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DIGITAL TALENT SCHOLARSHIP 2020





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AWS Storage Services

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BREAK
FOR
COMITS!





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Agenda

- How to store data
- Elastic Block Store (EBS)
- Simple Storage Service (S3)
- Amazon Glacier
- AWS Storage Case Studies





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How to store data ?



BREAK
YOUR
LIMITS !

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How about AWS ?





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Where should they store this ?

Produk Katalog

Menampilkan 901210 produk untuk "Action Figure" (1 - 60 of 901210)

Urutkan: Paling Sesuai ▼

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Home Mainan & Hobi Figure Action Figure Hulkbuster Figure Iron Man Ironman Marvel En...

Power Merchant
Hulkbuster Figure Iron Man Ironman Marvel End Game New Edition
4.5 ★★★★★ (31) • Terjual 68 Produk • 12961x Dilihat

HARGA **Rp82.500**

JUMLAH Stok tinggal <20, beli segera!
- 1 + Min. pembelian 1pcs. Lebih banyak, lebih murah! ⓘ

Tulis catatan untuk penjual

Berat	Kondisi	Asuransi	Etalase
250gr	Baru	Opsional	FIGURE CAMPUR ▼

Jakarta Barat, Cengkareng ▼
Dari Kota Administrasi Jakarta Barat

1. 2. 3. 4. Baby Groot Guardian of Galaxy Avengers Rp47.999 Jakarta Barat ★★★★★ (156)

Mainan Action Figure Avengers Spiderman- Rp25.000 Jakarta Barat ★★★★★ (113)

Pokeball figure pokemon / Bola Rp43.500 Kab. Bekasi ★★★★★ (163)

Action Figure Avengers Black Panther Rp25.000 Jakarta Barat ★★★★★ (104)

Hulkbuster Figure Iron Man Ironman Marvel End Game New Edition Rp82.500 Jakarta Barat ★★★★★ (31)

mainan model simulasi hewan laut keong Rp95.000 Jakarta Utara

ACTION FIGURE IRON MAN MARK 46 Rp89.900 Jakarta Barat

Iron Man Mark 50 Action Figure Recast Rp89.999 Jakarta Barat ★★★★★ (76)



273 produk "shf" di semua Kategori



Urut berdasarkan
Relevansi

Trending



 Tamashii 14818
478712 Shf Kr Ex-Aid Hunter
Action Gamer Lv.5 Action...
Rp812.000
Tangerang

Trending



 Tamashii 09507
480667 Gunpla SHF Takeshi
Hongou Action Figure
Rp812.000
Tangerang

Trending



Trending



SHF

SHF Ultraman Ginga 57631 Action Figure

Trending

Brand: SHF Belum ada ulasan



Harga
Harga awal ~~Rp875.000~~
Rp743.750 15% OFF

Blibli Rewards +149 poin Blibli Rewards [Info](#)

Cicilan **Cicilan 0%** mulai dari **Rp61.979** /bulan [Info](#)

Cicilan tanpa kartu kredit **Tersedia** [Info](#)

Metode Pengiriman ☒ **Pengiriman Langsung** **Stok Tersedia** ✓
Pesanan dikirim langsung ke tempat Anda

Ambil di Toko  **Tidak Tersedia** ⚠
Ambil pesanan langsung di store yang dipilih

1

BELI SEKARANG

TAMBAH KE BAG

♥ Tambah ke Wishlist

Share   



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Let calculate ...

1 product, 4 images

If each seller sell 10 products, they will have 40 images

And if the market place have 10.000.000 sellers

They will have 400.000.000 images

Are they going to add
more seller ?

YES



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How do you backup ?

