

The background of the slide is a semi-transparent image of a shipping yard. In the center, a large red container is suspended in the air by several cables. The yard is filled with rows of colorful containers in shades of red, yellow, and blue. In the upper right corner, there is a logo consisting of a large red triangle composed of several smaller, overlapping triangles in various shades of red and white.

# Uniface ~ Cloud

Using Container Technology

November 20, 2019

Allard van Berkel, Erwin Embsen, Jorge Núñez Orellana



Allard van Berkel – DevOps Engineer



Erwin Embsen – Cloud Architect



Jorge Núñez Orellana – Development  
Manager

# Today's Agenda



Goal



First Demonstration



Containerization Concepts



Second Demonstration



Summary

# Uniface and Docker Containers

(Container Technology)



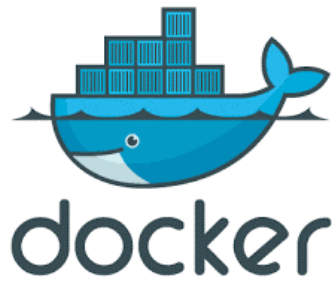
# Why Container Technology?



- Infrastructure / Deployment / Configuration by Code
- Portable (cloud / on-premises)
- Scalable (cloud)
- Small increments (CI/CD)



# How do we do this?



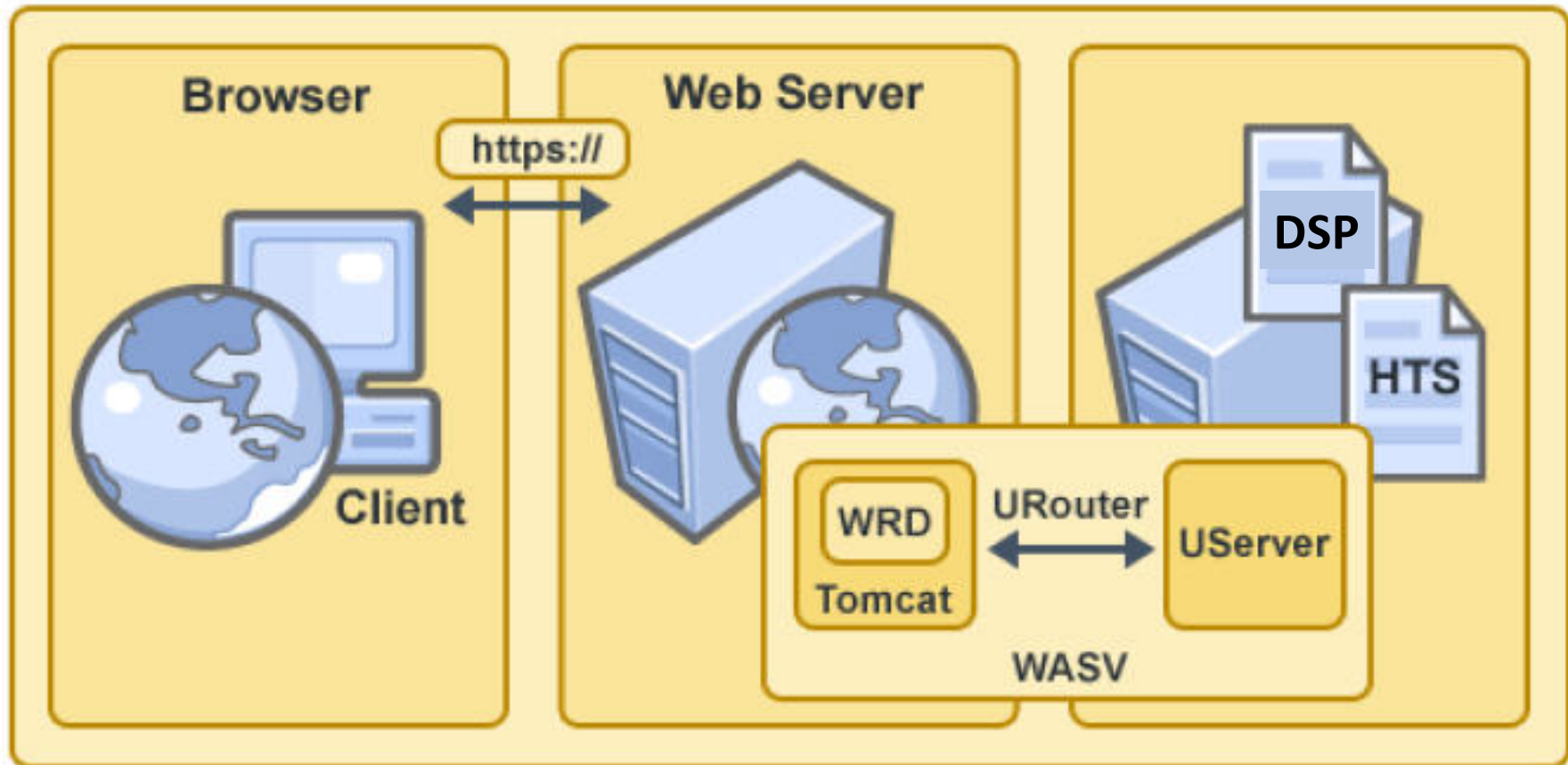
Features:

- Source version control
- Versioned Artifacts
- Pipelines to build artifacts
- Containers
- Orchestration



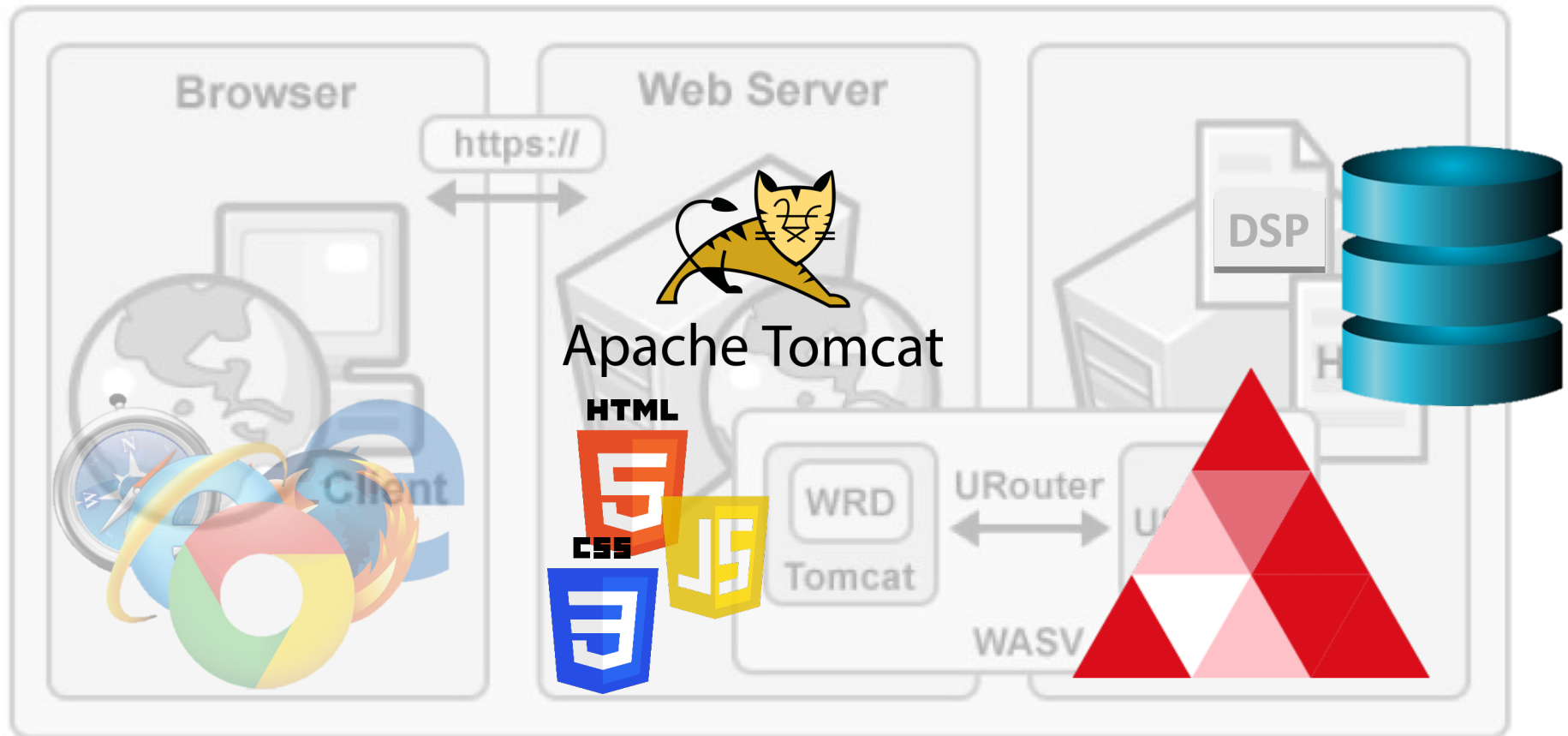
- RIAMusicShop Deployment
- Update Presentation Layer
- Update Business Layer

# Uniface Concepts – Web (Architecture)



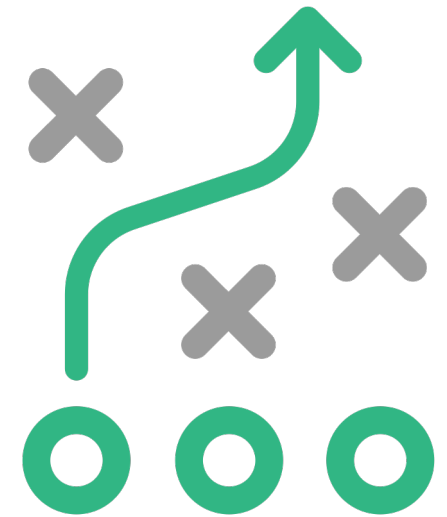


# Supporting Technology



First Demo:

1. RIAMusicShop Deployment
2. Update Presentation Layer (HTML / CSS)
3. Update Uniface Runtime (Install Patch)
4. Update Business Layer (UAR)

