



Cloud Native Platform: Services

Fall 2018



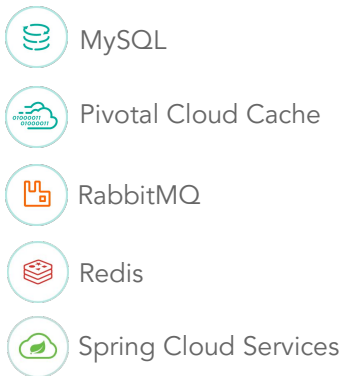
What is a Service?

- External resource that is required by an application



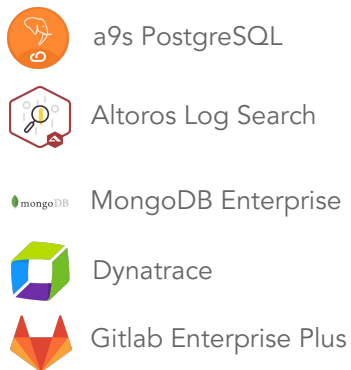
- Managed by developers through a self service portal

Pivotal Services



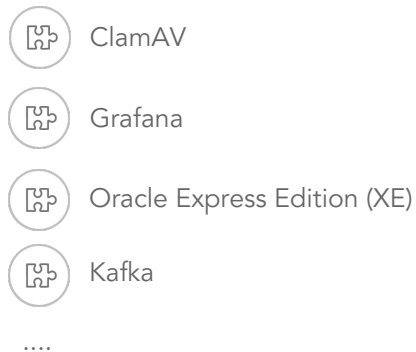
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Partner Services

