

Deploy an IIS and SQL Application using Docker Compose



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What This Module Covers



Design an IIS and SQL Application

Prepare a SQL Container Image with Dockerfiles

Prepare an IIS Container Image with Dockerfiles

Understand Docker Compose and YAML

Install Docker Compose on Windows Server 2019

Construct a YAML File for Docker Compose

Deploy IIS and SQL Images using Docker
Compose

Build IIS and SQL Images using Docker Compose



If You're
Following
Along

Install IIS Manager onto MYDESKTOP

Install IIS Manager for Remote
Administration onto MYDESKTOP

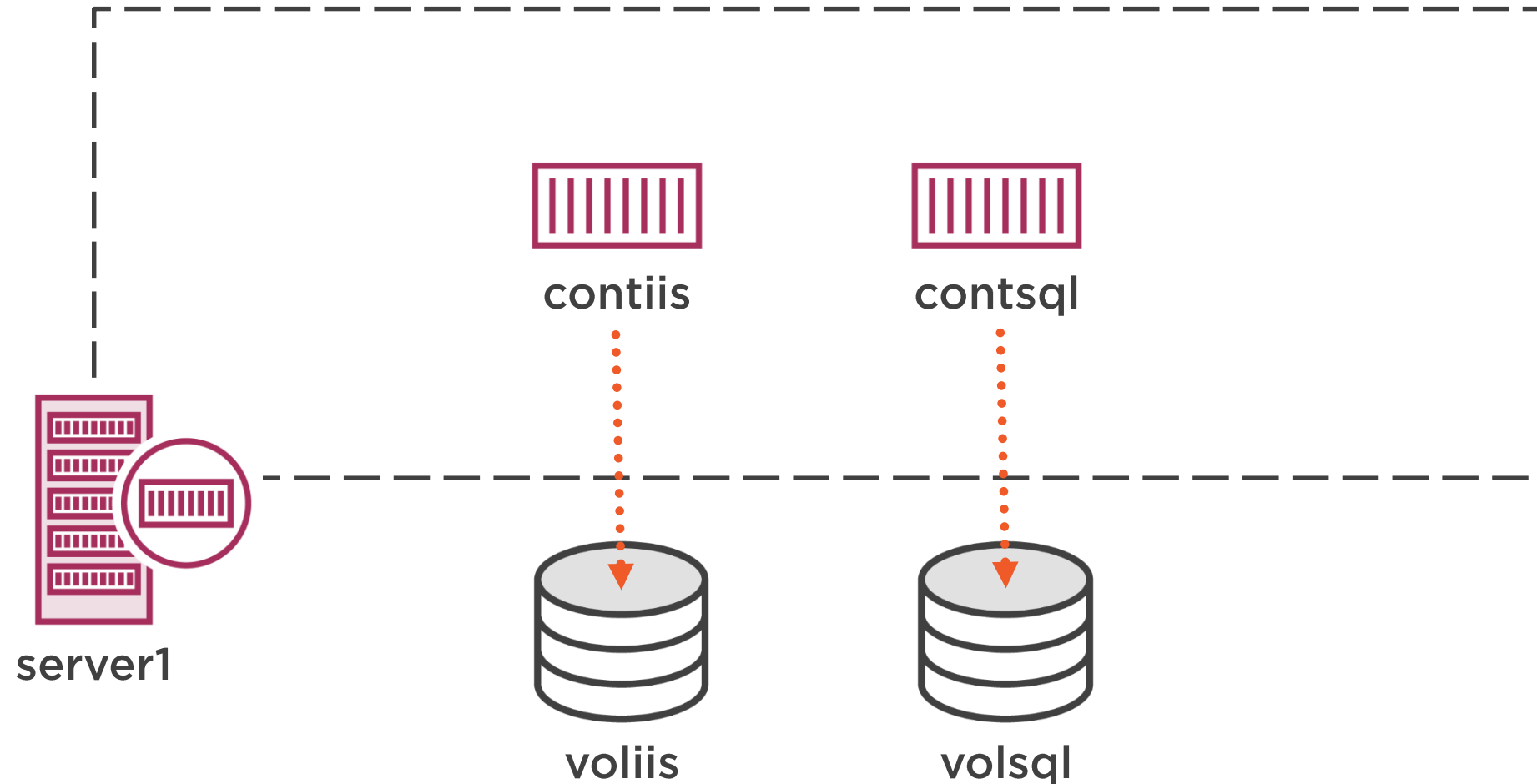
Install SQL Server Management Studio onto
MYDESKTOP

