

## ESSENTIALS

- Software-defined scale-out NAS
- Simple and efficient storage for enterprise edge locations
- Deployed on industry standard hardware (x86 servers)
- Runs the same Isilon OneFS 8.0 operating system as the Isilon appliance version
- Tightly integrated with VMware and managed from vCenter
- Scales from 3 nodes to 6 nodes and up to 36 TB capacity
- Free and frictionless version available for non-production use
- All Isilon software products are included at no additional charge in the fully licensed version

# DELL EMC ISILONSD EDGE

## Software-Defined Scale-Out NAS on Industry Standard Hardware for the Enterprise Edge

Organizations are experiencing unprecedented data growth as a result of which IT must find new and more cost effective ways to increase productivity for global and mobile knowledge workers. While data is geographically distributed, organizations and IT workers are under pressure to provide global visibility and cost effective management for all unstructured data, regardless of the location. Enterprises with branch and regional offices are further challenged with dispersed islands of storage that are costly and inefficient, while being difficult to reliably maintain and protect.

The Software Defined Data Center (SDDC) is a key driving force for enterprises to simplify, optimize, and accelerate the provisioning and management of infrastructure and data center resources. VMware revolutionized the SDDC well over a decade ago by virtualizing the compute infrastructure. Recent advances in connectivity around Software Defined Networking (SDN) enable rapid and flexible provisioning of networking resources. And, coupled with the dynamic capabilities of Software Defined Storage (SDS) solutions, enterprises have the flexible and agility to respond rapidly. According to IDC<sup>1</sup>, Software Defined Infrastructure (SDI) will provide business agility improvements, IT cost savings, and IT staff productivity benefits. In a recent Brief by ESG<sup>2</sup>, 60% of the enterprises are committed to deploying a SDS solution as part of their long-term strategy.

Isilon<sup>®</sup> has shown that the data lake is the enabler that helps organizations effectively and efficiently store and manage unstructured data. Isilon has further extended the data lake to cover not just the assets in the data center but also those in the branch and regional offices. This allows organizations to reduce costs and simplify management by consolidating unstructured data, eliminating inefficient storage silos, and streamlining data protection for remote offices.

## INTRODUCING ISILONSD EDGE

The Dell EMC IsilonSD product family combines the power of Isilon scale-out NAS with the economy of software defined storage. IsilonSD Edge is purpose-built to address the needs associated with growing unstructured data in enterprise edge locations including remote and branch offices. IsilonSD Edge allows you to quickly deploy a simple and efficient scale-out NAS solution that utilizes industry standard hardware in a VMware environment. IsilonSD Edge also extends the reach of the data lake from your core data center to your edge locations by economically supporting smaller capacity deployments in a virtualized infrastructure.

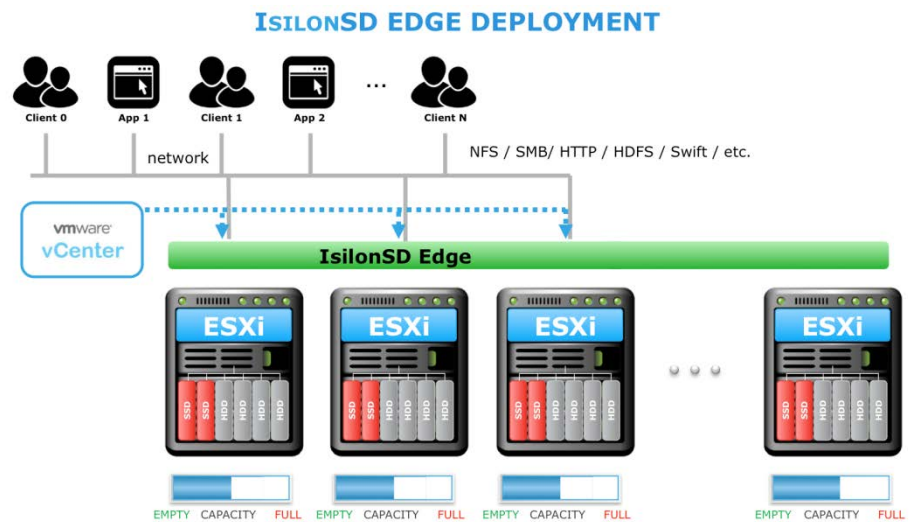
<sup>1</sup> Software Defined Infrastructure: State of the Market and Future Outlook Survey Results, Sep 2015

<sup>2</sup> 2015 Data Storage Market Trends, Oct 2015

## HARDWARE SCALE AND CAPACITY

IsilonSD Edge is simple to deploy and manage. Each IsilonSD Edge deployment can scale to 36 TB of storage capacity. Using industry standard hardware in a VMware environment, each IsilonSD Edge deployment may be configured from a minimum of 3 nodes to a maximum of 6 nodes in a single cluster. Nodes can be seamlessly added at any time for increased performance or capacity.

IsilonSD Edge can be used on any VMware Virtual SAN Ready Node but these should be sized to meet the performance requirements of your business. IsilonSD Edge supports direct attached storage (DAS) for data disks, SSD storage for journal disks, and either DAS or SAN is supported for the boot disk.



## VMWARE INTEGRATION

IsilonSD Edge is tightly integrated with the VMware environment and runs on top of VMware ESX 5.5 or 6.0. It leverages vCenter for management with a plug-in management server that is used to install licenses, or add and remove nodes from a cluster. The vCenter plug-in runs as a virtual image on VMware ESX 5.5 or 6.0. The server and storage resources on the selected hardware do not need to be dedicated to IsilonSD Edge. If performance and capacity needs are met, other applications can run on the same instance of VMware or on the underlying hardware.

