Zero to Hero in 16 Hours: HADR on SQL Server

DB
BITS

SOLUÇÕES
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Module 0: Introduction

What will we learn and goals
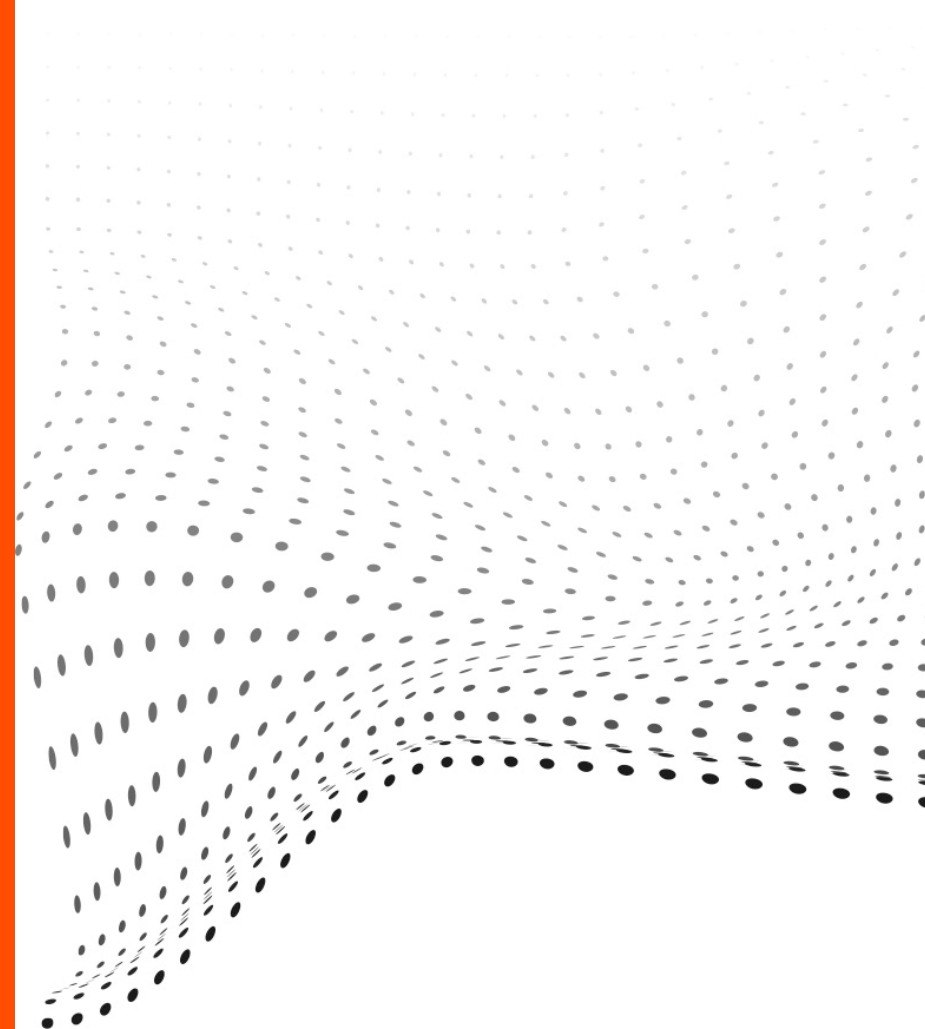
Meet your High Availability instructor

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Sp_helpDBA

Marcelo is a Principal Database Consultant at The Pythian Group and an MS Data Platform instructor.
He is currently a Microsoft MVP and holds the MCSE, MCT and MCSA Microsoft Certifications and also the Oracle OCP.

- https://linktr.ee/marceloadade
- PASS (ex) User Group SQLMANIACS co-leader http://www.sqlmaniacs.com.br
- Blogger at DBBITS www.dbbits.com.br
- www.pythian.com

GOALS

By the end of this course, you should be able to:

Create a **Log shipping** environment;

Create a **Database Mirroring** Environment;

Create an AO **Failover Cluster Instance** with 2 nodes;

Create an AO **Availability Group** with 2 and 3 nodes.

