IS THERE A MIGRATION OR UPGRADE PATH FROM CURRENT PRODUCTS INTO FREESTOR™?

FreeStor is a completely new product and platform from FalconStor®. As such, there is no way to upgrade from any of our existing products. Customers who wish to migrate to FreeStor as a new implementation may contact us to discuss how our professional services organization can help them.

IS THIS REALLY A FALCONSTOR PRODUCT OR DID YOU OEM FROM SOMEONE ELSE?

Yes, FalconStor used its 15 years of experience to unify our data services into our new Intelligent Abstraction™ core engine. This is an all-new engine designed for high IO environments to support today’s new SSD and flash storage platforms, as well as an entirely new HA active-active design for always-on, continuous operations.

CAN YOU DEFINE “SOFTWARE-DEFINED STORAGE (SDS)” A LITTLE MORE CLEARLY?

While there is no standard industry definition for SDS today, FreeStor is defined as software-defined storage as it does not rely on any underlying hardware or storage platform to virtualize storage or deliver data services. FreeStor is a truly horizontal platform that is not tied to any specific hardware, networks, or protocols; on or off the cloud.

CAN I GET THE NEW GUI AND MANAGEMENT SERVER IF I STAY ON THE STAND-ALONE PRODUCTS?

No, FreeStor is based on a completely new architecture. It uses metadata and a centralized database unique to FreeStor. Therefore, the FreeStor GUI and management server are not compatible with our existing products.

CAN A FREESTOR STORAGE SERVER BE RUN AS A VIRTUAL APPLIANCE (VA)?

Eventually, yes. Initially, FreeStor Storage Servers will be deployed as physical servers to ensure they can meet the performance demands of high IO SSD or Flash arrays. Storage Server VA’s will be supported as soon as we can ensure they can meet the performance requirements of Flash and SSD storage.

DO STORAGE SERVER VIRTUAL APPLIANCES (VA’S) COUNT TOWARDS THE 128 MAXIMUM?

Yes, if they are connected to a FreeStor Management server. However, clients running as VMs that are being protected by a FreeStor storage server are not considered storage servers and do not count toward this maximum.

CAN I RUN TIMEMARKS AND REPLICATION ON DEDUPLICATED VOLUMES?

Yes. TimeMarks, TimeViews and replication can all be done on deduplicated volumes.
**FAQS**

**CAN I WRITE MY OWN “WIDGETS” FOR THE NEW CONSOLE? IS THERE AN SDK?**

At this time, that is not possible. It is something we are exploring for future development. However, customers needing custom reports can use our full set of published APIs to get the information they need and publish to a 3rd party console or reporting engine.

**I SUPPORT MANY BUSINESS UNITS IN MY COMPANY; CAN I ORGANIZE MY RESOURCES BY BUSINESS UNIT?**

Yes! There are a number of ways this can be done in FreeStor. By creating resource groups in the management console, users can monitor, manage and report by those groups. Reporting can also be done at the group level and of course, our full set of APIs allow for custom reporting on everything from data usage, IO throughput and performance, network throughput and performance, and all data services used or modified. Admin rights can also be granted or restricted by group.

**WHAT ABOUT CHARGE-BACK REPORTING?**

FreeStor itself does not do charge-back reporting. However, all the information needed to report on usage, services, bandwidth, throughput, data consumption, performance and much more is available for anyone needing to do charge-backs.

**MUCH OF MY INFRASTRUCTURE IS NOT ON YOUR CERTIFICATION MATRIX, DOES THAT MEAN I CANNOT USE YOUR PRODUCT?**

Not necessarily. If you have hardware not on our certification matrix, we will work with you and our support organization to understand what hardware you have in place and determine if we can do a field certification.

**CAN I INSTALL IT MYSELF?**

No. FreeStor will require professional services to install and initially configure.

**IS IT NON-DESTRUCTIVE TO INSTALL AND USE? OR DO I HAVE TO START FRESH WITH EVERYTHING?**

FreeStor is a new platform and those elements will be a new installation. However, customers can use existing storage and data with FreeStor, ensuring that they can leverage their existing investments and get truly heterogeneous, unified data services and management.
**HOW DOES FREESTOR LICENSING DIFFER FROM MY OTHER FALCONSTOR LICENSING?**

FreeStor is based on a term use, annual subscription model that is “pay as you go”. Our existing point-products are based on a perpetual use license that must be purchased “up front”. Customers will purchase a single license per FreeStor Management Server (FMS) based on the capacity to be managed by that FMS for an agreed upon contractual term. All SW updates, enhancements, data services and 24 x 7 support are included with the license at no additional cost to the customer for as long as an active contract is in place.

