

Partition Recovery - Introduction

Partitioning allows to

- divide a single device into parts
- combine several devices into logical storage

Can be

- simple → contiguous area, called “*partition*”



- complex → non-adjacent areas, called “*volume*”



Partition metadata

Partition

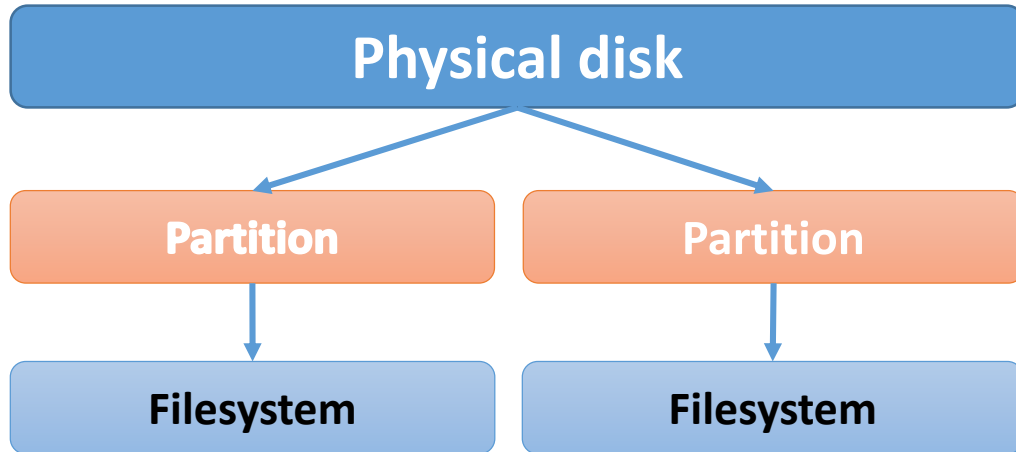
- contains a filesystem

characterized by

- location and size
 - filesystem type
 - partition name
 - unique ID of the partition
 - boot loader characteristics, if any (but we don't care of that in data recovery)
- } **optional**

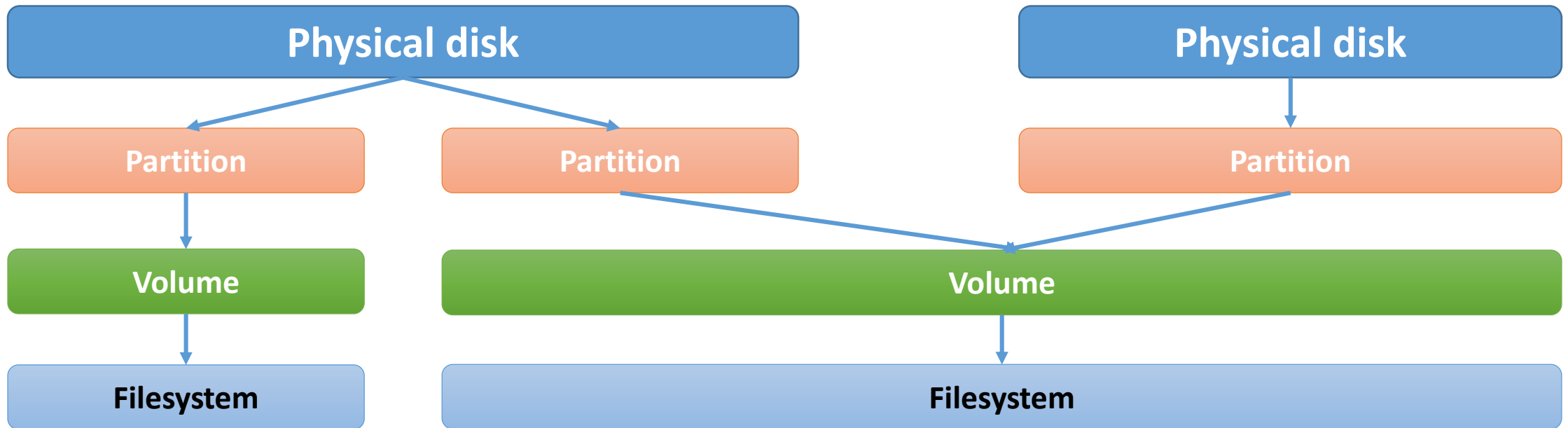
Simple partitioning schemes

Layout



- MBR (Master Boot Record, 1980)
- APM (Apple Partition Map, 1987), not used
- GPT (GUID Partition Table, 1990)

Complex partitioning schemes



- LDM, Logical Disk Manager
- LVM, Logical Volume Manager
- md-raid

used in Windows

used in Linux