Data in a Containerized World

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Agenda

Containerization

What are the benefits of containerization and how OpenShift and Cloud Pak for Data support Db2 deployments

Modernization of Db2

How do we deploy Db2 in a Containerized world and what are the benefits of working in this environment

IBM Db2 Click to Containerize

Working with your existing Db2 deployments and move them to OpenShift or CP4D with minimal effort

The Vinyl Record

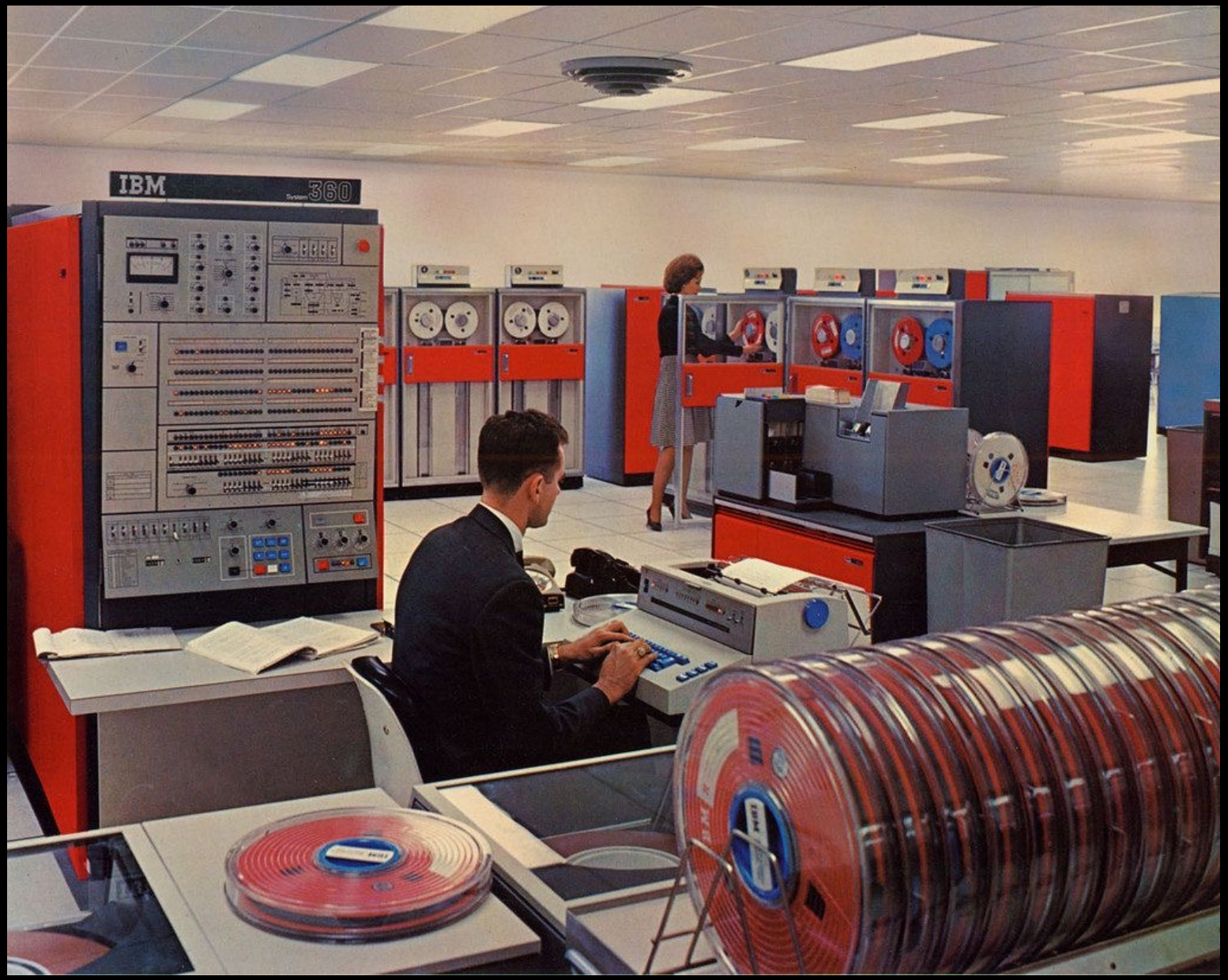
