

Tivoli Storage Manager új nevén IBM Spectrum Protect™



## IBM Szoftveres tárolási megoldások IBM Spectrum Protect

2016. Március 11.

**HUTUG – Storage Software szekció**

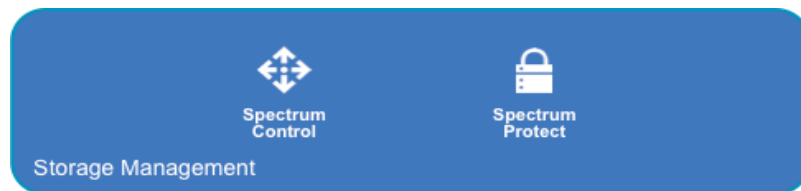
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# IBM Spectrum Storage termékcsalád



Any Storage



Flash Systems



Private, Public or Hybrid Cloud

 **IBM Spectrum Control**

Analitikus adat-menedzsment, akár 73% költségmegtakarítás

 **IBM Spectrum Protect**

Optimalizált adat-védelem, akár 53% mentésre fordított költségmegtakarítás

 **IBM Spectrum Archive**

Gyors adatmegőrzés, akár 90% megtakarítás az aktív adatok archiválására fordított költségből.

 **IBM Spectrum Virtualize**

Kevert tároló rendszer környezetek virtualizációja, akár 5x több használható tárolókapacitás

 **IBM Spectrum Accelerate**

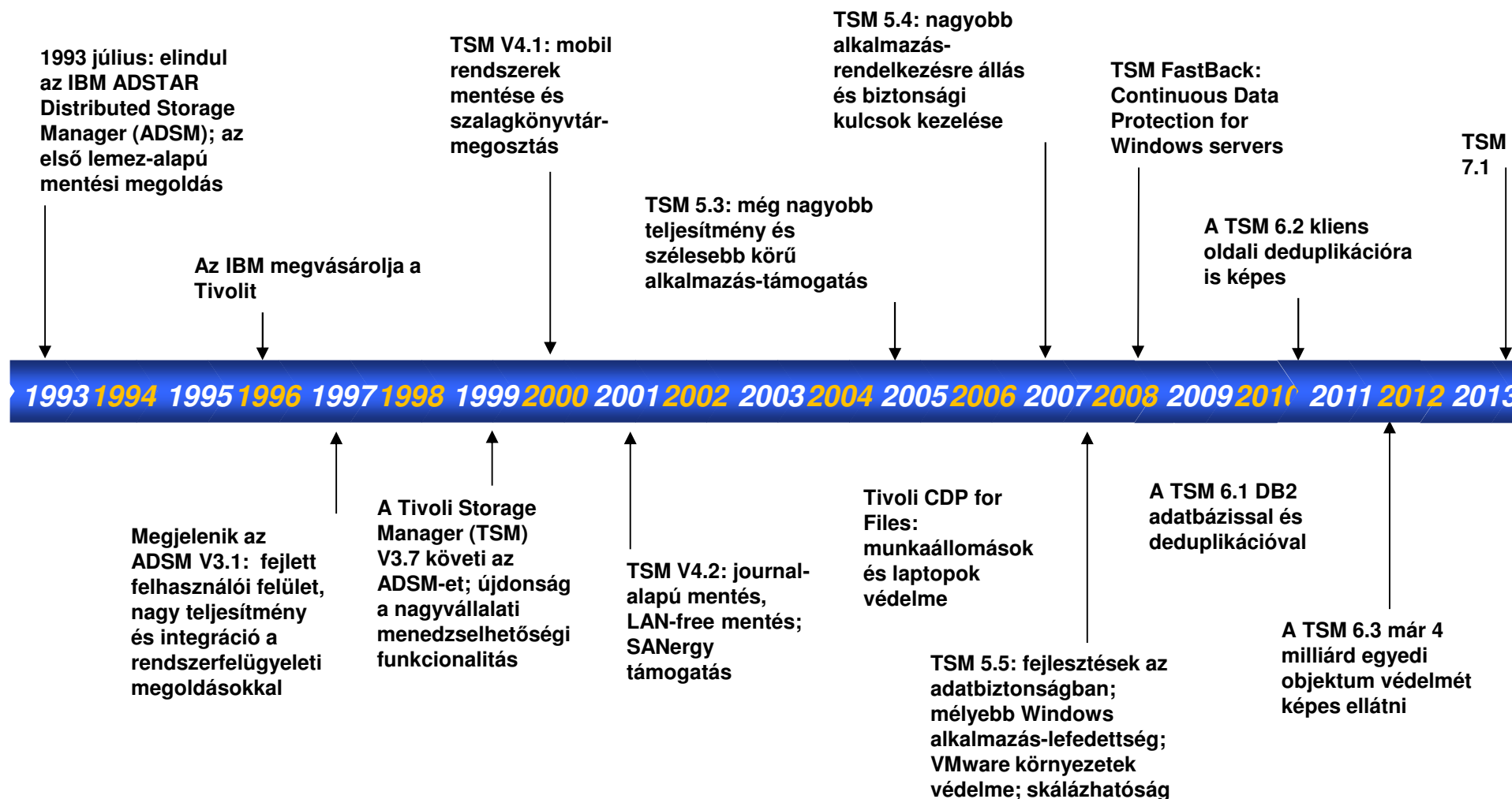
Nagyvállalati tároló rendszer, gyors beüzemelés felhőalapú kiszolgálásra, akár percek alatt.

