

# VCAP\_SERVICES & UPS



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## **Learning Objectives:**

1. Environment variable VCAP\_SERVICES
2. User Provided Services, their benefits & how to create them

# VCAP\_SERVICES for Managed Services

For bindable services CF adds details to the VCAP\_SERVICES in JSON form

Credentials

For the service

Name of offering

Name of service instance

Plan for service

```
"VCAP_SERVICES": {  
  "cleardb": [  
    {  
      "credentials": {  
        "hostname": "us-cdbr-iron-east-03.cleardb.net",  
        "jdbcUrl": "jdbc:mysql://us-cdbr-iron-east-03.cleardb.net:3306/  
        "name": "ad_6e80b2",  
        "password": "c xxxxxxxx",  
        "port": "3306",  
        "uri": "mysql://ad_6e80b2:c58c5b97@us-cdbr-iron-east-03.cleardb.net:3306/  
        "username": "be5 xxxxxxxx ;b6"  
      },  
      "label": "cleardb",  
      "name": "MySQL",  
      "plan": "spark",  
      "tags": [  
        "Data Stores",  
        "data_management",  
        "ibm_third_party"  
      ]  
    }  
  ]  
}
```

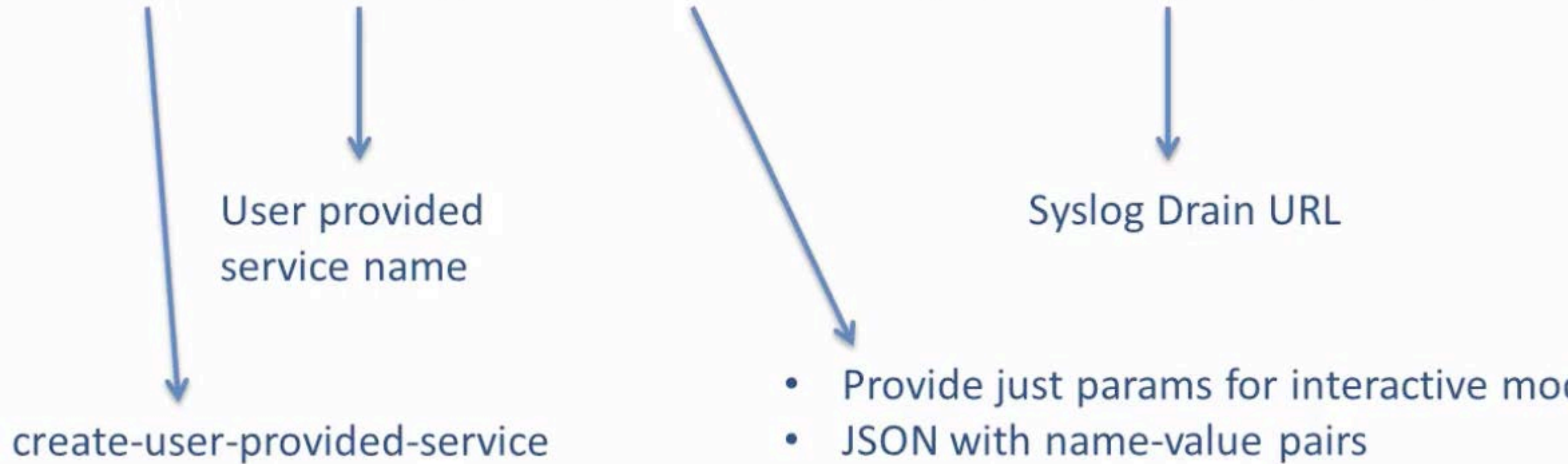
# User provided services

- Allows you to represent external assets as services
  - E.g., Databases, Messaging, Logging ..
  - Populates the VCAP\_SERVICES environment variable
- Benefits
  - Manage the credentials for external services



# Create User Provided Service (CUPS)

- `cf cups SERVICE_INST [-p CREDENTIALS] [-I SYSLOG_LOG_DRAIN]`



- `cf uups` for updating the UPS

# UCAP\_SERVICES for UPSI

- JSON array for user provided services

User provided services  
JSON array

Credentials provide with -p

Syslog URL with -l

```
"UCAP_SERVICES": {  
  "Auto-Scaling": [  
    {  
      "credentials": {  
        "agentPassword": "0493",  
        "agentUsername": "agen",  
        "app_id": "9e72d547-a3a5-47c9-adb0-38d5",  
        "service_id": "212c97f4-b041-4d87-aeeb-",  
        "url": "https://Scaling4.ng.bluemix.net",  
      },  
      "label": "Auto-Scaling",  
      "name": "Auto-Scaling-us",  
      "plan": "free",  
      "tags": [  
        "bluemix_extensions",  
        "ibm_created",  
        "dev_ops",  
      ],  
    },  
  ],  
  "user-provided": [  
    {  
      "credentials": {},  
      "label": "user-provided",  
      "name": "Acme_App_Logs",  
      "syslog_drain_url": "syslog://logs3.pape",  
      "tags": [],  
    },  
  ],  
}
```

```
f cups MyOracleDb -p "url, user, pass"
```

```
> jdbc://url.com
```

```
r> user
```

```
s> pass
```

```
ating user provided service MyOracleDb in org Cloud Rocket
```

```
f services
```

```
ting services in org Cloud Rocket / space Development as sa
```

