

BI AT HYPERSCALE

QUICKLY BUILD AND SCALE DASHBOARDS WITH AMAZON QUICKSIGHT

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BI AT HYPERSCALE

- QuickSight overview & demo
- QuickSight + AWS data at scale
- Users at scale
- Governance at scale
- Pricing at scale

Challenges with existing BI platforms



Restrictive pricing



Hard to scale



Don't integrate well



Resource-intensive



Lack of
advanced features

Amazon QuickSight

First BI service built for the cloud with pay-per-session pricing & ML insights for everyone

Pay as you go



Pay only for what you use

\$5/mo max for Readers

Auto Scaling & Serverless



Deploy globally to 100k's of users without provisioning servers

Built-in High Availability

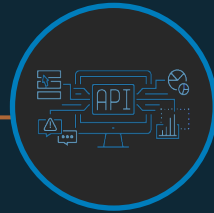
Deeply integrated with AWS services



Secure, private access to AWS data

Integrated S3 data lake permissions

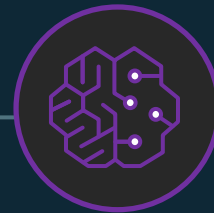
API Support



Programmatically onboard users and manage content

Easily embed in your apps

Machine Learning



Built-in Anomaly Detection and Forecasting

Bring your own model from Amazon SageMaker

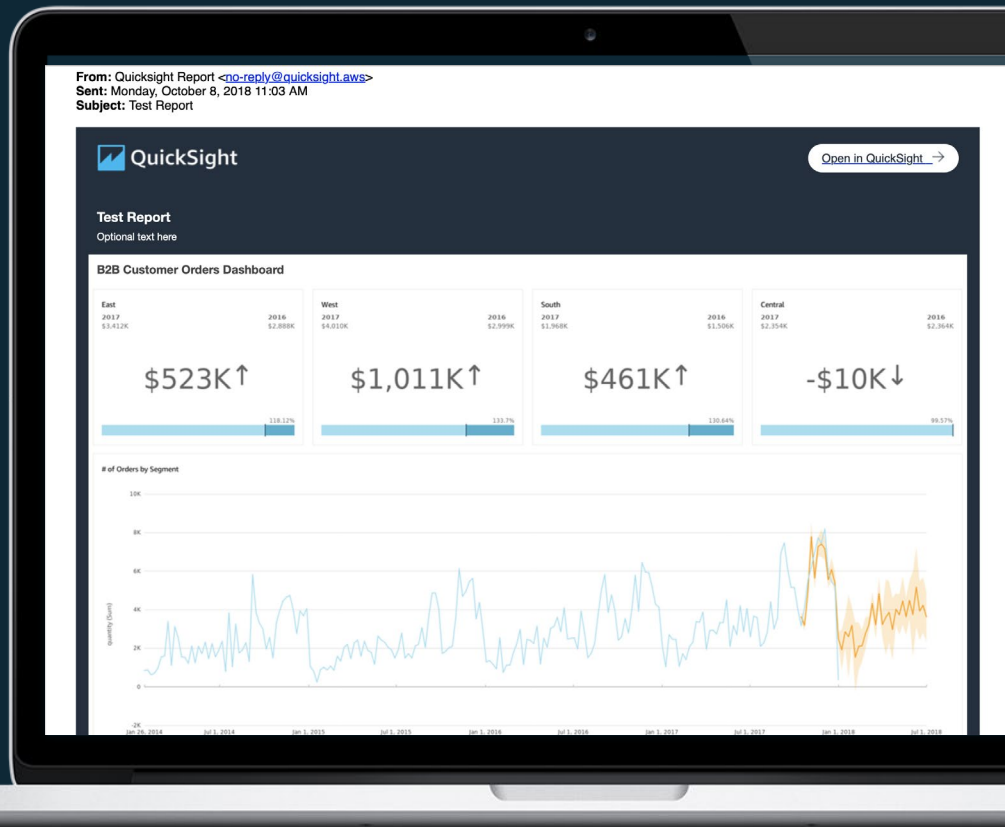
Create Beautiful, Interactive Dashboards

- Add rich interactivity like filters, drill downs, zooming, and more
- Blazing fast navigation
- Accessible on any device
- Data Refresh
- Publish to everyone with a click



