AWS re:Invent

NOV. 29 – DEC. 3, 2021 | LAS VEGAS, NV

ANT306-R2

Modernize your log analytics solution with Amazon OpenSearch Service

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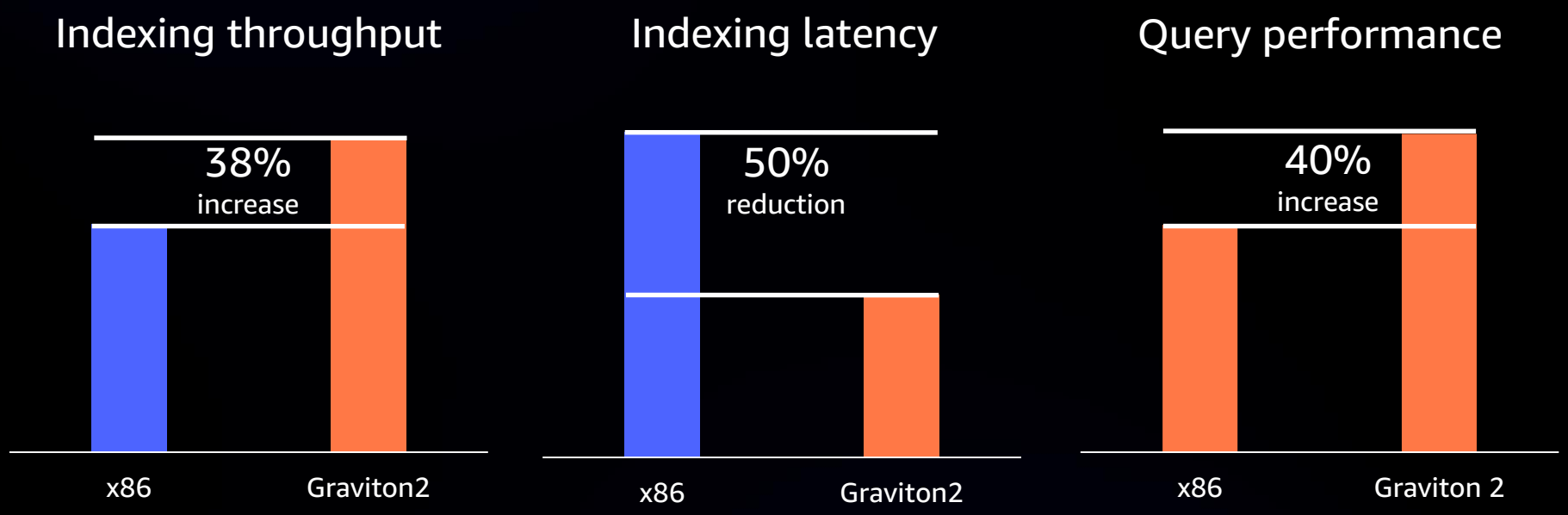
Agenda

- Overview of Amazon OpenSearch Service
- Latest innovations for modernization of your log analytics stack
- Chalk time and demos
- Wrap-up

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Performance – AWS Graviton2 instances

