SUSE® Storage

FUT7537

Software Defined Storage Introduction and Roadmap:
Getting your tentacles around data growth

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AGENDA

Enterprise Data Storage Market

SUSE Storage Product

SUSE Storage Solutions (Futures)

SUSE Storage Roadmap

Questions

Enterprise Data Storage Market

Current Enterprise Data Storage Market

More data to store
- business needs
- more data driven processes
- more applications
- e-commerce

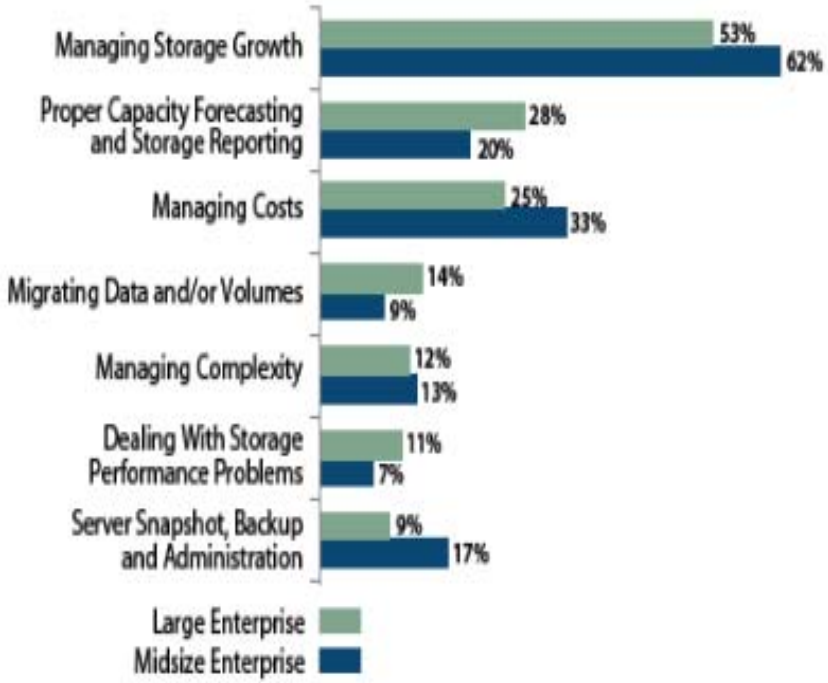
Bigger data to store
- richer media types
- presentations, images, video

For longer
- regulations / compliance needs
- business intelligence needs

Top Seven Pain Points:

What are your top storage-related pain points?

Large Enterprise Sample: n=180; Midsize Enterprise Sample: n=69.



The InfoPro Storage Study 1H12 – 451 Research

Enterprise Storage Today

Proprietary products and tools

- Integration and management complexity (OPEX)
- Expensive (CAPEX)

Business pressure on CIO

- Improve service level agreements
- Deliver innovation to the business
- Manage information explosion
- Flat budgets

Enterprise storage solutions

- Similar hardware components
- Similar software functionality

Undifferentiated Market

Enterprise Storage Tomorrow

Differentiated “Tiered” Information

- Timely Identification, Classification, and Efficient Placement

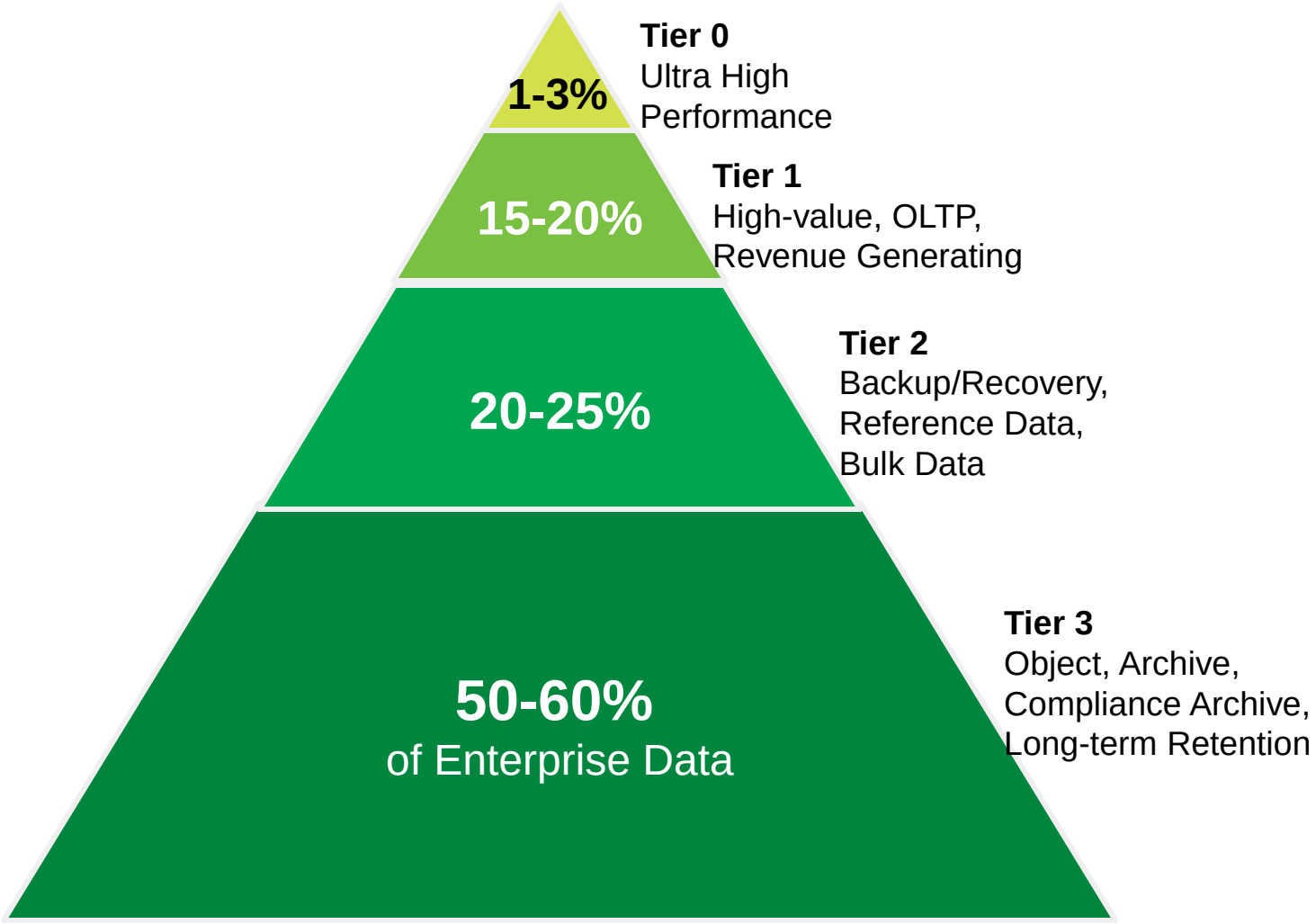
Software-Based Storage (OPEX)