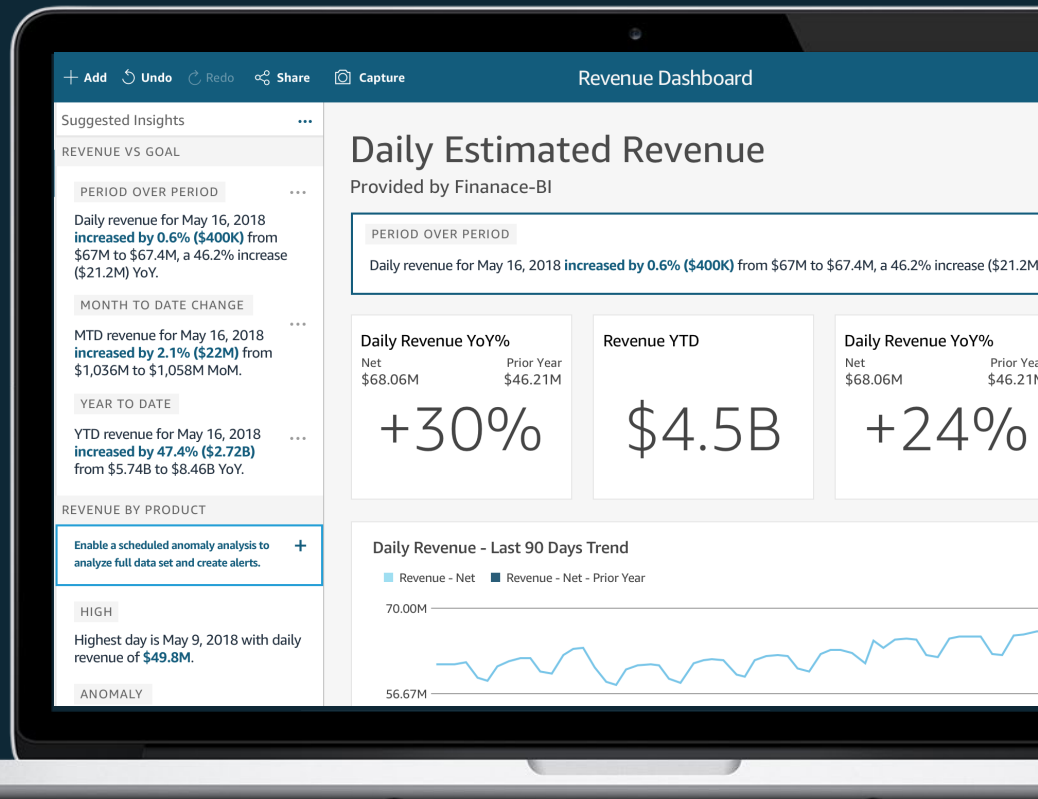
Insights Delivered to Your Inbox

- Schedule email reports on a daily, weekly, or monthly basis
- Sent to individual users or groups
- Supports Row Level Security so each user can receive customized emails
- Uses Pay-per-Session Pricing



