



# Data (Object) Transformation with Scality

Perfect Solution for Data Store ,  
Protect , Manage in Digital Economy

**Korea Sales Director**

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A decorative graphic on the right side of the slide consisting of several overlapping hexagons in various colors: dark teal, light teal, yellow, orange, red, and purple. The text "The art of scale" is written in a white, italicized serif font inside the largest, dark teal hexagon.

*The art  
of scale*



# Data Challenges in the Digital Economy

1. 비정형 데이터의 대규모 증가
2. Data Transformation , 애플리케이션 현대화 및 스토리지에 대한 새로운 요구 사항
3. Data Everywhere: Core , Multi Cloud 및 edge 환경에서 데이터를 관리

Introducing

# Unbreakable cloud storage for data centers

*Easy to manage.  
Zero data loss.*



## **ALL the advantages of cloud storage**

- 스케일 아웃 클라우드 S3 호환 개체 및 파일 스토리지 서비스 제공



## **Protection from ALL threats**

- 계획된 가동 중단 및 계획되지 않은 가동 중단
- 하드웨어 오류 및 소프트웨어 버그
- 데이터 센터 및 인프라 오류
- 악의적인 활동 랜섬웨어



# Data Transformation

**DATA GROWTH**

**RANSOMWARE**

**PUBLIC vs PRIVATE**



# Data Transformation

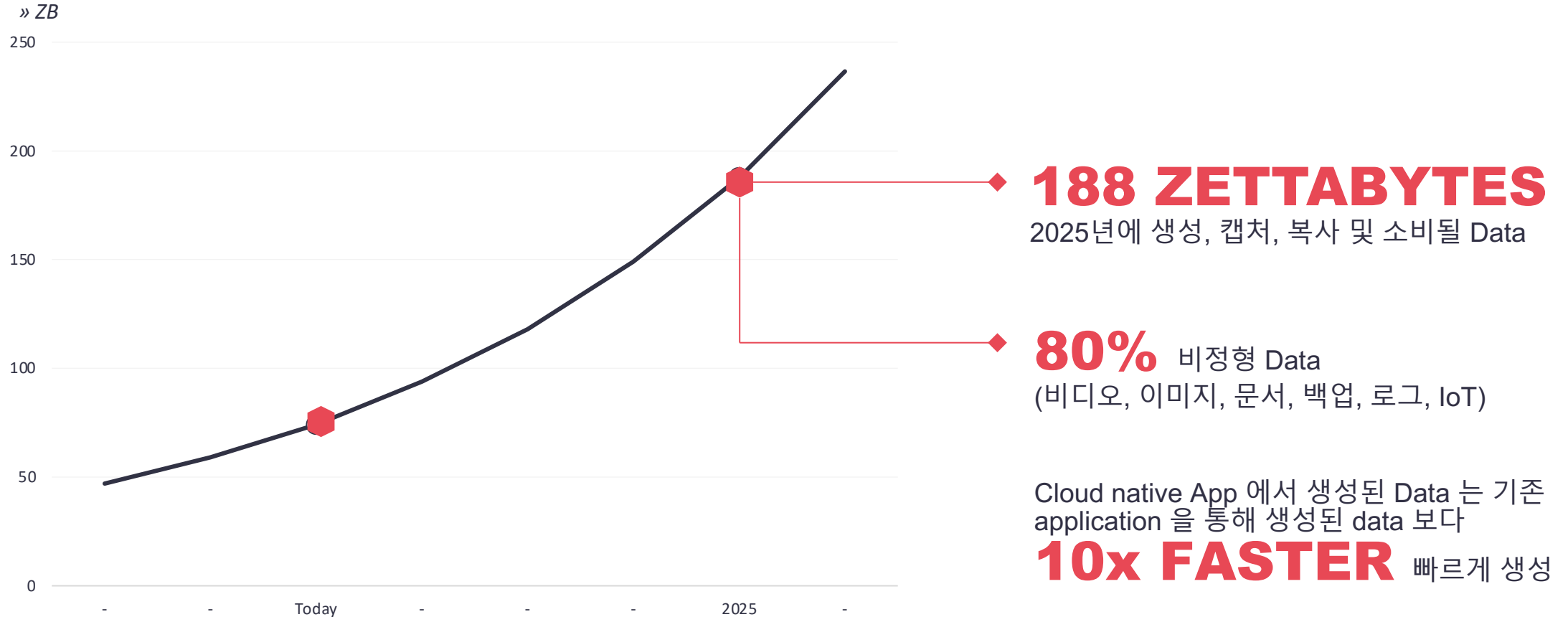
**DATA GROWTH**

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# 비정형 Data 의 시대



Based on IDC's Global DataSphere Forecast 2020

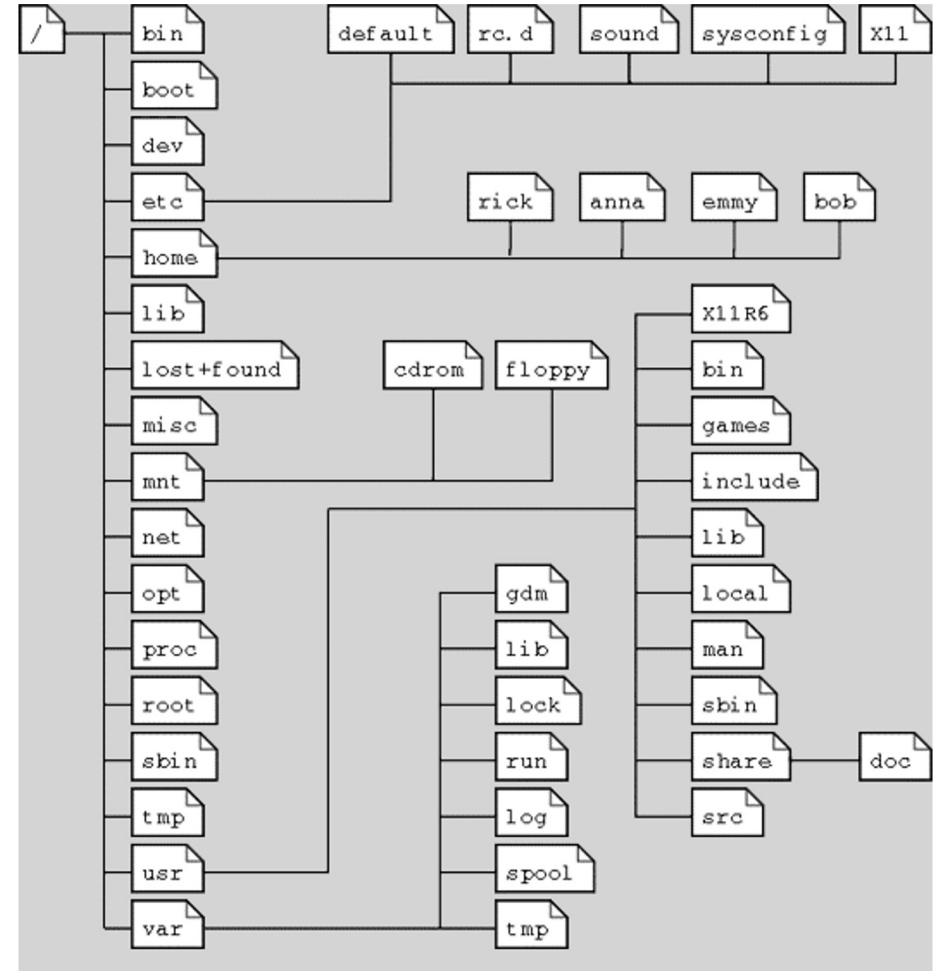


# FILE OR OBJECT? ( NAS Storage )

## *The UNIX and POSIX File Attributes*

- File type - specifies what type of file it is
- Access permission - the file access permission
- for owner, group and others
- Hard link count - number of hard link of the file
- Uid - the file owner user id
- Gid - the file group id
- File size - the file size in bytes

