



# OTM Nordic Tour

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Multitenant i Oracle 12.2

“Always on, never stop”

**ORACLE**

# Safe Harbor Statement

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# Oracle Multitenant: What's new in 12.2

## Ease of Provisioning and Tenant Mobility

Hot Clone

Refresh Clone

PDB Relocate

## Isolation with Economies of Scale

4k PDBs

Memory & IO  
Resource Mgt

Lockdown Profiles

## Centralized Management of Application Tenants

Application Root

Application Container

Proxy PDB

Container Map

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# Demos

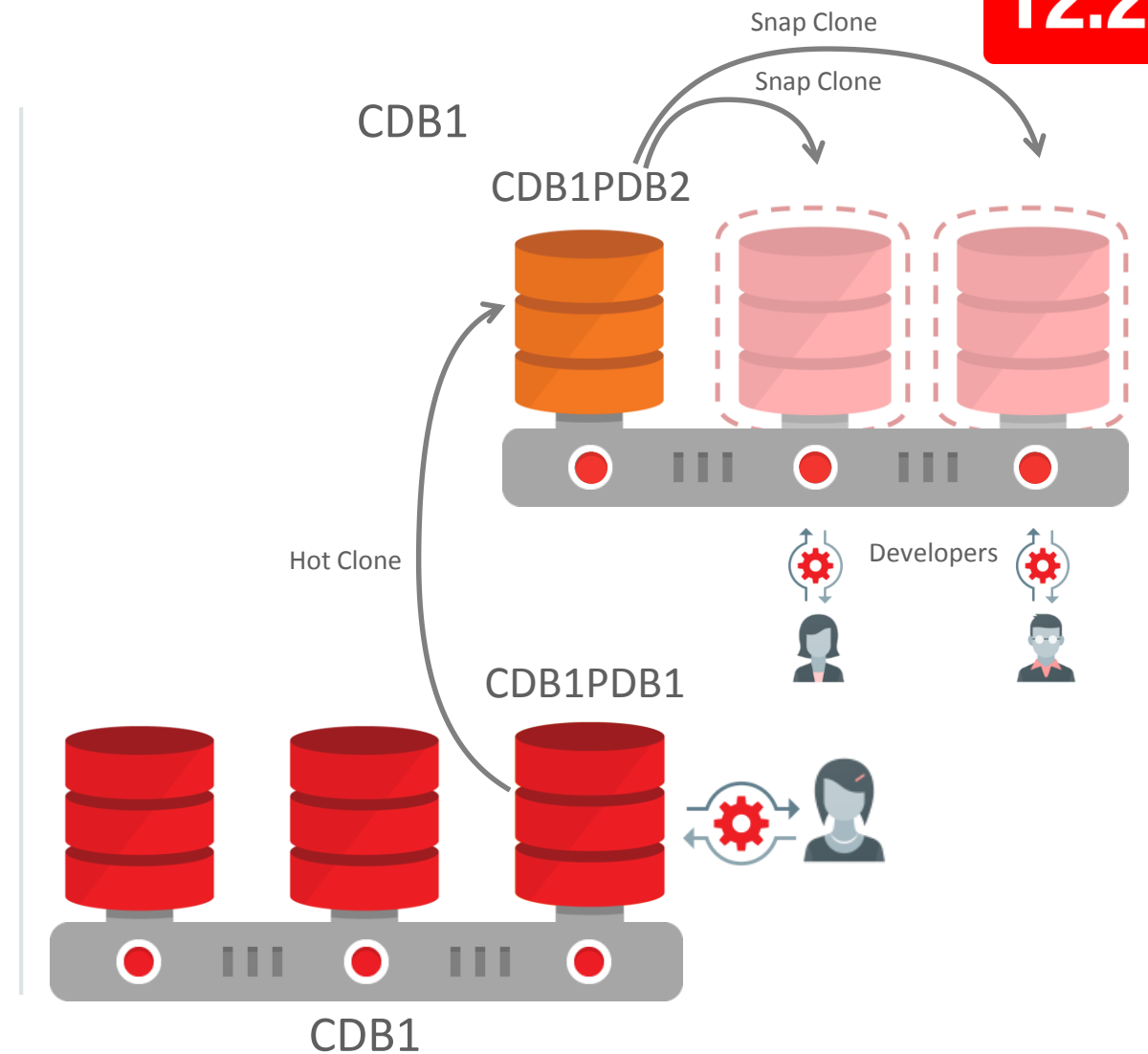
## Multitenant in Oracle DB 12.2

- Demo 1
  - Cloning when Source in Read/Write mode
- Demo 2
  - Create a Refreshable clone
- Demo 3
  - Relocate PDB