Download and unpack SQL Express 2017
(or later) into a folder

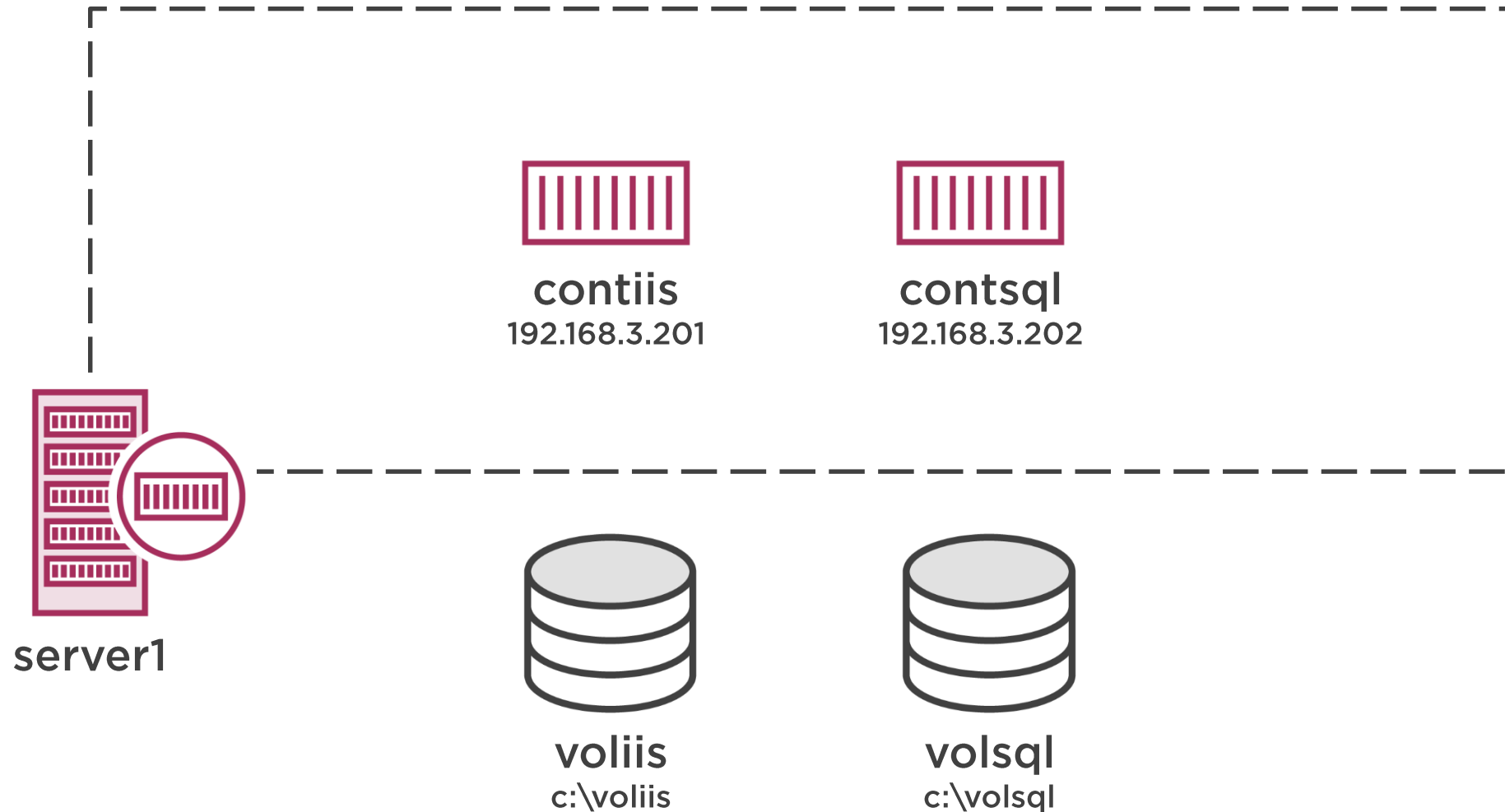
Copy “DonutShop” app content from
course exercise files



