



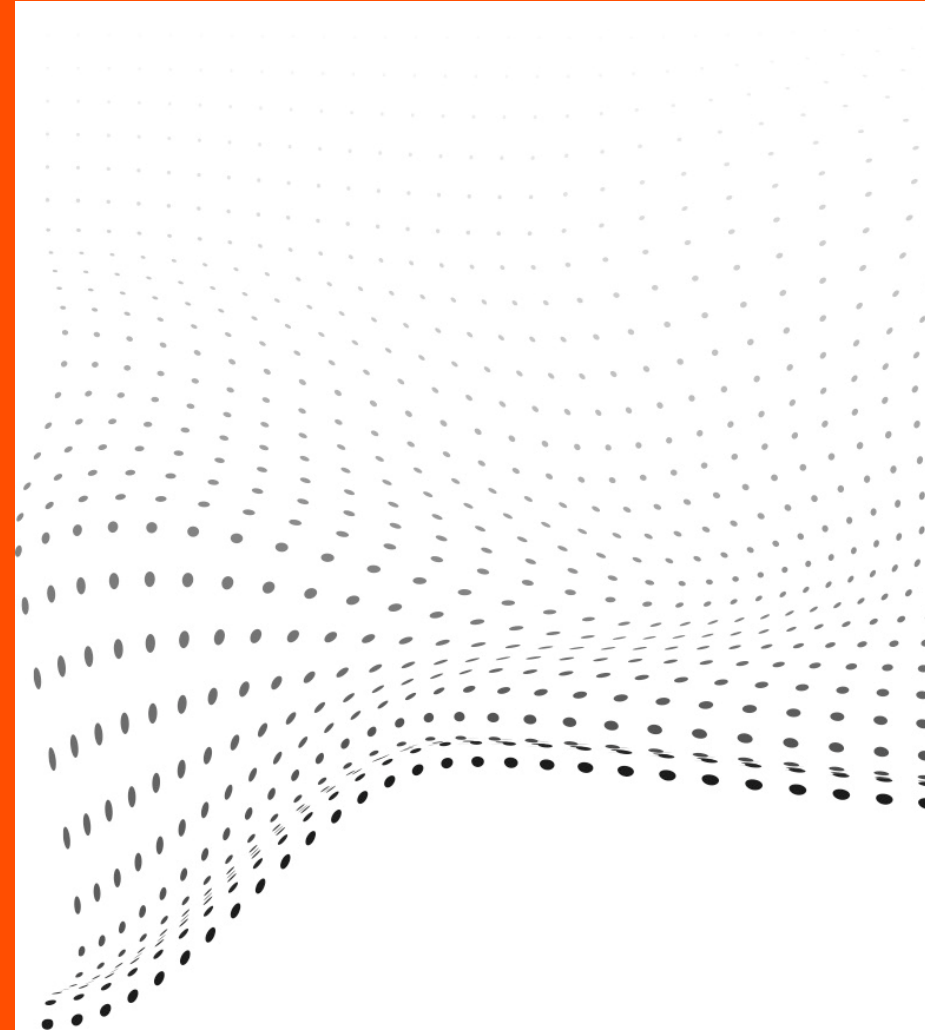
SOLUÇÕES  
EM GERENCIAMENTO  
DE DADOS

# Zero to Hero in 16 Hours: HADR on SQL Server



# Module 3: Log Shipping