- Separated Control Plane and Data Plane
- Open, Extensible, Unified and Simplified

Industry Standard Hardware Building Blocks (CAPEX)

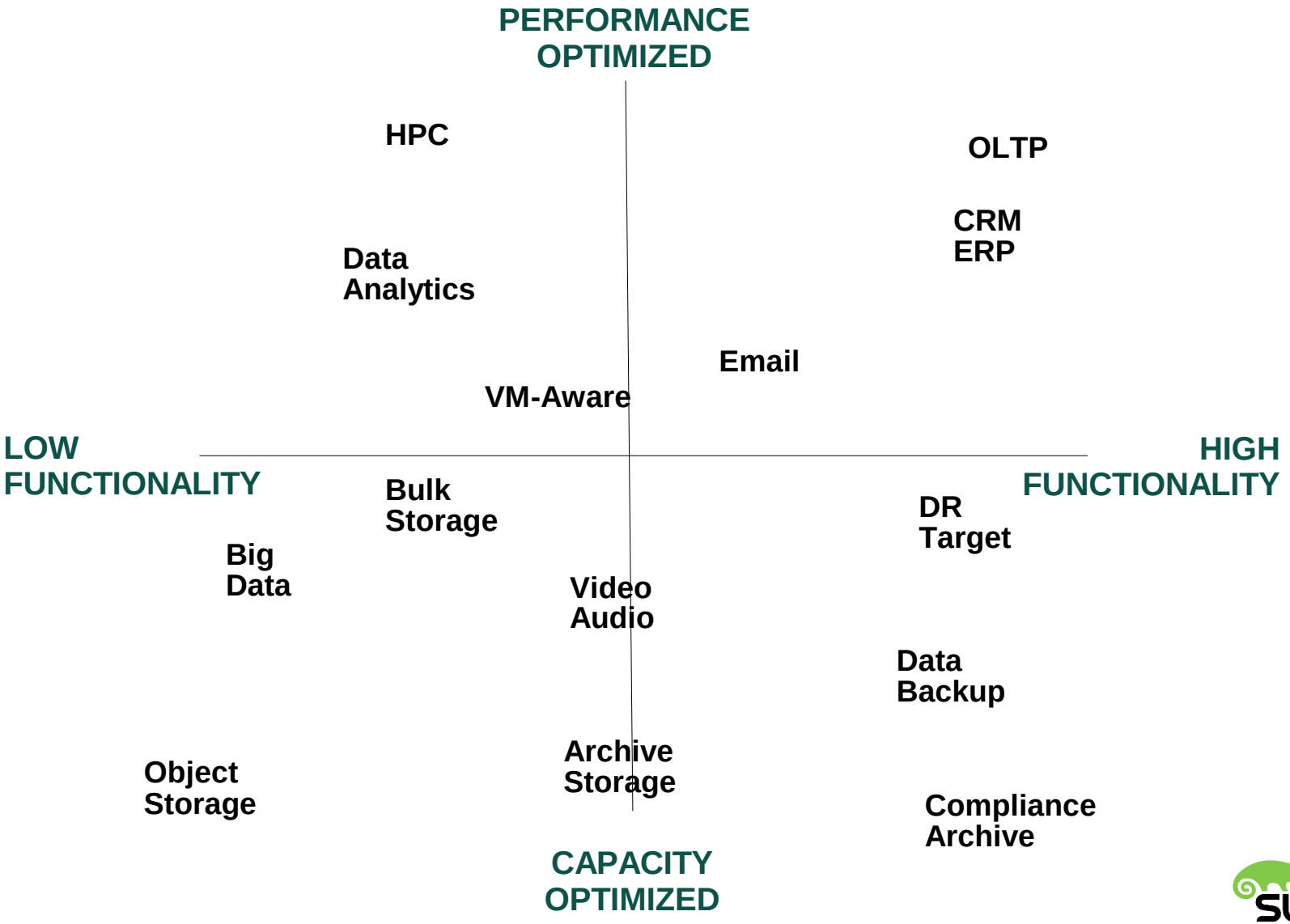
- Commodity Off-the-Shelf Servers for Control Plane
- Commodity Off-the-Shelf Drives for Data Plane

Enterprise Data Capacity Utilization (Percent)