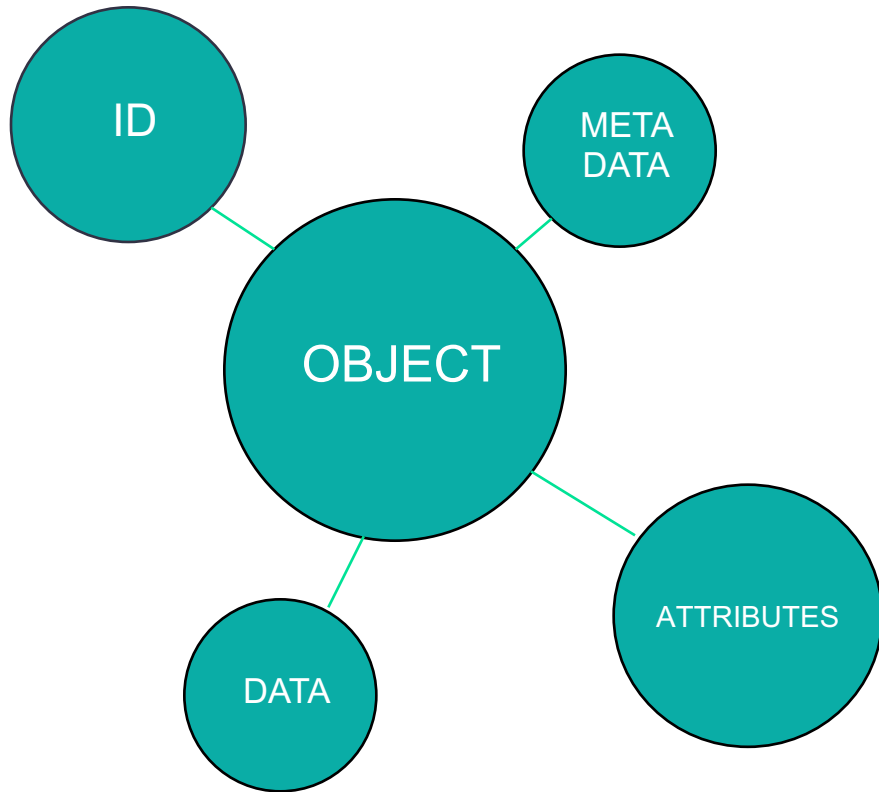
*Source: Sunil Kumar RM Asset Professor RUIT*



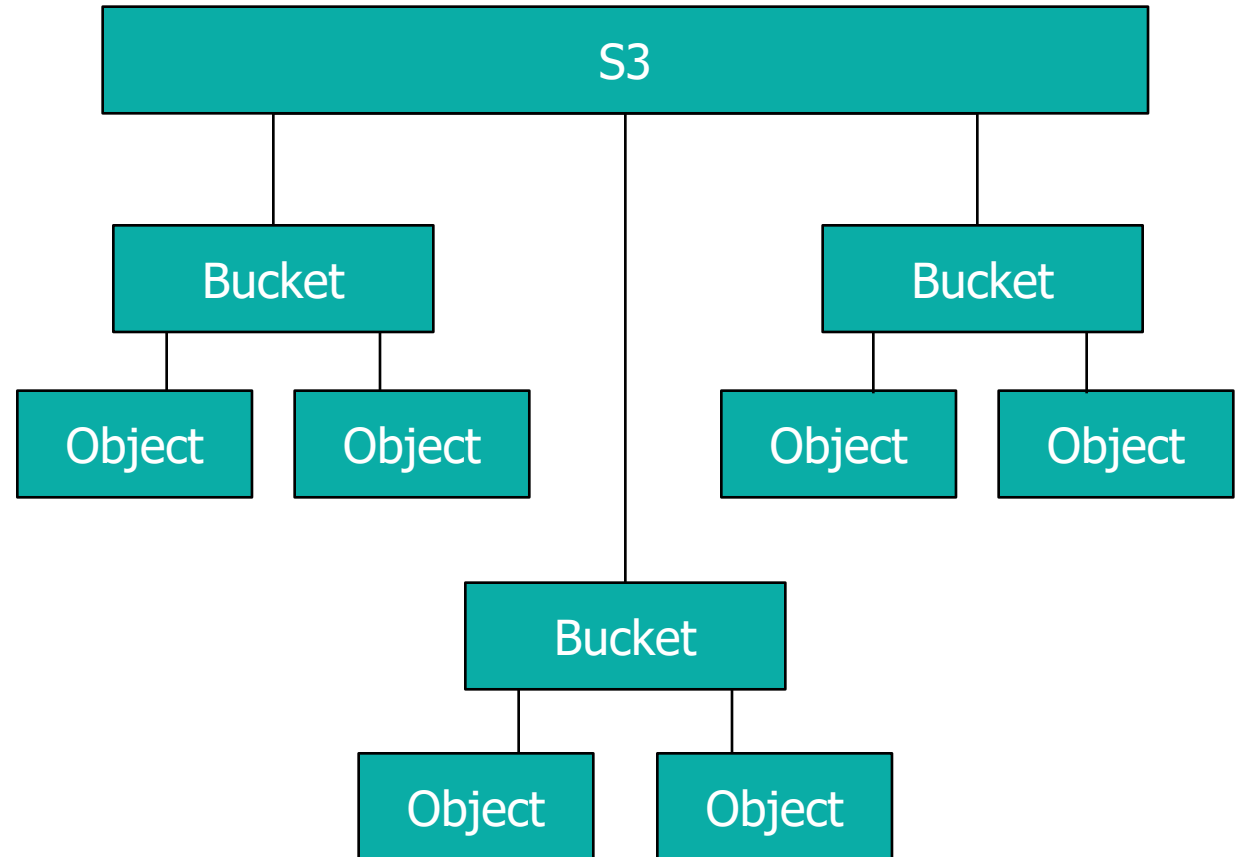
# FILE OR OBJECT? ( Object Storage –Scality , AWS etc )

