DELETE: For deleting resources.
- The API returns corresponding **HTTP status codes** for each request, see Swagger file. E.g.
 - 2xx for success: 200 OK, 204 Deleted
 - 4xx for client errors: 400 Bad request, 401 Unauthorized, 404 Not found
 - 5xx for server errors: 500 Internal server error
- The API is reachable via `https://api-<tenant>.valuestreamer.de/api/` where <tenant> must be replaced with your tenant
- E.g.: `https://api-demo.valuestreamer.de/api/exchange/processactivities`

Process activity		
GET	/exchange/processactivities	Retrieve a collection of process activities.
POST	/exchange/processactivities	Insert a process activity
GET	/exchange/processactivities/{id}	Retrieve a specific process activity.
PUT	/exchange/processactivities/{id}	Update a process activity
DELETE	/exchange/processactivities/{id}	Delete a specific process activity.
Process activity: Description Endpoints for fetching and updating the data of the richtext input field 'description'.		
GET	/exchange/processactivities/{id}/description	Get the description.
PUT	/exchange/processactivities/{id}/description	Update the description.
Process activity: Planning Endpoints for fetching and updating the plan data.		
GET	/exchange/processactivities/{id}/planning	Get the phase plannings of the process activity.
PUT	/exchange/processactivities/{id}/planning	Update the phase plannings of the process activity.
Process activity: Status history		
GET	/exchange/processactivities/{id}/status-history	Get the status history of the processItem, ordered by date.
Meta Endpoints to retrieve meta data.		
GET	/exchange/processboard-categories	Get all available categories
GET	/exchange/processboard-labels	Get all available labels
GET	/exchange/processboards/{id}	Get the details of a processboard including labels, phases, categories ...
Processboard		
GET	/exchange/processboards/{id}	Get the details of a processboard including labels, phases, categories ...

1.2 Authorization and user assignment

Authorization

1. Authorization on the API endpoints works via basic auth per request
2. ValueStreamer support provides username + password to the customer
3. When sending requests to the API, the basic auth credentials must be passed base64 encoded in the authorization header like so:
Authorization: Basic 123456

Assigned user for process activity changes via the API

1. ValueStreamer support creates an ValueStreamer Application user named "API-USER"
2. Whenever a process activity is created, modified or deleted via the API, this API-USER is written to the changelogs (createdBy, modifiedBy, ...)

Example:

GET /api/exchange/processactivities?board=229fef3d-3f46-4a57-ad69-70f678e9f997&page=1 HTTP/1.1

Host: api-demo.valuestreamer.de

Accept: application/vs.pb.v1.0.0+json

Authorization: Basic

a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9WTDdLdXY=

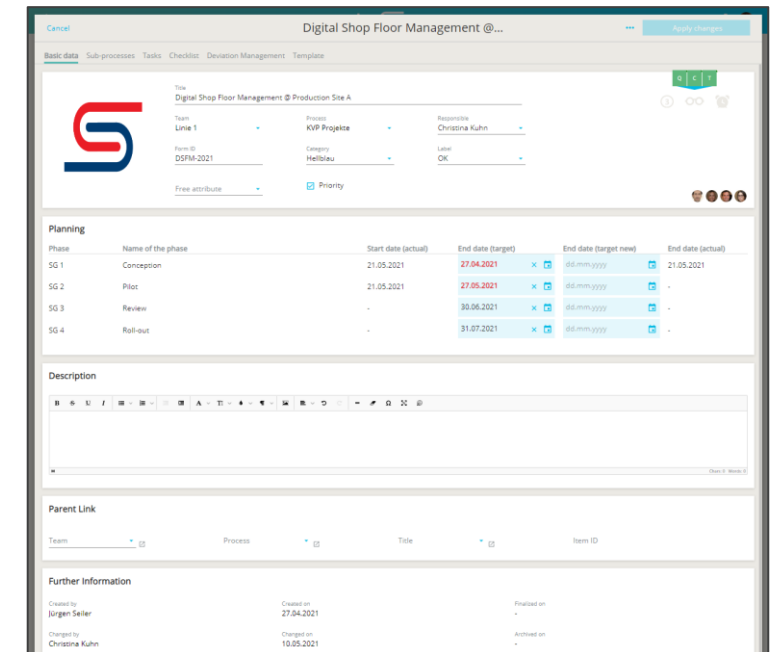
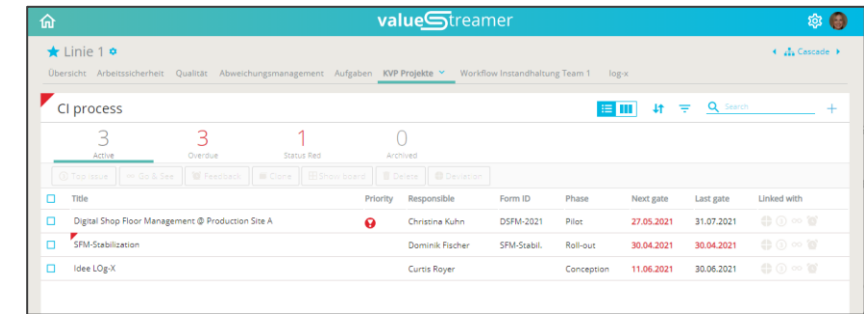
Postman example:

The screenshot shows a Postman interface for a GET request. The URL is `{{url}}/api/exchange/processactivities/df13f951-13a6-43d7-9ea7-272ac4543841`. The 'Authorization' tab is selected, showing 'Basic A...' as the type. The 'Username' field contains `{{basicUser}}` and the 'Password' field is masked with dots. A 'Show Password' checkbox is present. Below the main form, a 'Further Information' section displays metadata for the 'API-USER'.

Further Information		
Created by	Created on	Finalized on
API-USER	13.01.2021	-
Changed by	Changed on	Archived on
API-USER	11.06.2021	-

1.3 Process board overview

- Each team admin can create as many process boards as he wants to manage processes and process activities. Process activities step through the configured phases of the process board.
- Any number of **process activities** can be created in a process board.
- A process activity can be assigned to one **team member** (responsible user) in the team.
- A process activity is assigned to a **category** (mandatory field).
- A process activity can be assigned to a **label** (non-mandatory field).
- A process activity can be assigned to a **free attribute** (non-mandatory field).
- The process board is divided into backlog, 1-n **phase(s)**, done and archived. Besides backlog, done and archived, the team admin can freely add further phases.
- A process activity runs through all phases of the process board. The user can define **planned end dates** for each **phase**. The **actual start** and **end dates** are set when a process activity enters a new phase.
- A **template** (non-mandatory field) can be assigned to a process activity, which can trigger the generation of sub-processes, tasks or checklist entries when the process activity reaches specific phases.
- A process activity has an overall **status** which is calculated based on the status for **quality**, **cost** and **time**. The status can be green, yellow or red. If the status color is changed, a reason must be provided as status message.



2. Necessary metadata for querying, creating and updating process activities

1.2 Metadata: Use cases and API endpoints

The following table describes how to get all the data you need for interactions with the API
For more details, please have a look into the OpenAPI Files.

#	Use case	Use case description	HTTP method	API URL
1	Team: Get the list of teams	Returns all teams with id and name. The id can be used to fetch the team details.	GET	/exchange/teams
2	Team: Get a team's details (by team id)	Returns the details of a team by its team id: <ul style="list-style-type: none">▪ Team's name and short name▪ List of team members (potential assignees resp. responsible users)▪ List of available process boards (id and name). Can be used to fetch the process board details by id	GET	/exchange/teams/{id}
3	Process board: Get the process board details (by process board id)	Returns all process board specific metadata, which can be assigned to a process activity: <ul style="list-style-type: none">▪ Attributes▪ Categories▪ Labels▪ Phases▪ Templates	GET	/exchange/processboards/{id}
4	Get the list of all users	Returns all existing users with id and name.	GET	/exchange/users
5	Get the list of all categories	Returns all categories available on the tenant.	GET	/exchange/processboard-categories
6	Get the list of all labels	Returns all labels available on the tenant.	GET	/exchange/processboard-labels

#1 GET /exchange/teams

Get the list of teams

- The endpoint returns a list of all teams present on the tenant
- Based on the team id, the team details like the team members or available process boards can be fetched
- Media type: application/vs.te.v1.0.0+json

Request:

```
GET /api/exchange/teams HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.te.v1.0.0+json
Authorization: Basic a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9WTDDldXY=
```

Response:

```
[
  {
    "id": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
    "name": "Linie 1",
    "shortName": "Linie 1",
    "parentTeam": "5bcaa8b2-d0c1-11ea-87d0-0242ac130003"
  },
  {
    "id": "5bcaaa38-d0c1-11ea-87d0-0242ac130003",
    "name": "Linie 2",
    "shortName": "Linie 2",
    "parentTeam": "5bcaa8b2-d0c1-11ea-87d0-0242ac130003"
  },
  {
    "id": "d72fb249-af46-43d8-a116-afd5b32815ef",
    "name": "Log-X",
    "shortName": "Log-X",
    "parentTeam": "14321ce0-ba75-4336-ab26-1b13ebc33114"
  },
  {
    "id": "5bca9930-d0c1-11ea-87d0-0242ac130003",
    "name": "Management",
    "shortName": "Management",
    "parentTeam": "8ba7de30-41b8-4fb3-8d19-dd6c9e92ead7"
  }
]
```