Source: Horison Information Strategies - Fred Moore

Enterprise Data Storage: Use Cases



SUSE Storage Product

SUSE Storage Architectural Benefits

SCALABILITY

NO SINGLE POINT OF FAILURE

100% SOFTWARE BASED

AUTOMATED MANAGEMENT
- Self Managing
- Self Repairing

SUSE Storage with Ceph

Most Popular OpenStack Distributed Storage Solution

Extensively Scalable

- Storage Appliance to Cost Effective Cloud Solution

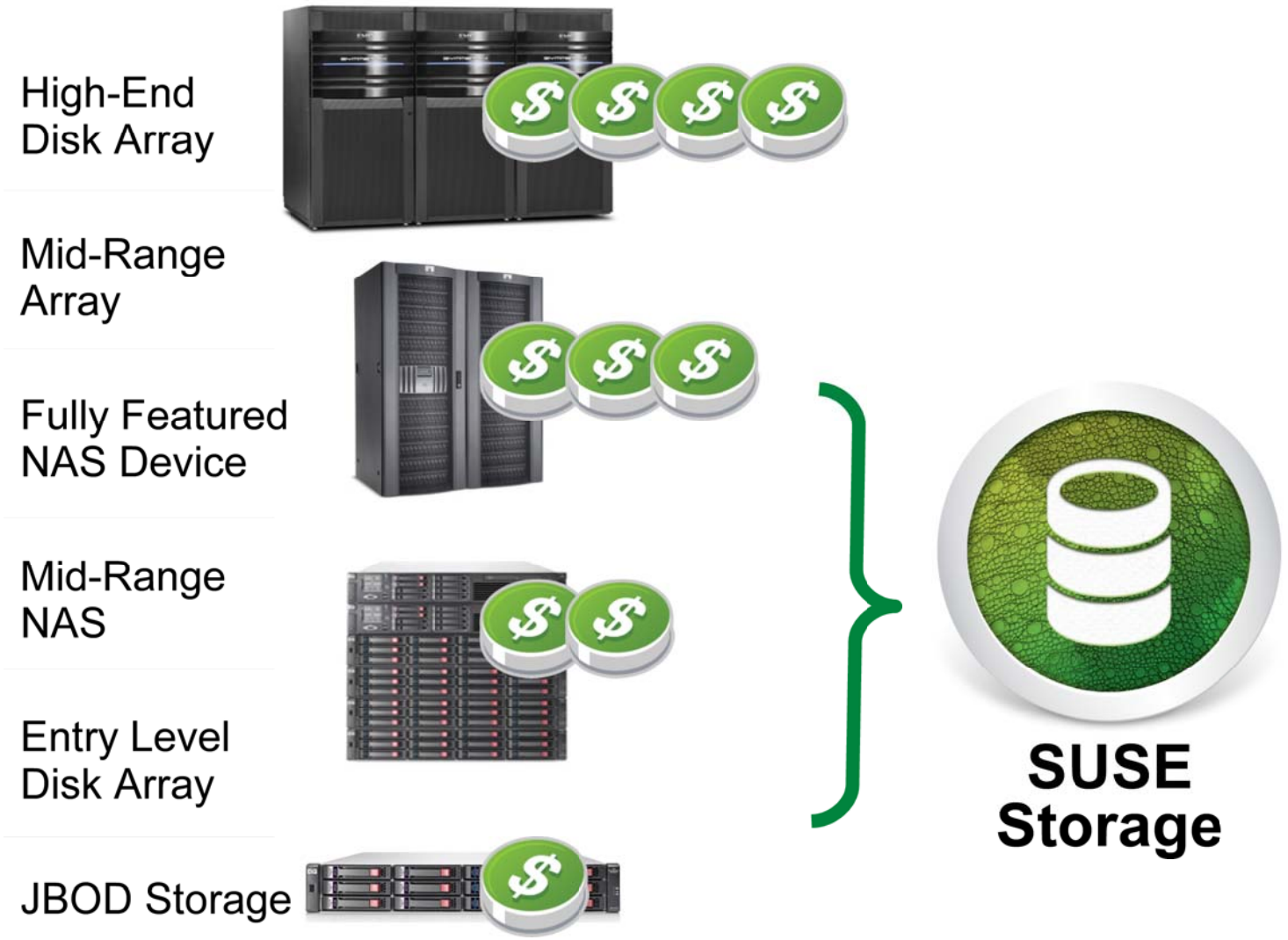
Industry Leading Storage Functionality (As of Firefly Release)

- Unified Block and Object with File Coming
- Thin Provisioning
- Erasure Coding
- Cache Tiering

Built upon Clustered Servers

- Self Healing
- Self Managing

SUSE Storage Product Positioning



SUSE Storage List Pricing

Capacity Based Pricing

- Tiered Capacity Pricing
  - $5000 for 36 Terabytes (Raw Capacity)
- Storage Servers and Monitors (SUSE Linux Enterprise Server)
  - $1499 per Server (Socket Pair)

Example (Software Only)

- 36 Terabytes + 1 Server = $6500
- 250 Terabytes + 10 Servers < $50,000
  - $0.017 per GB per Month

SUSE Storage Business Benefits

SAVINGS: Total Cost of Ownership

- Reduced CAPEX Expenditures
- Reduced OPEX Expenditures
- SUSE Focus On Ease of Management