e	service	plan	bound apps	last
n-scaling-0h	Auto-Scaling	free	CloudRocketApp	creat
OracleDb	user-provided			



```
f delete-service MyOracleDb
```

```
lly delete the service MyOracleDb?> y
```

```
eting service MyOracleDb in org Cloud Rocket / spa
```

```
f services
```

```
ting services in org Cloud Rocket / space development as sakhu
```

	service	plan	bound apps	last open
Auto-Scaling-0h	Auto-Scaling	free	CloudRocketApp	create s



```
cup MyOracleDb -p "{\jdbcurl\":"jdbc://url\","user\":"id\","pass\":"pa\"}"
ing user provided service MyOracleDb in org Cloud Rocket / space Development as sa
```

```
services
ing services in org Cloud Rocket / space Development as sakhuia4@gmail.com...
```

	service	plan	bound apps	last operation
Scaling 0h	Auto-Scaling	free	CloudRocketApp	create succeeded
acleDb	user-provided			



Welcome, **rajeev.**



All Categories



Compute



Network



Storage



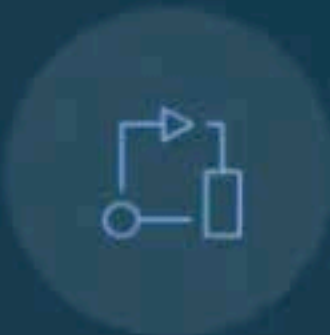
Data & Analytics



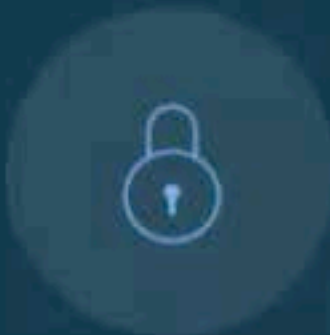
Watson



Integrate



DevOps



Security



Application Services



Mobile

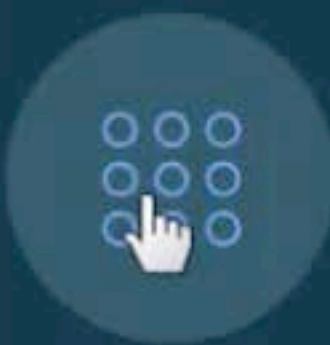


Internet of Things



APIs

Welcome, **rajeev.**



All Categories



Compute



Network



Storage



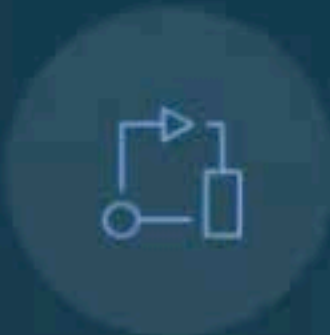
Data & Analytics



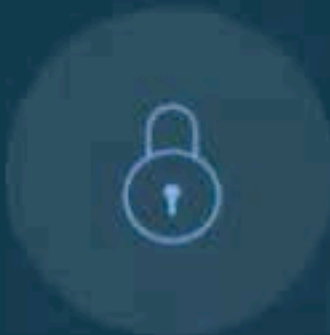
Watson



Integrate



DevOps



Security



Application Services



Mobile




Internet of Things



APIs




CF Applications

512 MB / 512 GB Used



AppCloudRocket

CloudRocket.mybluemix.net


 Running  

Services

5 / 2000 Used



All Categories

 **AppCloudRocket** Status: ● Your app is running

[View App](#) [Refresh](#) [Help](#)

[Getting Started](#) [Overview](#) [Runtime](#) [Connections](#) [Logs](#) [Monitoring](#)


[Connect Existing](#) [Connect New](#)



No Connected Services

Click the Connect Existing or Connect New button to add an item to your app.

All Categories

 **AppCloudRocket** Status: ● Your app is running

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Connect Existing

Connect New



No Connected Services

Click the Connect Existing or Connect New button to add an item to your app.

# Connect Existing Service

Services



CloudRocketLogs



MemcachedRocket  
Redis Labs



CloudRocketDb  
IBM



MyOracleDb



# Connect Existing Service

Services



CloudRocketLogs



MemcachedRocket  
Redis Labs




CloudRocketDb  
IBM



MyOracleDb


All Categories

 **AppCloudRocket** Status: ● Your app is running

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Getting Started Overview Runtime **Connections** Logs Monitoring


[Connect Existing](#) [Connect New](#)



**MyOracleDb**  
MyOracleDb

[View Credentials](#) [Docs](#)


All Categories

 **AppCloudRocket** Status: ● Your app is running

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**MyOracleDb**  
MyOracleDb

[View Credentials](#) [Docs](#)