#2 GET /exchange/teams/{id}

Get team details

- The endpoint returns the details of a team, like the team's members or process boards
- Based on the process board id, the process board details can be fetched
- Media type: application/vs.te.v1.0.0+json

Request:
GET /api/exchange/teams HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.te.v1.0.0+json
Authorization: Basic a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9WTDdldXY=

Response:

```
{
  "id": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
  "name": "Linie 1",
  "shortName": "Linie 1",
  "parentTeam": "5bcaa8b2-d0c1-11ea-87d0-0242ac130003",
  "members": [
    {
      "id": "e3373620-d0c2-11ea-87d0-0242ac130003",
      "firstName": "Nino",
      "lastName": "Baresi",
      "email": "Nino.Baresi@valuestreamer-demo.de"
    },
    {
      "id": "e3375560-d0c2-11ea-87d0-0242ac130003",
      "firstName": "Jürgen",
      "lastName": "Seiler",
      "email": "Jürgen.Seiler@valuestreamer-demo.de"
    }
  ],
  "processBoards": [
    {
      "id": "78f748e5-0ad5-4f1a-951e-7bcc7cc94d97",
      "name": "log-x"
    },
    {
      "id": "d40f30ae-f509-4126-bd71-73da5df21967",
      "name": "KVP Projekte"
    }
  ]
}
```

#3 GET /exchange/processboards/{id}

Get process board details

- The endpoint returns the details of the process board:
The selected categories, labels, phases and templates
- Media type: application/vs.pb.v1.0.0+json

Request:

```
GET /api/exchange/processboards/d40f30ae-f509-4126-bd71-73da5df21967 HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9wTDdldXY=
```

Response:

```
{
  "id": "d40f30ae-f509-4126-bd71-73da5df21967",
  "name": "KVP Projekte",
  "attributes": [],
  "categories": [
    {
      "id": "b8e3141b-815a-4be0-bdfe-7051bf1ad428",
      "name": "Hellgrün",
      "color": "#C8F8A9",
      "removable": true,
      "default": false
    }, ...
  ],
  "labels": [
    {
      "id": "10698228-d88a-4888-a043-cdc12c6f324e",
      "name": [
        {
          "language": "DE",
          "name": "Strategie"
        },
        {
          "language": "EN",
          "name": "Strategic"
        }
      ],
      "removable": true
    }, ...
  ],
  "phases": [
    {
      "id": "cb5f3b5e-fb19-4887-a3c5-c43d845a5042",
      "abbreviation": "Backlog",
      "name": "Backlog",
      "orderId": 0
    },
    {
      "id": "17696afa-b2b8-4904-bea9-30fe32497537",
      "abbreviation": "SG 1",
      "name": "Conception",
      "orderId": 1
    }, ...
  ],
  "templates": [
    {
      "id": "19771130-97f5-4762-8b72-9e61c90d2ebb",
      "title": "Shopfloor Management",
      "abbreviation": "SFM",
      "orderId": 0
    }
  ]
}
```

#4 GET /exchange/users

Get the list of users

- The endpoint returns all users present on the tenant
- For the list of team members for a specific process board, call the team details endpoint
- In non-private teams, all users can create process activities, even if they are not a team member. Therefore, process activities may have relations to users that are not a member of the team. To get the name of this users, you can fetch the list of all users present on the tenant
- Media type: application/vs.us.v1.0.0+json

Request:

```
GET /api/exchange/users HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.us.v1.0.0+json
Authorization: Basic a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9WTdLdXY=
```

Response:

```
[
  {
    "id": "e3372d60-d0c2-11ea-87d0-0242ac130003",
    "firstName": "Daniel",
    "lastName": "Ackermann",
    "email": "Daniel.Ackermann@valuestreamer-demo.de"
  },
  {
    "id": "e3372fcc-d0c2-11ea-87d0-0242ac130003",
    "firstName": "Martina",
    "lastName": "Amsel",
    "email": "Martina.Amsel@valuestreamer-demo.de"
  },
  {
    "id": "e3373314-d0c2-11ea-87d0-0242ac130003",
    "firstName": "Sarah",
    "lastName": "Andersen",
    "email": "Sarah.Andersen@valuestreamer-demo.de"
  },
  ...
]
```

