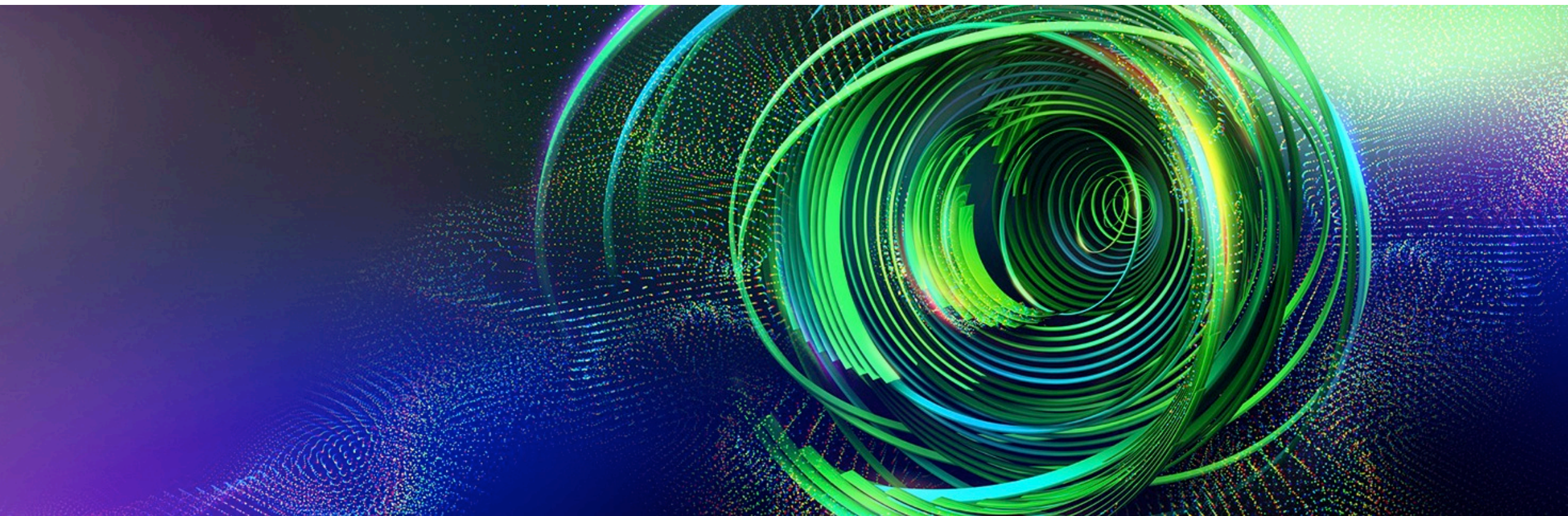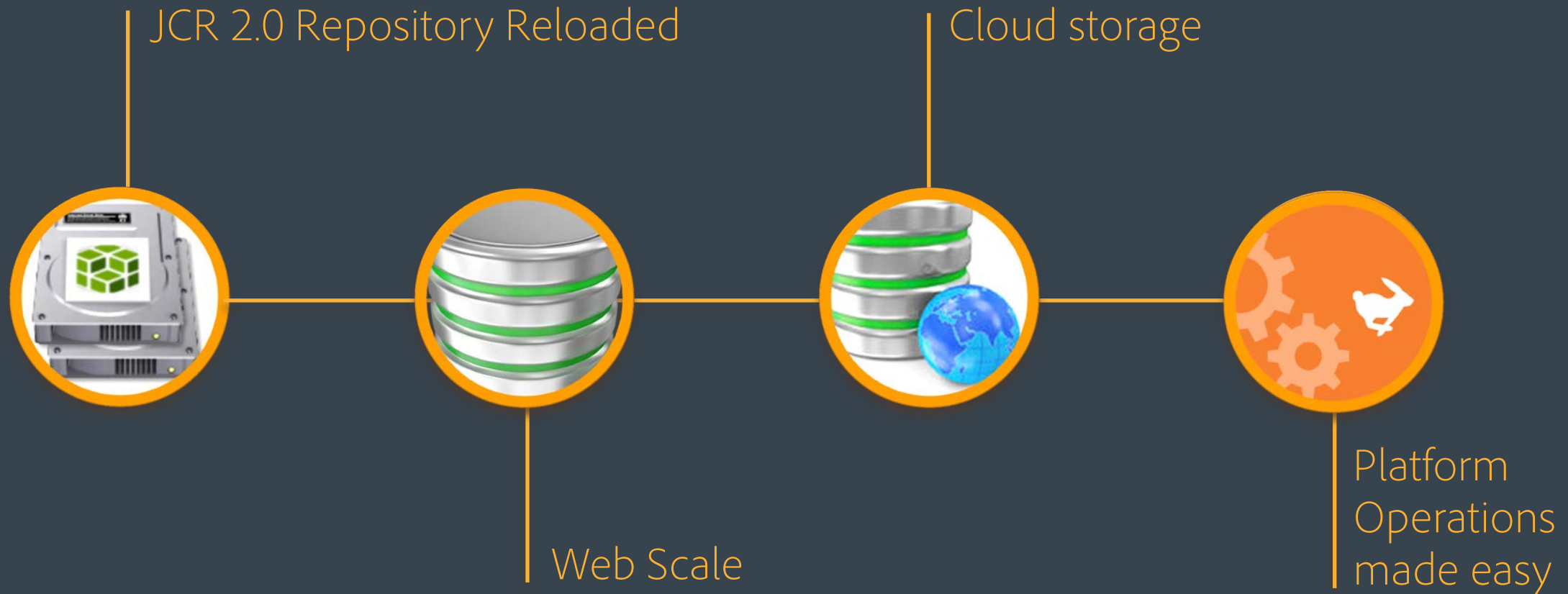# Adobe Experience Manager 6.0 Platform – What's New?
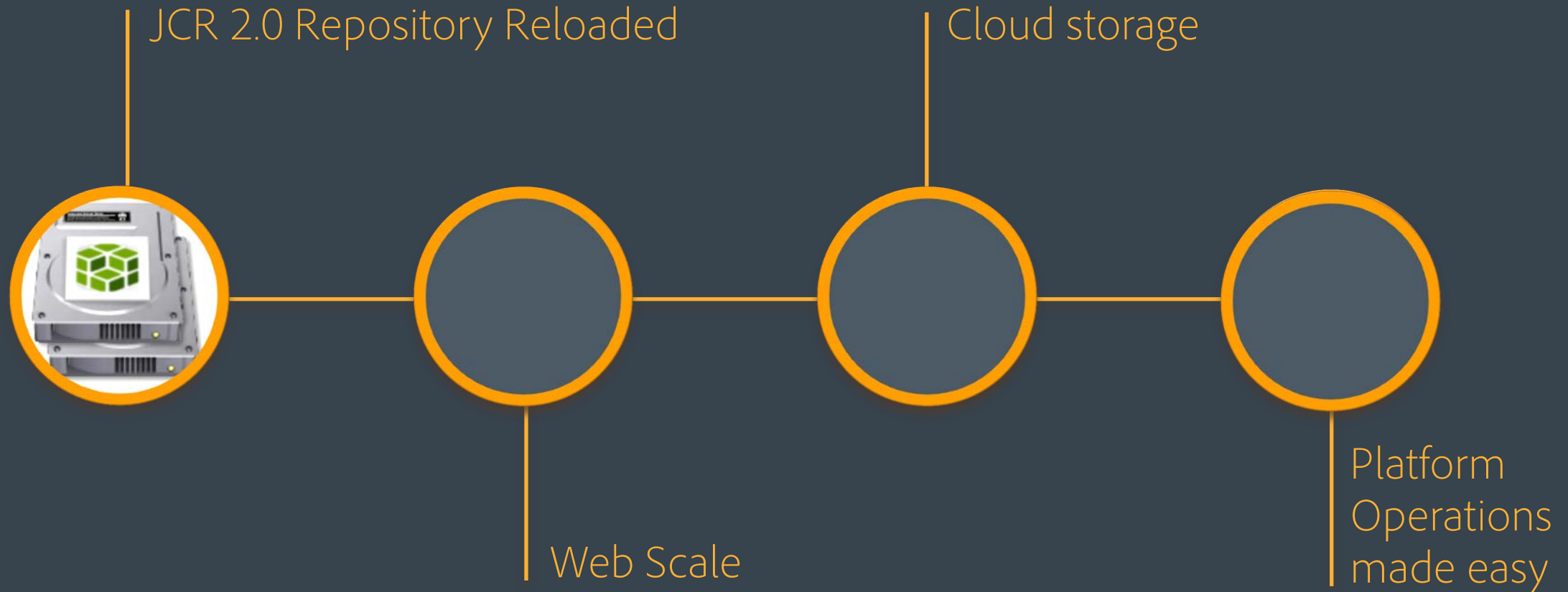
June, 2014 – Peter Klassen, Product Manager
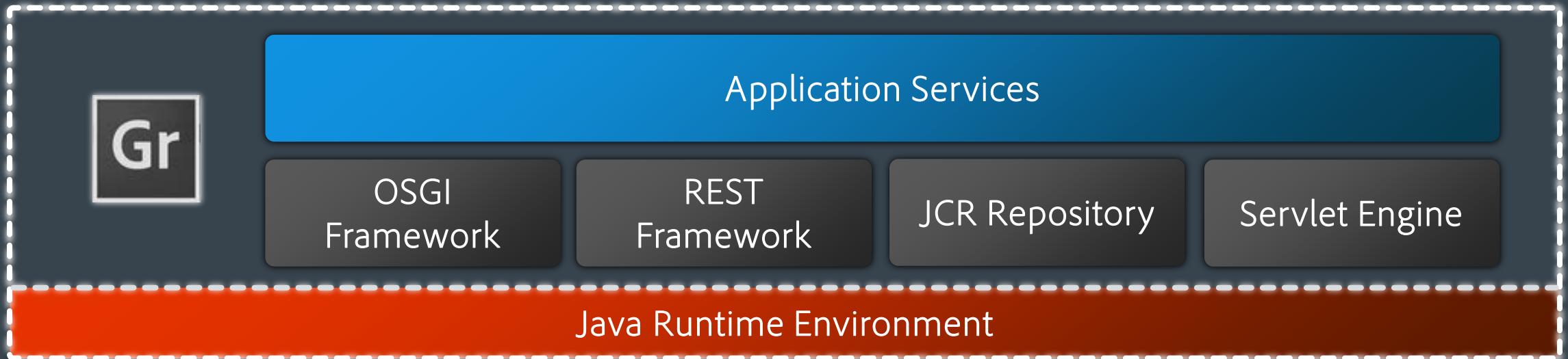
AEM 6.0 Platform: Most important innovations