FLEXIBILITY: Adaptability to Evolving Business Needs

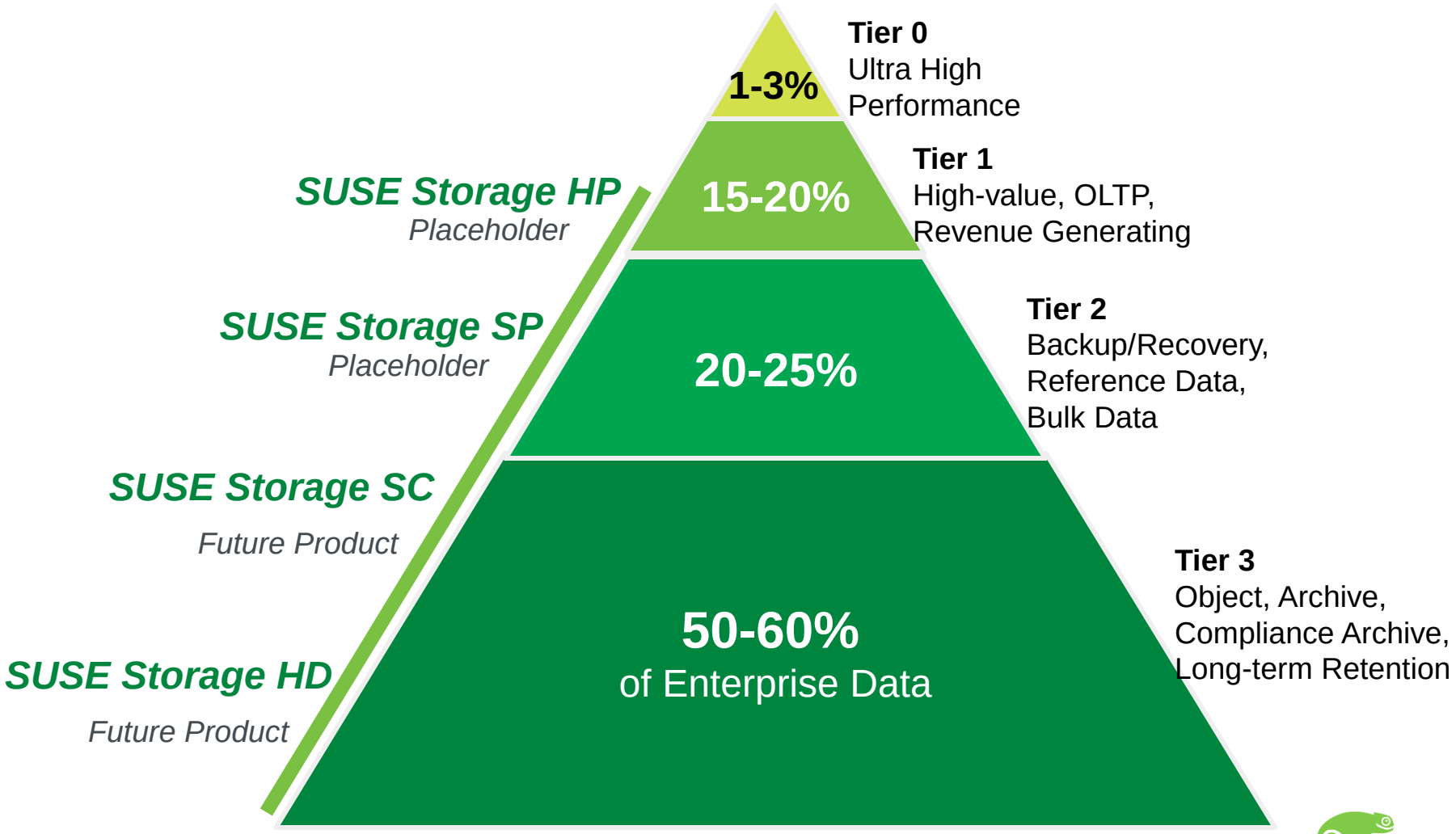
- Reduced Dependency Upon Proprietary “Locked In” Storage

CONFIDENCE: Reliability and Availability

- Leverage SUSE World Class Support and Services

SUSE Storage Solutions (Futures)

