

SHORT VERSION OF PRESENTATION

Short version of presentation (~15 mins)

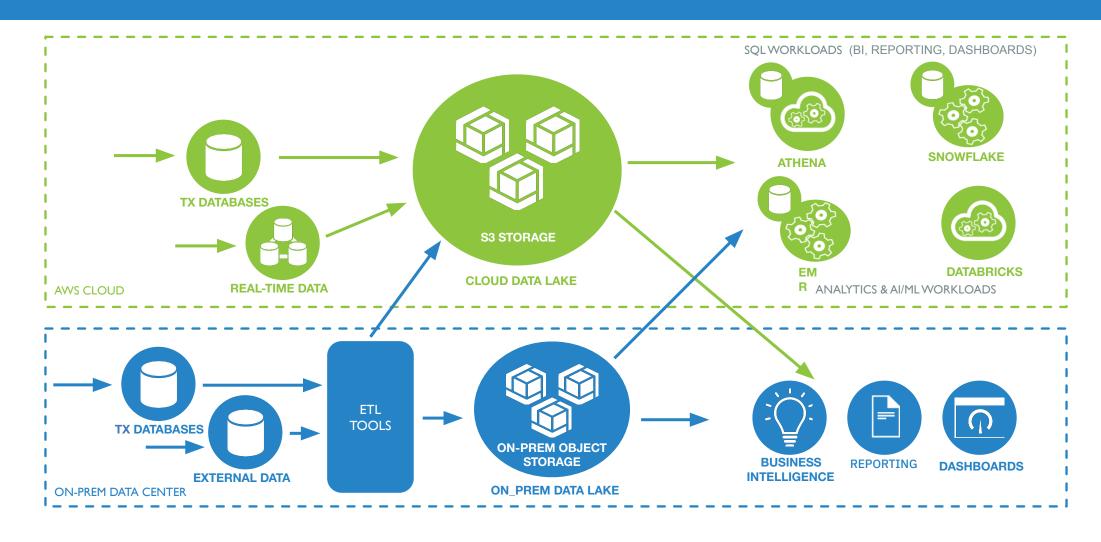
ALLUXIO HYBRID CLOUD DATA PLATFORM

ARCHITECTING A HETEROGENEOUS DATA PLATFORM ACROSS DATA CENTERS, REGIONS & CLOUDS



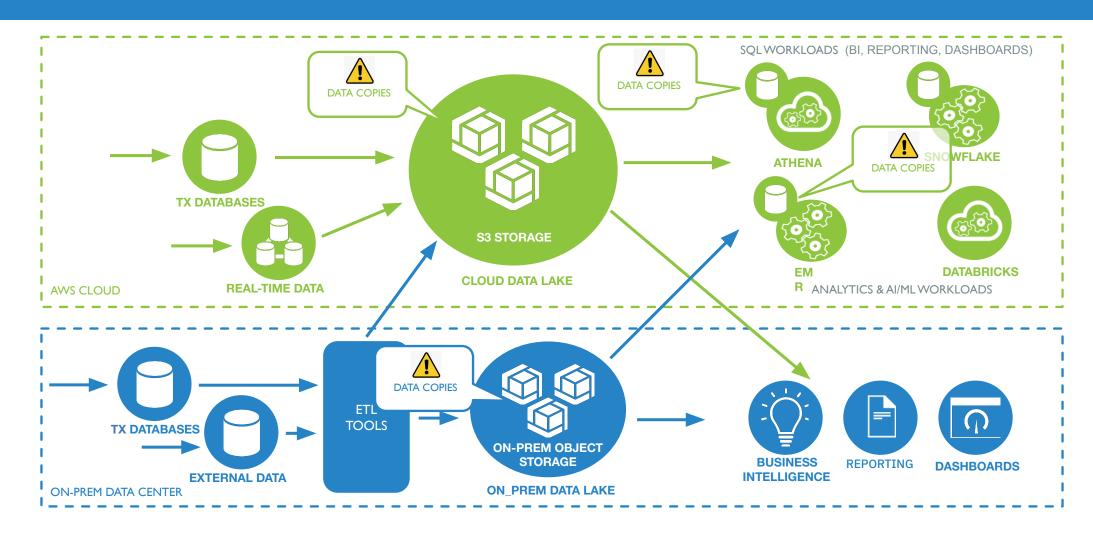


CLOUD ADOPTION JOURNEY: HYBRID-CLOUD ARCHITECTURE



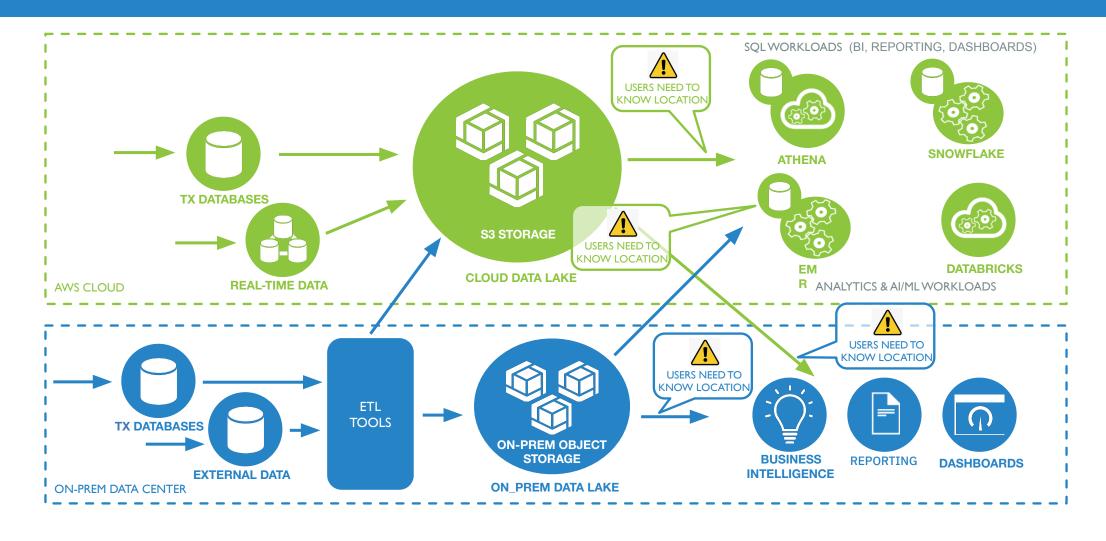


CLOUD ADOPTION JOURNEY: HYBRID-CLOUD ARCHITECTURE – TOO MANY DATA COPIES



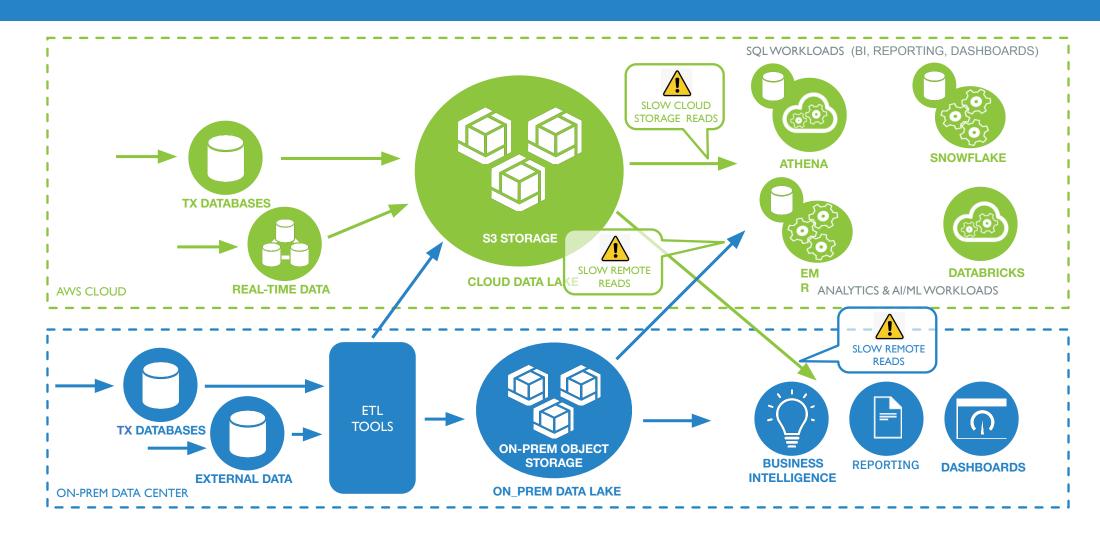


CLOUD ADOPTION JOURNEY: HYBRID-CLOUD ARCHITECTURE – DATA LOCATIONS



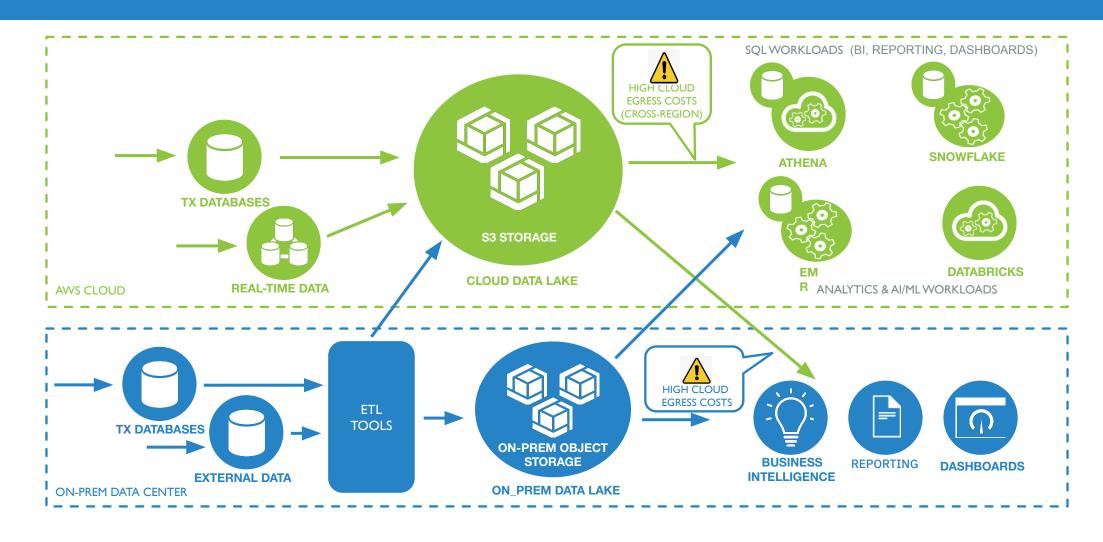


CLOUD ADOPTION JOURNEY: HYBRID-CLOUD ARCHITECTURE – SLOW READS

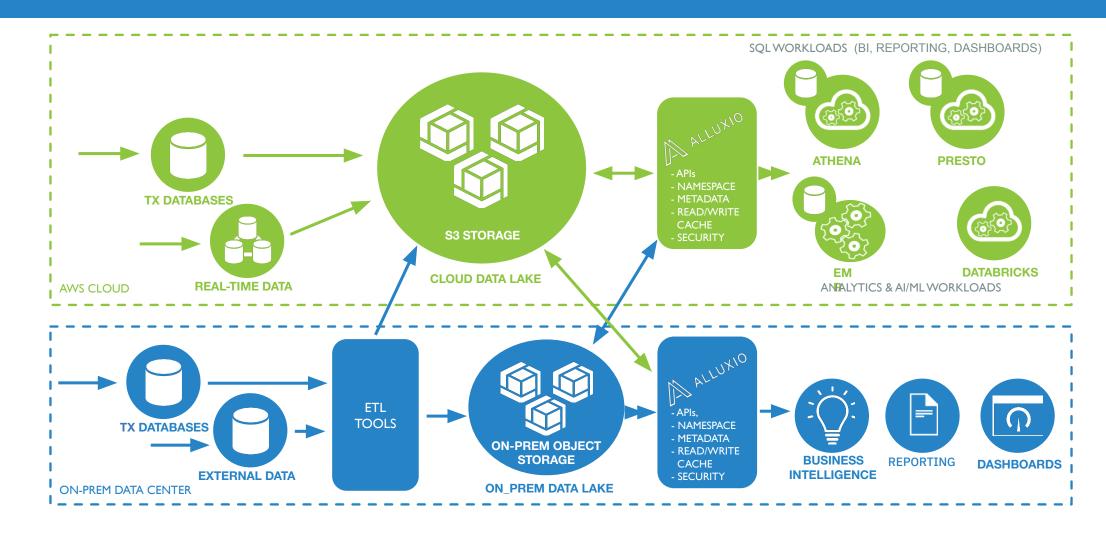




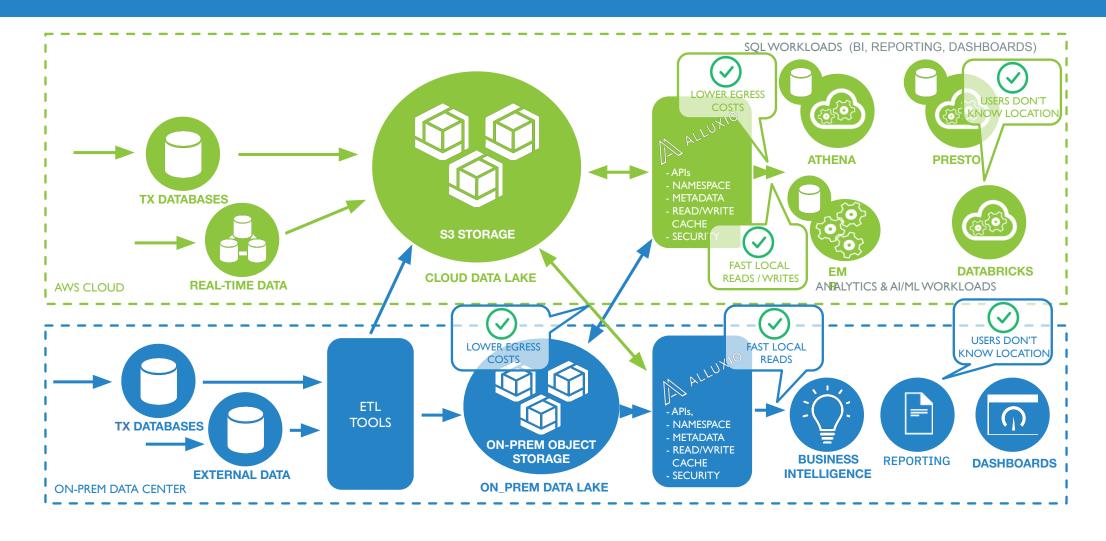
CLOUD ADOPTION JOURNEY: HYBRID-CLOUD ARCHITECTURE – HIGH EGRESS & API COSTS





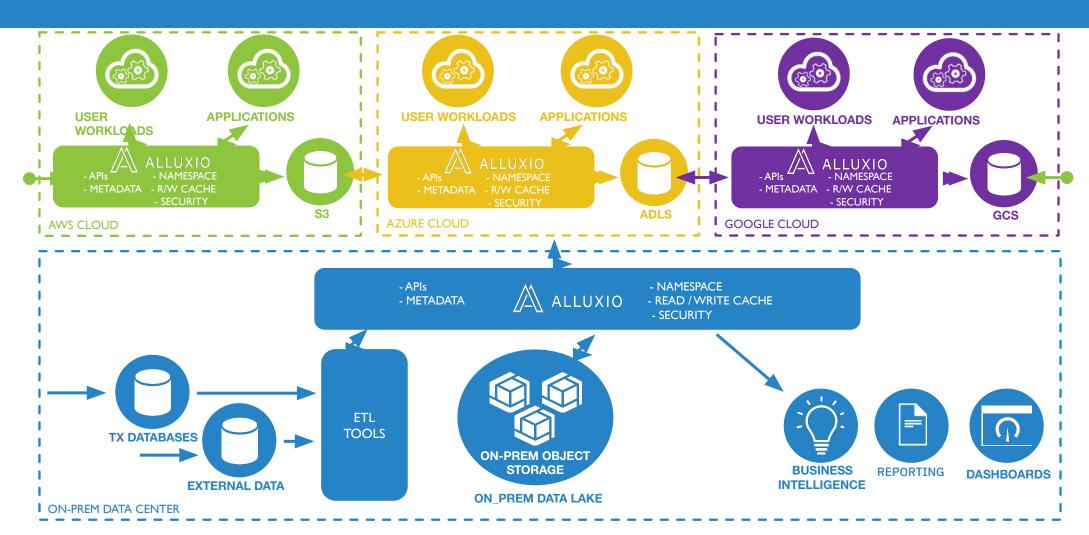