Extra:

Create an AO **Failover Cluster Instance** with 3 or 4 nodes across different subnets;

Create a **Distributed Availability Group.**

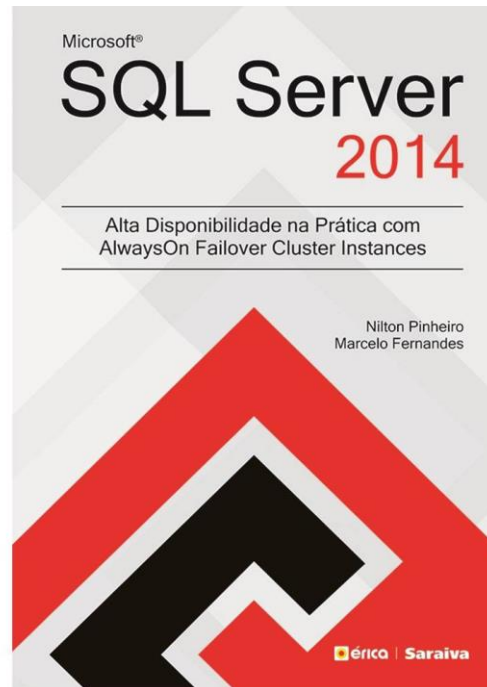Remember to enable the Virtual environment!

Contents

- **Intro to HADR**

- **Log, Backup and Restore**

- **Log Shipping**

- **Windows Cluster**

- **Always On Failover Cluster Instances**

- **Always On Availability Groups**

Resources and references

Book: Microsoft SQL SERVER 2014: Alta Disponibilidade na prática com Failover Cluster Instances – Nilton Pinheiro e Marcelo Fernandes;
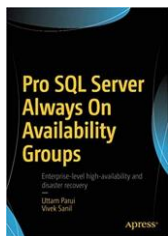
Resources and references

- Book: SQL SERVER Always On Revealed – Peter A. Carter

- Book: Pro SQL Server Always On Availability Groups – Uttam Parui

Prerequisites

- Basic SQL SERVER administration

- Basic SQL SERVER querying

- Basic infrastructure knowledge: Storage, Network, Operating System, Server architecture
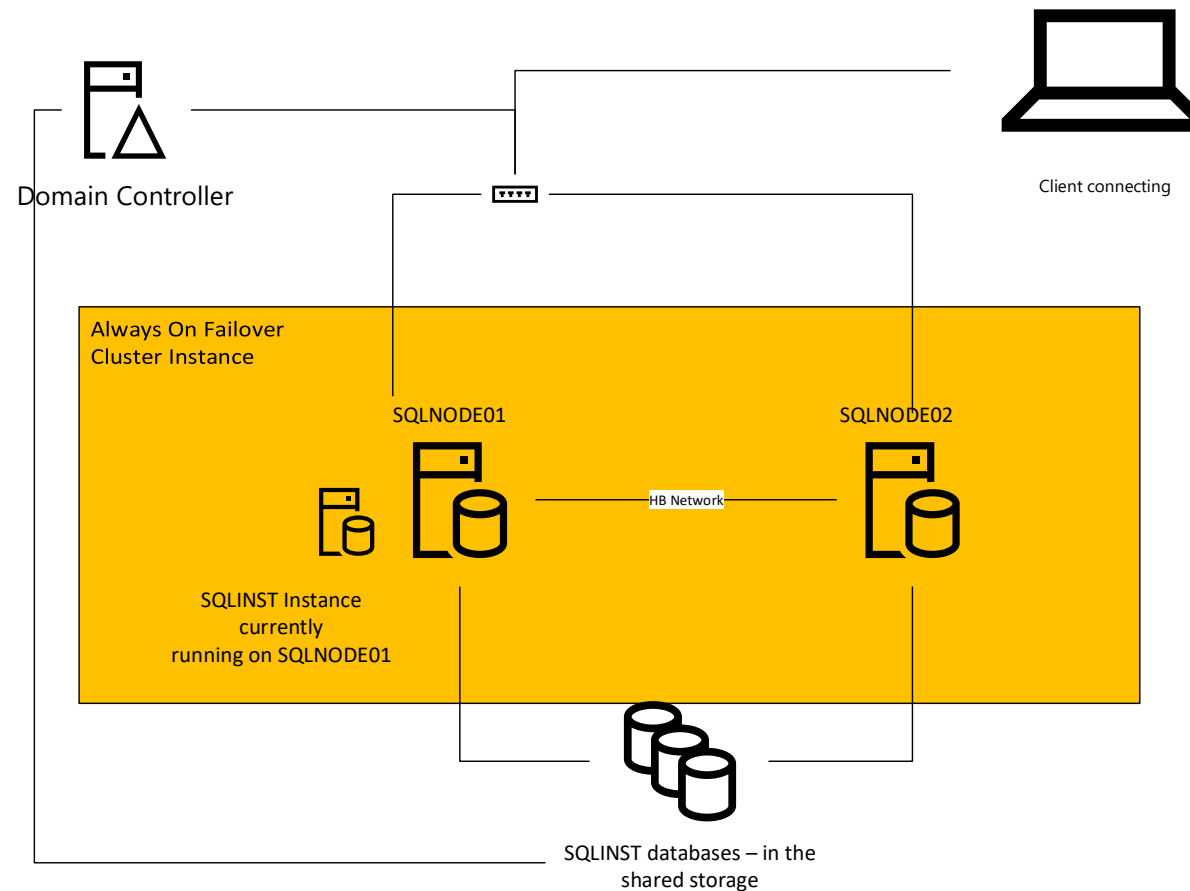
Prerequisites - optional

