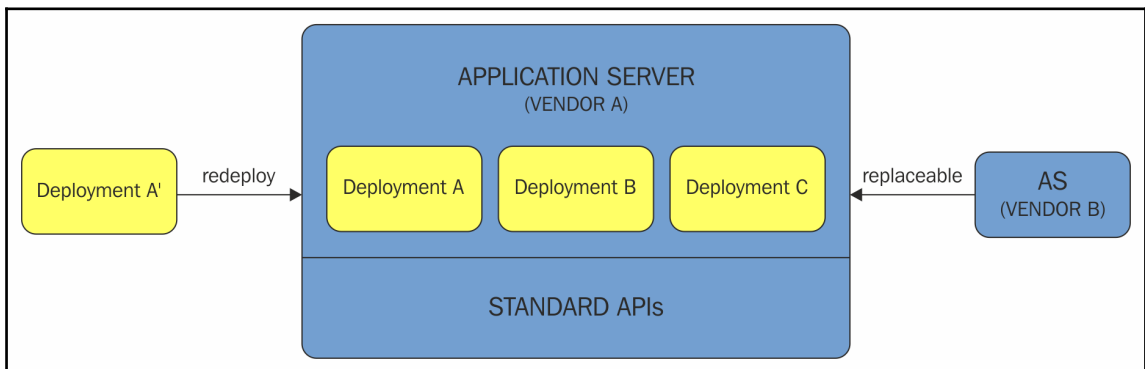
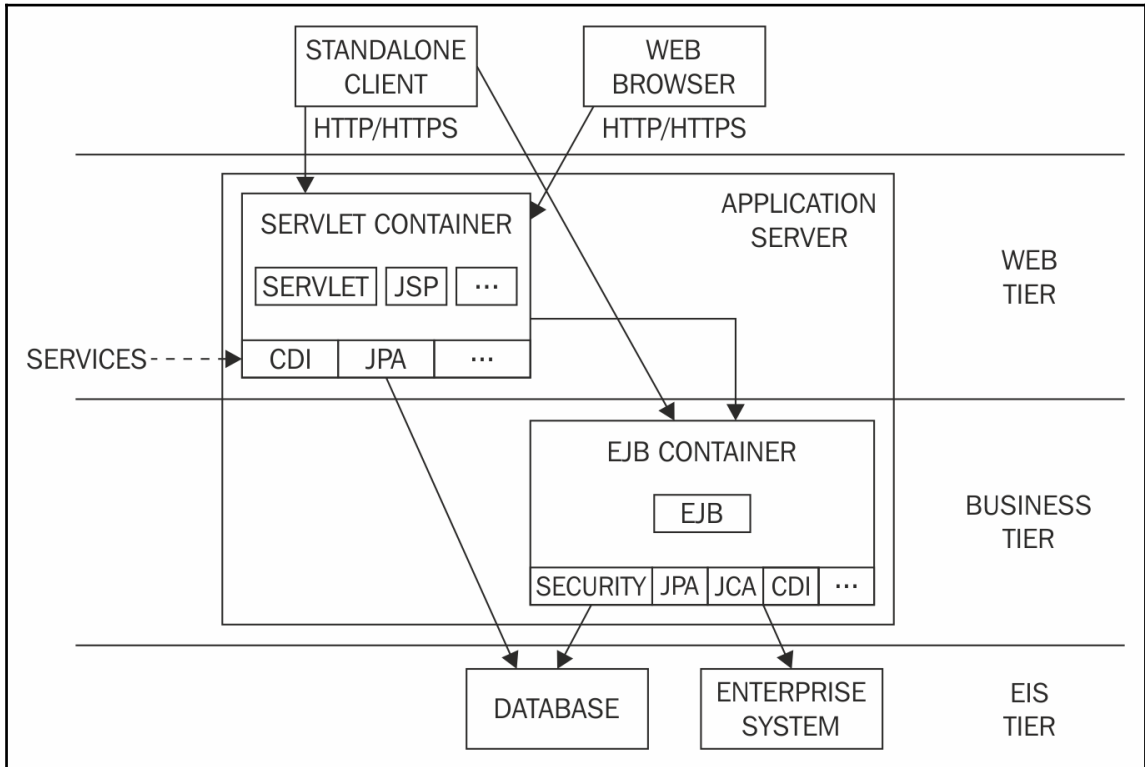
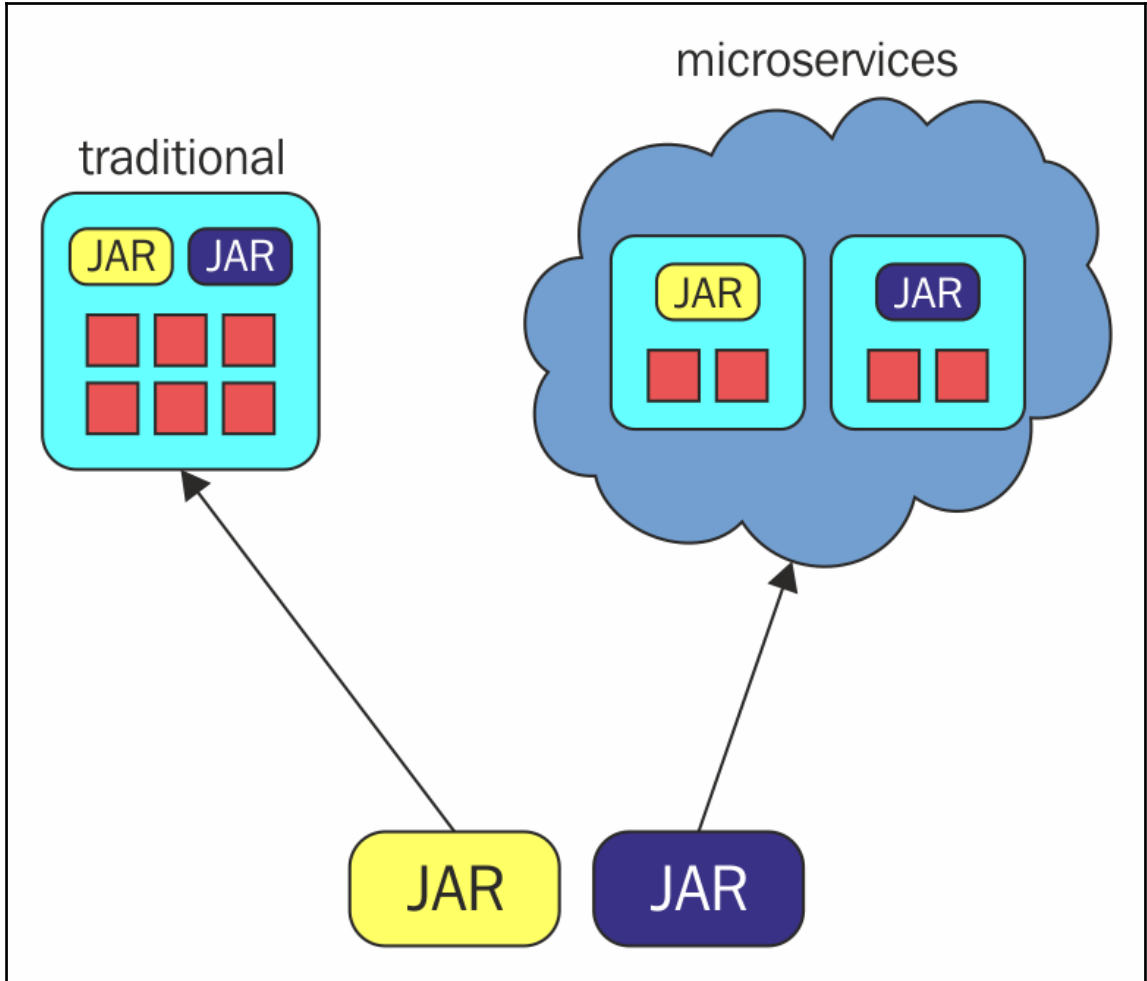
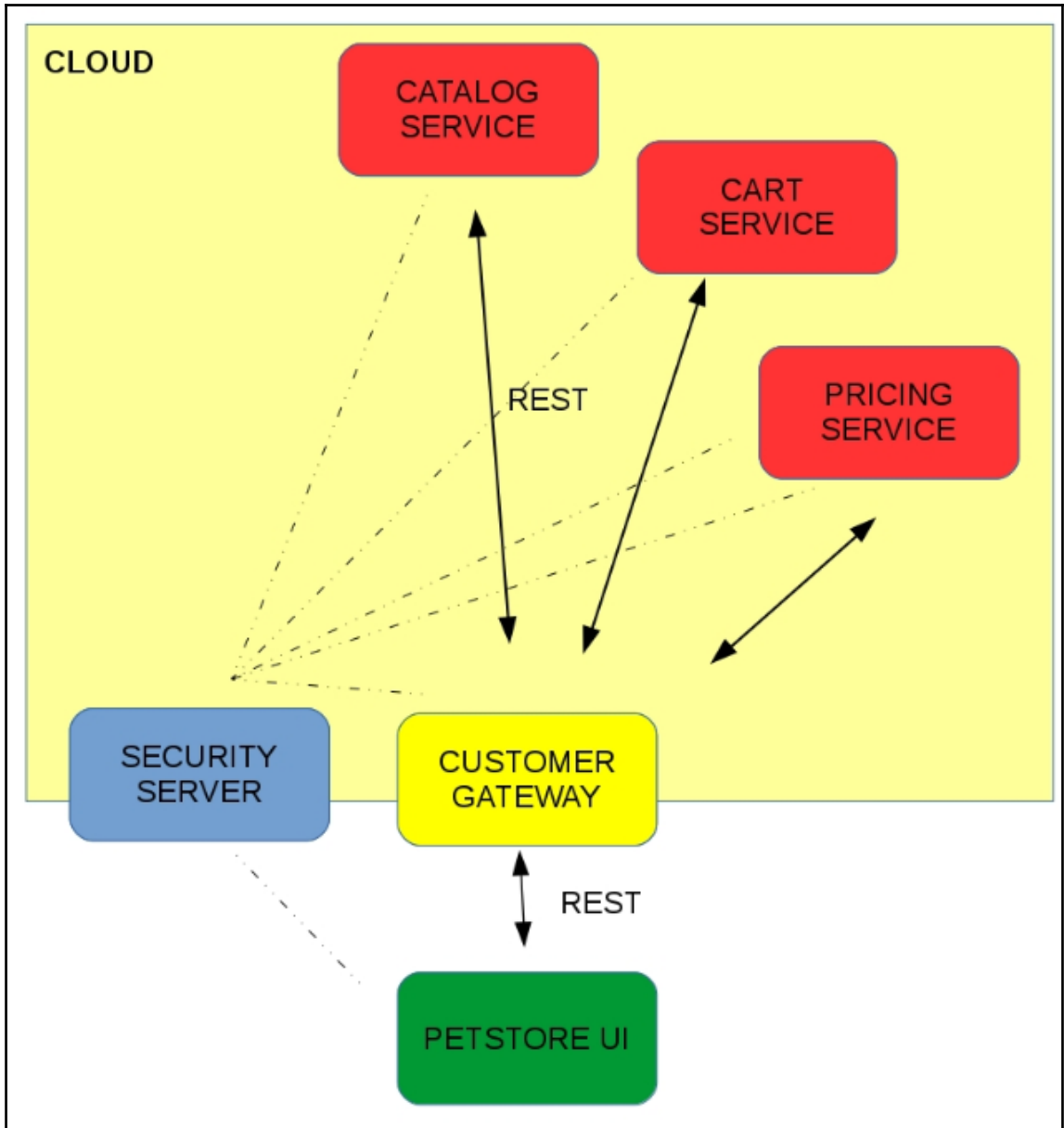


Chapter 1: Java EE and Modern Architectural Methodologies



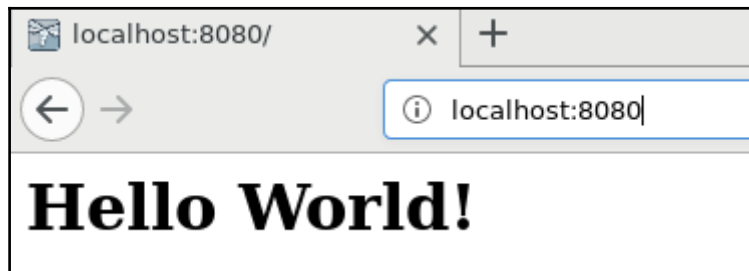




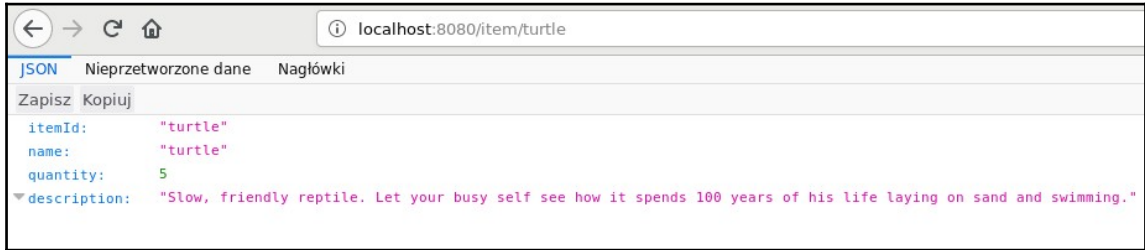
Chapter 2: Getting Familiar with WildFly Swarm

```
[org.jboss.as.security] (ServerService Thread Pool -- 18) WFLYSEC0002: Activating Security
[org.jboss.as.security] (MSC service thread 1-3) WFLYSEC0001: Current PicketBox version 4.0.0
[org.xnio.nio] (ServerService Thread Pool -- 17) XNIO NIO Implementation Version 3.5.4
[org.wildfly.extension.io] (ServerService Thread Pool -- 17) WFLYIO0001: Worker 'default' started
[org.wildfly.extension.undertow] (MSC service thread 1-8) WFLYUT0003: Undertow 1.4.18.Final
[org.wildfly.extension.undertow] (MSC service thread 1-5) WFLYUT0012: Started server default
[org.wildfly.extension.undertow] (MSC service thread 1-5) WFLYUT0006: Undertow HTTP listener default
[org.jboss.as.server] (Controller Boot Thread) WFLYSRV0212: Resuming server
[org.jboss.as] (Controller Boot Thread) WFLYSRV0025: WildFly Swarm 2018.3.0 (WildFly Core 1.10.0)
[org.wildfly.swarm.runtime.deployer] (main) deploying swarm-hello-world-1.0.war
[org.jboss.as.server.deployment] (MSC service thread 1-2) WFLYSRV0027: Starting deployment unit
[org.wildfly.extension.undertow] (MSC service thread 1-1) WFLYUT0018: Host default-host
[org.jboss.resteasy.resteasy-jaxrs.i18n] (ServerService Thread Pool -- 10) RESTEASY002
[org.wildfly.extension.undertow] (ServerService Thread Pool -- 10) WFLYUT0021: Registering
[org.jboss.as.server] (main) WFLYSRV0010: Deployed "swarm-hello-world-1.0.war" (runtime)
[org.wildfly.swarm] (main) WFSWARM99999: WildFly Swarm is Ready
```

Name	Size	Date
> classes	1 item	25.03.2018 21:57
> generated-sources	1 item	25.03.2018 21:57
> maven-archiver	1 item	25.03.2018 21:57
> maven-status	1 item	25.03.2018 21:57
> swarm-hello-world-1.0	2 items	25.03.2018 21:57
swarm-hello-world-1.0-swarm.jar	47,5 MiB	25.03.2018 21:57
swarm-hello-world-1.0.war	3,7 KiB	25.03.2018 21:57
swarm-hello-world-1.0.war.original	11,6 MiB	25.03.2018 21:57



Chapter 3: Right-Sizing Your Services



```
[INFO] Processing war project
[INFO] Webapp assembled in [14 msecs]
[INFO] Building war: /home/tomek/książka/swarm-examples/example-catalog-service/target/catalog-service-1.0.war
[INFO] --- wildfly-swarm-plugin:2018.3.0:package (default) @ catalog-service ---
[INFO] Scanning for needed WildFly Swarm fractions with mode: when missing
[INFO] Detected fractions: cdi:2018.3.0, jaxrs:2018.3.0
[INFO] Adding fractions: bean-validation:2018.3.0, cdi-config:2018.3.0, cdi:2018.3.0, container:2018.3.0, ee:2018.3.0, jaxrs-cdi:2018.3.0, jaxrs:2018.3.0, logging:2018.3.0, security:2018.3.0, transactions:2018.3.0, undertow:2018.3.0
[INFO] Resolving 59 out of 273 artifacts
[INFO] Repackaging .war: /home/tomek/książka/swarm-examples/example-catalog-service/target/catalog-service-1.0.war
[INFO] Repackaged .war: /home/tomek/książka/swarm-examples/example-catalog-service/target/catalog-service-1.0.war
[INFO] --- maven-install-plugin:2.4:install (default-install) @ catalog-service ---
```

```
UT0004: Undertow 1.4.18.Final stopping
SRV0028: Stopped deployment catalog-service-1.0.war (runtime-name: catalog-service-1.0.war)
warm 2018.3.0 (WildFly Core 3.0.8.Final) stopped in 38ms
atalog-service-1.0-swarm.jar
  Logging - STABLE          org.wildfly.swarm:logging:2018.3.0
  Bean Validation - STABLE org.wildfly.swarm:bean-validation:2018.3.0
  CDI Configuration - STABLE org.wildfly.swarm:cdi-config:2018.3.0
  Elytron - STABLE         org.wildfly.swarm:elytron:2018.3.0
  CDI - STABLE             org.wildfly.swarm:cdi:2018.3.0
  Transactions - STABLE    org.wildfly.swarm:transactions:2018.3.0
  Undertow - STABLE        org.wildfly.swarm:undertow:2018.3.0
  JAX-RS - STABLE          org.wildfly.swarm:jaxrs:2018.3.0

warm 2018.3.0 (WildFly Core 3.0.8.Final) starting
all MSC service for command line args: []
```