SUSE Storage Configuration Positioning



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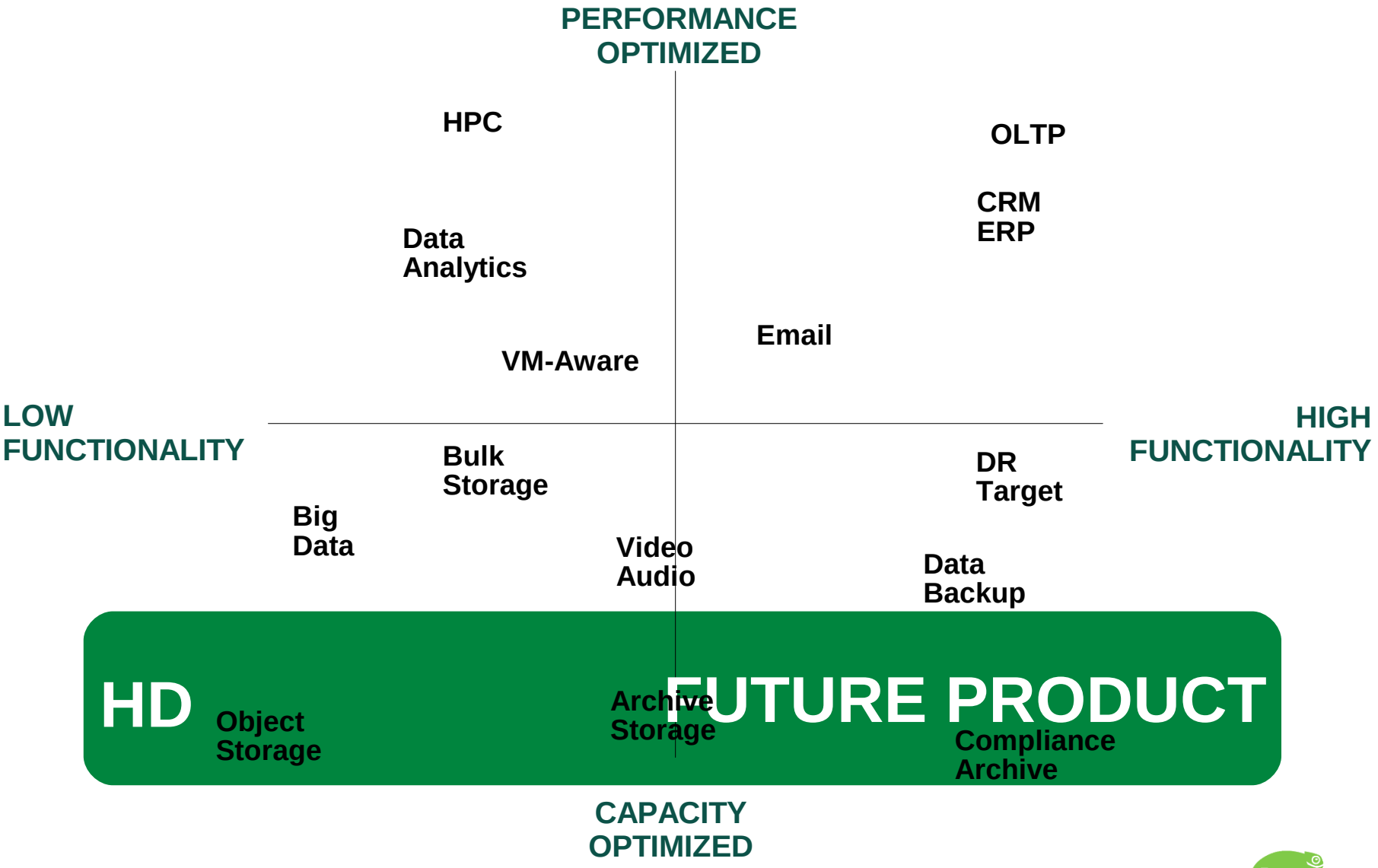