*A Flat Namespace*

## Object Storage



## S3 Namespace





# 급변하는 시대에서 최적의 **Solution** ?

## *Object vs Traditional Storage (NAS/SAN)*

### Traditional Storage

- SAN : 공유 불가. 확장 한계
- NAS : File System 구조 . 폴더 계층 구조로 인한 확장 한계.
- SAN & NAS : 고비용 Appliance 구조

### Scality ( Object Storage )

- unlimited capacity/nodes - petabyte scale storage ( single namespace )
- Cloud Ready ( Hybrid , Multi Cloud 지원 )
- 더 높은 내구성과 가용성 (up to 100% availability, up to 14 nine's durability)
- Multi Protocol 액세스( File 및 Object )
- Scality 는 SDS ( HW 제안 없음 ) 단일 클러스터에서 x86 서버와 드라이브 크기를 혼합구성
- Object Lock 을 통한 Data 보안



# Data Transformation

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# The Future of Ransomware Attacks

*More expensive, more impactful on organizations*

- 랜섬웨어로 인한 전 세계 피해 = **\$20B (USD) by 2021 - 57X more than 2015**<sup>1</sup>
- Average ransomware payment = **\$250,000 (USD)**<sup>3</sup>
- **Singapore** companies pay average **S\$1.5m** after ransomware attack<sup>6</sup>
- 기업에 대한 랜섬웨어 공격은 평균 11초마다 발생하는 것으로 추정됩니다.<sup>5</sup>
- **Too many silos** ( 확장 불가능한 백업 어플라이언스 )
- **30-50%의 데이터 증가 및 24x7 디지털 비즈니스로 복잡성 추가**
- **비용 유지 관리**
- 

(1) [Cybersecurity Ventures](#) (2) IDC's 2021 Ransomware Study: "Where You Are Matters!", Q2 2021 (IDC # US48093721, July 2021) (3) IDC's 2021 Ransomware Study: "Where You Are Matters!", Q2 2021 (IDC # US48093721, July 2021) (4) Cybereason A Global Study on Ransomware Business Impact (5) Cybereason A Global Study on Ransomware Business Impact



# Scality 의 대응 방안

*Unbreakable ransomware protection for backup storage*

확장 가능한 S3 API를 사용하여 Commvault, Rubrik, Veeam, Veritas, Zerto 등과 같은 하나 또는 여러 개의 동시 백업 애플리케이션에 Scality 구축

## Key Capabilities

- **100% uptime & lightning fast:** (80TB / hour<sup>1</sup>) backup & restore and always-on SLA
- **Ransomware Protection:** through S3 Object Lock, SEC 17a-4 compliance and 256-bit data encryption
- **Eliminates silos:** scale-out to never run out of space, eliminate data migrations for long-term retention
- **Cost-effective DR and zero RPO/RT0:** active/active replication eliminates wasteful hot-standby; geo-stretched for best efficiency



1 - based on 6-node RING, with 50% compression/dedupe ratio from backup application

# Data Transformation

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# Advantages and risks of Public Cloud

## PRO

### Scalability

growth & elimination of silos

### Rich feature set

### On-demand agility

## CON

### Loss of control

customers own security policies & procedure

### Lack of data sovereignty

Where is data actually stored?

