

Solution Details Guide

The implementation provides a simple example of how extension parameters that are passed from DME next number microservice can be traced and used in serverless function implemented in SAP BTP, Kyma Runtime.

Open the DMC_NextNumber_InAppExtensions/pass-ext-params-kyma/code_solution directory, contains two YAML files, known as "Kubernetes manifest". The manifest is a specification of a Kubernetes API object in JSON or YAML format. A manifest specifies the desired state of an object that Kubernetes will maintain when you apply the manifest.

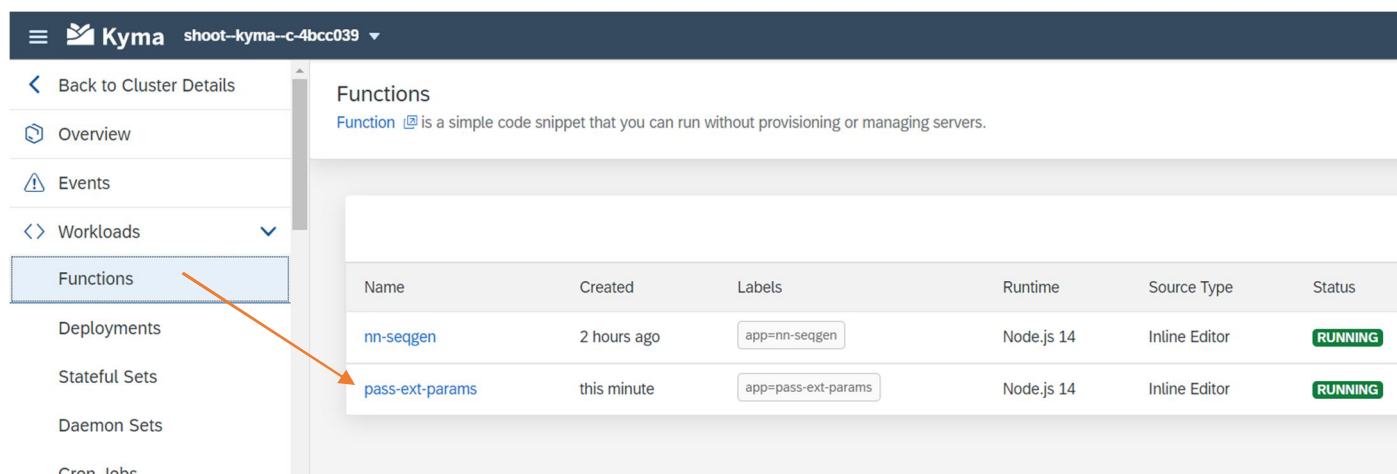
- Define pass-ext-params serverless function in pass-ext-params_function.yaml

"pass-ext-params" serverless function illustrates how to get plant value from extension parameters that passed from DME next number microservice, it also shows how to trace data to Logs by using console.log() function.

```
apiVersion: serverless.kyma-project.io/v1alpha1
kind: Function
metadata:
  labels:
    app: pass-ext-params
    name: pass-ext-params
spec:
  buildResources:
    limits:
      cpu: 700m
      memory: 700Mi
    requests:
      cpu: 200m
      memory: 200Mi
  deps: "{\n  \"name\": \"pass-ext-params\",\n  \"version\": \"1.0.0\",\n  \"dependencies\":\n    {\n}"
  maxReplicas: 1
  minReplicas: 1
  resources:
    limits:
      cpu: 25m
      memory: 32Mi
    requests:
      cpu: 10m
      memory: 16Mi
  runtime: nodejs14
  source: |-
    module.exports = {
      main: async function(event, context) {
        let result = event.data;
        console.log("Trace Extension parameters : %j", result);
        let extensionParameters = result.extensionParameters;
        if (extensionParameters) {
          let plant = extensionParameters["PLANT"];
          console.log("Trace Extension parameter PLANT : %s", plant);
        }
        return result;
      }
    }
```

```
}
```

The result of this deployment can be found if you navigate to Workloads à Functions in Kyma Console UI.



The screenshot shows the Kyma Console UI for a cluster named 'shoot-kyma-c-4bcc039'. The left sidebar contains navigation links: 'Back to Cluster Details', 'Overview', 'Events', 'Workloads' (expanded), 'Functions' (highlighted with an orange arrow), 'Deployments', 'Stateful Sets', 'Daemon Sets', and 'Cron Jobs'. The main content area is titled 'Functions' and includes a description: 'Function is a simple code snippet that you can run without provisioning or managing servers.' Below this is a table listing functions.

Name	Created	Labels	Runtime	Source Type	Status
nn-seqgen	2 hours ago	app=nn-seqgen	Node.js 14	Inline Editor	RUNNING
pass-ext-params	this minute	app=pass-ext-params	Node.js 14	Inline Editor	RUNNING

- Define API Rule in `pass-ext-params_apirule.yaml`

Defines the API endpoint, which exposes the services outside the cluster.

```
apiVersion: gateway.kyma-project.io/v1alpha1
kind: APIRule
metadata:
  name: pass-ext-params-api
spec:
  gateway: kyma-gateway.kyma-system.svc.cluster.local
  rules:
    - accessStrategies:
      - config: {}
        handler: noop
      methods:
        - POST
      path: /. *
    service:
      host: pass-ext-params
      name: pass-ext-params
      port: 80
```

The result of this deployment can be found if you navigate to Discovery and Network à API Rules in Kyma Console UI.

Kyma shoot-kyma-c-4bcc039

Daemon Sets
Cron Jobs
Jobs
Replica Sets
Pods
Discovery and Network
API Rules
Ingresses
Services
Horizontal Pod Autoscal...

API Rules
API Rule allows for exposing a service externally.

Create API

Name	Created	Labels	Host	Service Name	Status
nn-seggen-api	2 hours ago	-	https://nn-seggen.c-4bcc039.kyma.shoot.live.k8s-hana.ondemand.com	nn-seggen (port: 80)	OK
pass-ext-params-api	2 minutes ago	-	https://pass-ext-params.c-4bcc039.kyma.shoot.live.k8s-hana.ondemand.com	pass-ext-params (port: 80)	OK

Use Host value as URL path for defining new service in the Manage Service Registry DME application. This new service can be used as an in-App Extension for Next Number functionality.

SAP Manage Service Registry Plant: KYMA (Plant for KYMA extensions)

Manage Service Registry

Schema Library

Search Protocol: Web Server: Status: All Clear Adapt Filters

API Services UI Extensions

All Services Add Import

Group	Name	Protocol	Web Server	Status
User-defined				
<input type="checkbox"/>	AN2105T4_Group_Test02	REST	-	Enabled
<input type="checkbox"/>	tdstsfdsfsdfstsf	REST	-	Enabled
<input type="checkbox"/>	showcase_transformdata	REST	SHOWCASE_VL_TRANSFORM	Enabled
<input type="checkbox"/>	DataCollectionServiceWSService	SOAP	LI_WEBSEVER_ONPREMISE	Enabled
<input type="checkbox"/>	LiKong 建立连接	REST	LiKongIoTGateway	Enabled

New Service

Header General Information Parameters Request Body Response

Service Name: * pass_ext_params Description: Pass Extension Parameters

Display Name: Pass Extension Parameters Status: ☒ Enabled

Group:

General Information

Type: HTTP Protocol: REST

Method: POST Web Server:

URL / Path: * https://pass-ext-params.c-4bcc039.kyma.shoot.live.k8s-hana.ondemand.com Is Extension: Yes

Parameters

Create Cancel