CLOUD ADOPTION JOURNEY: HYBRID & MULTI-CLOUD WITH ALLUXIO



ALLUXIO HYBRID CLOUD DATA PLATFORM

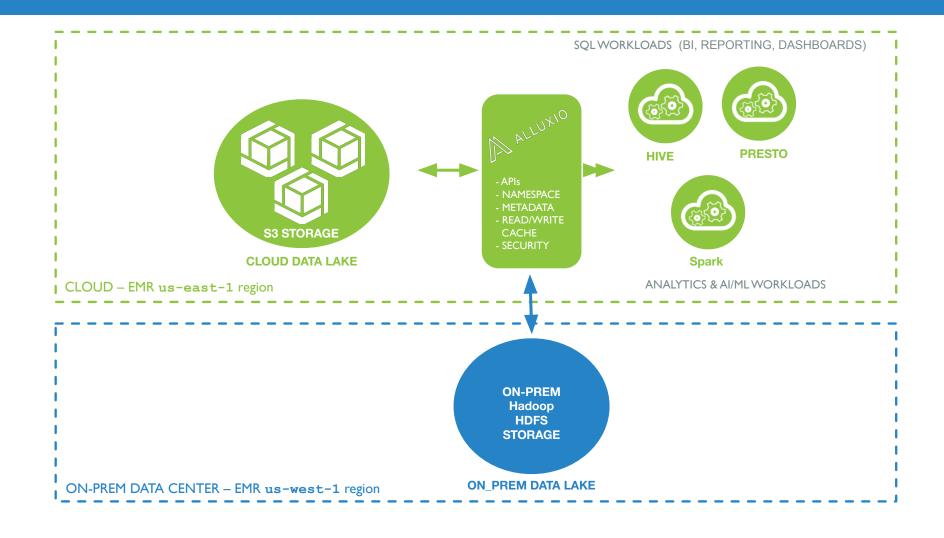
ARCHITECTING A HETEROGENEOUS DATA PLATFORM ACROSS DATA CENTERS, REGIONS & CLOUDS

Demo





ALLUXIO HYBRID CLOUD DEMO ENVIRONMENT





SUMMARY

Data platforms that span on-prem and multiple cloud environments can be very powerful for an enterprises' data consumers.

However, the data platform can suffer from:

- High cost of duplicate data copies
- Complex data location issues, including security and provenance
- Slow performance when reading remote regions, clouds and on-prem environments
- Very high cloud data egress costs

Alluxio can help mitigate those risks by providing:

- A unified namespace where data location is hidden from users and apps
- Metadata services to data consumers
- Multiple application APIs and multiple data source APIs