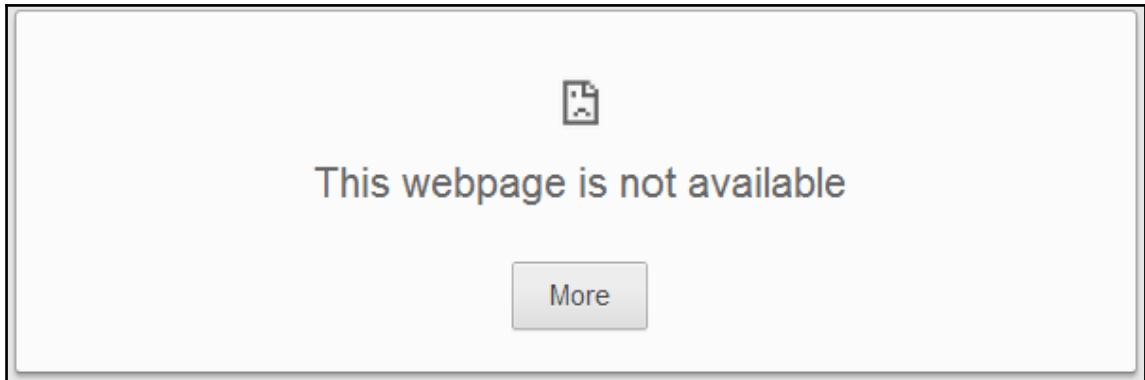
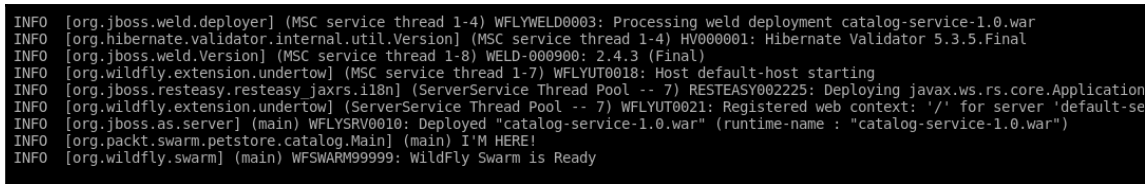
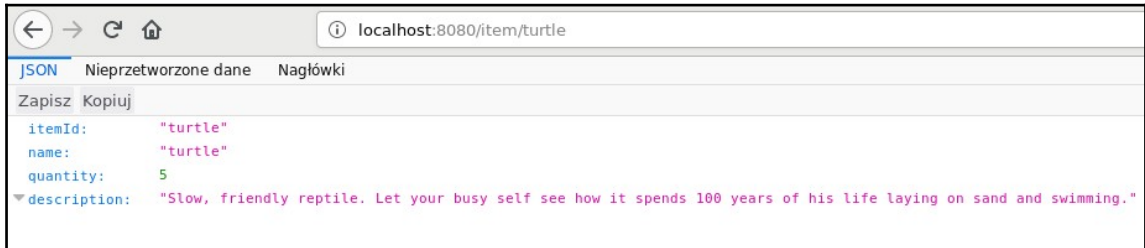
```
Installed fraction: Logging - STABLE org.wildfly.swarm:logging:2018.3.0
Installed fraction: Elytron - STABLE org.wildfly.swarm:elytron:2018.3.0
Installed fraction: Undertow - STABLE org.wildfly.swarm:undertow:2018.3.0
Installed fraction: JAX-RS - STABLE org.wildfly.swarm:jaxrs:2018.3.0
on 1.2.7.SP1
WFLYRSRV0049: WildFly Swarm 2018.3.0 (WildFly Core 3.0.8.Final) starting
1-7) WFSWARM0019: Install MSC service for command line args: []
Thread Pool -- 3) ELY00001: WildFly Elytron version 1.1.6.Final
Thread Pool -- 14) WFLYRS0016: RESTEasy version 3.0.24.Final
Thread Pool -- 16) WFLYSEC0002: Activating Security Subsystem
```

```
[INFO] Processing war project
[INFO] Webapp assembled in [14 msecs]
[INFO] Building war: /home/tomek/ksiazka/swarm-examples/example-catalog-service/target/catalog-service-1.0.war
[INFO] --- wildfly-swarm-plugin:2018.3.0:package (default) @ catalog-service ---
[INFO] Scanning for needed WildFly Swarm fractions with mode: when missing
[INFO] Detected fractions: cdi:2018.3.0, jaxrs:2018.3.0
[INFO] Adding fractions: bean-validation:2018.3.0, cdi-config:2018.3.0, cdi:2018.3.0, container:2018.3.0, ee:2018.3.0, jaxrs-cdi:2018.3.0, jaxrs:2018.3.0, logging:2018.3.0, security:2018.3.0, transactions:2018.3.0, undertow:2018.3.0
[INFO] Resolving 59 out of 273 artifacts
[INFO] Repackaging .war: /home/tomek/ksiazka/swarm-examples/example-catalog-service/target/catalog-service-1.0.war
[INFO] Repackaged .war: /home/tomek/ksiazka/swarm-examples/example-catalog-service/target/catalog-service-1.0.war
[INFO] --- maven-install-plugin:2.4:install (default-install) @ catalog-service ---
```

- 📁 [catalog-service-1.0](#)
- 📁 classes
- 📁 generated-sources
- 📁 maven-archiver
- 📁 maven-status
- 📄 catalog-service-1.0-hollow-swarm.jar
- 📄 catalog-service-1.0.war
- 📄 catalog-service-1.0.war.original

```
14M catalog-service-1.0
744K catalog-service-1.0-swarm.jar
8,0K catalog-service-1.0.war
12M catalog-service-1.0.war.original
44K classes
8,0K generated-sources
8,0K maven-archiver
24K maven-status
```

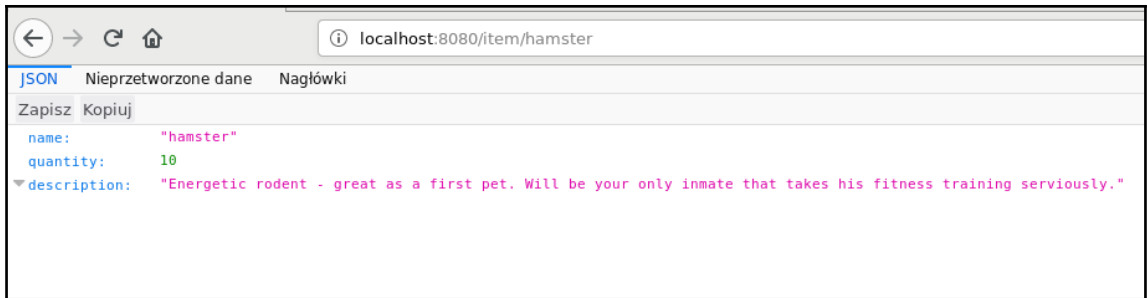
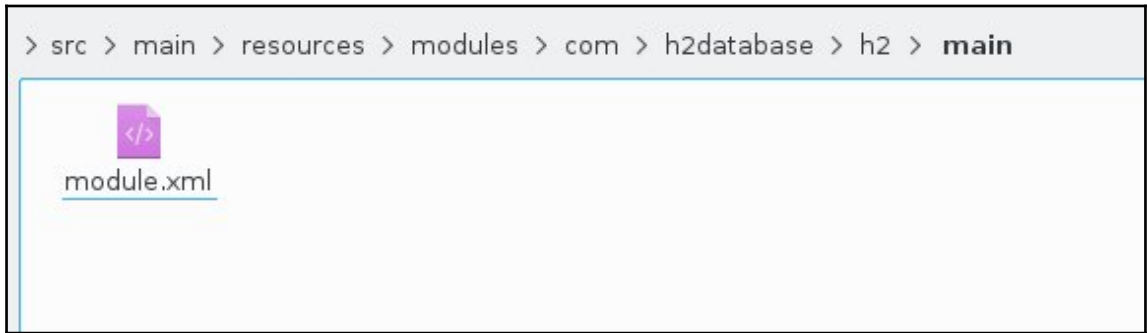
Chapter 4: Tuning the Configuration of Your Services

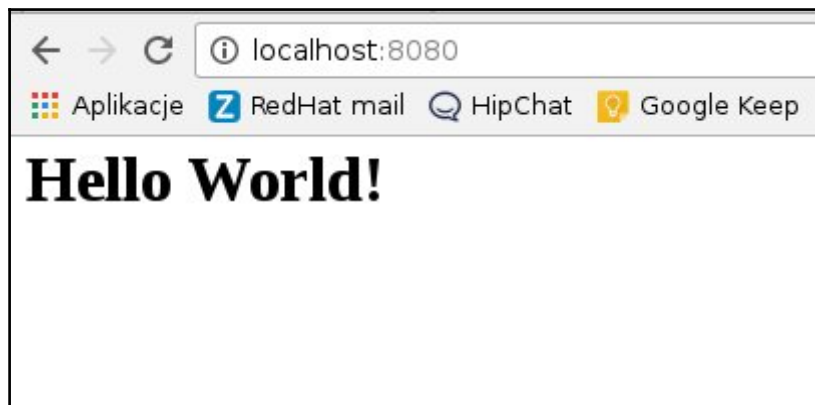
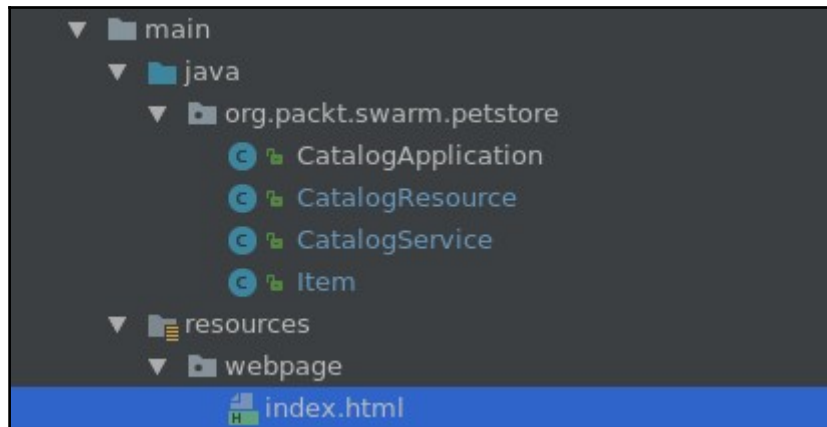


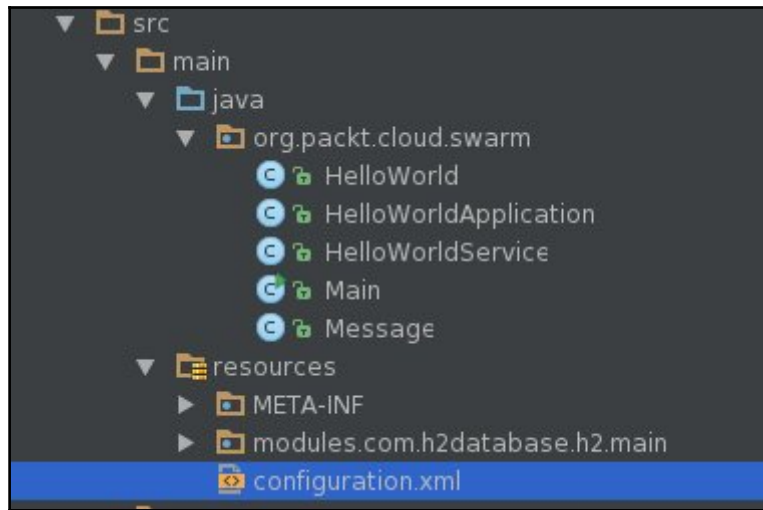

```

2018-03-08 01:46:49,840 INFO [org.jboss.weld.Version] (MSC service thread 1-3) WELD-000900: 2.4.3 (Final)
2018-03-08 01:46:49,884 INFO [org.wildfly.extension.undertow] (MSC service thread 1-5) WFLYUT0018: Host default-host starting
2018-03-08 01:46:49,891 INFO [org.jboss.as.connector.deployers.jdbc] (MSC service thread 1-4) WFLYJCA0018: Started Driver service with driver-name
2018-03-08 01:46:49,977 ERROR [org.jboss.as.controller.management-operation] (main) WFLYCTL0013: Operation ("add") failed - address: (("deployment"
were unable to start due to one or more indirect dependencies not being available." => {
  "Services that were unable to start:" => [
    "jboss.deployment.unit.\"catalog-service-1.0.war\".CdValidatorFactoryService",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".WeldStartService",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"javax.servlet.jsp.jstl.tlv.PermittedTaglibsTLVA\".START",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"javax.servlet.jsp.jstl.tlv.PermittedTaglibsTLVA\".WeldInstantiator",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"javax.servlet.jsp.jstl.tlv.ScriptFreeTLVA\".START",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"javax.servlet.jsp.jstl.tlv.ScriptFreeTLVA\".WeldInstantiator",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"org.jboss.weld.servlet.WeldInitialListener\".START",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"org.jboss.weld.servlet.WeldInitialListener\".WeldInstantiator",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"org.jboss.weld.servlet.WeldTerminalListener\".START",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".component.\"org.jboss.weld.servlet.WeldTerminalListener\".WeldInstantiator",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".deploymentCompleteService",
    "jboss.deployment.unit.\"catalog-service-1.0.war\".jndiDependencyService",
    "jboss.naming.context.java.module.\"catalog-service-1.0\".\"catalog-service-1.0\".DefaultDataSource",
    "jboss.persistenceunit.\"catalog-service-1.0.war#CatalogPU\".",
    "jboss.persistenceunit.\"catalog-service-1.0.war#CatalogPU\".__FIRST_PHASE_",
    "jboss.undertow.deployment.default-server.default-host./",
    "jboss.undertow.deployment.default-server.default-host./.UndertowDeploymentInfoService"
  ],
  "Services that may be the cause:" => [{"jboss.jdbc-driver.h2"}]
}}

```







Chapter 5: Testing Your Services with Arquillian

```
-----
T E S T S
-----
Running org.packt.swarm.petstore.catalog.CatalogServiceTest
Resolving 0 out of 541 artifacts
Sat Mar 10 17:36:28 CET 2018 INFO [org.wildfly.swarm.bootstrap] (main) Dependencies not bundled;
2018-03-10 17:36:31,633 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,637 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,638 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,638 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,638 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,639 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,639 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,639 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:31,639 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:33,206 INFO [org.jboss.msc] (main) JBoss MSC version 1.2.7.SP1
2018-03-10 17:36:33,299 INFO [org.jboss.as] (MSC service thread 1-7) WFLYSRV0049: WildFly Swarm
2018-03-10 17:36:33,332 INFO [org.wildfly.swarm] (MSC service thread 1-7) WFSWARM0019: Install
2018-03-10 17:36:33,532 INFO [org.wildfly.swarm.arquillian.daemon.server.Server] (MSC service t
2018-03-10 17:36:33,945 INFO [org.wildfly.security] (ServerService Thread Pool -- 3) ELY00001:
2018-03-10 17:36:33,980 INFO [org.jboss.as.naming] (ServerService Thread Pool -- 15) WFLYNAM0000

INFO: WELD-001125: Illegal bean type org.jboss.arquillian.core.spi.context.IdBoundContext<java.Lang.Class<?>> ign
kwi 11, 2017 11:26:56 PM org.jboss.as.server.deployment.DeploymentHandlerUtil$1$2 handleResult
INFO: WFLYSRV0010: Deployed "a9bba874-72a4-4bec-bd9e-1b68ed10f145.jar" (runtime-name : "a9bba874-72a4-4bec-bd9e-1
kwi 11, 2017 11:26:56 PM sun.reflect.NativeMethodAccessorImpl invoke0
INFO: WFSWARM99999: WildFly Swarm is Ready
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0, Time elapsed: 8.681 sec

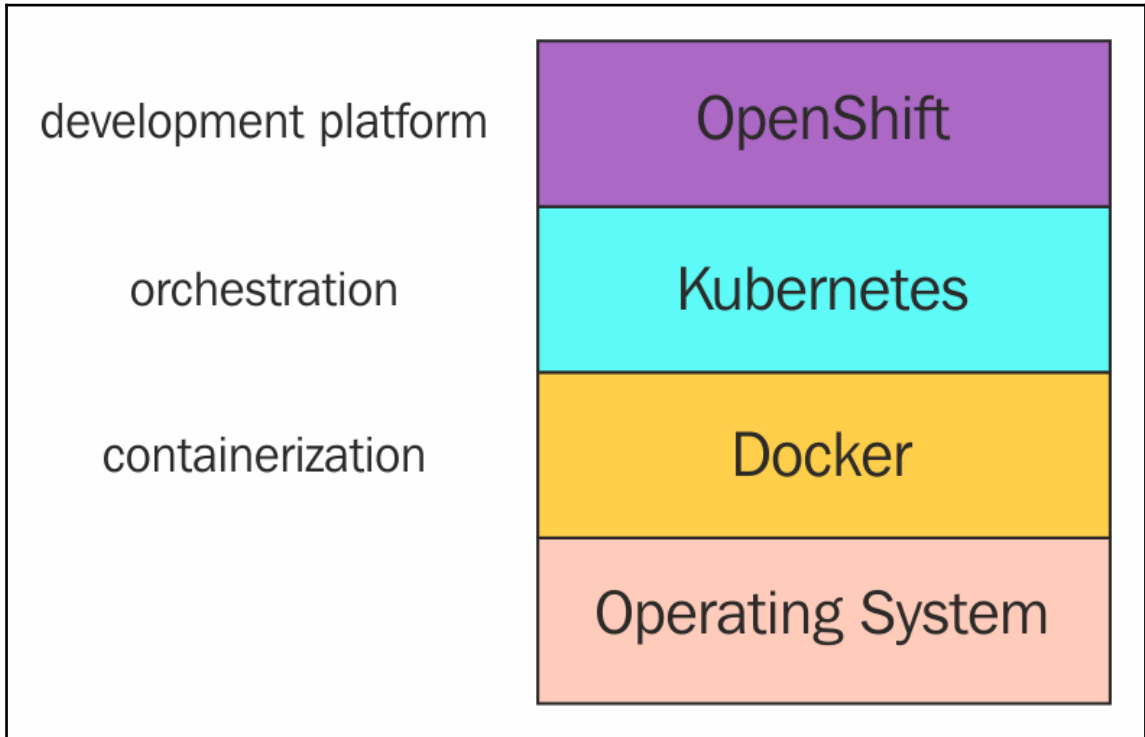
Results :

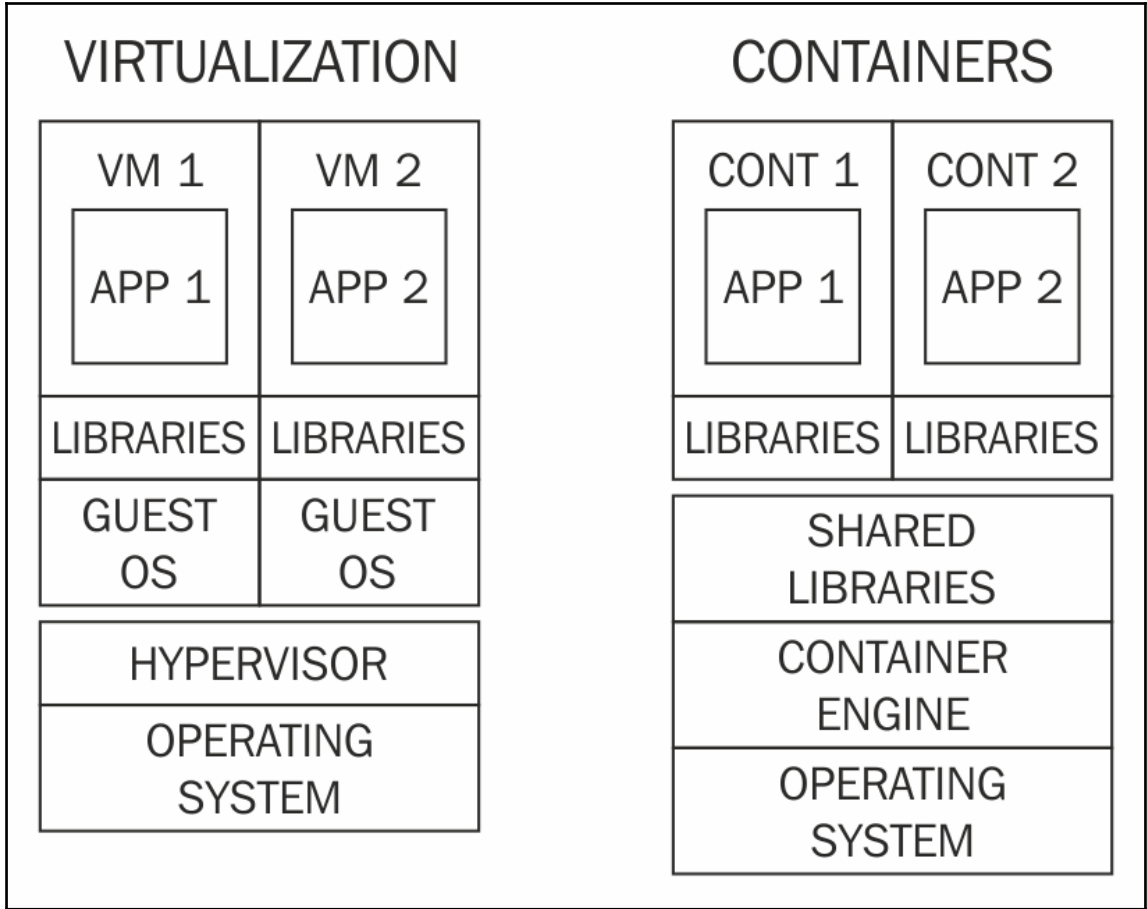
Tests run: 1, Failures: 0, Errors: 0, Skipped: 0

[INFO]
[INFO] --- maven-war-plugin:2.1.1:war (default-war) @ foos-test-swarm ---
[INFO] Packaging webapp
[INFO] Assembling webapp [foos-test-swarm] in [/home/tomek/ksiazka/Cloud development with Java EE/code/foos-test-
[INFO] Processing war project
[INFO] Webapp assembled in [14 msecs]
[INFO] Building war: /home/tomek/ksiazka/Cloud development with Java EE/code/foos-test-swarm/target/foos-test-swa
[INFO]
[INFO] --- wildfly-swarm-plugin:2017.3.2:package (default) @ foos-test-swarm ---
[INFO] Scanning for needed WildFly Swarm fractions with mode: when_missing
[INFO] Detected fractions: cdi:2017.3.2
```

```
Resolving 52 out of 266 artifacts
[INFO] Repackaging .war: /home/tomek/książka/swarm-examples/example-catalog-service/target/cata
[INFO] Repackaged .war: /home/tomek/książka/swarm-examples/example-catalog-service/target/cata
[INFO]
[INFO] <<< wildfly-swarm-plugin:2018.3.0:run (default-cli) < package @ catalog-service <<<
[INFO]
[INFO] --- wildfly-swarm-plugin:2018.3.0:run (default-cli) @ catalog-service ---
[INFO] Starting .war
Sat Mar 10 17:36:41 CET 2018 INFO [org.wildfly.swarm.bootstrap] (main) Dependencies not bundle
2018-03-10 17:36:43,373 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:43,378 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:43,378 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:43,378 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:43,378 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:43,379 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:43,379 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
2018-03-10 17:36:43,379 INFO [org.wildfly.swarm] (main) WFSWARM0013: Installed fraction:
```

