

# IBM Spectrum Scale

Spectrum Scale Strategy Days  
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# Agenda

## Spectrum Scale

- licensing

# Spectrum Scale licensing

## Spectrum Scale software licensed per terabyte/petabyte (TiB/PiB)

### Data Access Edition (DAE)

- Flat Per TiB/PiB pricing
  - No tiers. Just count all the TiBs/PiBs in all the NSDs in the cluster
  - No charge for clients (in the same cluster or separate cluster), or protocol nodes, or anything else besides NSD capacity
- Based on usable capacity
  - This is the capacity “visible” to Scale, i.e. after applying h/w RAID, h/w mirroring, h/w spares, etc.
  - Equivalent to Usable capacity for traditional thick provisioned block storage
- To verify or audit for compliance, simply run `mmlslicense --capacity --formatted` for each cluster
  - or look in the GUI

### Data Management Edition (DME)

- All DAE functionality plus:
  - Encryption
  - Asynchronous disaster recovery (AFM-ADR)
  - Transparent Cloud Tiering
  - File audit logging
  - Watch folder

### Erasure Code Edition (ECE)

- All DME functionality plus:
  - Deploy on storage rich servers with internal storage, using erasure coding for high durability, space efficiency, and rapid rebuilds

All nodes in a single cluster must be on the same Edition

# Spectrum Scale licensing

For time being existing Spectrum Scale software customers can remain on Sockets

## Standard Edition, licensed per socket

- **Strictly** for existing scale customers on socket.
  - **No** new customers on sockets
  - **No** new cluster at an existing customer to be added on sockets
- Same functionality as Data Access Edition
- Individual licenses for servers, clients, and FPO (“shared nothing”) nodes
- To verify or audit for license compliance, customer must count sockets on each machine (system dependent process) where Scale is deployed

## Advanced Edition, licensed per socket

- **Strictly** for existing scale customers on socket.
  - **No** new customers on sockets
  - **No** new cluster at an existing customer to be added on sockets
- Additional functionality (same as DME)
  - Encryption
  - Asynchronous disaster recovery (AFM-ADR)
  - Transparent Cloud Tiering
  - File audit logging
  - Watch folder

Customers can choose to trade up to Capacity licensing, but for time being nobody will be forced to migrate

All nodes in a single cluster must be on the same Edition

# Spectrum Scale licensing

For ESS customers, two Editions with two tiers

## Data Access Edition, licensed Per Disk

- Spectrum Scale RAID license entitlement included
- Two price tiers, HDD and SDD
- Select in eConfig

## Data Management Edition, licensed per Disk

- Adds Encryption, AFM-ADR, Transparent Cloud Tiering, File Audit Logging, Watch folder
- Two price tiers, HDD and SDD
- Select in eConfig

**If there is Quorum this must be licensed per TiB/PiB !!!**

Qorum capacity appers when executing `mmlslicense --capacity --formatted`

**ESS customers can also choose Per TiB/PiB pricing, e.g. for an ELA. Usually it will be more expensive**

**All nodes in a single cluster must be on the same Edition**

# Spectrum Scale (OEM) licensing

Spectrum Scale can be bought from various companies:

- IBM
- Lenovo
- HPE
- NEC
- Fujitsu
- ...

Please note:

**Do not mix licenses from different vendors within one storage cluster**

It is different legal entities

This also applies to appliances (eg IBM ESS, Lenovo DSS, ...)

# Scale licensing in detail

For more information please see scale licensing guide:

[https://www.ibm.com/docs/en/spectrum-scale?topic=STXKQY/IBMScale\\_ESS\\_Licensing.pdf](https://www.ibm.com/docs/en/spectrum-scale?topic=STXKQY/IBMScale_ESS_Licensing.pdf)