#5 GET /exchange/processboard-labels

Get the list of all labels

- The endpoint returns all labels present on the tenant, regardless if they are selected for a process board or not
- For the list of selected labels for a specific process board, call the process board details endpoint
- Team administrators can select or deselect labels for their process board at runtime. Process activities may therefore have labels assigned that are no longer associated with the process board and whose label is therefore no longer returned by the process board details endpoint
- Media type: application/vs.pb.v1.0.0+json

Request:
GET /api/exchange/processboard-labels HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9WTdDldXY=

Response:

```
[
  {
    "id": "10698228-d88a-4888-a043-cdc12c6f324e",
    "name": [
      {
        "language": "DE",
        "name": "Strategie"
      },
      {
        "language": "EN",
        "name": "Strategic"
      }
    ],
    "removable": true
  },
  {
    "id": "7acee23f-bce6-40ba-b3e5-d8c92a376416",
    "name": [
      {
        "language": "DE",
        "name": "Blockiert"
      },
      {
        "language": "EN",
        "name": "Blocked"
      }
    ],
    "removable": true
  },
  ...
]
```

#6 GET /exchange/processboard-categories

Get the list of all categories

- The endpoint returns all categories present on the tenant, regardless if they are selected for a process board or not
- For the list of selected categories for a specific process board, call the process board details endpoint
- Team administrators can select or deselect categories for their process board at runtime. Process activities may therefore have categories assigned that are no longer associated with the process board and whose category is therefore no longer returned by the process board details endpoint
- Media type: application/vs.pb.v1.0.0+json

Request:
GET /api/exchange/processboard-labels HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9WTdLdXY=

Response:

```
[
  {
    "id": "65d51f7a-e600-45d2-8877-8786018a958b",
    "name": "Gelb",
    "color": "#FBFF9B",
    "removable": true,
    "default": false
  },
  {
    "id": "662511f4-e6a5-4f5b-b984-a19ad89c2d17",
    "name": "Orange",
    "color": "#FFE49B\r\n",
    "removable": true,
    "default": false
  },
  ...
]
```

3. Process board use cases and REST-API endpoints

Use case and REST-API endpoint mapping

#	Use case	HTTP Method	API URL
1	Retrieve a list of process activities for a given process board.	GET	/exchange/processactivities?board={id}
2	Create a process activity in a specific process board.	POST	/exchange/processactivities
3	Retrieve a process activity by id.	GET	/exchange/processactivities/{id}
4	Update a process activity by id.	PUT	/exchange/processactivities/{id}
5	Delete a process activity by id.	DELETE	/exchange/processactivities/{id}
6	Retrieve the description of a process activity.	GET	/exchange/processactivities/{id}/description
7	Update the description of a process activity	PUT	/exchange/processactivities/{id}/description
8	Retrieve the phase plannings of a process activity.	GET	/exchange/processactivities/{id}/planning
9	Update the phase plannings of a process activity.	PUT	/exchange/processactivities/{id}/planning
10	Retrieve the full status history of a process activity.	GET	/exchange/processactivities/{id}/status-history

For more details, please have a look into the OpenAPI Files.

Fields of a process activity and where to get them as response

Cancel Digital Shop Floor Management... Apply changes

Basic data Sub-processes Tasks Checklist Deviation Management Template **10**

1 Title
Digital Shop Floor Management @ Production Site A

2 Team
Linie 1

3 Process
KVP Projekte

4 Responsible
Christina Kuhn

5 Form ID
DSFM-2021

6 Category
Hellblau

7 Label
OK

8 Free attribute

9 Priority

11

12 Planning

Phase	Name of the phase	13 Start date (actual)	14 End date (target)	15 End date (target new)	16 End date (actual)
SG 1	Conception	21.05.2021	27.04.2021	dd.mm.yyyy	21.05.2021
SG 2	Pilot	21.05.2021	27.05.2021	dd.mm.yyyy	-