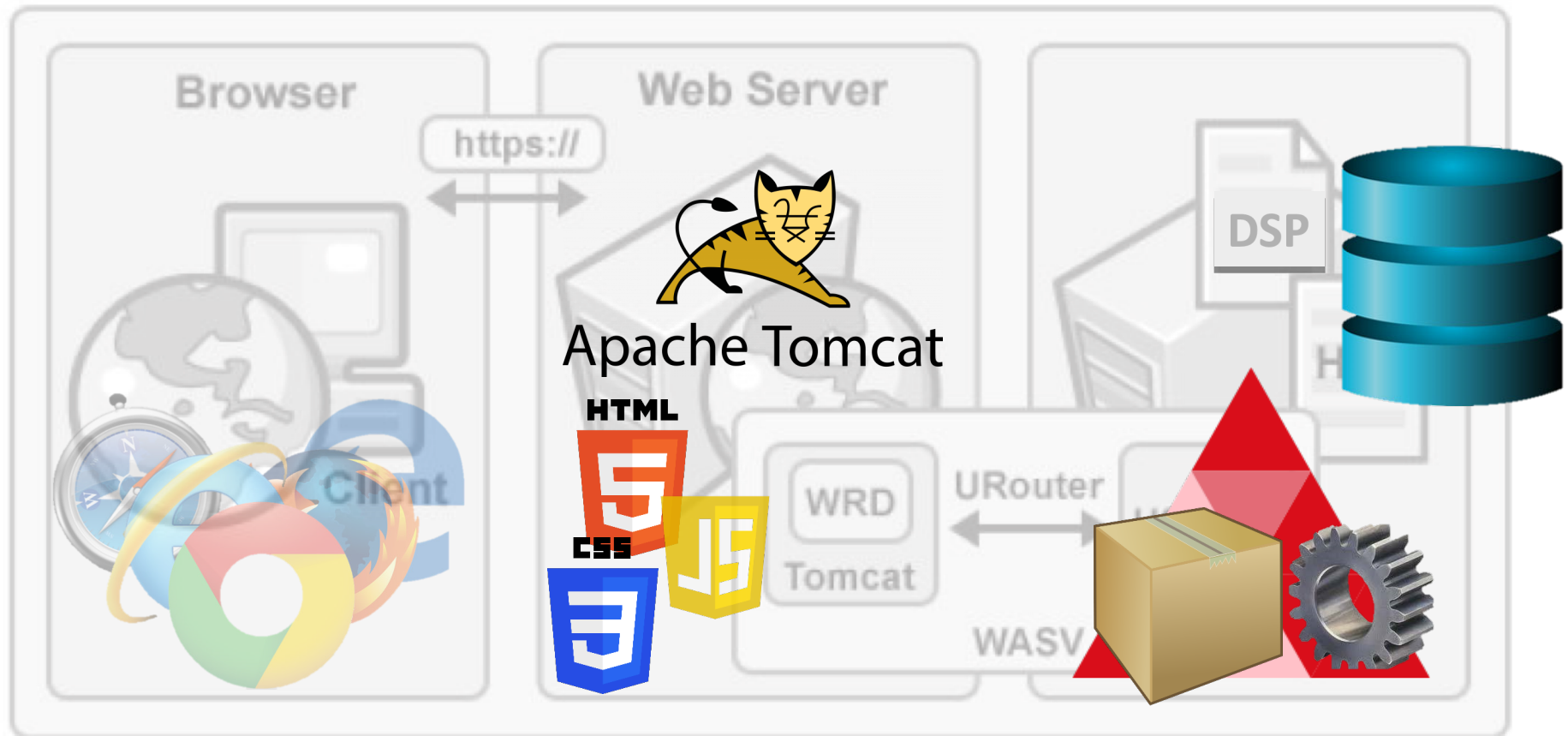


Step 1

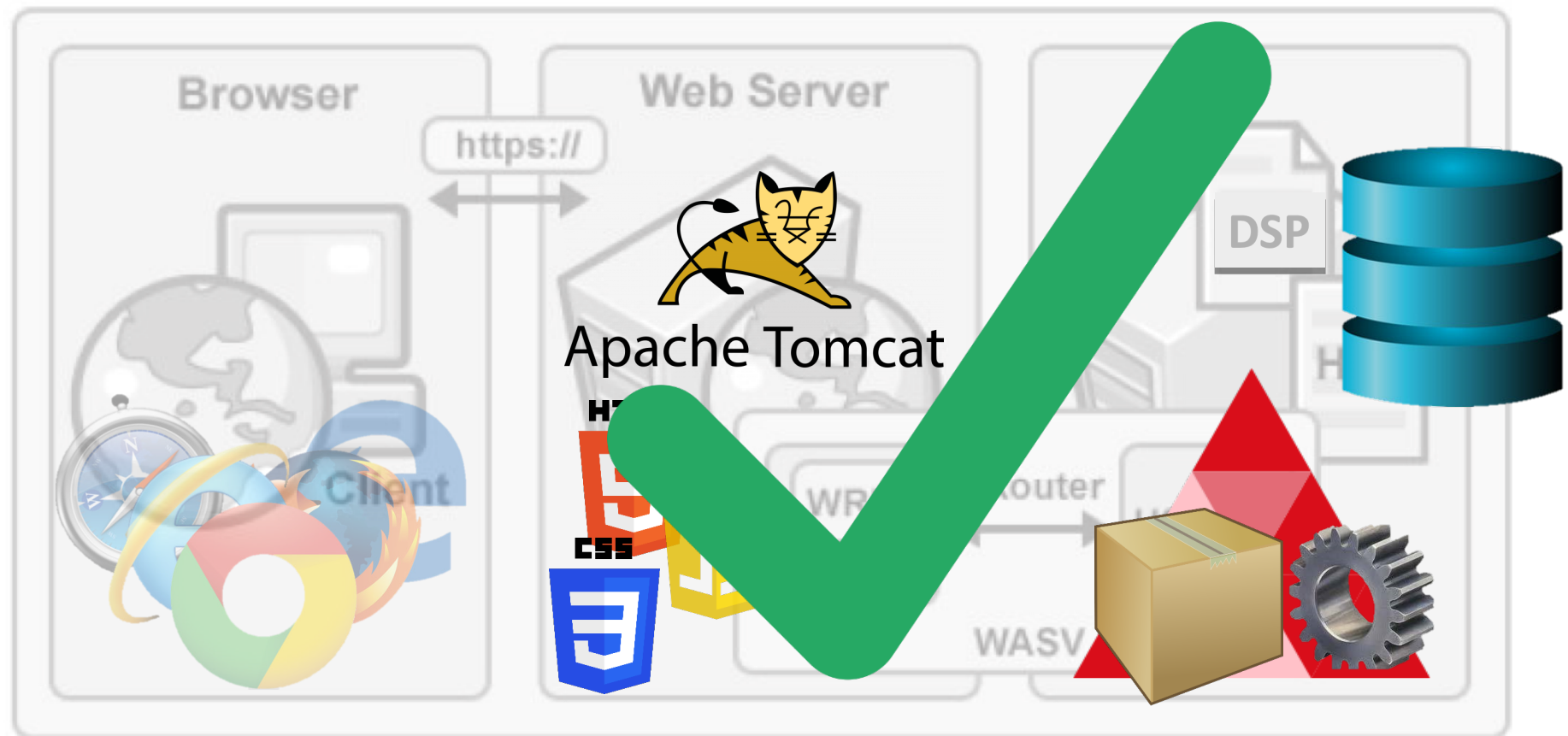
# RIAMusicShop Deployment



# RIAMusicShop Deployment



# RIAMusicShop Deployment



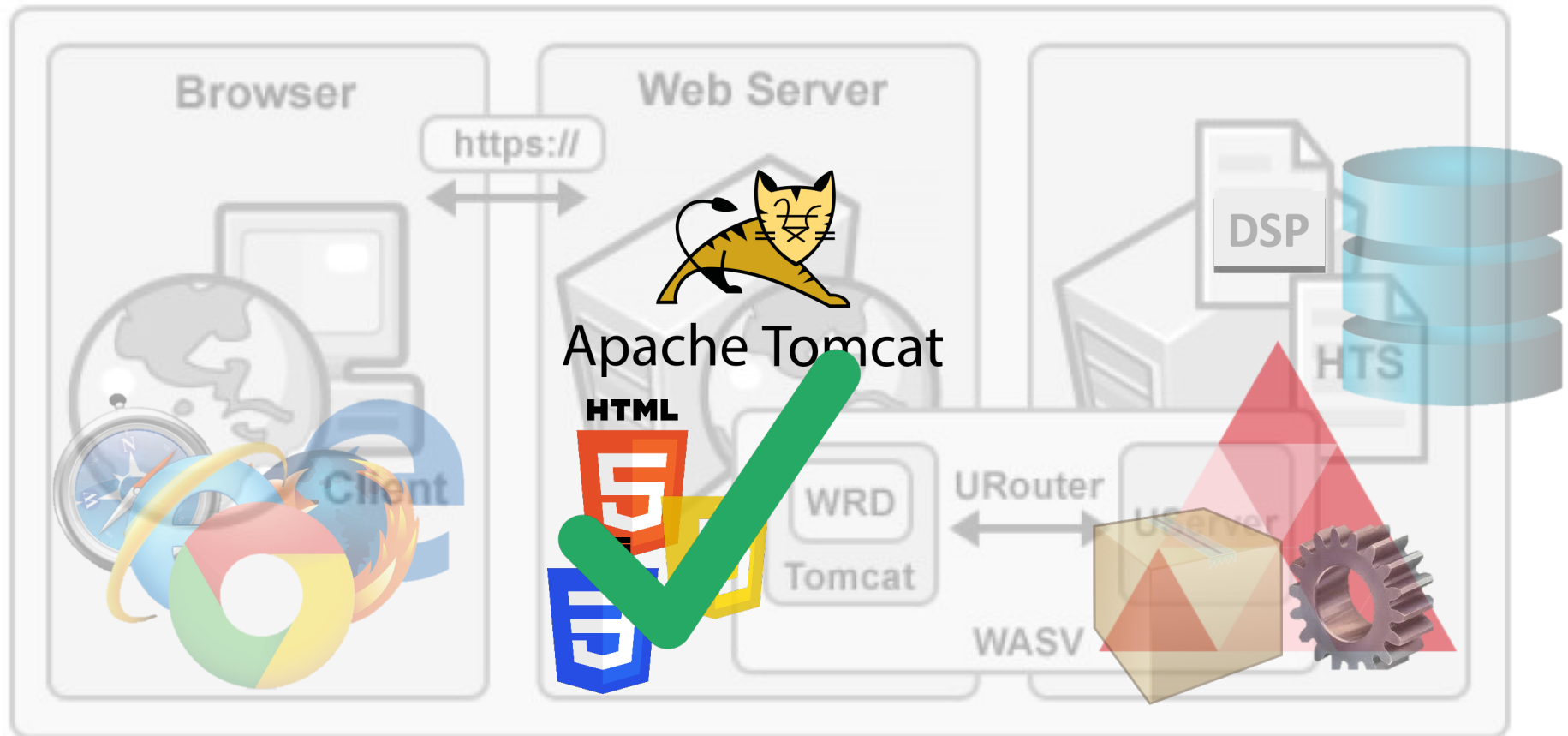


# Update Presentation Layer

(HTML / CSS)



# Update Presentation Layer





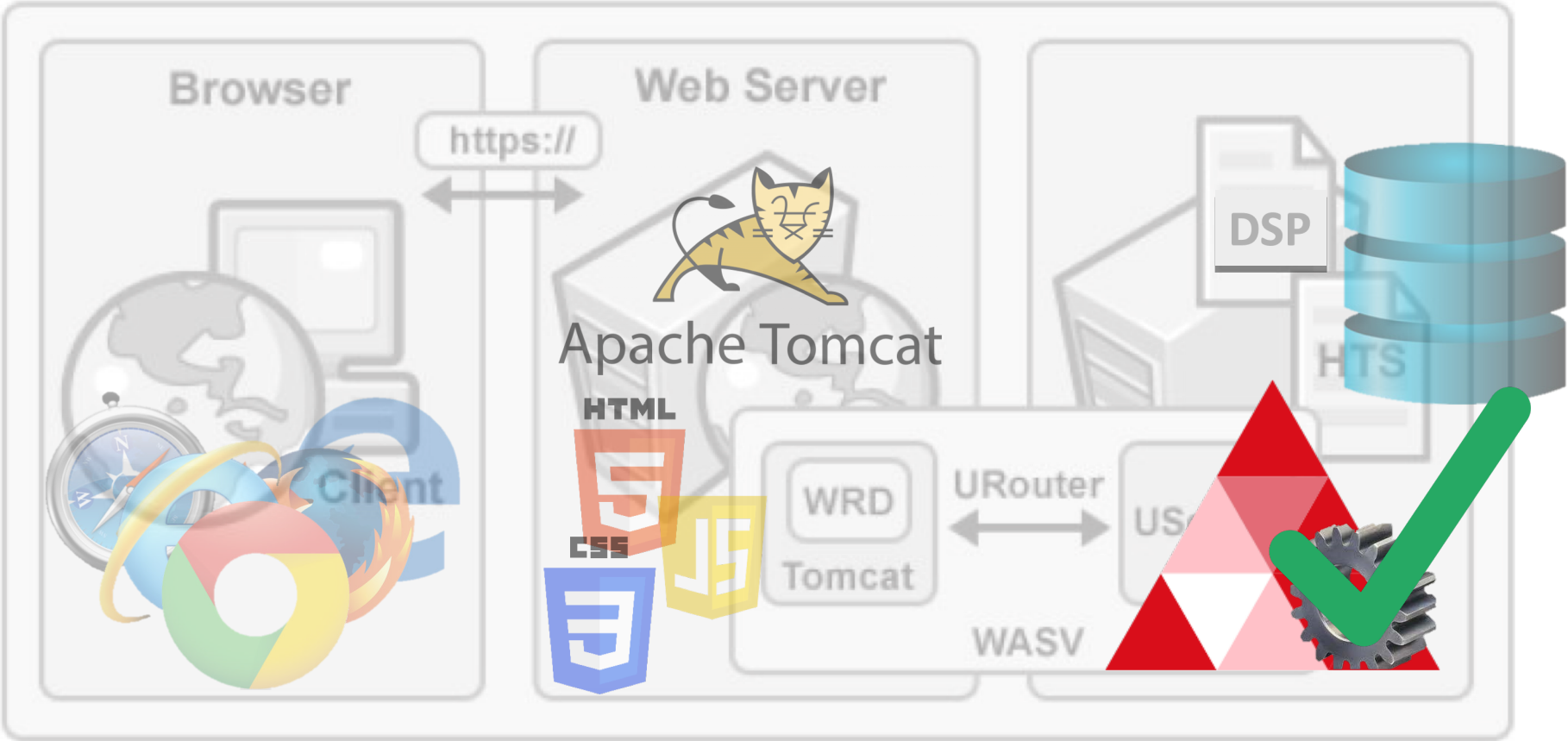
# Update Uniface Runtime

(Install Patch)