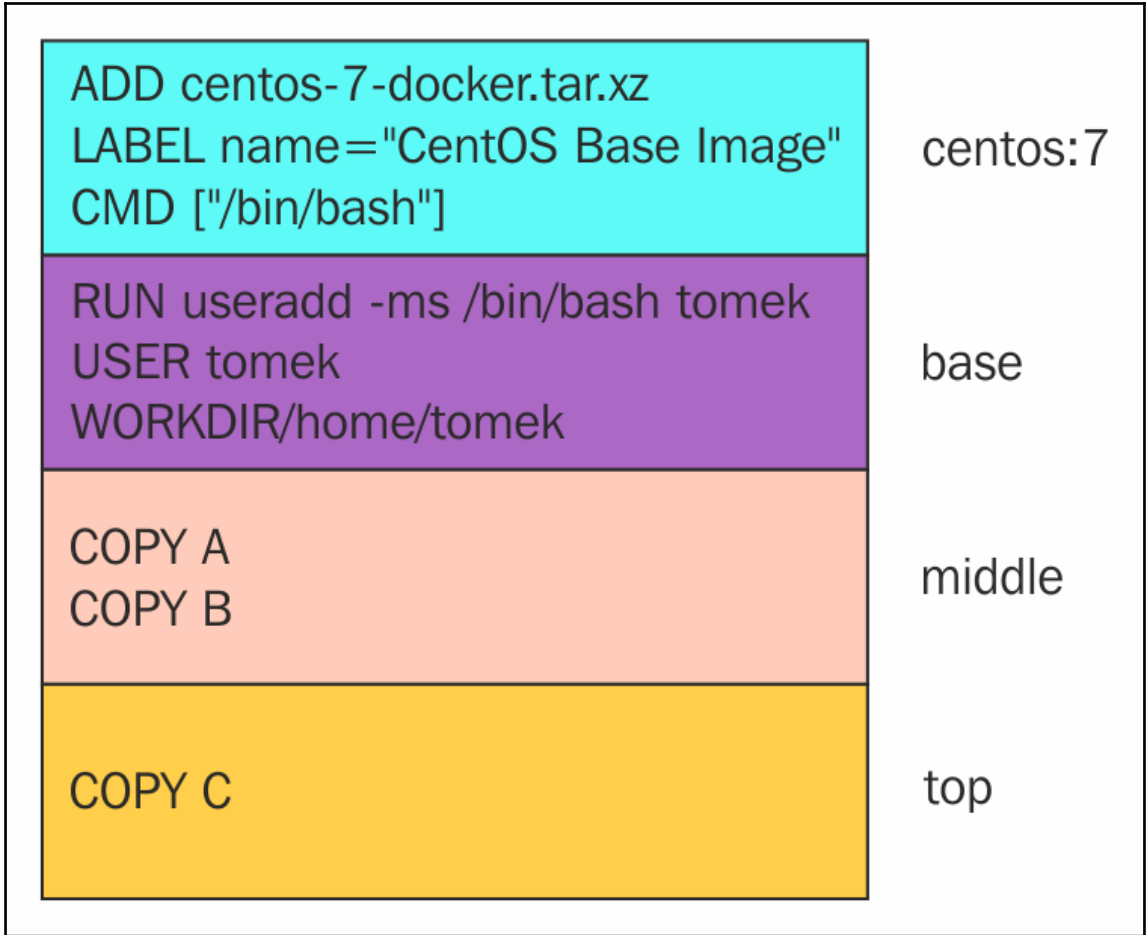
Chapter 6: Deploying Applications on the Cloud with OpenShift

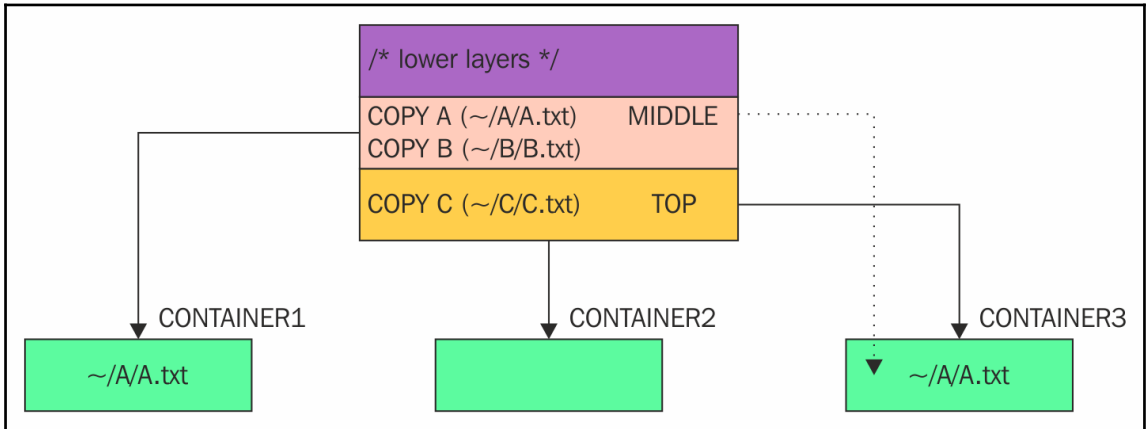
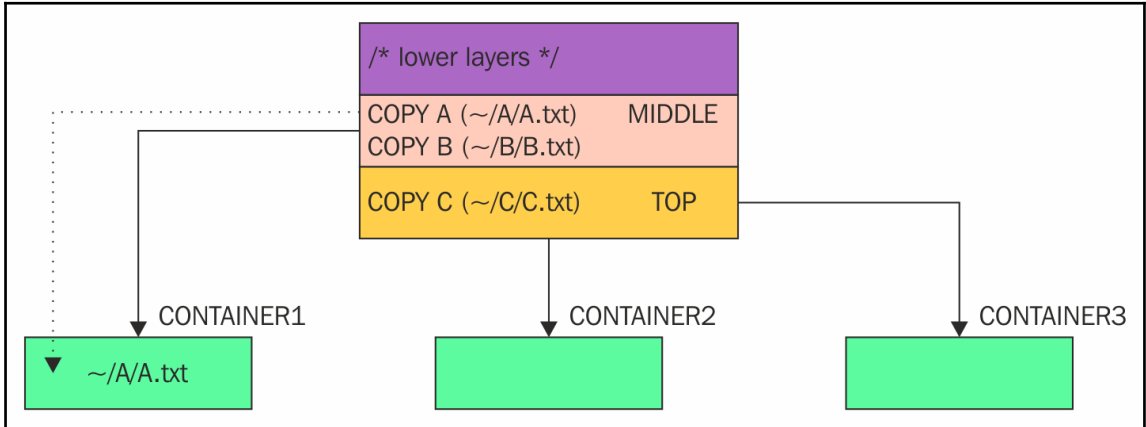
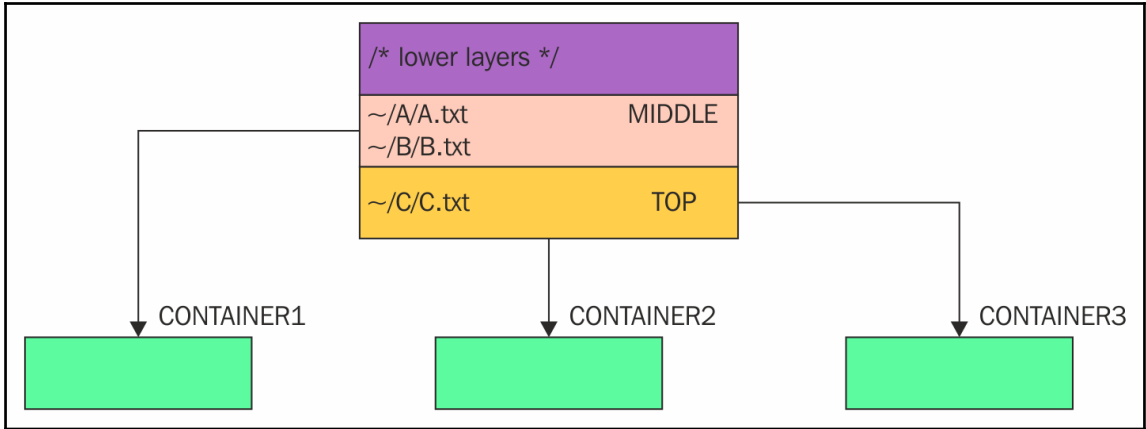


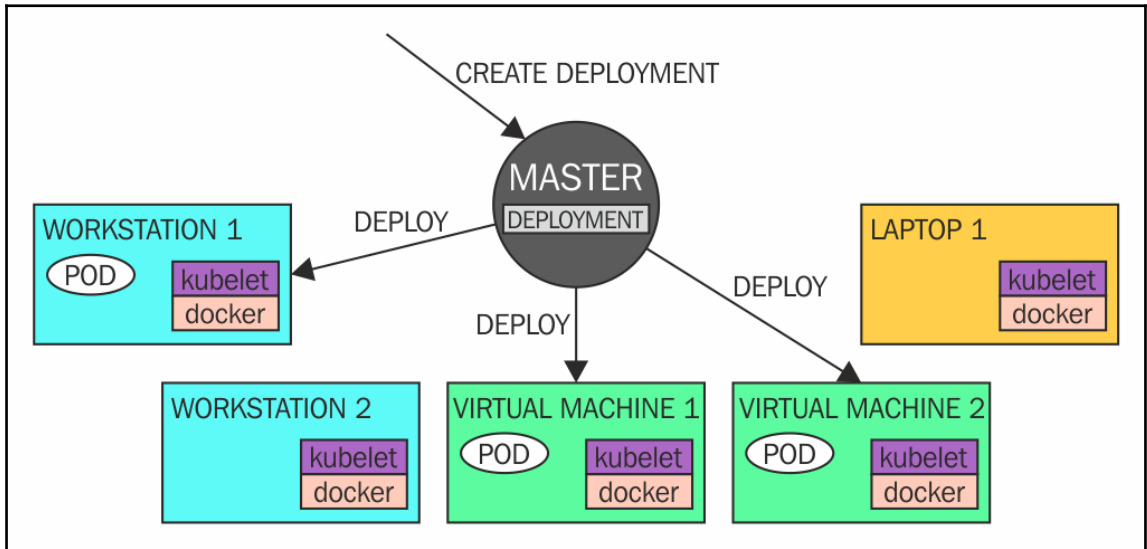
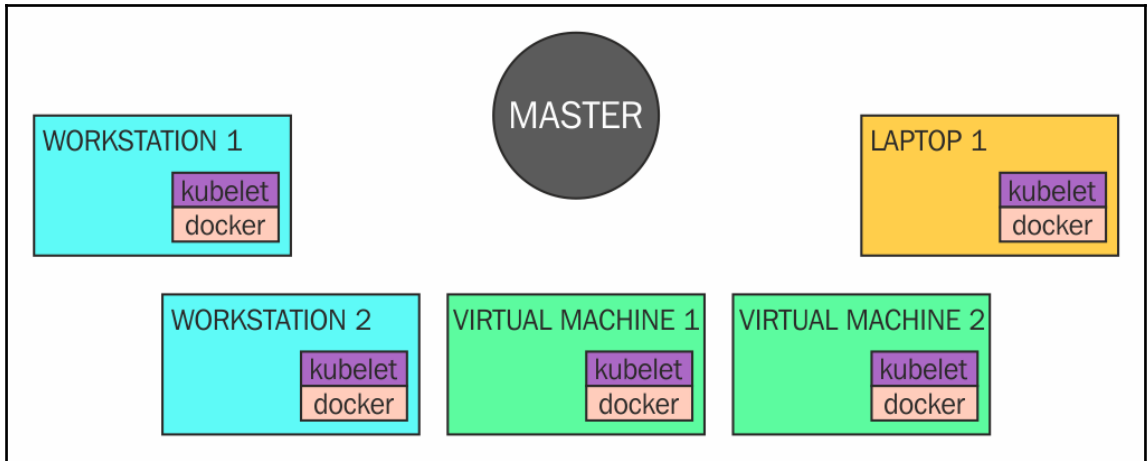