# PDB Hot Clone

- PDB Hot Clone
  - Online test master instantiation

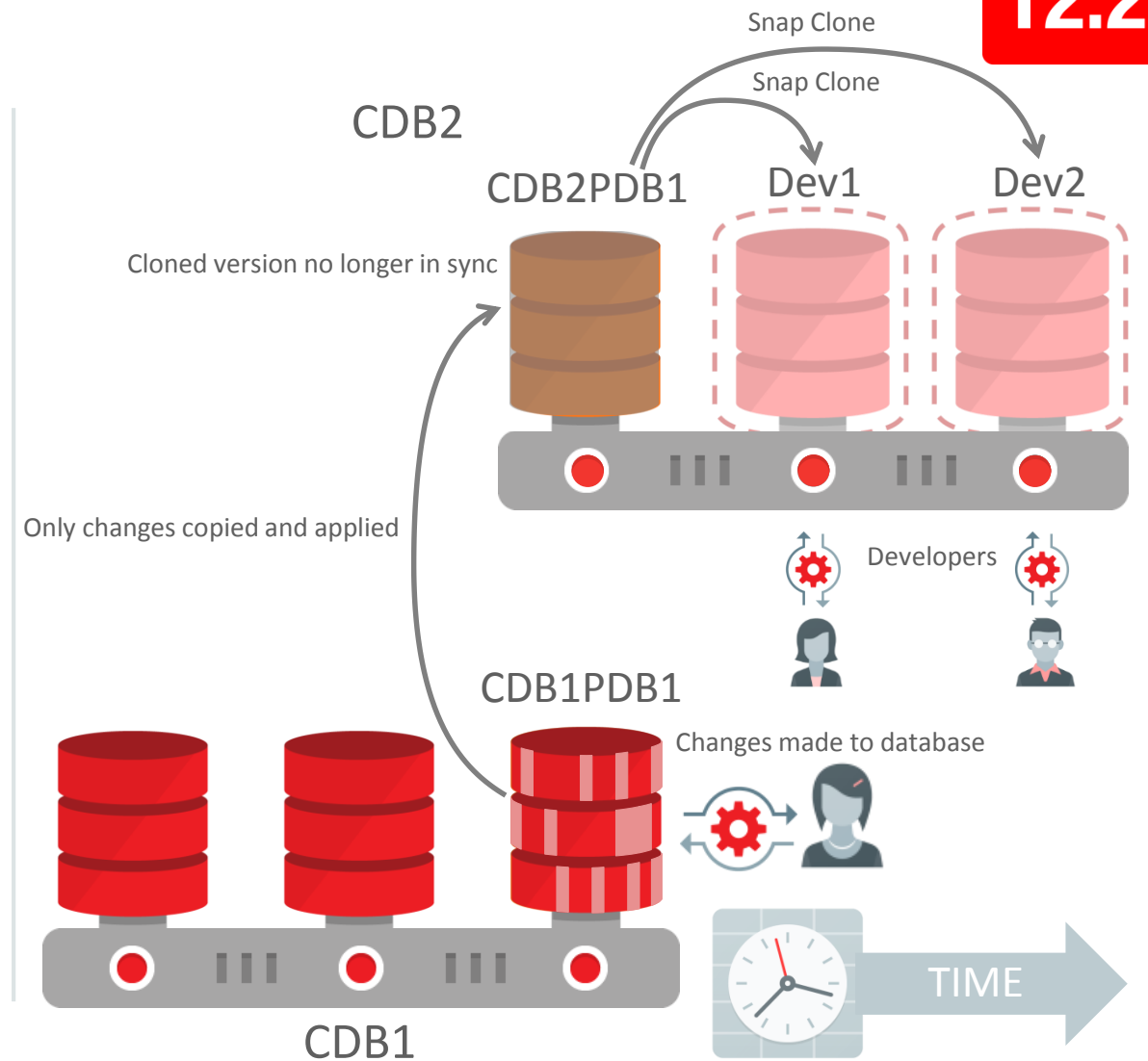
NEW IN  
12.2



# PDB Refresh

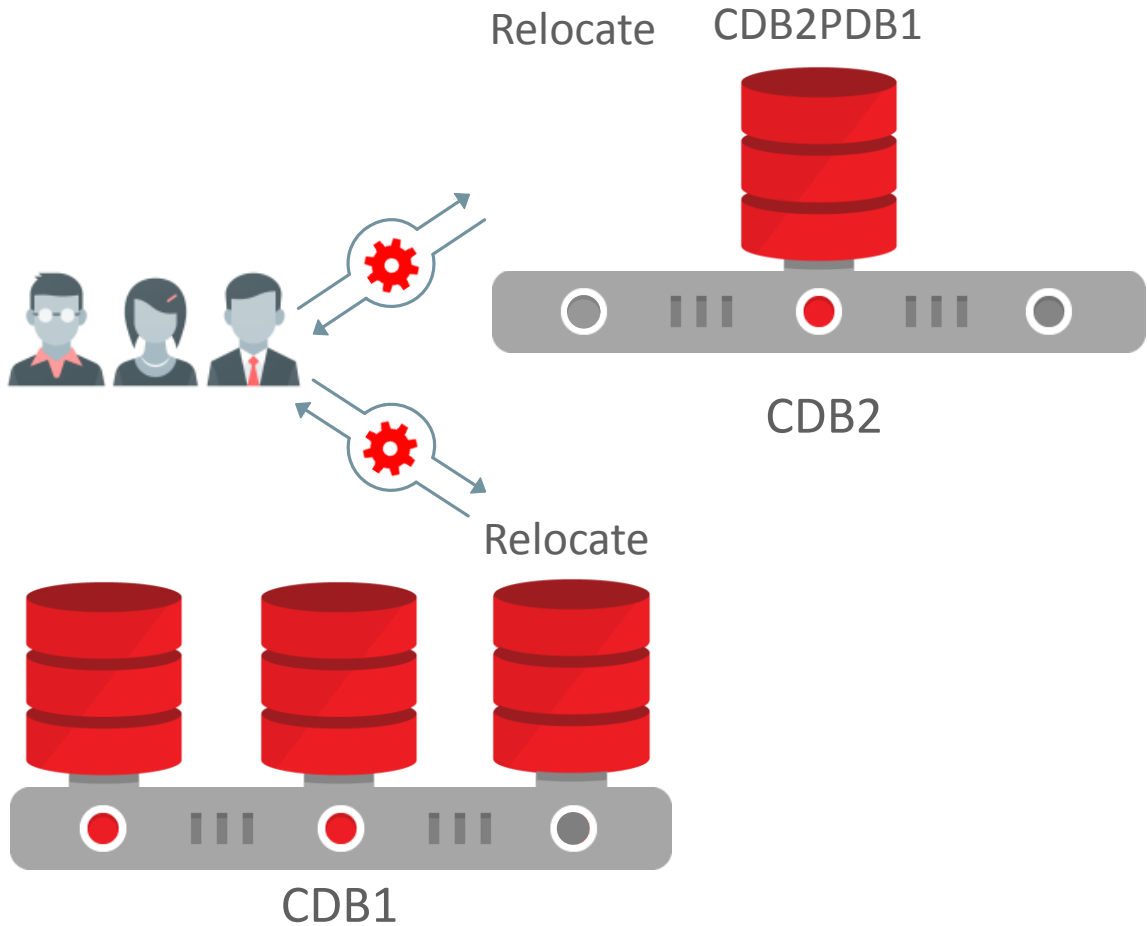
- PDB Hot Clone
  - Online test master instantiation
- PDB Refresh
  - Incremental refresh of clone with latest data

NEW IN  
12.2



# PDB Relocate

- PDB Hot Clone
  - Online test master instantiation
- PDB Refresh
  - Incremental refresh of clone with latest data
- PDB Relocate
  - Relocate with no downtime