 **IBM Spectrum Scale**

Strukturálatlan adattárolás, nagy teljesítmény és skálázhatóság mellett

# Több mint 20. éve vezető adatvédelmi eszköz!

1993



## Egy kis segítség a licenszelési útvesztőben

### Spectrum Protect Entry

Hány szerverre kell licenszelnem ?

### Trade-up vagy conversion

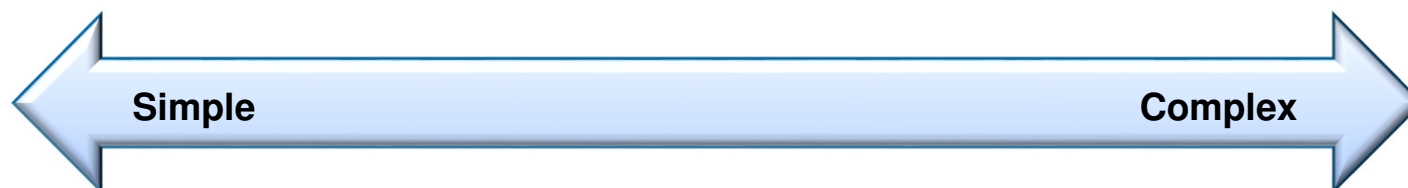
Melyiket válasszam ?

### Spectrum Protect Suite

Entry, Standard, Backend, Frontend ?

### Spectrum Protect (PVU)

Milyen komponenseket válasszak?



Product	Per Server	Front End	PVU / Processor	Back End
Spectrum Protect	✓	✓	✓	✓

# IBM Spectrum Storage Suite

Bejelentés  
jan.26.  
Elérhető  
feb.16.

## Új licenszelési lehetőség IBM Spectrum Storage Suite

- SW licensz csomag ajánlat
- kapacitás alapú licenszelés
- korlátozás nélkül keverhető  
licenz típusok
- IT piacon egyedülálló licenszelési  
rugalmasság

[Termék ismertető \(English\)](#)

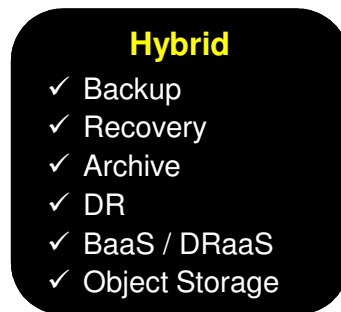
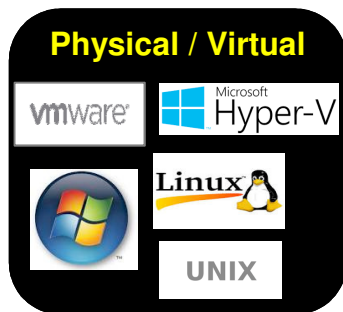
 <b>IBM Spectrum Control</b> <small>Virtual Storage Center</small>	<b>Analitikus adat-menedzsment</b>
 <b>IBM Spectrum Protect</b> <small>Tivoli Storage Manager</small>	<b>Optimalizált adat-védelem</b>
 <b>IBM Spectrum Archive</b> <small>LTFS – Linear Tape File System</small>	<b>Gyors adatmegőrzés szalagos adathordozón</b>
 <b>IBM Spectrum Virtualize</b> <small>SAN Volume Controller</small>	<b>Vegyes, akár különböző gyártók tároló rendszereinek virtualizációja</b>
 <b>IBM Spectrum Accelerate</b> <small>Based on XIV Software</small>	<b>Nagyvállalati SW tároló rendszer, általános célú szerver alapokon</b>
 <b>IBM Spectrum Scale</b> <small>GPFS/Elastic Storage</small>	<b>Nagy teljesítményű, skálázható tároló fájlrendszer strukturátlan adatok tárolására</b>