# Update Uniface Runtime



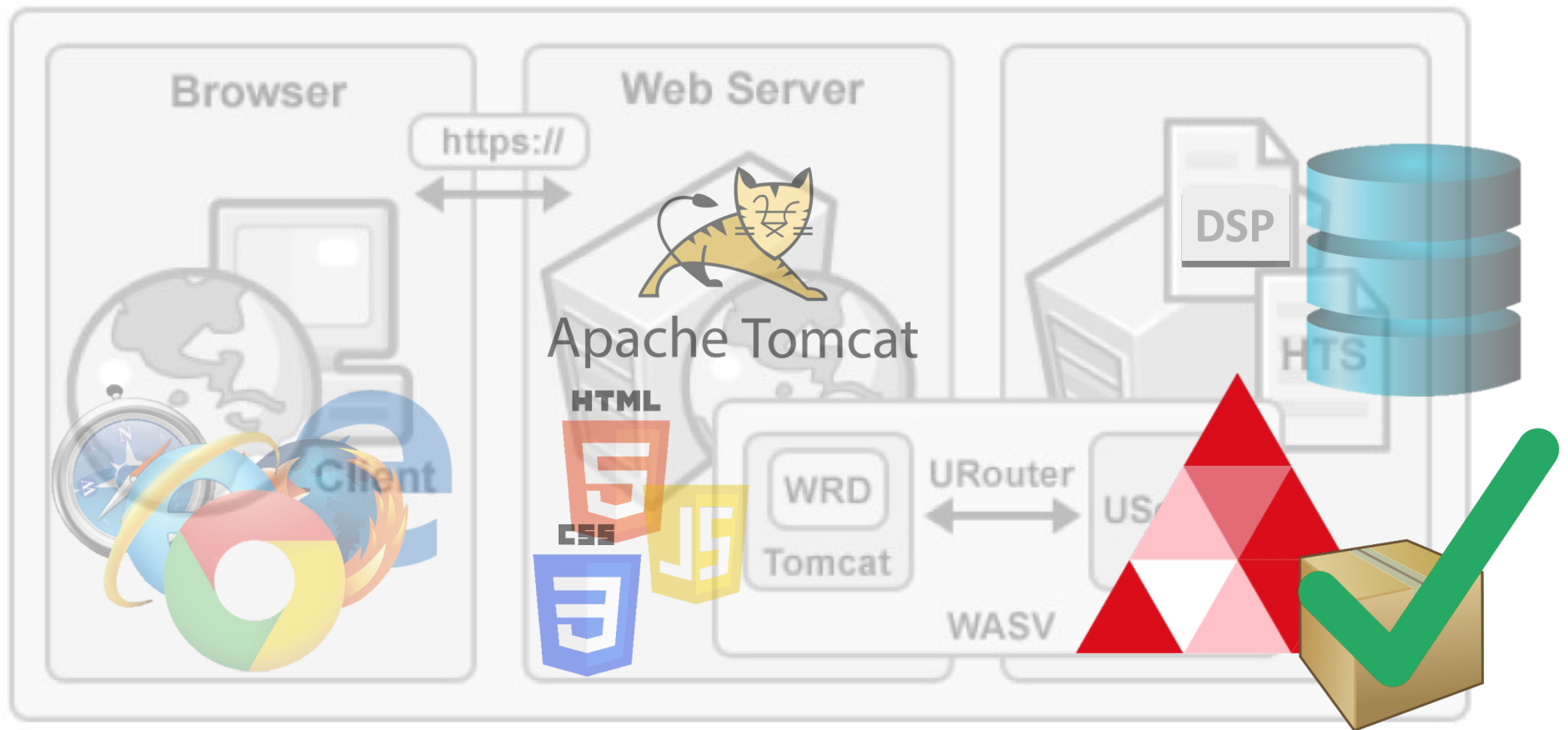


# Update Business Layer

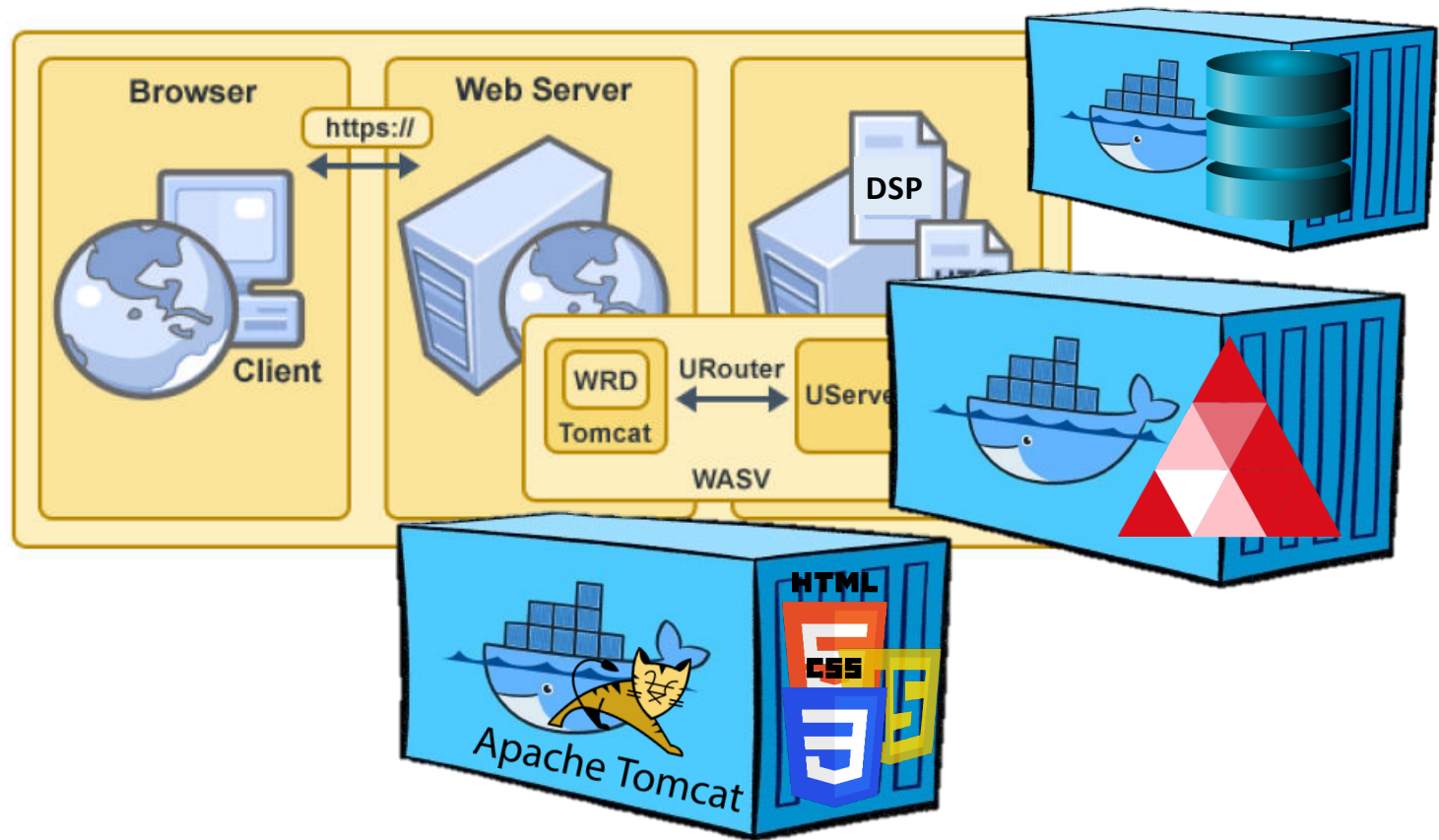
(UAR)



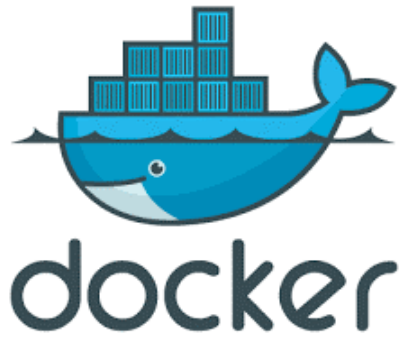
# Update Business Layer



# Uniface RIAMusicShop – All Containers



What happened here?



Why is this interesting?

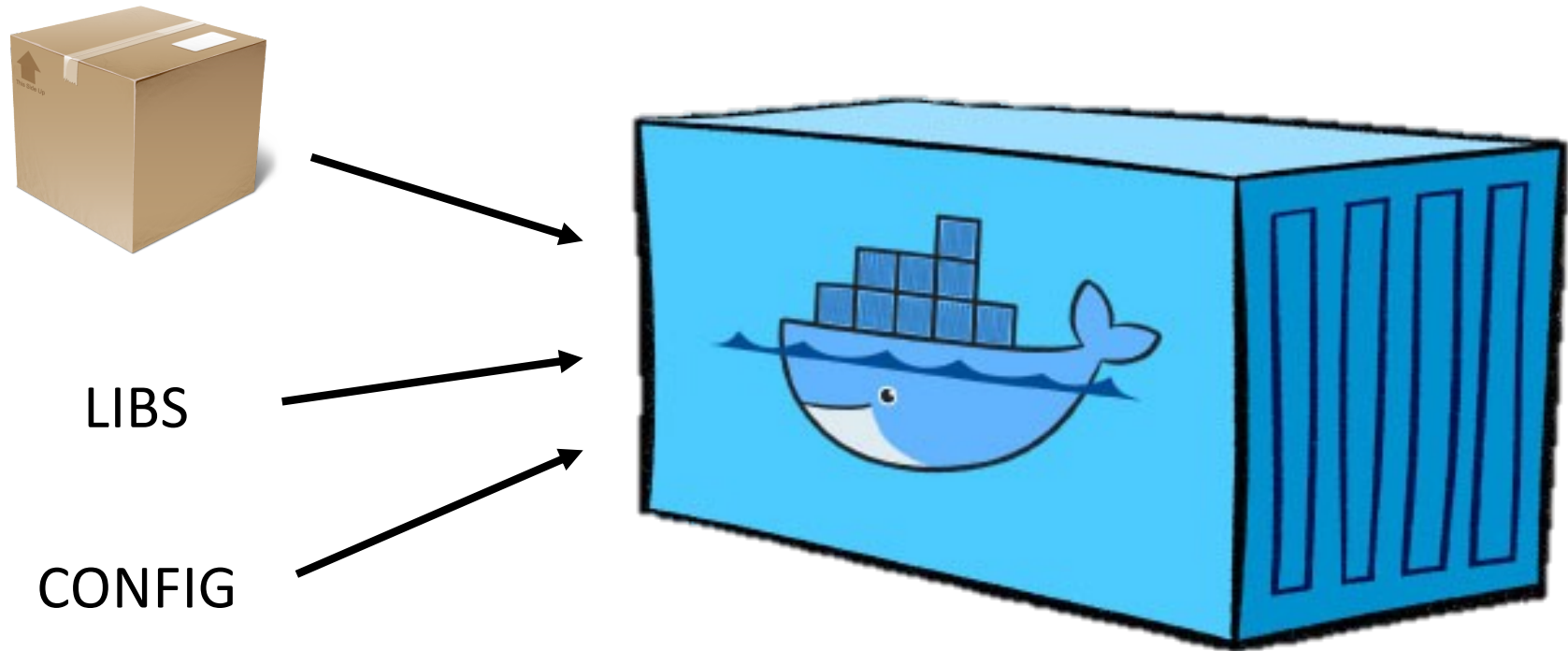
Containers?



