



Sehr geehrte Anwender,

die IBM hat die Serie der äußerst erfolgreichen

### **Storage Virtual Controller,**

kurz SVC genannt, um ein weiteres Modell "2145-CG8" erweitert.

Dieses neue Modell kann mit bereits installierten SVC's geclustered werden, so dass Ihnen weiterhin ein Investitionsschutz zur Verfügung steht.

Das Hinzufügen bzw. Ersetzen von existierenden Systemen erfolgt unterbrechungsfrei. Es muss auf allen SVC's die Software-Version 7.3 installiert werden. Die weiteren technischen Details finden Sie als Anlage vor.

Wenn Sie hierzu Fragen haben und weitere Informationen benötigen, sprechen Sie uns gern an.

Wir freuen uns auf Ihren Anruf oder eine Email.

Mit freundlichem Gruß



*Wiegand*  
Ihr Wolfgang Wiegand



*B. Wiegand*  
Ihr Björn Wiegand

Herausgeber:  
ACSG + DELTA Systems Gesellschaft für Informations-Technologie mbH  
Bramfelder Straße 123 - 22305 Hamburg  
Tel: 040 / 611 709-0 - Fax: 040 / 611 709-55 - info@acsg.de - www.acsg.de

ACSG + DELTA Systems Gesellschaft für Informations-Technologie mbH - Geschäftsführer: Björn Wiegand  
Gesellschafter: Wiegand Verwaltungsgesellschaft GbR - Geschäftsführer: Wolfgang Wiegand  
Sitz der Gesellschaft: Hamburg - HRB: 53997 Amtsgericht Hamburg - USt. IdNr.: DE 160 951 973



© Alle Rechte vorbehalten. Nachdruck oder Übernahme einzelner Meldungen sind nur mit ausdrücklicher schriftlicher Genehmigung des Herausgebers gestattet.

Sie können den Newsletter selbstverständlich jederzeit abbestellen. ► [Newsletter@ACSG.de](mailto:Newsletter@ACSG.de)

Für Feedback, Anregungen oder Kritik sind wir jederzeit dankbar. ► [Feedback@ACSG.de](mailto:Feedback@ACSG.de)

# SVC What's New



## A new engine to maximize Storwize

### Efficient

- **Double Data Storage** on current and future infrastructure
- IBM Rtc **maximizes compression benefits**
  - IBM Rtc can be used with active primary data
  - Customers deploying Real-time Compression with Oracle see **70%-90%** reduction in storage
- **Easy Tier 3** enables new options for optimized tier management
  - Exploit **Easy Tier Performance Efficiency** with new Enclosure options for SSD's

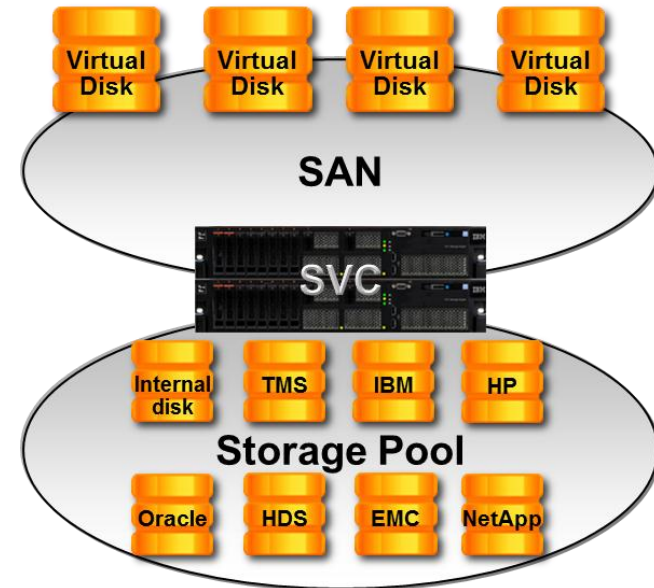
### Easy

- IBM Rtc operates immediately and is **easy to manage**
  - No need to schedule periods to run post-process compression
- **Rtc, Easy Tier, IP replication, Data Virtualization: Set it and forget it**
- **User-serviceable** canisters
  - Simple hardware upgrade options allowing scalability as user demands grow

### Dependable

- Even greater **Performance**, throughput **double** previous hardware
- **Power** to deliver **efficiency** with up to two, New Intel® **Hardware Compression Accelerators**
- Virtualize existing storage and experience **Efficiency** benefits

## Software Value



## SVC and Storwize V7000

### *The foundations for building a better storage infrastructure*

#### Next Generation Storwize Engines

- Greater **Power** to maximise **Software Value**
- Increased **scalability** to meet data agenda
- Same best of breed **ease of use**

