

TECH COMMUNITY DAY

[2020]



DEVELOPMENT

MIGRACIONES DE BASES DE DATOS CON FLYWAY

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Experience

Microsoft Data Platform MVP

Friend of Redgate

+10 years of experience multi-platform
Solutions architect

Community

GTSSUG – Community Leader

Speaker, author, blogger, mentor

Simple Talk, SQL Server Central & MSSQL Tips

DBA Mastery

Tips, scripts, best practices & more



MAXDOP Calculator

Azure Data Studio wait stats widget

Azure Data Studio notebooks

PerfMon for DBAs - PowerShell

AGENDA

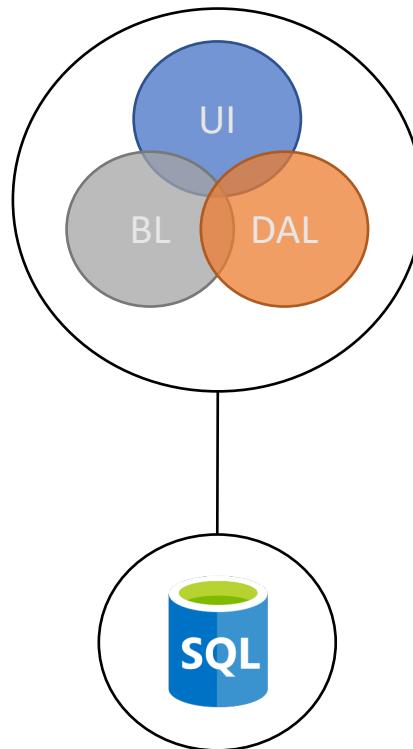
- Prácticas de desarrollo de software
- Migraciones de bases de datos
- Flyway
 - Que es y cómo funciona?
- Demo



Prácticas de desarrollo de software



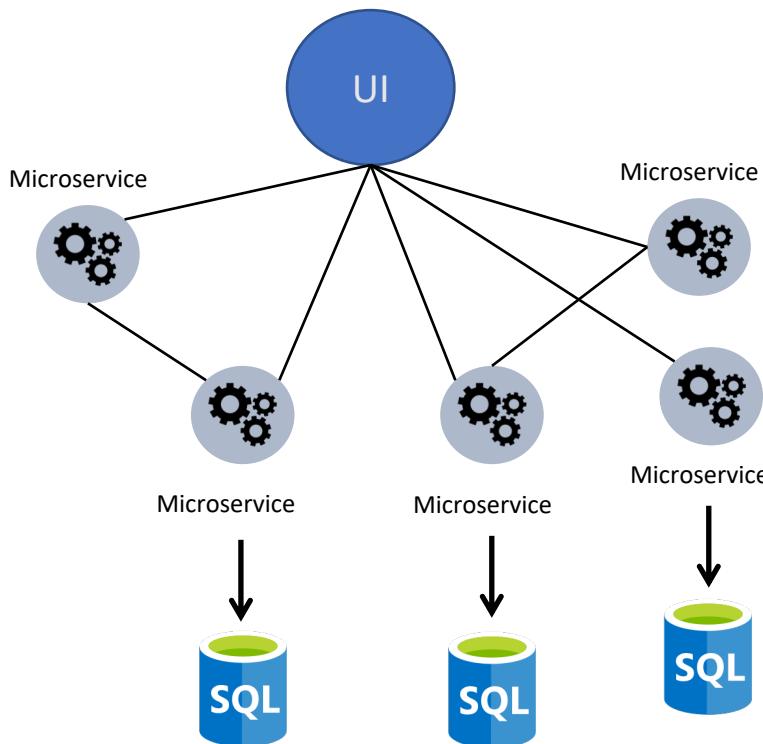
PRACTICA TRADICIONAL



- **Pros**
 - Desarrollo simple
 - Implementación simple
 - Pruebas sencillas
 - Fácil de compartir
- **Cons**
 - Difícil de entender / cambiar
 - Agilidad limitada
 - Lentitud
 - Baja confiabilidad



PRACTICA CONTEMPORANEA



- **Pros**
 - Escalable
 - Confiable
 - Flexible
 - Adopción fácil de nuevas tecnologías
- **Cons**
 - Pruebas de integración difíciles
 - Complejidad operacional
 - Expertiz alto