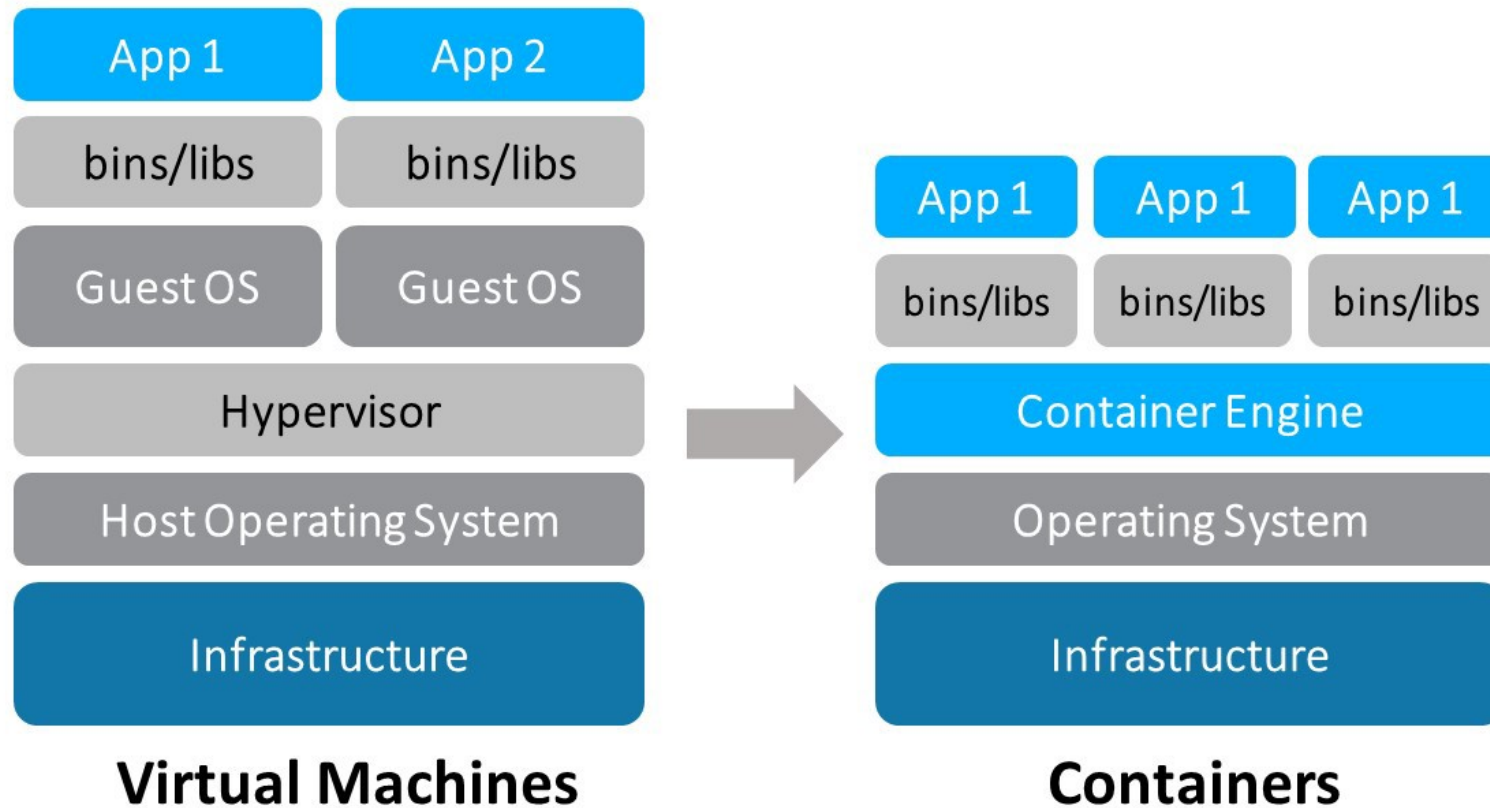
# Containerization Concepts



# Containerization Concepts - Containers

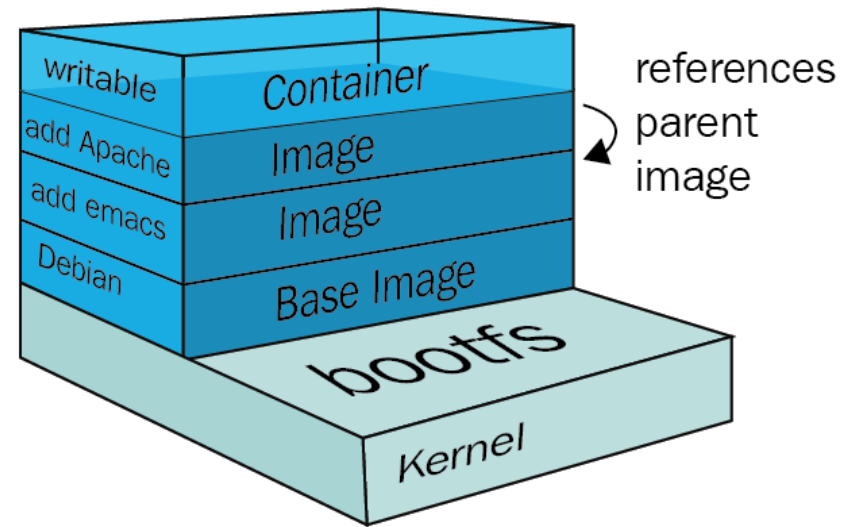


# Containerization Concepts - Containers



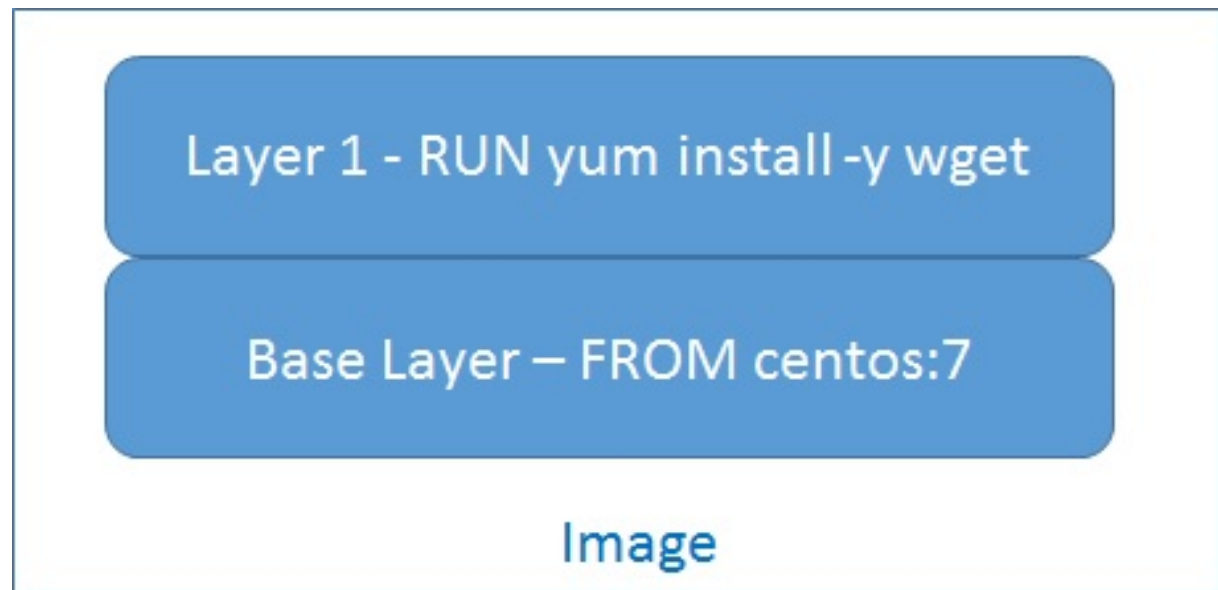


# Containerization Concepts – Images

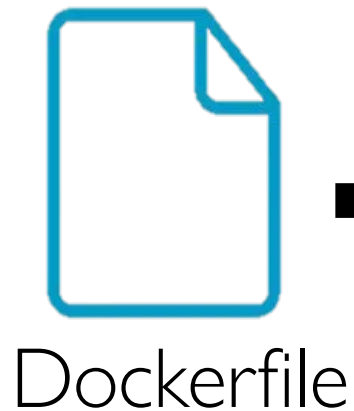


# Containerization Concepts – Images

Image  
Layers



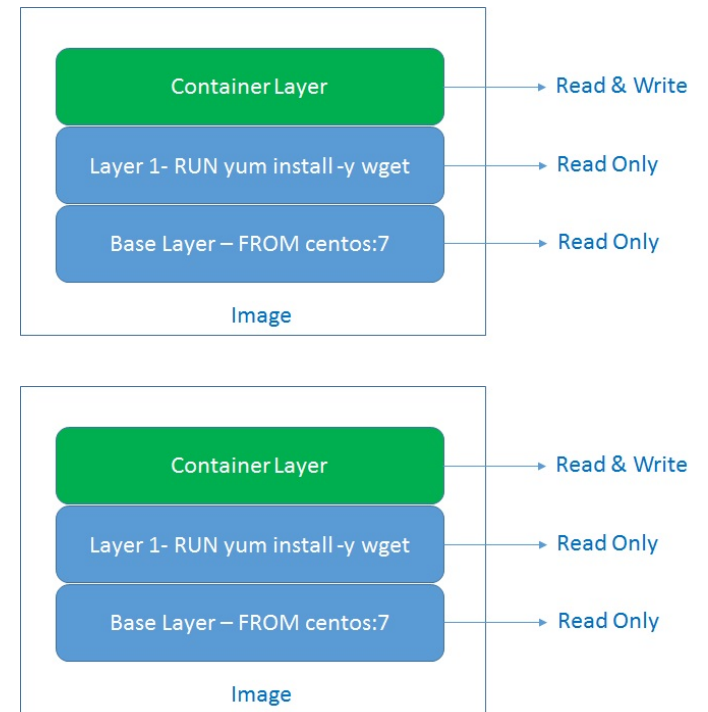
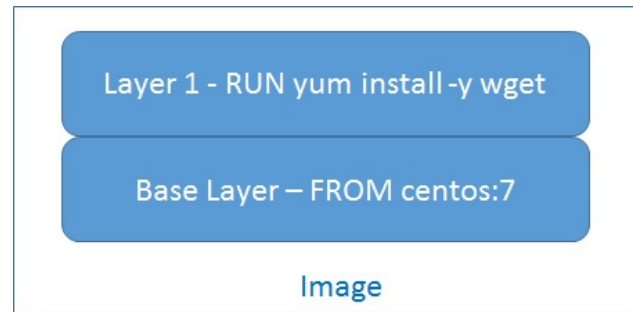
# Containerization Concepts – Images



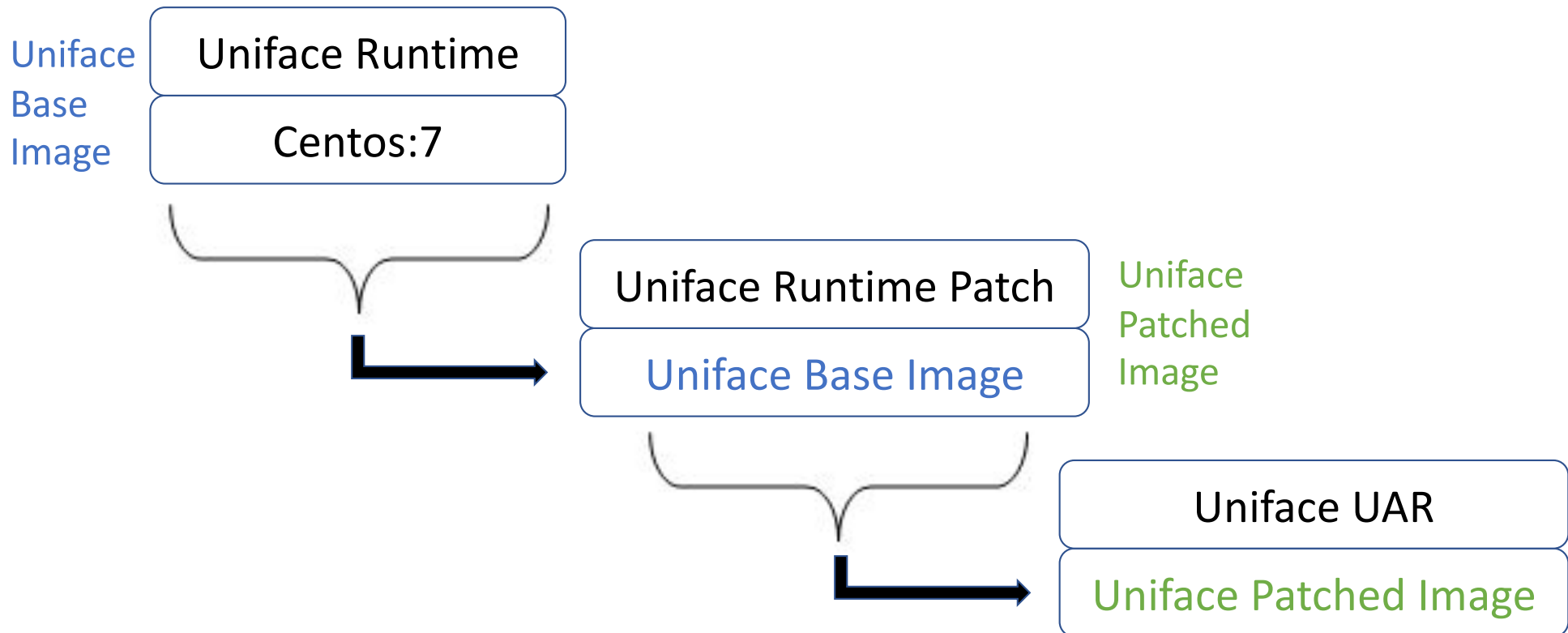
# Create Image – Run Containers



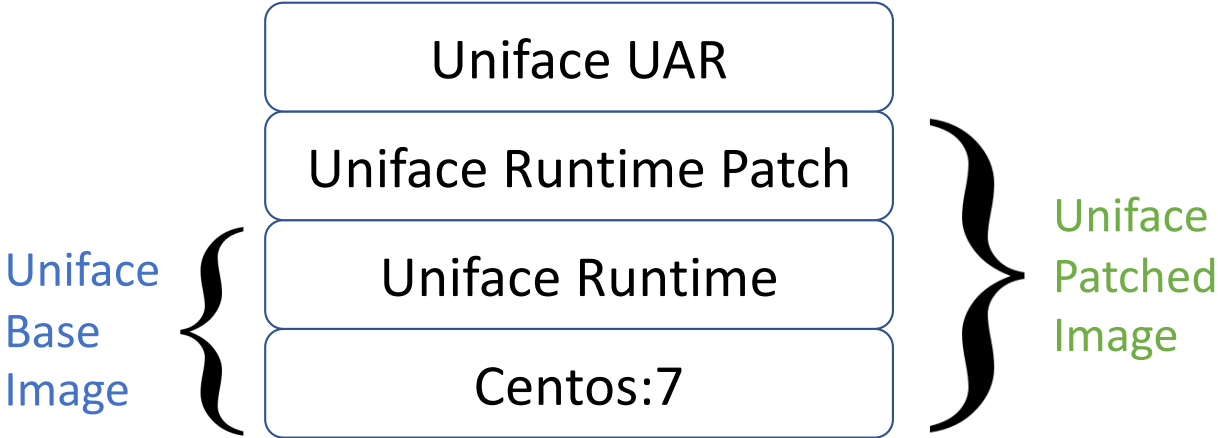
Dockerfile



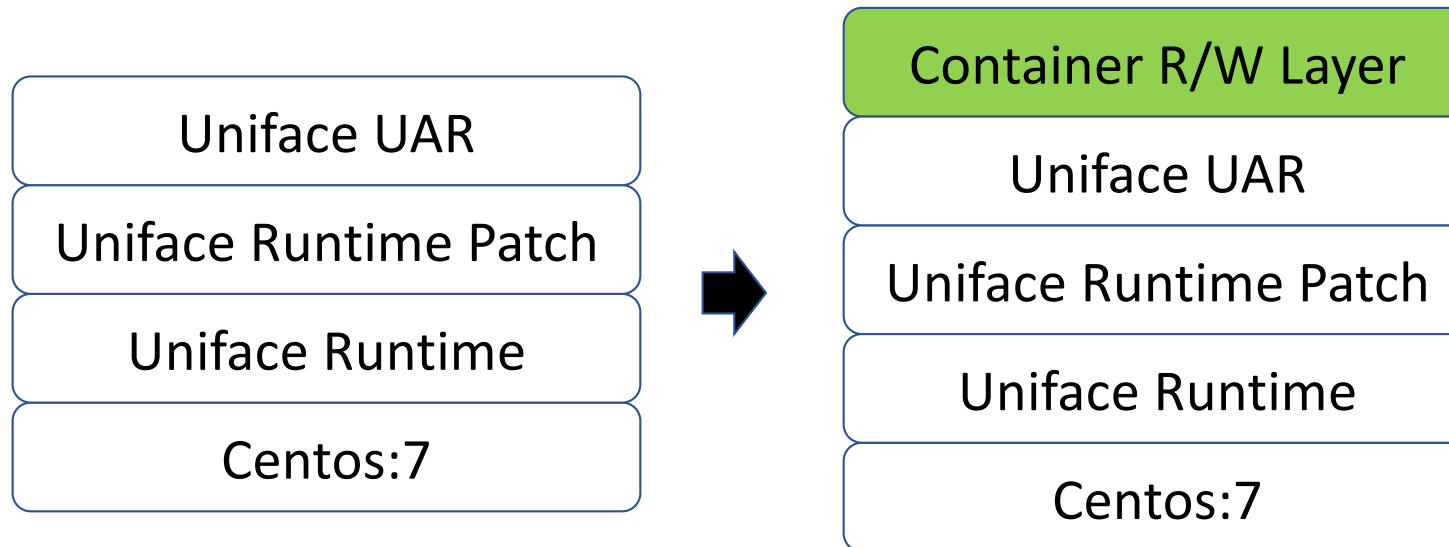
# Create Uniface Images



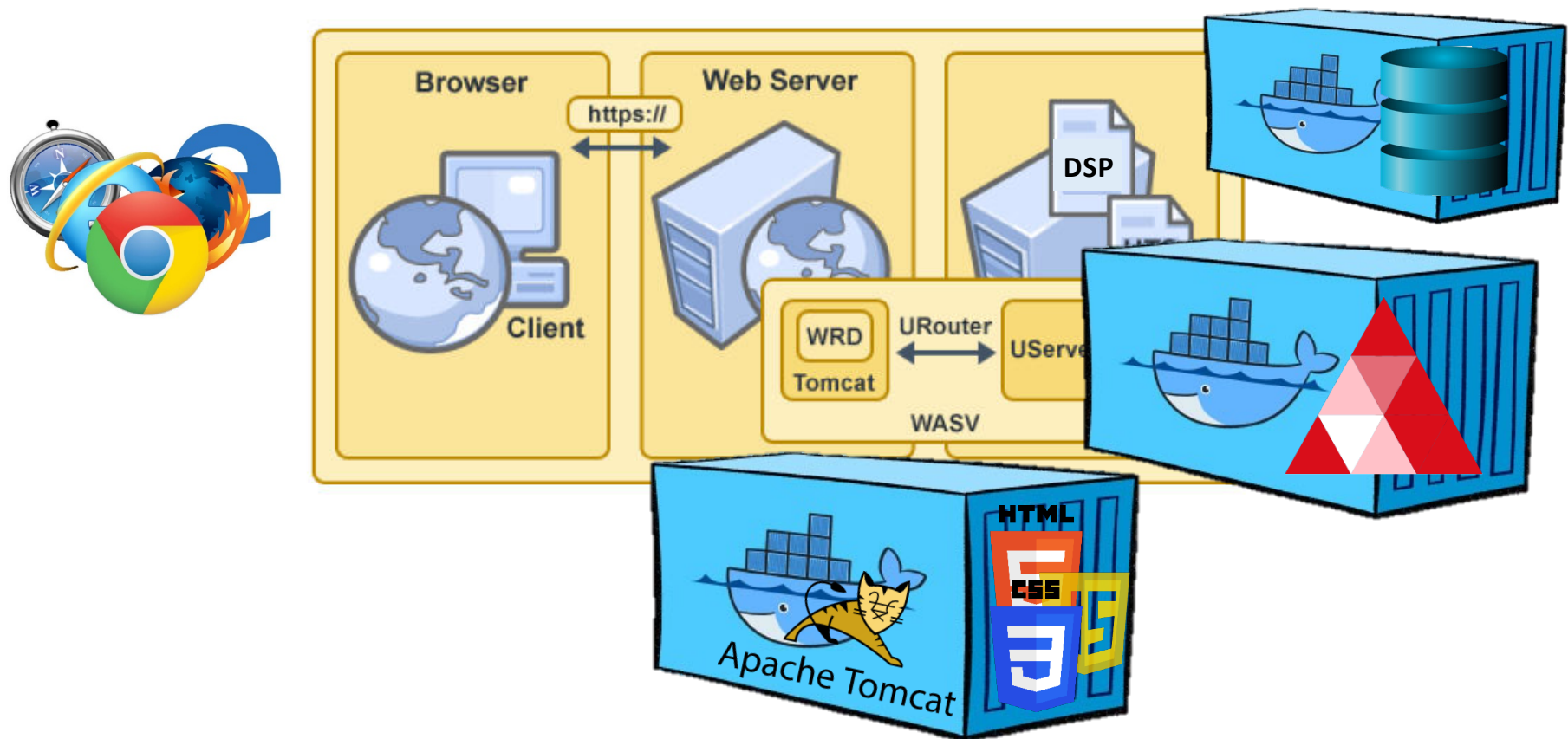
# The (complete & runnable) Uniface Image



