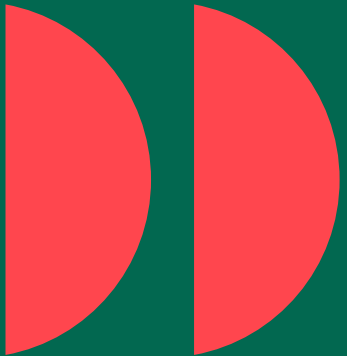
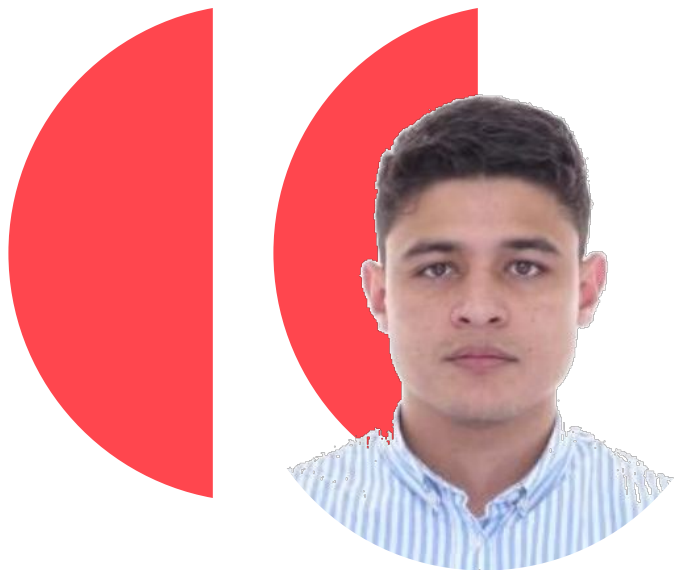


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# DOCKER + SPARK





# **Daniel Restrepo**

Big Data engineer Senior @ SoftServe.

**softserve**



# Luis Fernando Vásquez

Data Architect Sr. - Software Designer

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# **SOURCE & ARCHITECTURE**



# SOURCE



Open GPX Tracker

Open GPX Tracker supports multiple map tile servers



```
<?xml version="1.0" encoding="UTF-8"?>
<gpx xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="http://www.topografix.com/GPX/1/1"
  xsi:schemaLocation="http://www.topografix.com/GPX/1/1 http://www.topografix.com/GPX/1/1/gpx.xsd"
  version="1.1"
  creator="Open GPX Tracker for iOS">
  <trk>
    <trkseg>
      <trkpt lat="6.297475984325909" lon="-75.5781921186257">
        <ele>1668.879306793213</ele>
        <time>2022-03-01T20:33:48Z</time>
      </trkpt>
      <trkpt lat="6.297476068144941" lon="-75.57814610197728">
        <ele>1668.386142730713</ele>
        <time>2022-03-01T20:33:49Z</time>
      </trkpt>
    </trkseg>
  </trk>
</gpx>
```

```
gpx ..
  @xmlns:xsi: http://www.w3.org/2001/XMLSchema-instance
  @xmlns: http://www.topografix.com/GPX/1/1
  @xsi:schemaLocation: http://www.topografix.com/GPX/1/1 http://www.topografix.com/GPX/1/1/gpx.xsd
  @version: 1.1
  @creator: Open GPX Tracker for iOS
  trk ..
    trkseg ..
      trkpt ..
        @lat: 6.297475984325909
        @lon: -75.5781921186257
        ele 1668.879306793213
        time 2022-03-01T20:33:48Z
      trkpt ..
        @lat: 6.297476068144941
        @lon: -75.57814610197728
        ele 1668.386142730713
        time 2022-03-01T20:33:49Z
```