The CD

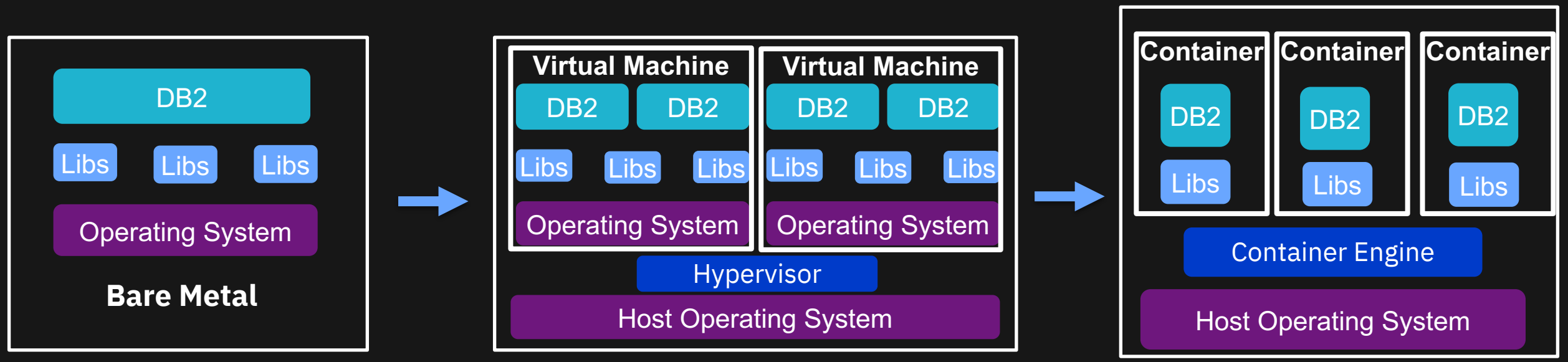
The Smartphone

The Cassette

The MP3 Player

The Cloud


IBM
System 360


DB2
Libs
Libs
Libs
Operating System
Bare Metal
Virtual Machine
DB2
DB2
Libs
Libs
Libs
Operating System
Virtual Machine
DB2
DB2
Libs
Libs
Libs
Operating System
Hypervisor
Host Operating System
Container
DB2
Libs
Container
DB2
Libs
Container
DB2
Libs
Container Engine
Host Operating System

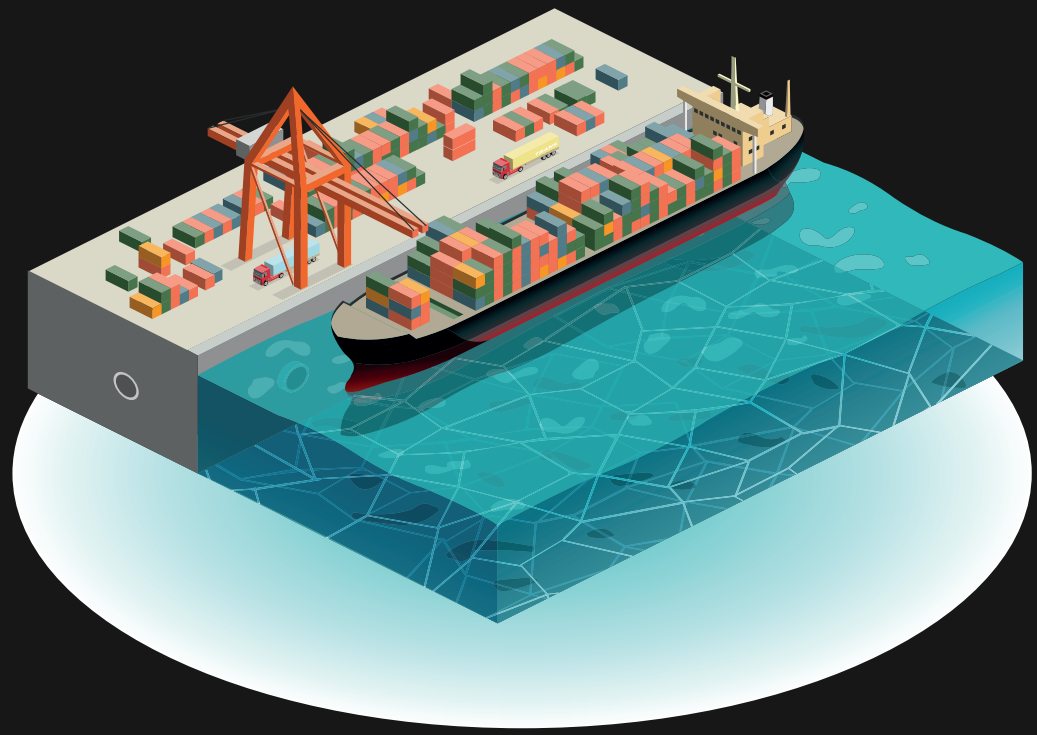
Simplify the Database Landscape with Containerization