# Create Uniface Images – Run Uniface Containers

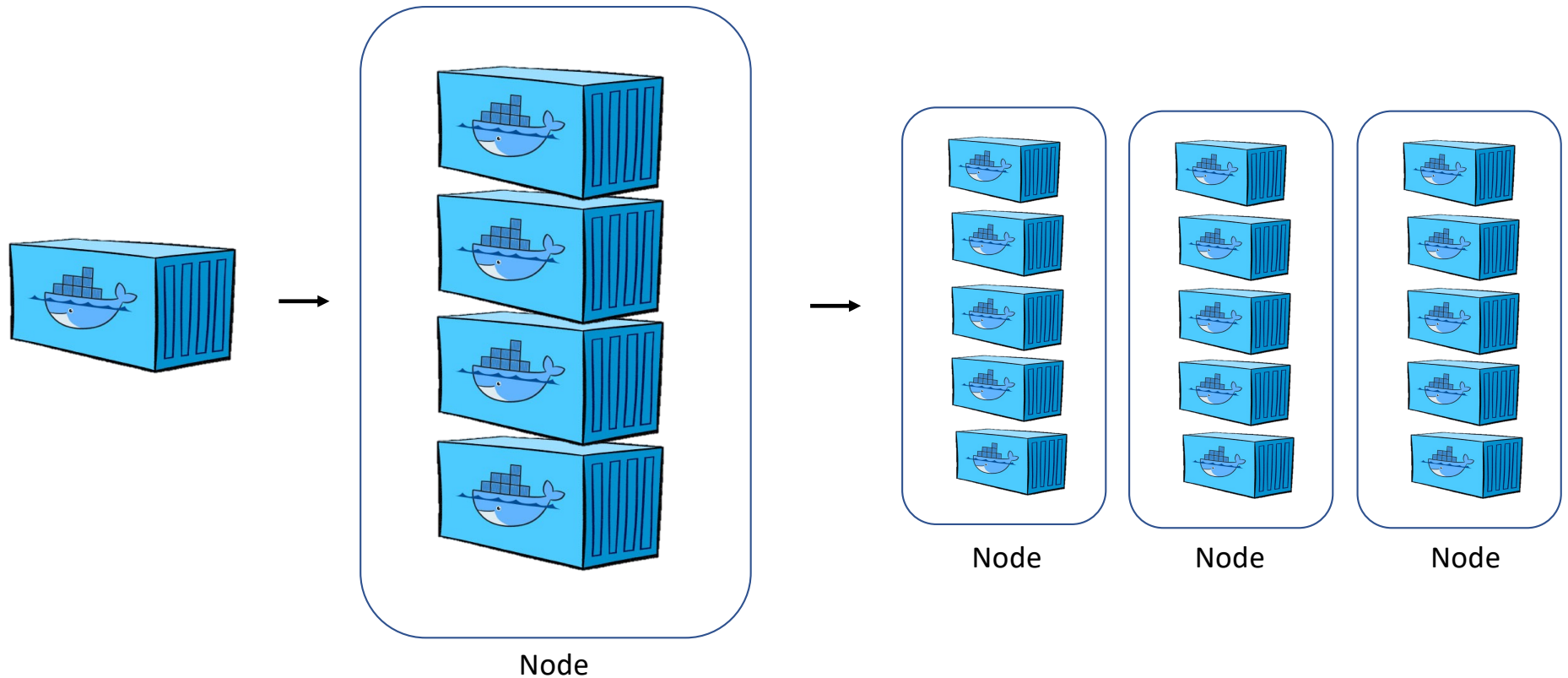


# RiaMusicShop in Containers

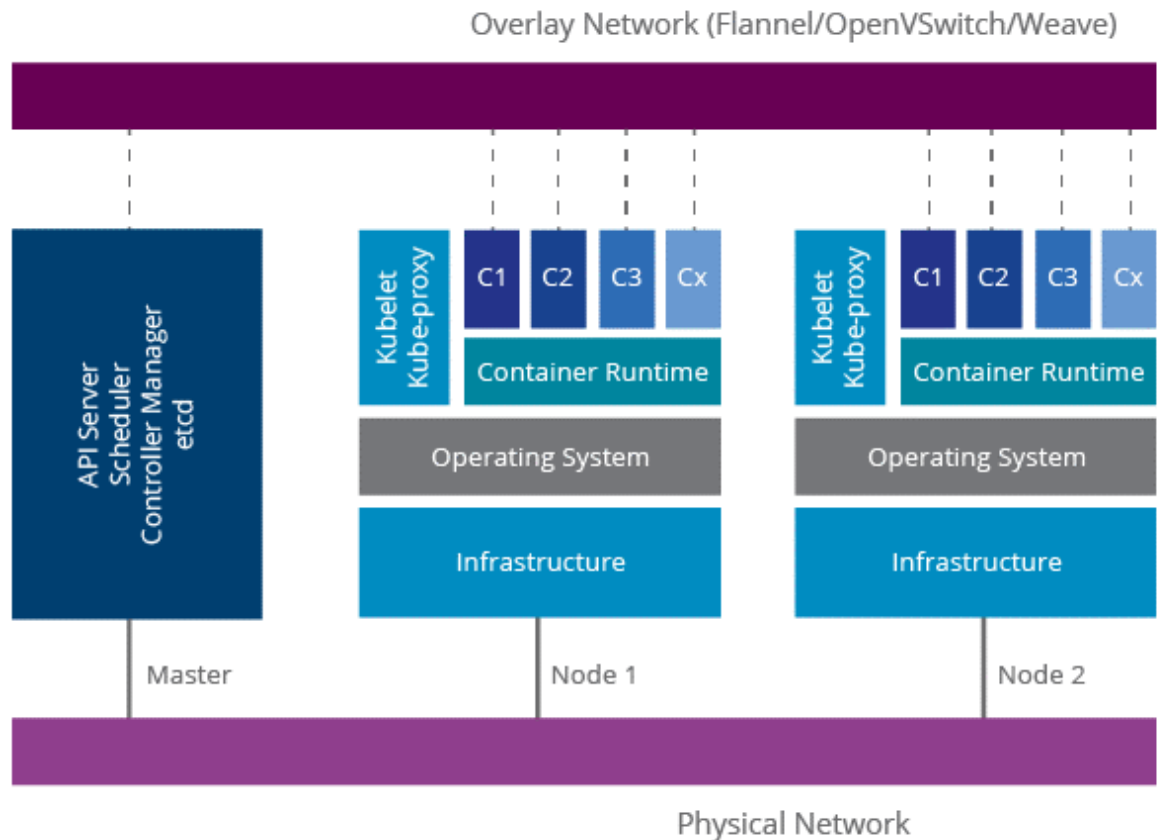




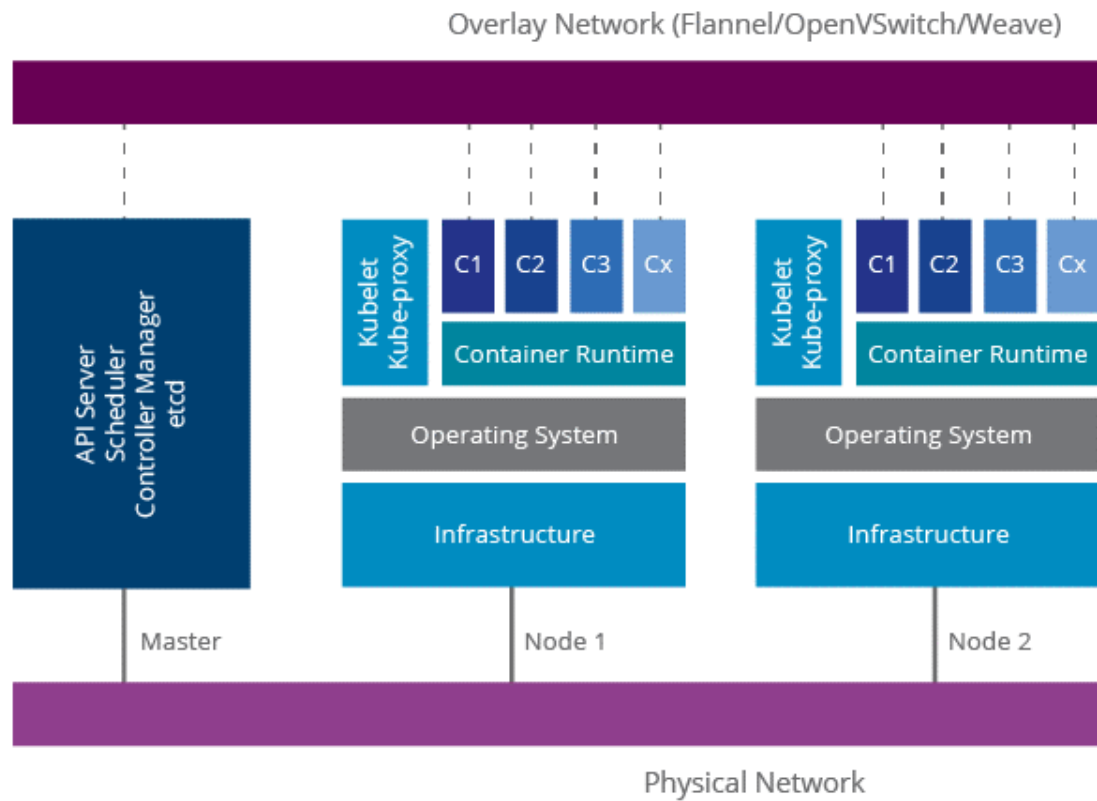
Manual -> Automate -> Orchestrate



# Container Platform (K8S) Architecture



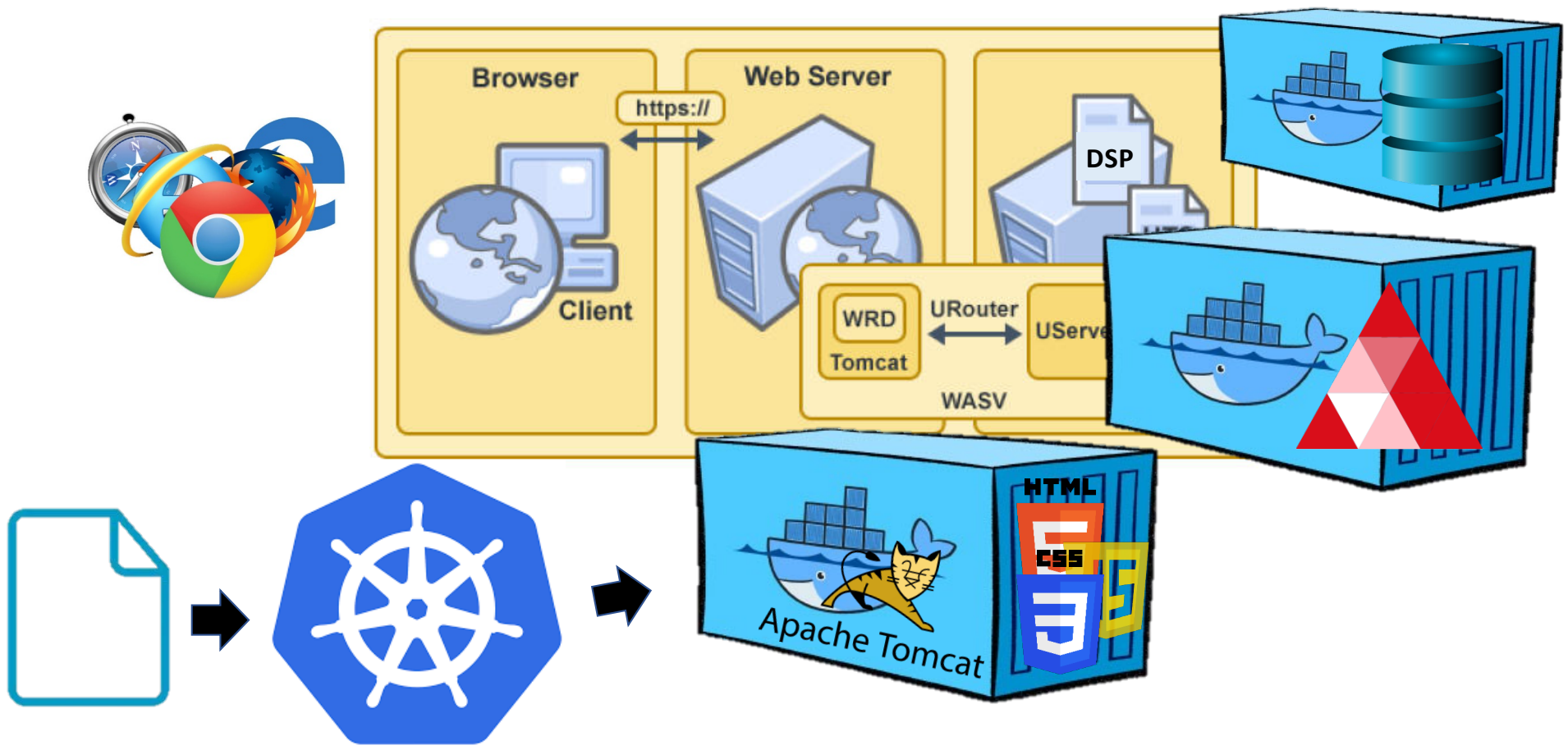
# K8S – Deployment through Desired State