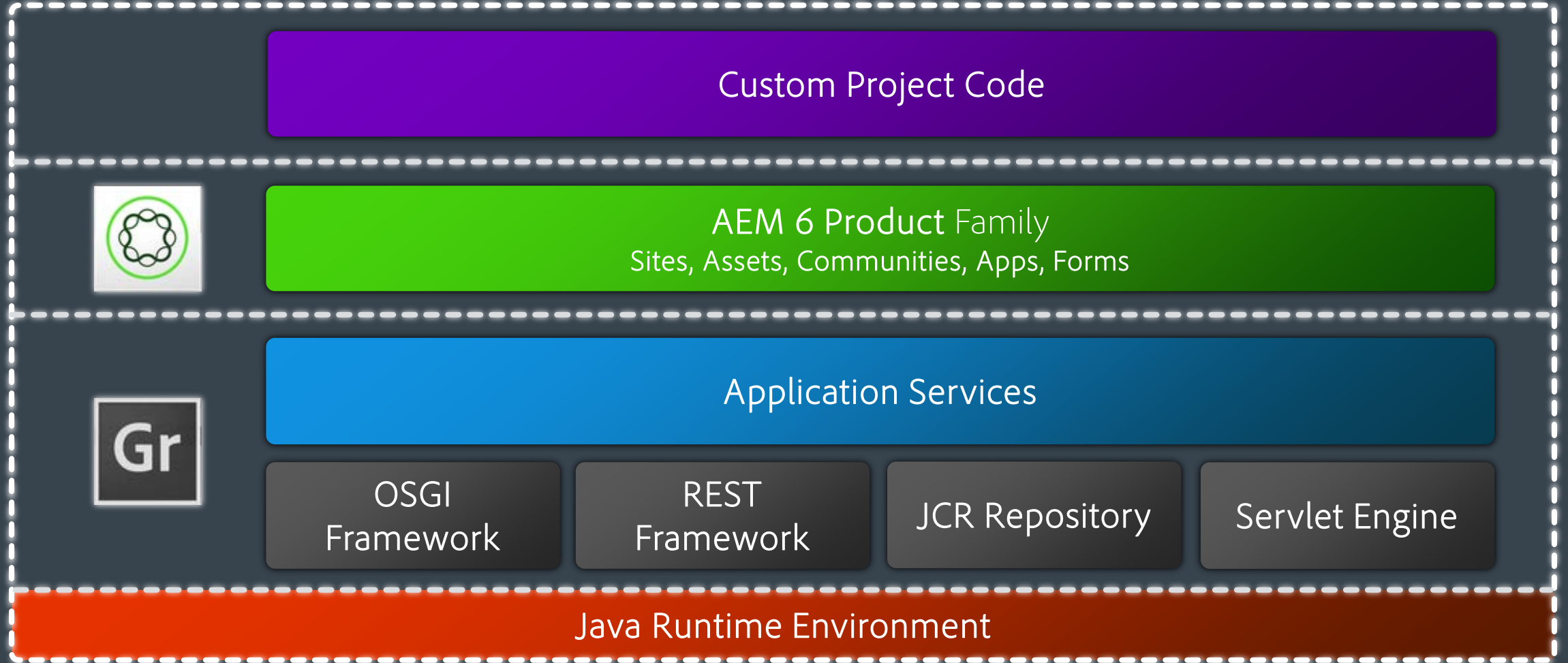JCR 2.0 Repository Reloaded

Cloud storage

Web Scale

Platform Operations made easy

AEM 6.0 Platform: Most important innovations

JCR 2.0 Repository Reloaded

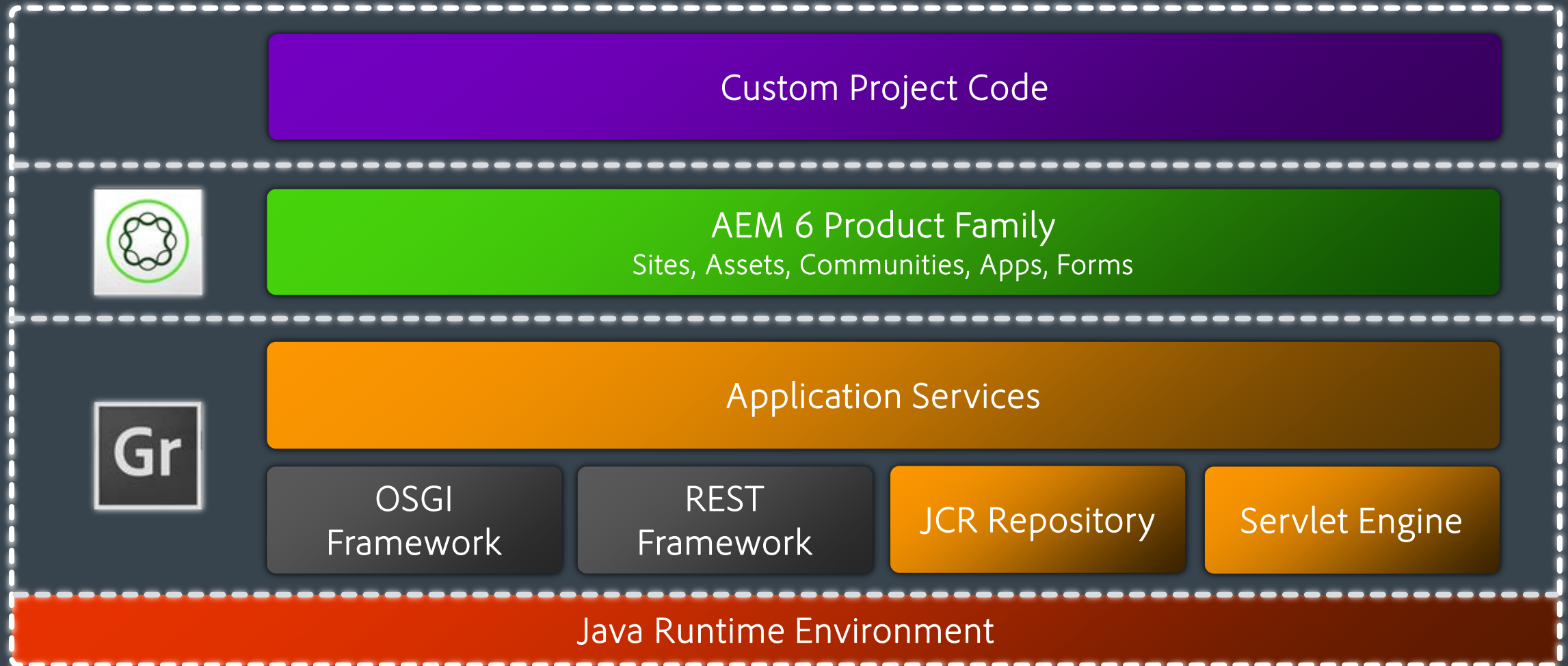Cloud storage

Web Scale

Platform
Operations
made easy

AEM Platform: A content-centric platform that provides an open, self-contained, standards-driven web stack to deliver relevant digital experiences in cloud & on-prem environments.

Gr

Application Services

| OSGI Framework | REST Framework | JCR Repository | Servlet Engine |