Deploy on Any Cloud or Server

Fast Time to Value

Alignment with Agile Application delivery

Lower Cost of Management



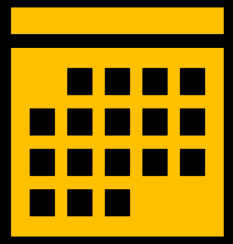
Db2: Cloud-Native Containerized Database

IBM

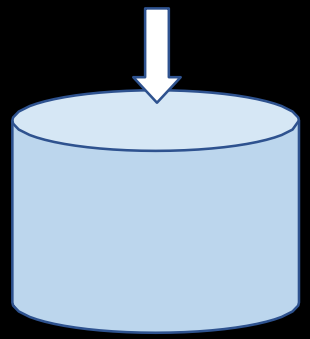
Db2

Rapid Deployment of Database which is Agile, Elastic and Modular

Deploy Db2 in 5 mins
Reduce Operational cost by 26%
[Forrester] Elasticity can reduce infra costs up to 40%



IBM Db2 services deployed as Microservices that can be developed, updated and scaled independently



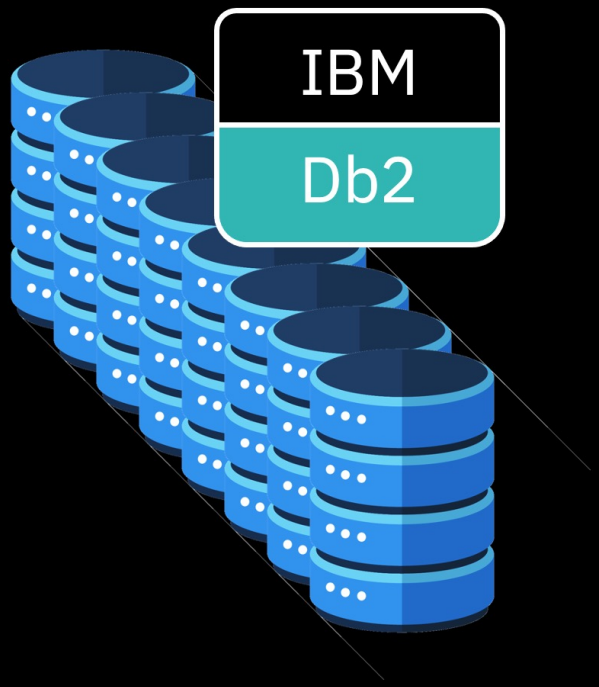
Rapid Deployment

Simplified Lifecycle Management (Upgrade via Helm, Coming soon: Operator Backup/restore)

Flexibility to deploy on-prem or any cloud provider

Why Should I go there ?

Db2 Base



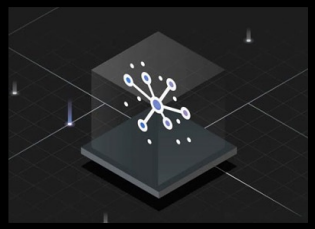
Serena
Application Development

Geoff
DBA Platform Team

Surendar
GSI Cloud Migrations

Hybrid Cloud

IBM
Db2



Cloud Pak for Data

OPENSHIFT

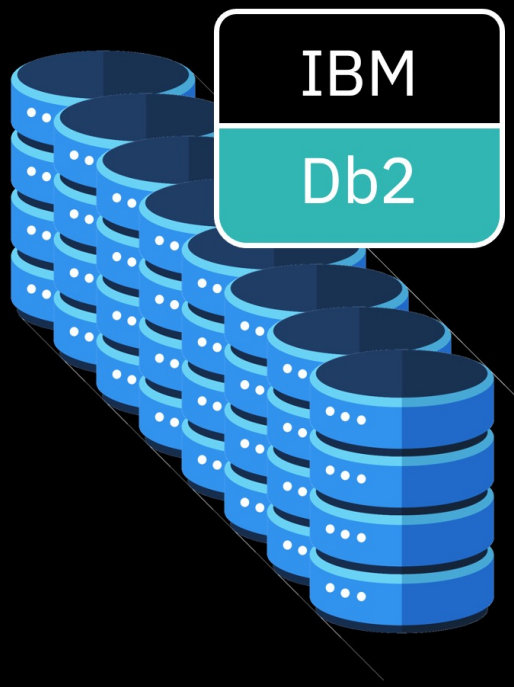
High Cost/Skill/Risk

Need to manage Upgrade at the same time

“Maybe in 18 months, Not sure we can manage this now”