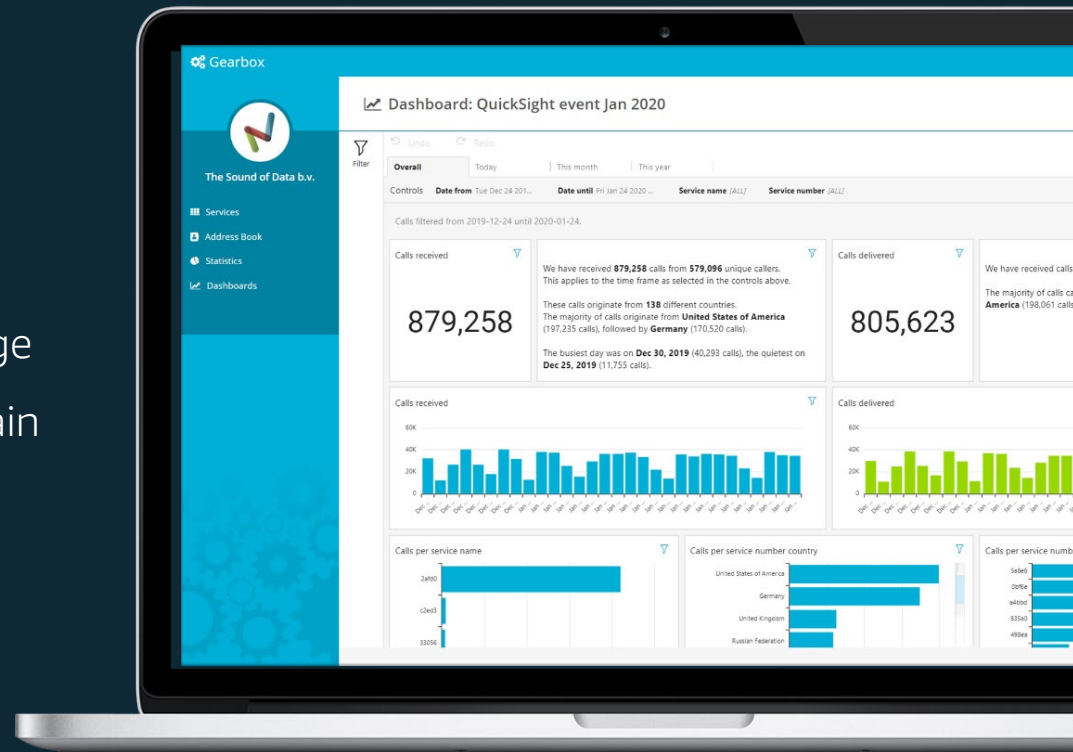
ML Insights

- Anomaly Detection
- Forecasting
- Bring your own model from Amazon SageMaker
- Auto-generated natural language narratives



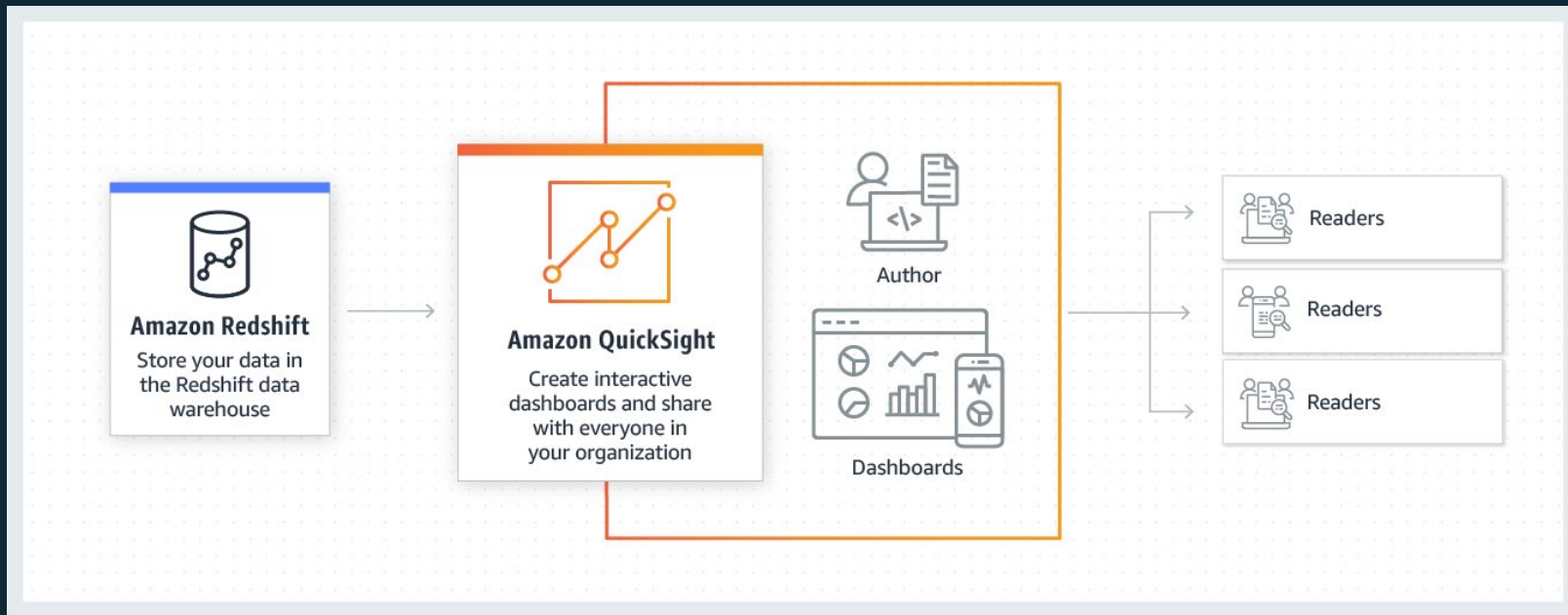
Embedding Dashboards In Your Application

- Enhance your applications with rich analytics and dashboards
- Easy maintenance, no servers to manage
- Fast! No Custom development or domain expertise needed
- Leverage new features as we add them