- Windows 10 (or Server) or equivalent with Hyper-V feature enabled;

- 16 GB of RAM;

- SSD disk with at least 200 GB of free space;

- Windows Server 2019 Evaluation edition: https://www.microsoft.com/en-us/evalcenter/evaluate-windows-server-20169

- SQL SERVER 2019 Evaluation edition: https://www.microsoft.com/en-us/evalcenter/evaluate-sql-server-2019-rtm

  - AdventureWorks database

  - AdventureWorks enlarging scripts

How our Virtual environment will look like

Failover Cluster instance

Domain Controller

Client connecting

Always On Failover Cluster Instance

SQLNODE01

SQLNODE02

HB Network

SQLINST Instance currently running on SQLNODE01

SQLINST databases – in the shared storage

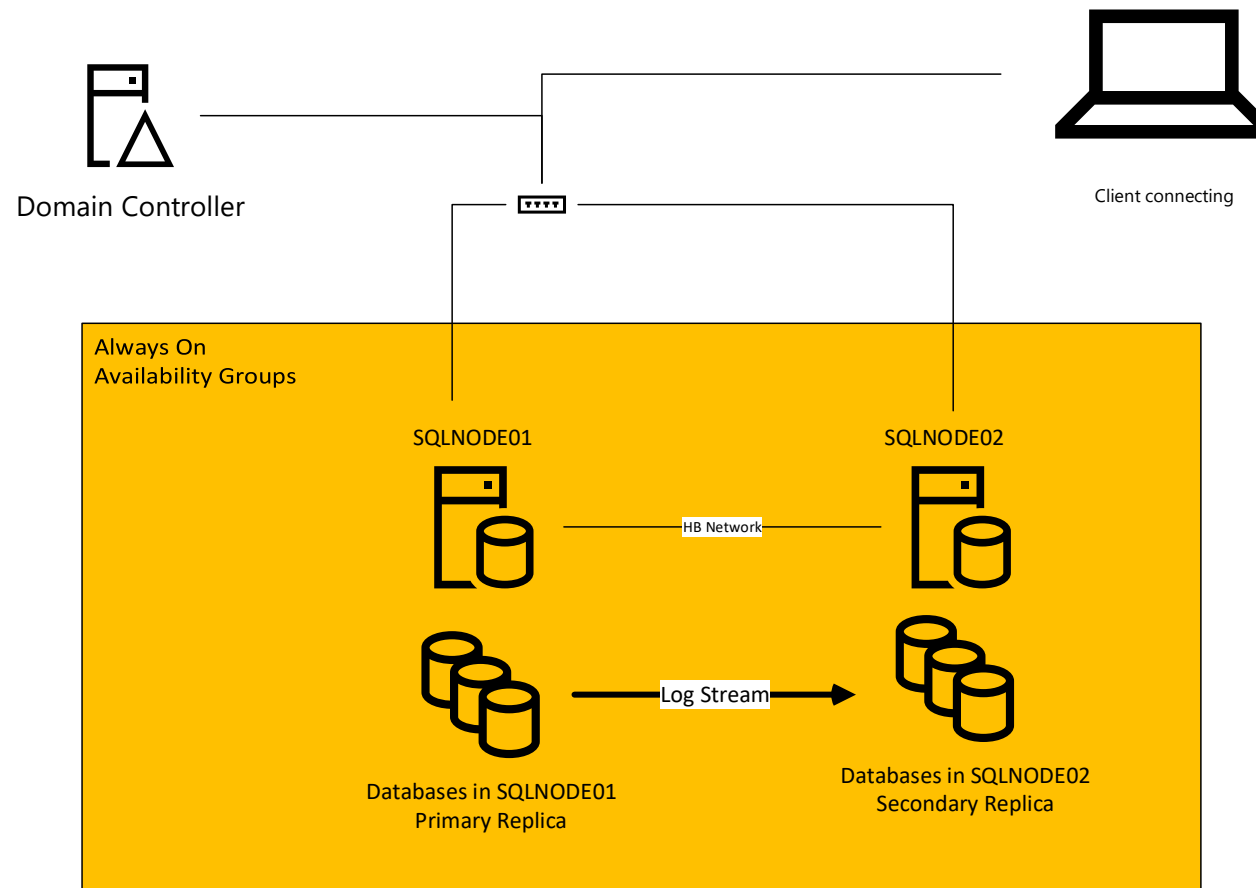# How our Virtual environment will look like

Always On Availability Group

Fim do módulo