Custom-built silicon with next-generation performance improvement

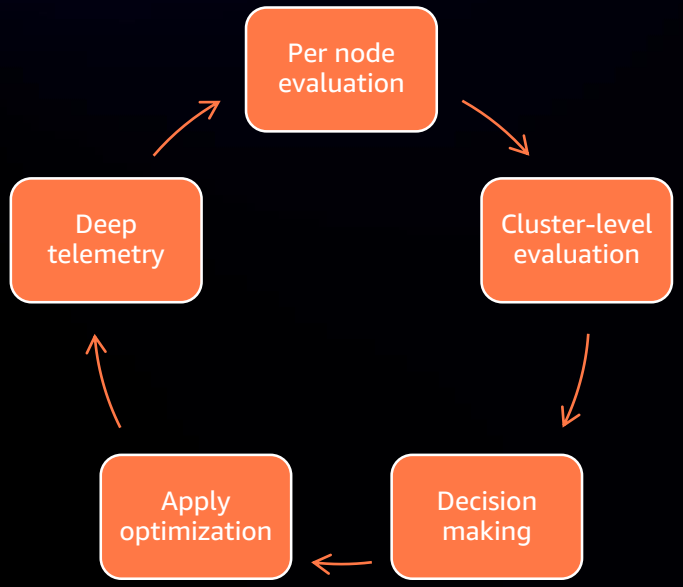


In aggregate, 44% better price to performance

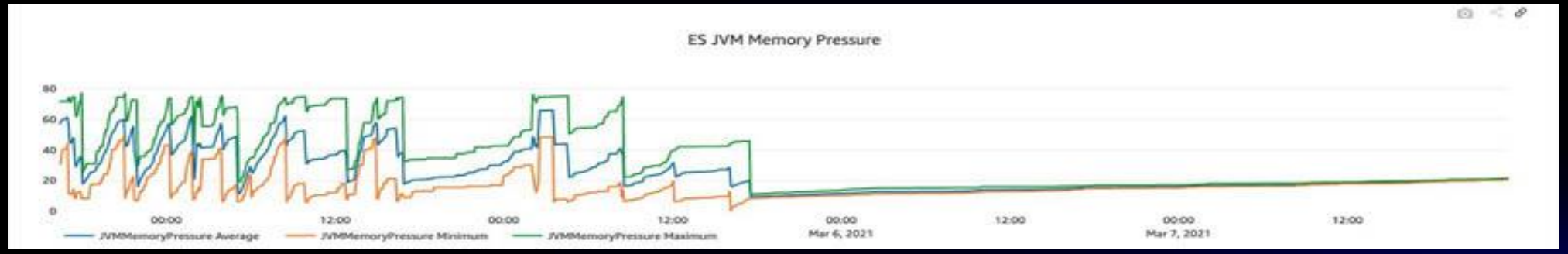
compared to fifth-generation instances for reference data sets

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Performance – Auto-Tune



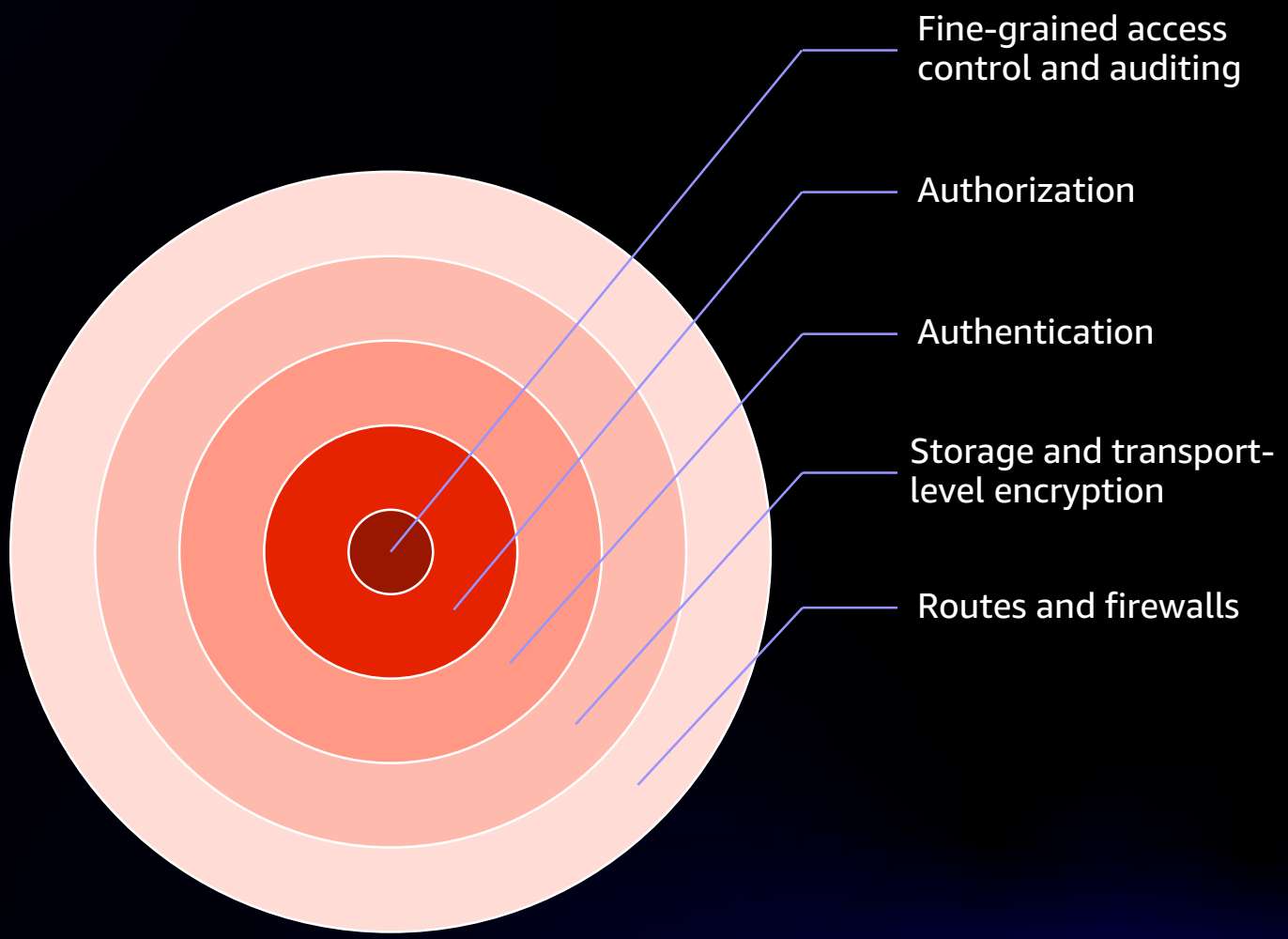
- Adaptive resource management
- Tunes JVM, certain caches and queues