IBM  
**Spectrum**  
**Protect**

Today

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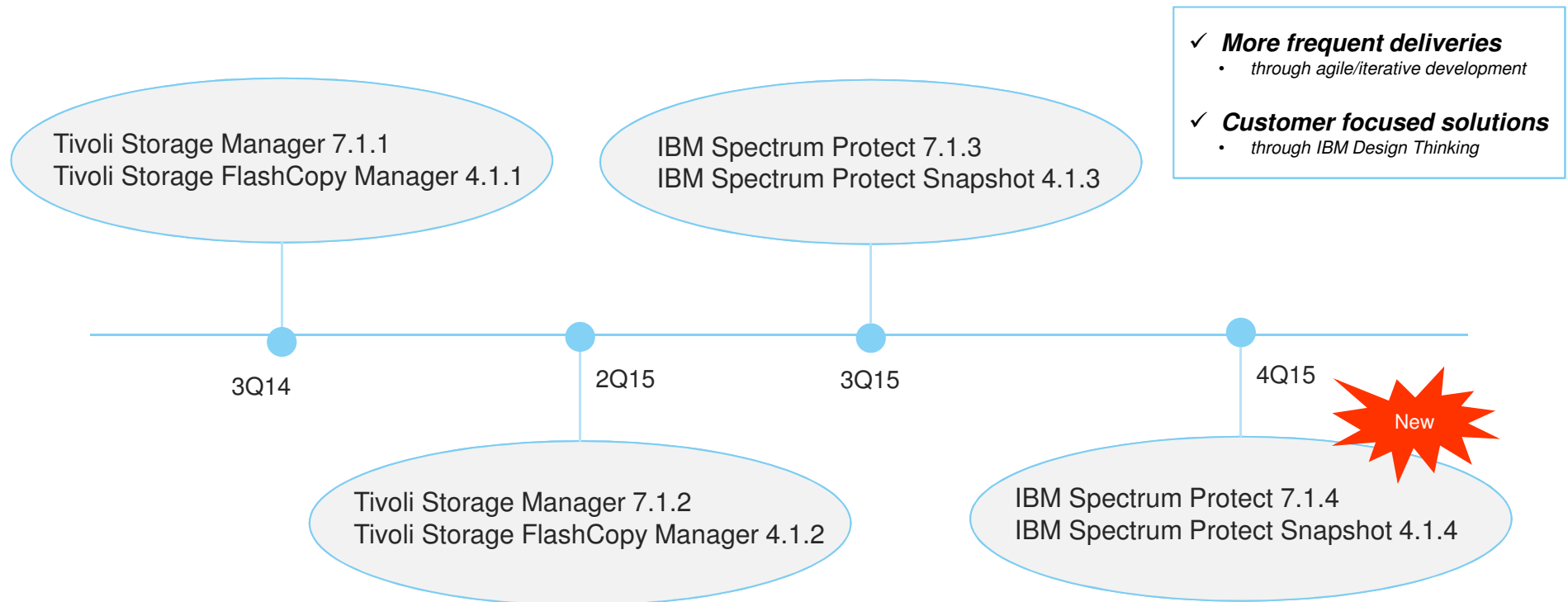
IBM  
**Spectrum  
Protect**

*"IBM Spectrum Protect allows us to keep pace with and manage data growth seamlessly and in ways we've never been able to before."*

Piedmont Healthcare

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## IBM Spectrum Protect — *Recent Deliveries*



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# IBM Spectrum Protect 7.1.1 and 7.1.2