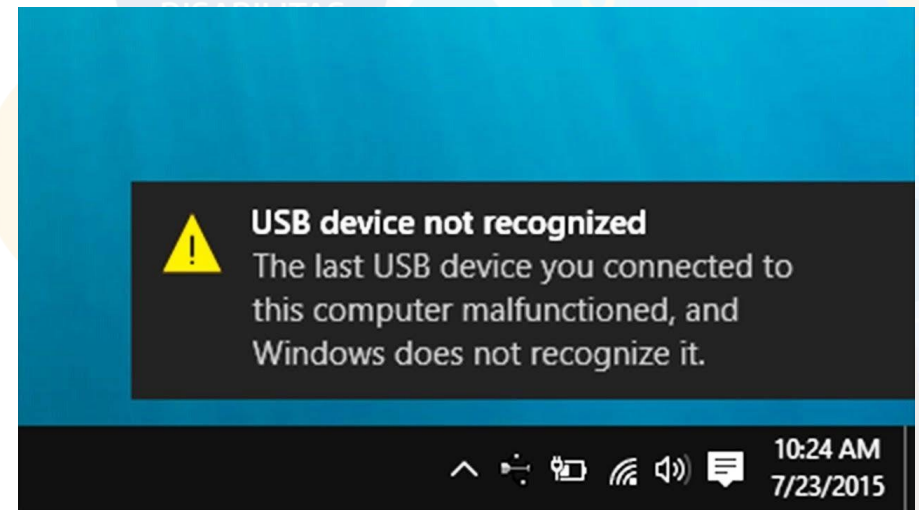
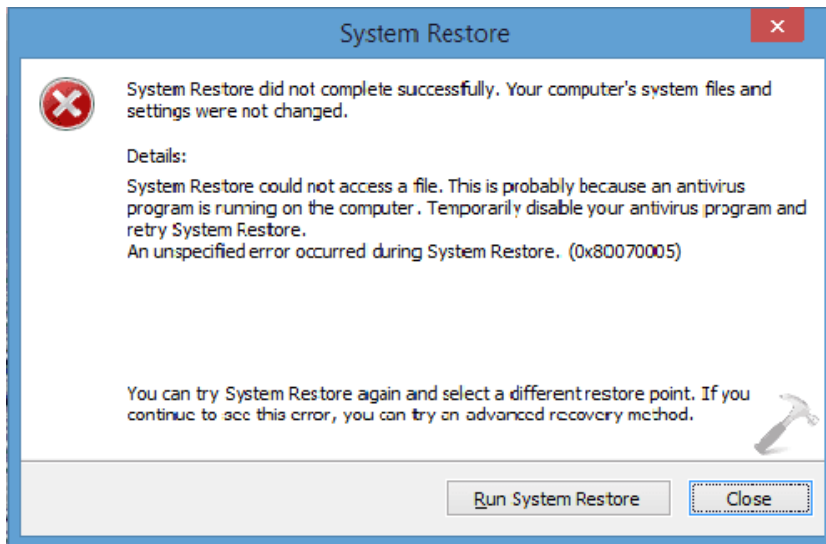


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Fail ?





AWS Storage Services



Amazon EBS

Persistent block storage for Amazon EC2



Amazon S3

Regionally distributed, web-enabled object storage



Amazon Glacier

Long-term record storage for archive and regulatory compliance



Amazon EFS

Sharable, network-attached file storage



AWS Storage Gateway

AWS extension of your on-premises storage



Cloud Data Migration Services

Efficient data migration options





What is EBS ?



EBS – Elastic Block Store
Same like Hard Disk for your EC2

- Persistent block level storage volumes offer consistent and low-latency performance.
- Stored data is automatically replicated within its Availability Zone.
- Snapshots are stored durably in Amazon S3.

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Amazon EBS Volume Types

	SSD		HDD	
Volume Type	General Purpose SSD (gp2)	Provisioned IOPS SSD (io1)	Throughput Optimized HDD (st1)	Cold HDD (sc1)
Description	Balances price and performance for a wide variety of transactional loads.	Highest-performance SSD volume designed for mission-critical applications.	Low-cost HDD designed for frequently accessed, throughput-intensive workloads.	Lowest cost HDD designed for less frequently accessed workloads.
Volume Sizes	1 GiB – 16 TiB	4 GiB – 16 TiB	500 GiB – 16 TiB	500 GiB – 16 TiB
Dominant Performance Attribute	IOPS	IOPS	MiB/s	MiB/s