Java Runtime Environment

Adobe Experience Manager Application Stack

Custom Project Code

AEM 6 Product Family
Sites, Assets, Communities, Apps, Forms

Application Services

| OSGI Framework | REST Framework | JCR Repository | Servlet Engine |

Java Runtime Environment

Platform Changes in AEM 6.0

Custom Project Code

AEM 6 Product Family
Sites, Assets, Communities, Apps, Forms

Application Services

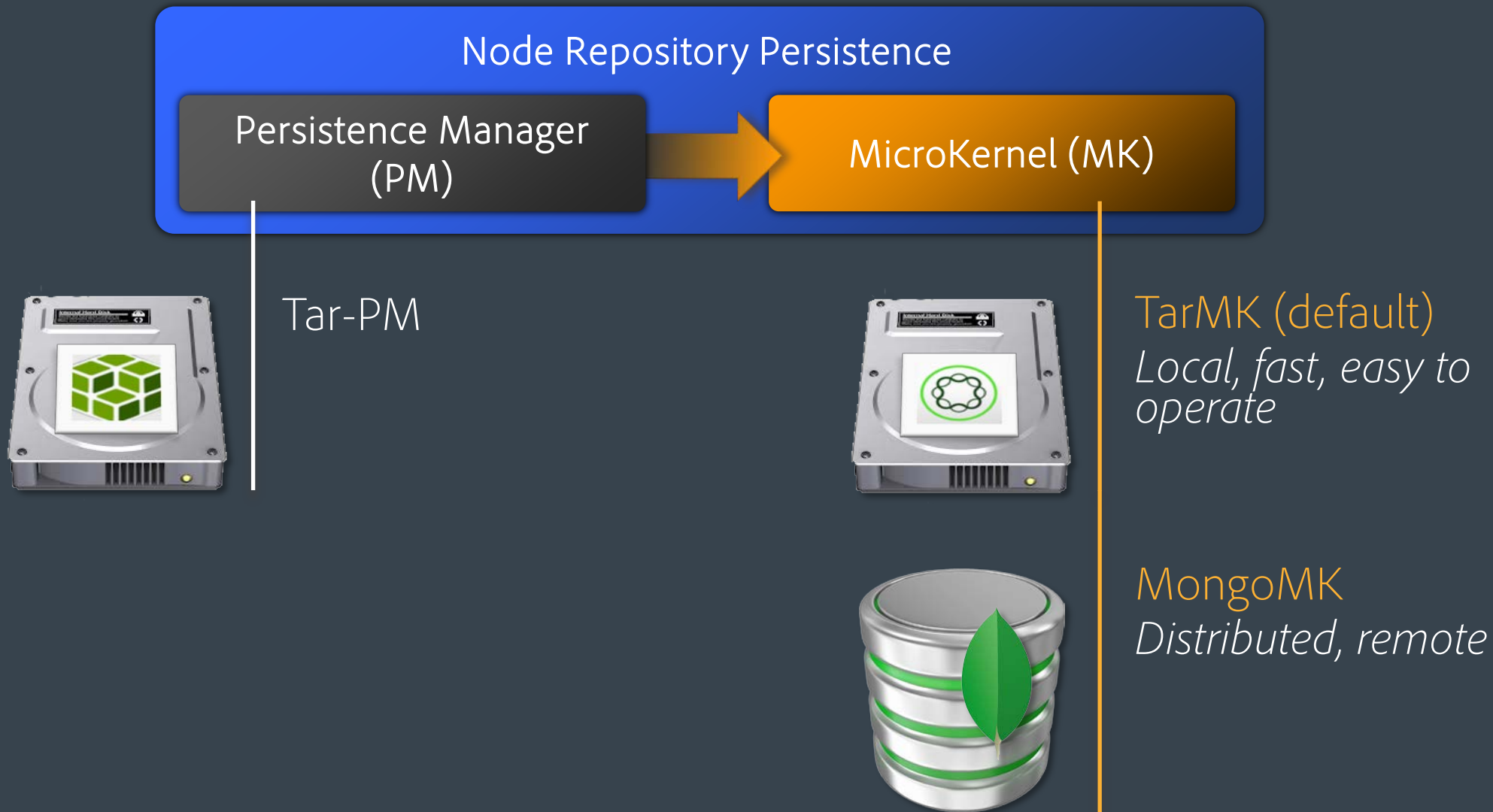| OSGI Framework | REST Framework | JCR Repository | Servlet Engine |