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# FLOW & COMPONENTS

PRODUCER

SOURCE

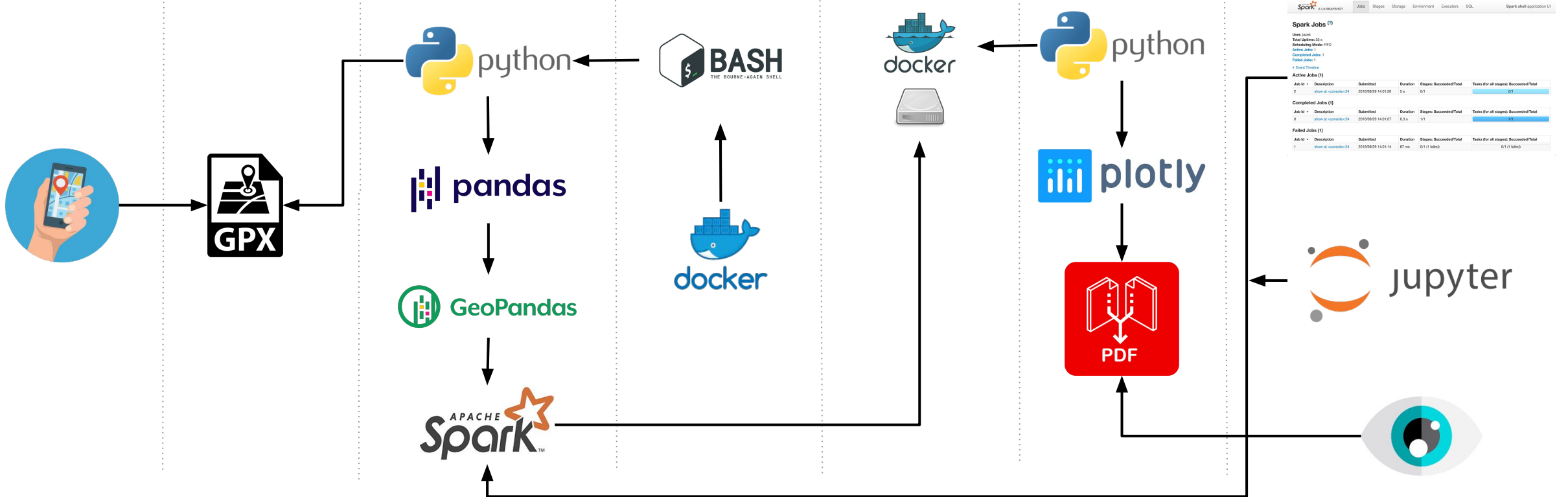
INGEST

TRIGGER

STORAGE

BUSINESS

REVIEW



OTHERS

flake8

python: my[py]

GitLab

GitHub

WK<html>TOPdf

HTML5

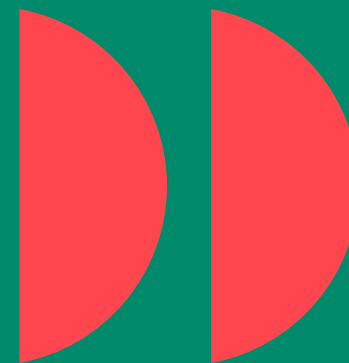
GNU Make

Parquet

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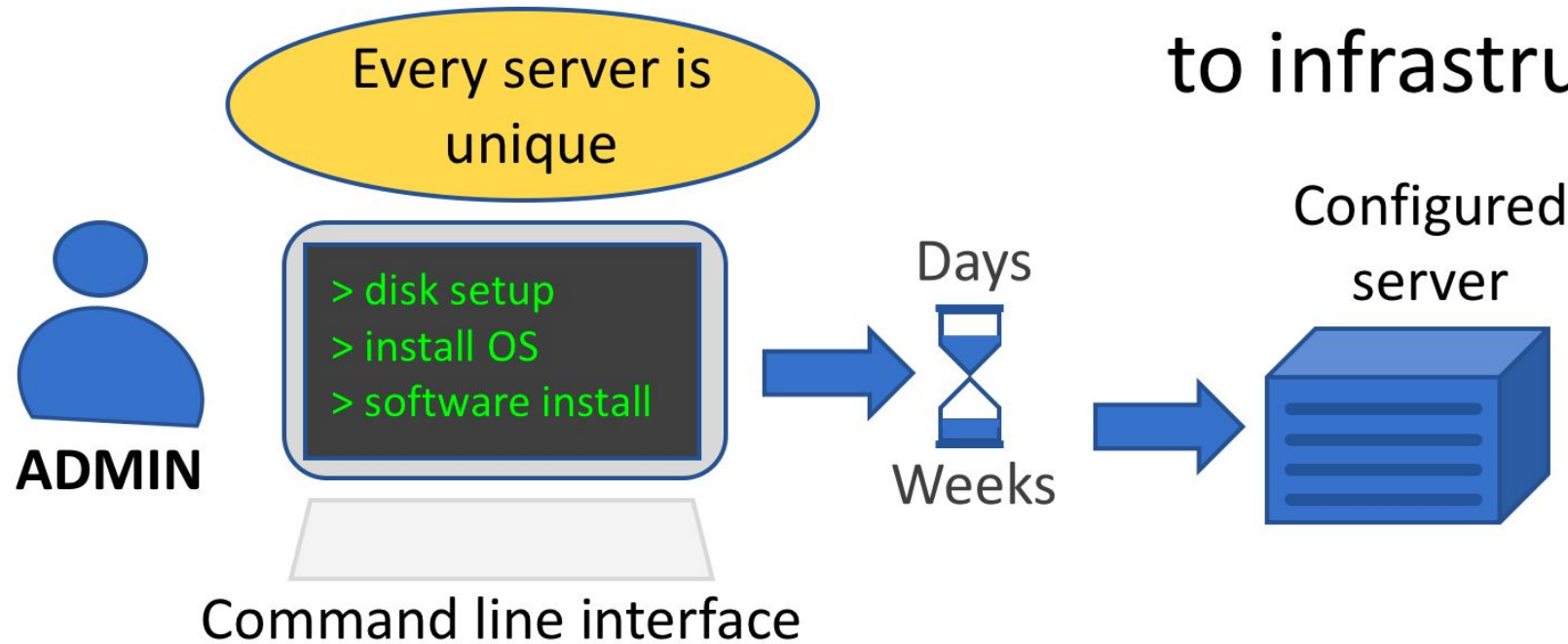