- Read and write capable cache storage to improve performance and reduce egress costs
- · Advanced security for authentication, authorization, encryption and auditing

ALLUXIO HYBRID CLOUD DATA PLATFORM

ARCHITECTING A HETEROGENEOUS DATA PLATFORM ACROSS DATA CENTERS, REGIONS & CLOUDS

Q & A

Next Steps





SHORT VERSION OF PRESENTATION

Long version of presentation (~ 45 mins)

ALLUXIO HYBRID CLOUD DATA PLATFORM

ARCHITECTING A HETEROGENEOUS DATA PLATFORM ACROSS DATA CENTERS, REGIONS & CLOUDS



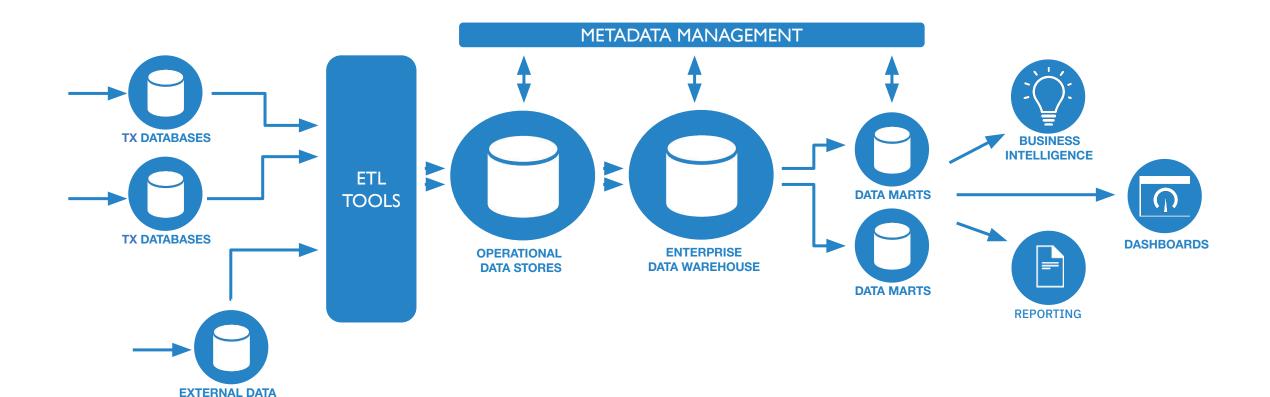


AGENDA

- Legacy data platforms
- New goal: move to the cloud
- Cloud adoption journey Phase 1: Burst user workloads to the cloud
- Cloud adoption journey Phase 2: Build a cloud data lake
- Cloud adoption journey Phase 3: Support a hybrid cloud architecture
- Cloud adoption journey Phase 4: Support a hybrid & multi-cloud architecture
- Q & A