17 Description

18 Team

19 Process

20 Title

Item ID

21 Created by
Jürgen Seiler

22 Created on
27.04.2021

25 Finalized on
-

23 Changed by
Christina Kuhn

24 Changed on
10.05.2021

26 Archived on
-

#	Field	Format	JSON field name	List of endpoints: 1. GET /processactivities?board=id 2. GET /processactivities/id 3. GET /processactivities/id/description 4. GET /processactivities/id/planning 5. GET /processactivities/id/status-history				
				1	2	3	4	5
	id	UUID	id	✓	✓			
1	Title	String	title	✓	✓			
2	Team	UUID	responsibleTeam		✓			
3	Process (board)	UUID	processBoardView		✓			
4	Responsible User	UUID	responsiblePerson	✓	✓			
5	Form ID	String	formId	✓	✓			
6	Category	UUID	category	✓	✓			
7	Label	UUID	processitemLabel	✓	✓			
8	Free Attribute	UUID	freeAttribute	✓	✓			
9	Priority	Boolean	priority	✓	✓			
10	Template	UUID	processitemTemplate		✓			
11	Overall status, Status Q, C, T	Int{1,2,3}	status, statusCost, statusQuality, statusTime	✓ Overall	✓ Overall + Q, C, T			✓ Q, C, T
	Status message	String	statusMessage		✓			✓
12	Current phase	UUID	phase	✓	✓		✓	
13	Start date (actual)	Date	actualStartDate				✓	
14	End date (target)	Date	targetEndDate				✓	
15	End date (target new)	Date	targetEndDateNew				✓	
16	End date (actual)	Date	actualEndDate				✓	
17	Description	String	description			✓		
18	Parent Team	UUID	linkedToTeam		✓			
19	Parent Process (board view)	UUID	linkedToProcess		✓			
20	Parent Process activity	UUID	linkedToProcessitem		✓			
21, 22	Created by, Created on	UUID, Date	createdBy, createdDate		✓			
23, 24	Changed by, Changed on	UUID, Date	modifiedBy, modifiedDate		✓			
25	Finalized on	Date	actualEndDate		✓			
26	Archived on	Date	archivedDate		✓			

Fields of a process activity and where to insert/update them in the request body

Cancel Digital Shop Floor Management... Apply changes

Basic data Sub-processes Tasks Checklist Deviation Management Template 10

1 Title
Digital Shop Floor Management @ Production Site A

2 Team
Linie 1

3 Process
KVP Projekte

4 Responsible
Christina Kuhn

5 Form ID
DSFM-2021

6 Category
Hellblau

7 Label
OK

8 Free attribute

9 Priority

11

Planning 12

Phase	Name of the phase	Start date (actual)	End date (target)	End date (target new)	End date (actual)
SG 1	Conception	21.05.2021	27.04.2021	dd.mm.yyyy	21.05.2021
SG 2	Pilot	21.05.2021	27.05.2021	dd.mm.yyyy	-

13

14

15

16

Description 17

Parent Link

Team 18

Process 19

Title 20

Item ID

Further Information

Created by 21
Jürgen Seiler

Created on 22
27.04.2021

Finalized on 25
-

Changed by 23
Christina Kuhn

Changed on 24
10.05.2021

Archived on 26
-

#	Field	Format	JSON field name	List of endpoints: 1. POST /processactivities 2. PUT /processactivities/id 3. PUT /processactivities/id/description 4. PUT /processactivities/id/planning			
				1	2	3	4
	id	UUID	id				
1	Title	String	title	✓	✓		
2	Team	UUID	responsibleTeam	✓			
3	Process	UUID	processBoardView	✓			
4	Responsible User	UUID	responsiblePerson	✓	✓		
5	Form ID	String	formId	✓	✓		
6	Category	UUID	category	✓	✓		
7	Label	UUID	processitemLabel	✓	✓		
8	Free Attribute	UUID	freeAttribute	✓	✓		
9	Priority	Boolean	priority	✓	✓		
10	Template	UUID	processitemTemplate	✓	✓		
11	Overall status, Status Q, C, T	Int{1,2,3}	status, statusCost, statusQuality, statusTime	✓ Q, C, T	✓ Q, C, T		
	Status message	String	statusMessage	✓	✓		
12	Current phase	UUID	phase	✓	✓		
13	Start date (actual)	Date	actualStartDate				✓
14	End date (target)	Date	targetEndDate	✓			✓
15	End date (target new)	Date	targetEndDateNew				✓
16	End date (actual)	Date	actualEndDate				✓
17	Description	String	description			✓	
18	Parent Team	UUID	linkedToTeam				
19	Parent Process (board view)	UUID	linkedToProcess				
20	Parent Process activity	UUID	linkedToProcessitem				
21, 22	Created by, Created on	UUID, Date	createdBy, createdDate				
23, 24	Changed by, Changed on	UUID, Date	modifiedBy, modifiedDate				
25	Finalized on	Date	actualEndDate				
26	Archived on	Date	archivedDate				

#1 GET /exchange/processactivities

Retrieve a list of process activities

- The endpoint returns all process activities in the given process board
- Filter attributes as req. parameters:
 - **?board={processBoardId}** -> id of the process board, mandatory
 - **&page=1** -> Page number., max. 200 entries per page, mandatory
 - **&phase={phaseId}** -> cf. Process board metadata / phaseId
 - If phaseId is not provided, the endpoint returns all process activities that are not archived
- Media type: application/vs.pb.v1.0.0+json