# CORE CONCEPTS



# UNDERSTANDING TRADITIONAL IT INFRASTRUCTURE

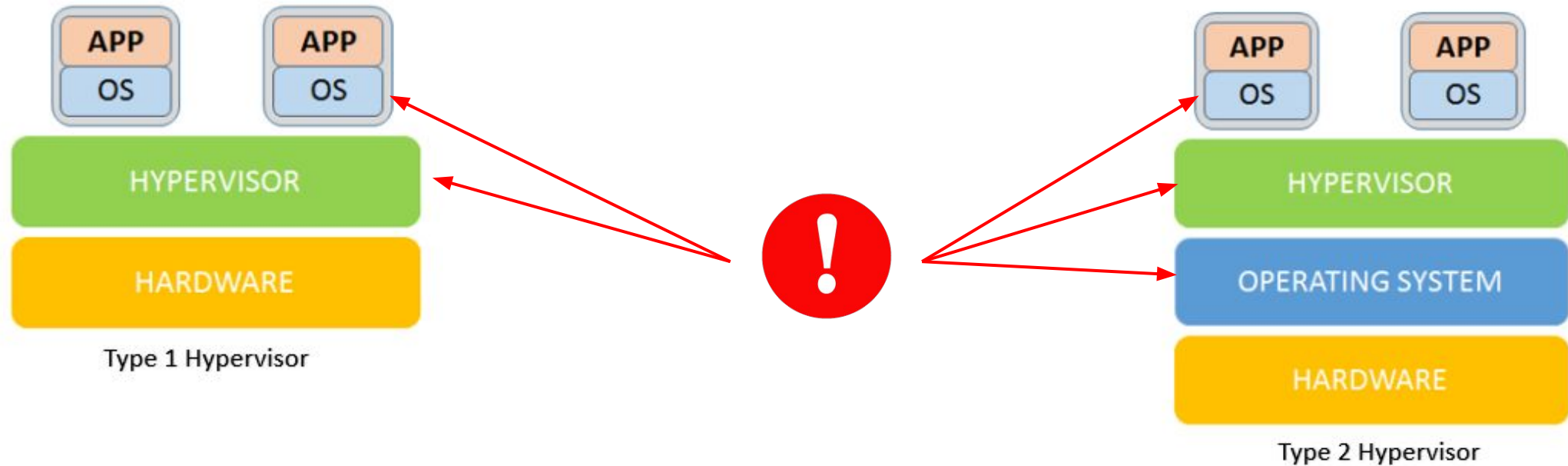
Traditional approach to infrastructure



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