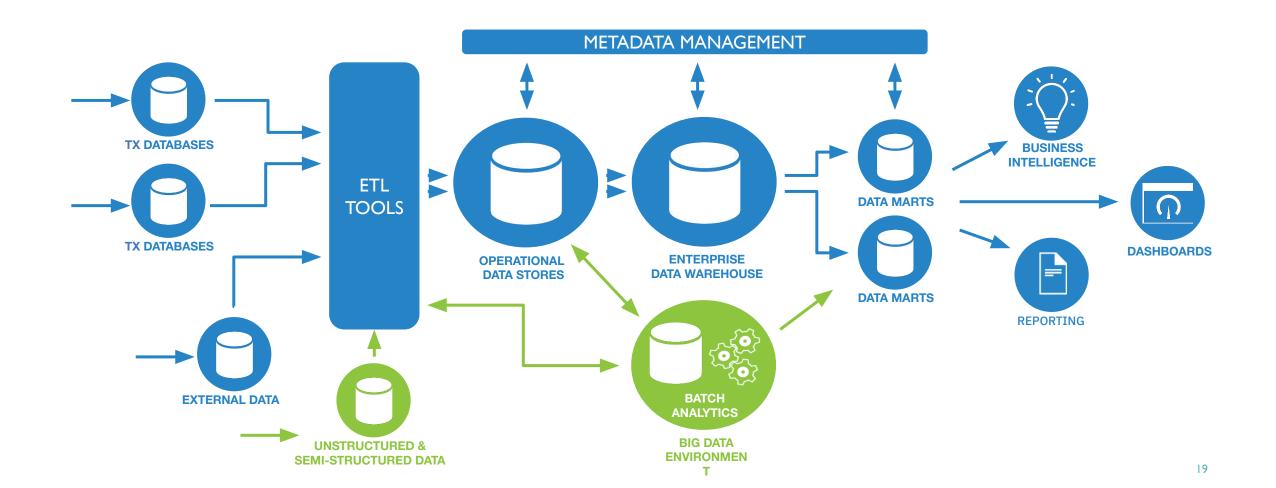


LEGACY DATA PLATFORMS: DATA WAREHOUSE WITH BI & REPORTING



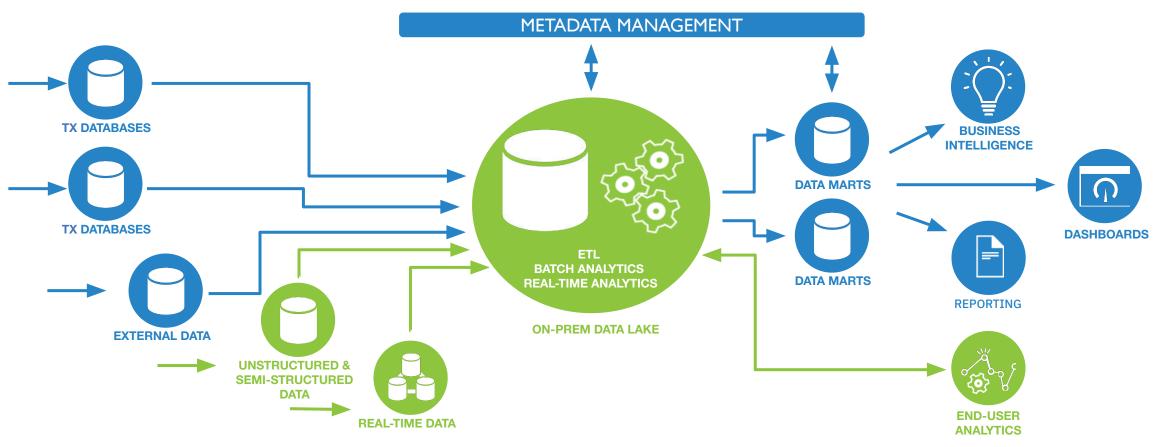


LEGACY DATA PLATFORMS: DATA WAREHOUSE WITH BIG DATA ANALYTICS





LEGACY DATA PLATFORMS: ON-PREM DATA LAKE WITH BI, REPORTING AND ANALYTICS





NEW GOAL: MOVE TO THE CLOUD



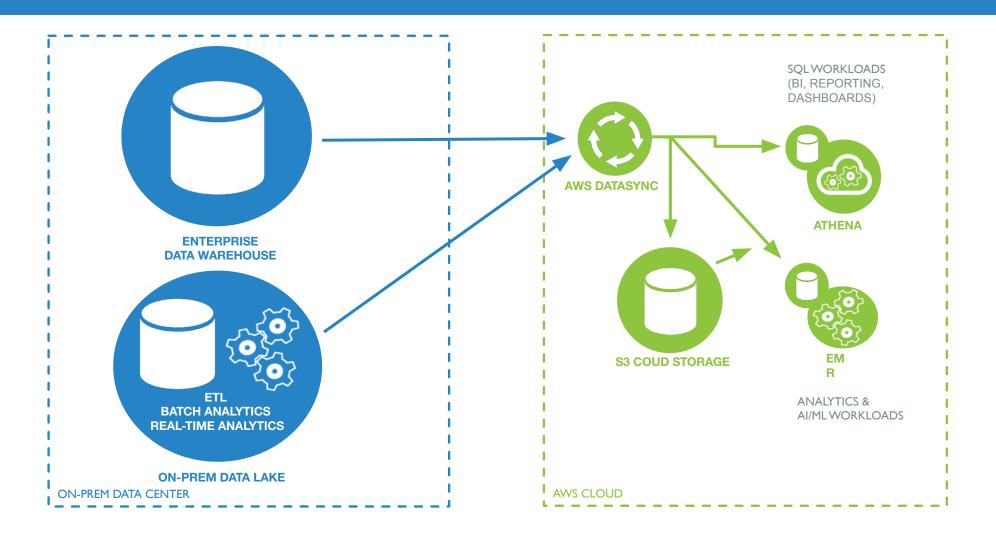
- Clouds are cheap
- Clouds are more flexible
- Clouds support decentralized control
- Clouds support elasticity
- Clouds support HA and DR
- Cloud storage is cheap and redundant



- Cloud costs can escalate quickly
- Cloud flexibility must be balanced with best practices
- Cloud decentralization discourages standards
- Cloud elasticity doesn't apply to some use cases
- Cloud HA and DR support requires planning
- Cloud storage is cheap but accessing it is costly

