



7 Kasım 2012 - Çırağan Palace Kempinski

**IBM Connected 2012 Istanbul**

Learn. Collaborate. Innovate.

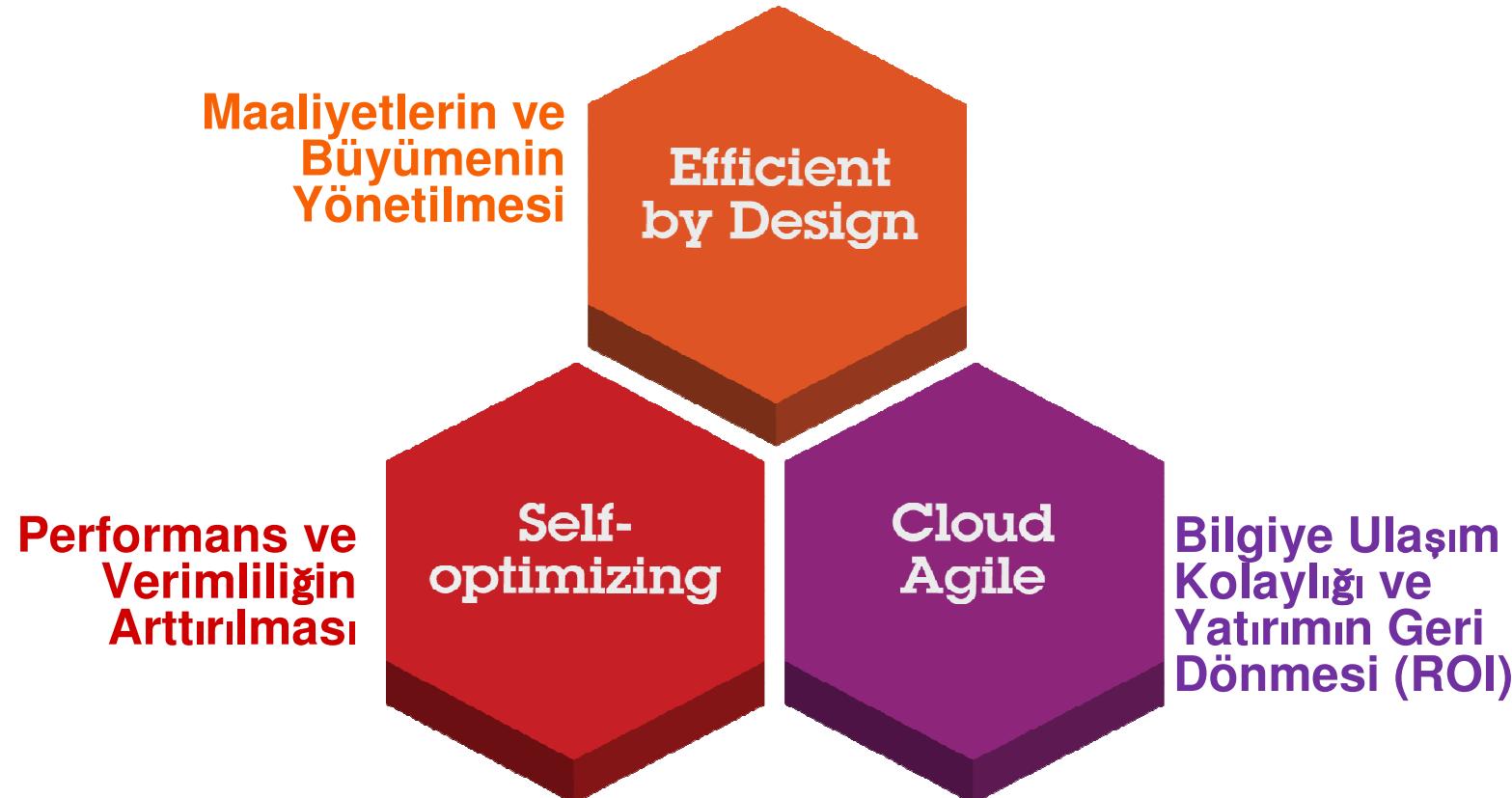
# VERİ ODAKLI YÖNETİM

## Storwize V3700

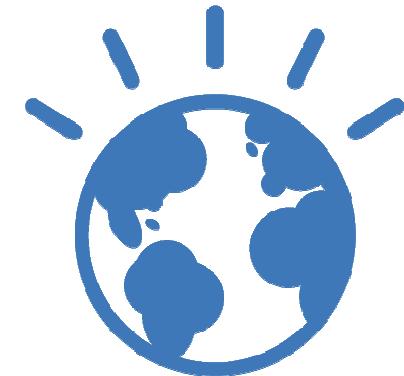
SELÇUK BAŞDEMİR  
Kıdemli Ürün Yöneticisi, Storage  
IBM TÜRK



# Storwize Sistemleri: Akıllı Veri Yönetimi



# Storwize Ailesinin Yeni Üyesi



Orta Seviye  
Storage'ta Yeni  
Standart  
**IBM Storwize V7000**

Unified Storage  
Active Cloud Engine  
**Storwize V7000 Unified**

Verimli Giriş Seviyesi  
Storage  
**Storwize Entry**

**October 2010**

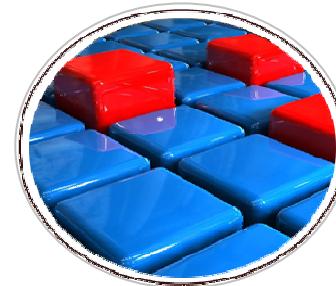
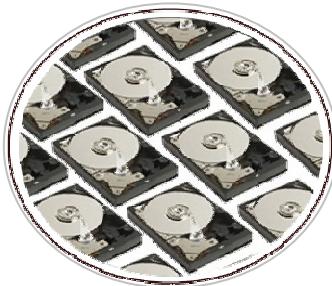
**October 2011**

**4Q 2012**



# IBM'in İnovasyon Mirası ve Veri Depolamadaki Liderliği

IBM 18 Yıldır Teknoloji Patentleri ile Dünya Lideri