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Security – Cluster options

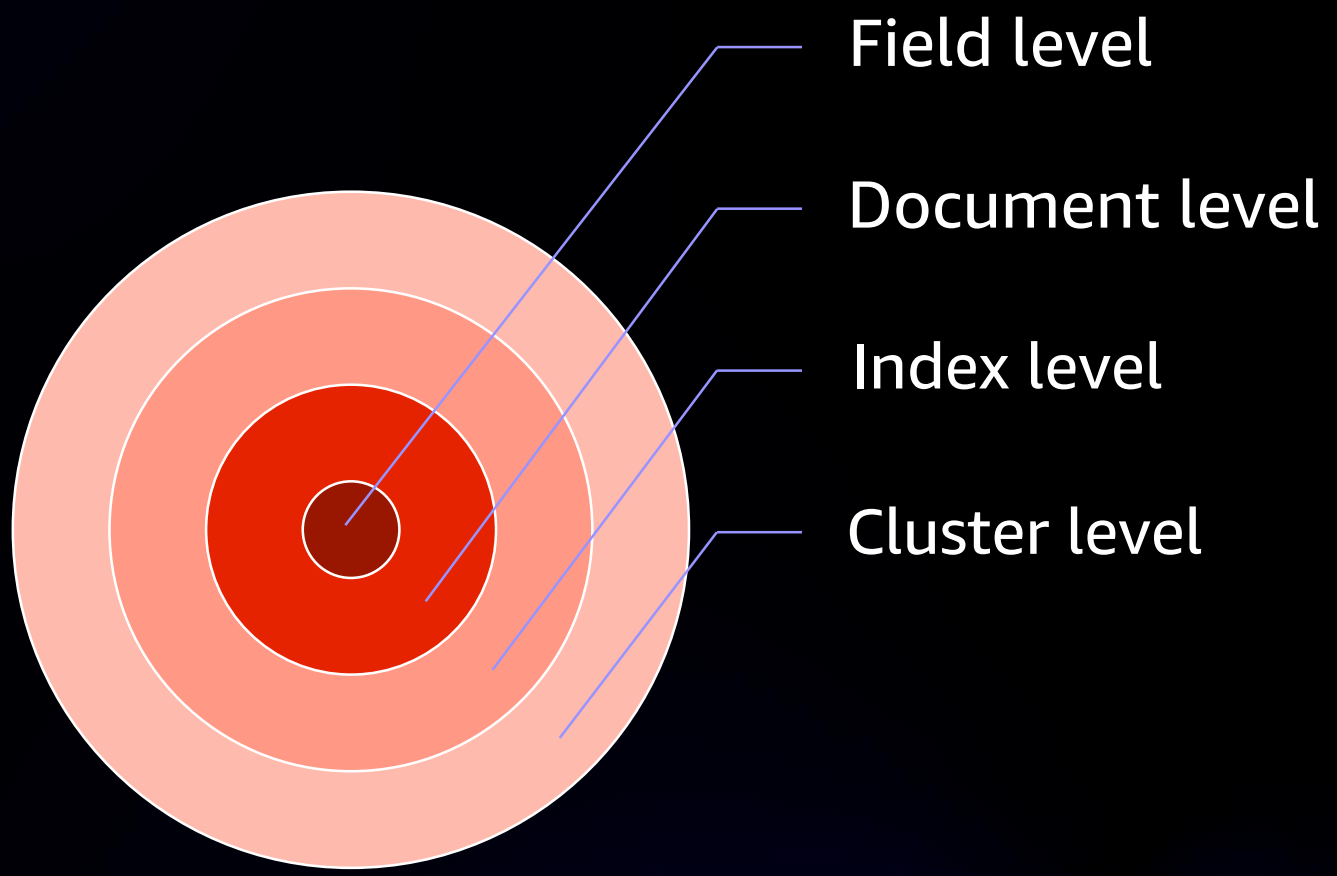
- Combination of controls
  - Inside the cluster
  - Outside of the cluster
- Security plugin
- Encryption
- Access via networking