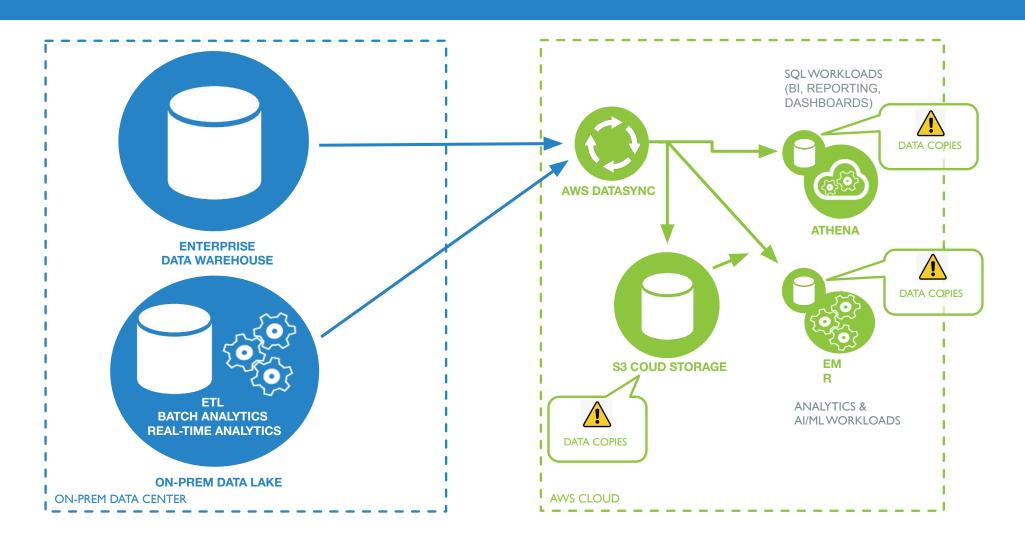


CLOUD ADOPTION JOURNEY – PHASE 1: BURST USER WORKLOADS TO THE CLOUD - AWS



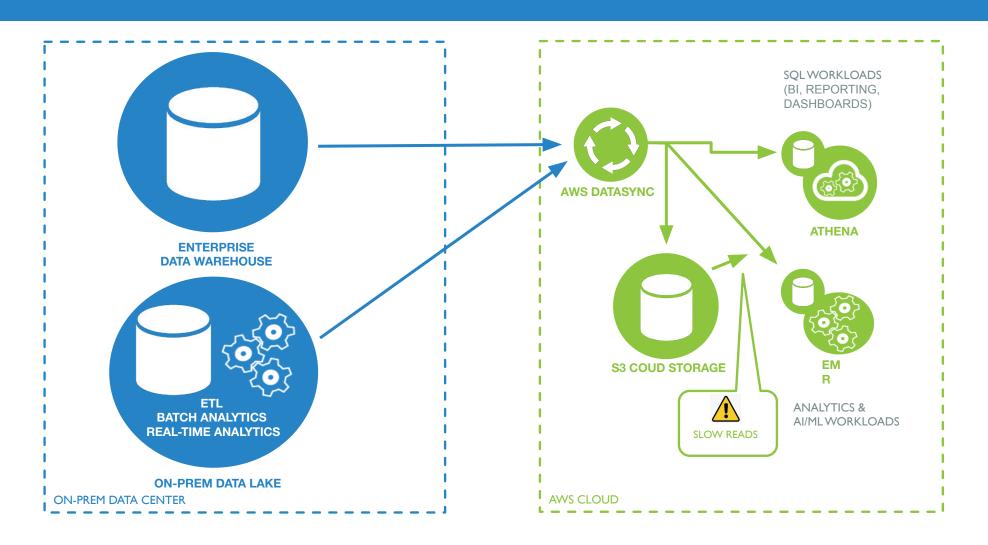
ALLUXIO

CLOUD ADOPTION JOURNEY – PHASE 1: BURST USER WORKLOADS TO THE CLOUD - AWS - DATA COPIES



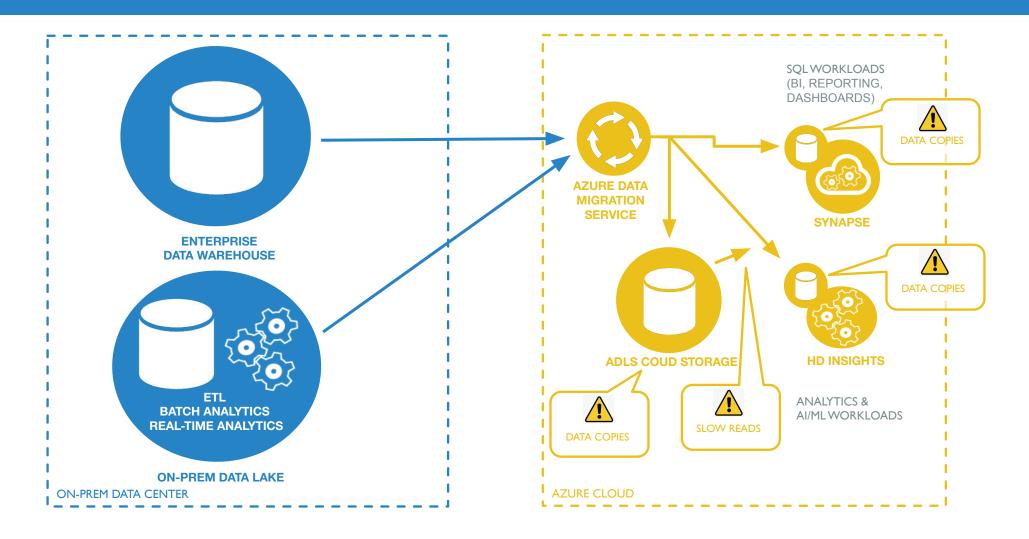
ALLUXIO

CLOUD ADOPTION JOURNEY – PHASE 1: BURST USER WORKLOADS TO THE CLOUD - AWS - SLOW READS



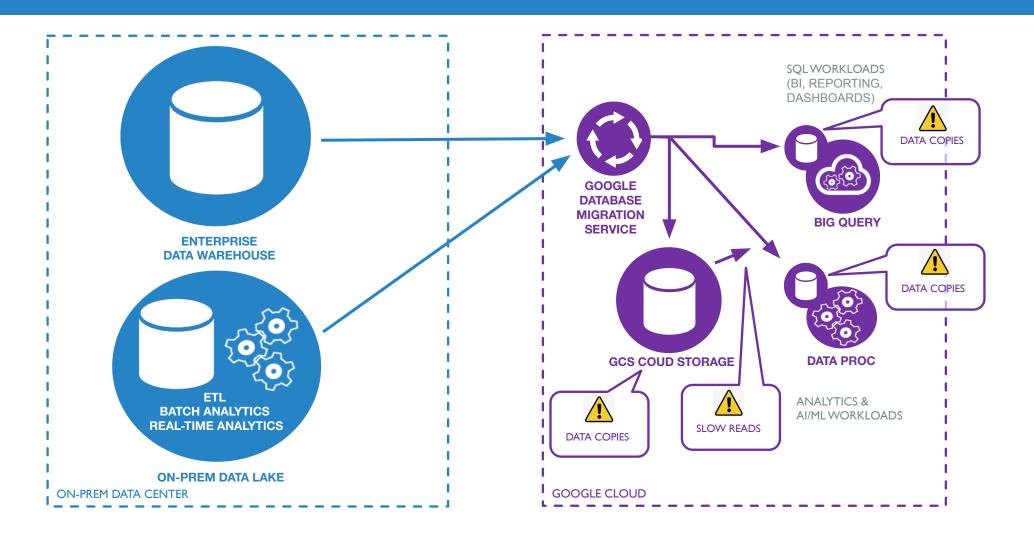


CLOUD ADOPTION JOURNEY – PHASE 1: BURST USER WORKLOADS TO THE CLOUD - AZURE



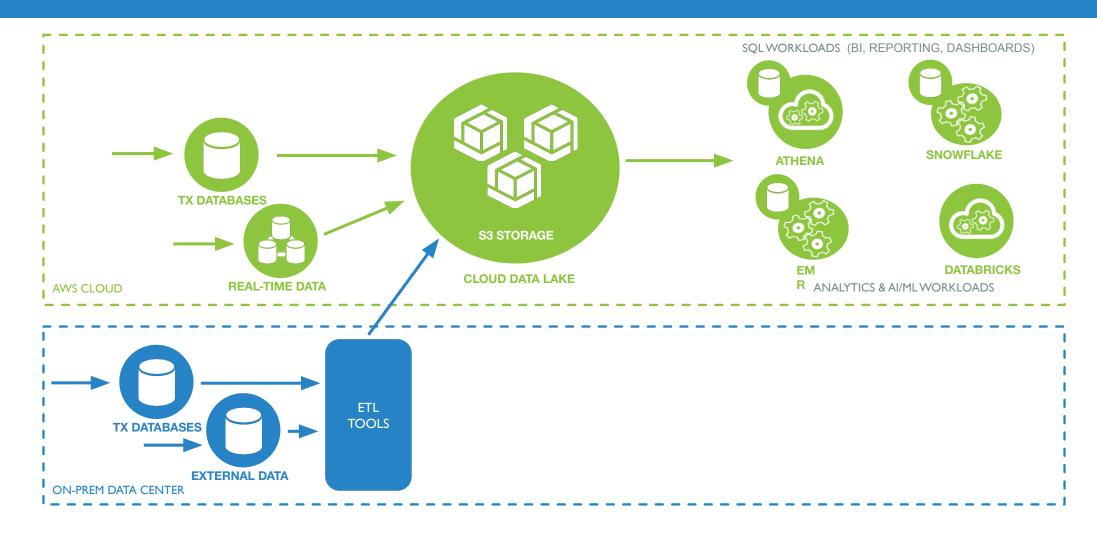


CLOUD ADOPTION JOURNEY – PHASE 1: BURST USER WORKLOADS TO THE CLOUD - GOOGLE



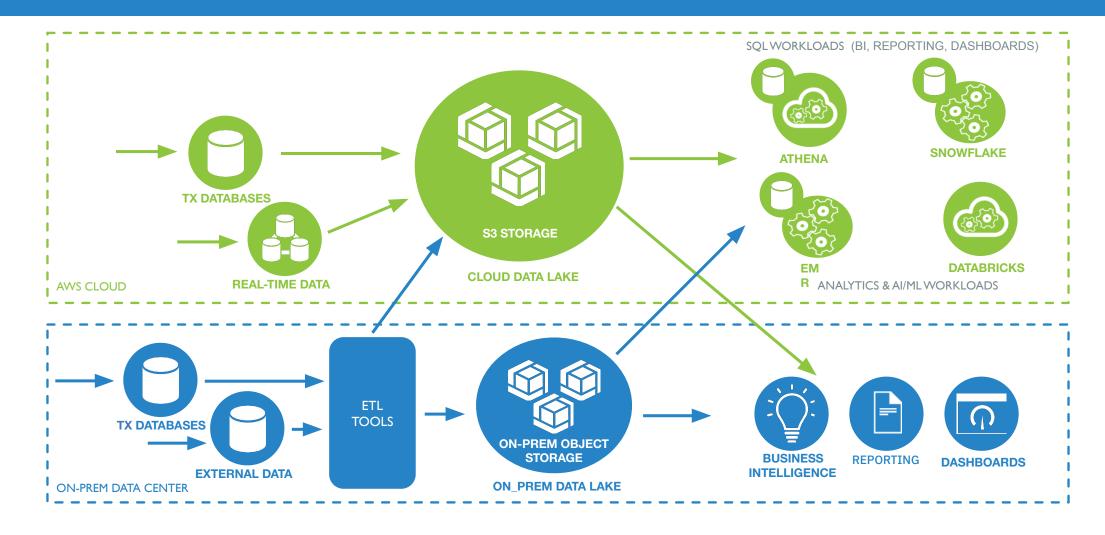


CLOUD ADOPTION JOURNEY – PHASE 2: BUILD A CLOUD DATA LAKE