Request:

```
GET /api/exchange/processactivities?board=229fef3d-3f46-4a57-ad69-70f678e9f997&page=1 HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic a3BpZXhjaGFuZ2U6NW1VZE1HbWpxOTNvdE9WTdDldXY=
```

Response:

```
{
  "page": {
    "page": 0,
    "elementsOnPage": 0,
    "elementsPerPage": 0,
    "totalPages": 0,
    "totalElements": 0
  },
  "entries": [
    {
      "id": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "category": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "freeAttribute": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "formId": "string",
      "phase": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "priority": true,
      "processitemLabel": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "processitemTemplate": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "responsiblePerson": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "responsibleTeam": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
      "status": 1,
      "title": "string"
    }
  ]
}
```

#2 POST /exchange/processactivities

Insert a process activity

- The endpoint inserts a new process activity into a process board (processBoardView)
- category, freeAttribute, phase, processitemLabel, processitemTemplate, responsiblePerson are filled with the id of the corresponding entry
- statusCost, statusQuality, statusTime can be filled with 1=green, 2=yellow, 3=red

```
Request:
POST /api/exchange/processactivities HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>

{
  "category": "c1e96ab9-366e-4c6d-822c-6bf8f9f4d5ea",
  "freeAttribute": null,
  "formId": "DSFM-2021",
  "phase": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
  "priority": true,
  "processitemLabel": "ec7c5766-778f-4cf1-b338-396930061eed",
  "processitemTemplate": "044c97da-4b1e-4610-b493-b191888d052a",
  "responsiblePerson": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "statusCost": 1,
  "statusQuality": 1,
  "statusTime": 1,
  "statusMessage": "",
  "title": "Digital Shop Floor Management @ Production Site A",
  "processBoardView": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
  "responsibleTeam": "3fa85f64-5717-4562-b3fc-2c963f66afa6",
  "targetEndDate": "2021-06-14"
}
```

Bold = required / mandatory

- processitemTemplate can be assigned only once – switching to another template is not possible
- The targetEndDate corresponds to the planned targetEndDate of the least phase
- Media type: application/vs.pb.v1.0.0+json

```
Response:
{
  "id": "df13f951-13a6-43d7-9ea7-272ac4543841",
  "actualEndDate": null,
  "archivedDate": null,
  "category": "c1e96ab9-366e-4c6d-822c-6bf8f9f4d5ea",
  "createdBy": "e3375560-d0c2-11ea-87d0-0242ac130003",
  "createdByTeam": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
  "createdDate": "2021-04-27",
  "freeAttribute": null,
  "formId": "DSFM-2021",
  "linkedToTeam": null,
  "linkedToProcessitem": null,
  "linkedToProcess": null,
  "modifiedBy": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "modifiedDate": "2021-05-10",
  "phase": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
  "priority": true,
  "processitemLabel": "ec7c5766-778f-4cf1-b338-396930061eed",
  "processitemTemplate": "19771130-97f5-4762-8b72-9e61c90d2ebb",
  "responsiblePerson": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "statusCost": 1,
  "statusQuality": 1,
  "statusTime": 1,
  "status": 1,
  "statusMessage": "Created by Jürgen Seiler",
  "title": "Digital Shop Floor Management @ Production Site A",
  "responsibleTeam": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
  "processBoardView": "d40f30ae-f509-4126-bd71-73da5df21967"
}
```

#3 GET /exchange/processactivities/{id}

Retrieve a specific process activity

- The endpoint returns a specific process activity by id
- Media type: application/vs.pb.v1.0.0+json

Request:
GET /api/exchange/processactivities/df13f951-13a6-43d7-9ea7-272ac4543841
HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>

Response:

```
{
  "id": "df13f951-13a6-43d7-9ea7-272ac4543841",
  "actualEndDate": null,
  "archivedDate": null,
  "category": "c1e96ab9-366e-4c6d-822c-6bf8f9f4d5ea",
  "createdBy": "e3375560-d0c2-11ea-87d0-0242ac130003",
  "createdByTeam": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
  "createdDate": "2021-04-27",
  "freeAttribute": null,
  "formId": "DSFM-2021",
  "linkedToTeam": null,
  "linkedToProcessitem": null,
  "linkedToProcess": null,
  "modifiedBy": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "modifiedDate": "2021-05-10",
  "phase": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
  "priority": true,
  "processitemLabel": "ec7c5766-778f-4cf1-b338-396930061eed",
  "processitemTemplate": "19771130-97f5-4762-8b72-9e61c90d2ebb",
  "responsiblePerson": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "statusCost": 1,
  "statusQuality": 1,
  "statusTime": 1,
  "status": 1,
  "statusMessage": "Created by Jürgen Seiler",
  "title": "Digital Shop Floor Management @ Production Site A",
  "responsibleTeam": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
  "processBoardView": "d40f30ae-f509-4126-bd71-73da5df21967"
}
```

