Services

Agenda

1. Cloud Native Apps
2. Managed Services
3. User Provided Service Instances

The 12 Factors

Codebase	Dependencies	Config	Backing Services
Build, release, run	Processes	Port binding	Concurrency
Disposability	Dev/prod parity	Logs	Admin Processes

Store config in the environment.

http://12factor.net/config

Backing Services

Treat backing services as attached resources.

http://12factor.net/backing-services

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Marketplace

Managed services advertise a catalog of plans from which service instances can be provisioned.

```
mysql 100mb
redis dedicated
```

Service

Manages service instance lifecycle.

creating

binding

unbinding

deleting

Service Instance

A reserved resource such as a database on a shared or dedicated system.

VCAP_SERVICES


```
"VCAP_SERVICES": {
  "p-mysql": [
   {
    "credentials": {
     "hostname": "10.68.104.83",
     "jdbcUrl":
"jdbc:mysql://10.68.104.83:3306/cf_58ad484c_f6c3_4f5f_8acc_e623bc8e302b?user=jlipqkmQqyaBlefS\u0026password=gm5o2PWsmyKqRn8y",
     "name": "cf_58ad484c_f6c3_4f5f_8acc_e623bc8e302b",
     "password": "gm5o2PWsmyKqRn8y",
     "port": 3306,
     "uri": "mysql://jlipqkmQqyaBlefS:gm5o2PWsmyKqRn8y@10.68.104.83:3306/cf_58ad484c_f6c3_4f5f_8acc_e623bc8e302b?reconnect=true",
     "username": "jlipqkmQqyaBlefS"
    },
    "label": "p-mysql",
    "name": "attendee-mysql",
    "plan": "100mb-dev",
    "tags": [
     "mysql",
     "relational"
    ]
   }
  ]
...
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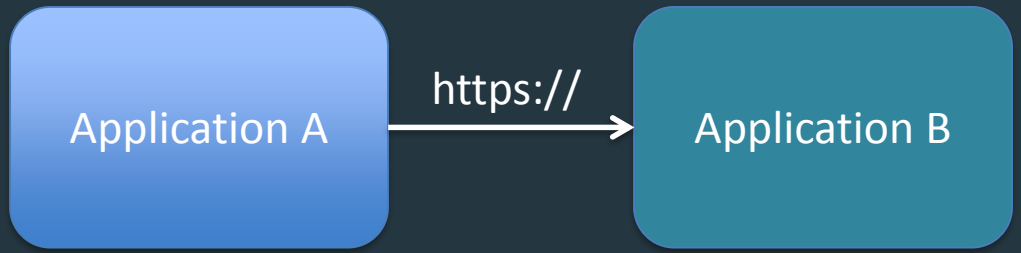
User Provided Service Instance

Enable developers to use services that are not available in the Marketplace with their applications running on Pivotal Cloud Foundry.

Oracle

DB2

Also used for application to application binding.



VCAP_SERVICES


```
"VCAP_SERVICES": {
…
 "user-provided": [
  {
   "credentials": {
    "uri": "oracle://root:secret@dbserver.example.com:1521/mydatabase"
   },
   "label": "user-provided",
   "name": "oracle-db",
   "syslog_drain_url": "",
   "tags": []
  }
 ]
```

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Transforming How The World Builds Software