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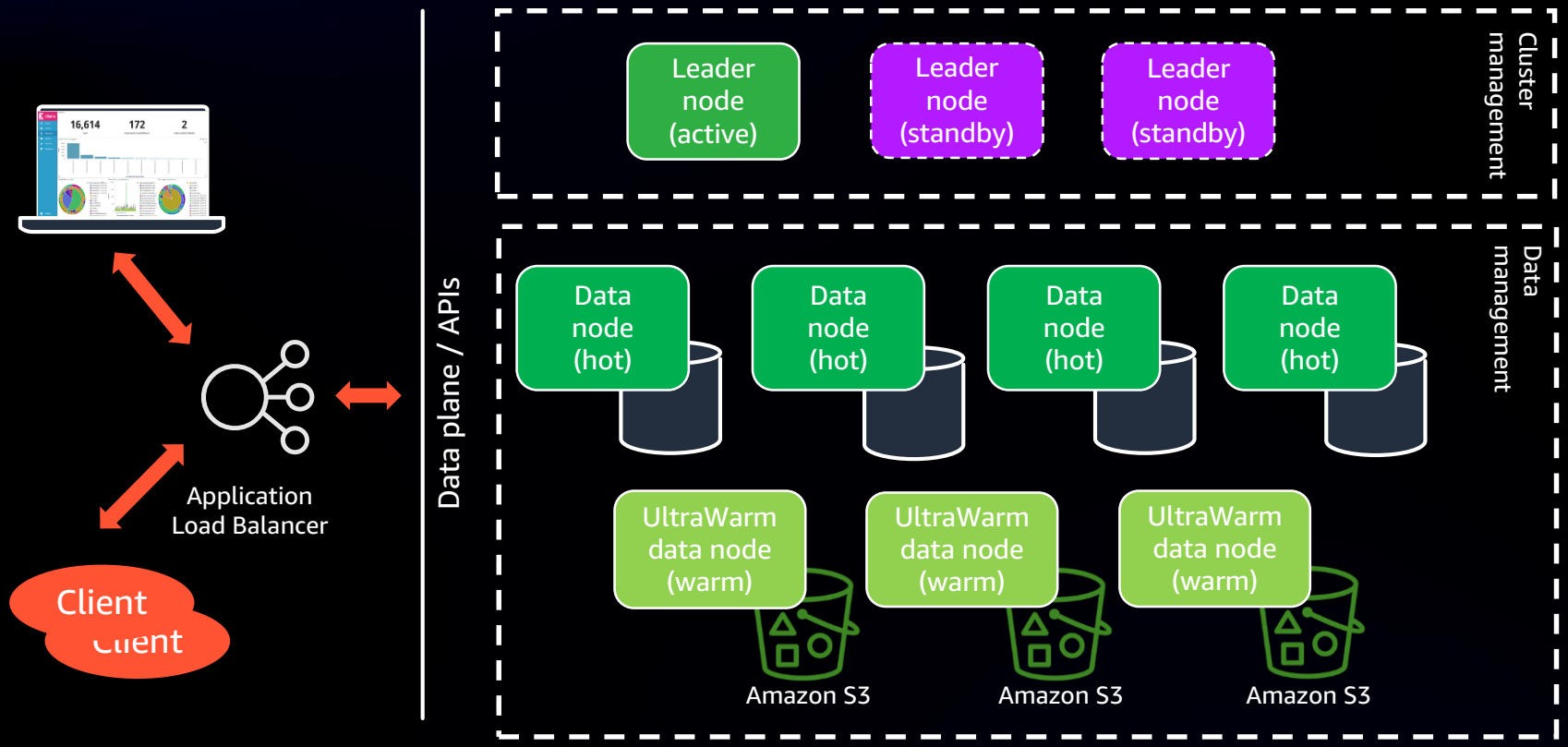
Security – Security plugin