**MyOracleDb**  
MyOracleDb

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MyOracleDb

## Service Credentials

```
{
  "user-provided": [
    {
      "name": "MyOracleDb",
      "label": "user-provided",
      "credentials": {
        "pass": "pass",
        "url": "jdbc://url.com",
        "user": "user"
      }
    }
  ]
}
```

Close



**MyOracleDb**  
MyOracleDb

[View Credentials](#) [Docs](#)

MyOracleDb

### Service Credentials

```
{
  "user-provided": [
    {
      "name": "MyOracleDb",
      "label": "user-provided",
      "credentials": {
        "pass": "pass",
        "url": "jdbc://url.com",
        "user": "user"
      }
    }
  ]
}
```

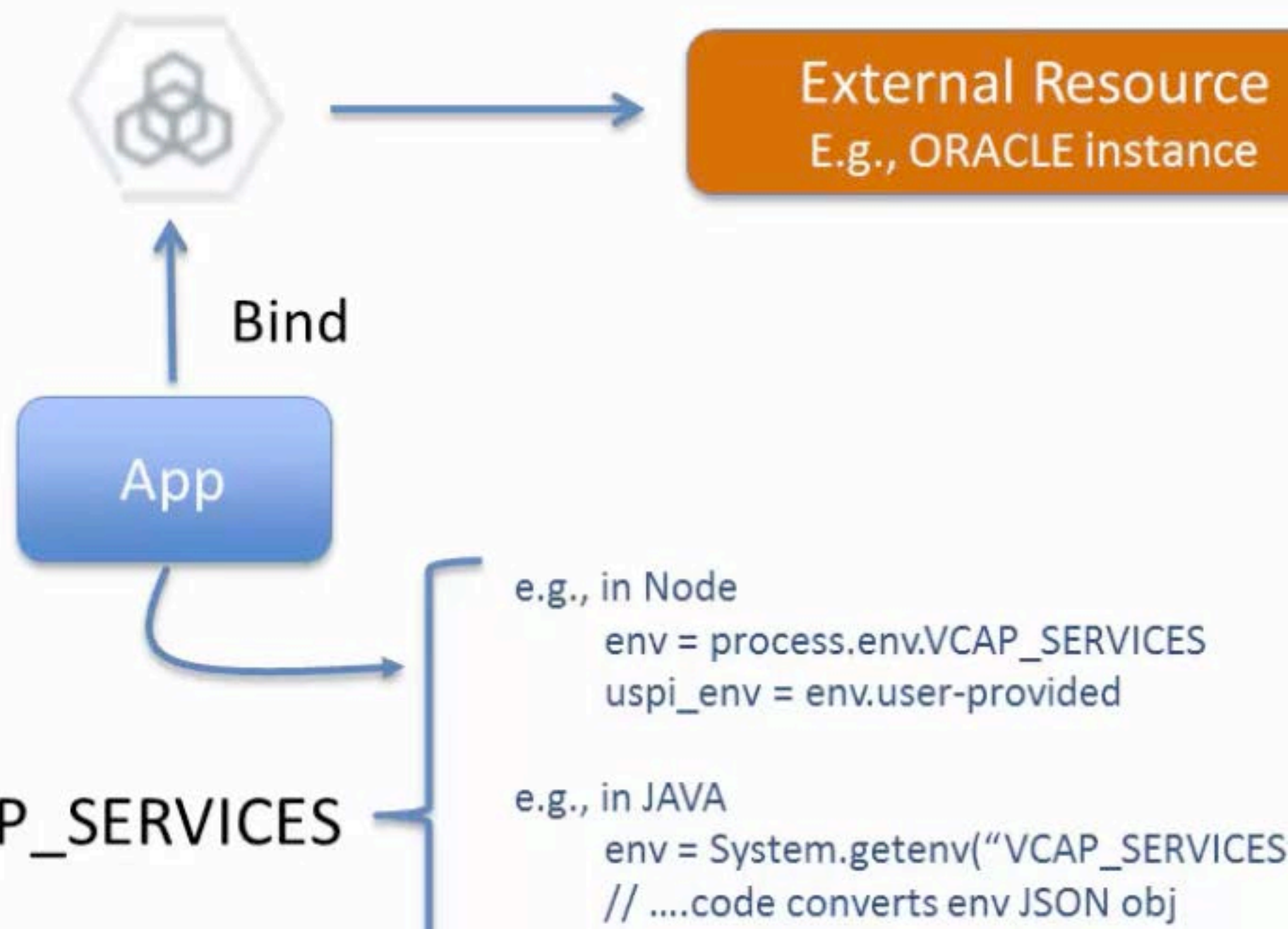
[Close](#)

# USPI Usage - Summary

Create USPI using *cf cups*

Bind to the service

In the code get USPI from VCAP\_SERVICES





# Not all managed services populate VCAP\_SERVICES

- Value is delivered directly to the user
- Refer documentation on how to use the specific service(s)
- Examples:



Static Analyzer



Delivery Pipeline

# ummary

- VCAP\_SERVICES environment variable holds connection information for the service instance bound to the app
- Users can define UPSI that populates VCAP\_SERVICES with information on the external services such as DB, Messaging ....