1956

## First magnetic hard disk drive

IBM 305 RAMAC (Random Access Method of Accounting and Control). Capacity of the 305's 50 two-foot diameter disks was 5 megabytes.

1993

## First distributed storage

IBM 9337 Disk Array Subsystem is first reliable storage system using multiple, low-cost disk drives as single logical unit.

2003

## Storage network virtualization

IBM SAN Volume Controller provides single, centralized point of control over data in heterogeneous storage environments.

2010

## First Intelligent data placement

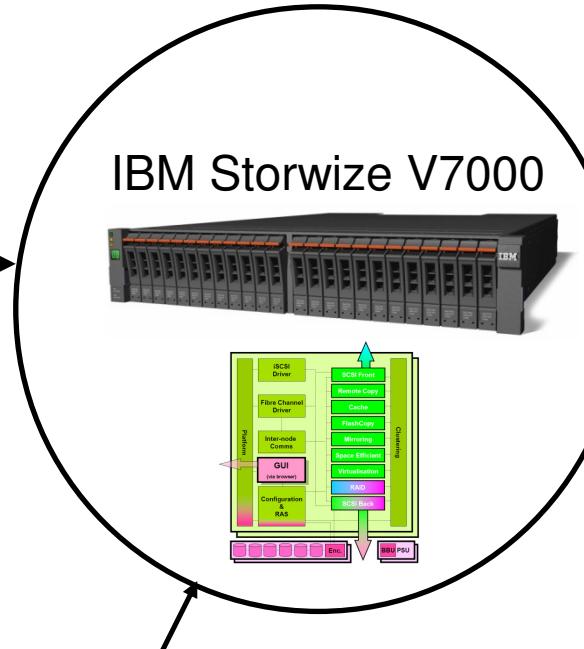
IBM System Storage Easy Tier first to automatically move most active data to faster solid-state drives for real-time analysis and less urgent data to tape.

