

# FIRST POSTGRESQL MEETUP IN GENEVA

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POSTGRESQL USER GROUP GENÈVE

# FIRST POSTGRESQL MEETUP IN GENEVA

- Leatitia Avrot (Loxodata) : "PostgreSQL pour les débutants"
- Vik Fearing (2ndQuadrant) : "Periods et les tables versionnées"
- Cédric Villemain (2ndQuadrant) : " Fluidifier ses transferts de données avec PostgreSQL"
- Fabrice Chapuis : Banque Lombard Odier : "Disponibilité de service avec PostgreSQL"

# DISPONIBILITÉ DE SERVICE AVEC POSTGRESQL

- Contexte:
  - 2 datacenter
  - VMware
  - Linux (redhat 7)
  - DB PostgreSQL
  - Serveur de backup

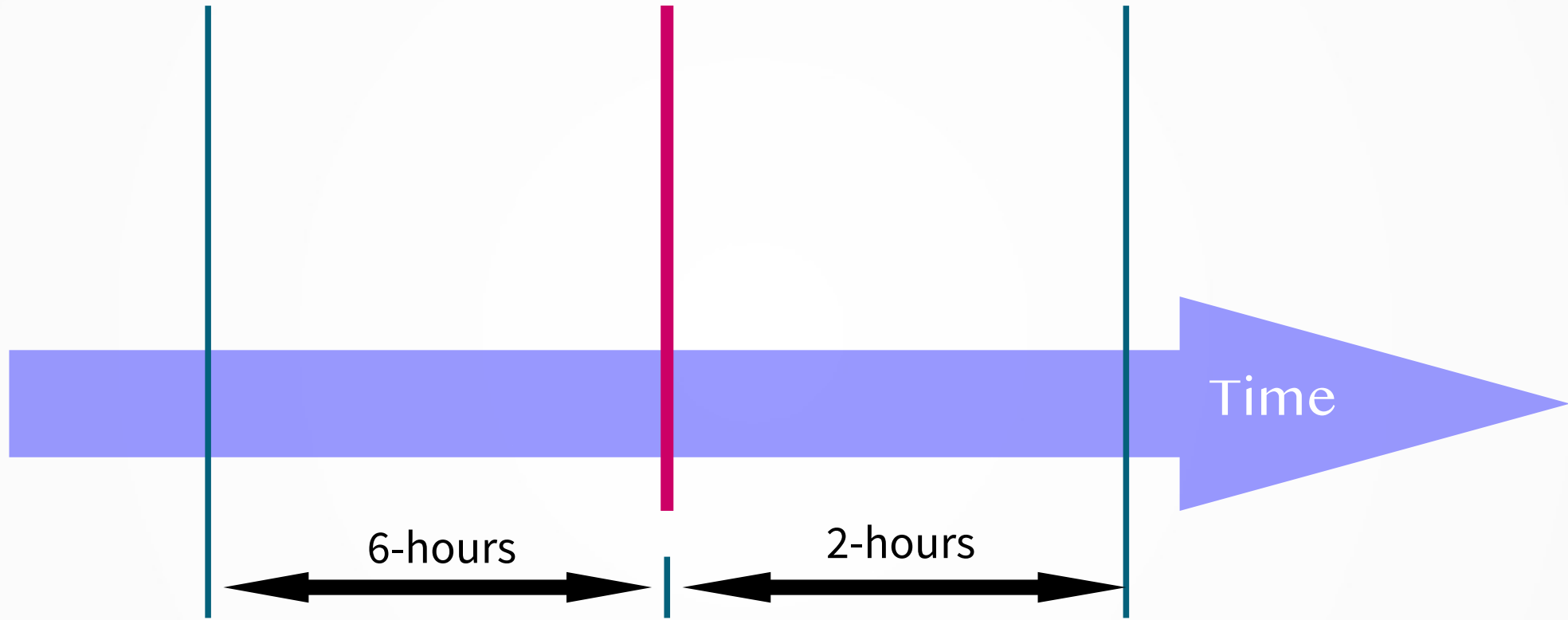
# DISPONIBILITÉ DE SERVICE AVEC POSTGRESQL

- Outage
  - Host failure (ESX)
  - OS corruption (virtual disk removed)
  - Database crash
  - Physical corruption (filesystem failure)
  - Logical corruption
  - Major outage (DRP)
- Maintenance
  - Database software patch

Last backup or point  
where data is in a  
usable state

**Outage**

Services  
restored



Recovery Point  
Objective (RPO)

Recovery Time  
Objective (RTO)

# DISPONIBILITÉ DE SERVICE AVEC POSTGRESQL

- Basic
  - 1 VM with synchronous replication at storage level via VMware
- Replication
  - 2 VM with software replication (primary / standby)
- Cluster
  - 2 VM in HA mode (cluster with automatic recovery)

	Host failure (ESX)	OS corruption	Database crash	Physical corruption	Logical corruption	Database software patch	BCP
<b>1 VM with hardware replication</b>	vm automatically reboot on another host RTO=10' RPO=0	DB restore RTO=2h RPO max 24h	nstance recovery RTO=1h RPO=0	DB restore RPO max 24h RTO = 2h	DB restore PITR RTO=2h RPO=0	Requires planning of a service outage RTO=? RPO=0	VM is manually restarted on disaster recovery site RPO=0 RTO=?
<b>2 VM with software replication</b>	vm automatically reboot on another host RTO=10' RPO=0	Manual activation of the standby database RTO = 1h RPO=0	nstance recovery RTO=1h RPO=0	Manual activation of the standby database RTO = 1h RPO=0	DB restore PITR RTO=2h RPO=0	Manually switch the application on the standby database RTO=0 RPO=0	Manual activation of the standby database RTO = 1h RPO=0
<b>2 VM in HA mode</b>	Automatic activation of the standby database RPO = 0 RTO = 5'	Automatic activation of the standby database RPO = 0 RTO = 5'	Automatic activation of the standby database RPO = 0 RTO = 5'	Automatic activation of the standby database RPO = 0 RTO = 5'	DB restore PITR RTO=2h RPO=0	Automatic switch of the application RTO=0 RPO=0	Automatic activation of the standby database RPO = 0 RTO = 5'

# DISPONIBILITÉ DE SERVICE AVEC POSTGRESQL

- Merci de votre attention
- Questions ?