The Solution

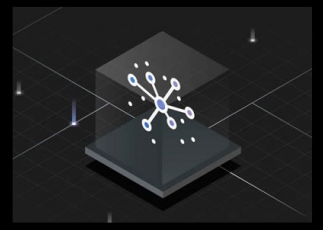
Db2 Base



IBM Db2 Click to Containerize-Tool

Containerizes the Database
Rather than Migrating it

Hybrid Cloud



Cloud Pak for Data

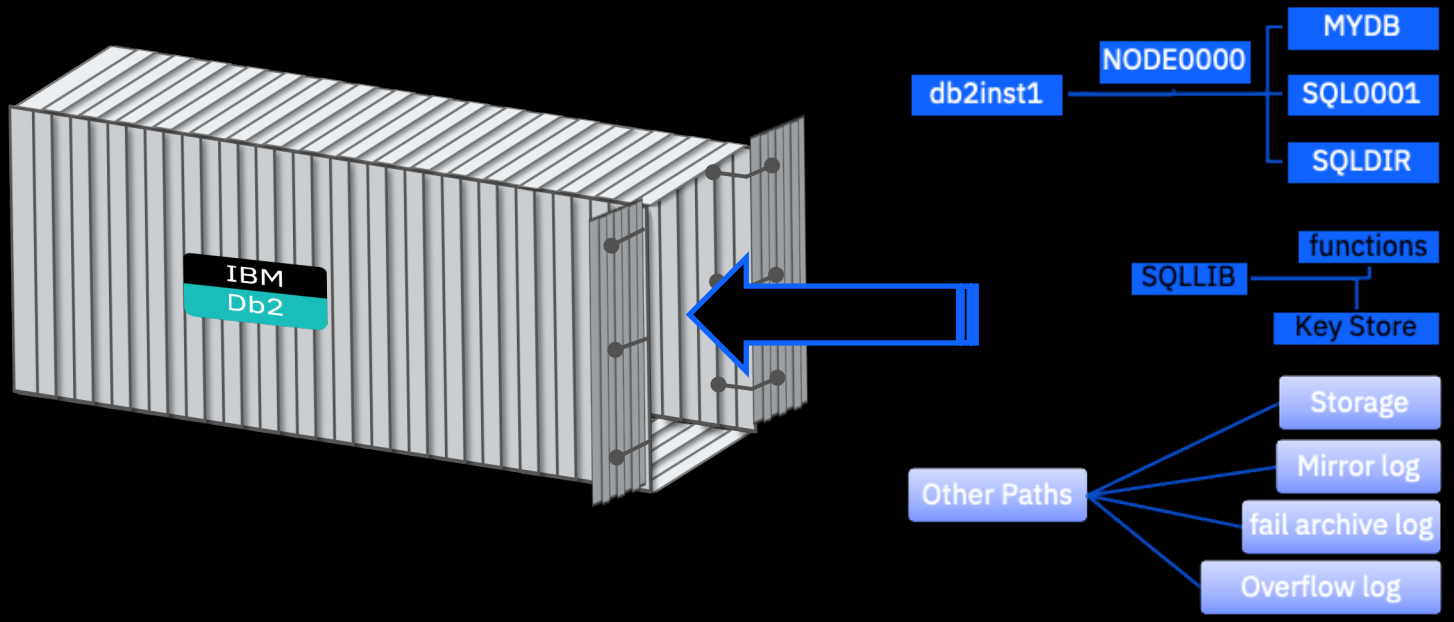
OPENSHIFT

Seamlessly Containerize

It’s Containerization

NOT Migration

- No Backup Restore
- No Export / Import
- No Reconfiguration
- Data Handled Securely



Candidate System Requirements

Operating Systems

- Linux X64, CentOS, Redhat 7, 8, Ubuntu 18.04, 20.04
- pLinux* (pLinux -> pLinux OpenShift)
- AIX* (AIX -> zLinux OpenShift)

Security

- Instance Owner access required for shifting database
- Select access to catalog tables required for Analysis

Target Systems

- Any platform running RedHat OpenShift (OCP 3.11, 4+)
- Cloud Pak for Data (3.0+)

* Currently being prototyped and does not imply that there is a commitment to deliver this feature at any time in the future

Candidate Database Requirements

Database Support

- Db2 V10.5, V11.1, V11.5 (Recommended to be at latest fixpak)