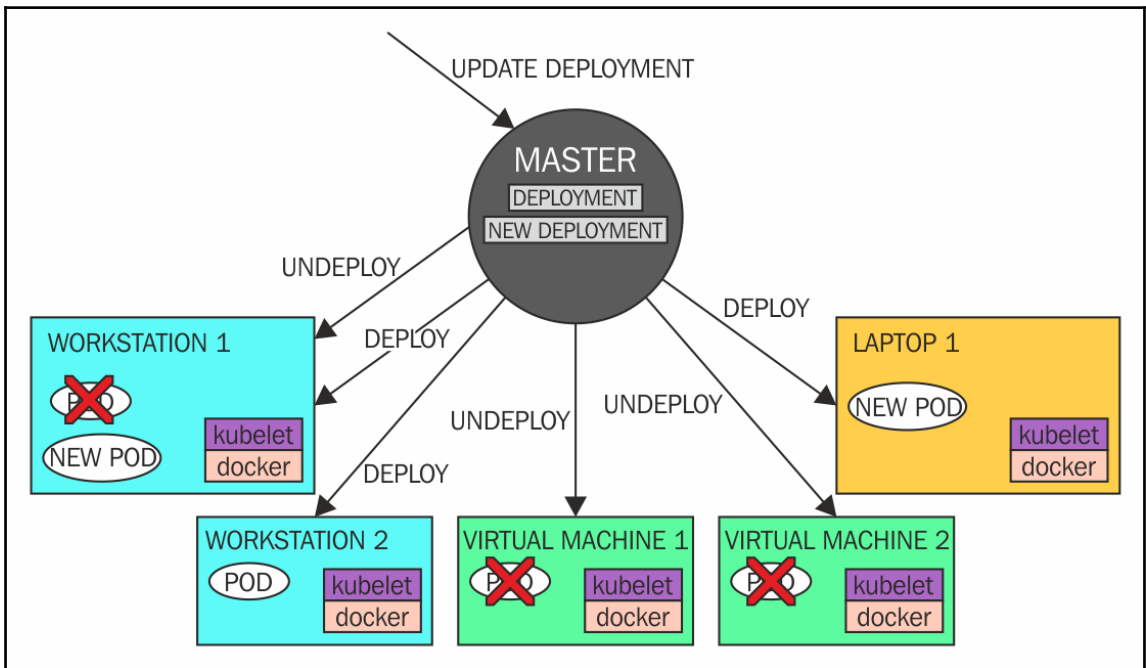
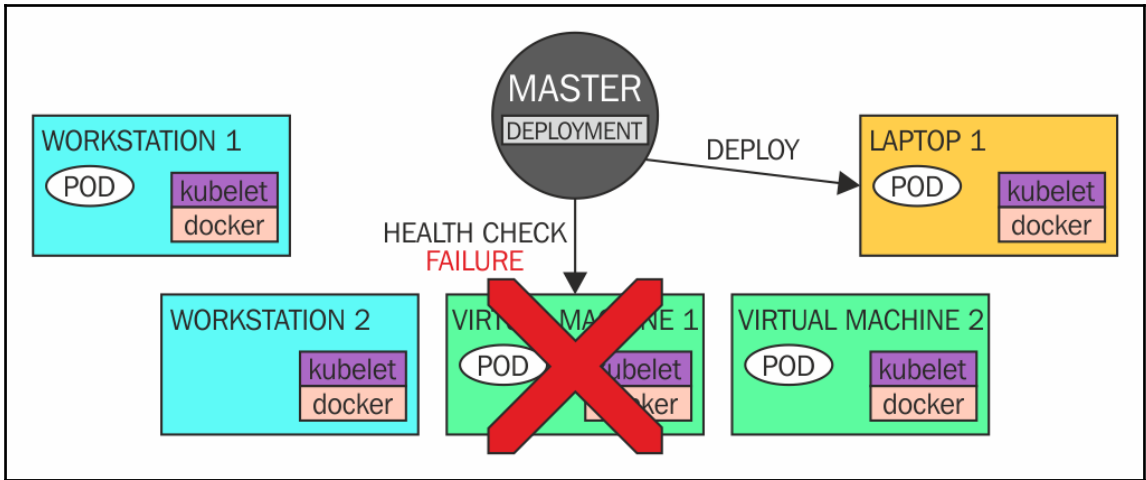
```

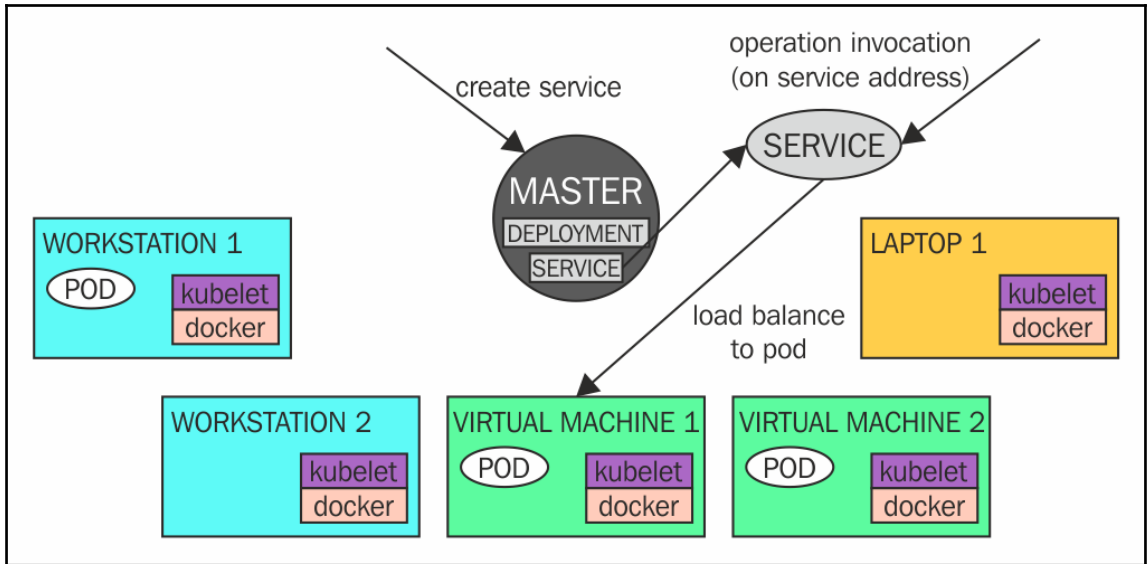
├── base
│   └── Dockerfile
├── image1
│   ├── A
│   │   └── A.txt
│   ├── B
│   │   └── B.txt
│   └── Dockerfile
└── image2
    ├── C
    │   └── C.txt
    └── Dockerfile
  
```











```
[root@fedoralaptop tomek]# su tomek
[tomek@fedoralaptop ~]$ minishift start
-- Checking if KVM driver is installed ...
   Driver is available at /usr/local/bin/docker-machine-driver-kvm ...
   Checking driver binary is executable ... OK
-- Starting local OpenShift cluster using 'kvm' hypervisor ...
-- Starting Minishift VM ..... OK
-- Checking for IP address ... OK
-- Checking if external host is reachable from the Minishift VM ...
   Pinging 8.8.8.8 ... OK
-- Checking HTTP connectivity from the VM ...
   Retrieving http://minishift.io/index.html ... OK
-- Checking if persistent storage volume is mounted ... OK
-- Checking available disk space ... 53% OK
-- OpenShift cluster will be configured with ...
   Version: v3.6.0
-- Checking `oc` support for startup flags ...
   host-data-dir ... OK
   host-pv-dir ... OK
   host-volumes-dir ... OK
   routing-suffix ... OK
   host-config-dir ... OK
Starting OpenShift using openshift/origin:v3.6.0 ...
OpenShift server started.

The server is accessible via web console at:
  https://192.168.42.201:8443
```

Project petstore Add to Project tomek

Overview Name Filter by name List by Application

Applications > APPLICATION catalog-service <http://catalog-service-petstore.192.168.42.201.nip.io>

Builds > DEPLOYMENT catalog-service, #2 1 pod

Resources >

Storage APPLICATION catalogdb

Monitoring > DEPLOYMENT catalogdb, #1 1 pod

APPLICATION petstore-service <http://petstore-service-petstore.192.168.42.201.nip.io>

You must specify the type of resource to get. Valid resource types include:

```
* all
* buildconfigs (aka 'bc')
* builds
* certificatesigningrequests (aka 'csr')
* clusters (valid only for federation apiservers)
* clusterrolebindings
* clusterroles
* componentstatuses (aka 'cs')
* configmaps (aka 'cm')
* daemonsets (aka 'ds')
* deployments (aka 'deploy')
* deploymentconfigs (aka 'dc')
* endpoints (aka 'ep')
* events (aka 'ev')
* horizontalpodautoscalers (aka 'hpa')
* imagestreamimages (aka 'isimage')
* imagestreams (aka 'is')
* imagestreamtags (aka 'istag')
* ingresses (aka 'ing')
* groups
* jobs
* limitranges (aka 'limits')
* namespaces (aka 'ns')
* networkpolicies
* nodes (aka 'no')
* persistentvolumeclaims (aka 'pvc')
* persistentvolumes (aka 'pv')
* poddisruptionbudgets (aka 'pdb')
* podpreset
* pods (aka 'po')
* podsecuritypolicies (aka 'psp')
* podtemplates
* policies
* projects
* replicaset (aka 'rs')
* replicationcontrollers (aka 'rc')
* resourcequotas (aka 'quota')
* rolebindings
* roles
* routes
* secrets
* serviceaccounts (aka 'sa')
* services (aka 'svc')
* statefulsets
* users
* storageclasses
* thirdpartyresources
```

```
[tomek@fedoralaptop ~]$ oc get svc
NAME                CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
catalog-service     172.30.57.46    <none>           8080/TCP,8888/TCP 10d
catalogdb           172.30.121.1    <none>           5432/TCP         10d
payment-service     192.168.1.144   <none>           <none>           9d
petstore-service    172.30.104.170  <none>           8080/TCP,8888/TCP 10d
pricing-service     172.30.11.68    <none>           8080/TCP,8888/TCP 8d
pricingdb           172.30.138.42   <none>           5432/TCP         10d
[tomek@fedoralaptop ~]$ oc get svc/catalog-service
NAME                CLUSTER-IP      EXTERNAL-IP      PORT(S)          AGE
catalog-service     172.30.57.46    <none>           8080/TCP,8888/TCP 10d
[tomek@fedoralaptop ~]$
```

```
[tomek@fedoralaptop ~]$ oc describe svc/catalog-service
Name:                catalog-service
Namespace:           petstore
Labels:              app=catalog-service
Annotations:         openshift.io/generated-by=OpenShiftNewApp
Selector:            app=catalog-service,deploymentconfig=catalog-service
Type:                ClusterIP
IP:                  172.30.57.46
Port:                8080-tcp           8080/TCP
Endpoints:           172.17.0.5:8080
Port:                8888-tcp           8888/TCP
Endpoints:           172.17.0.5:8888
Session Affinity:    None
Events:              <none>
[tomek@fedoralaptop ~]$
```

OPENSIFT ORIGIN

? ▼

👤 tomek ▼

Welcome to OpenShift.

OpenShift helps you quickly develop, host, and scale applications.
Create a project for your application.

Create Project

To learn more, visit the [OpenShift documentation](#).

catalog-service #1 Running 38 seconds a few seconds ago Source

Project Catalog Service Add to Project tomiek

Name Filter by name List by Application

APPLICATION catalog-service <http://catalog-service-catalog-service.192.168.42.253.nip.io>

DEPLOYMENT catalog-service

No deployments.
A new deployment will start automatically when an image is pushed to catalog-service/catalog-service:latest.

Networking

SERVICE Internal Traffic catalog-service 8080/TCP (8080-tcp) → 8080

ROUTES External Traffic <http://catalog-service-catalog-service.192.168.42.253.nip.io>
Route catalog-service, target port 8080-tcp

Builds catalog-service

Build #1 is running ... created a minute ago [View Full Log](#)

```
[INFO] Downloading: https://repository.jboss.org/nexus/content/groups/public/com/...
[INFO] Downloading: https://repo1.maven.org/maven2/com/fasterxml/jackson/jackson-...
[INFO] Downloaded: https://repo1.maven.org/maven2/com/fasterxml/jackson/jackson-p-...
[INFO] Downloading: https://repository.jboss.org/nexus/content/groups/public/com/...
[INFO] Downloading: https://repo1.maven.org/maven2/com/fasterxml/oss-parent/25/os-...
[INFO] Downloaded: https://repo1.maven.org/maven2/com/fasterxml/oss-parent/25/os-...
[INFO] Downloading: https://repository.jboss.org/nexus/content/groups/public/com/...
```

Route	Service Port	Target Port	Hostname
catalog-service	→ 8080/TCP (8080-tcp)	→ 8080	http://catalog-service-petstore.192.168.42.201.nip.io

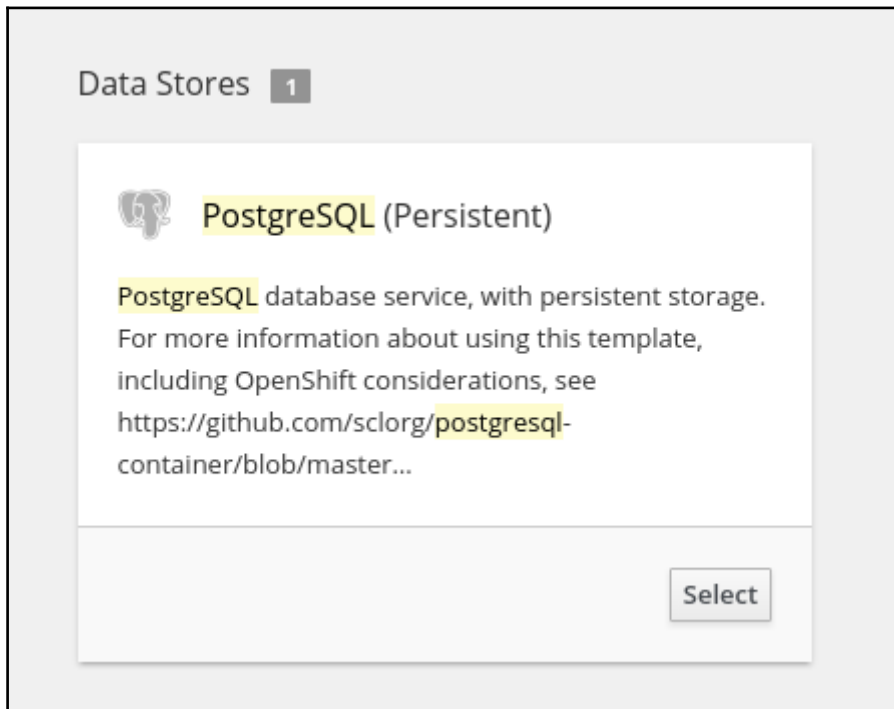
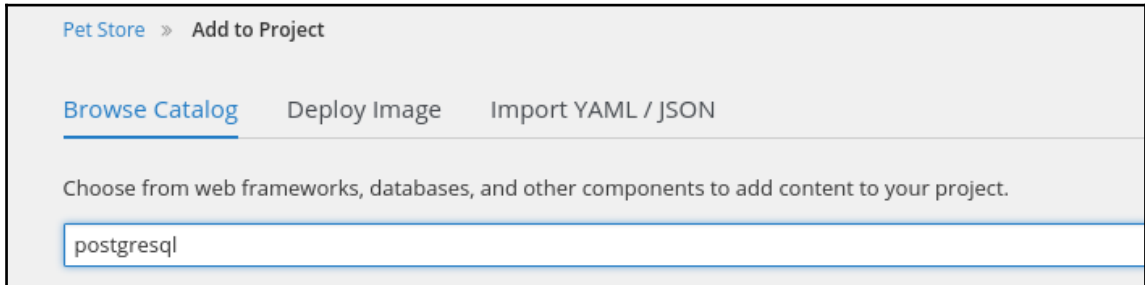
localhost:8080/item/turtle

JSON Nieprzetworzone dane Nagłówki

Zapisz Kopij

```
itemId: "turtle"
name: "turtle"
quantity: 5
description: "Slow, friendly reptile. Let your busy self see how it spends 100 years of his life laying on sand and swimming."
```

Chapter 7: Configuring Storage for Your Applications



Labels ? About Labels

The following labels are being added automatically. If you want to override them, you can do so below.

template	postgresql-persistent-template
app	postgresql-persistent

Each label is applied to each created resource.

template	catalogdb-template	⋮	×
app	catalogdb	⋮	×

[Add Label](#)

postgresql created 34 minutes ago

[app](#) [postgresql-persistent](#) [template](#) [postgresql-persistent-template](#)

[History](#) [Configuration](#) [Environment](#) [Events](#)

Deployment #1 is active. [View Log](#)
created 34 minutes ago

Deployment	Status
#1 (latest)	Active, 1 replica

Pods > postgresql-1-f87z3

postgresql-1-f87z3 created an hour ago

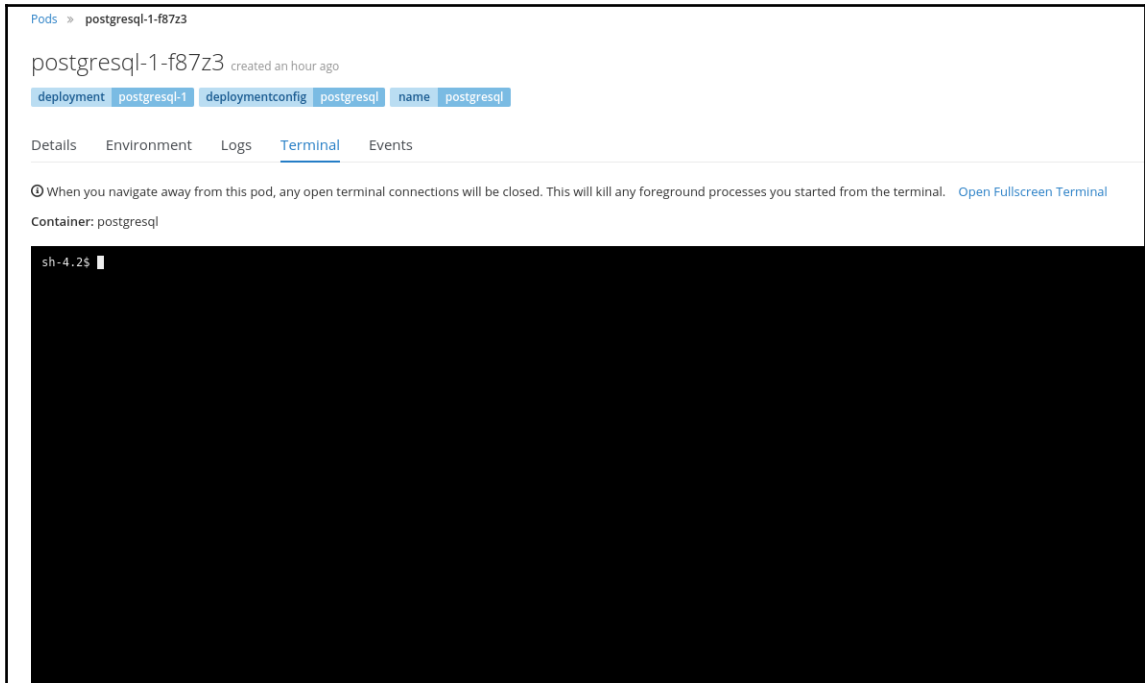
deployment postgresql-1 deploymentconfig postgresql name postgresql

Details Environment Logs Terminal Events

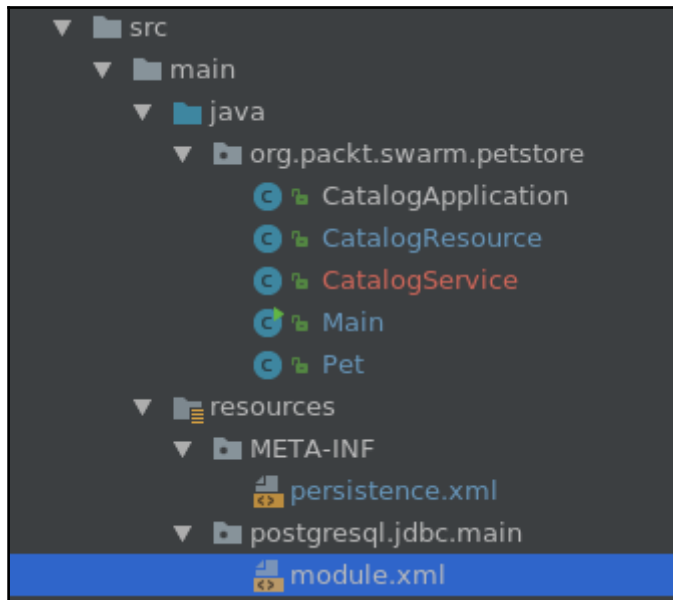
ⓘ When you navigate away from this pod, any open terminal connections will be closed. This will kill any foreground processes you started from the terminal. [Open Fullscreen Terminal](#)