## Efficiently protect hybrid environments



- ✓ Flexible retention policies for source and target
- ✓ Automatic failover for client recovery
- ✓ Automatic repair of damaged files or volumes
- ✓ Up to 10x improvement in deduplication (V6 vs. V7)

## Modernize your data protection leveraging snapshots



- ✓ Snapshots (FCM) added to software suites (SUR)
- ✓ Near instantaneous backup/restore with application integration
- ✓ Heterogeneous hardware snapshot support
- ✓ Spectrum Scale (GPFS) snapshots
- ✓ New HDS and HP 3PAR support

## Market leading protection for virtual environments



- ✓ Support for VMware vSphere®6
- ✓ Incremental forever for VMware and Hyper-V
- ✓ Multiple recovery options using single-source backup
- ✓ Instantly access/recover VMs or perform file/item level restores
- ✓ Resilient scheduled backups with automatic retry
- ✓ Fully integrated recovery experience in vSphere

## Data Protection Simplification



- ✓ Prescriptive blueprints for deployment
- ✓ Centralized visibility and control
- ✓ Easy deployment and management through wizards
- ✓ Front End capacity licensing
- ✓ Portal for cloud deployment and management

# IBM Spectrum Protect 7.1.3 – Release Highlights

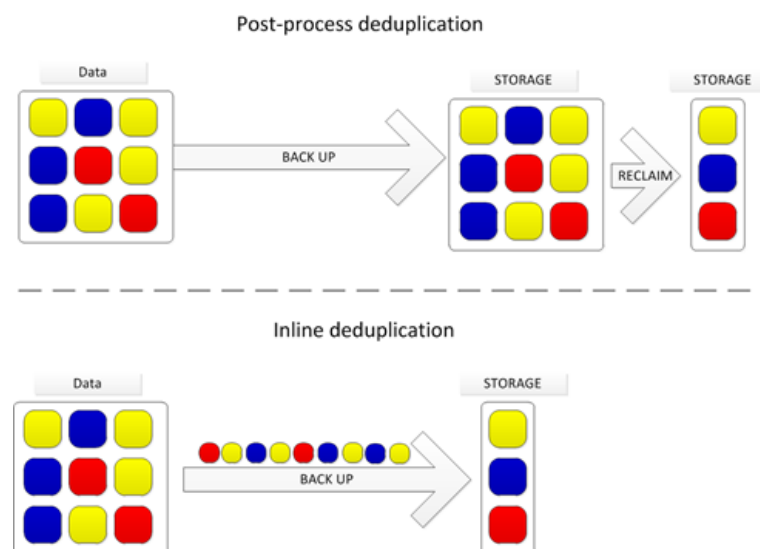
## Differentiated hybrid data protection capabilities

### New inline deduplication

Breakthrough cost and performance improvements for scalability and efficiency of software defined deduplication, increased ingestion rates, and increased capacity

- Up to 10x improvement in capacity per Spectrum Protect server
- Up to 100 TB daily ingest and replicate
- 1 PB stored, 4 PB protected per server

	Previous Deduplication	7.1.3 Deduplication
Server side dedupe	Post process	Inline
Client side dedupe	Yes	Yes
Max dedupe storage pool size	100 TB	1 PB
Managed data	400 TB	4 PB
Reclamation process required	Yes	No



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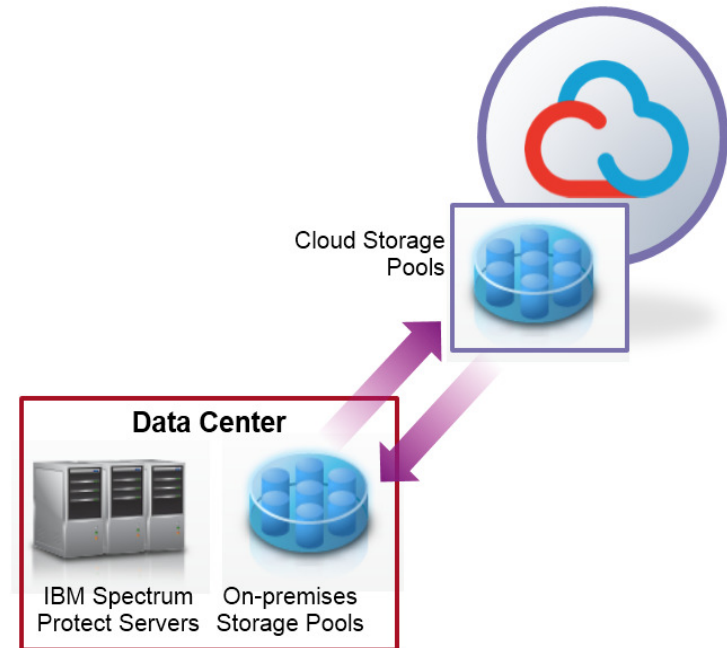
# IBM Spectrum Protect 7.1.3 – *Release Highlights*