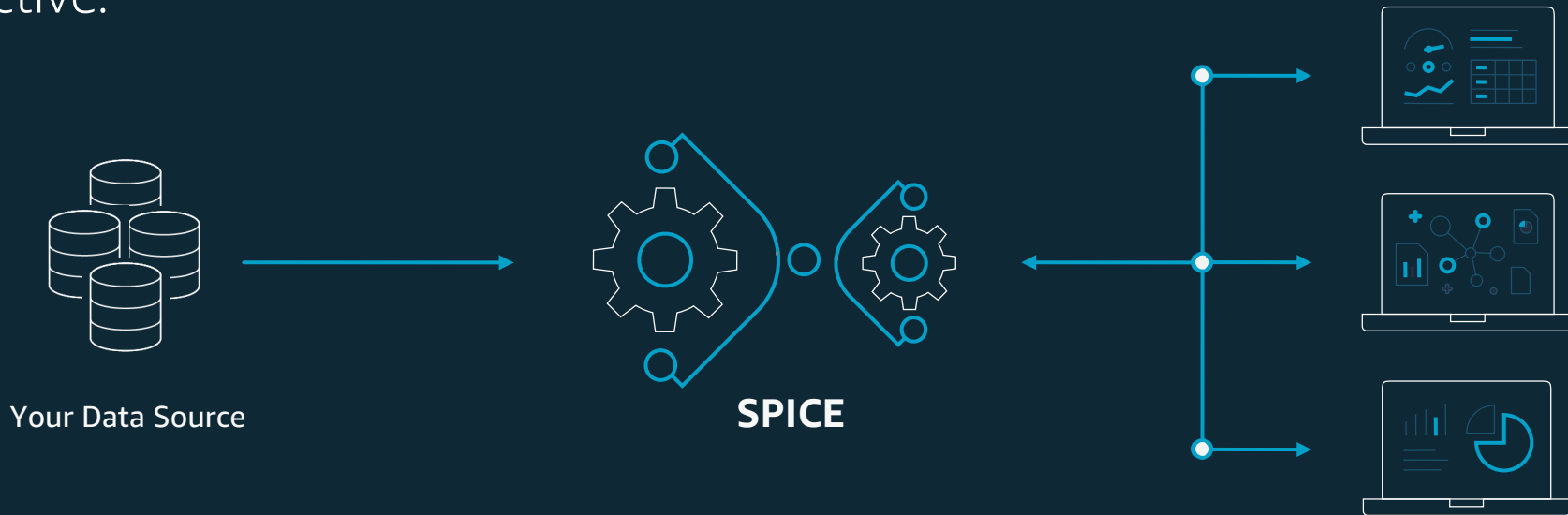
How QuickSight Works

QuickSight allows you to connect to your data sources, and create dashboards that can be securely shared across your organization.



SPICE

QuickSight is powered by SPICE, a super-fast calculation engine that delivers performance and scale, regardless of how many users are active.



What's new (last 12 months)

- **ML Insights (Forecasting, Anomaly Detection, Natural Language Narratives)**
- **Embedded Authoring**
- **SageMaker integration**
- **250M rows in SPICE**
- **Cross Source Joins**
- **New iOS and Android apps**
- Cross-region VPC peering
- VPC Gateway for external data sources
- APIs: Data set refresh/status
- APIs: Dashboard & Analysis
- APIs: Theming
- APIs: User management
- Regional AD Support
- JSON support
- Donut, Gauge, Word Cloud, Funnel, Boxplot, Waterfall charts
- **Folders**
- **Real-time Analytics**
- **Column Level Security**
- **Lake Formation integration**
- **Localization (15 languages)**
- **Regions: London, Frankfurt, Seoul, Mumbai, Gov Cloud West**
- Dashboard Themes
- Filter Actions
- Level Aware Aggregations
- Athena Workgroups support
- Conditional formatting
- On-sheet filters
- Favorites
- Anomaly detection alerts
- Export to PDF, Excel