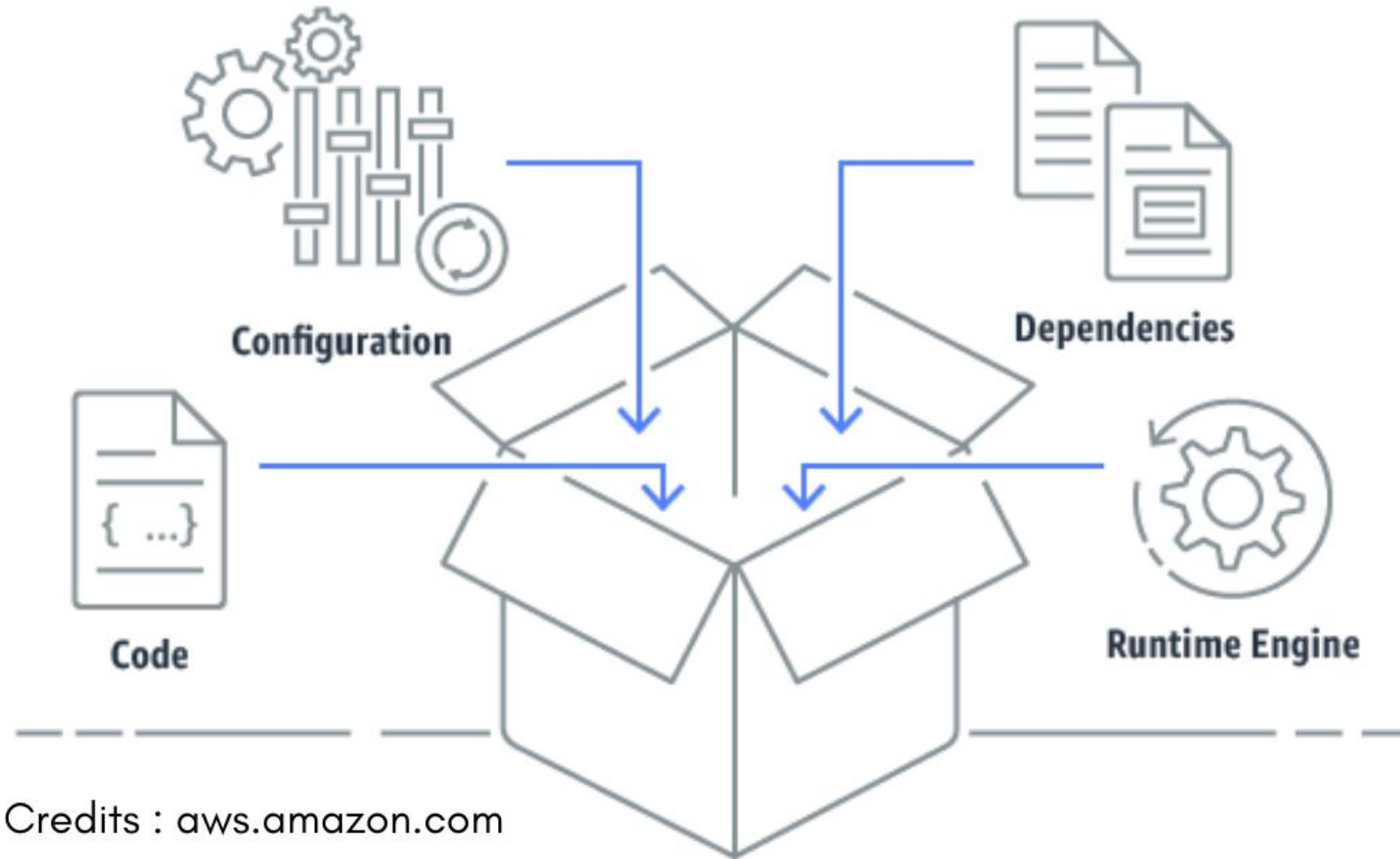


# UNDERSTANDING THE HYPERVISOR



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# UNDERSTANDING THE CONTAINER



Pic Credits : [aws.amazon.com](https://aws.amazon.com)