### Insufficient performance

for all mission critical applications

### Not easily reversible

once data is in, it will cost money to take it out

### High total cost of operations

50% higher TCO than on-prem due to hidden costs

### Not eco-friendly

Higher impact than modern on-prem solutions



# THE FOUR PILLARS FOR THE BEST STORAGE SOLUTION



**Empower agile  
& on-demand  
growth**



**Protect and  
keep data  
available**



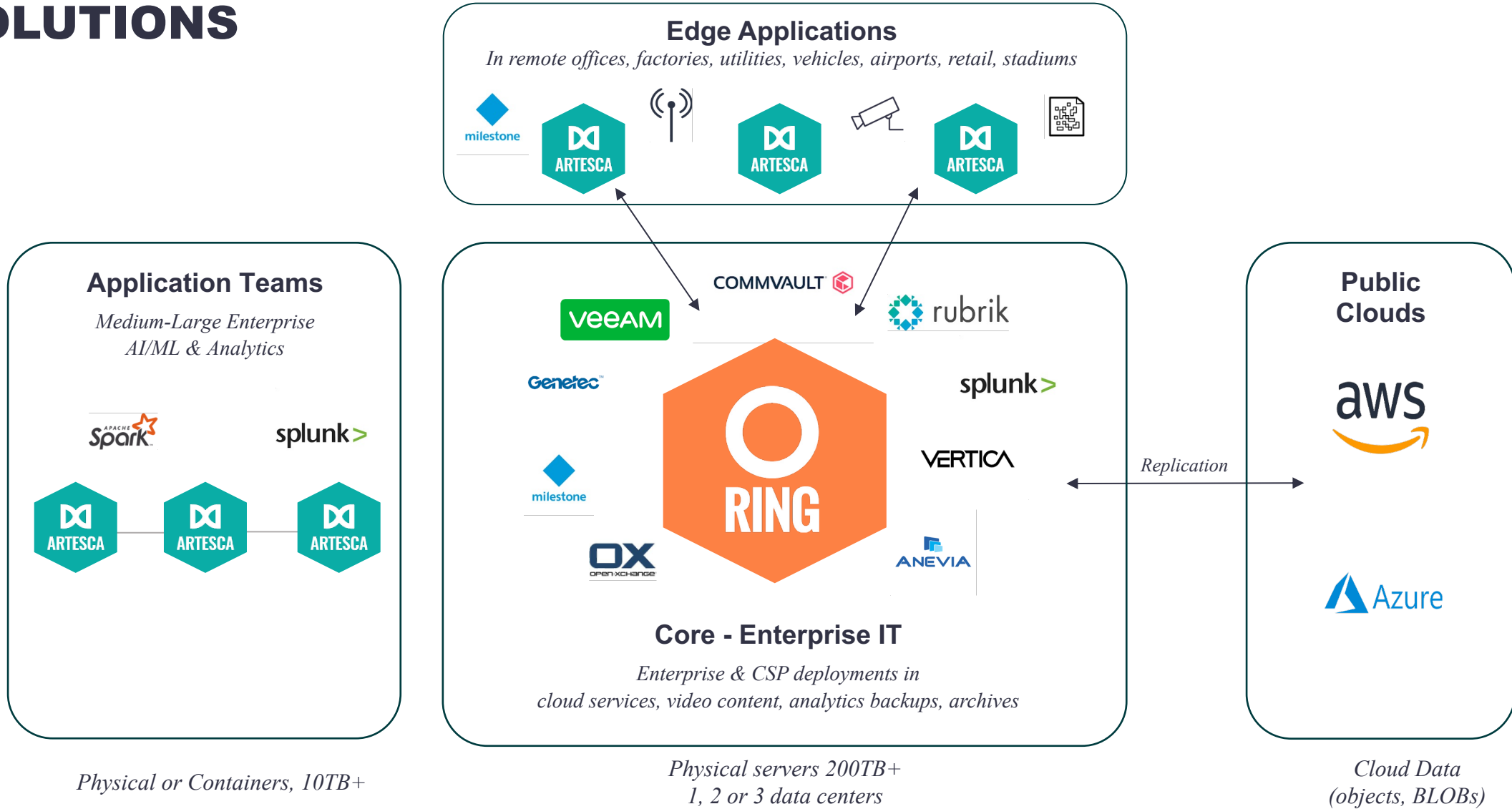
**Cloud-like  
economics**



**Improve IT  
staff efficiency**



# SCALITY SOLUTIONS



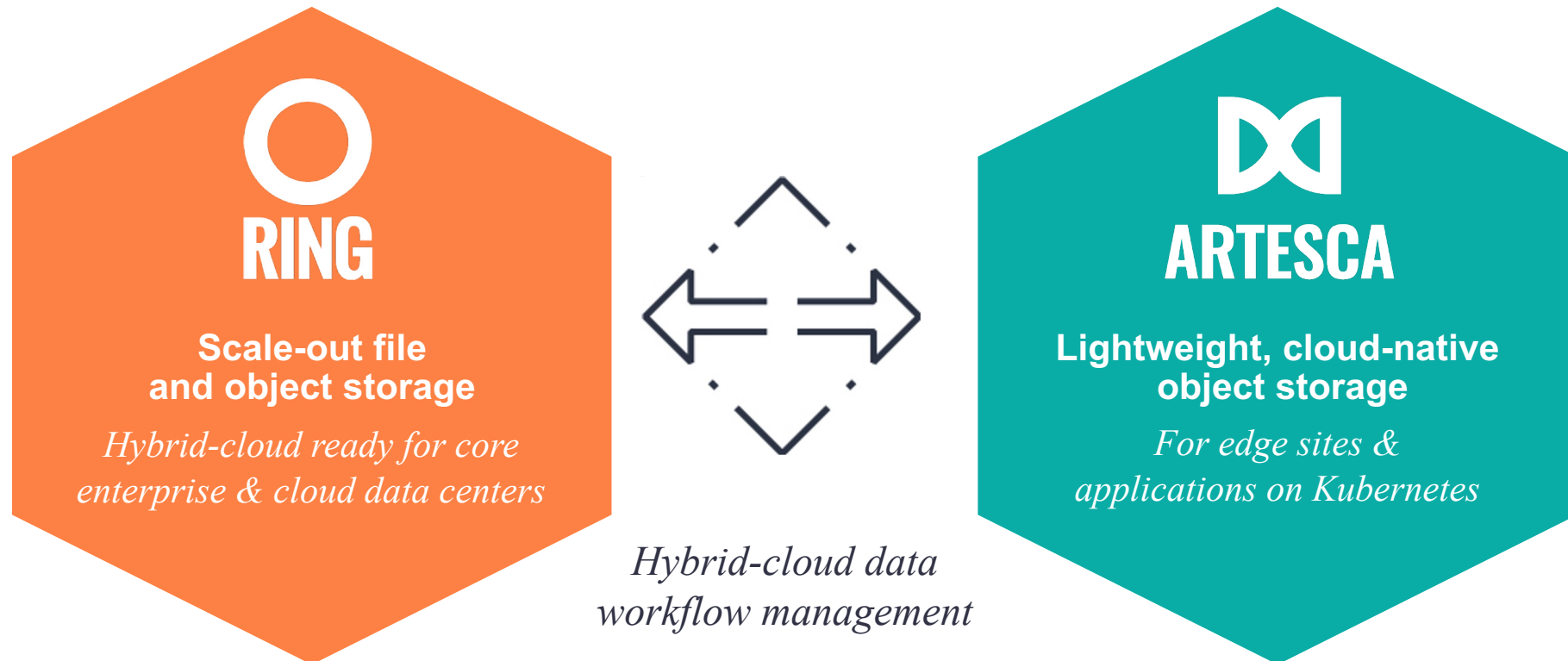


# SCALITY PRODUCT LINE

*Hybrid / Multi Cloud Ready*

## Managing file and object data from cloud-to-core-to-edge

*Sustainable by design with adaptive enterprise data management*





# Storing file and object data from cloud-to-core-to-edge

Sustainable by design with adaptive enterprise data management

## Scality RING



S3 Object Lock  
FS Protection



### ENTERPRISE

- 파일과 오브젝트의 통합
- 동기식, 비동기식 재해복구 환경 제공
- 데이터센터간 분산 파일 저장
- 최소 3 nodes, 200TB
- 최신기술 적용 SDS솔루션
- Released 2010
- Useable 라이선스 정책
- 멀티클라우드 솔루션 제공
- NFS/SMB, S3, POSIX, Swift
- NVMe, Capacity 모델 사용