**WHAT DOES SUBSCRIPTION PRICING MEAN?**

Subscription pricing is defined as purchasing FreeStor for a contractual term at a fixed $/TB rate. This will be billed in annual capacity increments based on capacity being managed by FreeStor. The term can be from one year to as many years the customer would like to put under contract to lock-in pricing. Terms of three to five years are typical, but contracts can be longer or shorter depending on the needs of the customer.

**WHAT DOES MANAGED CAPACITY MEAN?**

Customers will only be charged for capacity managed by FreeStor. This is separate from the RAW capacity of the underlying physical storage as not all of that storage capacity must be managed by FreeStor. As a result, customers have the flexibility to use any or all of the FreeStor data services, turn them on or off at will, and add or remove storage capacity at any time without having to stop and get any additional licenses or pay additional fees.

**WHAT IS AN ANNUAL “TRUE-UP” AND HOW DOES IT WORK?**

At the end of each contract year (not calendar year), FalconStor will do a “true-up” with the customer to see how capacity is now being managed using a built in utility called an “X-Ray”. Based on the contractual $/TB rate, the following contract year will be billed for the capacity being used at the end of the previous contract year. For example, let say a customer has a 3-year FreeStor contract with a starting capacity of 100TBs, they would initially be charged 100 TBs at the agreed upon $/TB rate. At the end of each contract year, an “X-Ray” will be taken to determine how much capacity is being managed by FreeStor. If capacity goes up to 125 TBs at the end of year one, for year two they would pay for 125TBs at the fixed $/TB rate. If the capacity went down to 75 TBs, they would only be charged for that amount in year two. This annual “true-up” process will continue until the contract ends or is renewed. Once the contract is in place, FalconStor can bill that monthly, quarterly, or annually, whichever works best for the customer.

**HOW MANY LICENSE KEYS WILL I NEED TO RUN THESE FSS SERVER OR CAPACITY?**

With FreeStor, customers only need one license for each FreeStor Management Server. They can have up to 128 FreeStor Storage Servers behind each FreeStor Management Server. As Storage Servers are added, no new licenses are required. Storage arrays and capacity can be added to or removed from the FreeStor Storage Pool at any time with no additional licenses.
FAQS

DO WE NEED SYSTEM DOWNTIME TO UPDATE FREESTOR NODES (PATCH APPLICATION AND UPGRADE)?

FreeStor Storage Servers can be configured with active-active redundancy to ensure that upgrades are non-disruptive and access to data is continuous. FreeStor Management Servers (FMS) can be updated at any time. Since the FMS is side-band connected to the Storage Servers, and not in the data path, it can be taken down for maintenance without disrupting the Storage Servers. The FreeStor Storage servers have a CLI in case access is needed while the FMS is being updated. A fully redundant FMS configuration will be available in future versions.

WHAT PROTOCOL DOES FREESTOR SUPPORT?

At initial release, we support FC, iSCSI and FCoE for client connection, TCP/IP for data replication between FSS/FDR nodes, 10GbE for FSS node interlink and FC and iSCSI for connection between FSS and FDR nodes.

WHAT TYPE OF INDUSTRY OR CUSTOMER IS MAIN TARGET USER OF FREESTOR?

Enterprises that are looking to consolidate their storage environment to gain more efficient use of storage and or eliminate management silos and complexity. Enterprises looking to modernize legacy environments without ripping and replacing current hardware. Enterprises looking to move to a hybrid or private cloud environment. Service Providers (MSP or CSP) needing to embed a data move and data services into their offerings to address the heterogeneous variety of hardware across their customers and their own infrastructure.

HOW DOES FREESTOR CONNECT WITH OPENSTACK AND OR CINDER?

Not at initial launch. FalconStor is evaluating OpenStack and Cinder support for a future release.

WOULD FREESTOR HAVE THE SAME AGENTS THAT FALCONSTOR CDP/NSS HAS?

All the agents available for NSS and CDP are also available for FreeStor.
WOULD THE CURRENT CDP/NSS VERSION OF RECOVERTRAC™, HYPERTRAC™ WORK WITH FREESTOR?

RecoverTrac and HyperTrac technology has been built into FreeStor.

ANY NEW AGENT THAT IS COMING OUT TO SPECIFICALLY WORK WITH FREESTOR?

None are required at this time.

WHEN WOULD WE SEE AUTOMATED STORAGE TIERING BE AVAILABLE IN FREESTOR?

FalconStor is evaluating policy management, analytics and automated tiering for a future release.