Design an IIS and SQL Application



Design an IIS and SQL Application



Prepare a SQL Container Image with Dockerfiles, Part 1



```
C:\SOURCE\SQLEXPR_x64_ENU\SETUP.exe /Q /ACTION=INSTALL  
/FEATURES=SQLENGINE /INSTANCENAME=MSSQLSERVER  
/SECURITYMODE=SQL /SAPWD='P@ssword!' /SQLSVCACCOUNT='NT  
AUTHORITY\System' /AGTSVCACCOUNT='NT AUTHORITY\System'  
/SQLSYSADMINACCOUNTS='BUILTIN\Administrators'  
/IACCEPTSQLSERVERLICENSETERMS=1 /TCPENABLED=1  
/UPDATEENABLED=False
```

Prepare a SQL Container Image with
Dockerfiles, Part 1



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Prepare a SQL Container Image with Dockerfiles, Part 1



Prepare a SQL Container Image with Dockerfiles, Part 2



```
Invoke-Sqlcmd -Query """CREATE DATABASE MyApp ON  
(FILENAME='C:\volsql\myapp.mdf'),  
(FILENAME='C:\volsql\myapp_log.ldf') FOR ATTACH;""" ;`  
  
Invoke-Sqlcmd -Query """USE MyApp; EXEC sp_change_users_login  
'Auto_Fix', 'myappdbuser', NULL, 'P@ssword!';""" ;`
```