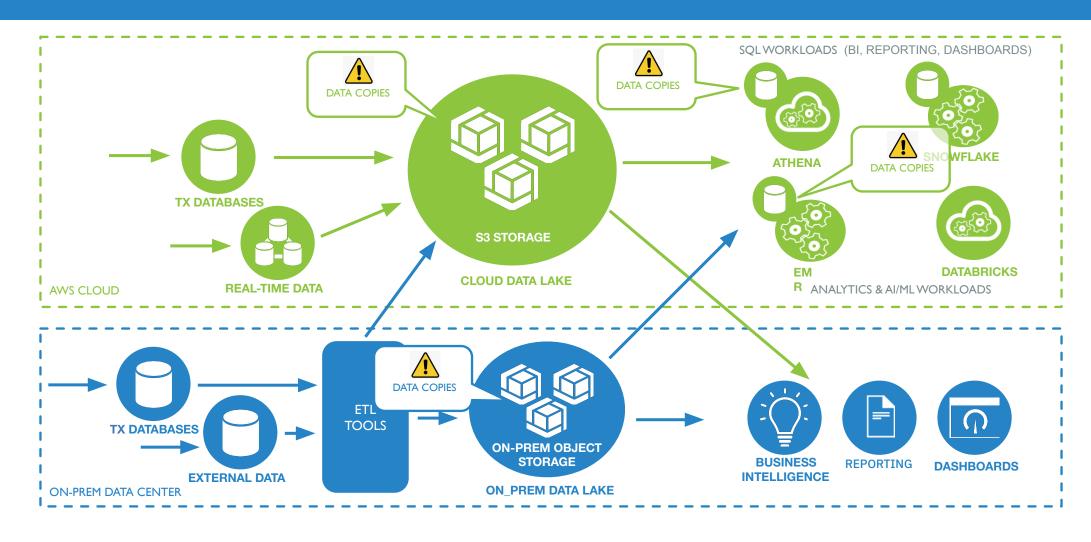


CLOUD ADOPTION JOURNEY – PHASE 3: DEPLOY A HYBRID-CLOUD ARCHITECTURE



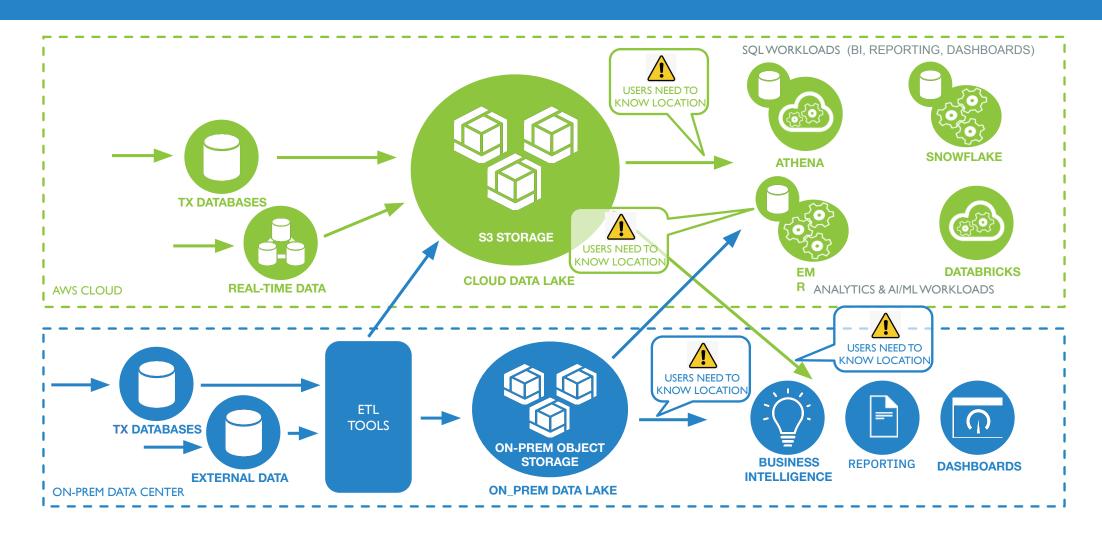


CLOUD ADOPTION JOURNEY – PHASE 3: HYBRID-CLOUD ARCHITECTURE – DATA COPIES



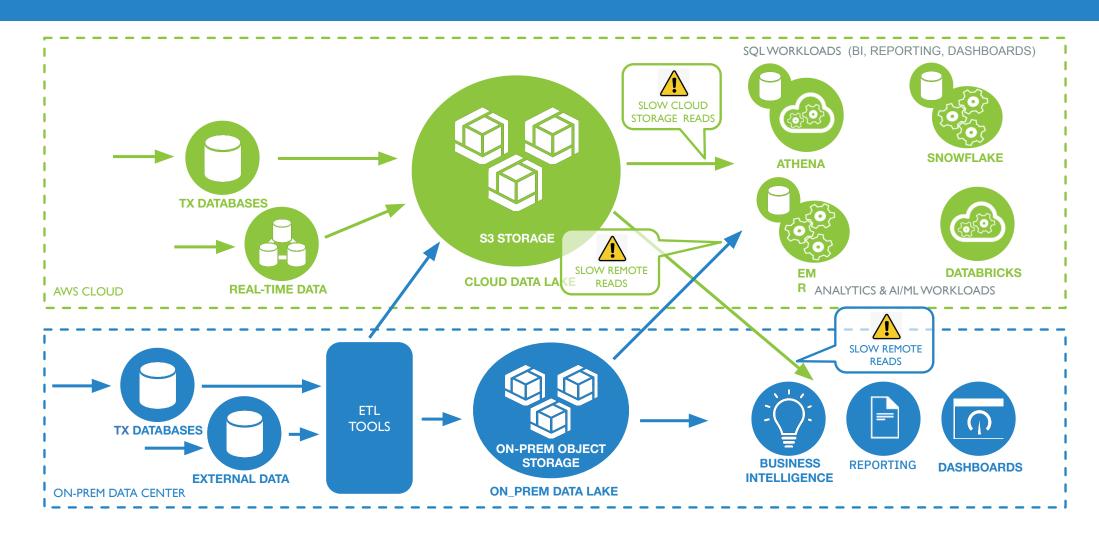


CLOUD ADOPTION JOURNEY – PHASE 3: HYBRID-CLOUD ARCHITECTURE – DATA LOCATION



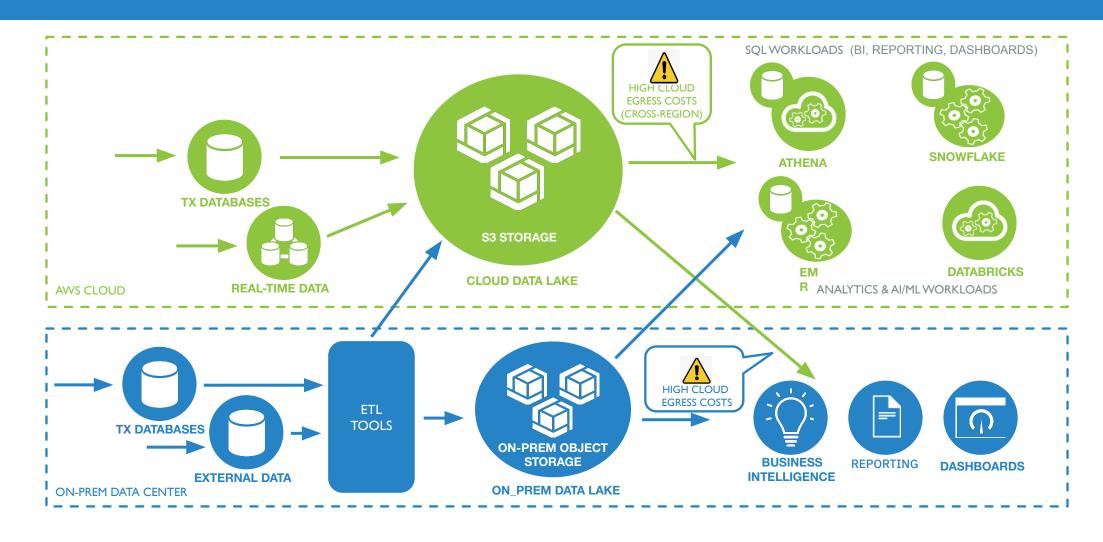


CLOUD ADOPTION JOURNEY – PHASE 3: HYBRID-CLOUD ARCHITECTURE – SLOW READS





CLOUD ADOPTION JOURNEY – PHASE 3: HYBRID-CLOUD ARCHITECTURE – HIGH EGRESS & API COSTS





What is Alluxio?

ACCESS YOUR DATA ANYWHERE, ANYTIME WITH ALLUXIO

Alluxio is a Data Orchestration Platform that connects all your data driven applications across all your data sources in any environment.

