Dell EMC’s Multi-dimensional Data Management appliance

PowerProtect X400 offers next generation data management, enabling faster IT transformation while assuring that you can easily guard and quickly unlock your data’s value. X400 is a multi-dimensional, scaling out with linear performance and capacity increases while also delivering scale-up, grow-in-place capacity expansion. Available in both Hybrid and All Flash options, X400 provides whatever level of performance your application or business demands. With simplicity, agility and flexibility at its core, X400 enables you to protect, manage and recover data at scale. Transform IT faster knowing data is protected and available as a business asset.

Software defined

Address IT operational complexity and propagation of new technologies by leveraging a software-defined, scale-out platform. PowerProtect delivers next generation data management, enabling organizations to transform IT faster; with confidence their data is protected and available to drive value as an asset for their business.

With simplicity, agility and flexibility at its core, the PowerProtect software platform enables you to protect, manage and recover data at scale with self-service capabilities for operational efficiency and IT governance controls to ensure compliance.

Integrated into an appliance form factor for ease of deployment, PowerProtect X400 delivers the platform’s efficient data management capabilities to your ever-changing IT environment, leveraging the latest evolution of Dell EMC’s trusted protection storage architecture.

Self-service

PowerProtect X400 empowers data owners to perform backup and recovery operations from their native applications, while at the same time providing IT with oversight and governance to ensure compliance.

Empower both Data Owners and the Central IT Team.
Key Takeaways:

- Software defined with built-in deduplication for data protection, replication and reuse
- Self-service for data owners combined with central IT governance
- SaaS-based management, compliance & predictive analytics
- Modern services based architecture for ease of deployment, scaling and upgrading
- Multi-dimensional with scale-up & scale-out flexibility and all flash performance

Scale-up & Scale-out flexibility

- Scale-up with grow-in-place capacity expansion (16 TB)
- Scale-out compute and capacity with additional X400F or X400H cubes (starting at 64 TB each)
- Benefit from the linear scale-out of performance, compute, network and capacity

All Flash performance

- Leverage protected assets for data reuse
- Meet the strictest SLOs

Enabled with Machine Learning

- Load balancing across scale-out cubes
- Optimal deduplication and performance

SaaS-based management

Take advantage of SaaS-based management to easily monitor, analyze and troubleshoot your distributed environment from anywhere. PowerProtect software enables IT to meet objectives more effectively with evolving operational intelligence.

Modern services based architecture

As your environment continues to transform, the PowerProtect software platform supports the ability to rapidly evolve to meet future IT demands across all form factors. The PowerProtect X400 appliance benefits from this design, enabling simple upgrades and rapid deployment.

The X400 appliance is simple to install, use and upgrade.

Multi-dimensional

PowerProtect X400 is an integrated appliance that can scale-out compute and capacity, and also scale-up with grow-in-place capacity expansion. Available in both Hybrid and All Flash options, PowerProtect Appliances provides you the level of performance you demand. Benefit from the linear scale-out of performance, compute, network and capacity.

Enabled with machine learning, PowerProtect Appliances deliver load balancing to provide optimal deduplication and performance. As customers add additional scale-out cubes (either hybrid or all flash), the PowerProtect platform will, at its discretion, rebalance assets and data as required. Seamlessly to the already protected assets, the data will be redirected and migrated to the appropriate scale-out cube.

The base configuration for a PowerProtect X400 appliance comes with an X400 platform cube plus one or more X400H Hybrid scale-out cube(s) or X400F All Flash scale-out cube(s) for capacity. Up to four scale-out cubes can be added of either Hybrid or All Flash. Currently, Hybrid and All Flash capacity cubes may not be mixed in a single appliance. An X400H Hybrid scale-out cube starts at 64TB (96TB max per cube), with additional cubes adding 64-96TB (384TB appliance maximum). An X400F All Flash scale-out cube starts at 64TB (112TB max per cube), with additional cubes adding 64-112TB (448TB appliance maximum).
### PowerProtect X400 Capacity with X400F All Flash scale-out cubes

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Logical Capacity</th>
<th>Usable Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - X400</td>
<td>640 TB – 5.6 PB</td>
<td>64 – 112 TB</td>
</tr>
<tr>
<td>1 - X400F</td>
<td>1.76 – 11.2 PB</td>
<td>176 – 224 TB</td>
</tr>
<tr>
<td>2 - X400F</td>
<td>2.88 – 16.8 PB</td>
<td>288 – 336 TB</td>
</tr>
<tr>
<td>3 - X400F</td>
<td>4.00 – 22.4 PB</td>
<td>400 – 448 TB</td>
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</tbody>
</table>

### PowerProtect X400 Capacity with X400H Hybrid scale-out cubes

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Logical Capacity</th>
<th>Usable Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - X400</td>
<td>640 TB – 4.8 PB</td>
<td>64 – 96 TB</td>
</tr>
<tr>
<td>1 - X400H</td>
<td>1.6 – 9.6 PB</td>
<td>160 – 192 TB</td>
</tr>
<tr>
<td>2 - X400H</td>
<td>2.56 – 14.4 PB</td>
<td>256 – 288 TB</td>
</tr>
<tr>
<td>3 - X400H</td>
<td>3.52 – 19.2 PB</td>
<td>352 – 384 TB</td>
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</tbody>
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1. Based on 10x - 50x deduplication ratio.