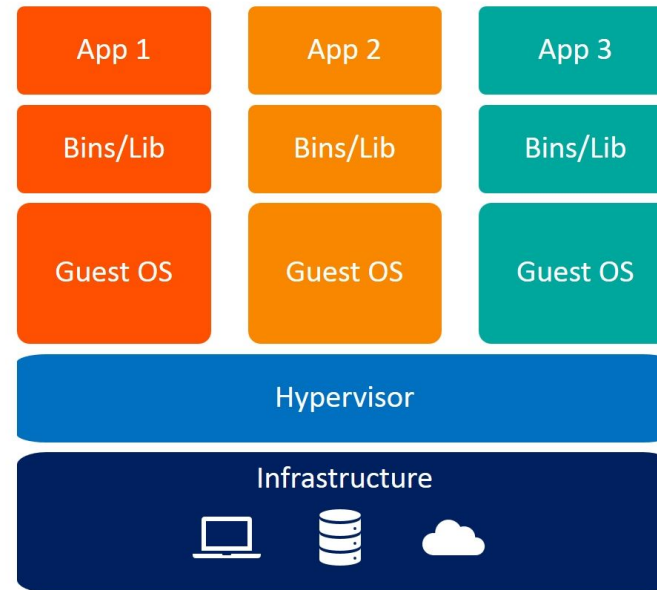
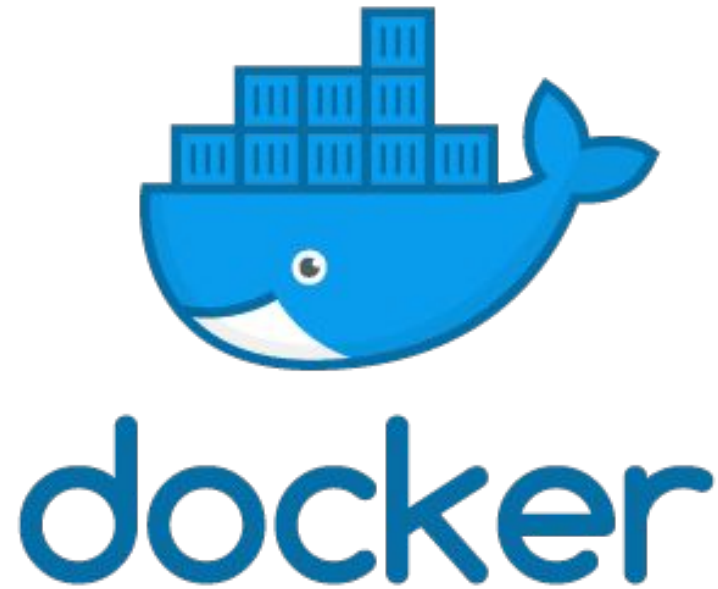
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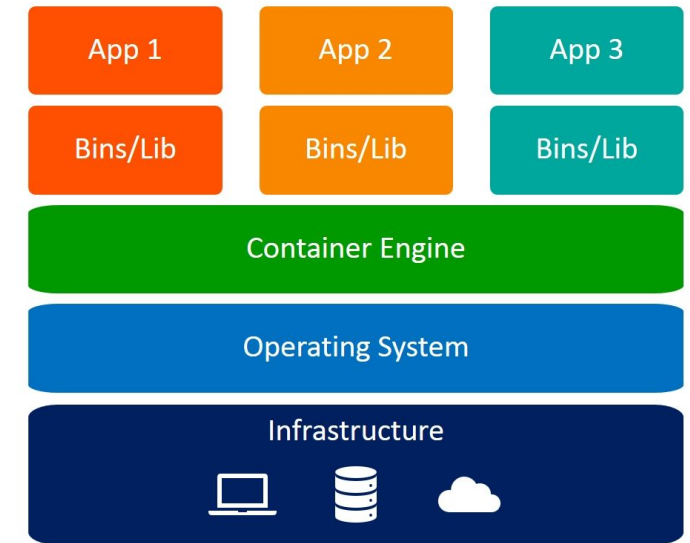
**¿WHAT IS  
DOCKER?**