- Authentication
  - Third-party SAML integration
  - Basic authentication
  - IAM integration
- Authorization
- Auditing
- Tenant isolation



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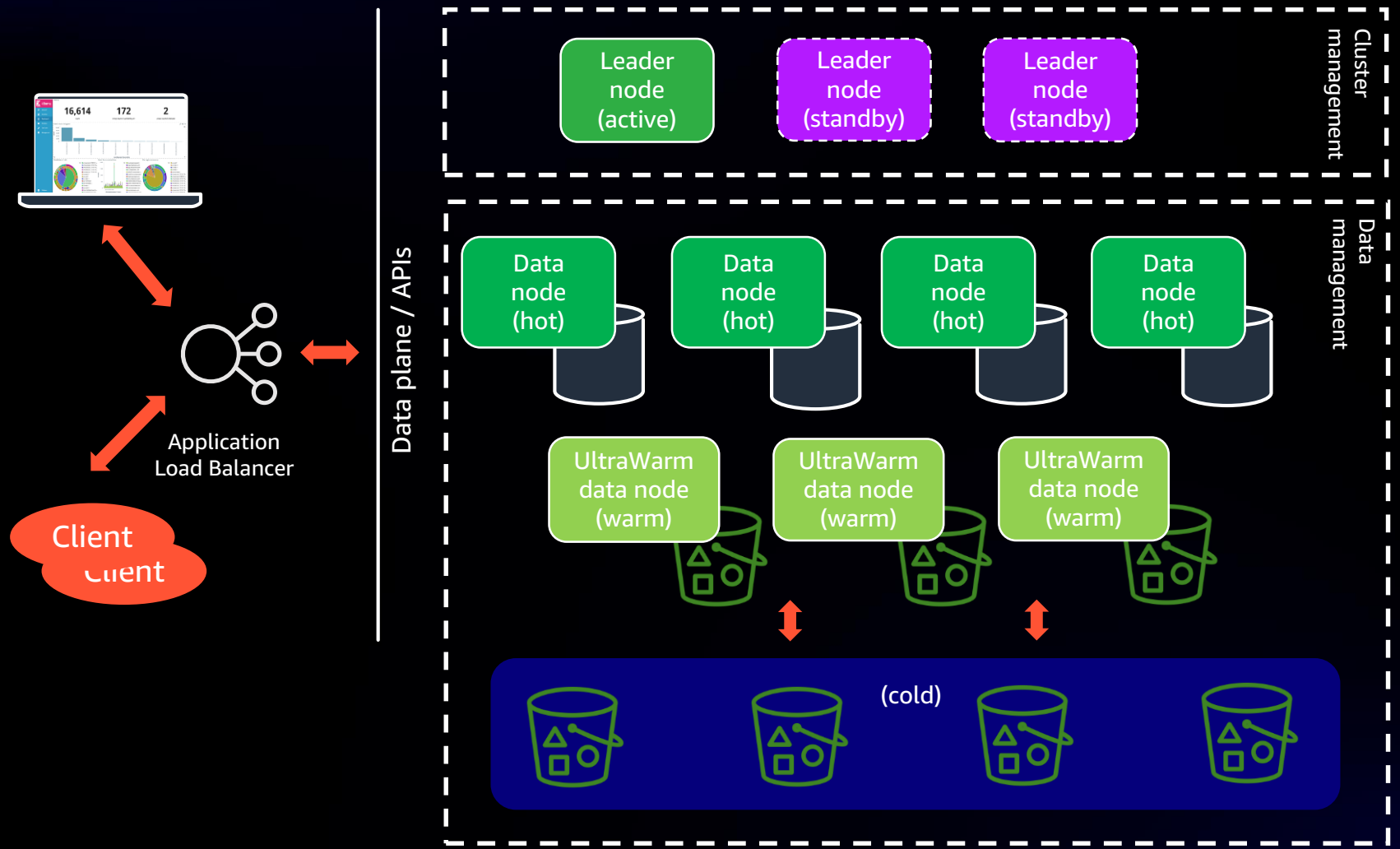
Cost control – UltraWarm



