



# ESVA<sup>®</sup> Data Services

Rapidly growing data leads to burgeoning storage needs. An ideal storage solution for mission-critical applications should not only provide necessary capacity and performance to accommodate data and process transactions, but also ensure quick recovery from unplanned outages or disasters. However, the dynamic nature of applications makes it difficult to anticipate data demands. Leveraging storage based on traditional rigid architectures to deal with changing needs often leads to wasted investments in storage along with additional management overhead.

Infortrend's ESVA offers industry-leading storage systems built on a revolutionary architecture featuring virtualization and scale-out technologies. Enhanced with comprehensive data services and data protection features, ESVA can meet the most demanding storage requirements at attractive price points and provide enhanced management efficiency.

## EFFICIENT RESOURCE UTILIZATION

Through our storage virtualization technology, the capacity and computing power of multiple ESVA storage systems are consolidated into single or multiple storage pools. Coupled with thin provisioning and an intelligent access prioritizing mechanism, the Infortrend ESVA ensures the most efficient utilization of pooled resources.

- Allocate capacity dynamically when data writes happen to minimize expenses wasted on large and underutilized data volumes
- Eliminate the administration overhead associated with capacity planning and utilization monitoring of each data volume
- Arrange I/Os in the queue based on their priority to allow applications to achieve respective ideal service levels

## NON-DISRUPTIVE STORAGE SCALING

With scale-up and scale-out on ESVA, storage scaling can be performed on demand. Both capacity and performance can incrementally grow without disrupting service.

- Achieve "hot" capacity scaling by simply attaching expansion enclosures to member ESVA systems of a storage pool
- Automatic, dynamic workload balancing across ESVA systems to achieve and maintain optimized performance
- Linearly scale performance for increased transactional speed by adding more ESVA systems to the storage pool

## HIGHEST DATA AVAILABILITY

ESVA comes with snapshot and replication capabilities to protect mission-critical data. By strategically deploying snapshot images and full data copies, you can enjoy the highest data availability in the event of an outage caused by logical errors, physical errors or disasters.

- Create granular recovery points by creating space-efficient snapshot copies
- Protect data from extensive disasters with asynchronous data copies
- Optimize asynchronous remote replication with data compression feature
- Achieve optimal no-data-loss protection with synchronous data copies

## OPTIMIZED STORAGE PERFORMANCE

By enabling users to flexibly assign applications to four available tiers distinguished by different drive types and RAID levels, and offering automated data migration, automated storage tiering on ESVA provides an architecture that fully leverages the advantages of different storage media. With automated storage tiering, users can greatly optimize storage performance and increase ROI.

- Deploy up to four tiers to meet different service level requirements
- Optimize performance by efficiently integrating SSDs in highest tier
- Ensure the most efficient data distribution in a storage pool through highly granular data migration based on data usage patterns and user-configured policies

**ESVA F60  
ESVA F70  
ESVA E60**

**ESVA F10  
ESVA E10**

<b>Virtualization</b>		
Storage-based Virtualization	Yes	Yes
Thin Provisioning	Yes	Yes
Zero Downtime Capacity Expansion	Yes	Yes
Maximum Number of Disks in a Virtual Pool	1344	64
Maximum Number of Virtual Volumes in a Virtual Pool	1024	1024
Maximum Size of a Virtual Pool	2PB	512TB
Maximum Size of a Virtual Volume	2PB	512TB
Minimum Size of a Virtual Volume	10GB	10GB
<b>Scale-out</b>		
Horizontal performance scaling	Yes	Yes
Distributed Load Balance	Yes	Yes
Balanced Data Migration	Yes	Yes
Prioritized Volume Access	Yes	Yes
Maximum Number of Systems in a Virtual Pool	12	4
<b>Snapshot</b>		
Snapshot Rollback	Yes	Yes
Maximum Number of Snapshot Images for a Source Volume	1024	256
Maximum Number of Snapshot Images in a Virtual Pool	16,000	4096
<b>Replication</b>		
Sync and Async Remote Replication	Yes	Async Only
Data Compression for Async Remote Replication	Yes	Yes
Volume Copy/Volume Mirror	Yes	Yes
Disaster Tolerance	Yes	Yes
Maximum Number of Source Volumes in a Virtual Pool	32	32
Maximum Number of Concurrent Replication Pairs of a Source Volume	8	8
Maximum Number of Concurrent Replication Pairs in a Virtual Pool	256	256
<b>Automated Storage Tiering</b>		
Automated Storage Tiering	Yes	No
Sub-Volume Tiering	Yes	-
Maximum Number of Storage Tiers	4	-
Storage Tiers Based on Drive Type	Yes	-
SSD Support	Yes	-
Storage Tiers Based on RAID Level	Yes	-
Automated Data Migration with Scheduling Options	Yes	-

<sup>1</sup> To include more than one ESVA storage system in a storage pool, Scale-out License is required for all models except the ESVA F10/E10. To take snapshot images and create full data copies in a single storage pool, Local Replication License is required for all models except the ESVA F10/E10. To create full data copies across storage pools, Remote Replication License is required for all models except the ESVA F10/E10.

24x7 Global Support: <http://support.infortrend.com/esva>