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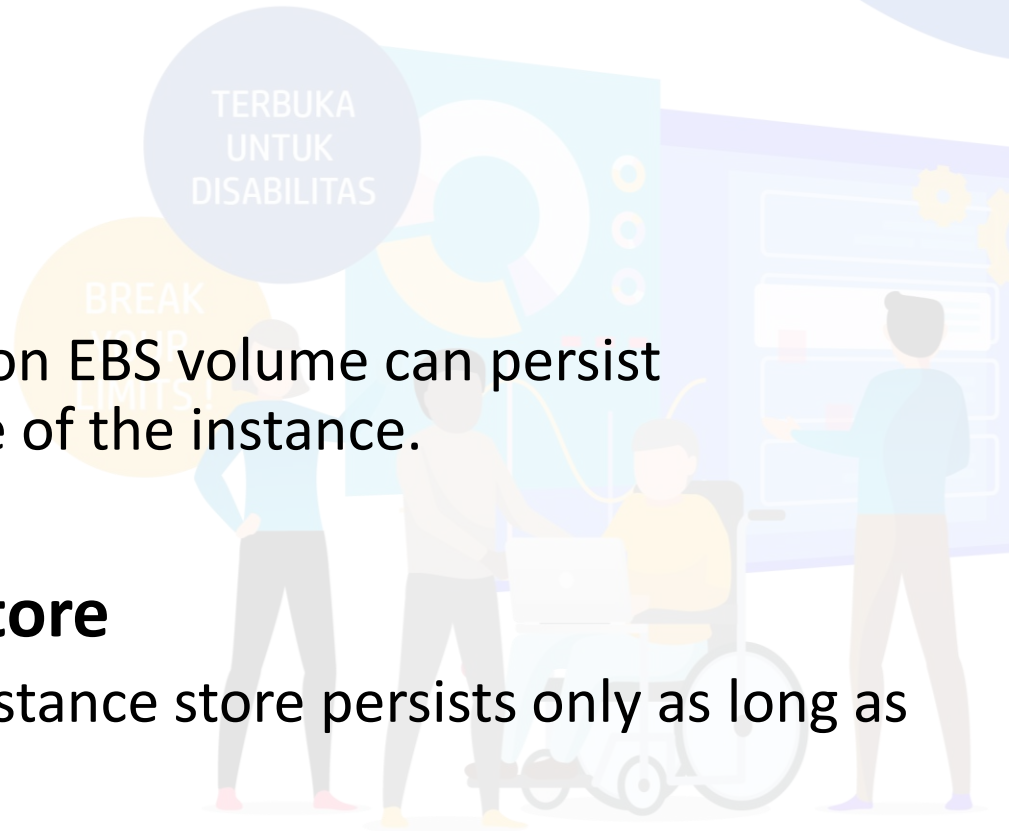
Amazon EBS vs. Amazon EC2 Instance Store

- **Amazon EBS**

- Data stored on an Amazon EBS volume can persist independently of the life of the instance.
- Storage is **persistent**.

- **Amazon EC2 Instance Store**

- Data stored on a local instance store persists only as long as the instance is alive.
- Storage is **ephemeral**.





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What is Amazon S3?

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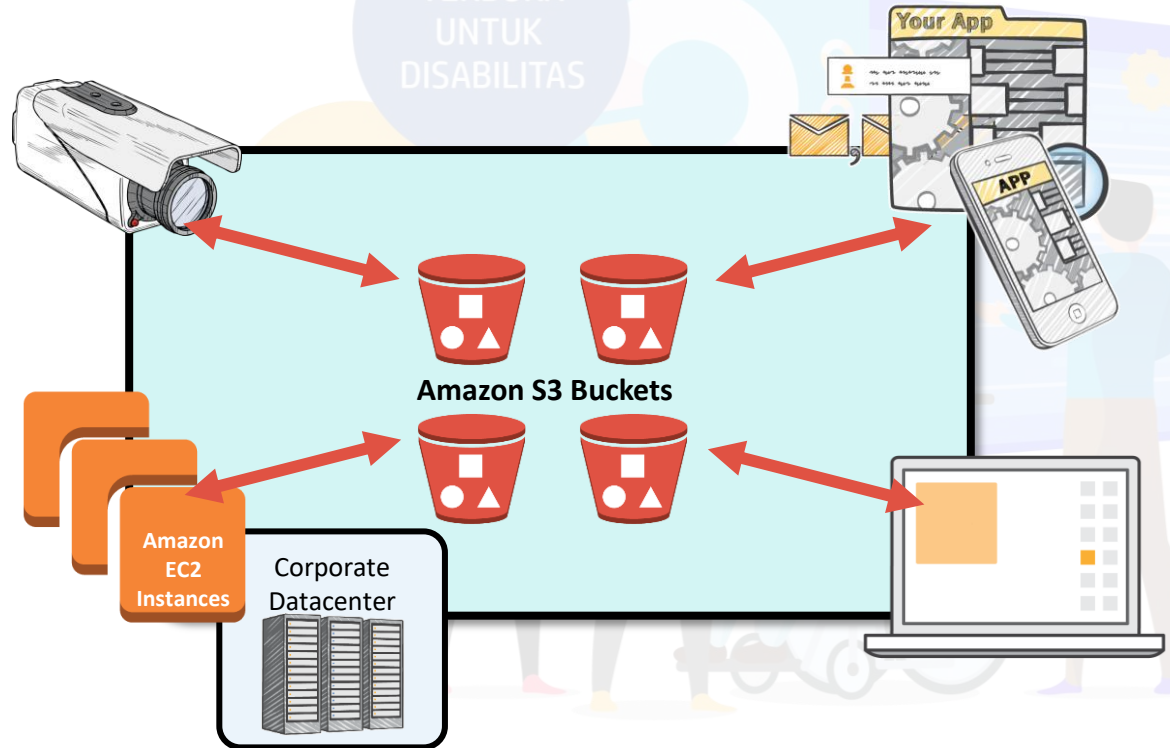
- Data is stored as objects within buckets
- Unlimited storage
 - Single object limited to 5TB
- 99.9999999999% durable
- Granular access to bucket and objects