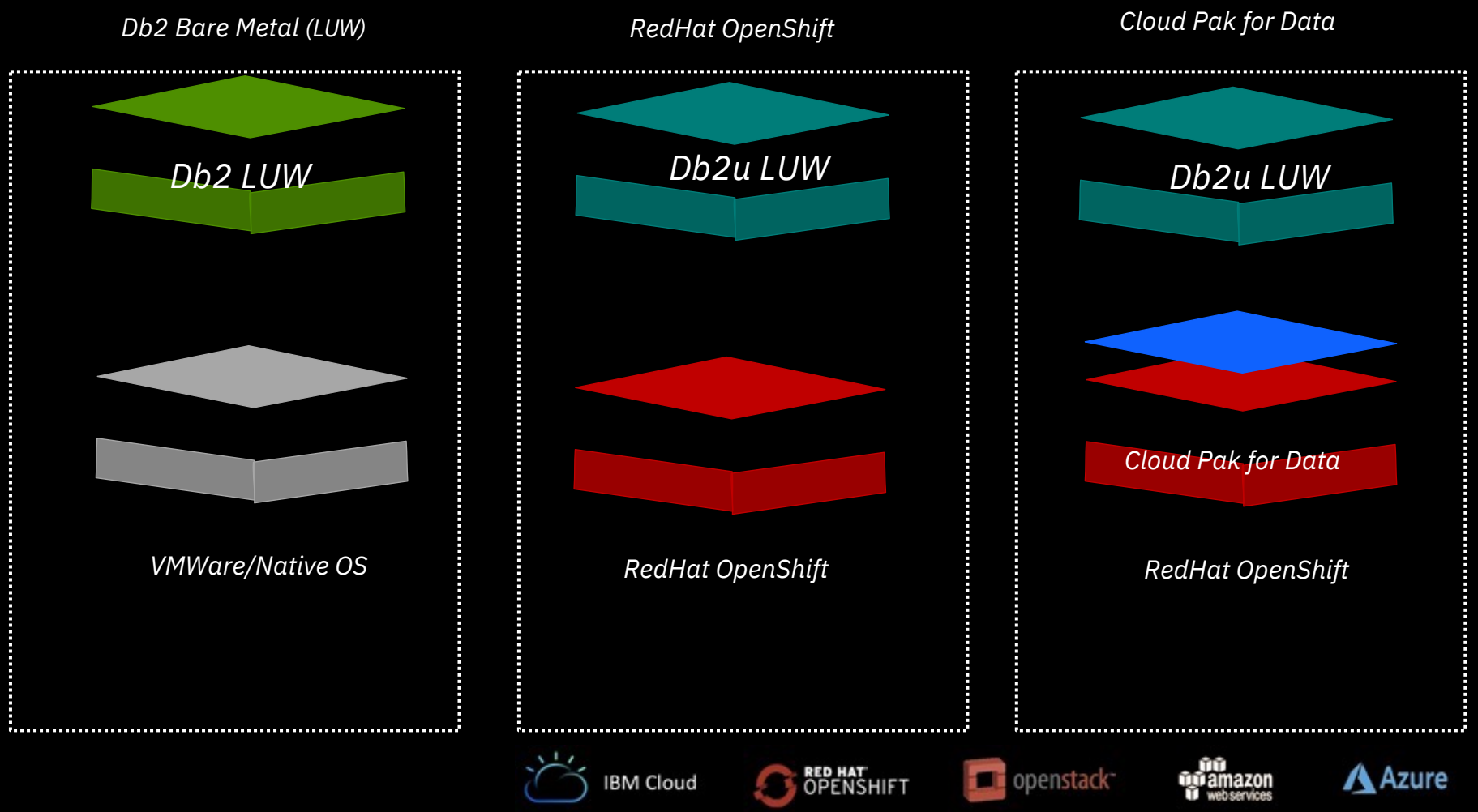
Features Supported

- SMP, MPP, Columnar Tables, Codepages
- Encryption, Compression, Federation, Oracle Compatibility, HADR
- Mirror, Archive, Overflow Logs, Automatic Storage
- Supports Unified Console
- User Defined Functions/Procedures located in the SQL lib Directory

Not Currently Supported (TBD on support)