Automating Backup and Restore

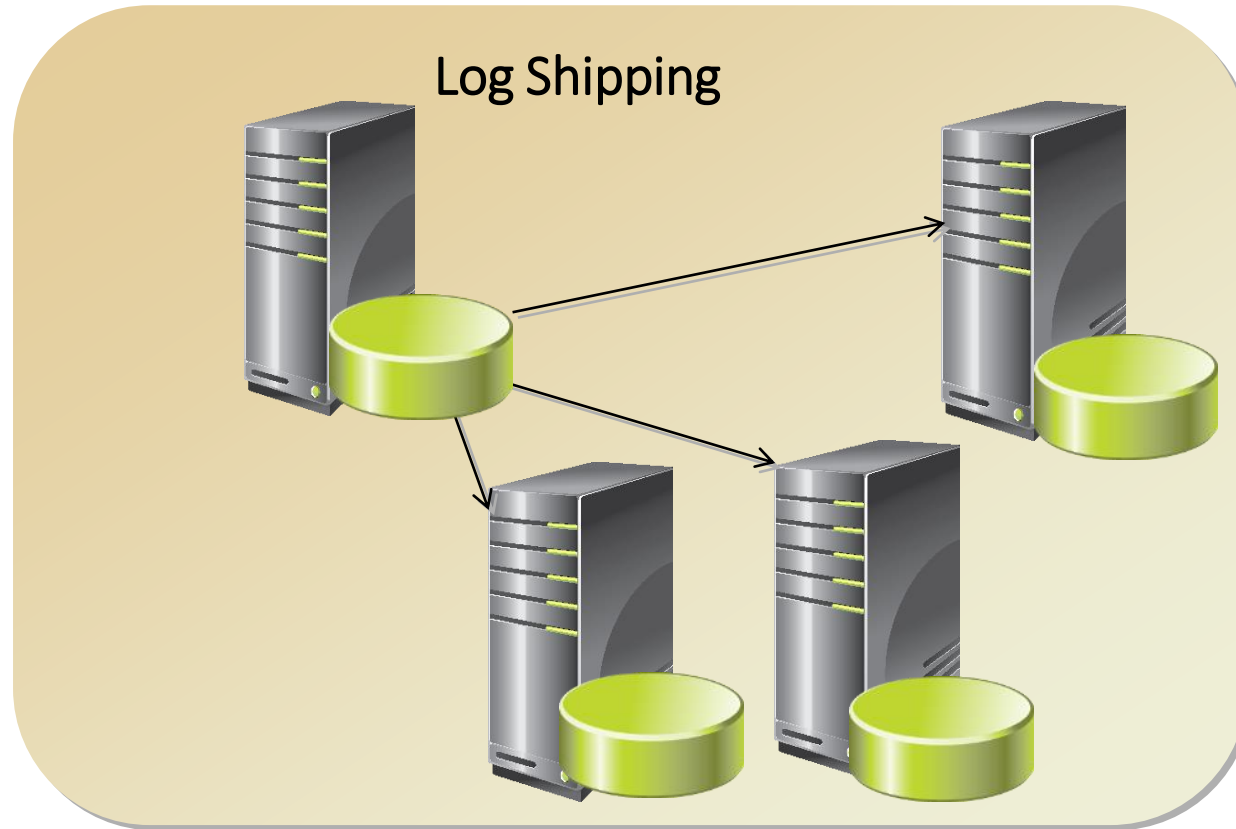


# Goals

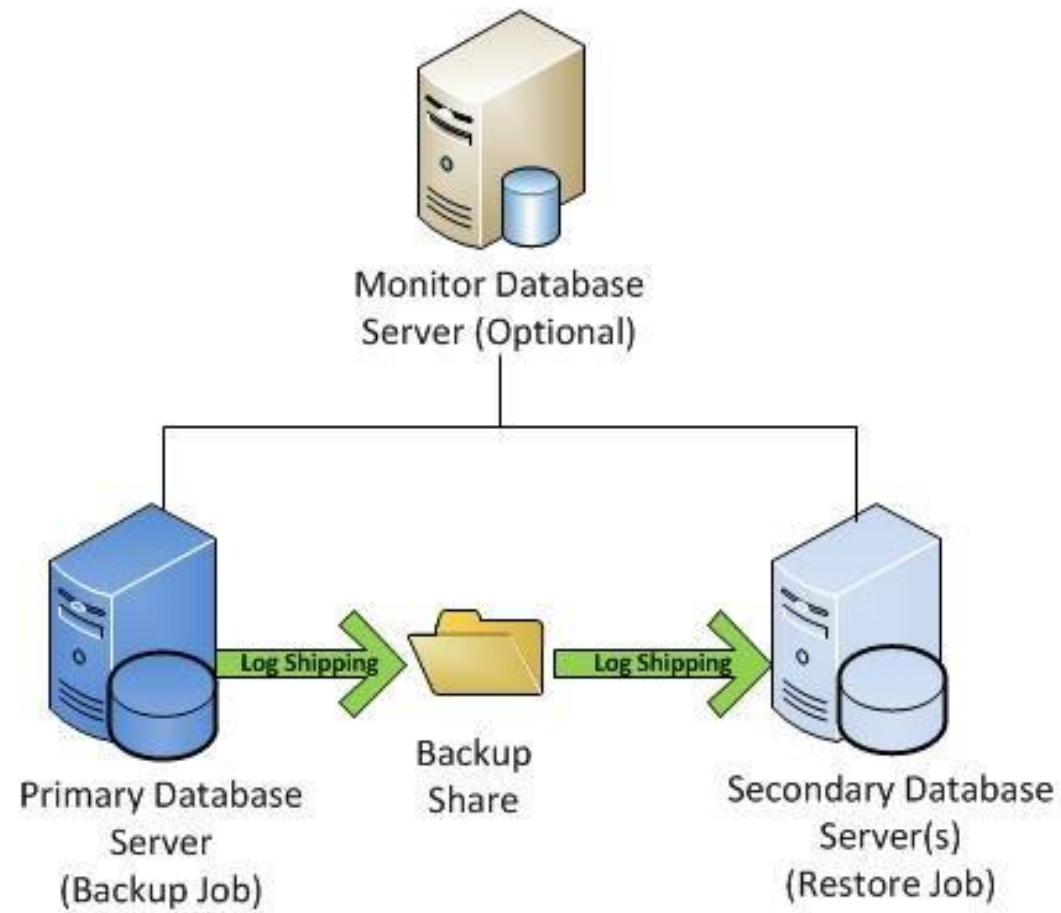


- Understand Log Shipping
- Maintain L. S.