Container: postgresql

```
sh-4.25 █
```



```
Name:          catalogdb
Namespace:     petstore
StorageClass:
Status:       Bound
Volume:       pv0028
Labels:       app=catalogdb
              template=catalogdb-template
Annotations:  pv.kubernetes.io/bind-completed=yes
              pv.kubernetes.io/bound-by-controller=yes
Capacity:     100Gi
Access Modes: RWO,ROX,RWX
Events:       <none>
```



Project petstore
Add to Project

- Overview
- Applications
- Builds
- Resources
- Storage
- Monitoring

```

50 Deploying non-JDBC-compliant driver class org.postgresql.Driver (version 42.1)
51 2017-09-30 15:42:59,044 INFO [org.jboss.weld.Version] (MSC service thread 1-4) WELD-000900: 2.3.5 (Fin
52 2017-09-30 15:42:59,073 INFO [org.wildfly.extension.undertow] (MSC service thread 1-2) WFLYUT0018: Host
53 2017-09-30 15:42:59,091 INFO [org.jboss.as.connector.deployers.jdbc] (MSC service thread 1-3) WFLYJCA0018:
54 2017-09-30 15:42:59,225 INFO [org.jboss.as.jpa] (ServerService Thread Pool -- 29) WFLYJPA0010: Starting
55 2017-09-30 15:42:59,407 INFO [org.hibernate.dialect.Dialect] (ServerService Thread Pool -- 29) HHH000400: Using
56 2017-09-30 15:42:59,790 INFO [org.hibernate.engine.jdbc.env.internal.LobCreatorBuilderImpl] (ServerService
57 2017-09-30 15:42:59,797 INFO [org.hibernate.type.BasicTypeRegistry] (ServerService Thread Pool -- 29)
58 2017-09-30 15:42:59,807 INFO [org.hibernate.envers.boot.internal.EnversServiceImpl] (ServerService Thread Pool
59 2017-09-30 15:43:00,241 INFO [org.hibernate.hql.internal.QueryTranslatorFactoryInitiator] (ServerService Thread
60 2017-09-30 15:43:00,241 INFO [org.hibernate.envers.boot.internal.EnversServiceImpl] (ServerService Thread Pool
61 2017-09-30 15:43:01,080 INFO [org.jboss.resteasy.resteasy_jaxrs.i18n] (ServerService Thread Pool -- 29)
62 2017-09-30 15:43:01,112 INFO [org.wildfly.extension.undertow] (ServerService Thread Pool -- 29) WFLYUT0021:
63 2017-09-30 15:43:01,155 INFO [org.jboss.as.server] (main) WFLYSRV0010: Deployed "catalog-1-1.0-SNAPSHOT.war"
64 2017-09-30 15:43:01,157 INFO [org.wildfly.swarm] (main) WFSWARM99999: WildFly Swarm is Ready
  
```

Routes [Learn More](#)

Filter by label

Name	Hostname	Routes To
catalog-service	http://catalog-service-petstore.192.168.42.55.nip.io	catalog-service

catalog-service-petstore. x +

catalog-service-petstore.192.168.42.28.nip.io/item/a2aa1ca7-add8-4aae-b361-b7f92d82c3f5

JSON Nieprzetworzone dane Nagłówki

Zapisz Kopiuj

```

itemId: "a2aa1ca7-add8-4aae-b361-b7f92d82c3f5"
name: "lion"
quantity: 9
description: "Big cat with fancy mane - you kid will love it! Loves playing the tag and cuddling with other animals and people."

```

Buils » catalog-service

catalog-service created 17 hours ago

app catalog-service

History Configuration Environment

✓ Build #1 is complete. [View Log](#)
started 17 hours ago

Filter by label

Build	Status	Duration	Created
#1	✓ Complete	4 minutes, 33 seconds	17 hours ago

← → ↻ ⓘ catalog-service-petstore.192.168.42.4: ... ✓ ☆ >> ≡

JSON Nieprzetworzone dane Nagłówki

Zapisz Kopiuuj ▾ Filtruj JSON

```
0:
  itemId: "dbf67f4d-f1c9-4fd4-96a8-65eela22b9ff"
  name: "turtle"
  quantity: 5
  description: "Slow friendly reptile. Let your busy self see how it spends 100 years of his life laying on sand and swimming."
1:
  itemId: "fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd"
  name: "hamster"
  quantity: 10
  description: "Energetic rodent - great as a first pet. Will be your only inmate that takes his fitness training seriously."
2:
  itemId: "725dfad2-0b4d-455c-9385-b46c9f356e9b"
  name: "goldfish"
  quantity: 3
  description: "With its beauty it will be the decoration of you aquarium. Likes gourmet fish feed and postmodern poetry."
3:
  itemId: "a2aalca7-add8-4aae-b361-b7f92d82c3f5"
  name: "lion"
  quantity: 9
  description: "Loves playing the tag and cuddling with other animals and people."
4:
  itemId: "059e4b9a-7f2f-46f8-8653-0134178762e1"
  name: "rabbit"
  quantity: 7
  description: "Small mammal which jumps a lot"
```

Chapter 8: Scaling and Connecting Your Services

The screenshot shows the OpenShift console interface for the 'catalog-service' deployment. The page is titled 'catalog-service' and was created 19 minutes ago. It features several tabs: 'app', 'catalog-service', 'History', 'Configuration', 'Environment', and 'Events'. The 'Configuration' tab is active, displaying various settings:

- Details:** Selectors (app=catalog-service, deploymentconfig=catalog-service), Replicas (1 replica), Strategy (Rolling), Timeout (600 sec), Update Period (1 sec), Interval (1 sec), Max Unavailable (25%), and Max Surge (25%).
- Autoscaling:** Includes an 'Add Autoscaler' button and 'Hooks' (Learn More).
- Triggers:** Shows a 'Manual (CLI)' trigger with the command 'oc rollout latest dc/catalog-service -n petstc' and a 'Change Of' trigger for 'Config' pointing to 'petstore/catalog-service:latest'.
- Template:** A warning message states: 'Container catalog-service does not have health checks to ensure your application is running correctly. Add Health Checks'.
- Containers:** Lists the container 'CATALOG-SERVICE' with image 'tadamski/catalog-service 05f4958' (244.6 MIB) and ports 8080/TCP, 8778/TCP, 9779/TCP.
- Volumes:** Includes links for 'Add Storage', 'Add Config Files', and 'Show Annotations'.

```
[tomek@localhost ~]$ oc get replicationcontrollers -l app=catalog-service
NAME                DESIRED   CURRENT   READY   AGE
catalog-service-1   0         0         0       21m
catalog-service-2   0         0         0       5m
catalog-service-3   1         1         1       5m
[tomek@localhost ~]$
```



```

[tomek@localhost ~]$ oc describe replicationcontroller/catalog-service-3
Name:          catalog-service-3
Namespace:    petstore
Selector:     app=catalog-service,deployment=catalog-service-3,deploymentconfig=catalog-service
Labels:       app=catalog-service
Annotations:  openshift.io/deployment-config.name=catalog-service
              openshift.io/deployer-pod.name=catalog-service-3-deploy
              openshift.io/deployment-config.latest-version=3
              openshift.io/deployment-config.name=catalog-service
              openshift.io/deployment.phase=Complete
              openshift.io/deployment.replicas=
              openshift.io/deployment.status-reason=manual change
              openshift.io/encoded-deployment-config={"kind":"DeploymentConfig","apiVersion":"v1","metadata":{"name":"catalog-service"
,"namespace":"petstore","selfLink":"/apis/apps.openshift.io/v1/namespaces/petsto...
Replicas:    1 current / 1 desired
Pods Status: 1 Running / 0 Waiting / 0 Succeeded / 0 Failed
Pod Template:
  Labels:    app=catalog-service
             deployment=catalog-service-3
             deploymentconfig=catalog-service
  Annotations: openshift.io/deployment-config.latest-version=3
               openshift.io/deployment-config.name=catalog-service
               openshift.io/deployment.name=catalog-service-3
               openshift.io/generated-by=OpenShiftWebConsole

Containers:
  catalog-service:
    Image:          tadamski/catalog-service@sha256:b40765874ca3adb7f7d2fb06b8a8b10a9ebc485f6fd9ee502c05070e0984fe55
    Ports:         8080/TCP, 8778/TCP, 9779/TCP
    Environment:
      POSTGRESQL_HOST:    172.30.199.153
      POSTGRESQL_USER:    petstore
      POSTGRESQL_PASSWORD: XyIpmjEWLXCQnPsG
      POSTGRESQL_SCHEMA:  petstoredb
    Mounts:
      <none>
    Volumes:
      <none>
Events:
-----
FirstSeen    LastSeen    Count   From              SubObjectPath  Type           Reason          Message
-----
12m          12m         1      replication-controller  /              Normal        SuccessfulCreate  Created pod: cat
alog-service-3-3kr44

```

Deployments » catalog-service

catalog-service created an hour ago

app catalog-service

History Configuration Environment Events

Details

Selectors: app=catalog-service
deploymentconfig=catalog-service

Replicas: ✓ ✕

Strategy: Rolling

Timeout: 600 sec

Update Period: 1 sec

Interval: 1 sec

Max Unavailable: 25%

Max Surge: 25%

```
[tomek@localhost ~]$ oc get rc/catalog-service-3
NAME           DESIRED  CURRENT  READY  AGE
catalog-service-3  5        5        5      49m
```

Builds [Learn More](#)

Filter by label

Add

Name	Last Build	Status	Duration	Created	Type
catalog-service	#2	✓ Complete	2 minutes, 4 seconds	a day ago	Source
petstore-service	#3	✓ Complete	1 minute, 33 seconds	a day ago	Source
wildflyswarm-10-centos7-build	#1	✓ Complete	2 minutes, 40 seconds	a day ago	Docker

pricing-service created 2 days ago

app **pricing-service**

Details Events

Selectors: deploymentconfig=pricing-service
Type: ClusterIP
IP: 172.30.104.212
Hostname: pricing-service.petstore.svc ⓘ
Session affinity: None

```
[tomek@localhost ~]$ curl -I http://catalog-service-petstore.192.168.42.48.nip.io/
item/fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd
HTTP/1.1 200 OK
pod: catalog-service-1-8842l
Content-Type: application/json
Content-Length: 206
Date: Sun, 18 Mar 2018 13:37:00 GMT
Set-Cookie: 143a3872a836a2875d0e32fb7af4450c=a096c3835f5eb25fa681fcc839e114f0; pat
h=/; HttpOnly
Cache-control: private

[tomek@localhost ~]$ curl -I http://catalog-service-petstore.192.168.42.48.nip.io/
item/fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd
HTTP/1.1 200 OK
pod: catalog-service-1-sq05t
Content-type: application/json
Content-Length: 206
Date: Sun, 18 Mar 2018 13:37:07 GMT
Set-Cookie: 143a3872a836a2875d0e32fb7af4450c=246506eedb4cfc092f2862ddf4df4fc9; pat
h=/; HttpOnly
Cache-control: private

[tomek@localhost ~]$ curl -I http://catalog-service-petstore.192.168.42.48.nip.io/
item/fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd
HTTP/1.1 200 OK
pod: catalog-service-1-zlb85
Content-type: application/json
Content-Length: 206
Date: Sun, 18 Mar 2018 13:37:10 GMT
Set-Cookie: 143a3872a836a2875d0e32fb7af4450c=c511a0b6fb50bac9bfb43165db52909d; pat
h=/; HttpOnly
Cache-control: private

[tomek@localhost ~]$ curl -I http://catalog-service-petstore.192.168.42.48.nip.io/
item/fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd
HTTP/1.1 200 OK
pod: catalog-service-1-rcd42
Content-type: application/json
Content-Length: 206
Date: Sun, 18 Mar 2018 13:37:11 GMT
Set-Cookie: 143a3872a836a2875d0e32fb7af4450c=3b42672ae622d5ba049a797c69e2ecc8; pat
h=/; HttpOnly
Cache-control: private

[tomek@localhost ~]$ curl -I http://catalog-service-petstore.192.168.42.48.nip.io/
item/fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd
HTTP/1.1 200 OK
pod: catalog-service-1-qznz9
Content-type: application/json
Content-Length: 206
Date: Sun, 18 Mar 2018 13:37:12 GMT
Set-Cookie: 143a3872a836a2875d0e32fb7af4450c=15303f0b3403ed17f9d3790998eb63da; pat
h=/; HttpOnly
Cache-control: private

[tomek@localhost ~]$ █
```

Parameters

* Memory Limit

Maximum amount of memory the container can use.

Namespace

The OpenShift Namespace where the ImageStream resides.

* Database Service Name

The name of the OpenShift Service exposed for the database.

* PostgreSQL Connection Username

Username for PostgreSQL user that will be used for accessing the database.

* PostgreSQL Connection Password

Password for the PostgreSQL connection user.

* PostgreSQL Database Name

Name of the PostgreSQL database accessed.

* Volume Capacity

Volume space available for data, e.g. 512Mi, 2Gi.

* Version of PostgreSQL Image

Version of PostgreSQL image to be used (9.2, 9.4, 9.5 or latest).

Labels [About Labels](#)

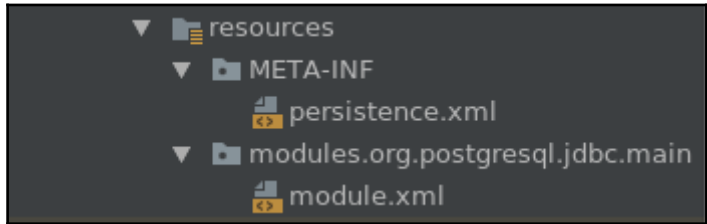
The following labels are being added automatically. If you want to override them, you can do so below.

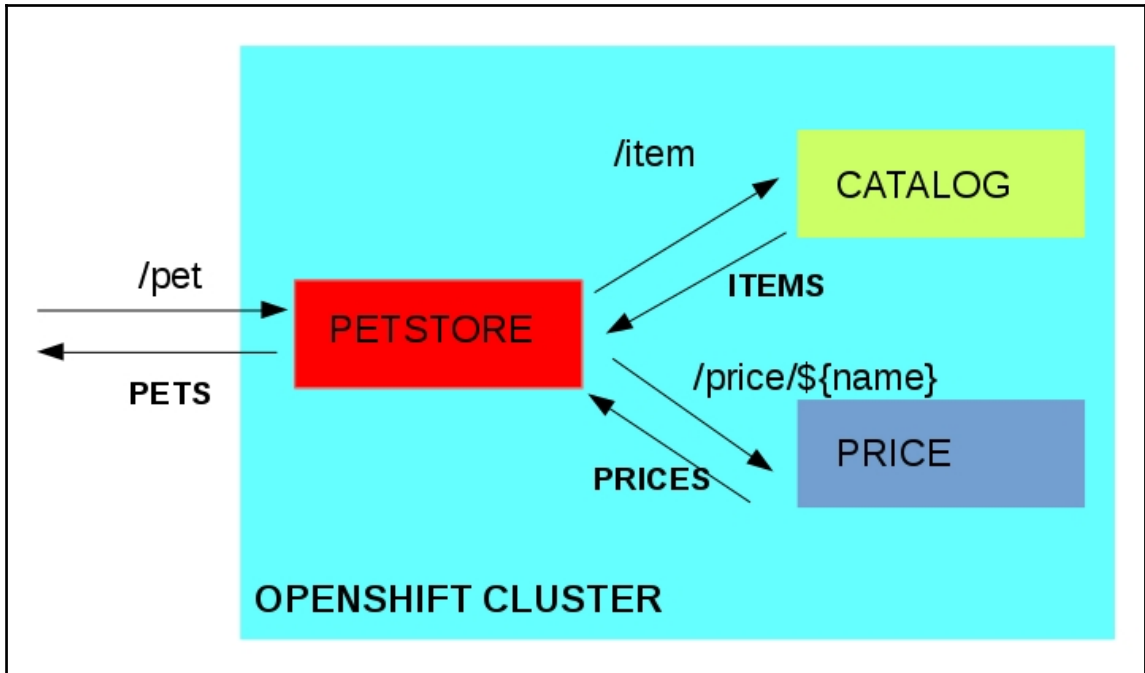
<input type="text" value="template"/>	<input type="text" value="postgresql-persistent-template"/>
<input type="text" value="app"/>	<input type="text" value="postgresql-persistent"/>

Each label is applied to each created resource.