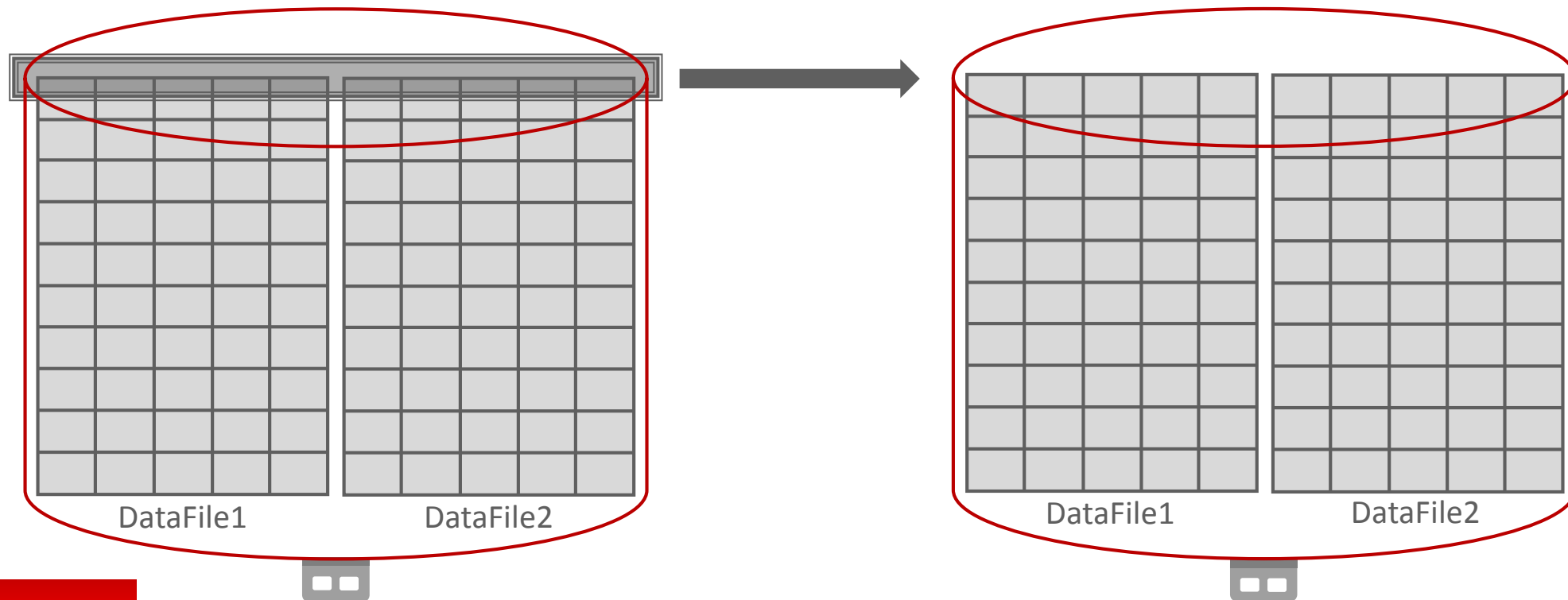




# Cold Clone

## 12.1 capability requires outage in source PDB

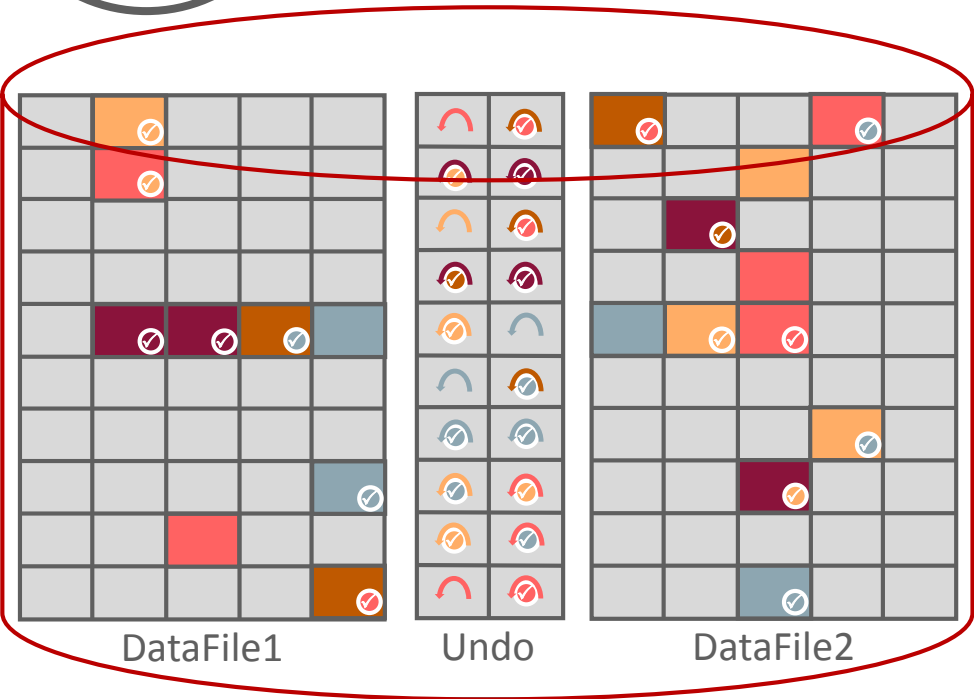
- Source PDB transitions to read-only
- Read and copy in parallel
- Open source database read-write when complete