Migraciones de bases de datos



Shiny Soft

Version: 5.2.4

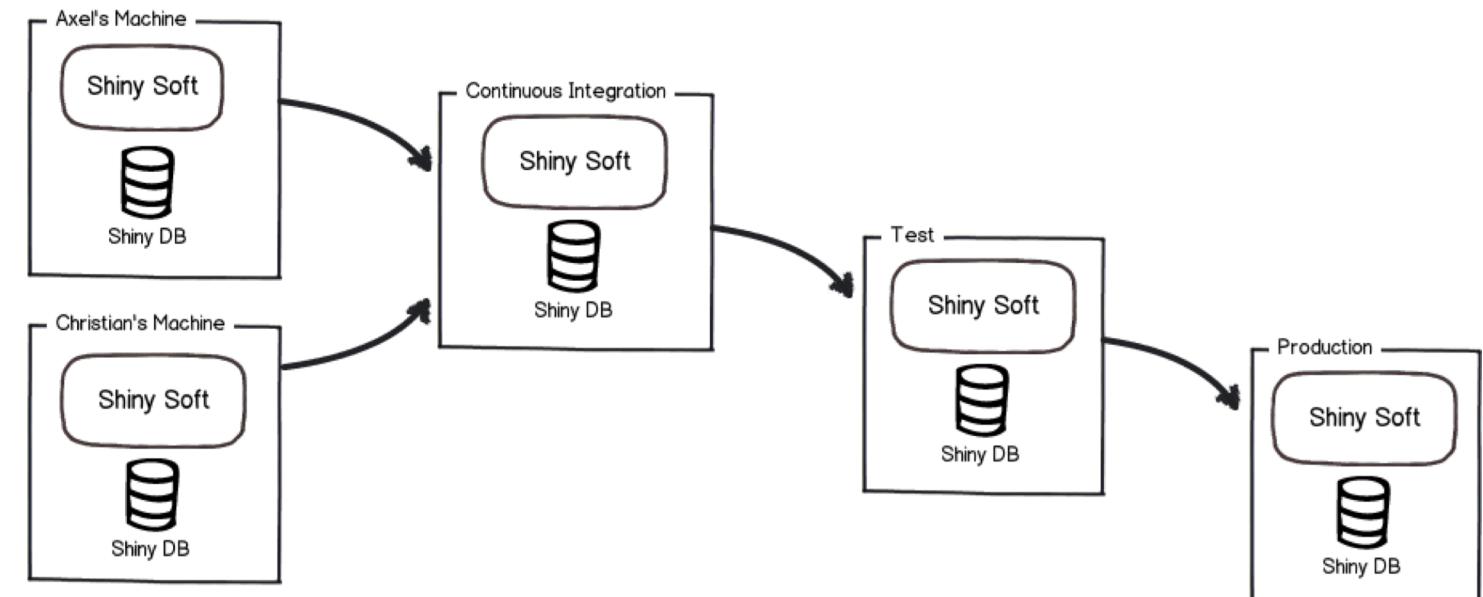
-> Well defined and
reproducible

Version: ?