<input type="text" value="template"/>	<input type="text" value="pricingdb-template"/>	≡	×
<input type="text" value="app"/>	<input type="text" value="pricingdb"/>	≡	×

[Add Label](#)





```

sh-4.2$ env | grep PRICING SERVICE
PRICING SERVICE PORT=tcp://172.30.104.212:8080
PRICING SERVICE PORT 8778 TCP=tcp://172.30.104.212:8778
PRICING SERVICE PORT 9779 TCP ADDR=172.30.104.212
PRICING SERVICE SERVICE PORT 8778 TCP=8778
PRICING SERVICE PORT 8080 TCP ADDR=172.30.104.212
PRICING SERVICE PORT 8778 TCP ADDR=172.30.104.212
PRICING SERVICE PORT 8080 TCP=tcp://172.30.104.212:8080
PRICING SERVICE PORT 9779 TCP PROTO=tcp
PRICING SERVICE PORT 8778 TCP PORT=8778
PRICING SERVICE SERVICE PORT 9779 TCP=9779
PRICING SERVICE PORT 8080 TCP PROTO=tcp
PRICING SERVICE SERVICE PORT 8080 TCP=8080
PRICING SERVICE PORT 8778 TCP PROTO=tcp
PRICING SERVICE PORT 8080 TCP PORT=8080
PRICING SERVICE SERVICE HOST=172.30.104.212
PRICING SERVICE PORT 9779 TCP PORT=9779
PRICING SERVICE SERVICE PORT=8080
PRICING SERVICE PORT 9779 TCP=tcp://172.30.104.212:9779

```

The screenshot shows a web browser interface displaying a JSON response. The address bar contains the URL: `customer-gateway-petstore.192.168.42.48.nip.io/catalog/item`. The browser tabs are labeled "JSON", "Nieprzetworzone dane", and "Nagłówki". Below the tabs, there are buttons for "Zapisz" and "Kopiuuj", and a search box labeled "Filtruj JSON". The main content area displays a JSON array of four objects, each representing a pet item. The items are: a turtle (quantity 5, price 50), a hamster (quantity 10, price 30), a goldfish (quantity 3, price 15), and a lion (quantity 9, price 3000). Each item has a unique ID and a detailed description.

```
{
  "0": {
    "itemId": "dbf67f4d-f1c9-4fd4-96a8-65ee1a22b9ff",
    "name": "turtle",
    "quantity": 5,
    "price": 50,
    "description": "Slow friendly reptile. Let your busy self see how it spends 100 years of his life laying on sand and swimming."
  },
  "1": {
    "itemId": "fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd",
    "name": "hamster",
    "quantity": 10,
    "price": 30,
    "description": "Energetic rodent - great as a first pet. Will be your only inmate that takes his fitness training seriously."
  },
  "2": {
    "itemId": "725dfad2-0b4d-455c-9385-b46c9f356e9b",
    "name": "goldfish",
    "quantity": 3,
    "price": 15,
    "description": "With its beauty it will be the decoration of you aquarium. Likes gourmet fish feed and postmodern poetry."
  },
  "3": {
    "itemId": "a2aalca7-add8-4aae-b361-b7f92d82c3f5",
    "name": "lion",
    "quantity": 9,
    "price": 3000,
    "description": "Loves playing the tag and cuddling with other animals and people."
  }
}
```

Chapter 9: Configuring Continuous Integration Using Jenkins

```
[tomek@fedoralaptop ~]$ oc describe bc/wildflyswarm-10-centos7-build
Name:          wildflyswarm-10-centos7-build
Namespace:     petstore
Created:       25 hours ago
Labels:        <none>
Annotations:   <none>
Latest Version: 1

Strategy:      Docker
URL:           git://github.com/wildfly-swarm/sti-wildflyswarm.git
ContextDir:    1.0
From Image:    ImageStreamTag swarm-centos:latest
Output to:     ImageStreamTag wildflyswarm-10-centos7:latest

Build Run Policy:  Serial
Triggered by:     ImageChange
Webhook GitHub:
  URL:            https://192.168.42.201:8443/oapi/v1/namespaces/petstore/buildconfigs/wildflyswarm-10-centos7-build/webhooks/secret101/github

Build
wildflyswarm-10-centos7-build-1      Status      Duration      Creation Time
complete                             2m40s        2017-10-28 23:37:33 +0200 CEST

Events: <none>
[tomek@fedoralaptop ~]$ █
```

Builds		Learn More			
<input type="text" value="Filter by label"/>		<input type="button" value="Add"/>			
Name	Last Build	Status	Duration	Created	Type
catalog-service	#2	✓ Complete	2 minutes, 4 seconds	a day ago	Source
petstore-service	#3	✓ Complete	1 minute, 33 seconds	a day ago	Source
wildflyswarm-10-centos7-build	#1	✓ Complete	2 minutes, 40 seconds	a day ago	Docker

Image Streams [Learn More](#)

Filter by label

Name	Docker Repo	Tags	Updated
catalog-service	172.30.1.1:5000/petstore/catalog-service	latest	4 hours ago
swarm-centos	172.30.1.1:5000/petstore/swarm-centos	latest	4 hours ago
wildflyswarm-10-centos7	172.30.1.1:5000/petstore/wildflyswarm-10-centos7	latest	4 hours ago

Default locale: en_US, platform encoding: ANSI_X3.4-1968

OS name: "linux", version: "4.4.41-boot2docker", arch: "amd64", family: "unix"

Follow

[INFO] Scanning for projects...

Downloading: <https://repo.maven.apache.org/maven2/org/jboss/spec/jboss-javaee-7.0/1.0.3.Final/jboss-javaee-7.0-1.0.3.Final.pom>

3/17 KB

5/17 KB

8/17 KB

11/17 KB

13/17 KB

16/17 KB

17/17 KB

Downloaded: <https://repo.maven.apache.org/maven2/org/jboss/spec/jboss-javaee-7.0/1.0.3.Final/jboss-javaee-7.0-1.0.3.Final.pom> (17 KB at 23.4 KB/sec)

Downloading: <https://repo.maven.apache.org/maven2/org/jboss/jboss-parent/16/jboss-parent-16.pom>

3/31 KB

5/31 KB

8/31 KB

11/31 KB

13/31 KB

16/31 KB

19/31 KB

21/31 KB

24/31 KB

27/31 KB

29/31 KB

```
[INFO] Installing /opt/app-root/src/pom.xml to /opt/app-
root/src/.m2/repository/org/packit/book/pricing-service/1.0/pricing-service-1.0.pom
[INFO] Installing /opt/app-root/src/target/pricing-service-1.0-swarm.jar to /opt/app-
root/src/.m2/repository/org/packit/book/pricing-service/1.0/pricing-service-1.0-swarm.jar
[INFO] -----
[INFO] BUILD SUCCESS
[INFO] -----
[INFO] Total time: 07:29 min
[INFO] Finished at: 2017-10-30T00:19:09+00:00
[INFO] Final Memory: 31M/234M
[INFO] -----
[WARNING] The requested profile "openshift" could not be activated because it does not
exist.
...done

Pushing image 172.30.1.1:5000/petstore/pricing-service:latest ...
Pushed 7/8 layers, 88% complete
Pushed 8/8 layers, 100% complete
Push successful
```

[Go to Top](#)

Edit Build Config pricing-service

```
20     name: 'pricing-service:latest'
21   postCommit: {}
22   resources: {}
23   runPolicy: Serial
24   source:
25     git:
26       uri: 'https://github.com/swarmpetstore/pricing-service'
27       type: Git
28     strategy:
29       sourceStrategy:
30         from:
31           kind: ImageStreamTag
32           name: 'wildflyswarm-10-centos7:latest'
33           namespace: petstore
34         incremental: true
35       type: Source
36     successfulBuildsHistoryLimit: 5
37   triggers:
38     - github:
39         secret: HVM8yWEboyd12DedAjaI
40         type: GitHub
41     - generic:
42         secret: _b9HLMimVllmDjKNhCdJ
43         type: Generic
44     - type: ConfigChange
45     - imageChange:
46         lastTriggeredImageID: >-
47         172.30.1.1:5000/petstore/wildflyswarm-10-centos7@sha256:e1a53addf45163a91f144accfa2398e2bce7a766108a67d91ab824e61cac6c90
48     type: ImageChange
49   status:
```

```
Pulling image "172.30.1.1:5000/petstore/pricing-service:latest" ...
Restoring saved artifacts from prior build...Found pom.xml... attempting to build with 'mvn -U install -Popenshift -DskipTests '
Apache Maven 3.3.3 (7994120775791599e205a5524ec3e0dfe41d4a06; 2015-04-22T11:57:37+00:00)
Maven home: /usr/local/apache-maven-3.3.3
Java version: 1.8.0_151, vendor: Oracle Corporation
Java home: /usr/lib/jvm/java-1.8.0-openjdk-1.8.0.151-1.b12.el7_4.x86_64/jre
Default locale: en_US, platform encoding: ANSI_X3.4-1968
OS name: "linux", version: "4.4.41-boot2docker", arch: "amd64", family: "unix"
```

```
[INFO] BUILD SUCCESS
```

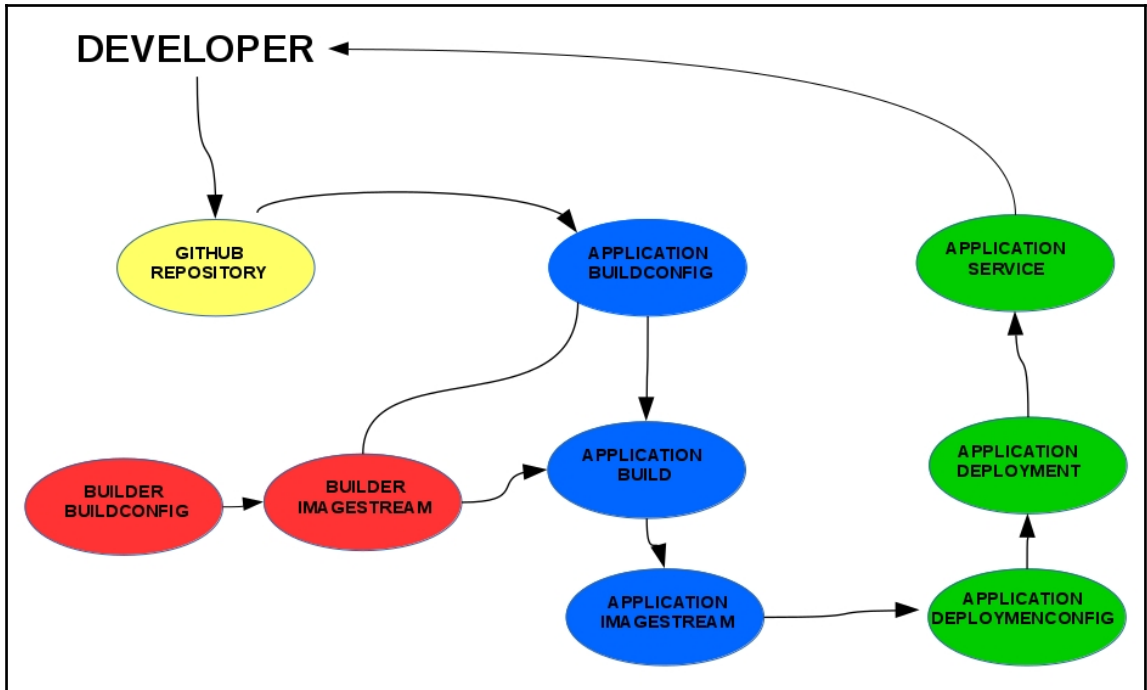
```
[INFO] -----
```

```
[INFO] Total time: 16.347 s
```

```
[INFO] Finished at: 2017-10-30T01:04:03+00:00
```

```
[INFO] Final Memory: 31M/341M
```

```
[INFO] -----
```



Browse Catalog Deploy Image [Import YAML / JSON](#)

Create or replace resources from their YAML or JSON definitions. If adding a template, you'll have the option to process the template.

[Browse...](#)

Upload file by dragging & dropping, selecting it, or pasting from the clipboard.

[Clear Value](#)

```
1  apiVersion: v1
2  kind: BuildConfig
3  metadata:
4    name: pricing-service-pipeline
5    labels:
6      name: pricing-service-pipeline
7  spec:
8    runPolicy: Serial
9    strategy:
10     type: JenkinsPipeline
11     jenkinsPipelineStrategy:
12     jenkinsfile:"pipeline { \n agent any\n stages {\n stage('Build') {\n steps {\n echo 'Pipeline is running'\n }\n }\n }
```

[Create](#) [Cancel](#)

Other Resources

> | DEPLOYMENT
jenkins, #1 Recreate deployment is running... [View Events](#) | [Cancel](#) ⋮

Pods [Learn More](#)

Filter by label Add

Name	Status	Containers Ready	Container Restarts	Age
jenkins-1-gxfw9	Container creating	0/1	0	a minute
jenkins-1-deploy	Running	1/1	0	a minute

Pipelines [Learn More](#)

[pricing-service-pipeline](#) created a few seconds ago Start Pipeline

No pipeline builds have run for pricing-service-pipeline. View the [Jenkinsfile](#) to see what stages will run.

[Pipelines](#) > [pricing-service-pipeline](#)

[pricing-service-pipeline](#) created a few seconds ago Start Pipeline Actions

name `pricing-service-pipeline`

[History](#) [Configuration](#)

✔ **Build #1** is complete. [View Log](#)
started a few seconds ago

Filter by label Add

<p>✔ Build #1 a few seconds ago View Log</p>	<p>Print</p> <p></p> <p>0s</p>
---	--------------------------------

Jenkins 1 Szukaj... tomek | Wyloguj

Jenkins > petstore/pricing-service-pipeline > #1

- [Back to Project](#)
- [Status](#)
- [Changes](#)
- Logi konsoli**
 - Jako niesformatowany tekst
- [Edit Build Information](#)
- [Usuń to zadanie](#)
- [Open Blue Ocean](#)
- [Replay](#)
- [Pipeline Steps](#)

Logi konsoli

```

OpenShift Build petstore/pricing-service-pipeline-1
[Pipeline] node
Running on master in /var/lib/jenkins/jobs/petstore-pricing-service-pipeline/workspace
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Build)
[Pipeline] echo
Pipeline is running
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS

```

Jenkins 1 search tomek | log out

Jenkins > petstore/pricing-service-pipeline > [ENABLE AUTO REFRESH](#)

- [Back to Dashboard](#)
- [Status](#)
- [Changes](#)
- [Build Now](#)
- [Delete Pipeline](#)
- [Configure](#)
- [Open Blue Ocean](#)
- [Full Stage View](#)
- [Pipeline Syntax](#)

Build History [trend](#)

- #1** Nov 02, 2017 2:11 PM
OpenShift Build petstore/pricing-service-pipeline-1

[RSS for all](#) [RSS for failures](#)

Pipeline petstore/pricing-service-pipeline

Project name: petstore-pricing-service-pipeline [add description](#)

[Recent Changes](#)

Stage View

Average stage times:

Build
47ms

#1	Nov 02 15:11	No Changes
----	-----------------	---------------

Permalinks

- [Last build \(#1\), 13 min ago](#)
- [Last stable build \(#1\), 13 min ago](#)
- [Last successful build \(#1\), 13 min ago](#)
- [Last completed build \(#1\), 13 min ago](#)

Pipeline

Definition

Pipeline script

Script

```
1 pipeline {
2   agent any
3   stages {
4     stage('Print') {
5       steps {
6         echo 'This pipeline will build pricing-service someday'
7       }
8     }
9   }
10 }
11
```

Use Groovy Sandbox

[Pipeline Syntax](#)

Save

Apply

The screenshot displays a pipeline management interface. At the top, a vertical menu contains the following items:

- Build Now
- Delete Pipeline
- Configure
- Open Blue Ocean
- Full Stage View
- Pipeline Syntax

Below the menu is a section titled "Build History" with a sun icon and a "trend" link. It features a search input field containing the text "find". The build history table below shows two entries:

Build ID	Timestamp	Description
#2	Nov 2, 2017 2:27 PM	OpenShift Build petstore/pricing-service-pipeline-2
#1	Nov 2, 2017 2:11 PM	OpenShift Build petstore/pricing-service-pipeline-1

Jenkins 1 search tomek | log out

petstore/pricing-service-pipeline #3

- Back to Project
- Status
- Changes
- Console Output**
 - View as plain text
- Edit Build Information
- Delete Build
- Open Blue Ocean
- Replay
- Pipeline Steps
- Previous Build

Console Output

```
OpenShift Build petstore/pricing-service-pipeline-3
Started by user tomek
[Pipeline] node
Running on master in /var/lib/jenkins/jobs/petstore-pricing-service-pipeline/workspace
[Pipeline] {
[Pipeline] stage
[Pipeline] { (Print)
[Pipeline] echo
This pipeline will build pricing-service someday
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS
```

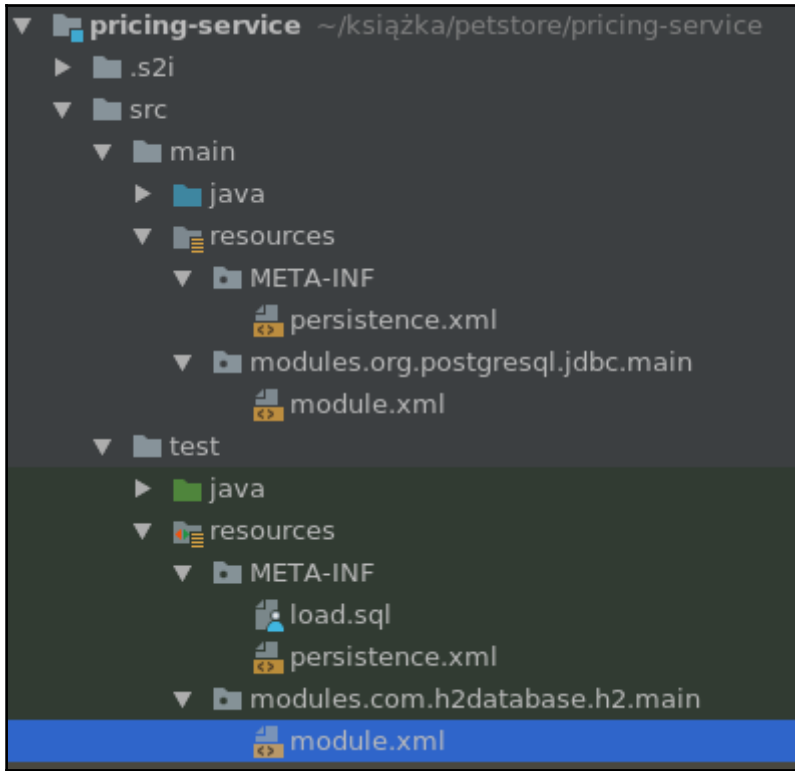
OPENSIFT ORIGIN tomek

petstore » pricing-service-pipeline-3 » Edit YAML

Edit Build pricing-service-pipeline-3

```
44 | type: None
45 | strategy:
46 |   jenkinsPipelineStrategy:
47 |     jenkinsfile: |
48 |       pipeline {
49 |         agent any
50 |         stages {
51 |           stage('Print') {
52 |             steps {
53 |               echo 'This pipeline will build pricing-service someday'
54 |             }
55 |           }
56 |         }
57 |       }
58 |   type: JenkinsPipeline
59 |
```

Save Cancel



List of OpenShift Client Tools installations on this system

JDK

JDK installations

JDK	Name	jdk8u152
-----	------	----------

Install automatically

Install from java.sun.com

Version: Java SE Development Kit 8u152

I agree to the Java SE Development Kit License Agreement

Maven

Maven installations

Maven

Name

Install automatically

Install from Apache

Version

Add Installer

```

at org.apache.maven.surefire.booter.ProviderFactory.invokeProvider(ProviderFactory.java:85)
at org.apache.maven.surefire.booter.ForkedBooter.runSuitesInProcess(ForkedBooter.java:115)
at org.apache.maven.surefire.booter.ForkedBooter.main(ForkedBooter.java:75)

Results :

Failed tests:  testSearchById(org.packt.swarm.petstore.pricing.PricingServiceTest)




Tests run: 1, Failures: 1, Errors: 0, Skipped: 0

[INFO] -----
[INFO] BUILD FAILURE