# Storwize V7000 Mimarisi



SVC:

- Virtualization
- Advanced Copy Services
- High Availability
- Data Migration
- Application Integration



DS8000:

- Extent Architecture
- RAID Protection
- EasyTier

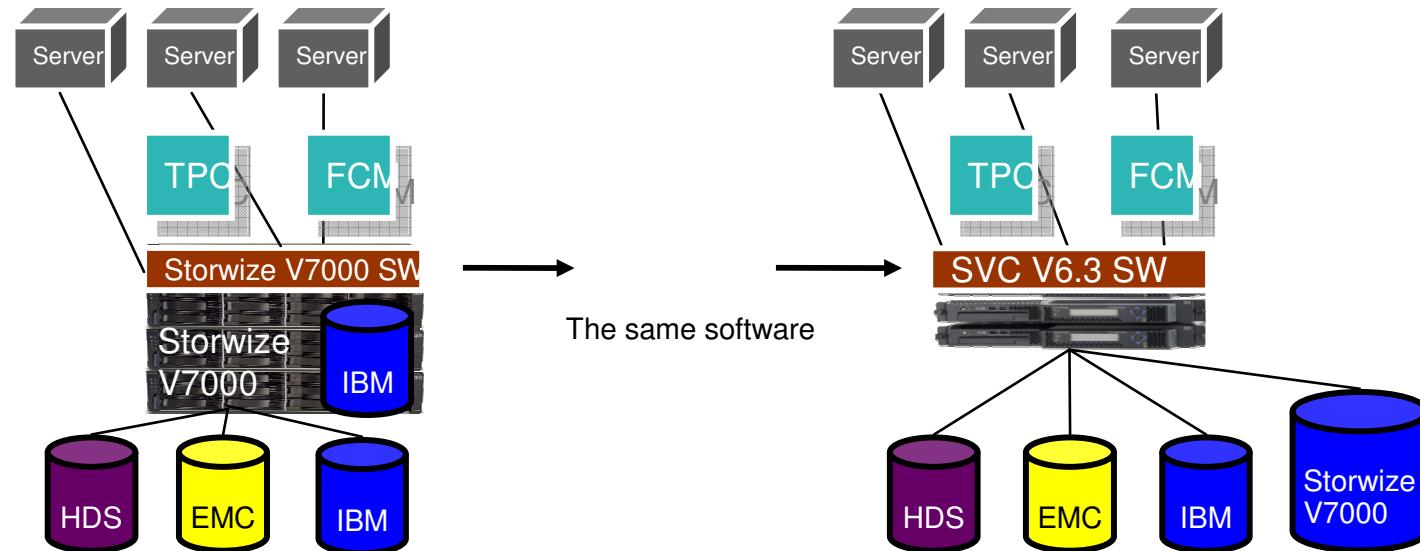
XIV:

- Ease of use
- GUI design



# Storwize V7000 Mimarisi

22.500+  
SVC Node Sold  
in 8 years

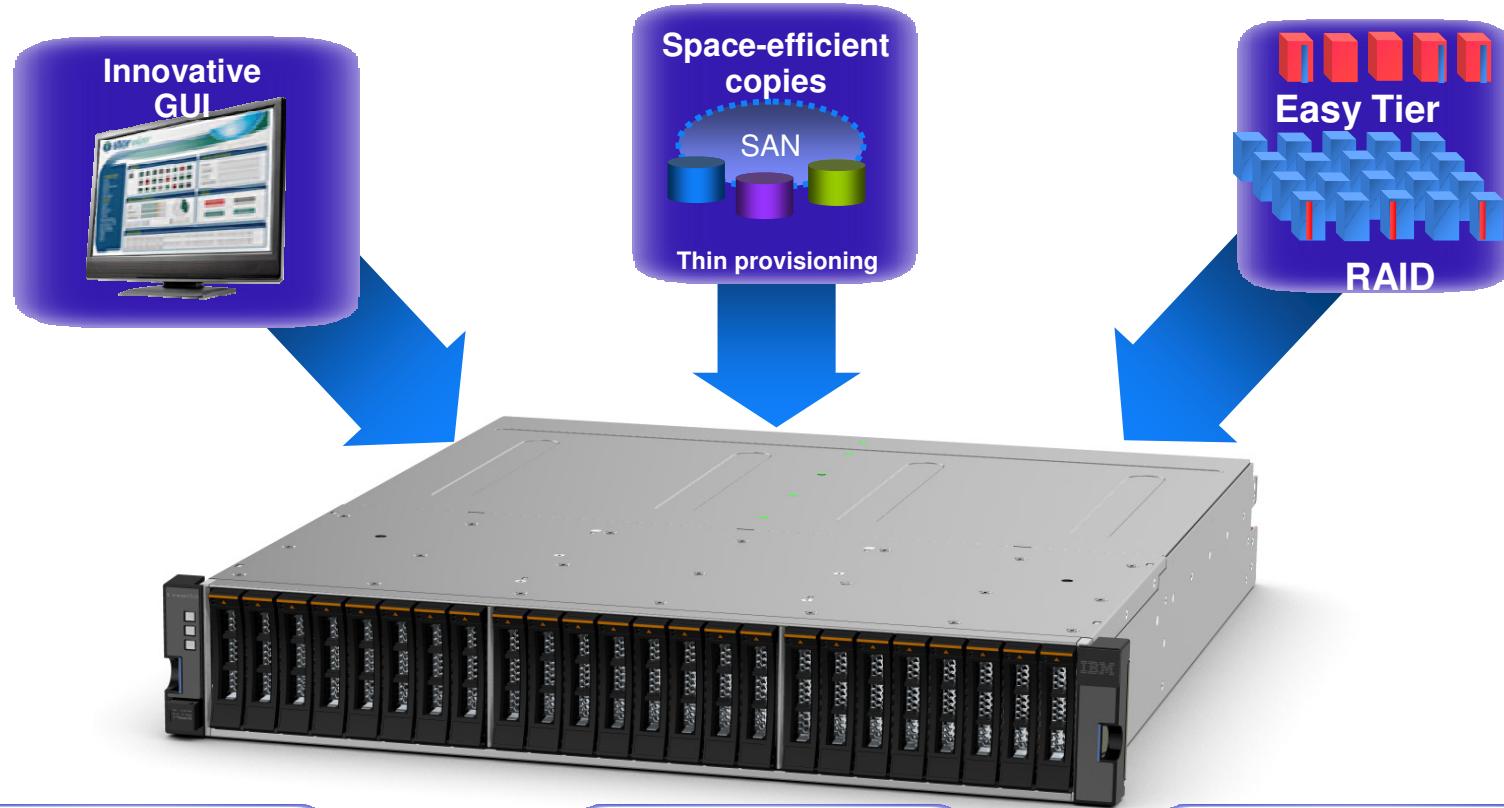


# Bir Yıl Sonra: Teknoloji Entegrasyonu Devam Ediyor

## *Storwize V7000 Unified Storage*



## Storwize V3700



**Yerden  
Kazanarak  
Datanızı  
Koruyun**

**Verimliliği Artıran  
Kullanım  
Kolaylığı**

**Response  
Zamanınızı  
Geliştirin -  
EasyTIER**

# IBM'in Akıllı Depolama Ürün Ailesi

## Entry/Midrange Storage Sistemleri

- Storwize Family
  - Storwize V7000
  - Storwize V7000 Unified
  - **Storwize V3700**
- **DS Family**
  - DS3500
  - DS5000