Java Runtime Environment

AEM 6.0 Repository Implementation transitions

AEM 5.6.1 → AEM 6.0

JCR Content Repository

Persistence

Node Repository

Persistence Manager (PM) → MicroKernel (MK)
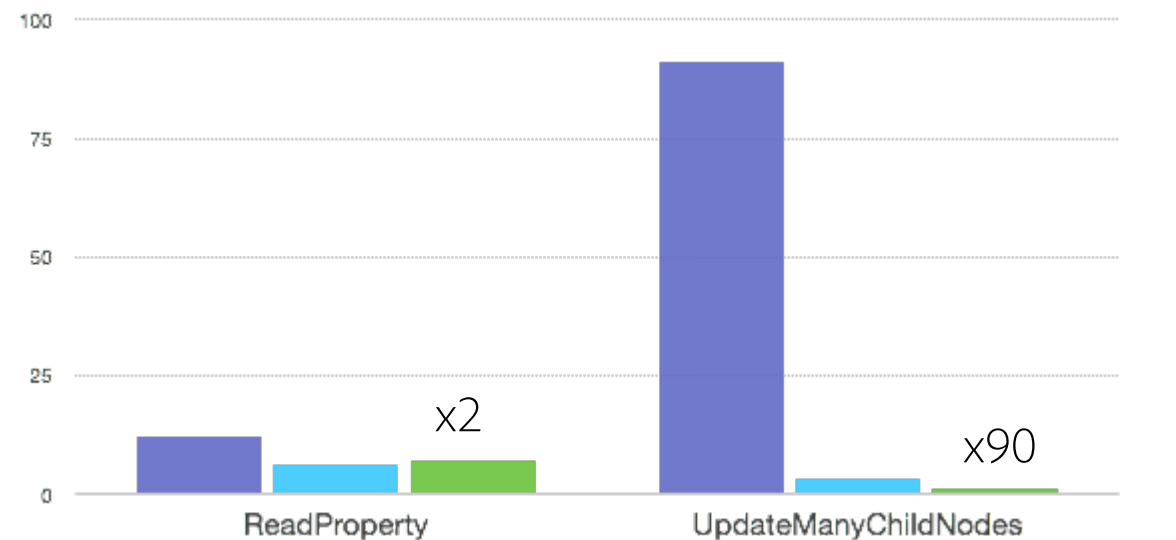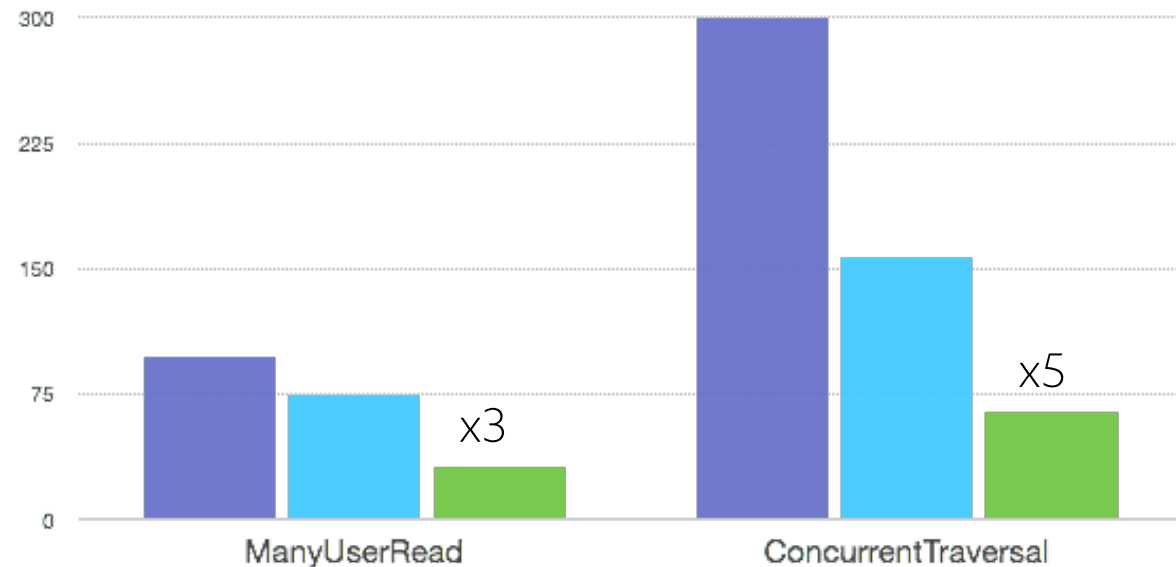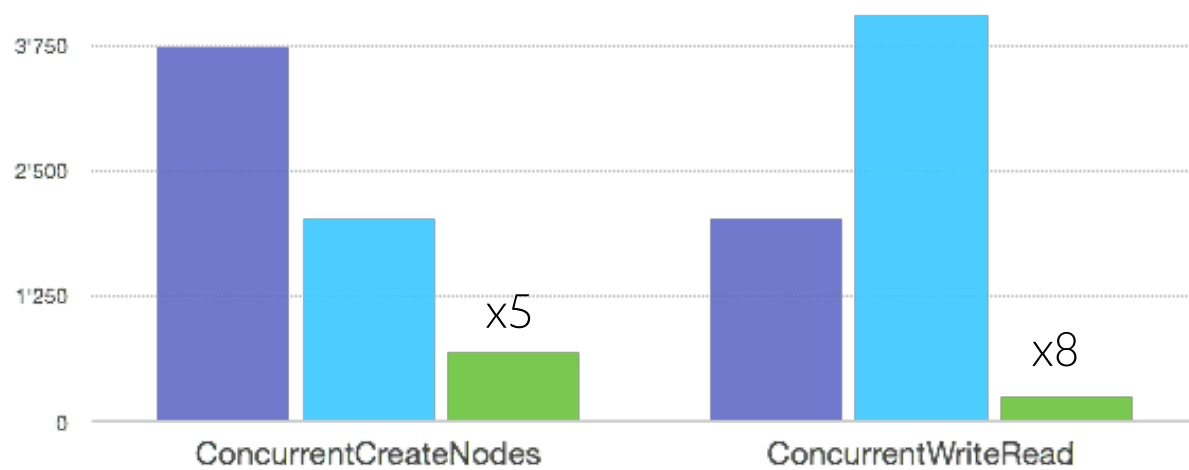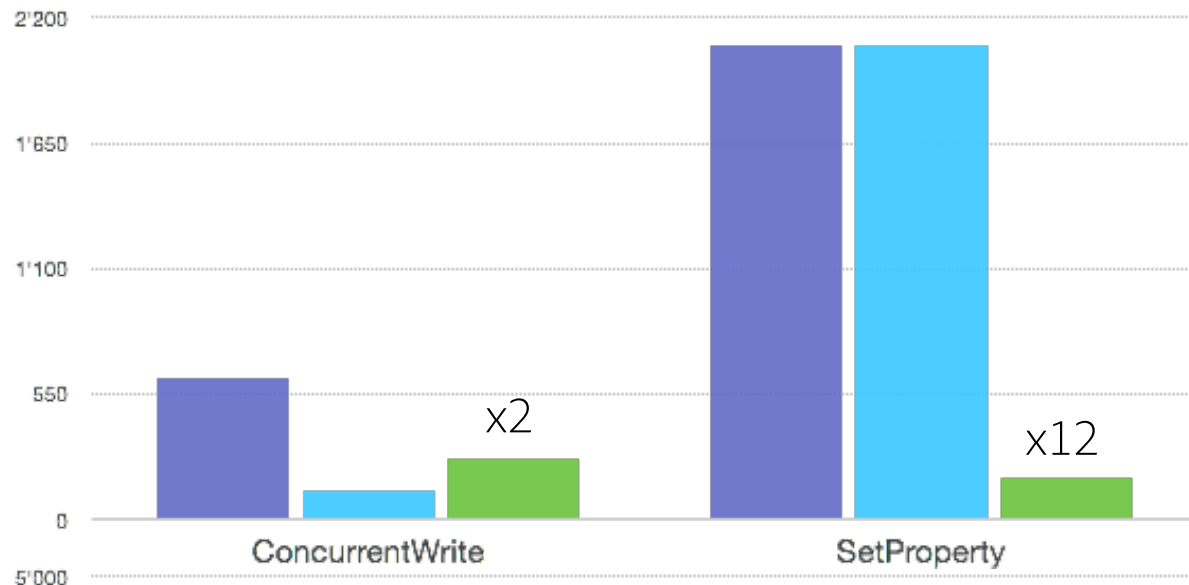
Data Repository