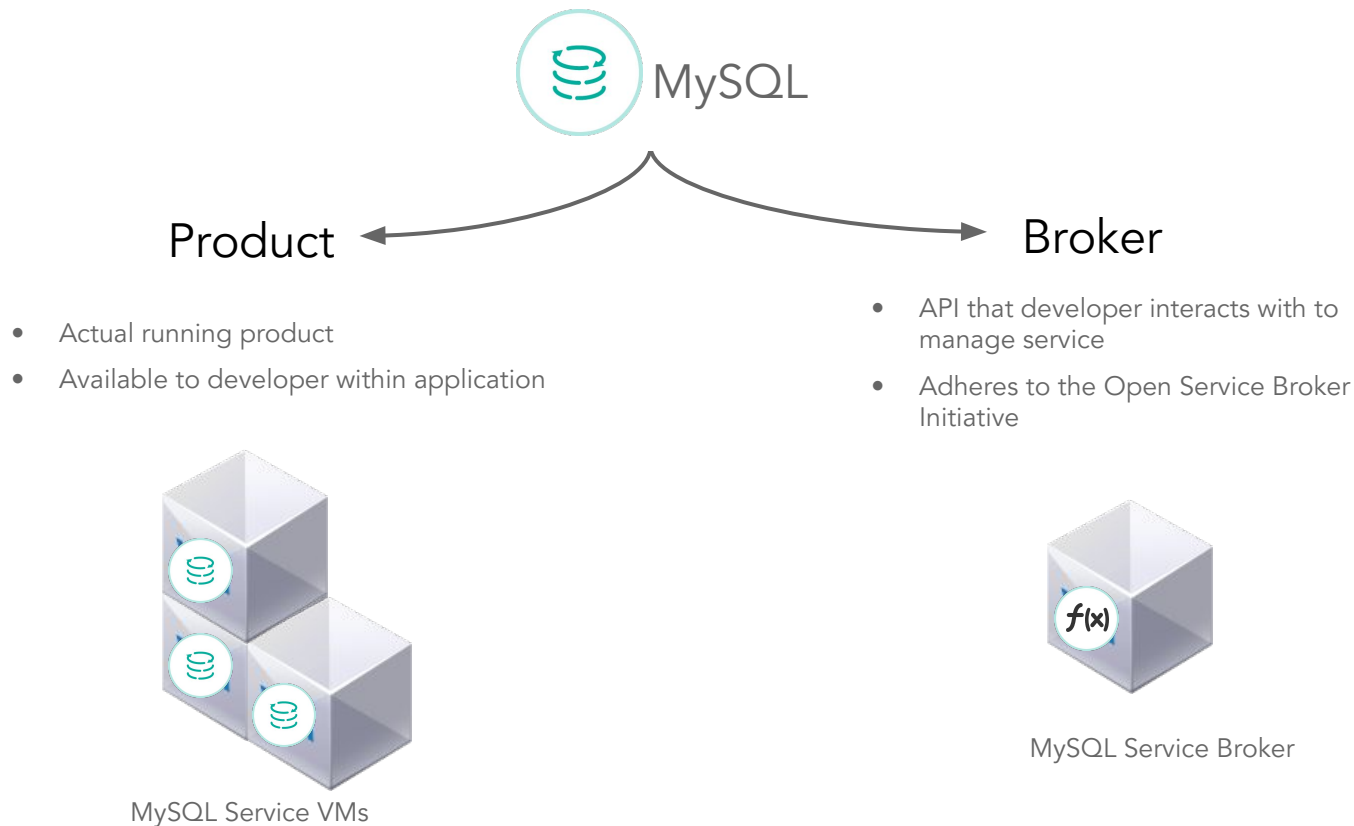


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Open Source Services



Pivotal Service Fundamentals



Service Broker Provider

- Self Service Acc

Catalog
GET
/v2/catalog

Pi
/v2/service

Utilize services brokers for internal corporate services too!

```
{
  "services": [
    {
      "name": "fake-service",
      "id": "acb56d7c-XXXX-XXXX-XXXX-feb140a59a66",
      "description": "fake service",
      "imageUrl": "http://example.com/cat.gif",
      "blurb": "Add a blurb here",
      "longDescription": "A long time ago, in a galaxy far far away...",
      "displayName": "The Fake Broker",
      "redirect_uri": "http://localhost:1234",
      "plan_updateable": true,
      "plans": [
        {
          "name": "fake-plan-1",
          "id": "d3031751-XXXX-XXXX-XXXX-a42377d3320e",
          "description": "Shared fake Server, 5tb persistent disk, 40 max concurrent connections",
          "max_storage_tb": 5,
          "metadata": {
            "costs": [
              {
                "amount": {
                  "usd": 99.0,
                  "unit": "MONTHLY"
                }
              }
            ]
          }
        }
      ]
    }
  ]
}
```



Creds:
Username - admin
Password - service

```
{
  "credentials": {
    "uri": "myservice:8080",
    "username": "admin",
    "password": "service",
    "host": "myservice",
    "port": 8080
  }
}
```