- Infrequent access
- Immutable
- Interactive
- Highly durable

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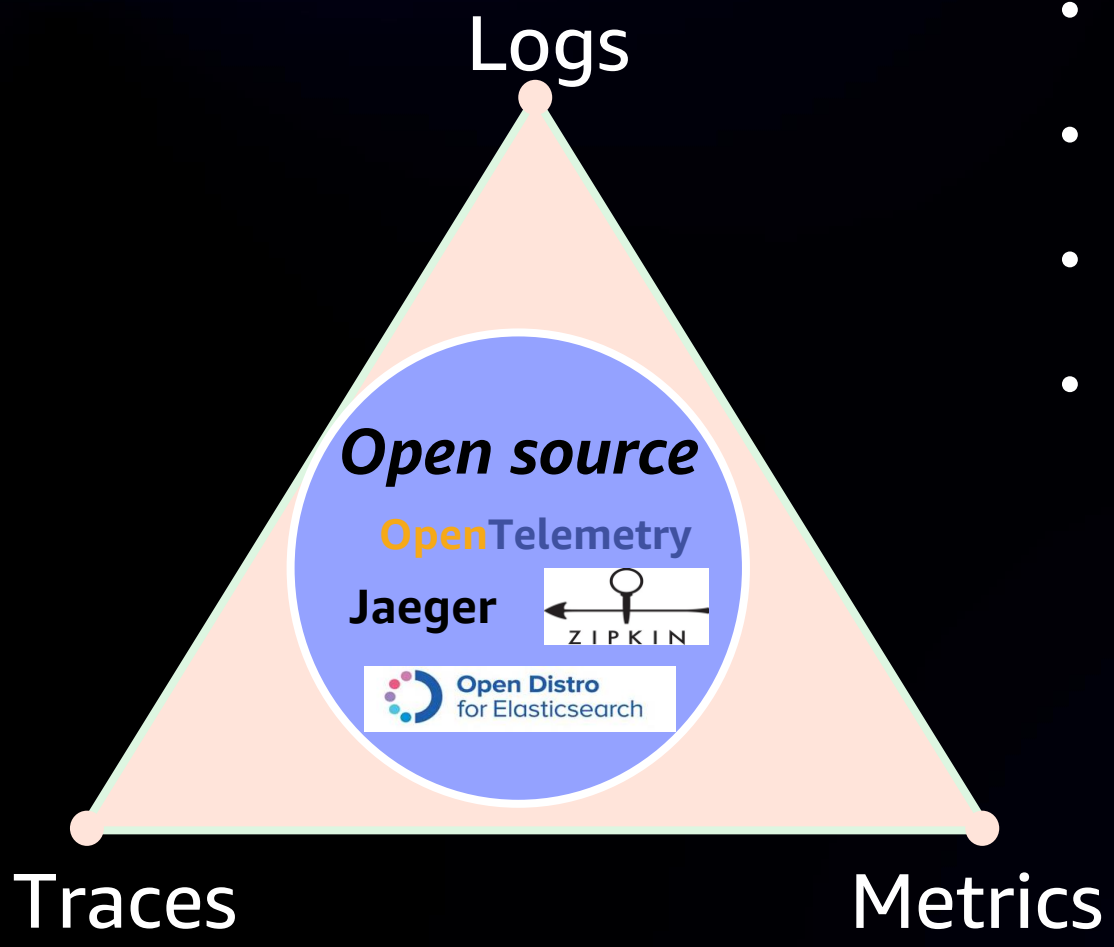
Cost control – Cold storage