#4 PUT /exchange/processactivities/{id}

Update a process activity

- The endpoint updates a specific process activity by id
- processitemTemplate can be assigned only once – switching to another template is not possible
- If one of the values in statusCost, statusQuality, statusTime or statusMessage differs from the previous values, a new status history record is created internally
- To change the phase of a process activity, insert the corresponding id of the phase. When the phase is changed, actual start date and actual end date are automatically set in the planning section
- Media type: application/vs.pb.v1.0.0+json

Bold = required / mandatory

```
Request:
PUT /api/exchange/processactivities/df13f951-13a6-43d7-9ea7-272ac4543841
HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>

{
  "category": "c1e96ab9-366e-4c6d-822c-6bf8f9f4d5ea",
  "freeAttribute": null,
  "formId": "DSFM-2021",
  "phase": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
  "priority": true,
  "processitemLabel": "ec7c5766-778f-4cf1-b338-396930061eed",
  "processitemTemplate": "19771130-97f5-4762-8b72-9e61c90d2ebb",
  "responsiblePerson": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "statusCost": 1,
  "statusQuality": 1,
  "statusTime": 3,
  "statusMessage": "Deadline delay",
  "title": "Digital Shop Floor Management @ Production Site A",
}
```

```
Response:
{
  "id": "df13f951-13a6-43d7-9ea7-272ac4543841",
  "actualEndDate": null,
  "archivedDate": null,
  "category": "c1e96ab9-366e-4c6d-822c-6bf8f9f4d5ea",
  "createdBy": "e3375560-d0c2-11ea-87d0-0242ac130003",
  "createdByTeam": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
  "createdDate": "2021-04-27",
  "freeAttribute": null,
  "formId": "DSFM-2021",
  "linkedToTeam": null,
  "linkedToProcessitem": null,
  "linkedToProcess": null,
  "modifiedBy": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "modifiedDate": "2021-05-10",
  "phase": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
  "priority": true,
  "processitemLabel": "ec7c5766-778f-4cf1-b338-396930061eed",
  "processitemTemplate": "19771130-97f5-4762-8b72-9e61c90d2ebb",
  "responsiblePerson": "e3374700-d0c2-11ea-87d0-0242ac130003",
  "statusCost": 1,
  "statusQuality": 1,
  "statusTime": 1,
  "status": 1,
  "statusMessage": "Deadline delay",
  "title": "Digital Shop Floor Management @ Production Site A",
  "responsibleTeam": "5bcaa97a-d0c1-11ea-87d0-0242ac130003",
  "processBoardView": "d40f30ae-f509-4126-bd71-73da5df21967"
}
```


#5 DELETE /exchange/processactivities/{id}

Delete a process activity

- The endpoint deletes a specific process activity by id
- Media type: application/vs.pb.v1.0.0+json

Request:
DELETE /api/exchange/processactivities/4fb39aaa-1458-4cab-82d9-fee017177cd2
HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>

Response:

#6 GET /exchange/processactivities/{id}/description

Get the description.

- The endpoint returns the rich text description of a process activity
- Media type: application/vs.pb.v1.0.0+json

Request:

```
GET /api/exchange/processactivities/df13f951-13a6-43d7-9ea7-272ac4543841/description HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>
```

Response:

```
{
  "description": "<p>Here comes the richtext.</p>\n"
}
```

#7 PUT /exchange/processactivities/{id}/description

Update the description

- The endpoint updates the rich text description of a process activity
- Media type: application/vs.pb.v1.0.0+json

Request:

```
PUT /api/exchange/processactivities/df13f951-13a6-43d7-9ea7-272ac4543841/description HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>
{
  "description": "<b>Here comes the new richtext.</b>"
}
```

Response:

```
{
  "description": "<p>Here comes the new richtext.</p>\n"
}
```

#8 GET /exchange/processactivities/{id}/planning

Get the phase plannings of the process activity

- The endpoint returns the plannings for each custom phase of the process activity
- Backlog, Done and Archived are not listed resp. have no plannings and start or end dates
- Media type: application/vs.pb.v1.0.0+json