API

vision

Delete

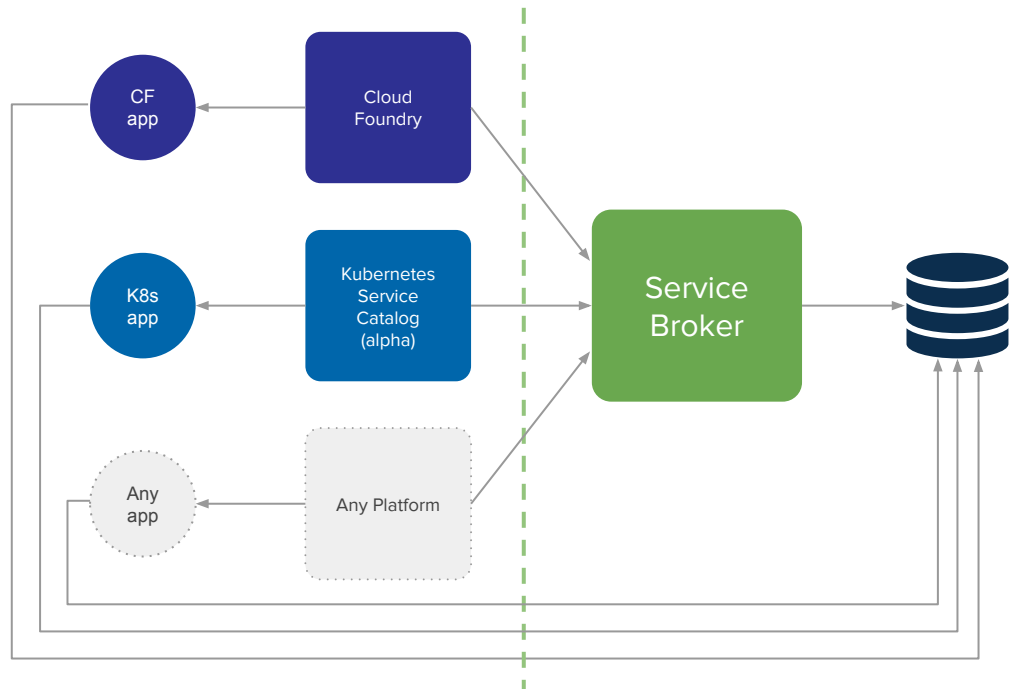
/v2/service_instance/:s_id

Extensibility

Service Broker Model



OPEN SERVICE BROKER API™



Service Broker Consumer



Service Categories

Managed Services

- Developer Self Service through a Service Broker
- High Availability
- Complete life cycle management - updates, patching, health checking
- Fully Supported
- Fully Secured



Brokered Services

- Developer Self Service through a Service Broker
- Manually deployed, managed, and health checked externally by operator
- Can be secured

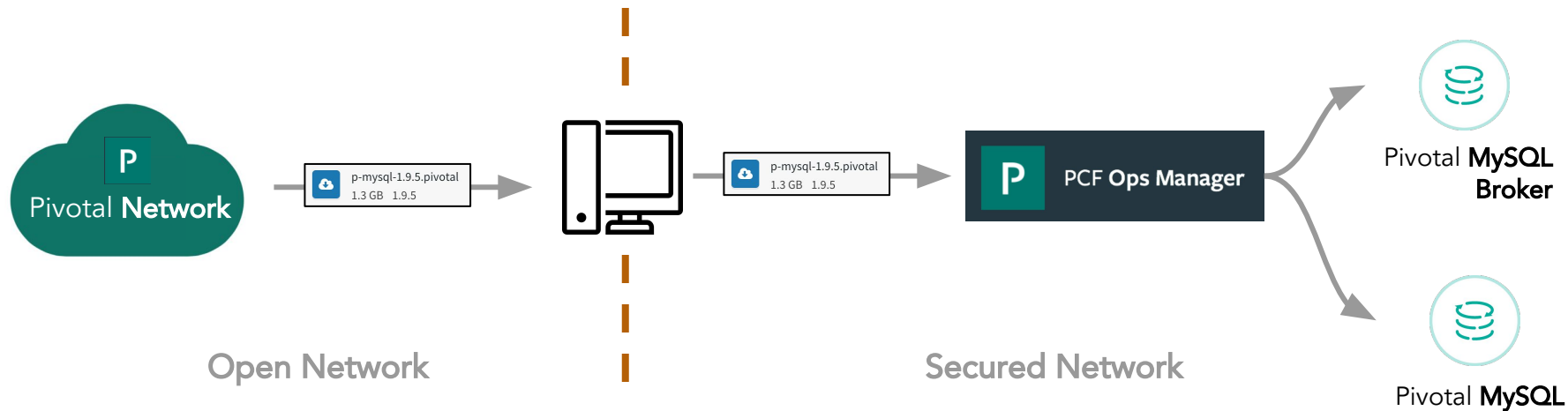


User Provided Services

- Manually supplied to developers
- Manually deployed, managed, and health checked externally by operator
- Not secured



Managed Services



On Demand Services

Technical Ability:

- Utilize BOSH 2.0 Capabilities
- VMs deployed on **EACH** create_service broker request
- On demand provisioning of full service instances
- Utilizes same service broker api

Value Added:

- Ability to have both 'shared' and 'isolated' service instances
- Reduces 'noisy-neighbor' issues
- Allows greater flexibility with total configuration of each service
- Production level services

User Provided Services

Problem: My operations group gave me a URL, port, username, and password for communicating with <X> service. How can I connect to this service using the typical workflow?

Solution: User provided service instances enable you to configure applications with any parameters using the familiar create/bind/unbind/delete operations.

```
cf cups SERVICE_INSTANCE -p '{"username":"admin","password":"pa55woRD"}'
```



Keep Calm
and
cf push



Pivotal
Application Service



Pivotal
Container Service



Pivotal
Function Service



Pivotal
Services Marketplace