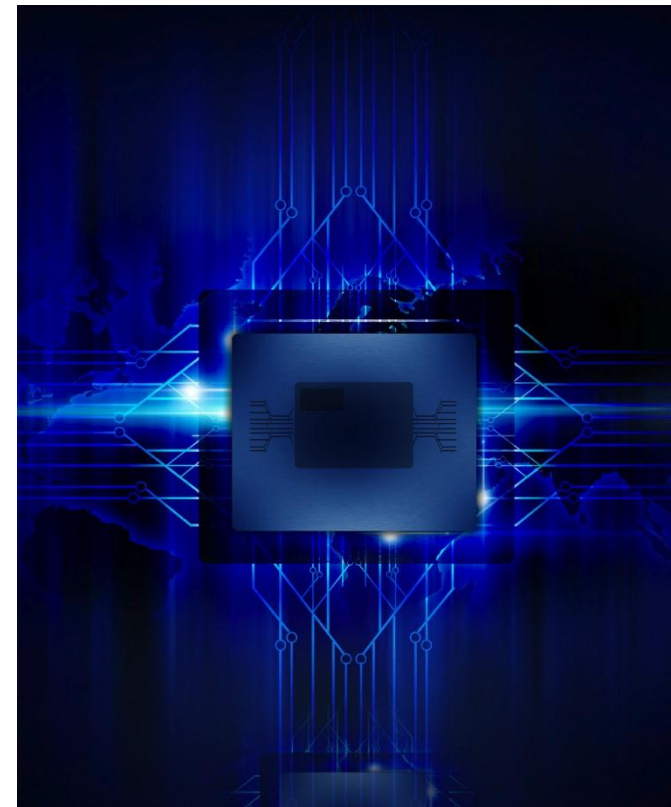


#### Enhanced Software Capabilities

- **Efficiency**
  - Easy Tier 3, enables new options for optimized data tier management
  - A.C.E. Global distributed file sharing, for optimized file management
- **Ease of Use**
  - Simplified performance management, with storage pool balancing
  - Management efficiency with Departmental multi-tenancy
- **Dependable**
  - Compression and performance guarantee

# New SVC Engine

- More powerful hardware platform
  - 2x performance of SVC CG8 engine
  - Up to 9x compressed performance
- One or two 8-core CPUs
- 32GB cache per CPU (32GB or 64GB of cache per engine)
- More flexible server connectivity
- *Industry first* hardware compression acceleration with Intel QuickAssist technology
  - One or two optional accelerators
  - Provide dedicated processing power and greater throughput for compression
- *Integrated flash capability*: up to 48 12Gbps flash drives
  - In external flash expansion enclosures



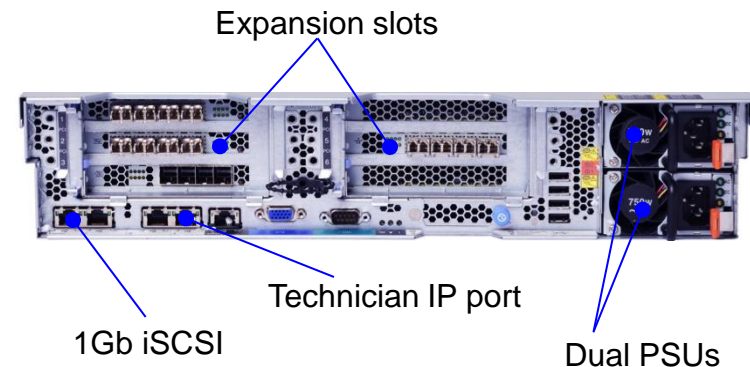
# New SVC Engine

- 2145 Model DH8
- New 2U form factor
  - Internal batteries eliminate need for UPS
  - Total system size unchanged
- Up to 3 I/O adapter cards



8Gbps FC	10Gbps FCoE/iSCSI	1 Gbps iSCSI
4		3
	4	3
4	4	3
8		3
8	4	3
12		3

- Technician IP port replaces front panel function



# SVC Configuration Rules

- At least one compression accelerator is required to use Real-time Compression
- Optional second CPU and 32GB memory required
  - When using Real-time Compression
  - When 3 host interface cards are installed
    - Three FC interface cards or two FC interface cards and one 10GbE card
- Optional second CPU and memory may be installed now in anticipation of future use (see SODs)
- Both engines in an I/O Group must be configured the same

# New SVC Flash Expansion

- One or two SVC SFF Expansion Enclosures
  - 2145-24F
  - No other expansion enclosure supported
- Attach to both nodes in an I/O Group
  - Requires 12Gbps SAS Enclosure attach card in both
- Up to 48 200GB, 400GB, or 800GB 12Gbps flash drives
  - Up to 38.4TB raw capacity
  - Disk drives are not supported
- Flash may be used for dedicated volumes or with Easy Tier



# SVC Maximum Performance (One I/O Group)

Uncompressed	SVC CG8	New SVC DH8
Read Hit IOPS	1,000,000	1,500,000
Read Miss IOPS	360,000	630,000
Write Miss IOPS	125,000	200,000
“DB-like”	200,000	385,000

Compressed	SVC CG8	New SVC DH8
Read Miss IOPS	2,600-50,000	71,000-175,000
Write Miss IOPS	1,200-16,000	28,000-115,000
“DB-like”	2,200-40,000	59,000-149,000

- Compressed performance shows a range depending on I/O distribution
- Compressed performance is better than uncompressed in some cases because of fewer I/Os to drives and additional cache benefits



# New SVC Data Engine

## Power to Virtualize

- Virtualized server environments demand virtualized storage
- **2x** performance: up to **128 cores**
- **50%** more connectivity: up to **10000**
- **2.5x** cache: up to **512GB**
- **6x** integrated flash: up to **192 drives**



# SVC Investment Protection

- New SVC engines may be added to existing SVC systems  
*without disruption*
- New SVC engines may replace existing engine  
SVC systems  
*without disruption*
- All engines in an SVC system may access flash expansion capacity
- SVC system must be running Version 7.3 software