```

pricing-service-pipeline created 2 hours ago

Recent Runs

<p>Build #7</p> <p>14 minutes ago</p> <p>View Log</p>	<p>Declarative: Tool Install</p> <p></p> <p>0s</p>	<p>Test</p> <p></p> <p>26s</p>	<p>Build</p> <p></p> <p>0s</p>
	<p>View Pipeline Runs Edit Pipeline</p>		

```

[WARNING] The requested profile "openshift" could not be activated because it does not exist.
...done
Pushing image 172.30.1.1:5000/petstore/pricing-service:latest ...
Pushed 7/8 layers, 88% complete
Pushed 7/8 layers, 95% complete
Pushed 8/8 layers, 100% complete
Push successful

Exiting "Trigger OpenShift Build" successfully; build "pricing-service-19" has completed with status: [Complete].
[Pipeline] openshiftVerifyBuild

Starting the "Verify OpenShift Build" step with build config "pricing-service" from the project "petstore".
  Waiting on build "pricing-service-19" to complete ...
Operation will timeout after 5000 milliseconds

Exiting "Verify OpenShift Build" successfully; build "pricing-service-19" has completed with status: [Complete].
[Pipeline] }
[Pipeline] // stage
[Pipeline] }
[Pipeline] // withEnv
[Pipeline] }
[Pipeline] // node
[Pipeline] End of Pipeline
Finished: SUCCESS

```

Deployments [Learn More](#)

Filter by label

Name	Last Version	Status	Created	Trigger
jenkins	#3	Active, 1 replica	16 hours ago	Config change
pricing-service	#9	Active, 3 replicas	a day ago	Manual

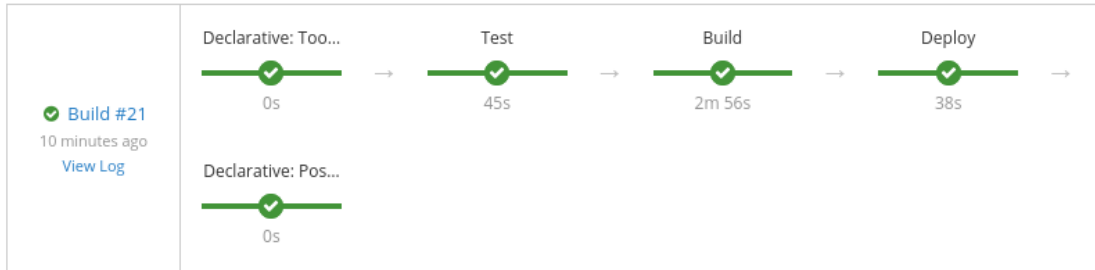
Pipelines [Learn More](#)

pricing-service-pipeline created 21 hours ago

Start Pipeline

Recent Runs

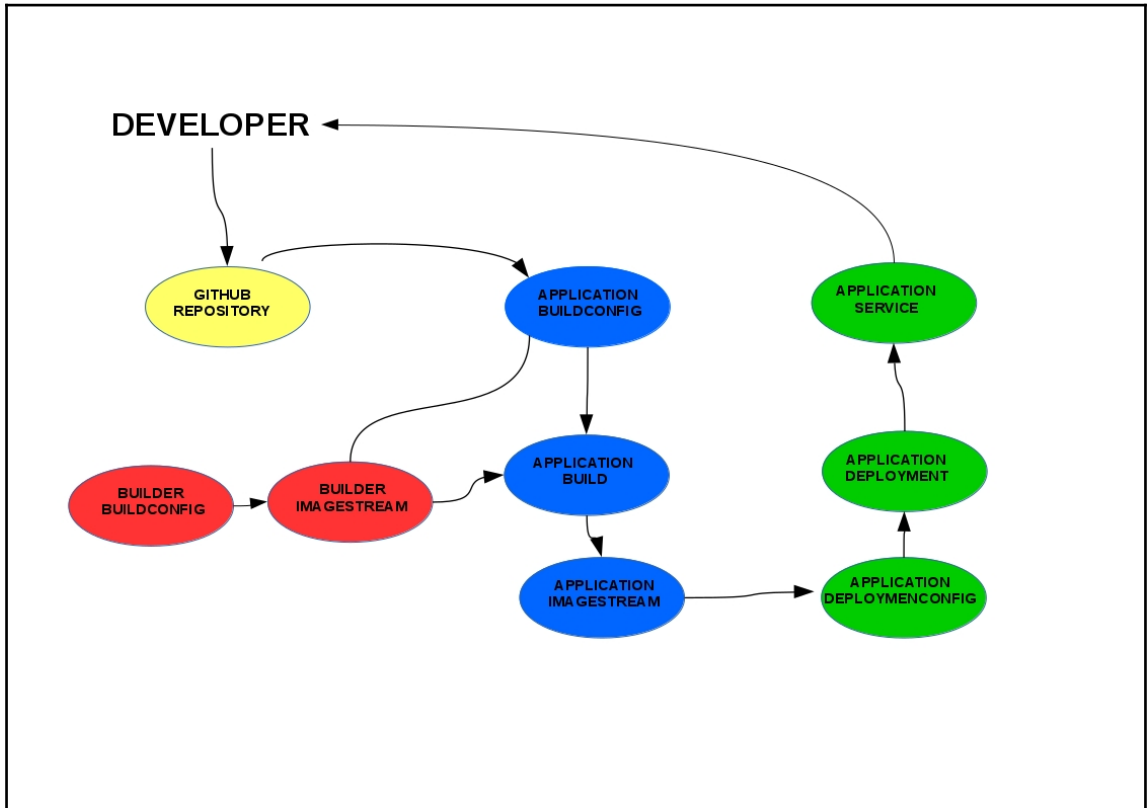
Average Duration: 1m 51s

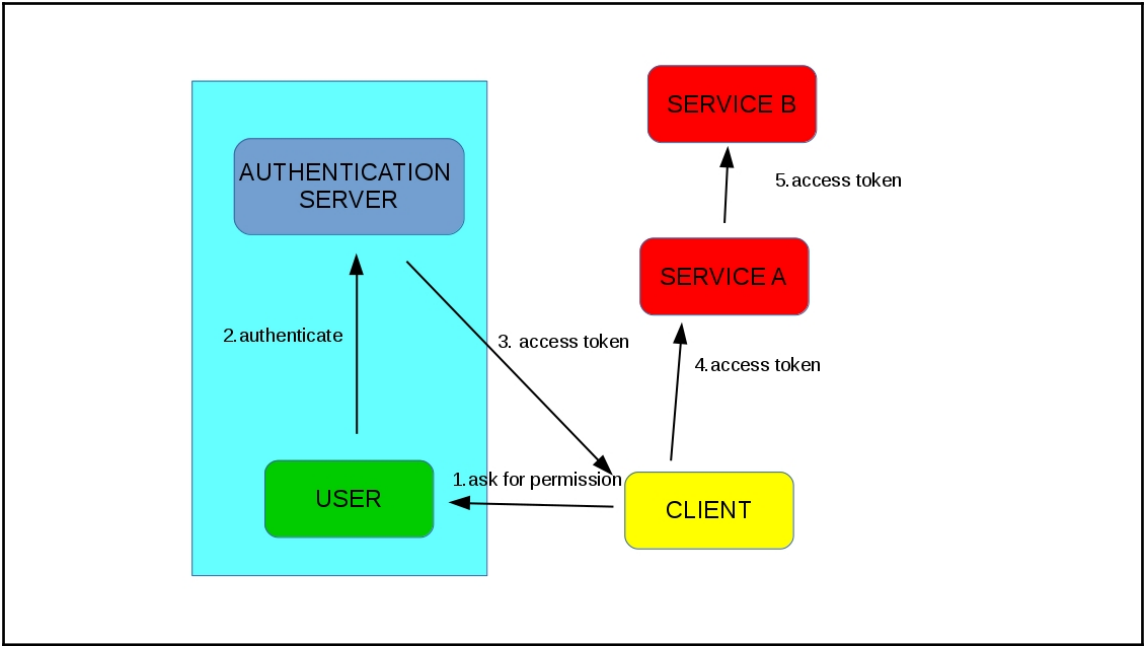


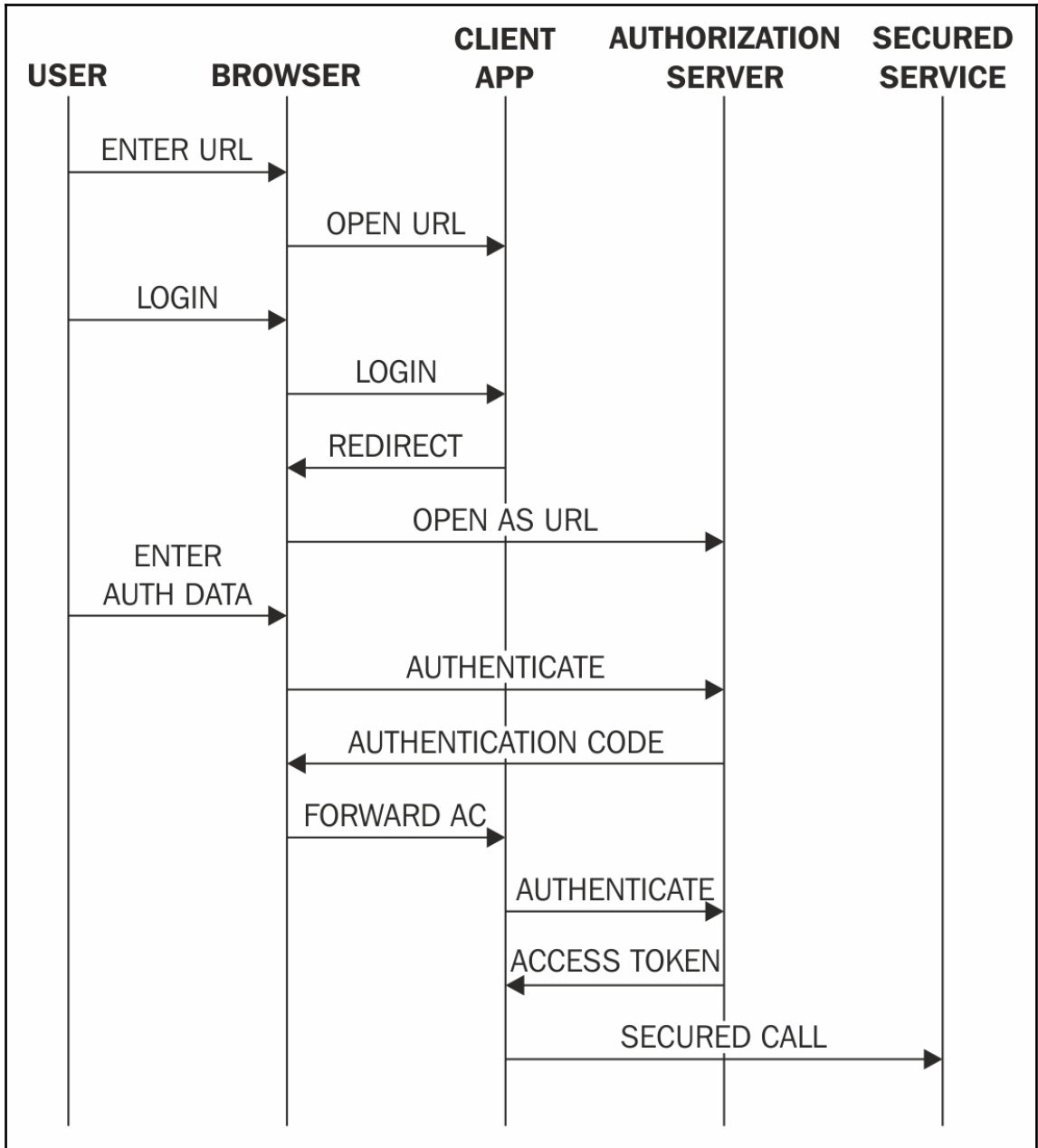
✔ Build #21
10 minutes ago
[View Log](#)

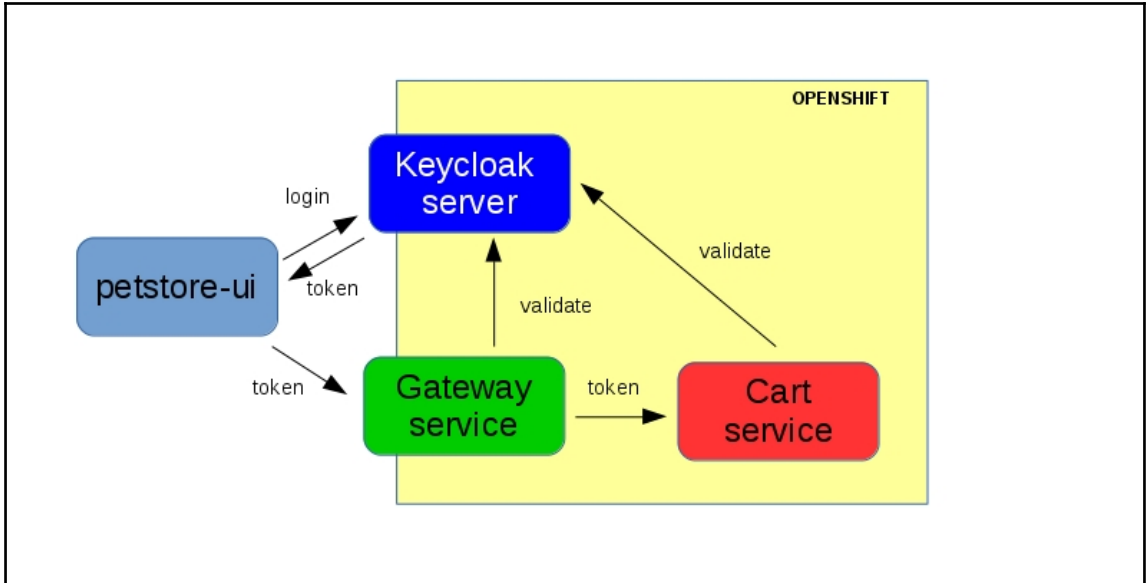
[View Pipeline Runs](#) | [Edit Pipeline](#)

Chapter 10: Providing Security Using Keycloak









OPENSHIFT ORIGIN ? v tomek v

[petstore](#) > [Add to Project](#)

[Browse Catalog](#) [Deploy Image](#) [Import YAML / JSON](#)

Deploy an existing image from an image stream tag or docker pull spec.

Image Stream Tag

Namespace / Image Stream : Tag

Image Name

Select an image stream tag or enter an image name.

*** Name**

keycloak

Identifies the resources created for this image.

Pull Secret

Secret name ⌵ ✕

Secret for authentication when pulling images from a secured registry. [Learn More](#) ⌵

[Create New Secret](#)

Environment Variables

[About Environment Variables](#)

KEYCLOAK_USER	admin	⌵	✕
KEYCLOAK_PASSWORD	admin	⌵	✕
PROXY_ADDRESS_FORWARDING	true	⌵	✕

[Add Environment Variable](#) | [Add Environment Variable Using a Config Map or Secret](#)

[Routes](#) » **keycloak**

keycloak created a few seconds ago

<http://keycloak-petstore.192.168.42.217.xip.io>

✓ Exposed on router 'router' a few seconds ago

Details

Path: *none*

Service: [keycloak](#)

Target Port: 8080-tcp

This target port will route to Service Port 8080 → Container Port 8080 (TCP).

KEYCLOAK Admin

Master ▼

Configure

- Realm Settings
- Clients
- Client Templates
- Roles
- Identity Providers
- User Federation
- Authentication

Manage

- Groups
- Users
- Sessions
- Events
- Import
- Export

Master 🗑️

General | Login | Keys | Email | Themes | Cache | Tokens | Client Registration | Security Defenses

*** Name**

Display name

HTML Display name

Enabled

Endpoints

Petstore-ui

Settings


Roles

Mappers 

Scope 

Revocation

Sessions 

Offline Access 

Installation 

Permissions 

Client ID 

Name 

Description 

Enabled 

Consent Required  OFF


Client Protocol 


Client Template 

Access Type 

Standard Flow Enabled 

Implicit Flow Enabled  OFF

Direct Access Grants Enabled 

Authorization Enabled  OFF

Root URL 

* Valid Redirect URIs  

Base URL 

Admin URL 

Web Origins  

Add Role

* Role Name

Description

Scope Param
Required ⓘ

 OFF

Users » Add user

Add user

ID

Created At

Username *

tomek

Email

First Name

Last Name

User Enabled ?

 ON

Email Verified ?

 OFF

Required User Actions ?

Select an action...

Save

Cancel

Users > tomek

Tomek

Details Attributes **Credentials** Role Mappings Groups Consents Sessions

Manage Password

New Password




Password Confirmation

Temporary OFF

Users > tomek

Tomek

Details Attributes Credentials **Role Mappings** Groups Consents Sessions

Realm Roles	Available Roles 	Assigned Roles 	Effective Roles 
	<ul style="list-style-type: none">admincreate-realm <input type="button" value="Add selected >"/>	<ul style="list-style-type: none">customeroffline_accessuma_authorization <input type="button" value="« Remove selected"/>	<ul style="list-style-type: none">customeroffline_accessuma_authorization
Client Roles	Select client to view roles for client		
<input type="text"/>			

KEYCLOAK Admin

Petstore

Configure

- Realm Settings
- Clients
- Client
- Templates
- Roles
- Identity
- Providers
- User
- Federation
- Authentication

Manage

- Groups
- Users
- Sessions

Clients > petstore-ui

Petstore-ui

Settings Roles Mappers Scope Revocation Sessions Offline Access Installation

Permissions

petstore-ui Scope Mappings

Full Scope Allowed OFF

Realm Roles	Available Roles	Assigned Roles	Effective Roles
	<ul style="list-style-type: none"> admin offline_access uma_authorization 	<ul style="list-style-type: none"> customer 	<ul style="list-style-type: none"> customer

Client Roles

Deployments >> customer-gateway

customer-gateway created 18 hours ago

app customer-gateway

History Configuration Environment Events

Container customer-gateway Environment Variables

Name	Value
KEYCLOAK_URL	http://keycloak-openshift-petstore.192.168.42.98.nip.io

[Add Environment Variable](#) | [Add Environment Variable Using a Config Map or Secret](#)

turtle

Slow friendly reptile. Let your busy self see how it spends 100 years of his life laying on sand and swimming.

50\$

hamster

Energetic rodent - great as a first pet. Will be your only inmate that takes his fitness training seriously.

30\$

goldfish

With its beauty it will be the decoration of you aquarium. Likes gourmet fish feed and postmodern poetry.

15\$

lion

Big cat with fancy mane - you kid will love it! Loves playing the tag and cuddling with other animals and people.