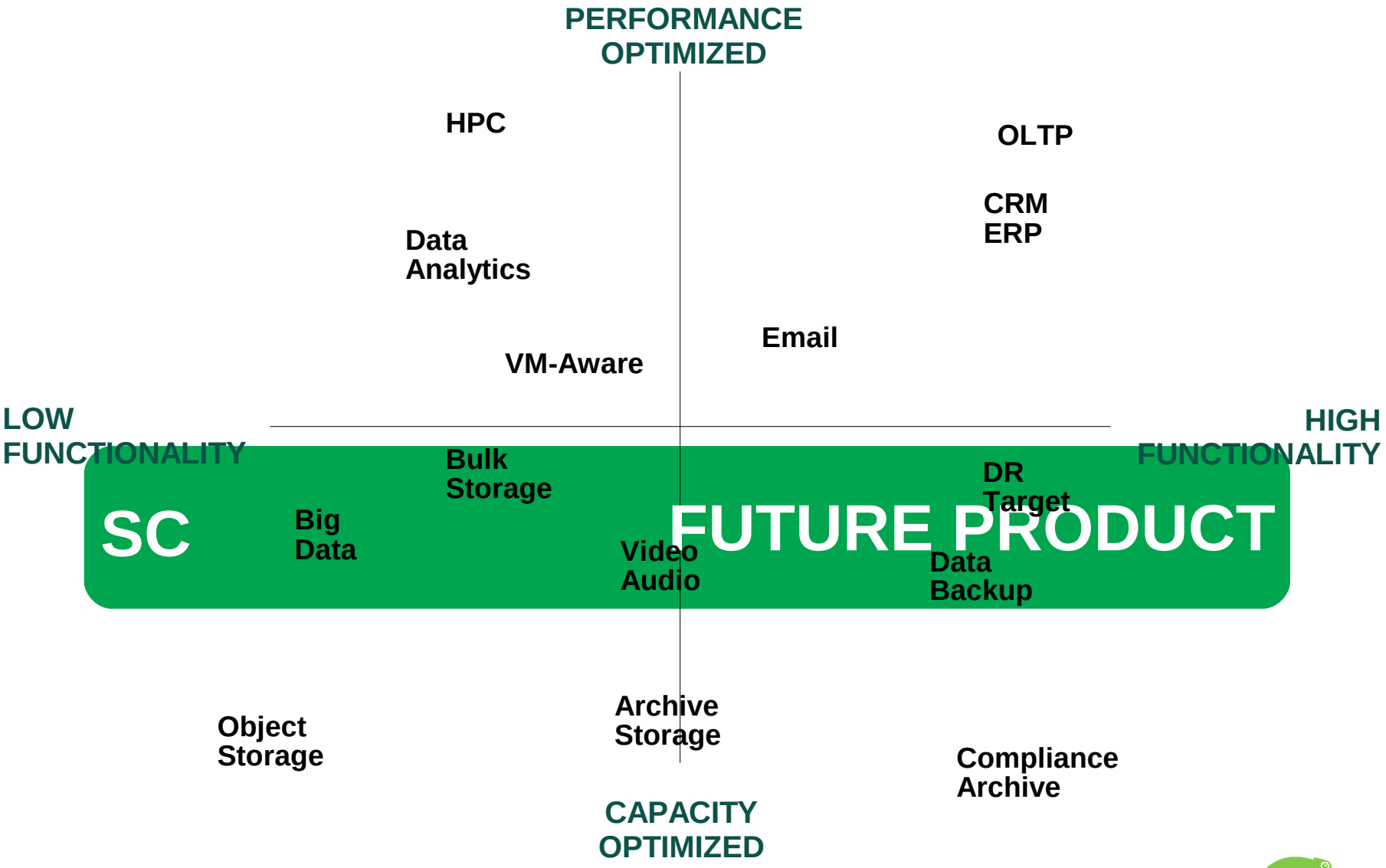
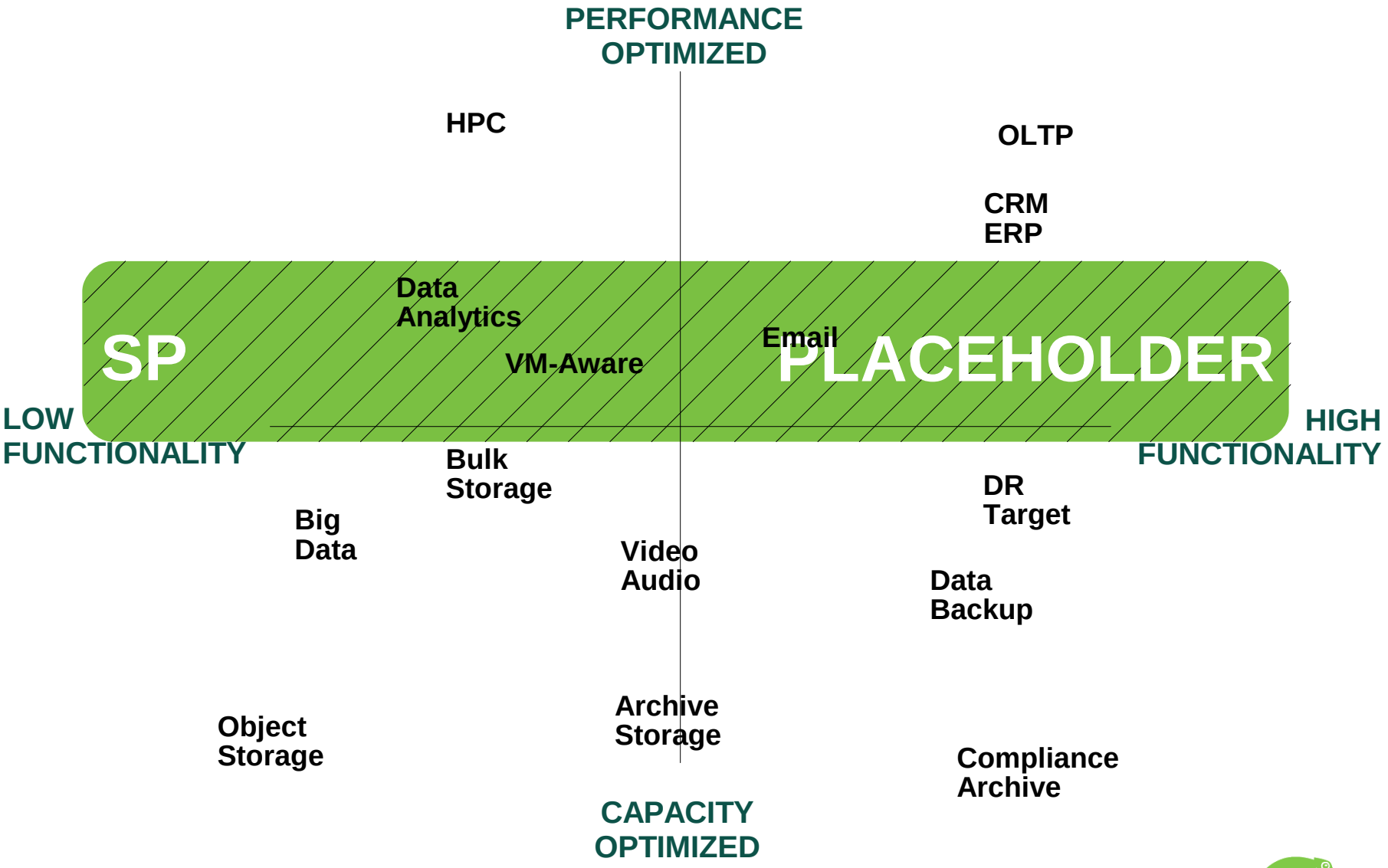
SUSE Storage High Density