## ISILON SOFTWARE

IsilonSD Edge is built on the powerful yet simple to manage Isilon OneFS<sup>®</sup> operating system and offers all of the software capabilities of the current Isilon appliance-based solution. This includes multi-protocol support to support a wide range of applications and workloads along with enterprise-grade data management and protection capabilities. This increases operational flexibility and lowers storage costs without increasing management complexity.

The production version of IsilonSD Edge incorporates licenses for all Isilon data management and protection software including Isilon SyncIQ<sup>®</sup> for data replication, Isilon SmartQuotas<sup>™</sup> for quota management, and Isilon SnapshotIQ<sup>™</sup> for data backups. Storage administrators familiar with managing Isilon clusters in the core datacenter would be completely familiar in managing an IsilonSD Edge cluster. Almost all the operations in managing a physical Isilon cluster are identical in managing an IsilonSD Edge implementation.

## CHALLENGES AT THE ENTERPRISE EDGE

Managing data storage at enterprise edge locations is challenging for many organizations. According to ESG<sup>3</sup>, 61% of enterprises surveyed have over 100 remote offices and 68% of these have over 10 TB of data storage requirements at each remote office. Remote office management challenges include limited IT resources to manage the growing storage needs, islands of disconnected storage, inconsistent data protection and backup, increased management complexity, and inefficient storage utilization. IsilonSD Edge meets these challenges while providing a simple and efficient storage solution that can be easily managed. At the same time, IsilonSD Edge increases IT visibility at the edge, provides improved governance, and simplifies overall storage management.

## IMPROVED DATA PROTECTION AT THE EDGE

IsilonSD Edge can be deployed at the enterprise edge to consolidate and increase efficiency of storage at these locations. To simplify and streamline backups and disaster recovery, data can be replicated from the edge to the datacenter core using SyncIQ software, which is included with IsilonSD Edge. It can also be used to eliminate the need for local tape-based backups by automatically replicating data from edge locations to your core data center. This helps to address a major pain point for organizations with a large network of remote offices.

IsilonSD Edge also includes support for Dell EMC Secure Remote Services (ESRS) for better remote monitoring, problem avoidance, and proactive incident response

## CORE TO EDGE DATA DISTRIBUTION

IsilonSD Edge can also be used to distribute content from your data center to enterprise edge locations to provide fast and local access to information. Using SyncIQ for replication enables your storage administrators to make data available locally to users at the edge while maintaining centralized management.

## FREE AND FRICTIONLESS DOWNLOAD

IsilonSD Edge is also available as a free and frictionless download for non-production use in a test environment. You may obtain a version from the Isilon download [page](#). With it you can test with your applications before you choose to purchase the production version of IsilonSD Edge. The free and frictionless version is limited to Dell EMC Community support and does not include Isilon SmartLock<sup>®</sup>, Isilon SyncIQ and Isilon CloudPools software. To convert from the free and frictionless version to a production version requires a simple license upgrade that you may purchase through your Dell EMC representative, authorized Dell EMC reseller or the [Dell EMC Store](#).

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<sup>3</sup> Remote Office Branch Office Technology Trends, May 2015

## ISILONSD EDGE SOFTWARE DEFINED STORAGE



## SPECIFICATIONS

	FREE AND FRICTIONLESS VERSION	PRODUCTION VERSION
<b>NUMBER OF NODES PER INSTANCE</b>	3 to 6 physical servers	3 to 6 physical servers
<b>CAPACITY PER INSTANCE</b>	Up to 36 TB	Up to 36 TB
<b>OPERATING SYSTEM</b>	OneFS 8.0 or higher	OneFS 8.0 or higher
<b>VERSION OF VMWARE ESX</b>	VMware ESX 5.5 update 2 or 6.0	VMware ESX 5.5 update 2 or 6.0
<b>VERSION OF VCENTER</b>	vCenter 5.5 update 2 or 6.0	vCenter 5.5 update 2 or 6.0
<b>HARDWARE SUPPORTED</b>	IsilonSD Edge runs as an application on VMware ESX. Consult the VSAN HCL for supported hardware and minimum hardware requirements. Running IsilonSD Edge on VSAN is not supported	
<b>DISKS REQUIRED</b>	Minimum of 1 boot disk, 1 journal disk, and 6 data disks	
<b>DELL EMC ISILON SOFTWARE INCLUDED</b>	Dell EMC Isilon <a href="#">SmartConnect</a> , <a href="#">SnapshotIQ</a> , <a href="#">SmartQuotas</a> , <a href="#">SmartPools</a> and <a href="#">InsightIQ</a>	All Dell EMC Isilon software included in the Free and Frictionless version plus Isilon <a href="#">SyncIQ</a> , <a href="#">SmartLock</a> and <a href="#">CloudPools</a>

## SUMMARY

IsilonSD Edge is a powerful yet simple storage solution purpose-built for enterprise edge locations that combines the power of Isilon scale-out NAS with the economy of software defined storage that utilizes industry standard hardware in a VMware environment. With it, you can extend your data lake from your core data center to your enterprise edge locations to store, manage, protect and analyze data more effectively and efficiently.

## TAKE THE NEXT STEP

Contact your Dell EMC sales representative or authorized reseller to learn more about how IsilonSD Edge can benefit your organization.

Also see our solutions in the Dell EMC Store at <https://store.emc.com/isilon>.