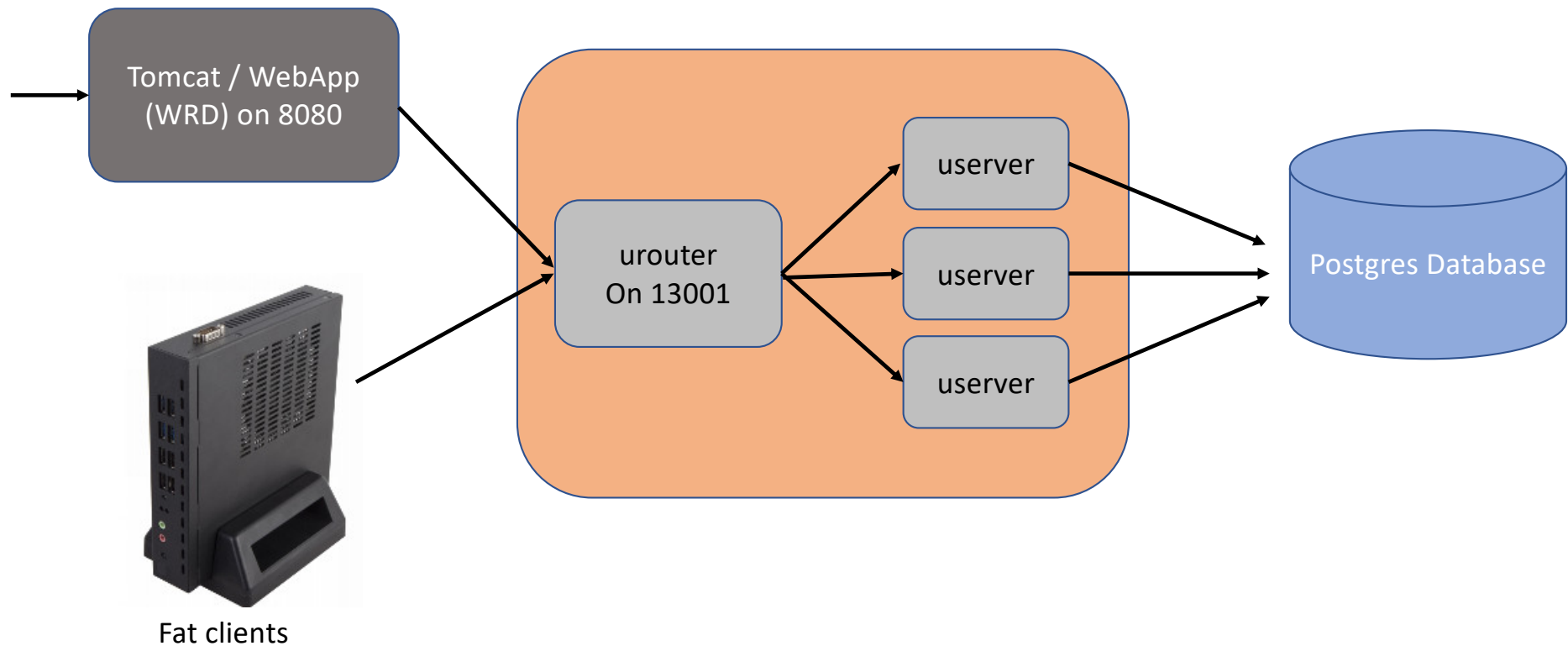
Manifest



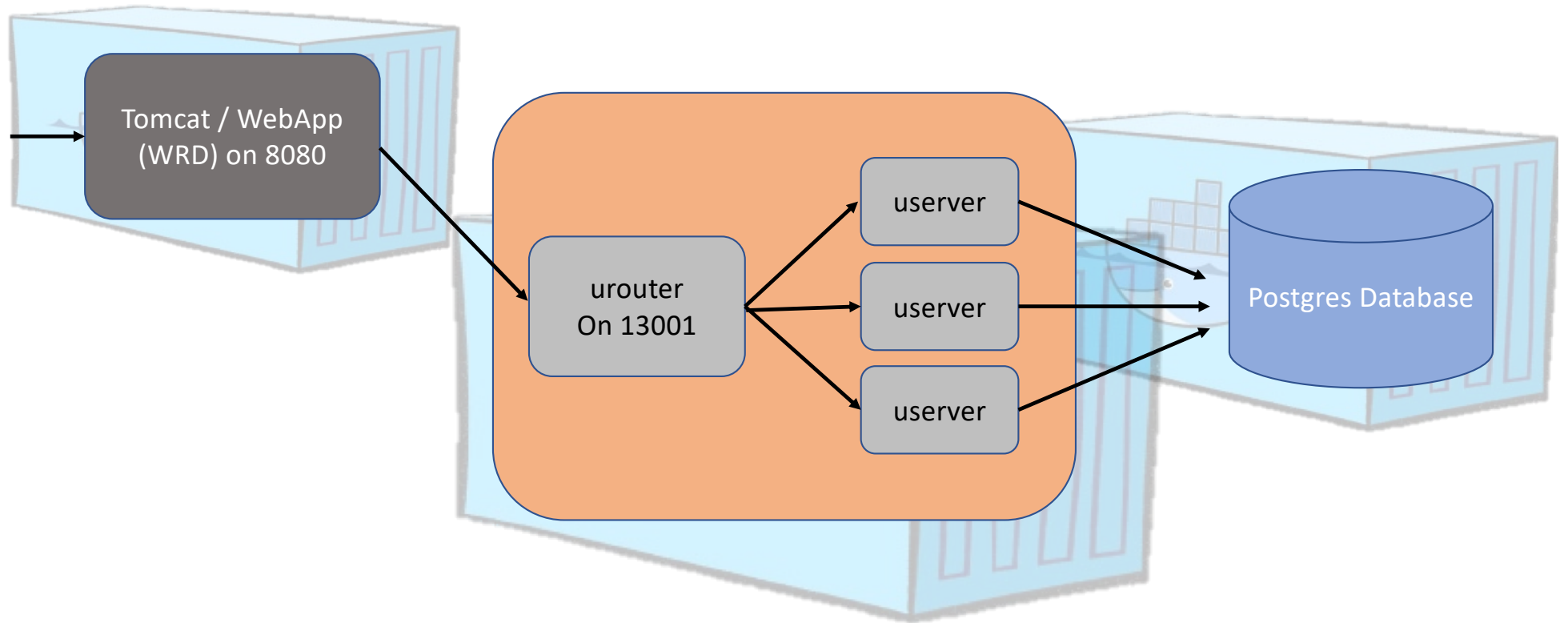
# RiaMusicShop – K8S Desired State



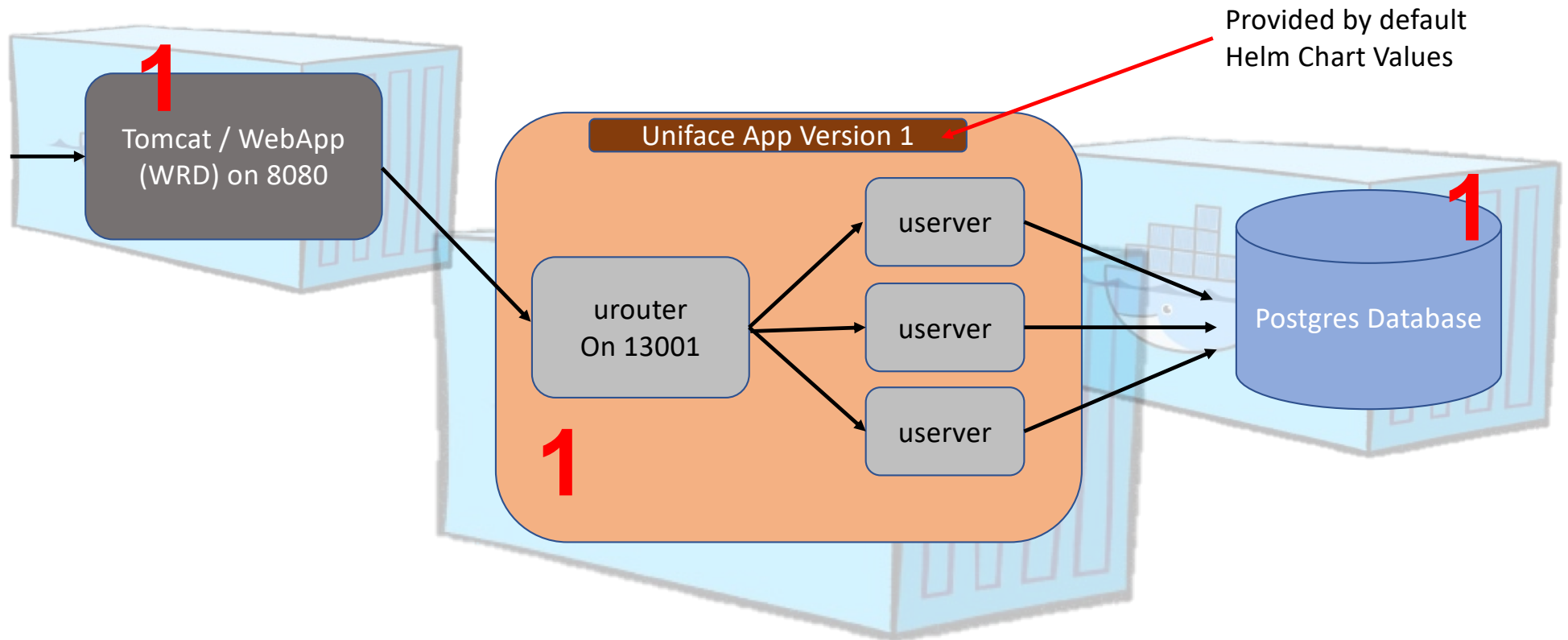
# Uniface application system architecture



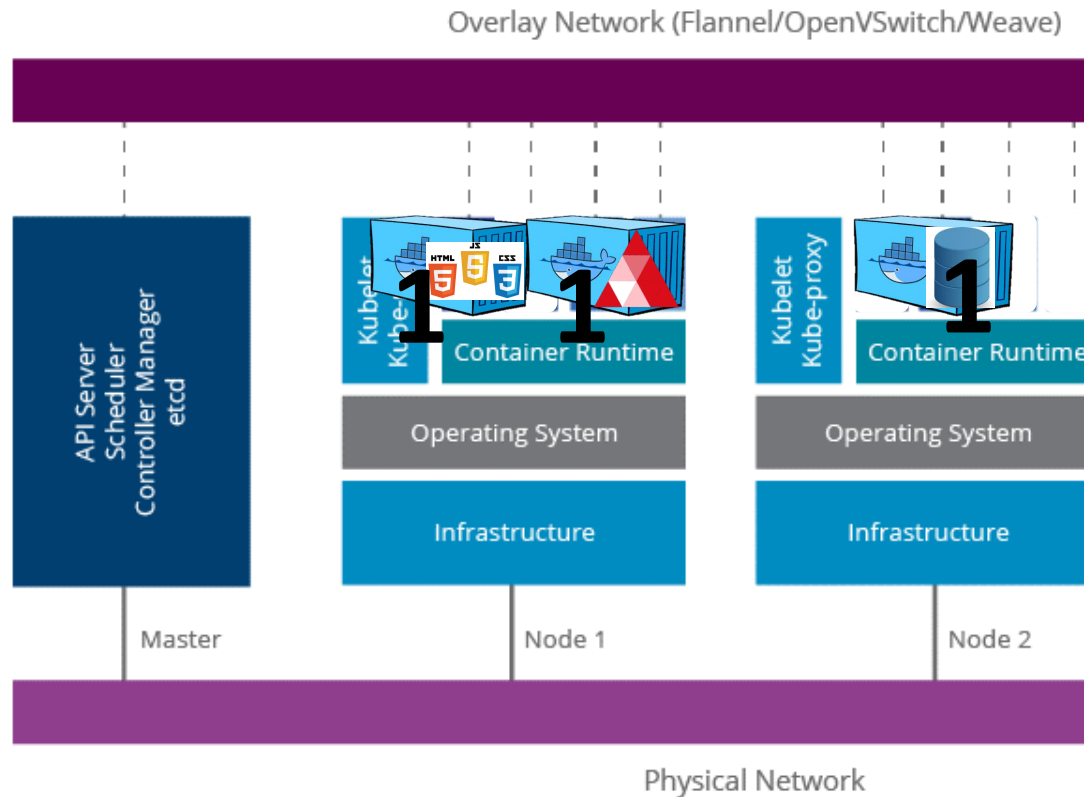
# Uniface application system architecture