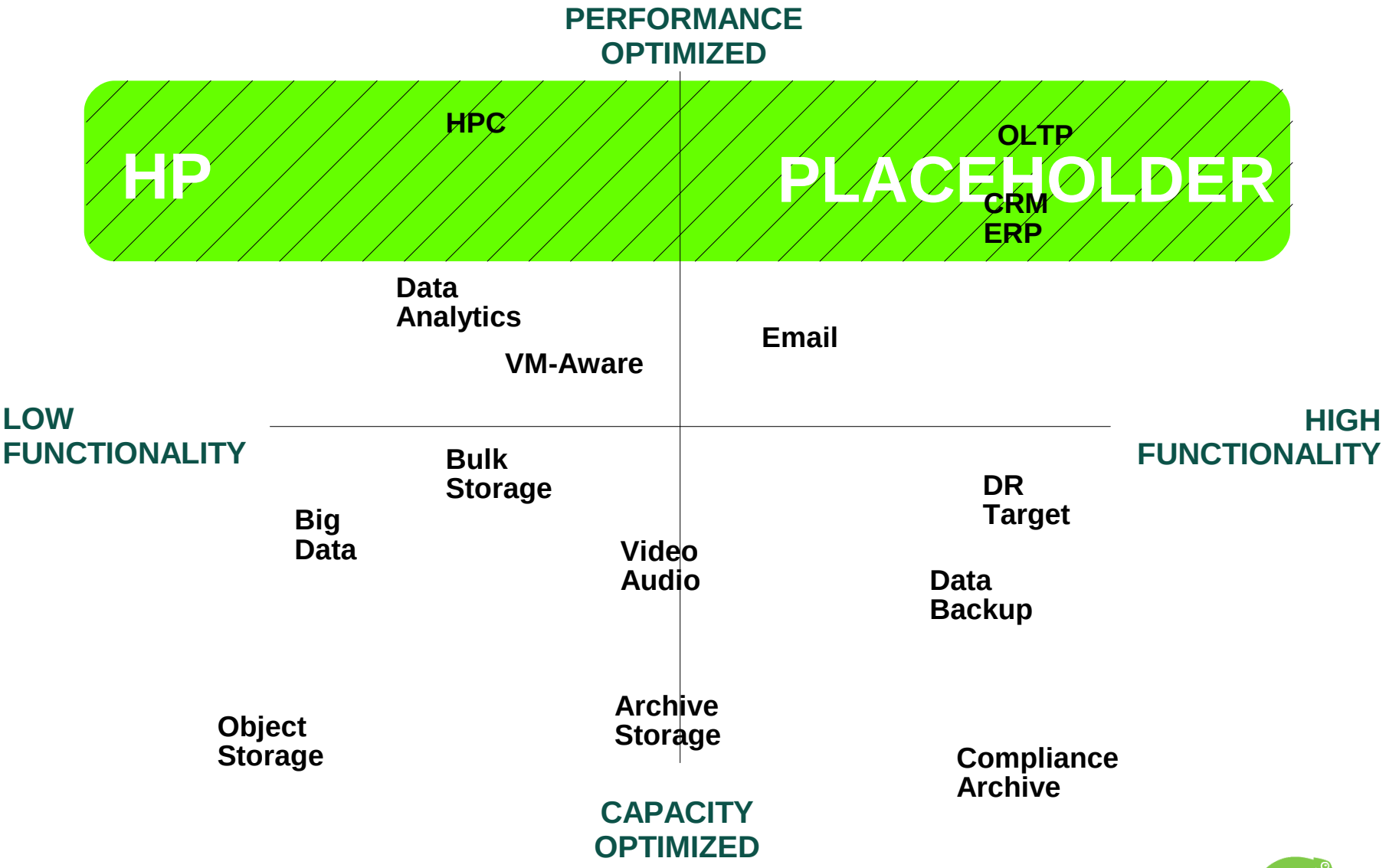
SUSE Storage Standard Capacity



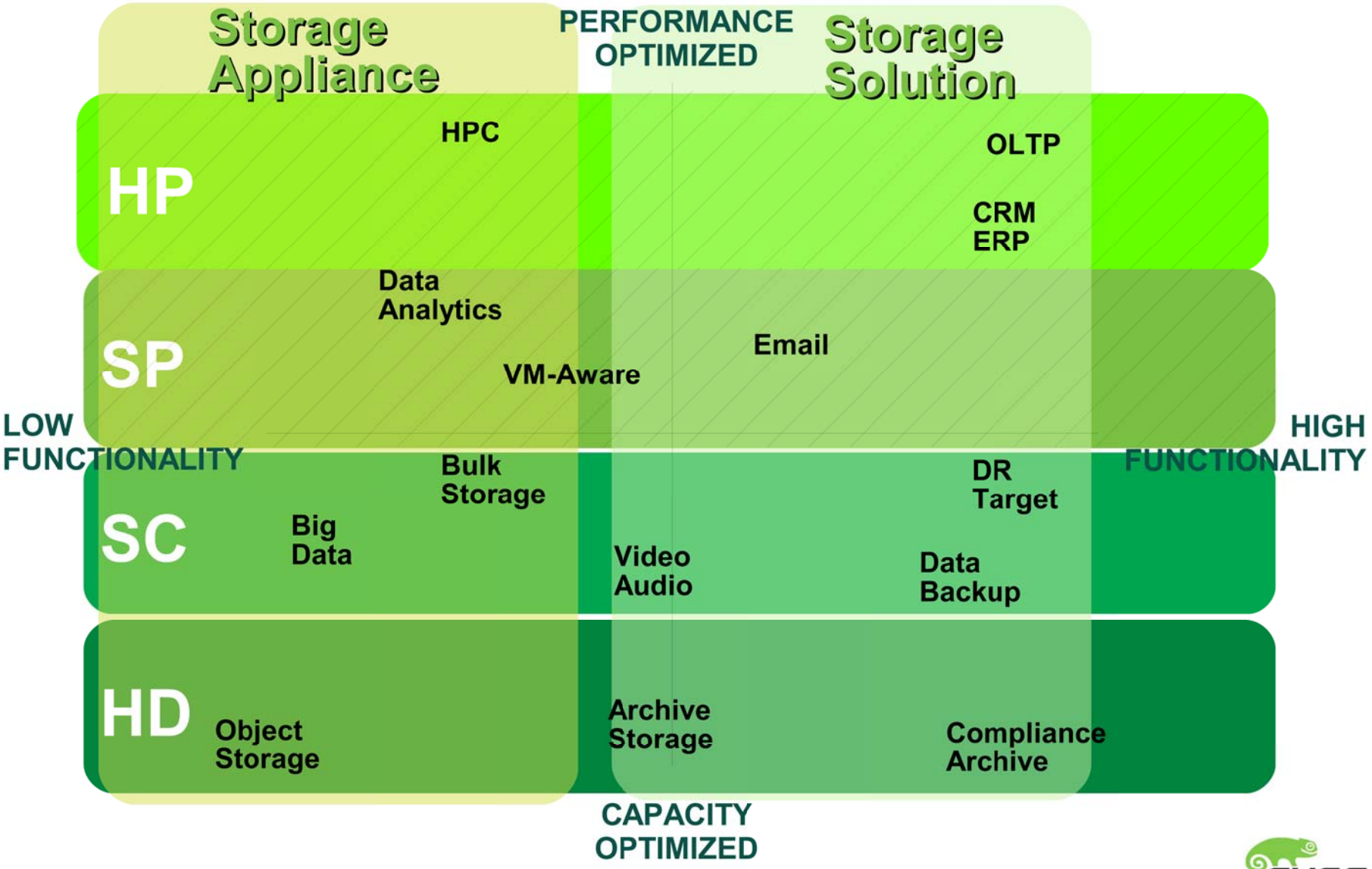
SUSE Storage Standard Performance



SUSE Storage High Performance



SUSE Storage: Appliance and Solution



SUSE Storage HD

High Density

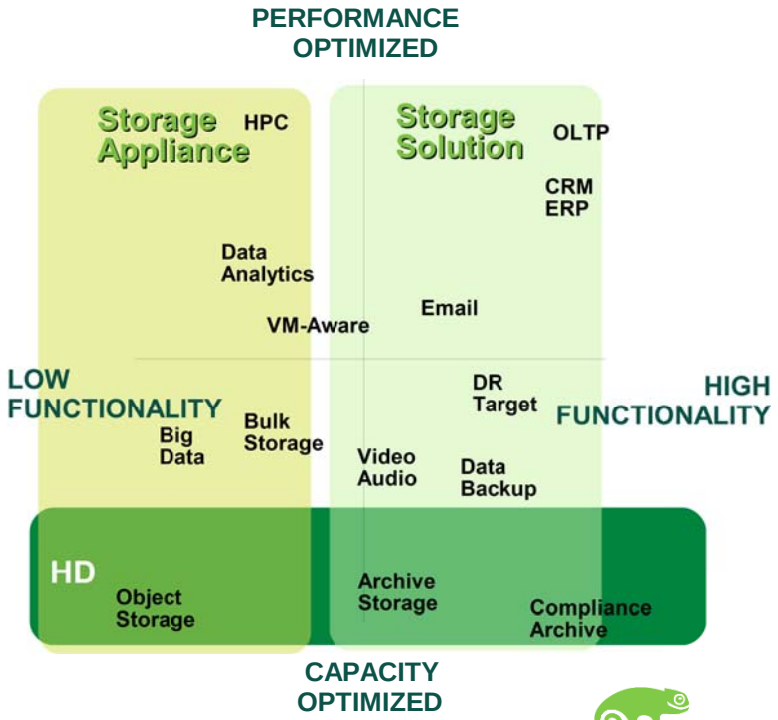
- Erasure Coding for Redundancy
- 36-62 Drive Storage Node Configuration
  - 2 High Performance SAS Drives
  - 34-60 High Capacity SATA Drives

Storage Appliance Use Case:

- Object Storage
  - RESTful APIs (Swift or Amazon S3)

Storage Solution Use Cases:

- Archive Storage
  - Integrate De-Duplication Software
  - Integrate Backup Software
- Compliance Archive
  - Integrate De-Duplication Software
  - Integrate Backup Software
  - Integrate Authenticity/Data Tampering