3000\$

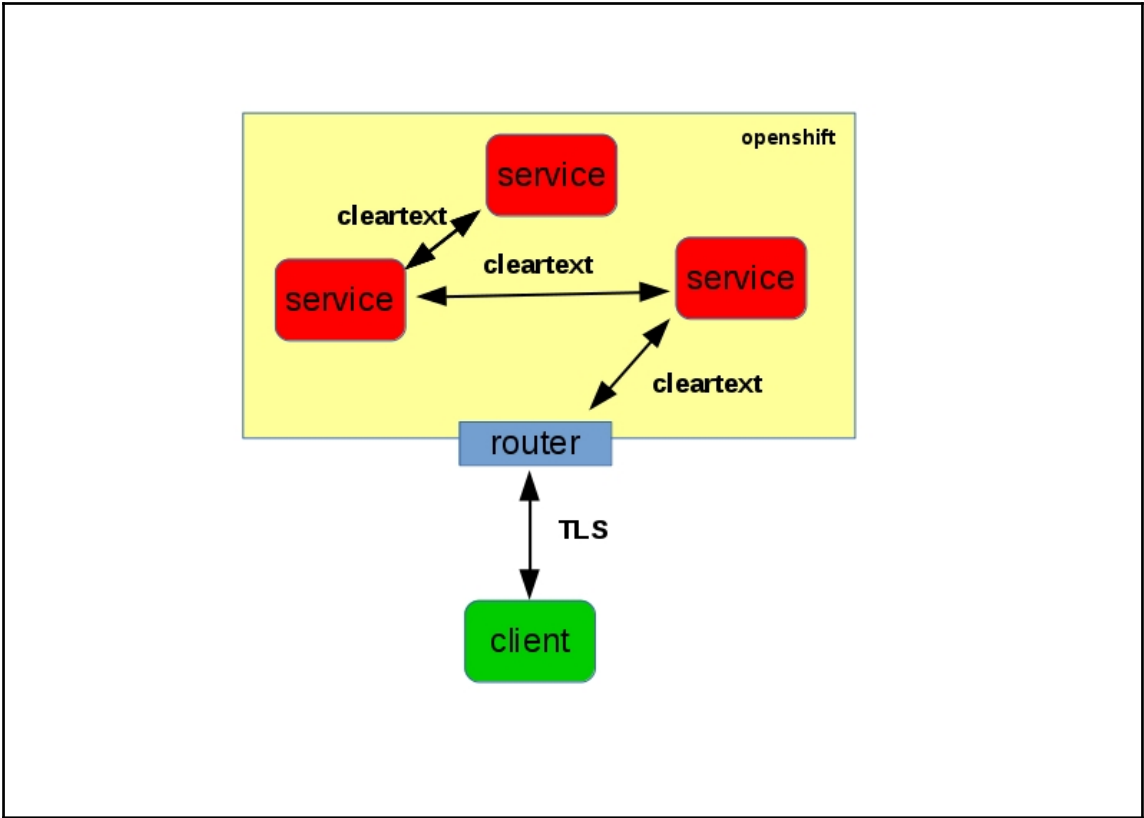
PETSTORE

Username or email

Password

<p>turtle</p> <p>Slow friendly reptile. Let your busy self see how it spends 100 years of his life laying on sand and swimming.</p> <p>50\$</p> <p><input type="text" value="1"/> <input type="button" value="Add to cart"/></p>	<p>hamster</p> <p>Energetic rodent - great as a first pet. Will be your only inmate that takes his fitness training seriously.</p> <p>30\$</p> <p><input type="text" value="1"/> <input type="button" value="Add to cart"/></p>	<p>goldfish</p> <p>With its beauty it will be the decoration of you aquarium. Likes gourmet fish feed and postmodern poetry.</p> <p>15\$</p> <p><input type="text" value="1"/> <input type="button" value="Add to cart"/></p>	<p>lion</p> <p>Big cat with fancy mane - you kid will love it! Loves playing the tag and cuddling with other animals and people.</p> <p>3000\$</p> <p><input type="text" value="1"/> <input type="button" value="Add to cart"/></p>
---	--	--	--

Product	Price	Quantity		Subtotal
hamster	30\$	<input type="text" value="1"/>	✘	30\$
goldfish	15\$	<input type="text" value="3"/>	✘	45\$
turtle	50\$	<input type="text" value="1"/>	✘	50\$
lion	3000\$	<input type="text" value="1"/>	✘	3000\$
<input type="button" value="Continue shopping"/>		Total		3125
			<input type="button" value="Buy"/>	



Security

Secure route

Routes can be secured using several TLS termination types for serving certificates.

TLS Termination

Edge

[Learn More](#)

Insecure Traffic

None

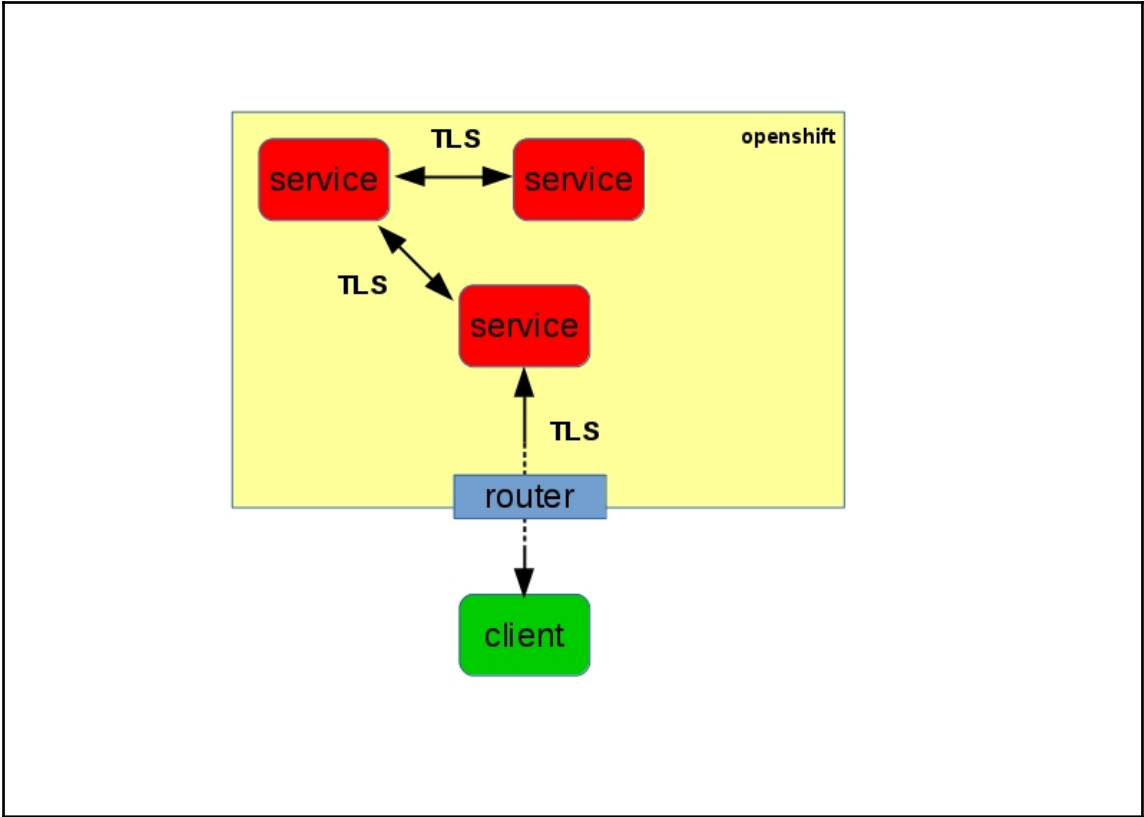
Policy for traffic on insecure schemes like HTTP.

Certificates

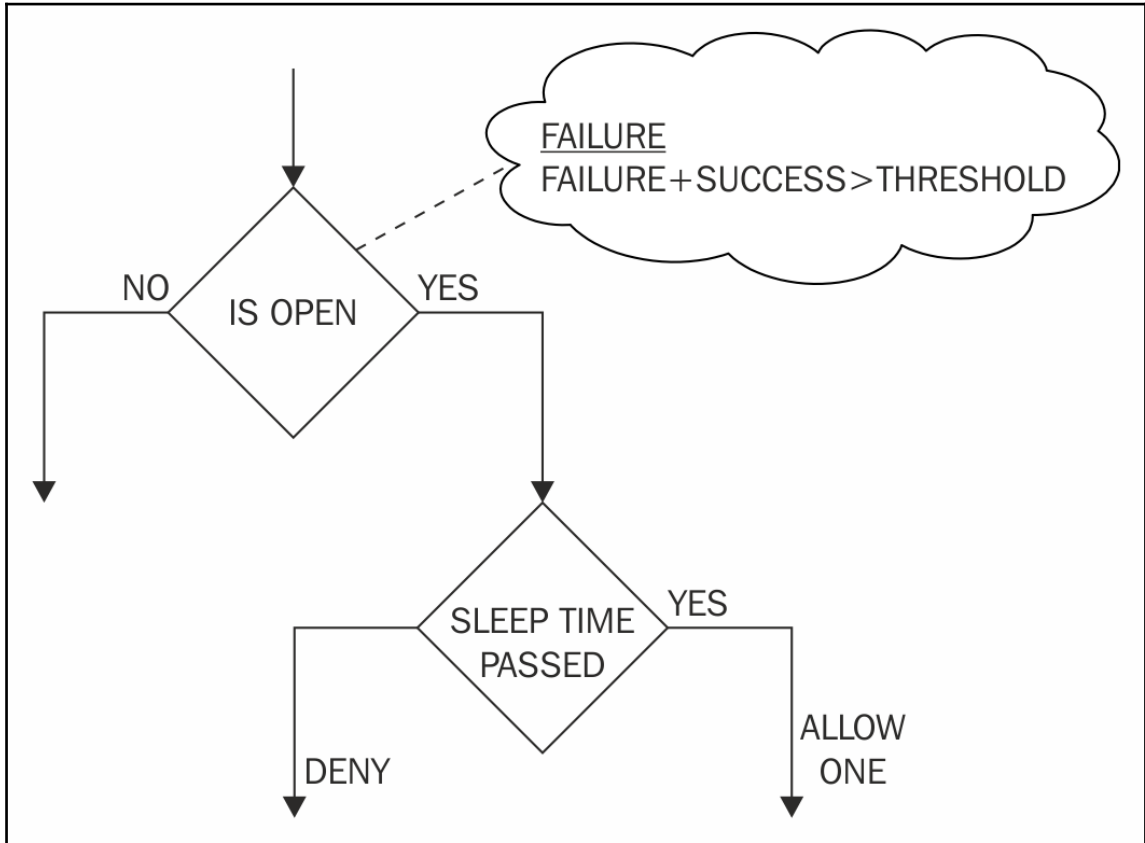
TLS certificates for edge and re-encrypt termination. If not specified, the router's default certificate is used.

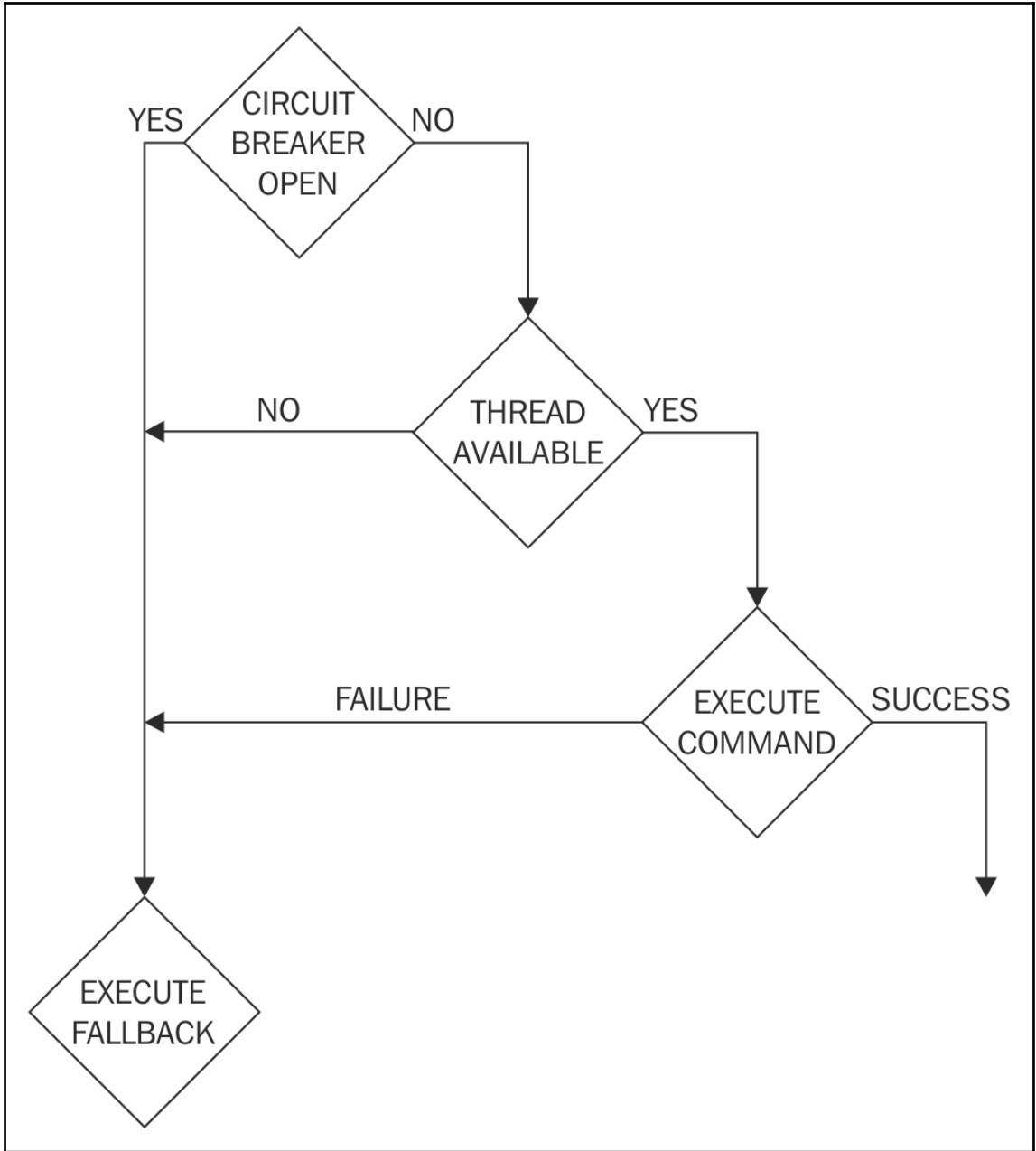
Certificate

The PEM format certificate. Upload file by dragging & dropping, selecting it, or pasting from the clipboard.



Chapter 11: Adding Resilience Using Hystrix






```
[tomek@localhost ~]$ time curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item
[{"itemId":"dbf67f4d-f1c9-4fd4-96a8-65ee1a22b9ff","name":"turtle","quantity":5,"price":50,"description":"Slow friendly reptile. Let your busy self see how it spends 100 years of his life laying on sand and swimming."},{ "itemId":"fc7ee3ea-8f82-4144-bcc8-9a71f4d871bd", "name":"hamster", "quantity":10, "price":30, "description":"Energetic rodent - great as a first pet. Will be your only inmate that takes his fitness training seriously."},{ "itemId":"725dfad2-0b4d-455c-9385-b46c9f356e9b", "name":"goldfish", "quantity":3, "price":15, "description":"With its beauty it will be the decoration of you aquarium. Likes gourmet fish feed and postmodern poetry."},{ "itemId":"a2aa1ca7-ad8-4aae-b361-b7f92d82c3f5", "name":"lion", "quantity":9, "price":3000, "description":"Loves playing the tag and cuddling with other animals and people."}]
real    0m0.133s
user    0m0.003s
sys     0m0.005s
[tomek@localhost ~]$ █
```

```
[tomek@localhost ~]$ time curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item
<html><head><title>Error</title></head><body>Internal Server Error</body></html>
real    0m1.057s
user    0m0.004s
sys     0m0.005s
[tomek@localhost ~]$ █
```

```
Caused by: com.netflix.hystrix.exception.HystrixRuntimeException: GetPriceCommand timed-out and no fallback available.
    at com.netflix.hystrix.AbstractCommand$22.call(AbstractCommand.java:819)
    at com.netflix.hystrix.AbstractCommand$22.call(AbstractCommand.java:804)
    at rx.internal.operators.OperatorOnErrorResumeNextViaFunction$4.onError(OperatorOnErrorResumeNextViaFunction.java:140)
    at rx.internal.operators.OnSubscribeDoOnEach$DoOnEachSubscriber.onError(OnSubscribeDoOnEach.java:87)
    at rx.internal.operators.OnSubscribeDoOnEach$DoOnEachSubscriber.onError(OnSubscribeDoOnEach.java:87)
    at com.netflix.hystrix.AbstractCommand$DeprecatedOnFallbackHookApplication$1.onError(AbstractCommand.java:1472)
    at com.netflix.hystrix.AbstractCommand$FallbackHookApplication$1.onError(AbstractCommand.java:1397)
```

```
[tomek@localhost ~]$ time curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item
<html><head><title>Error</title></head><body>Internal Server Error</body></html>
real    0m0.174s
user    0m0.004s
sys     0m0.004s
[tomek@localhost ~]$ █
```

```
[tomek@localhost ~]$ time curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item &
[1] 6643
[tomek@localhost ~]$ time curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item &
[2] 6646
[tomek@localhost ~]$ time curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item &
[3] 6649
[tomek@localhost ~]$ time curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item &
[4] 6652
[tomek@localhost ~]$ <html><head><title>Error</title></head><body>Internal Server Error</body></html>
real    0m0.062s
user    0m0.007s
sys     0m0.004s
<html><head><title>Error</title></head><body>Internal Server Error</body></html>
real    0m1.302s
user    0m0.002s
sys     0m0.009s
<html><head><title>Error</title></head><body>Internal Server Error</body></html>
real    0m1.079s
user    0m0.003s
sys     0m0.003s
<html><head><title>Error</title></head><body>Internal Server Error</body></html>
real    0m1.070s
user    0m0.004s
sys     0m0.004s
```

```
Caused by: java.lang.RuntimeException: Hystrix circuit short-circuited and is OPEN
    at com.netflix.hystrix.AbstractCommand.handleShortCircuitViaFallback(AbstractCommand.java:979)
    at com.netflix.hystrix.AbstractCommand.applyHystrixSemantics(AbstractCommand.java:557)
    at com.netflix.hystrix.AbstractCommand.access$200(AbstractCommand.java:60)
    at com.netflix.hystrix.AbstractCommand$4.call(AbstractCommand.java:419)
    at com.netflix.hystrix.AbstractCommand$4.call(AbstractCommand.java:413)
    at rx.internal.operators.OnSubscribeDefer.call(OnSubscribeDefer.java:46)
    ... 80 more
```

```
[tomek@localhost ~]$ curl -X GET http://customer-gateway-petstore.192.168.42.48.nip.io/catalog/item; echo
HTTP/503 Service Unavailable
[tomek@localhost ~]$ █
```

Chapter 12: Future Direction