- Archival access
- Decoupled
- Managed Amazon S3 cost
- Must load data into UltraWarm nodes for interaction

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Observability – Trace Analytics

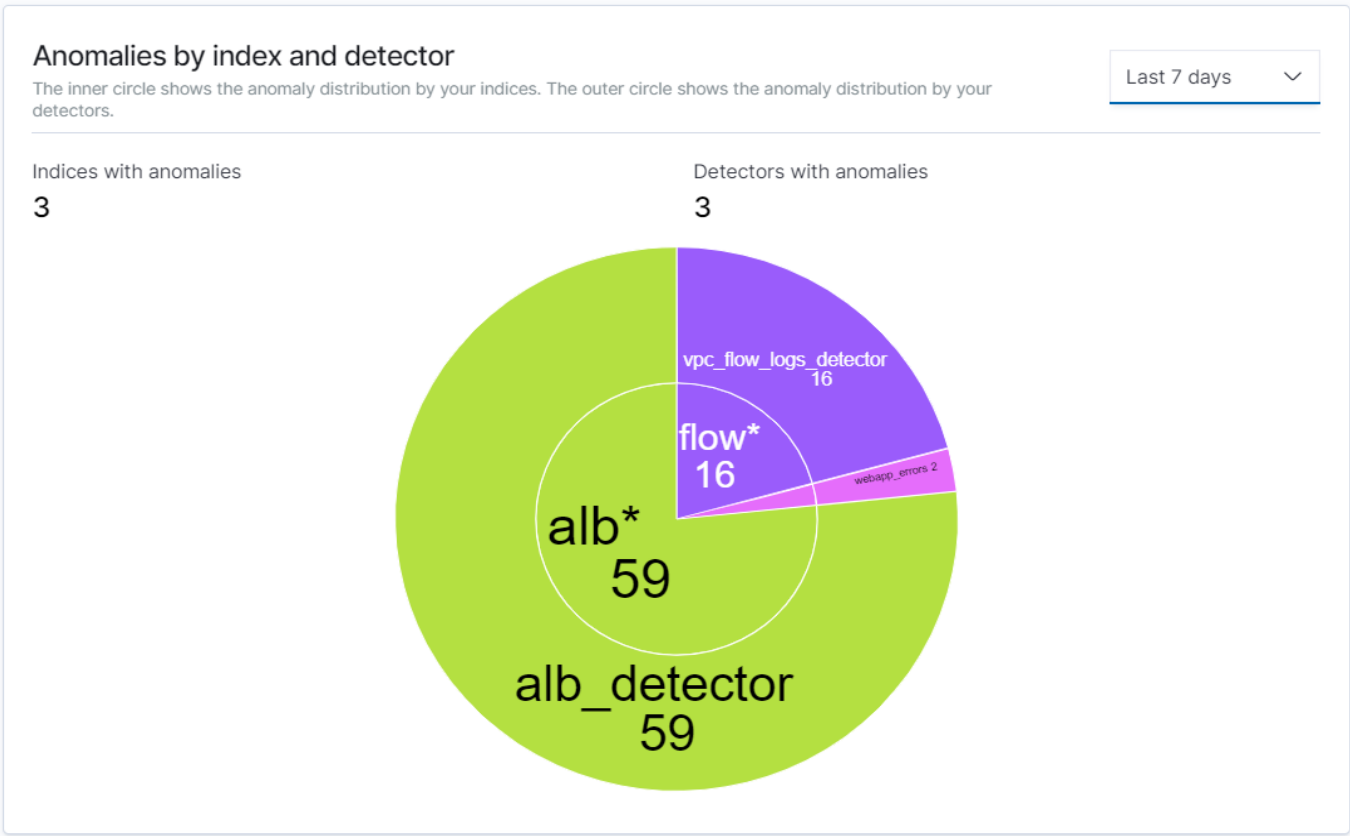


- Enables faster mean time to resolution
- Profile individual request / response cycles
- Open source
- Data collection integration with
  - OpenTelemetry
  - Jaeger
  - Zipkin
  - Fluentd / Fluentbit
  - And many others

aws

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Machine learning – Anomaly detection

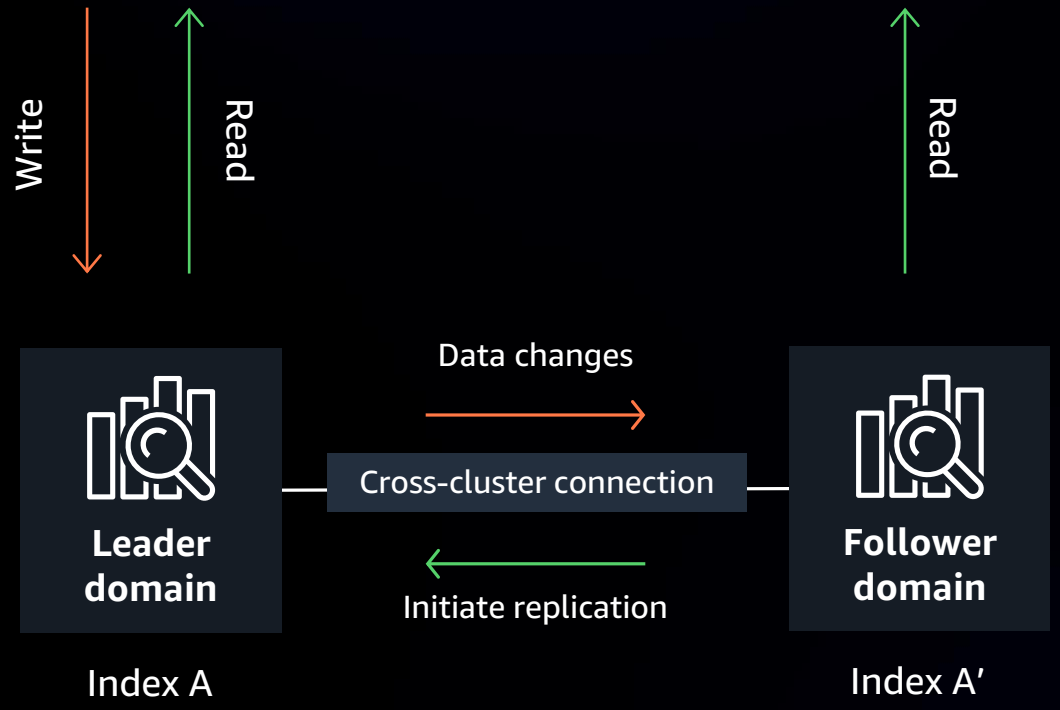


- Learns what is normal
- Doesn't require prior knowledge
- Deviations from normal are anomalies
- Works in near real time on time series data
- Uses the Random Cut Forest (RCF) algorithm
- Rich visualizations

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HA/DR – Cross-cluster replication

High availability, disaster recovery, and data proximity



- Active-passive replication
- Granular control through index-based replication
- Cross-account and cross-region support
- One-to-many leader-to-follower relationship

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Thank you!

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