# Standard Uniface Helm Deployment

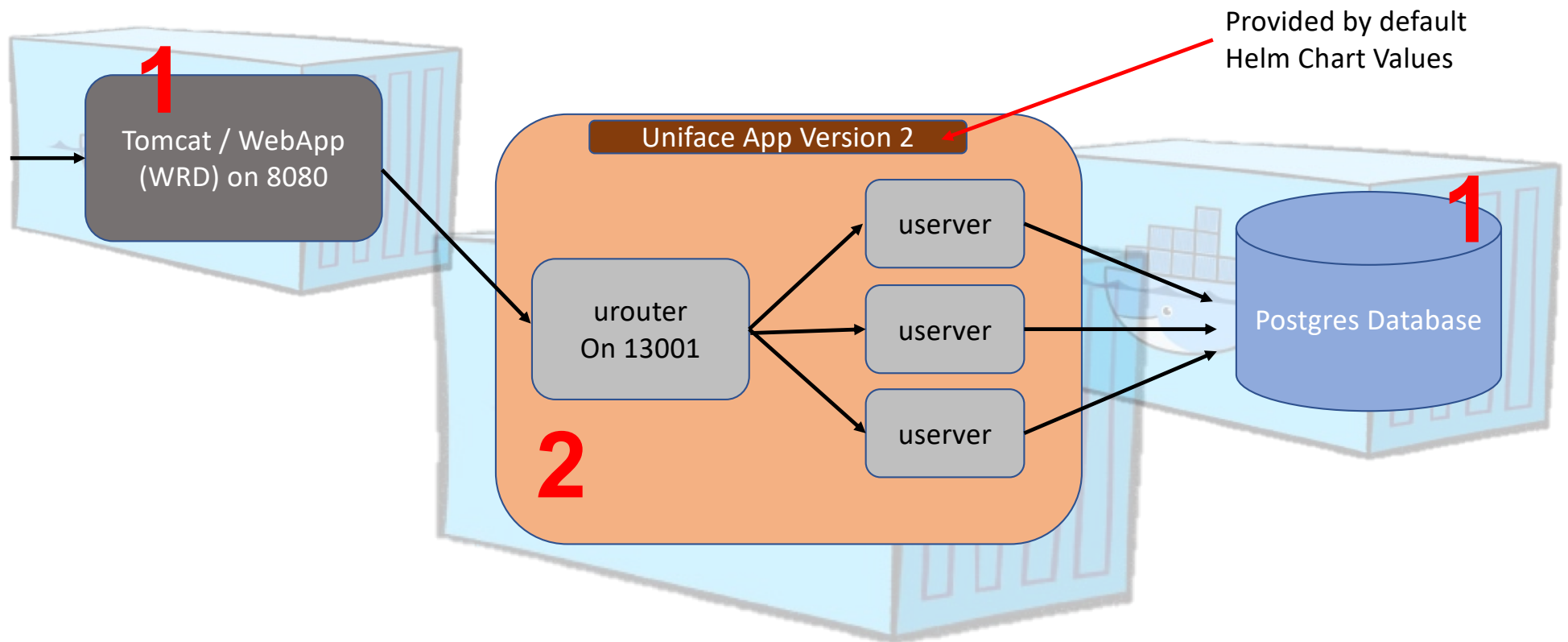


# Uniface Containers on K8S

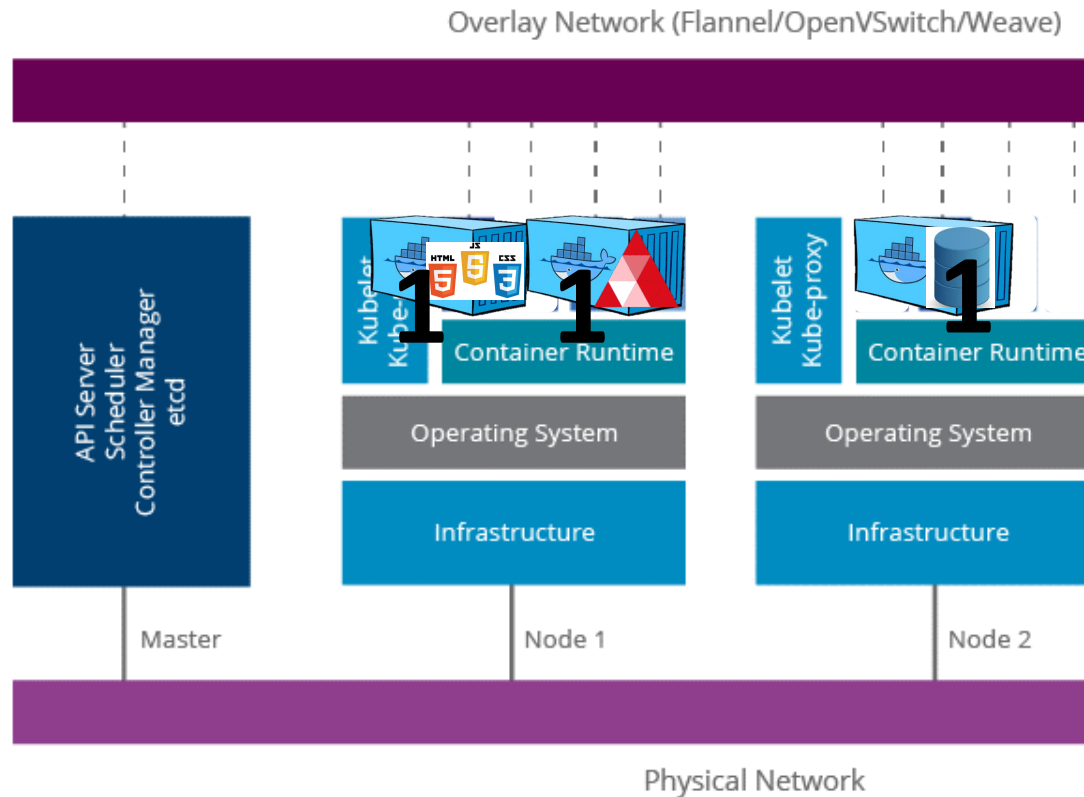




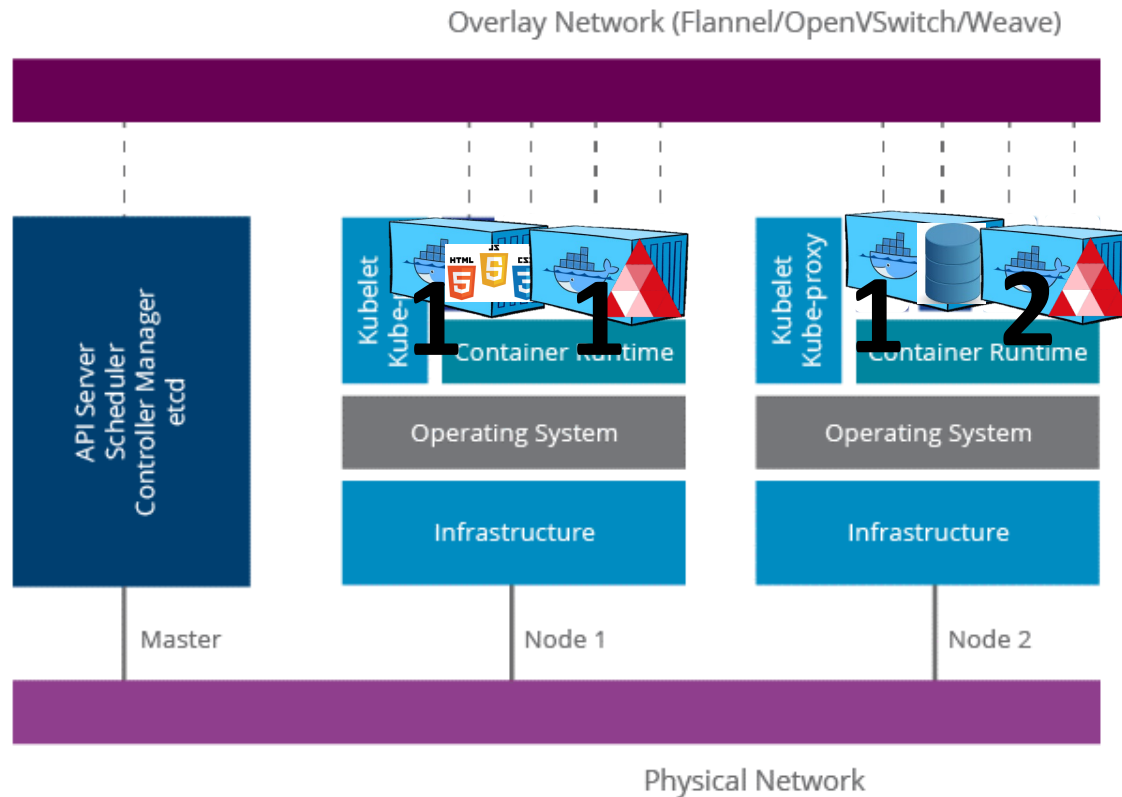
# Advance Uniface Version to 2 (Helm)