- Spatial, Text Extender

IBM Db2 Deployment Options

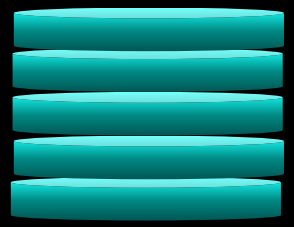


Seamlessly Containerize

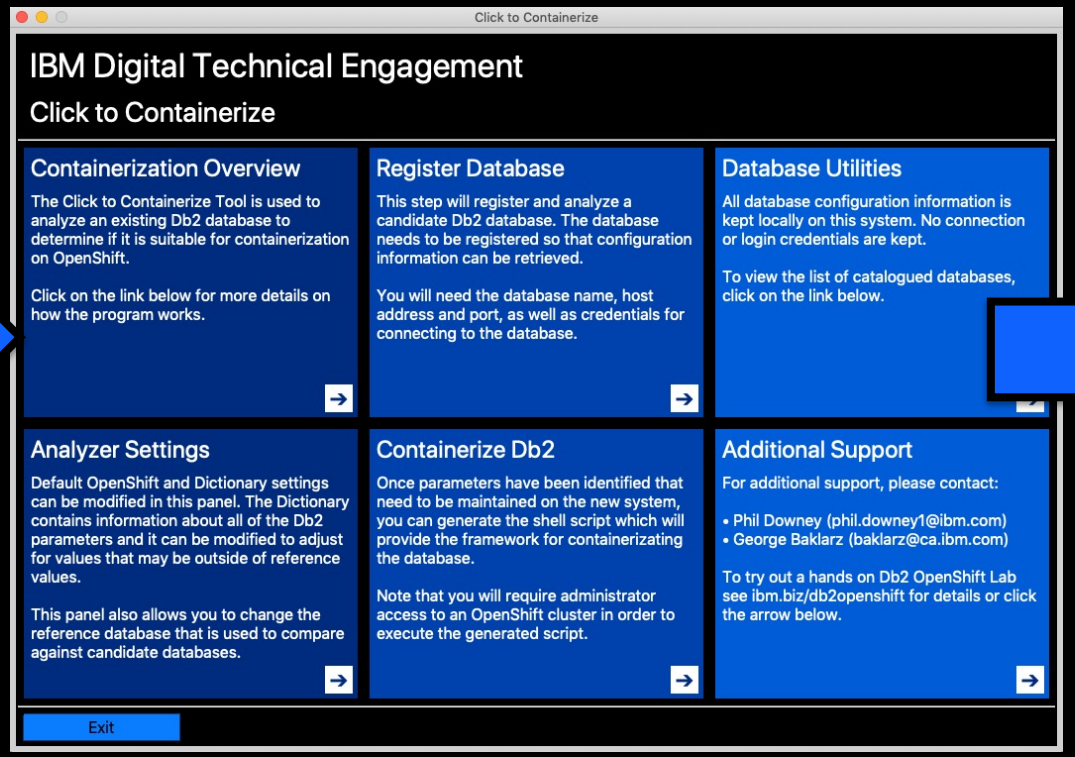
Analyze and Shift

Db2 On Prem

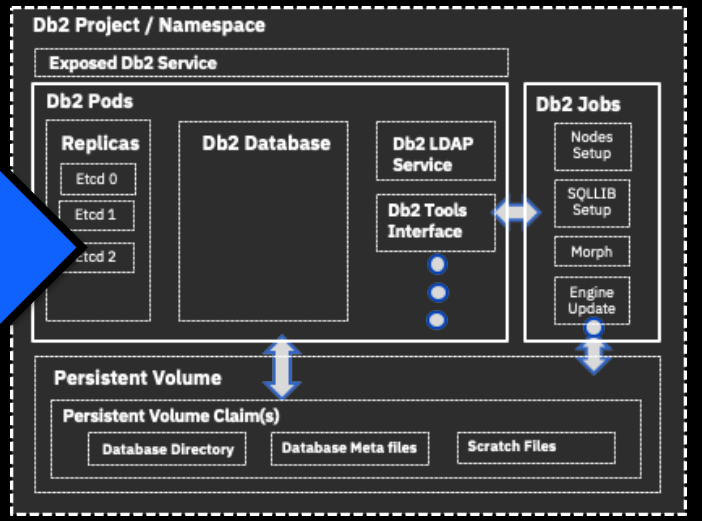
Db2 on Linux



- Logs
- Mirror Logs
- Storage Path
- Storage Path X
- External UDFs
- DB Config Files
- KeyStore



Db2 for OpenShift & Cloud Pak



Red Hat OpenShift

Demo


CROSLEY
LONG PLAYING

Questions?

Thank you!

If you have any further questions please contact:

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