DataStore → DataStore
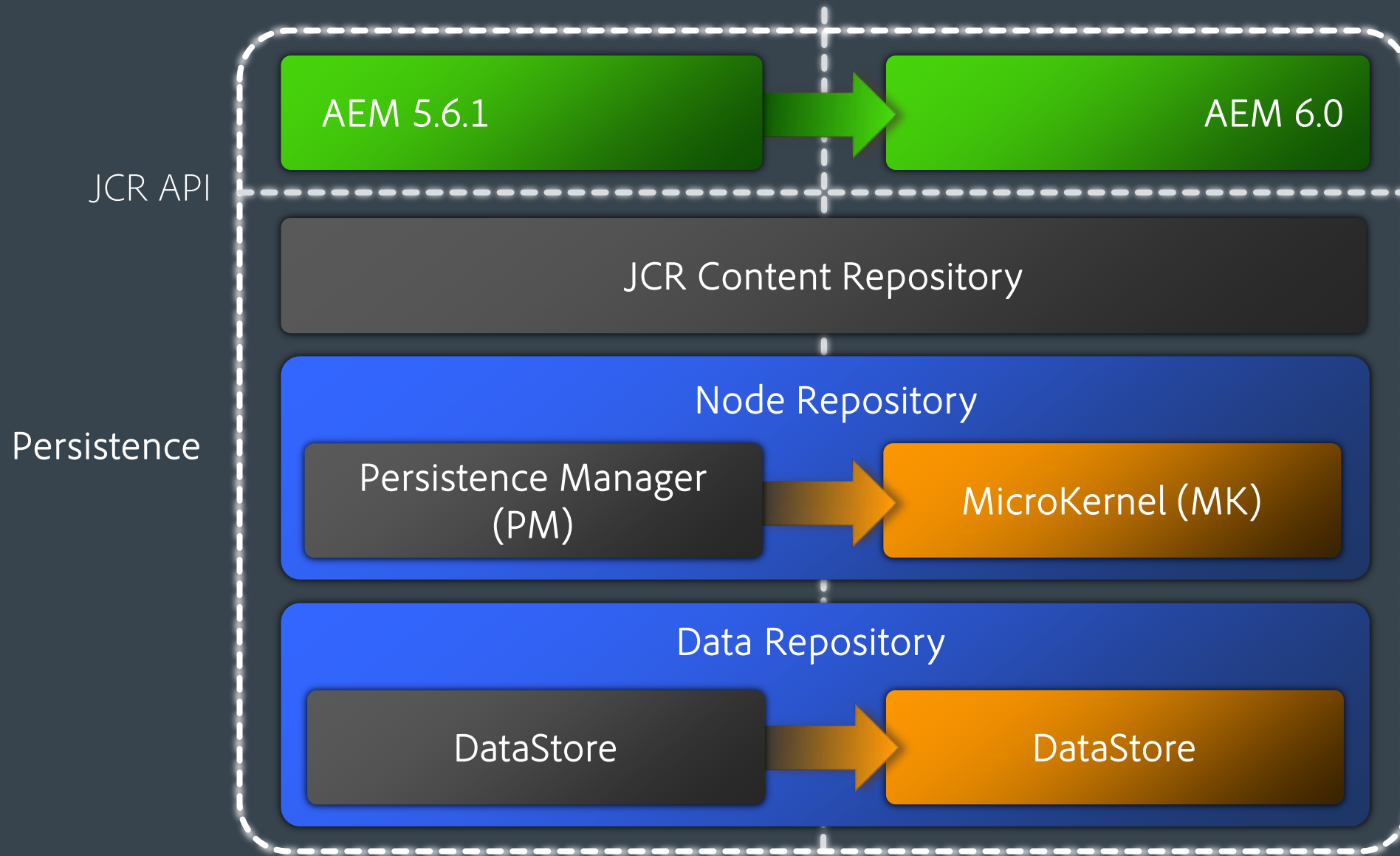
AEM 6.0 Repository Development Goals