# Modeling Database Changes Over Time

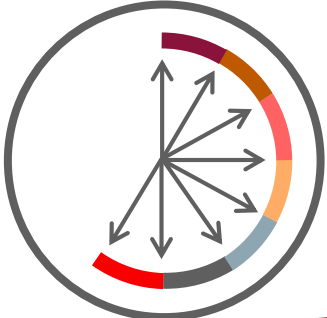


Redo Log



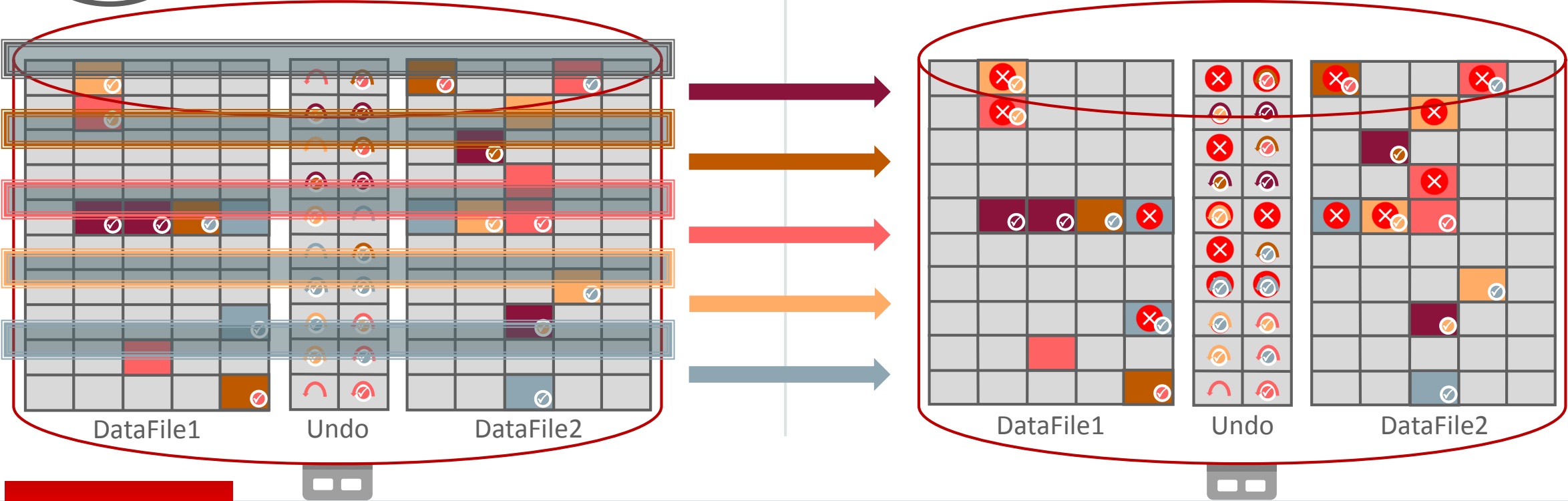
Legend	
	Uncommitted block changed in interval
	Block changed in interval
	Committed in interval
	Uncommitted redo
	Undo written in interval
	Committed in interval

# Hot Clone



Redo Log

- Source PDB remains open read/write
- Read and copy in parallel
- On-going operations imply a “dirty read”
- Some data changes not included in initial file copy
- Ship and apply redo to catch up with source
- Apply undo to rollback uncommitted transactions



# Integrated Cloud

## Applications & Platform Services

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