**Differentiated** hybrid data protection capabilities

## New cloud and native object storage pools

Low cost, secure cloud storage capability, leveraging native object storage

- No need for a gateway
- On IBM SoftLayer cloud
- On-premises native object stores (such as IBM Spectrum Scale)



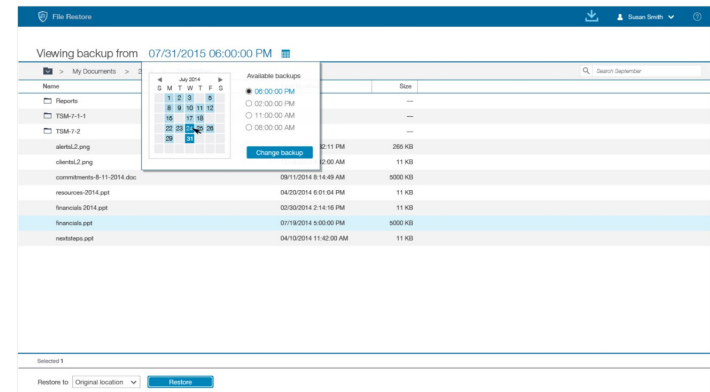
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# IBM Spectrum Protect 7.1.3 – Release Highlights

## Simplify the experience

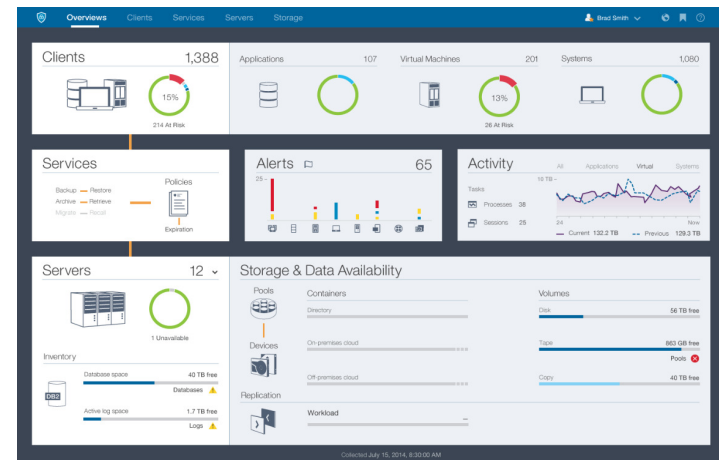
### Intuitive web-based portal for self-service file recovery

- “Self Service” - No administrator assistance required
- End user does not need to know Spectrum Protect
- Browser-based - No software required on end user system
- Demo: <https://frdemo.tsm.ibm-serviceengage.com:9081/FRDemo/>



### Ease of use

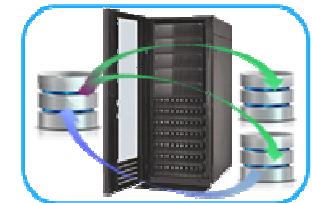
- Enhanced monitoring, reporting and analytics
- Wizard-based configuration
- More visibility, control, and automation
- Demo: <https://www.ibm-serviceengage.com/on-premises-solutions>



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# IBM Spectrum Protect 7.1.4 (Snapshot 4.1.4) – Release Highlights