-> No exact idea about
state

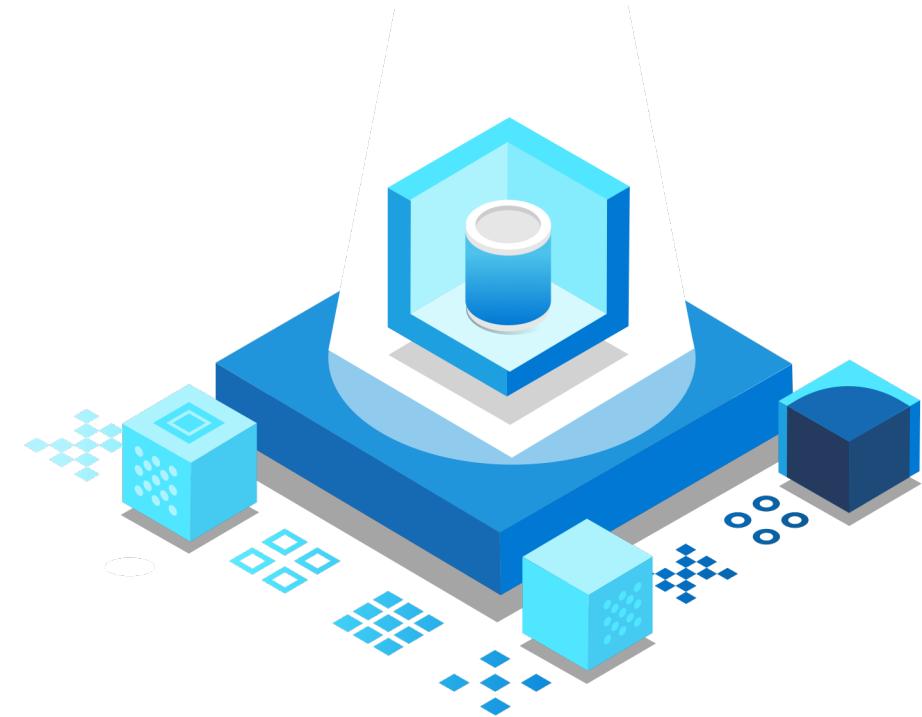


Shiny DB

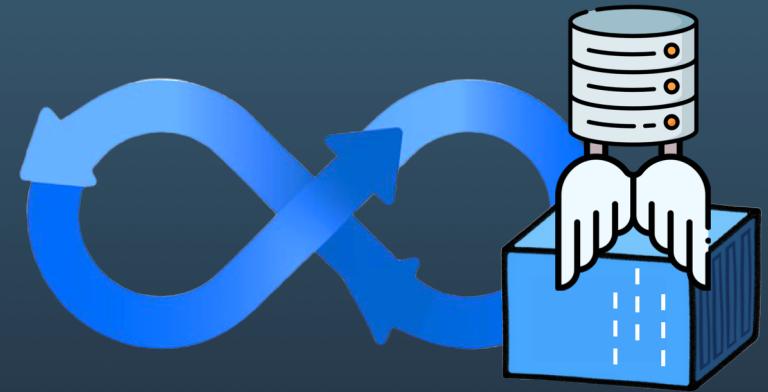


CI/CD BASES DE DATOS?

- Dockerfile
- SH & PoSH scripts
- SQL Script
- psql, sqlcmd, pgAdmin, ADS
- ORM



Enter Flyway



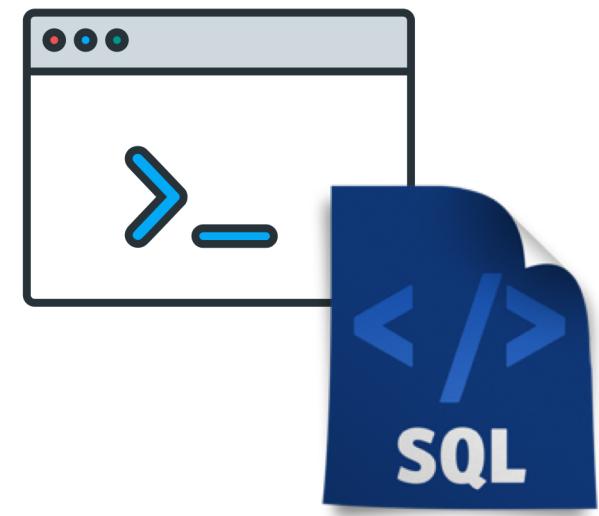
QUE ES FLYWAY?

- Open source
- Multi-platform & DBMS
- Database migrations
- Schema version
- Command line & API



COMANDOS

- Migrate
- Clean
- Info
- Validate
- Baseline
- Repair
- Undo (Pro version)



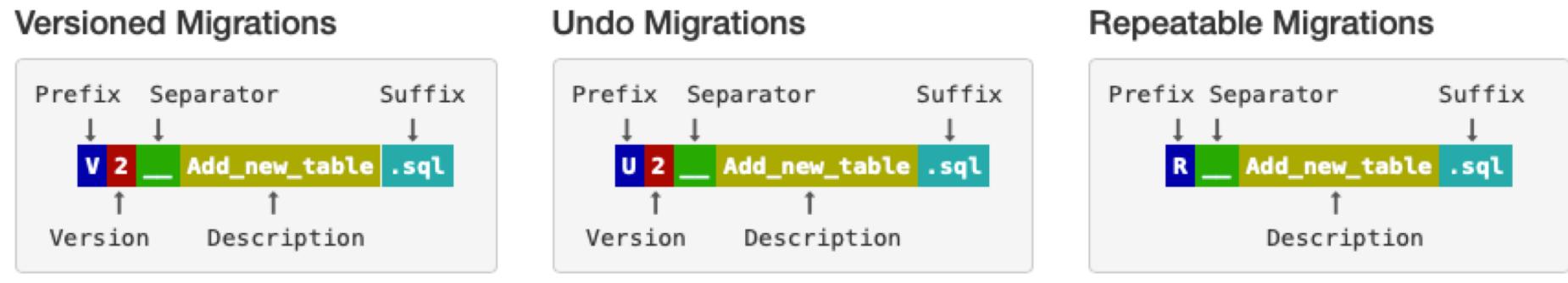
CONFIGURACION

```
flyway-6.4.4
├── conf
│   ├── flyway.conf      ← configuration file
│   ├── drivers          ← JDBC drivers
│   ├── jars              ← Java-based migrations (as jars)
│   ├── jre
│   ├── lib
│   ├── licenses
│   ├── sql              ← SQL migrations
│   ├── flyway           ← macOS/Linux executable
│   └── flyway.cmd       ← Windows executable
```