# DOCKER



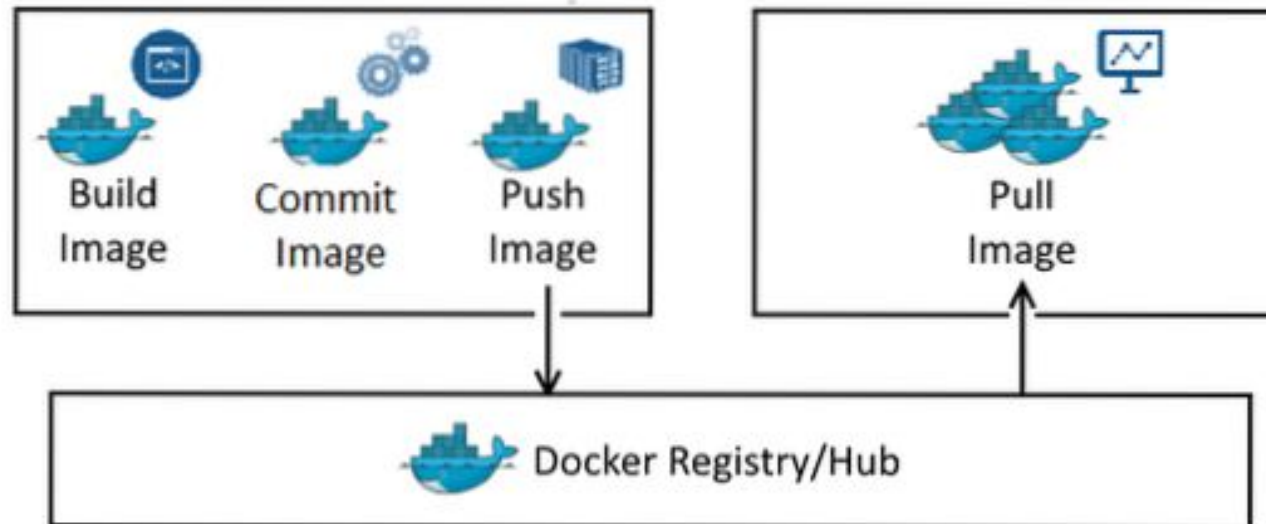
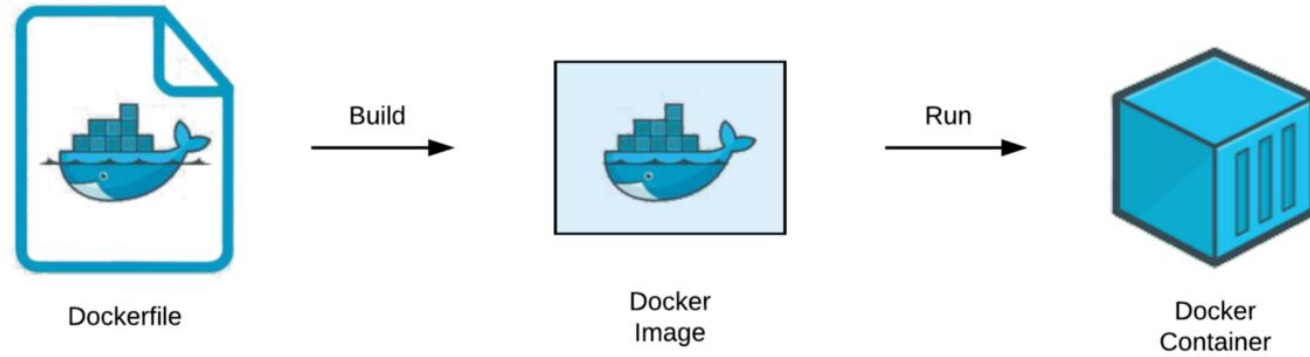
Virtual Machines



Containers

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# CORE FUNCTIONALITIES



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# WORLD DOCKER USE CASES



## SIMPLIFYING CONFIGURATION



## SERVER CONSOLIDATION



## PRODUCTIVITY



## PIPELINES



## AUTOMATION



## EASY CONFIGURATION



## APP ISOLATION



## CODE VALIDATION



## DEBUGGING CAPABILITIES

**13 million +**  
developers

**7 million +**  
applications

**13 billion +**  
monthly image downloads



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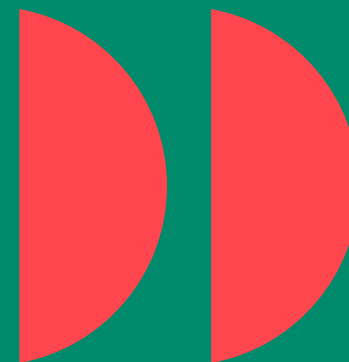


# CREATING A DOCKER IMAGE





**DEMO ETL**





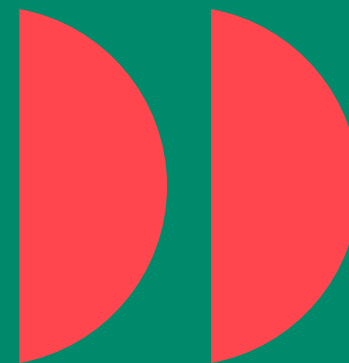


# **SPARK CODE + SPARK UI + PDF OVERVIEW**





**¿QUESTIONS?**





THANK  
YOU