- Scalability: Large repositories, many distributed cluster nodes

- Write performance: Parallel writes, high write throughput

- Content scalability: Support for many child nodes and high ACL complexity

- Search performance: Focus-oriented content indexing

AEM 6.0 Repository Available MicroKernels

Node Repository Persistence

Persistence Manager (PM) → MicroKernel (MK)

Tar-PM

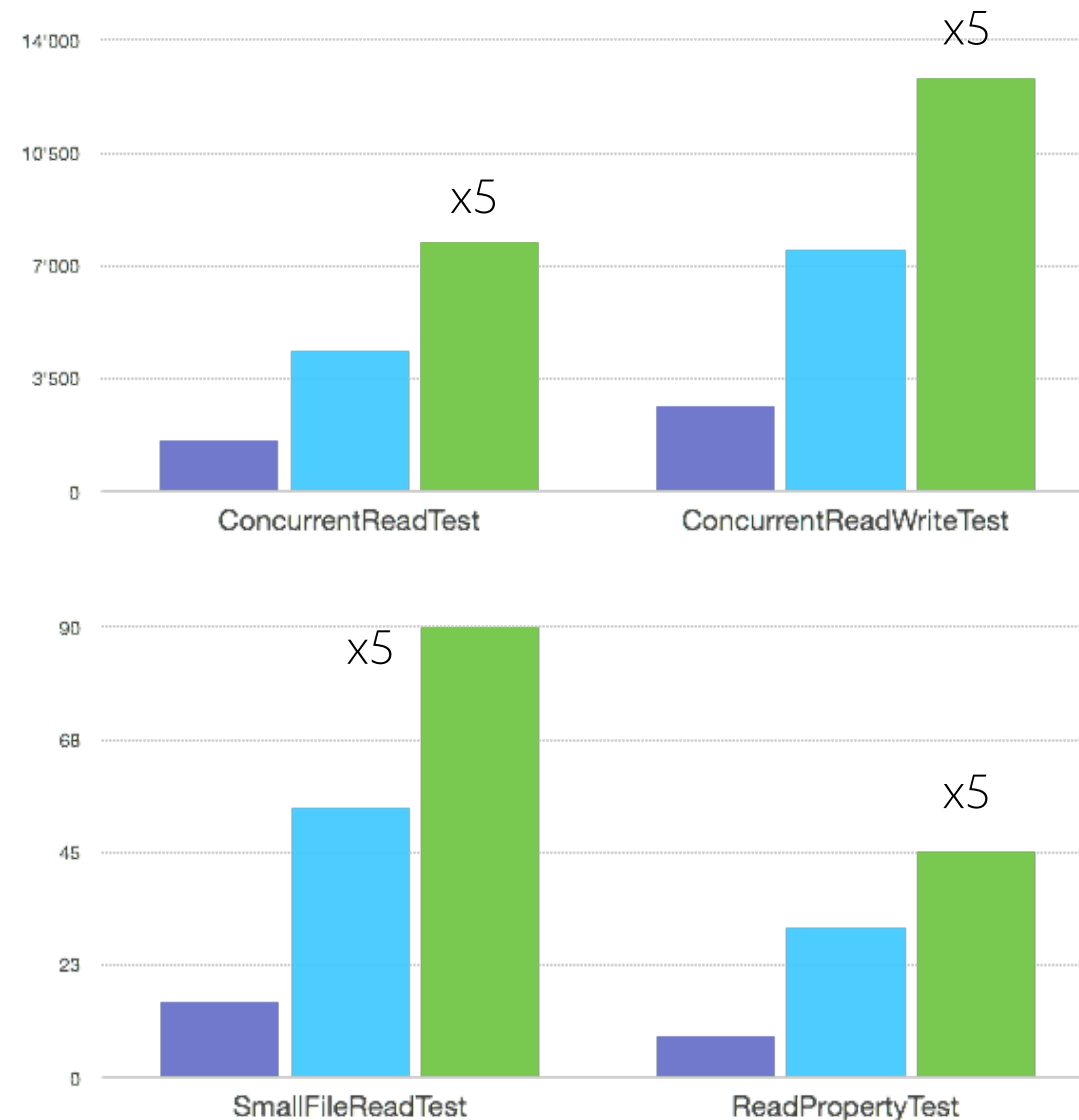TarMK (default)
Local, fast, easy to operate

MongoMK
Distributed, remote

Numbers Performance (lower is better)

Numbers Scalability (higher is better)