CONFIGURACION

- flyway.url jdbc:<db>:<host>:<port>
 - flyway.user sa / postgres
 - flyway.password s3cr3Tp@s\$

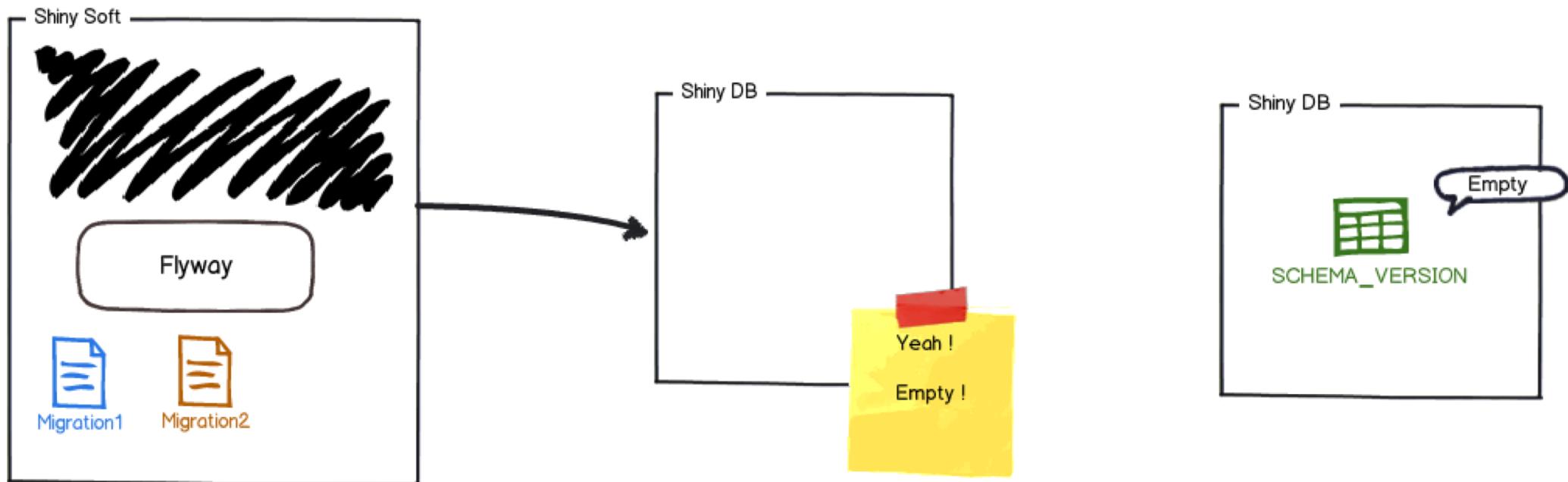


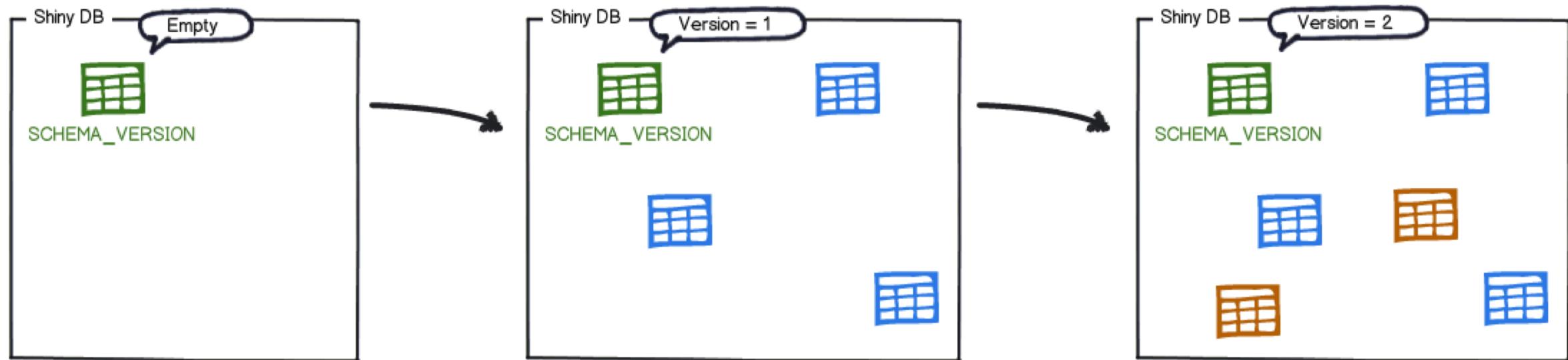
CONFIGURACION

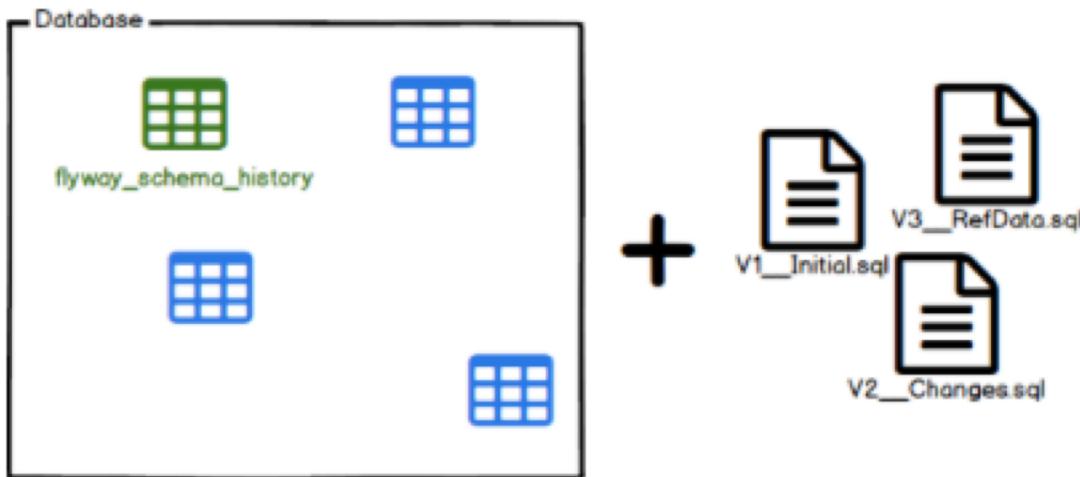
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```



COMO FUNCIONA FLYWAY?







Category	Version	Description	Type	Installed on	State
Versioned	1	Initial	SQL	2017-11-16 10:26:35	SUCCESS
Repeatable		Package	SQL	2017-11-16 10:26:37	SUCCESS
Versioned	2	RefData	JDBC	2017-11-16 10:26:41	PENDING



DEMO

Flyway info, migrate, clean



REVIEW

- Database migrations
- Flyway
- Open source, multi-platform
- Six commands (+1 pro)
- Command-line, SQL, Java, API



Q&A



REFERENCIAS

- Documentación oficial
 - [Docker Docs](#)
 - [Kubernetes Docs](#)
- SQL Server
 - [SQL Server workshops](#)
 - [SQL Server in Docker](#)
- Libros
 - [The Phoenix / Unicorn Project](#)
 - [The DevOps Handbook](#)
 - [Kubernetes: Up and Running](#)
 - [Designing Distributed Systems](#)
 - [Pro SQL Server On Linux by Bob Ward](#)
- Cursos Pluralsight
 - [Getting Started with Docker](#)
 - [Docker Deep Dive](#)
 - [Docker and Kubernetes: The big picture](#)
 - [Kubernetes Installation and Configuration fundamentals](#)
- Cursos Microsoft Learning
 - [Kubernetes Learning Path](#)
 - [SQL Workshops](#)
- Katacoda
 - [Docker](#)
 - [Kubernetes](#)



ARTICULOS Y MAS

- **YouTube**
 - [SQL Containers on Docker & Kubernetes \(English\)](#)
 - [Todo sobre SQL Server Containers en Docker y K8s](#)
 - [Database DevOps con SQL Server](#)
 - [SQL Server containers in Microsoft Azure](#)
- [Redgate - Simple Talk](#)
- [SQL Server Central](#)
- [MSQL Tips](#)



redgate

SQL 
ServerCentral.com


MSSQLTips.com





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Gracias!