Prepare a SQL Container Image with Dockerfiles, Part 2



```
Invoke-Sqlcmd -Query """CREATE DATABASE MyApp ON  
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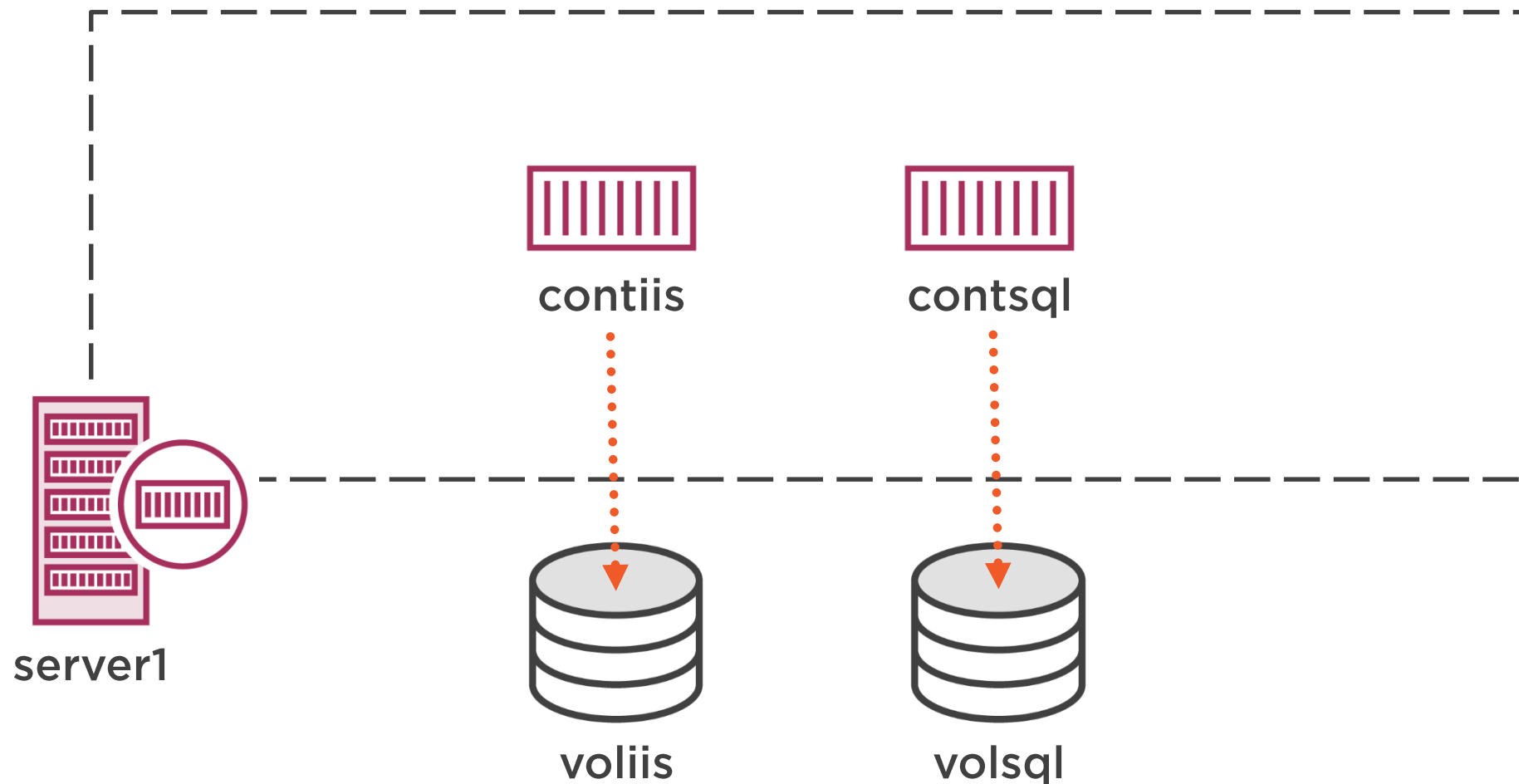
Prepare a SQL Container Image with Dockerfiles, Part 2



Understand Docker Compose and YAML



Understand Docker Compose and YAML



Understand Docker Compose and YAML



contiis



contsql



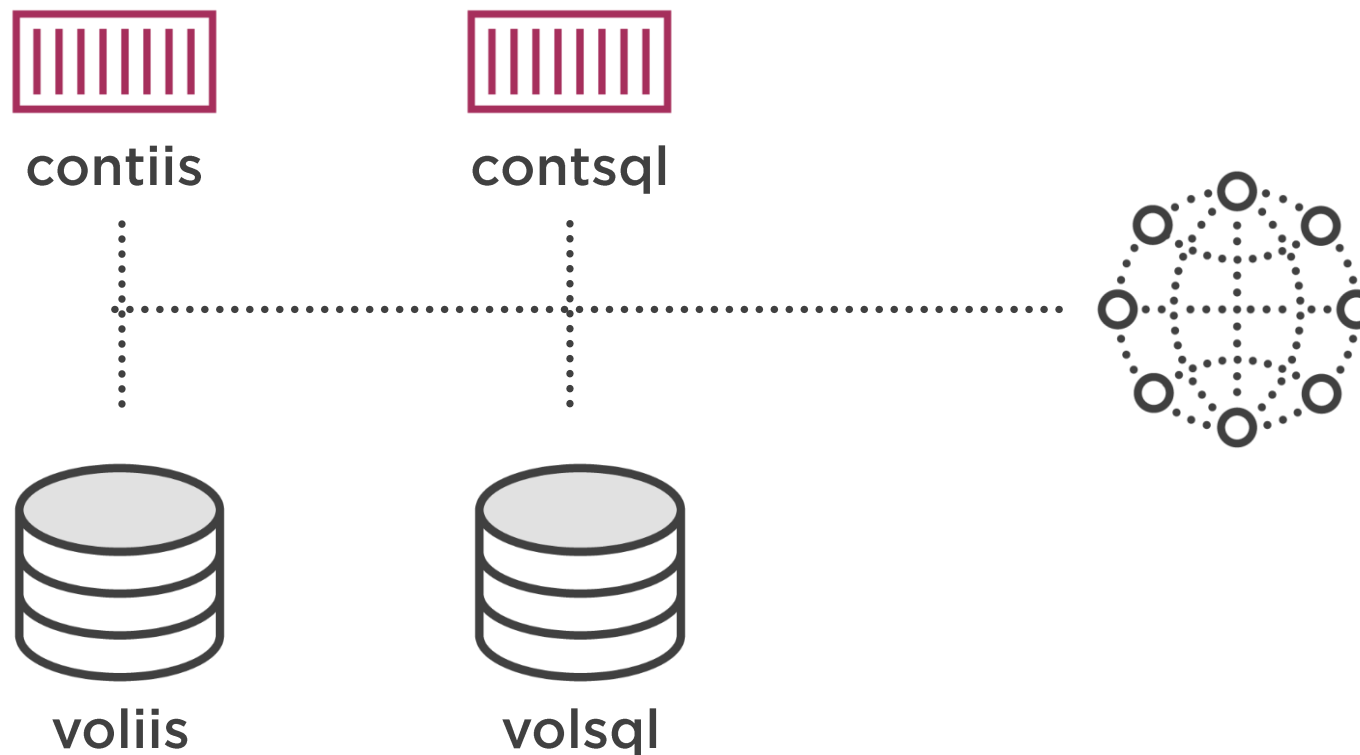
voliis



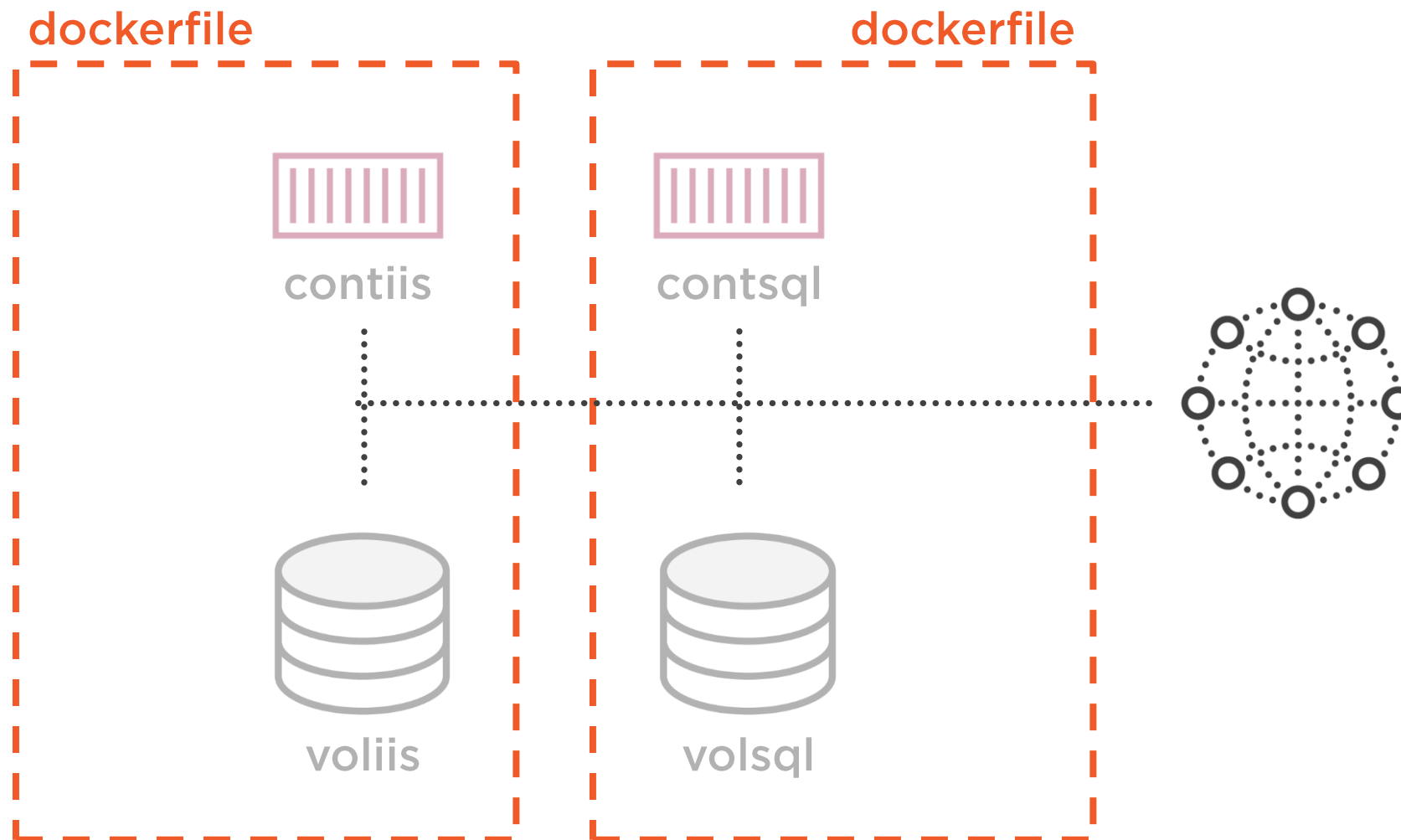
volsql



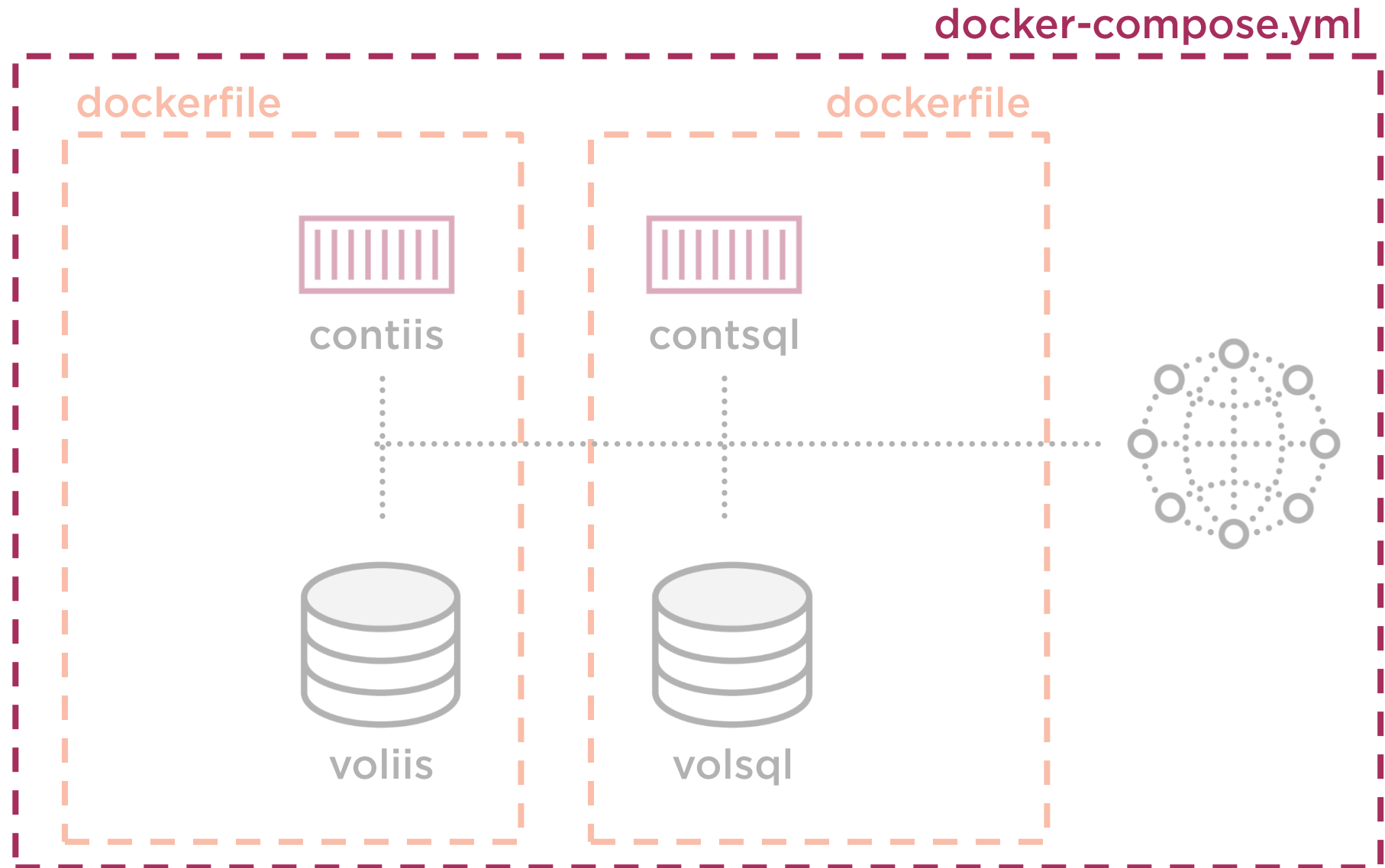
Understand Docker Compose and YAML



Understand Docker Compose and YAML



Understand Docker Compose and YAML



```
[Net.ServicePointManager]::SecurityProtocol =  
[Net.SecurityProtocolType]::Tls12
```

```
Invoke-WebRequest
```

```
"https://github.com/docker/compose/releases/download/1.24.1/  
docker-compose-Windows-x86_64.exe" -UseBasicParsing -OutFile  
$Env:ProgramFiles\Docker\docker-compose.exe
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Install Docker Compose on Windows Server 2019




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Install Docker Compose on Windows Server 2019



Deploy IIS and SQL Images using Docker Compose



Deploy IIS and SQL Images using Docker Compose

docker-compose up -d

docker-compose down

docker-compose build

docker-compose pause

docker-compose unpause

docker-compose images



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Implementing Docker for Windows Containers in Windows Server 2019

THIS HAS BEEN



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