1 Oak
3 Oaks
5 Oaks

x5 means linear scalability

AEM 6.0 Platform: Most important innovations

JCR 2.0 Repository Reloaded

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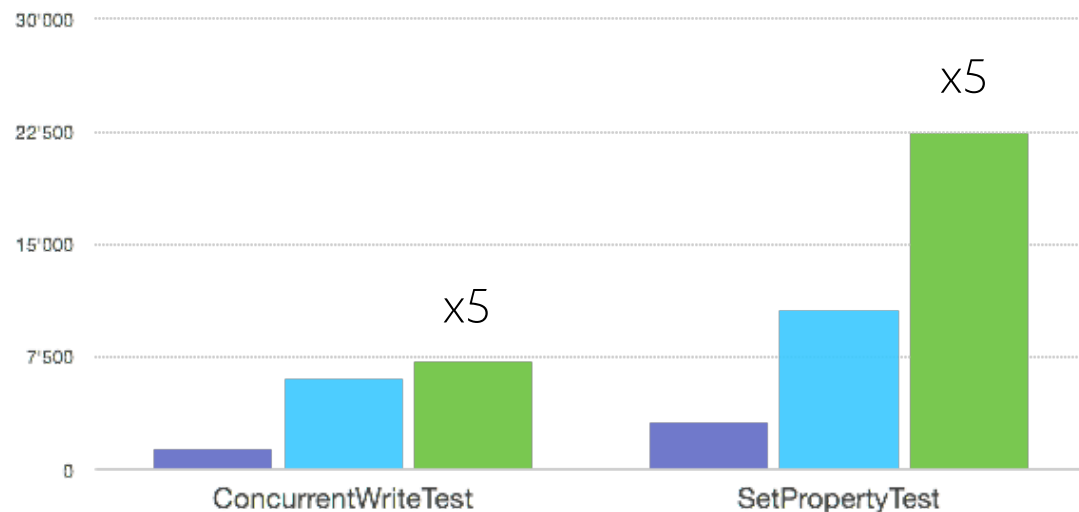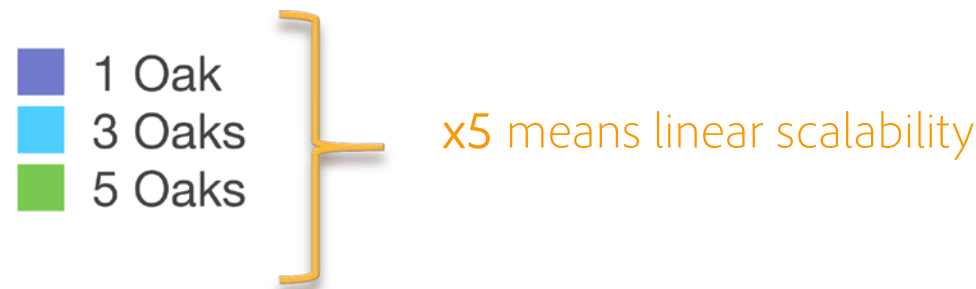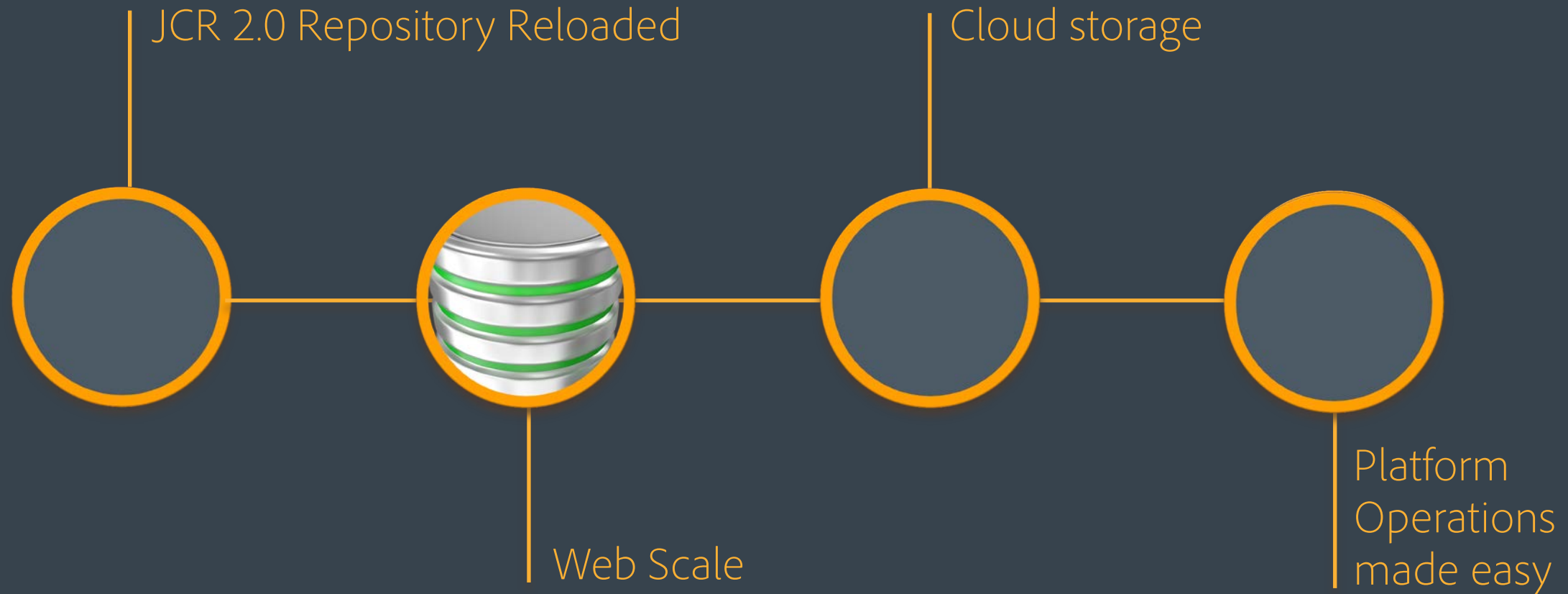
Which Microkernel to use on AEM6 Author

Upgrade from CRX2 TAR-PM
for higher performance

Default: TarMK
Fast, local, easy to operate

Which Microkernel to use on AEM6 Author

Keep CRX2 TAR-PM on AEM6?

Deprecated, but still supported for a customer transition period. Status will be re-validated with AEM 6.1 release.

AEM6 Scalability

"We need options to scale on demanding AEM use-cases, also we need to be prepared for future business requirements.

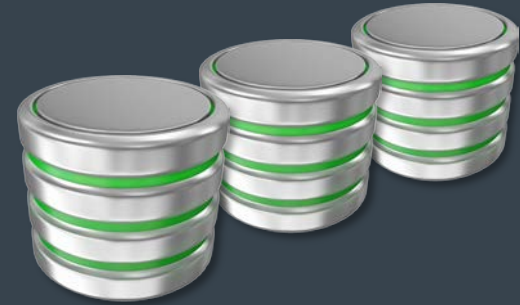MongoMK: AEM 6.0 Author to leverage MongoDB's web-scale capabilities.

AEM6 Scalability Cluster options with MongoDB

Scale repository size Add MongoDB shards

Scale read throughput Add MongoDB replicas

Scale CPU: Add AEM instances

Scale globally (distribute replicas)

Which Microkernel to use on AEM6 Publish

"What's the upgrade path for my TarPM on publish? I want to keep using TAR, requirements are availability and load-balancing."

Primary use case is Publishing: TarMK as a "Farm" (independent instances)
Fast, independent, easy to operate

Which Microkernel to use on AEM6 Publish

"What's the upgrade path for my TarPM on Publish? I need availability and scalability on demanding AEM use-cases."

