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Rapport d'architecture distribuée

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Objectif du tp :

L'objectif du tp c'est de déployer notre service pour la gestion des animaux, dans un serveur externe hébergé en PaaS. BlueMix, la solution Cloud proposée par IBM pour sa simplicité d'utilisation et son support PaaS.

Difficultés rencontrées :

Nous avons rencontré des problèmes au niveau de la dernière partie qui concerne la persistance des données, nous avons essayé de suivre les instructions sur le site officiel IBM, mais ça ne marchait pas la connexion JDBC.

On avait choisi MySQL car il est le plus simple, et on se trouve plus familiarisé avec par rapport aux autres.

```
C:\Users\Ilyass Farsal\Documents\TP-CLOUD2\ZOO_MANAGER>cf create-service mysql 100 DaoService
Creating service instance DaoService in org il.yass.12@hotmail.com / space orga as il.yass.12@hotmail.com...
OK

C:\Users\Ilyass Farsal\Documents\TP-CLOUD2\ZOO_MANAGER>cf bind-service ZooManagerAD DaoService
Binding service DaoService to app ZooManagerAD in org il.yass.12@hotmail.com / space orga as il.yass.12@hotmail.com...
OK
TIP: Use 'cf restage ZooManagerAD' to ensure your env variable changes take effect

C:\Users\Ilyass Farsal\Documents\TP-CLOUD2\ZOO_MANAGER>cf restage ZooManagerAD
Restaging app ZooManagerAD in org il.yass.12@hotmail.com / space orga as il.yass.12@hotmail.com...
Downloading java_buildpack...
Downloaded java_buildpack
Creating container
Successfully created container
Downloading app package...
Downloaded app package (9.4M)
Downloading build artifacts cache...
Downloaded build artifacts cache (54.5M)
Staging...
-----> Java Buildpack Version: v3.6 | https://github.com/cloudfoundry/java-buildpack.git#5194155
-----> Downloading Open Jdk JRE 1.8.0_91-unlimited-crypto from https://java-buildpack.cloudfoundry.org/openjdk/trusty/x86_64/openjdk-1.8.0_91-unlimited-crypto.tar.gz (found in cache)
Expanding Open Jdk JRE to .java-buildpack/open_jdk_jre (1.6s)
-----> Downloading Open JDK Like Memory Calculator 2.0.2_RELEASE from https://java-buildpack.cloudfoundry.org/memory-calculator/trusty/x86_64/memory-calculator-2.0.2_RELEASE.tar.gz (found in cache)
Memory Settings: -Xss853K -Xmx160M -XX:MaxMetaspaceSize=64M -Xms160M -XX:MetaspaceSize=64M
-----> Downloading Spring Auto Reconfiguration 1.10.0_RELEASE from https://java-buildpack.cloudfoundry.org/auto-reconfiguration/auto-reconfiguration-1.10.0_RELEASE.jar (found in cache)
Modifying /WEB-INF/web.xml for Auto Reconfiguration
-----> Downloading Tomcat Instance 8.0.42 from https://java-buildpack.cloudfoundry.org/tomcat/tomcat-8.0.42.tar.gz (found in cache)
Expanding Tomcat Instance to .java-buildpack/tomcat (0.2s)
-----> Downloading Tomcat Lifecycle Support 2.5.0_RELEASE from https://java-buildpack.cloudfoundry.org/tomcat-lifecycle-support/tomcat-lifecycle-support-2.5.0_RELEASE.jar (found in cache)
-----> Downloading Tomcat Logging Support 2.5.0_RELEASE from https://java-buildpack.cloudfoundry.org/tomcat-logging-support/tomcat-logging-support-2.5.0_RELEASE.jar (found in cache)
-----> Downloading Tomcat Access Logging Support 2.5.0_RELEASE from https://java-buildpack.cloudfoundry.org/tomcat-access-logging-support/tomcat-access-logging-support-2.5.0_RELEASE.jar (found in cache)
Exit status 0
Staging complete
```

```

"mysql": [
  {
    "credentials": {
      "host": "159.8.160.112",
      "hostname": "159.8.160.112",
      "name": "ddc51778e6226424d887d47b6f1b33b0a",
      "password": "pSQLTYxAoIdrj",
      "port": 3307,
      "uri": "mysql://uTlXEmBIHbrXX:pSQLTYxAoIdrj@159.8.160.112:3307/ddc51778e6226424d887d47b6f1b33b0a",
      "user": "uTlXEmBIHbrXX",
      "username": "uTlXEmBIHbrXX"
    },
    "label": "mysql",
    "name": "DaoService",
    "plan": "100",
    "provider": "core",
    "syslog_drain_url": null,
    "tags": [
      "mysql",
      "relational",
      "data_management",
      "ibm_experimental"
    ]
  }
]
}
}
}

{
  "VCAP_APPLICATION": {
    "application_id": "ea7f5097-bf72-40b3-b7d3-7f3c59474f5f",
    "application_name": "ZooManagerAD",
    "application_uris": [
      "ZooManagerAD.eu-gb.mybluemix.net"
    ],
    "application_version": "3805ecb0-8725-415d-810c-3ff721fcdf64",
    "limits": {
      "disk": 1024,
      "fds": 16384,
      "mem": 256
    },
    "name": "ZooManagerAD",
    "space_id": "137b0f10-ee1f-4d02-af8b-d35a5a1d73b4",
    "space_name": "orga",
    "uris": [
      "ZooManagerAD.eu-gb.mybluemix.net"
    ],
    "users": null,
    "version": "3805ecb0-8725-415d-810c-3ff721fcdf64"
  }
}

```

Conclusion :

Grâce à ce tp nous avons appris comment déployer un service sur un serveur externe hébergé en PaaS, et aussi la possibilité d'utilisation un système de persistance pour de stocker les données et les consulter par la suite.