- **Simplify** the experience
  - ✓ Operations Center enhancements for customized reporting – adhoc, scheduled, email
  - ✓ Visualize NAS filers within the Operations Center
  - ✓ Managed capacity reporting integration for Spectrum Protect Snapshot
  - ✓ Blueprint updates for pLinux
- **Modernize** your data protection
  - ✓ Spectrum Protect Snapshot for Windows - Instant Restore for non-IBM devices
  - ✓ NDMP and SnapMirror to Tape support for NetApp® clustered Data ONTAP® (CDOT)
  - ✓ Spectrum Scale snapshot offload to Spectrum Protect server
  - ✓ Spectrum Protect for Space Management (HSM) zLinux support
  - ✓ Dynamic LUN provisioning for Spectrum Protect Snapshot for UNIX/Linux
- **Lead** the market in protection of virtual environments
  - ✓ Support for larger VMs – enables backup of VMware VMs > 2 TB
  - ✓ Support for VMware vVols – enables backup of VMs using vVols



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## Roadmap



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## IBM Spectrum Protect – *Themes for 2016*

2016

- ✓ **Simplify** the experience for deployment, administration, and the end user
- ✓ **Differentiated** hybrid data protection capabilities
- ✓ **Lead** the market in protection of virtual environments
- ✓ **Modernize** your data protection

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## ✓ **Simplify** the experience for deployment, administration, and the end user

- Manage your Spectrum Protect environment with ease using the Operations Center
  - Device management - tape drives and library management, perform cleaning operations, manage offsite tape rotation
  - Reporting and monitoring, historical trending
  - Ease set up and configuration with client deployment and updates
- Enhanced prescriptive blueprints to make configuration and deployment automated, optimized, and simple
- Automate and simplify installation and deployment in VMware environments
- Provide easy to use and intuitive interfaces for every user including more vSphere Web Client integration
- Spectrum rebranding – provide consistency and alignment with the other products in the portfolio
- Cross platform server migration

### **Client Value**

- ✓ Lower the total cost of administration with easy management of day-to-day operations
- ✓ Simplify deployment with automated client installs and upgrades
- ✓ Point and click visibility, control, and automation with intuitive visual status indicators
- ✓ Faster time to value across the board

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## ✓ Differentiated hybrid data protection capabilities

- Data lifecycle management with business process collections (single ingest) - policy-based assignment of recovery points
- Migrate existing legacy deduplicated data to the new efficient and more scalable directory container pools
- Optimize costs by moving older/colder deduplicated data to cloud object stores
- Protect deduplicated storage pools by creating copies on tape
- Secure and optimize your deduplicated storage pools with encryption and compression
- Integrate Spectrum Protect replication with object store and hardware-based replication - meta data only replication
- Extend cloud storage pools to include native support for Cleversafe, Amazon S3, Microsoft Azure, and Google object stores
- High-speed data transfer between Spectrum Protect servers with Aspera – integrated WAN acceleration
- Enhance security to meet compliancy requirements with tighter LDAP integration (central user management)

### Client Value

- ✓ Intelligent policy management of ingested data - store it once, access it anytime, anywhere
- ✓ Leverage more cloud capabilities as your business expands its footprint in hybrid cloud
- ✓ Leverage the replication technologies within the storage you already own
- ✓ Tighten security to secure your data

## ✓ **Lead** the market in protection of virtual environments

- Simplify backup management and ease your organization's transition to hypervisor-based data protection
  - Automate and simplify deployment and configuration in VMware environments
  - Enable intuitive operations with deeper vSphere Web Client integration
  - Schedule, execute, and monitor backups directly within the vSphere Web Client
  - Set backup rules and choose backup policies using VMware native controls (like tagging)
- Scale up with additional performance enhancements for backing up and restoring large VMs
- Leverage hardware snapshots for data stored on VMware virtual volumes (VVOLS)
- Performance enhancements when sending VMware snapshots to the Spectrum Protect server

### **Client Value**

- ✓ Shorter time to value with automation and integration with familiar interfaces
- ✓ Reduce impact to your backup administrators by enabling your virtual environment administrators
- ✓ Reduce downtime by shortening time to recovery for file restores from VMware backups
- ✓ Gain efficiencies by exploiting VMware virtual volumes and leveraging performance improvements

## ✓ Modernize your data protection

- Deeper cloud integration
  - SoftLayer – choose Spectrum Protect for your data protection while provisioning your machines in SoftLayer
  - Enable the ability to leverage cloud storage for long-term data retention of inactive data
- Tighter snapshot integration - further integration for key workloads like VMware, Exchange, SQL, Linux guests
- Additional REST APIs to make it easier and quicker for deployment, provisioning, and automation
- Support for the newest applications and operating systems
  - Windows Server 2016, Hyper-V 2016
  - Exchange Server 2016, SQL Server 2016
  - vSphere 2016