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Amazon S3 Common Use Scenarios

- Backup and storage
- Application hosting
- Media hosting
- Software delivery





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S3 Pricing

Amazon S3		Overview	Features ▾	Storage classes	Pricing	Security	Resources ▾	FAQs
Region:		Asia Pacific (Singapore) ▾						
		Storage pricing						
		S3 Standard - General purpose storage for any type of data, typically used for frequently accessed data						
		First 50 TB / Month						
		\$0.025 per GB						
		Next 450 TB / Month						
		\$0.024 per GB						
		Over 500 TB / Month						
		\$0.023 per GB						

If we assume 1 USD = IDR 15.000

Cost for 1 Gb storage per month = $0.0025 \times 15.000 = \text{IDR } 375$





Achieving



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Media asset workflows

Healthcare information archiving

Regulatory and compliance archiving

Scientific data storage

Digital preservation

Magnetic tape replacement



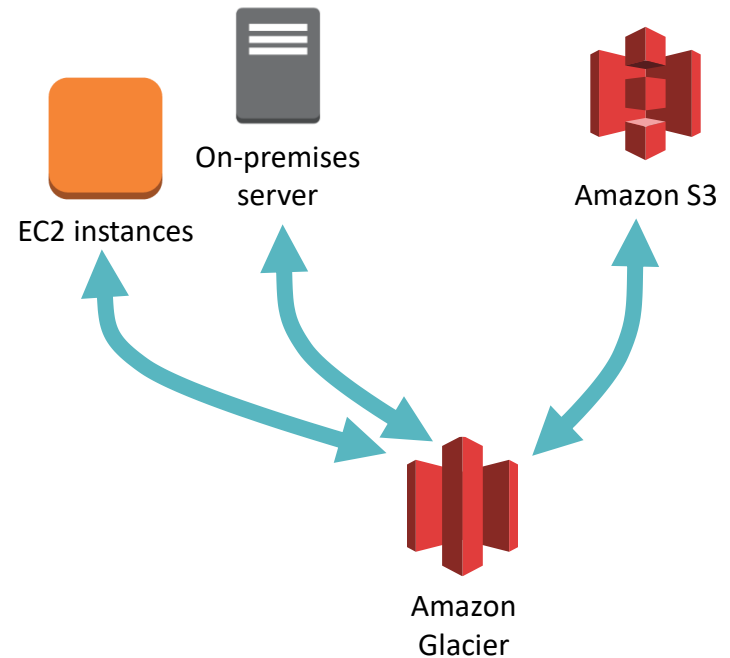


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What is Amazon Glacier?

- Low-cost data archiving and long-term backup
- 3- to 5-hour retrieval*
- Can configure lifecycle archiving of Amazon S3 content to Amazon Glacier

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S3 Glacier Pricing

Storage pricing

Region:

- \$0.005 per GB / Month

If we assume 1 USD = IDR 15.000

Cost for 1 Gb storage per month = $0.0005 \times 15.000 = \text{IDR } 75$



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Amazon EBS and Amazon S3

	Amazon EBS 	Amazon S3 
Paradigm	Block storage with file system	Object store
Performance	Very fast	Fast
Redundancy	Across multiple servers in an Availability Zone	Across multiple facilities in a Region
Security	EBS Encryption – Data volumes and Snapshots	Encryption
Access from the Internet?	No (1)	Yes (2)
Typical use case	It is a disk drive	Online storage

- (1) Accessible from the Internet if mounted to server and set up as FTP, etc.
(2) Only with proper credentials, unless ACLs are world-readable



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AWS S3 Case Studies



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