



# PAAS HACKATHON

Stelios Kousouris (stelios@redhat.com)

Andrea Tarocchi (atarocch@redhat.com)

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# INTRODUCTION

## **Scenario:**

You are santas helping teams with one aim to get his reindeers in alphabetical order in order for Santa to deliver the Christmas Presents.

## **Hackathon Goal:**

Lets learn the quirks of bringing an MSA into OCP, read environment configurations, communicate with other MSAs, use pipelines and anything else you can bring in (-:

# HACKATHON FORMAT

- Will be split in teams of 2 people each according to [https://docs.google.com/spreadsheets/d/1992Hygg9oUAeevFcgx4pG\\_4z0](https://docs.google.com/spreadsheets/d/1992Hygg9oUAeevFcgx4pG_4z0)
- each groups is going to develop a MSA
- we will have 2 checkpoints meetings (invitations already sent) and a final presentation/discussion.

# MSA REQUIREMENTS

- be able to **handle** an **http POST** at **/reindeerservice** with this JSON payload

```
{
  "serviceName" : "",
  "payload" : [ {
    "teamName" : "",
    "reindeerName" : "",
    "nameEmaiMap" : {
      " " : " "
    }
  }
]
```

Example:

```
{
  "serviceName" : "shinny-upatree",
  "payload" : [ {
    "teamName" : "santas-helpers-c-team",
    "reindeerName" : "comet",
    "nameEmaiMap" : {
      "Andrea Tarrochi" : "atarocch@redhat.com",
      "Stelios Kousouris" : "stelios@redhat.com"
    }
  }, {
    "teamName" : "santas-helpers-a-team",
    "reindeerName" : "dancer",
    "nameEmaiMap" : {
      "Matteo Renzi" : "mrenzi@redhat.com",
      "Alexis Tsipras" : "atsipras@redhat.com"
    }
  } ]
}
```

# MSA REQUIREMENTS

- **pick up** your team reindeer names from a **configMap**:

```
configMap: santas-config  
  
santas-helpers-a-team    santas-helpers-b-team  
team.a.reindeer.1       team.b.reindeer.1  
team.a.reindeer.2       team.b.reindeer.2
```

- **add** your reindeer to the input list you received (might be empty if you are the first service called)
- **sort** the reindeer list alphabetically
- **discover** a service called **proxy-api** and **call** it with an http POST at /api/service/proxy with the payload you've just created by adding your reindeer to the list and sorting it.
- the proxy-api service is going to call all the services in turn and send an email with the aggregated response which should hopefully contain all the reindeer names in alphabetical order

# EXTENDED EXAMPLE

- assume you are team a (i.e. your service name should be bushy-evergreen) and you receive a POST call with this payload:

```
{
  "serviceName" : "shinny-upatree",
  "payload" : [ {
    "teamName" : "santas-helpers-c-team",
    "reindeerName" : "comet",
    "nameEmailMap" : {
      "Andrea Tarrochi" : "atarocch@redhat.com",
      "Stelios Kousouris" : "stelios@redhat.com"
    }
  } ]
}
```

- and the configMap looks like this:

```
configMap: santas-config

team.a.reindeer.1=dancer      team.b.reindeer.1=dasher
team.a.reindeer.2=prancer    team.b.reindeer.2=rudolph
[...]
```

# EXTENDED EXAMPLE

- you should POST to proxy-api service /api/service/proxy this payload:

```
{
  "serviceName" : "bushy-evergreen",
  "payload" : [ {
    "teamName" : "santas-helpers-c-team",
    "reindeerName" : "comet",
    "nameEmailMap" : {
      "Andrea Tarrochi" : "atarocch@redhat.com",
      "Stelios Kousouris" : "stelios@redhat.com"
    }
  }, {
    "teamName" : "santas-helpers-c-team",
    "reindeerName" : "dancer",
    "nameEmailMap" : {
      "Andrea Tarrochi" : "dsanchor@redhat.com",
      "Stelios Kousouris" : "psforza@redhat.com"
    }
  }, {
    "teamName" : "santas-helpers-c-team",
    "reindeerName" : "prancer",
    "nameEmailMap" : {
      "Andrea Tarrochi" : "dsanchor@redhat.com",
      "Stelios Kousouris" : "psforza@redhat.com"
    }
  } ]
}
```

# ENVIRONMENT DESCRIPTION

- each MSA service has his own namespace in which a test version of proxy-api service should be already deployed
- there are a preprod and prod namespaces in which latest images from each team namespaces are pulled and deployed
- a mycicd namespace which does the pull and deploy in preprod and prod using jenkins