- Migrating to a hybrid- or multi-cloud data infrastructure
- Moving off of legacy systems to a cloud-native modern data stack
- Onboarding new data-driven applications accessing geo-distributed data



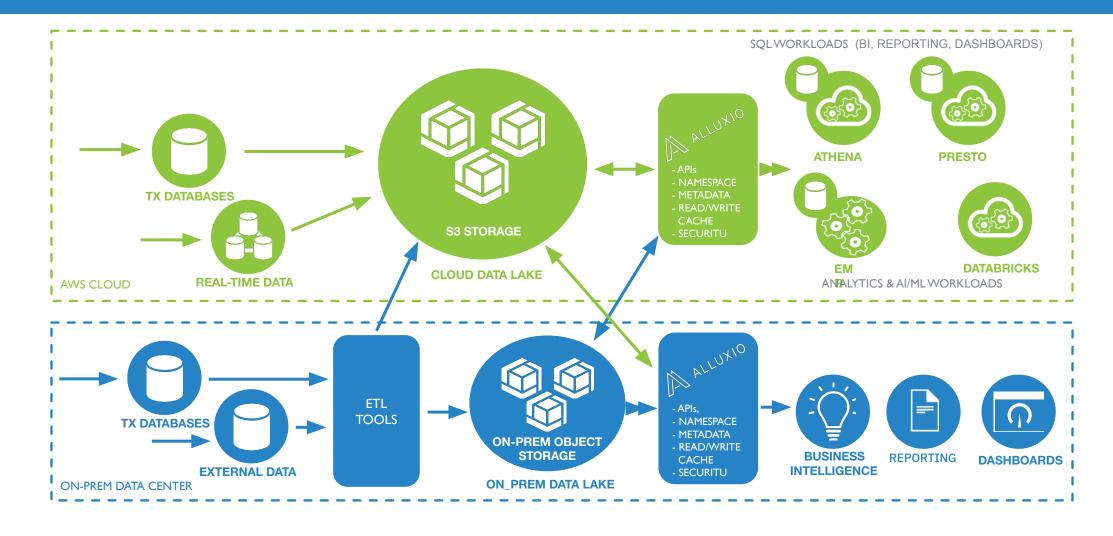
Key capabilities of Alluxio

- Supports the concept of data location independence
- Provides metadata services to data consumers
- Supports multiple application APIs:
 S3, HDFS, POSIX file system, Java, Python, etc.
- Supports multiple data source APIs:
 S3,ADLS, GCS, HDFS, NFS, on-prem S3, etc.

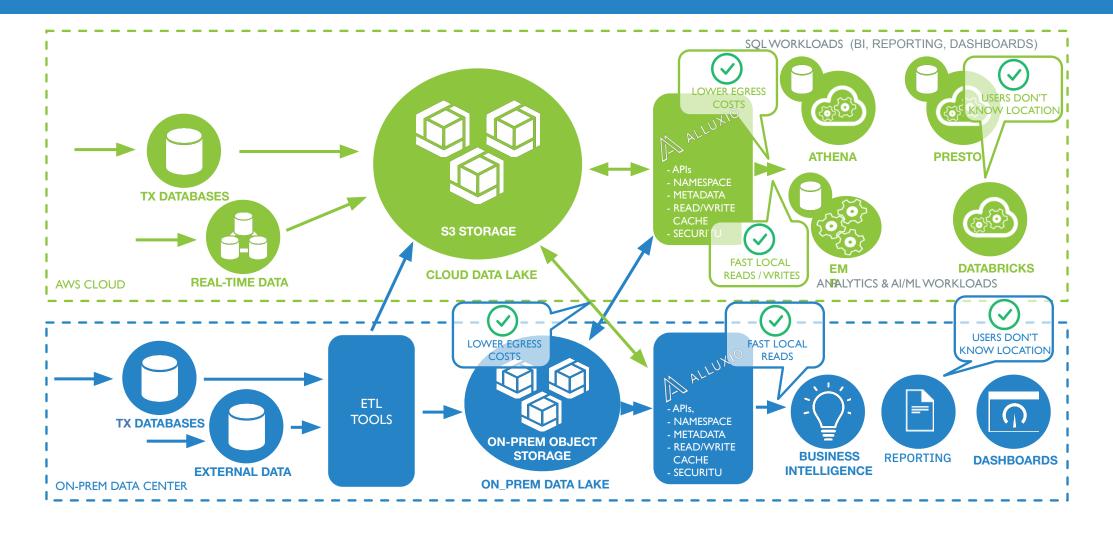
- Supports multiple data lake file formats
- Supports both read and write operations
- Supports caching of data for improved performance
- Supports security standards:

Authentication, authorization, auditing, and encryption



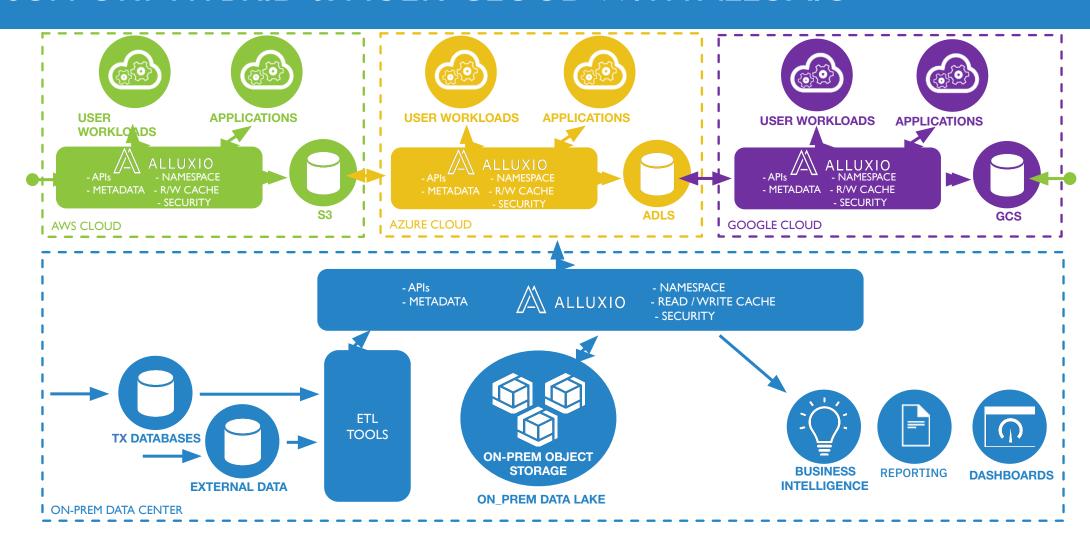






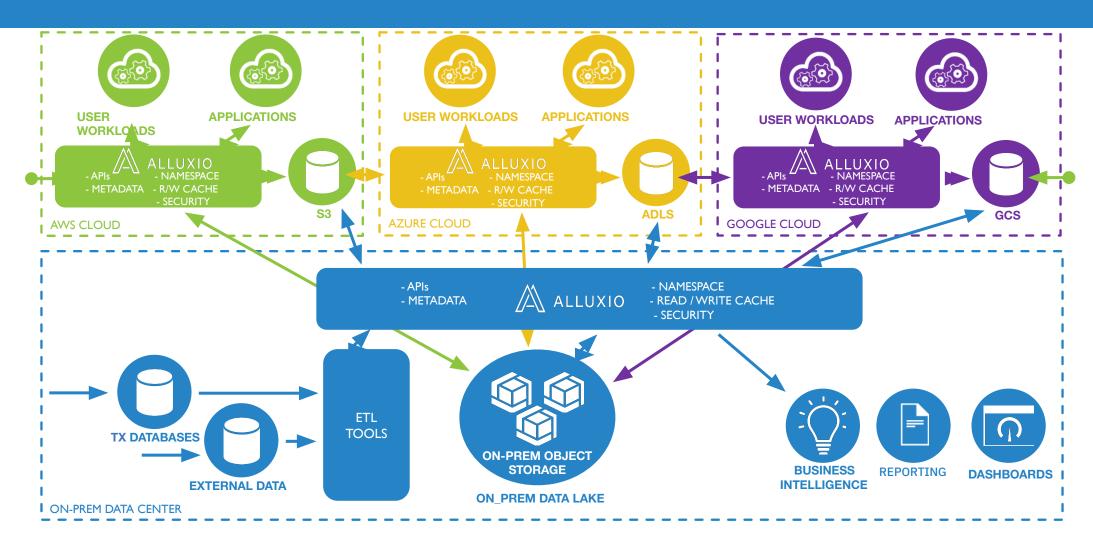


CLOUD ADOPTION JOURNEY – PHASE 4: SUPPORT HYBRID & MULTI-CLOUD WITH ALLUXIO





CLOUD ADOPTION JOURNEY – PHASE 4: SUPPORT HYBRID & MULTI-CLOUD WITH ALLUXIO



ALLUXIO HYBRID CLOUD DATA PLATFORM

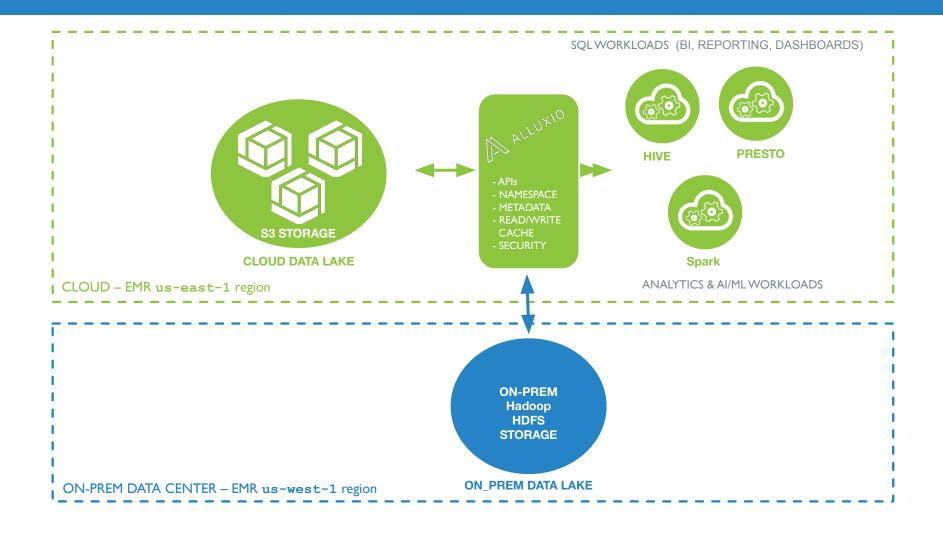
ARCHITECTING A HETEROGENEOUS DATA PLATFORM ACROSS CLUSTERS, REGIONS, & CLOUDS

Demo





ALLUXIO HYBRID CLOUD DEMO ENVIRONMENT





SUMMARY

Data platforms that span on-prem and multiple cloud environments can be very powerful for an enterprises' data consumers.

However, the data platform can suffer from:

- High cost of duplicate data copies
- Complex data location issues, including security and provenance
- Slow performance when reading remote regions, clouds and on-prem environments
- Very high cloud data egress costs

Alluxio can help mitigate those risks by providing:

- A unified namespace where data location is hidden from users and apps
- Metadata services to data consumers
- Multiple application APIs and multiple data source APIs
- Read and write capable cache storage to improve performance and reduce egress costs
- · Advanced security for authentication, authorization, encryption and auditing

ALLUXIO HYBRID CLOUD DATA PLATFORM

ARCHITECTING A HETEROGENEOUS DATA PLATFORM ACROSS DATA CENTERS, REGIONS & CLOUDS

Q & A

Next Steps