## Enterprise Storage Sistemleri

- DS8000 Family
  - DS8700
  - DS8800
- XIV Family
  - XIV
  - XIV Gen3

## Dosya Tabanlı Storage Sistemleri

- Scale-Out NAS (SONAS)
- N series
  - N3000
  - N6000
  - N7000

## Backup Sistemleri

- TS Family
  - TS2000
  - TS3000

## “Verimlilik”

- Real-Time Compression
- Easy Tier
- SAN Volume Controller (SVC)
- Active Cloud Engine

Storage Management Software  
**Tivoli. software**

FlashCopy Manager (FCM)

Tivoli Productivity Center (TPC)

Tivoli Storage Manager (TSM)

Tivoli Key Lifecycle Manager

# Storwize V3700 Sistemi IBM Giriş Seviyesi İhtiyaçlara Akıllı Storage

- **Verimli**
  - Storwize V7000 tabanlı kolay kullanıcı arayuzu
  - Internal Virtualization ve Thin Provisioning
  - FlashCopy Entegrasyonu
- **Kendini Optimize Edebilen**
  - Easy Tier<sup>2</sup> ile disk katmanlama teknolojisi
  - Turbo Performance<sup>3</sup> ile 30% Performans Artışı
- **Bulut Teknolojisine Uyum**
  - Küçük Başlayın, Akıllı Büyüyün
  - Kesintisiz Migration Entegrasyonu
- **Düşük fiyat**
  - Giriş Seviyesi ürünler için düşük fiyat.11K<sup>4</sup>



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1 Up to 64 FlashCopy Targets included; optional License available in R2 – 1H2013 (IBM Plans are subject to change without notice)

2 Planned to announce 1H2013 (IBM Plans are subject to change without notice)

3 Planned to announce 1H2013 (IBM Plans are subject to change without notice) - To be confirmed in performance testing prior to announcement.

4 Dual Controller, 3TB of capacity, Thin Provisioning, Migration and FlashCopy (64 targets) and basic protection (configured in RAID5 3+P)

## Giriş Seviyesi IBM Storwize Sistemleri

- **Enclosures** sadece 2U'da 12 adet LFF (3.5") yada 24 adet SFF (2.5") disk seçenekleri
- **Kontrol Uniteleri:** Dual ve Aktif Aktif çalışan kontrol üniteleri
  - 8GB Cache (4GB per controller) standart olarak; opsiyonel olarak 16GB'a upgrade edilebilir
  - 1Gb iSCSI standart host portları ve opsiyonel olarak 8Gb FC yada 10Gb iSCSI/FCoE yada SAS\* host portlarına upgrade edilebiliyor.
- **Genişleme Çekmeceleri:**
  - Tek kontrol unitesine 4 adete kadar disk çekmecesi bağlama imkanı
  - 120 adet SFF yada 60 LFF adet disk'e kadar genişleme
  - Tek bir disk çekmecesinde karışık SAS ve SSD disk seçenekleri
- **RAID Seviyeleri** RAID 0, 1, 5, 6, and 10
- **Redundant, hot-swappable bileşenler** (i.e., power supplies and fans)
- **AC power** (110 to 240 V)
- **Opsiyonel Yazılımlar\***: Easy Tier, Remote Mirroring, 64 adede kadar FlashCopy hedefleri, Turbo Performance



\*Planned to announce 1H2013 (IBM Plans are subject to change without notice)

## Storwize V3700 Disk Opsiyonları

- Drives of same form-factor may be freely intermixed without limitation in an enclosure

Small form-factor (SFF, 2.5-inch) HDD	15,000 RPM	146GB, 300GB SAS
	10,000 RPM	300GB, 600GB, 900GB SAS
	7,200 RPM	500GB, 1TB Nearline SAS
Small form-factor (SFF, 2.5-inch) SSD	200GB, 400GB E-MLC SAS	
Large form-factor (LFF, 3.5-inch) HDD	7,200 RPM	2TB, 3TB Nearline SAS

## Storwize V3700: 2U24



## Storwize V3700: 2U12



## Arkadan Görünüş – Kontrol Ünitesi



## Arkadan Görünüş – Genişleme Çekmecesi





**TEŞEKKÜRLER**