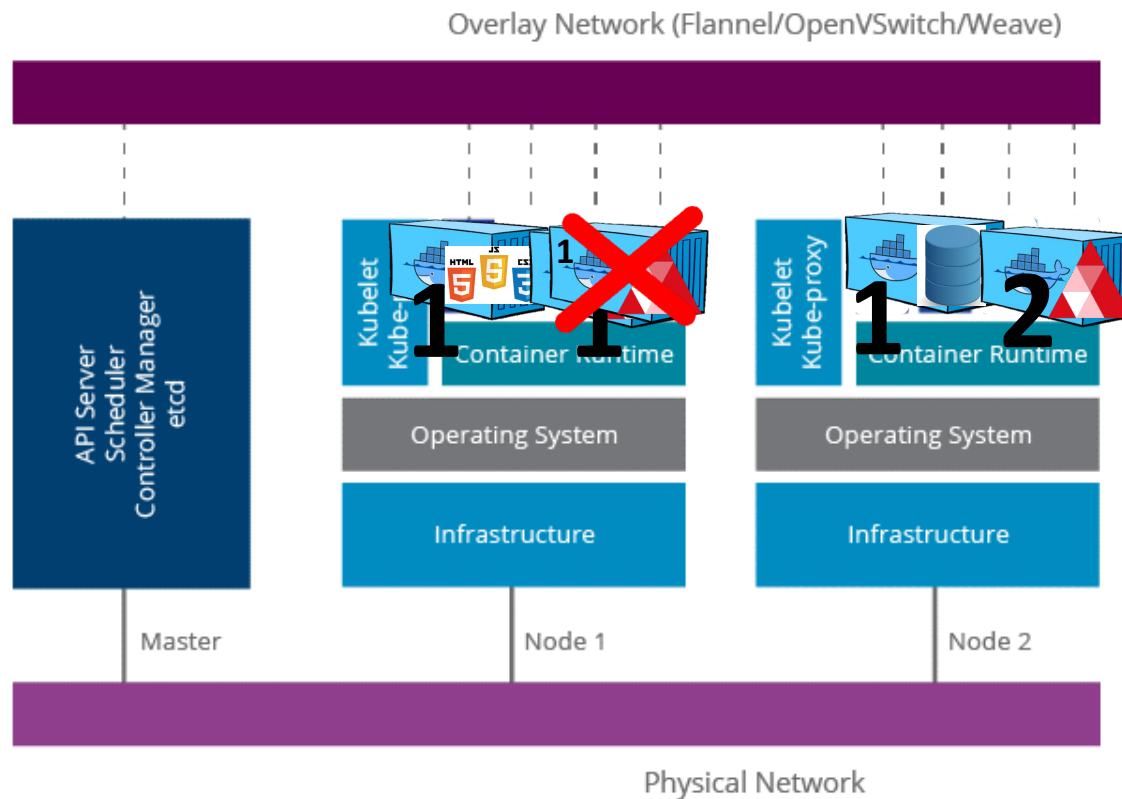
# Uniface Containers on K8S



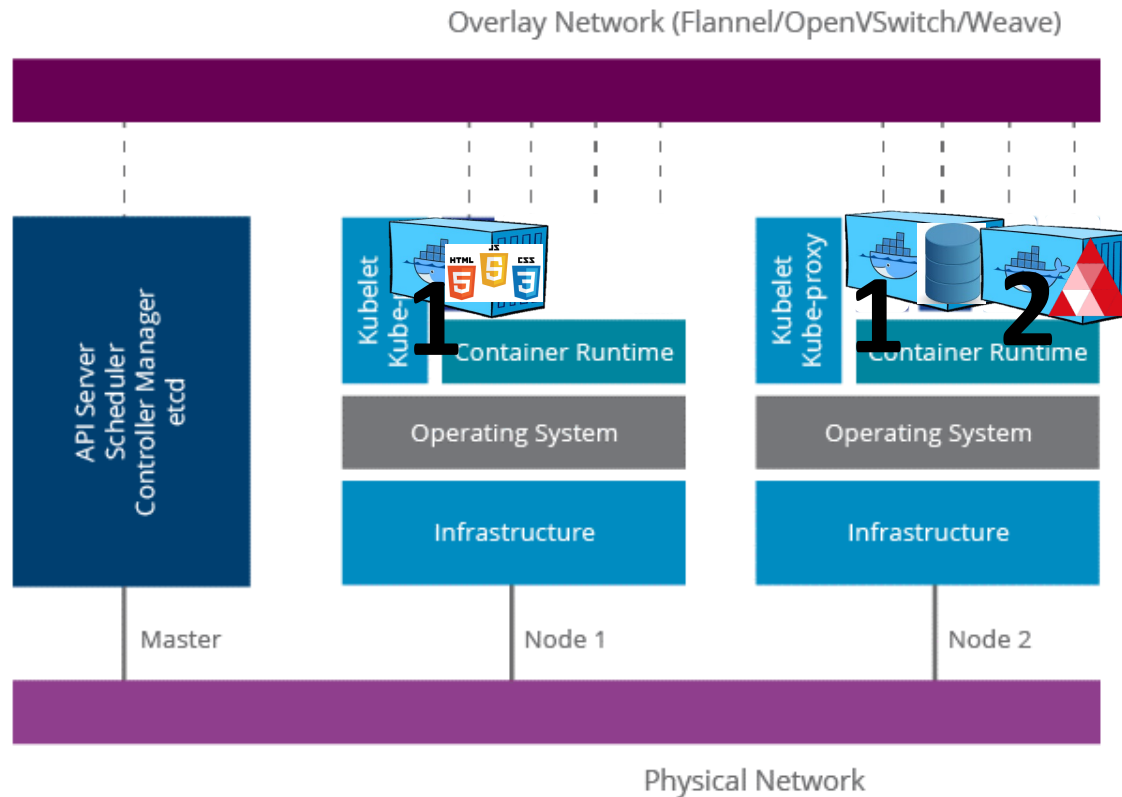
# Uniface App 2 Container Deployed



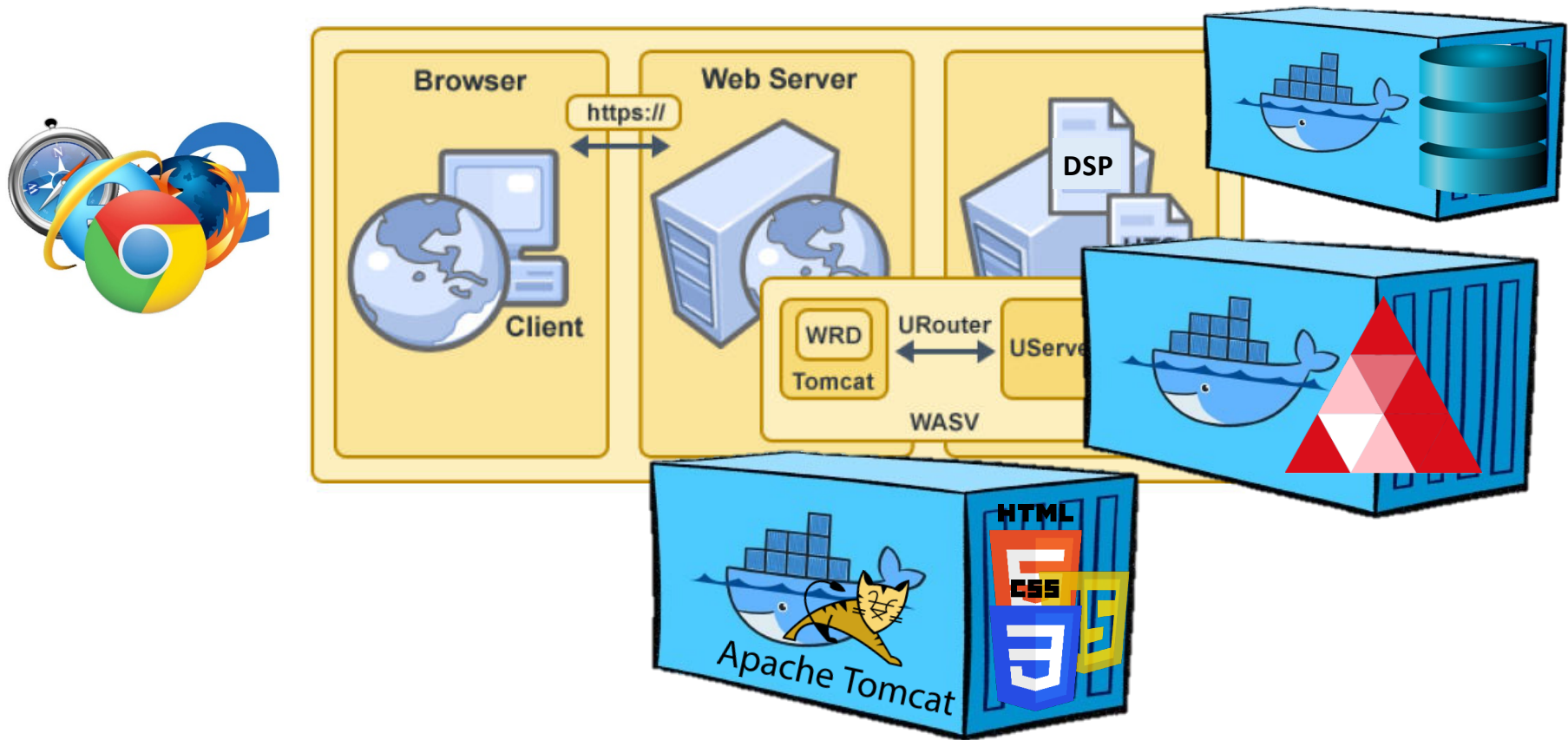
# Uniface App 2 Container Deployed



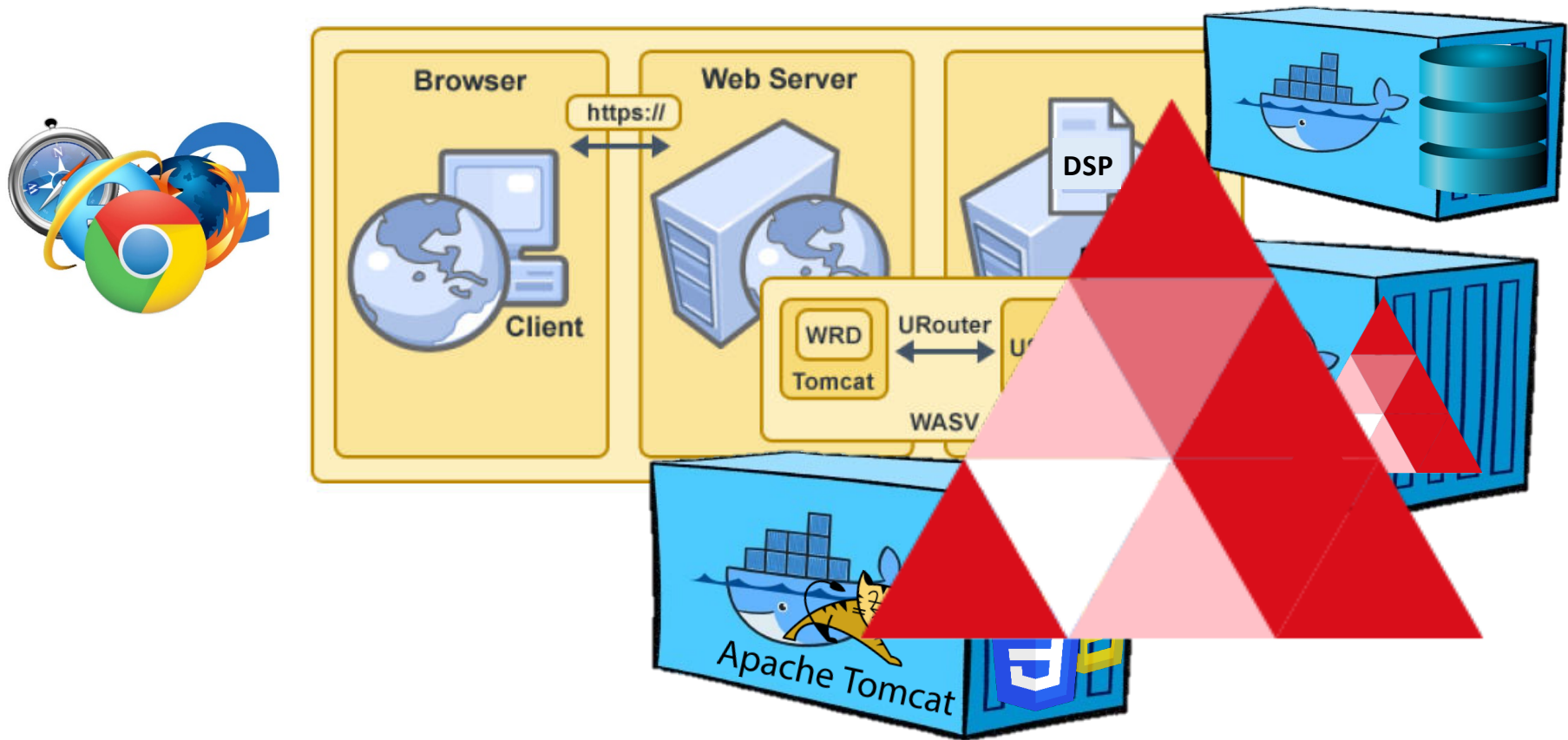
# Uniface App 1.1 Container Deployed



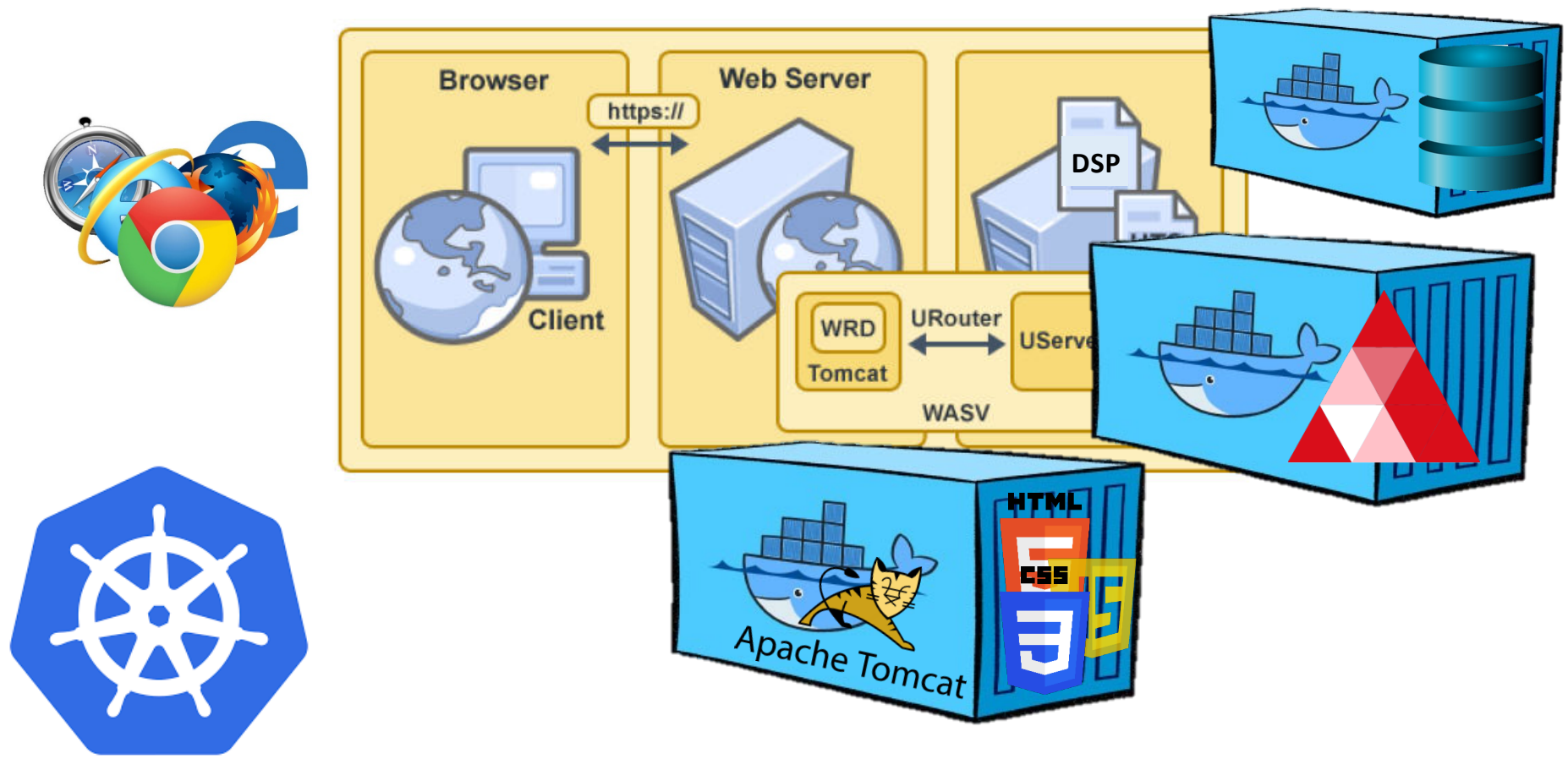
# RiaMusicShop – Containerized



# RiaMusicShop – Containerized



# RiaMusicShop – Orchestrated







- RIAMusicShop Deployment
- Update Presentation Layer
- Update Business Layer

Step 1

# RIAMusicShop Deployment





# Update Presentation Layer

(HTML / CSS)





# Update Uniface Runtime

(Install Patch)





# Update Business Layer

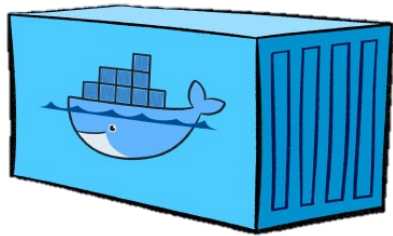
(UAR)



SUMMARY



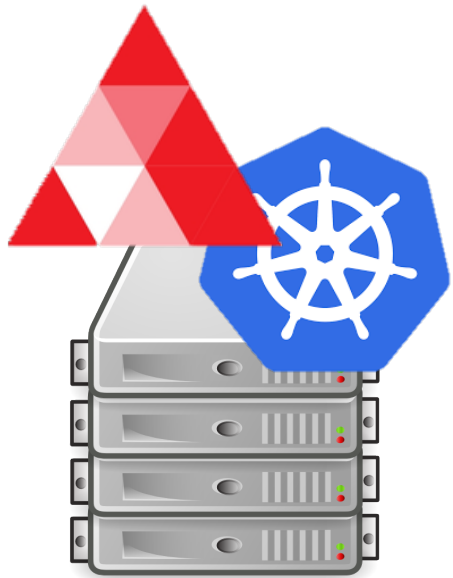
# Why Container Technology?



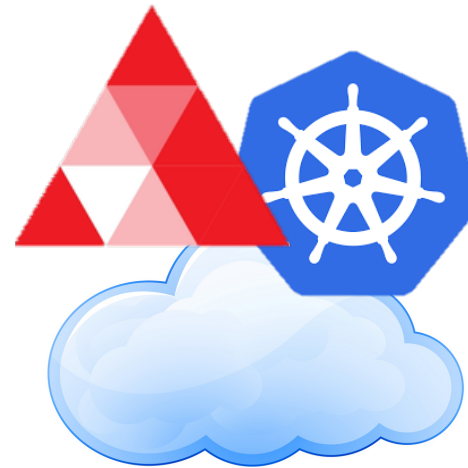
- Infrastructure / Deployment / Configuration by Code
- Portable (cloud / on-premises)
- Scalable (cloud)
- Small increments (CI/CD)



# Move to container technology ~ cloud?



On-premise



AWS / Azure / GCP / DO ...





Thank you !!

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