Request:
GET /api/exchange/processactivities/df13f951-13a6-43d7-9ea7-272ac4543841/planning HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>

Response:

```
[
  {
    "phaseId": "17696afa-b2b8-4904-bea9-30fe32497537",
    "actualStartDate": "2021-05-21",
    "actualEndDate": "2021-05-21",
    "targetEndDate": "2021-04-27",
    "targetEndDateNew": null
  },
  {
    "phaseId": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
    "actualStartDate": "2021-05-21",
    "actualEndDate": null,
    "targetEndDate": "2021-05-27",
    "targetEndDateNew": null
  },
  {
    "phaseId": "0247c8f2-4d4e-4e62-a73a-2ed0dedfbc5e",
    "actualStartDate": null,
    "actualEndDate": null,
    "targetEndDate": "2021-06-30",
    "targetEndDateNew": null
  },
  {
    "phaseId": "bd6f1927-2e00-47f8-8880-bf44f3f99177",
    "actualStartDate": null,
    "actualEndDate": null,
    "targetEndDate": "2021-07-31",
    "targetEndDateNew": null
  }
]
```

#9 PUT /exchange/processactivities/{id}/planning

Update the phase plannings of the process activity

- The endpoint updates the plannings for each custom phase of the process activity
- Media type: application/vs.pb.v1.0.0+json

```
Request:
PUT /api/exchange/processactivities/df13f951-13a6-43d7-9ea7-
272ac4543841/planning HTTP/1.1
Host: api-demo.valuestreamer.de
Accept: application/vs.pb.v1.0.0+json
Authorization: <>
[
  {
    "phaseId": "17696afa-b2b8-4904-bea9-30fe32497537",
    "targetEndDate": "2021-04-28",
    "targetEndDateNew": null
  },
  {
    "phaseId": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
    "targetEndDate": "2021-05-29",
    "targetEndDateNew": null
  },
  {
    "phaseId": "0247c8f2-4d4e-4e62-a73a-2ed0dedfbc5e",
    "targetEndDate": "2021-07-05",
    "targetEndDateNew": null
  },
  {
    "phaseId": "bd6f1927-2e00-47f8-8880-bf44f3f99177",
    "targetEndDate": "2021-07-28",
    "targetEndDateNew": "2021-07-29",
  }
]
```

```
Response:
[
  {
    "phaseId": "17696afa-b2b8-4904-bea9-30fe32497537",
    "actualStartDate": "2021-05-21",
    "actualEndDate": "2021-05-21",
    "targetEndDate": "2021-04-28",
    "targetEndDateNew": null
  },
  {
    "phaseId": "cbdf4a11-6e7f-4522-9476-2e4e53b79ef2",
    "actualStartDate": "2021-05-21",
    "actualEndDate": null,
    "targetEndDate": "2021-05-29",
    "targetEndDateNew": null
  },
  {
    "phaseId": "0247c8f2-4d4e-4e62-a73a-2ed0dedfbc5e",
    "actualStartDate": null,
    "actualEndDate": null,
    "targetEndDate": "2021-07-05",
    "targetEndDateNew": null
  },
  {
    "phaseId": "bd6f1927-2e00-47f8-8880-bf44f3f99177",
    "actualStartDate": null,
    "actualEndDate": null,
    "targetEndDate": "2021-07-28",
    "targetEndDateNew": "2021-07-29",
  }
]
```

#10 GET /exchange/processactivities/{id}/status-history

Get the status history log of the process activity

- The endpoint returns the full status history log of the process activity as array
- The status can be updated via PUT
/exchange/processactivities/{id} (Cf. Use case #4)
- Media type: application/vs.pb.v1.0.0+json

Request:

```
GET /api/exchange/processactivities/df13f951-13a6-43d7-9ea7-272ac4543841/status-history HTTP/1.1
Host: api-demo.valuestreamer.de
accept: application/vs.pb.v1.0.0+json
Authorization: Basic <>
```

Response:

```
[
  {
    "comment": "Deadline delay",
    "modifiedByUser": "e3375560-d0c2-11ea-87d0-0242ac130003",
    "modifiedDate": "2021-04-30",
    "statusCost": 1,
    "statusQuality": 1,
    "statusTime": 3
  },
  {
    "comment": "Created by Jürgen Seiler",
    "modifiedByUser": "e3375560-d0c2-11ea-87d0-0242ac130003",
    "modifiedDate": "2021-04-27",
    "statusCost": 1,
    "statusQuality": 1,
    "statusTime": 1
  }
]
```

valueSstreamer

ECHTE ZUSAMMENARBEIT