SUSE Storage SC

Standard Capacity

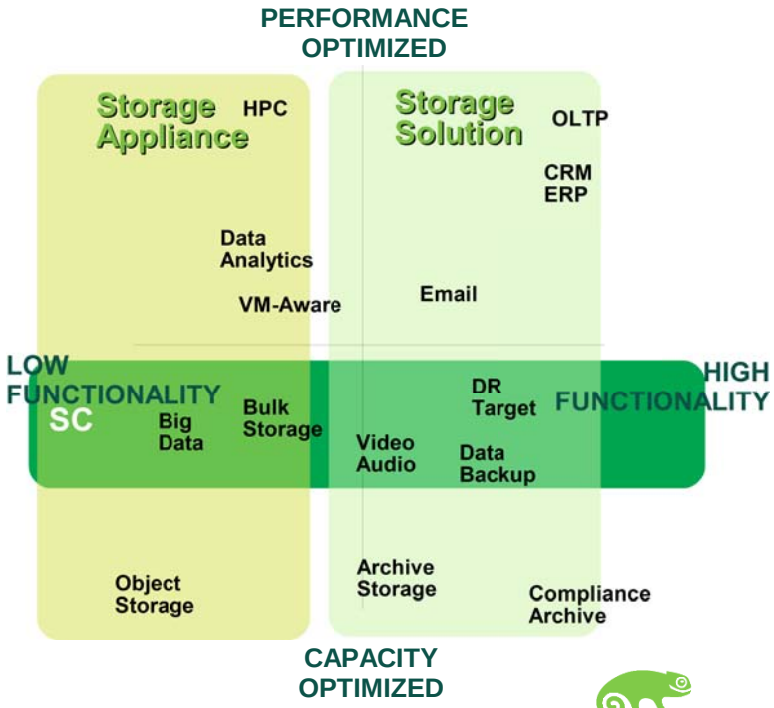
- Replicated Copies for Redundancy
- 8-12 Drive Storage Node Configuration
  - 2 SSD Drives
  - 6-10 High Capacity SAS/SATA Drives

Storage Appliance Use Cases:

- Big Data/Hadoop (CephFS Dependency)
- Bulk Storage (not high performance access)

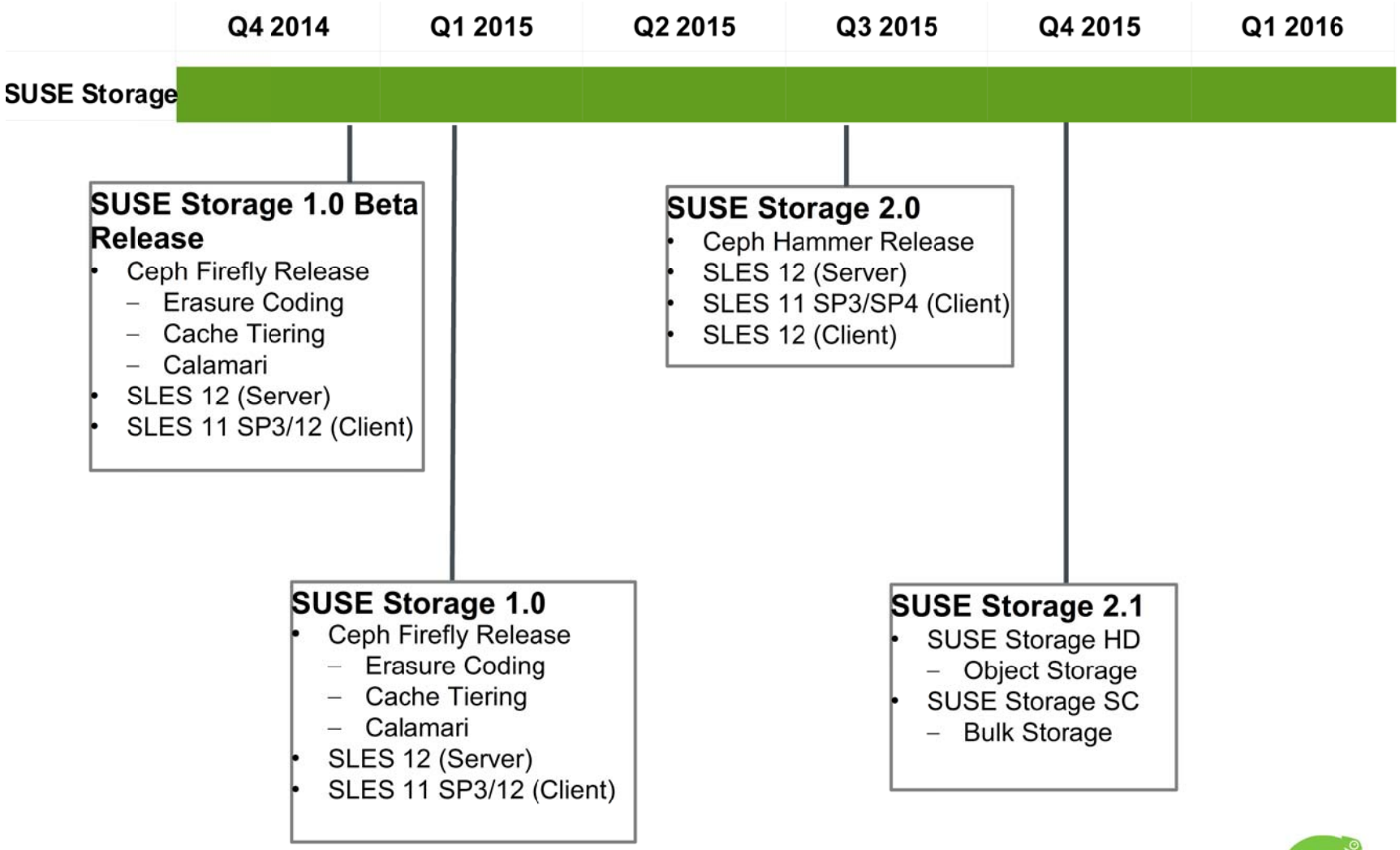
Storage Solution Use Cases:

- Video/Audio
  - Integrate Streaming Software
- Disk-To-Disk Backup Target
  - Integrate De-Duplication Software
  - Integrate Backup Software
- Disaster Recovery Target
  - Integrate Remote Replication Software



SUSE Storage Roadmap

SUSE Storage Roadmap



QUESTIONS

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