## Scality ARTESCA



### PERFORMANCE

- S3를 위한 경량의 오브젝트 스토리지
- 비동기식 재해복구 제공
- 최소 1 node, 50TB
- 멀티 클라우드 API자체 내장
- 이중 데이터 보호 (Dual-EC)
- Deployment on HW, VM, K8s
- OS can be included
- Released 2021
- Useable 라이선스 정책
- NVMe, Capacity 모델 사용



# SCALITY SOLVES DATA-CENTRIC USE CASE TOGETHER WITH 130+ ISVS

BACKUP TARGET	DATA ARCHIVE	NAS REPLACEMENT	BIG DATA ANALYTICS	CLOUD-NATIVE APP STORAGE	MEDICAL IMAGE ARCHIVES	M&E CONTENT MANAGEMENT



Providing a single, infinitely-scalable framework for any use case from core to cloud to edge

**A growing eco-system of 130+ validated application partners**

Check <https://www.scality.com/isv-compatibility-list> for details



cross-industry

industry-specific

# Major 고객과 Cloud Service Provider 의 선택

*Scality supports customers in 46 countries worldwide*

- 7 of the 15 **largest banks worldwide**, plus major insurance & brokerages in US & Europe
- **10 of the top 20** global Telcos & CSPs
- Video delivery and broadcasters in 5 countries
- **40+ large hospital systems** in US, LATAM, Europe, Japan & Israel
- Police & defense agencies in US, Israel & Europe
- **100s PBs in Govt. & intelligence** in US & EMEA
- Cloud and public services across Europe & Russia



# RECOGNIZED LEADER BY IDC & GARTNER

## LEADER GARTNER MQ FOR DISTRIBUTED FILE SYSTEMS AND OBJECT STORAGE 2016 - 2022

SCALITY Gartner

**7 years a LEADER**

Gartner® Magic Quadrant™ 2022  
For Distributed File Systems and Object Storage

GO TO SCALITY.COM FOR ACCESS TO THE REPORT

## IDC BUSINESS VALUE SNAPSHOT – COST TO SERVE (TCO/ROI)\*

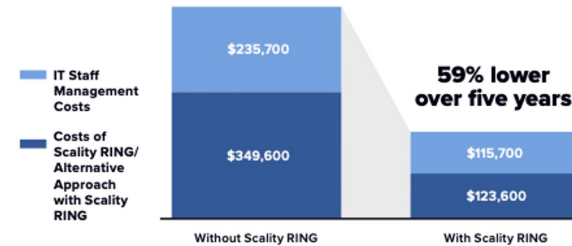
### KEY RESULTS

**366%**  
5-year ROI

**59%**  
reduced total cost of operations

**8 months**  
to payback on investment

### Total Cost of Operations per Petabyte (PB), 5 years



### Storage Infrastructure Benefits

**31% more**  
efficient IT Storage Infrastructure staff

**192% more**  
object storage available

**65% reduced**  
cost of storage capacity

**53% faster**  
IT agility to deploy new storage

**IDC**  
\*January 2022

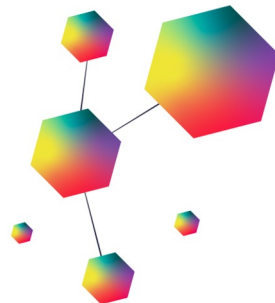
## LEADER IDC MARKETSCAPE WORLDWIDE OBJECT-BASED STORAGE 2019/2020



**Leader**

**Marketscape**

Worldwide object-based storage



*“Scality remains one of the top choices for object storage deployments where very large scale, geographical distribution, hardware independence and flexibility are IT leaders’ highest priorities.” – Gartner MQ*

*“Scality’s integrated file and object architecture remains a unique differentiator, where other vendors depend on an add-on gateway solution” - Gartner MQ*

*“Scality has accurately evaluated unstructured storage requirements for digitally transforming enterprises moving in the direction of cloud-native IT. With the ARTESCA launch, it has taken the opportunity to give IT managers well-integrated core, edge, and multi-public cloud deployment options for a digital world.” - Eric Burgener, Research Vice President, Infrastructure Systems, Platforms and Technologies Group, IDC.*





**Thank you**

