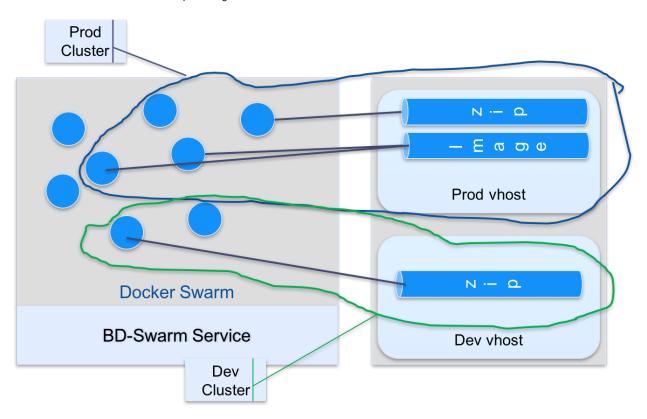
# **Script Deployment Stories**

In order to turn the tools catalog into an application that can administrator scripts running in clusters, we propose a set of changes:

# Concepts:

- Tool
  - A basic 3rd party library that is used to develop converters or extractors
- Tool Script
  - A deployable component based on the tool's library
  - Can be a converter or an extractor
  - Can be a Docker image or manually deployed to a VM
- Cluster
  - A place where a Tool Script can be deployed
  - Includes a BD-Status service and a Rabbit vhost
- Service
  - An instance of a script running in the swarm



#### Deployment

As a Brown Dog Administrator I can...

- 1. Select a script from the tools catalog to deploy
- 2. Select a cluster to which the script will be deployed
- 3. Override default values:

C.

- a. The script's default queue name
  - i. RABBITMQ\_QUEUE environment variable set in the request [ BD-1835 ]
  - ii. RABBITMQ\_URI for the vhost Exists in Polyglot and Pyclowder2 and 1
  - iii. Only for extractor [BD-1837]
- b. Default min and max instances
  - i. Passed in as labels bd.replicas.min/max [ BD-1771 ]
  - ii. Memory and CPU resource requirements
  - i. Passed in as resource property in request
    - ii. Just limits, not reservations
- d. Default Service Name
- i. construct as: Cluster name type queueName
- e. Disable automated queue bindings
  - i. RABBITMQ\_EXCHANGE if empty do not bind
  - ii. if not in environment then it will bind to default

- 4. Receive an error if:
  - a. Queue name is already allocated in the cluster
  - b. Docker image invalid
  - c. Cluster unable to allocate requested resources

### Pause Deployed Service

As a Brown Dog Administrator I can...

- 1. Select a cluster to view deployed services
- 2. Select a service and pause processing

#### Delete a Deployed Service

As a Brown Dog Administrator I can...

- 1. Select a cluster to view deployed services
- 2. Select a service and delete it and its associated queues

#### Administration Authorization

As a brown dog tool administrator I can...

- 1. Query tools and scripts
- 2. Approve tools
- 3. Revoke approval

As a brown dog deployment administrator for a cluster I can...

- 1. Query tools and scripts
- 2. Deploy a script to a cluster for which I am authorized
- 3. Pause a service on a cluster for which I am authorized
- 4. Delete a service on a cluster for which I am authorized

# Manually Bind a Service to an Exchange

As a Brown Dog Administrator I can...

- 1. Select a cluster to view deployed services
- 2. Select a service to manage
- 3. See all exchanges in the cluster to which I am authorized to manage
- 4. See existing bindings (including those generated automatically)
- 5. Enter a binding between exchange and the service

# Manually Delete Binding Between a Service to an Exchange

As a Brown Dog Administrator I can...

- 1. Select a cluster to view deployed services
- 2. Select a service to manage
- 3. See all exchanges in the cluster to which I am authorized to manage
- 4. See existing bindings (including those generated automatically)
- 5. Delete a binding