Primary use case is UGC:
MongoMK in a Publish Cluster
All AEM Publish instances running on same MongoDB

AEM 6.0 Repository Scalability / Cluster

|	TarMK (default)	Offloading AEM	MongoMK
AEM 6.0 Author	*Concurrent Authoring*	*High content processing*	*Distributed Authoring Many authors*
	TarMK (default)	**TarMK Farm**	**MongoMK**
AEM 6.0 Publish	*Many web site visitors*	*Very high visitor peaks High page complexity*	*User-generated content*

AEM 6.0 Platform: Most important innovations

JCR 2.0 Repository Reloaded

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Platform Operations made easy
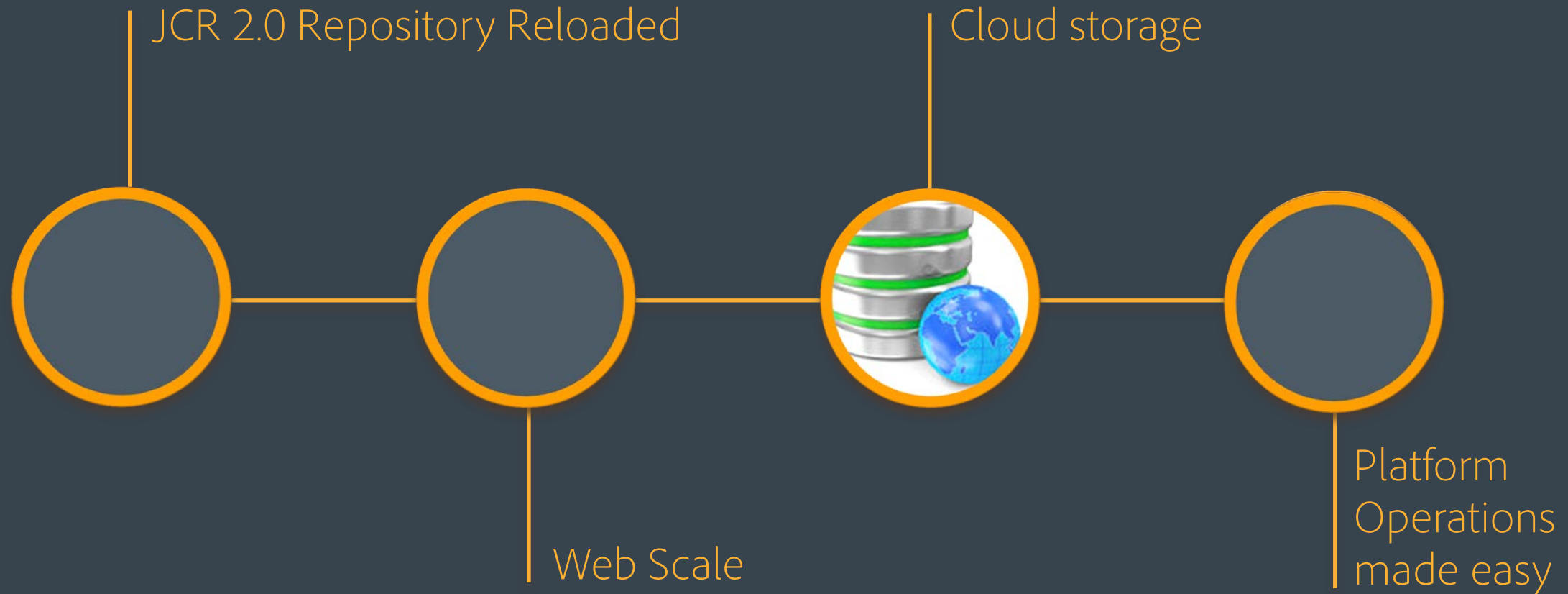
Which DataStore to use with AEM6 TarMK

Using the TarMK, you can store your binaries at one of the locations:

Tar: Local, fast

File: Shareable on FS level, local or remote

AWS S3: Scalable, remote

Which DataStore to use with AEM6 MongoMK

Using the MongoDB-MK, you can store your binaries at one of the locations:
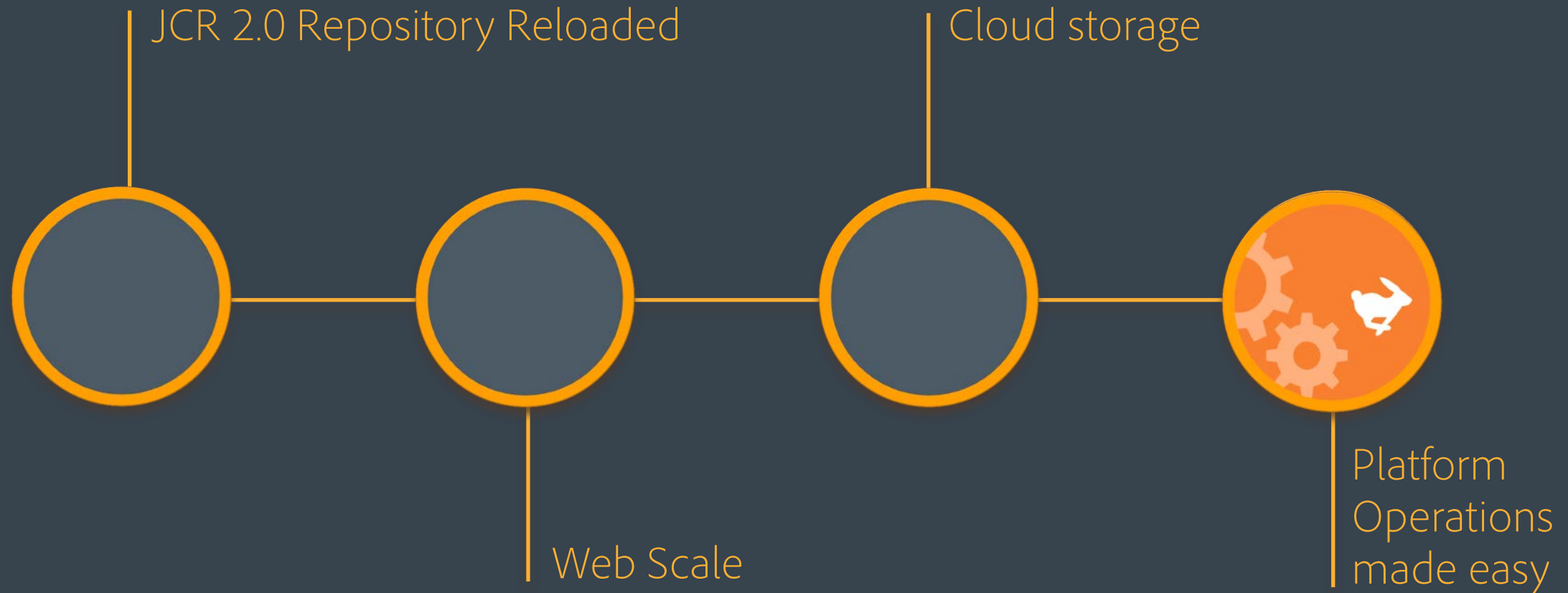
MongoDB: Scalable, remote

File: Shareable on fs level, local or remote

AWS S3: Scalable, remote

AEM 6.0 Platform: Most important innovations

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Platform Operations made easy

Deep insights into your AEM performance.

- What should be monitored at AEM 6.0?

- How can I identify and analyze issues?

- What do I need to maintain on AEM 6.0?

DEMO

Operations made easy. AEM 6.0 Operations Dashboard provides control over system health, diagnosis and maintenance automation, efficiently and extensible.

Main improvements:

- System health overview at a glance

- Dramatically reducing time to find, analyze and fix issues

- One-Click system status to help Customer support gain efficiency improvements

- Self-contained maintenance automation to reduce project operations and support cases significantly

Thank you!