# Log Shipping



# Log Shipping



# Log Shipping



## Benefits:

- Provides a disaster-recovery solution for a single primary database and one or more secondary databases, each on a separate instance of SQL Server.
- Supports limited read-only access to secondary databases (during the interval between restore jobs).
- Allows a user-specified delay between when the primary server backs up the log of the primary database and when the secondary servers must restore (apply) the log backup. A longer delay can be useful, for example, if data is accidentally changed on the primary database. If the accidental change is noticed quickly, a delay can let you retrieve still unchanged data from a secondary database before the change is reflected there.

# Log Shipping



## **Disadvantages:**

- Administrative overhead
- Easy to get lost due to human error
- Lack of control
- Many external factors can affect its functionality

# Log Shipping – resourcing

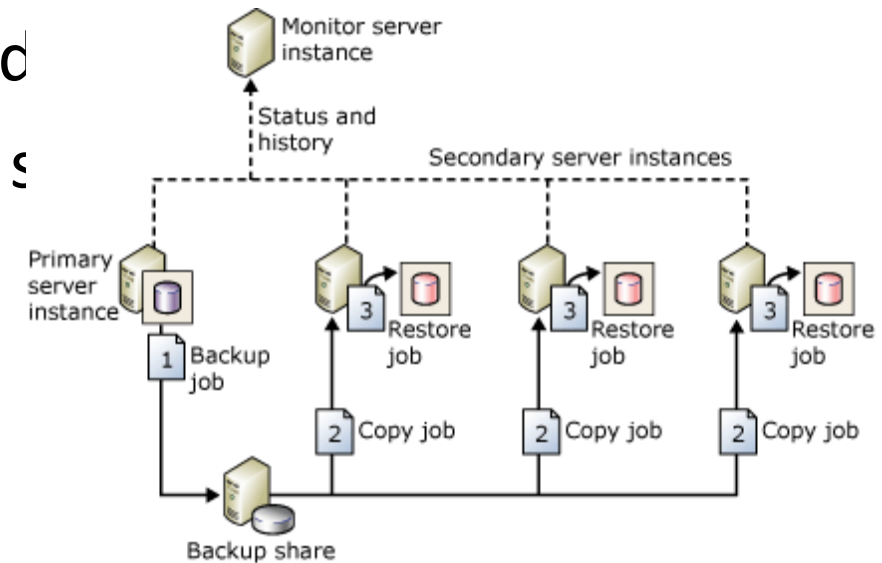
- Primary Server
- Primary database
- Secondary Server
- Secondary database
- Monitor Server
- Backup job
- Copy job
- Restore job
- Alert job





# Log Shipping at its prime!

1. Backup the transaction log – Primary Instance
2. Copy the transaction log file to the secondary
3. Restore the log backup on the secondary s

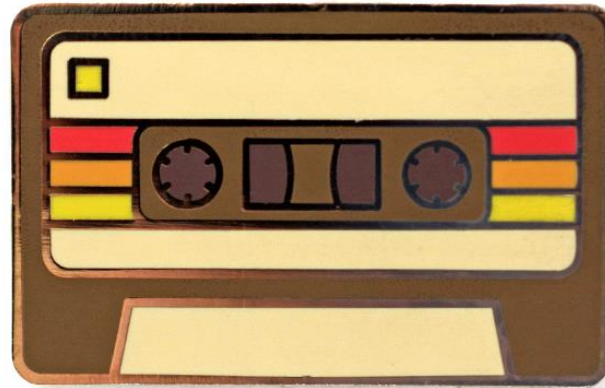


# Log Shipping prerequisites



- Recovery model: FULL or Bulk-logged
- File share accessible by all Instances

# Maintaining Log Shipping



# Failing over



- Planned failover
- Unplanned ☹️
- Backup the tail of the log on the Primary... WITH NORECOVERY

(as seen in <https://blogdojamal.wordpress.com/2019/08/22/failover-com-log-shipping/>)



# Upgrade scenario



- We can establish a Log Shipping between an older version and a newer one.

# To know more...



<https://docs.microsoft.com/en-us/sql/database-engine/log-shipping/log-shipping-tables-and-stored-procedures>

**Fim do módulo**