### Client Value

- ✓ Deeper cloud integration to enable broader coverage of cloud use cases
- ✓ Leverage the speed, power, and efficiency of snapshots to protect your large workloads
- ✓ Protect your applications as they move to the latest technologies

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# Roadmap

Future

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## ✓ Simplify the experience for deployment, administration, and the end user

- Continue to simplify the experience through user centered design using IBM Design Thinking
  - Interfaces that meet the user needs – web browser, vSphere Web Client, Microsoft System Center
- Operations Center enhancements
  - Deeper reporting and monitoring
  - Historical analytics
- Appliances – Physical and Virtual, Spectrum Protect + Spectrum Scale, Docker
- Multi-tenancy / Data sovereignty – clear separation of data for multiple tenants
- RESTful APIs for administration and Client Management Services

## ✓ Differentiated hybrid data protection capabilities

- Enhance data lifecycle management with business process collections (single ingest)
  - Optional copy for offsite vaulting, adhoc for arbitrary date(s), hold/release for legal compliance
- eDiscovery – Index data managed by Spectrum Protect for eDiscovery
- Aspera integration for high speed client to server data transfer
- Comprehensive replication for disaster recovery and media failure protection
  - Automated failover/failback and store, “Always on”, multiple target servers, transparent client access
- Additional security with more integration with LDAP for authorization (RBAC)

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## ✓ Lead the market in protection of virtual environments

- Web portal for File Recovery - Extend visibility into your entire backup inventory without mounts
- Extend VMware capabilities, including tighter application integration
- Extend Hyper-V capabilities, including Snapshot support and application integration
- Optimized full VM restores including incremental VM restores
- Add support for Docker, KVM, and OpenStack
- Add support for vRealize
- Add support for Bluemix

## ✓ Modernize your data protection

- Copy data management for optimizing the growing copies of data in your enterprise
- More integrated snapshot support with tighter integration and automation
- SQL Server database cloning to leverage the speed and efficiencies of snapshots
- Oracle 12c container database support
- MongoDB, Hadoop, Netezza
- SaaS applications

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# Backup

## IBM Spectrum Storage Suite – Mi van a csomagban?

### IBM Spectrum Storage Suite V1.0

IBM Spectrum Accelerate, Version 11.5.3

IBM Spectrum Archive Enterprise Edition, Version 1.2 (Linux edition)

IBM Spectrum Control Advanced Edition 5.2

IBM Spectrum Protect Suite 7.1

IBM Spectrum Scale Advanced and Standard Editions (Protocols) V4.2

IBM Spectrum Virtualize Software for SAN Volume Controller, Version 7.6

IBM Spectrum Virtualize Software for SAN Volume Controller, Version 7.6 - Real-time Compression

IBM Spectrum Virtualize Software for SAN Volume Controller, Version 7.6 - Encryption Software



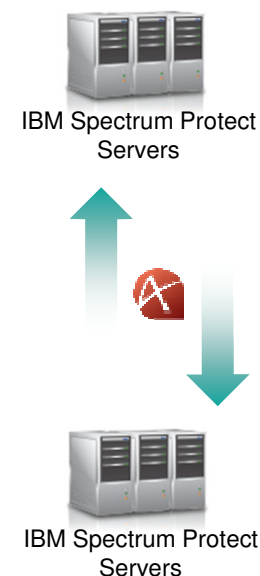
# Introducing IBM Spectrum Protect High Speed Data Transfer

First enterprise backup software integrated with IBM Aspera FASP high speed data transfer protocol

- Transfer speeds not affected by distance
- Performance scales linearly as bandwidth increases

Enables fast replication over long distances

Complete data transfers within shorter replication windows



# Expanded Cloud Storage Pools

Empower your administrators to become hybrid cloud data protection experts

**New** Cleversafe support for cloud and on-premises object storage

Expands existing capabilities

- IBM SoftLayer cloud
- OpenStack Swift on-premises object storage

Use the cloud with confidence - without losing control of your data



Köszönöm a figyelmet