Demo

Users at scale

Auto-scales for fast, consistent performance

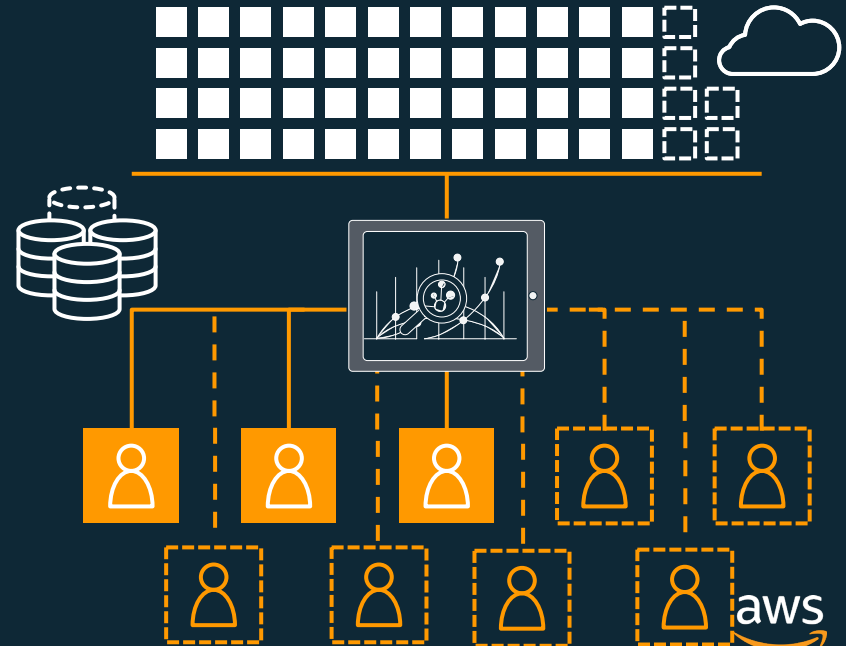
	Server-based BI architecture	Serverless QuickSight architecture
More concurrent users	More servers	Automatically scale to your users
More complex dashboards	More servers	All you can use in 30 min
Geographic distribution	More servers + management	Deploy as needed, no infra mgmt.
High Availability	More servers + management	Native HA, no infra mgmt.
True TCO	License + infrastructure costs + management staff	Session price = all-in pricing

Why does QuickSight's serverless architecture matter?

Traditional, server based BI



QuickSight's serverless architecture



Governance at scale



Federated Single Sign-On (SSO)

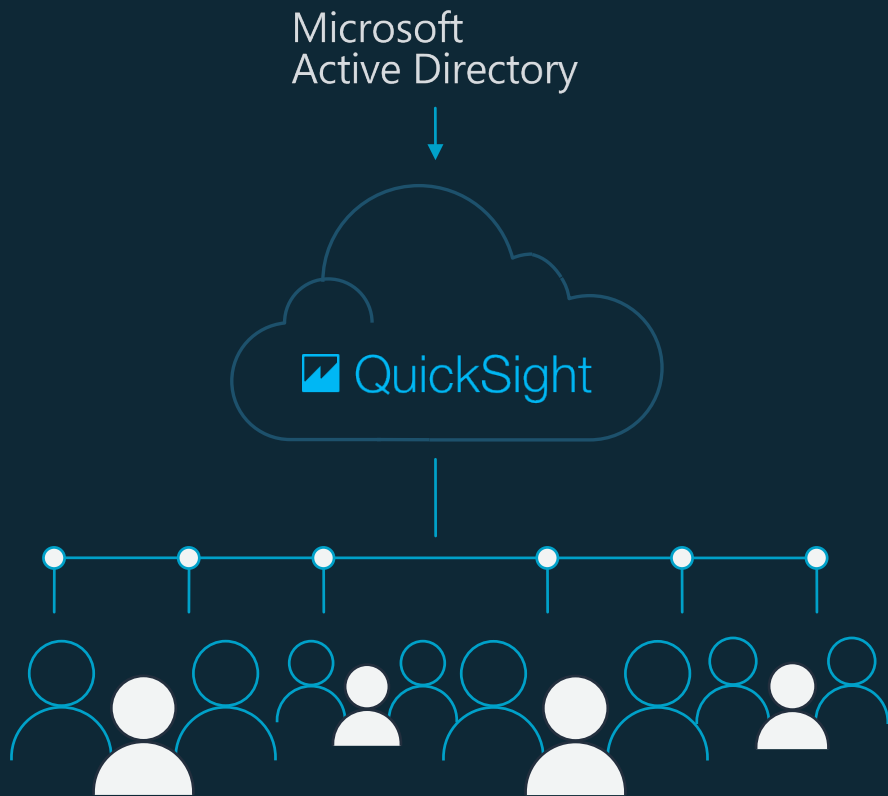
Allows users to sign in to their Identity Provider portals with existing credentials and then access QuickSight using SAML 2.0

Federated Access with SAML 2.0



User Management and AD Integration

QuickSight Enterprise Edition can integrate with your Active Directory to dynamically manage users and groups



Enterprise Governance using Folders



Admin users

Author users

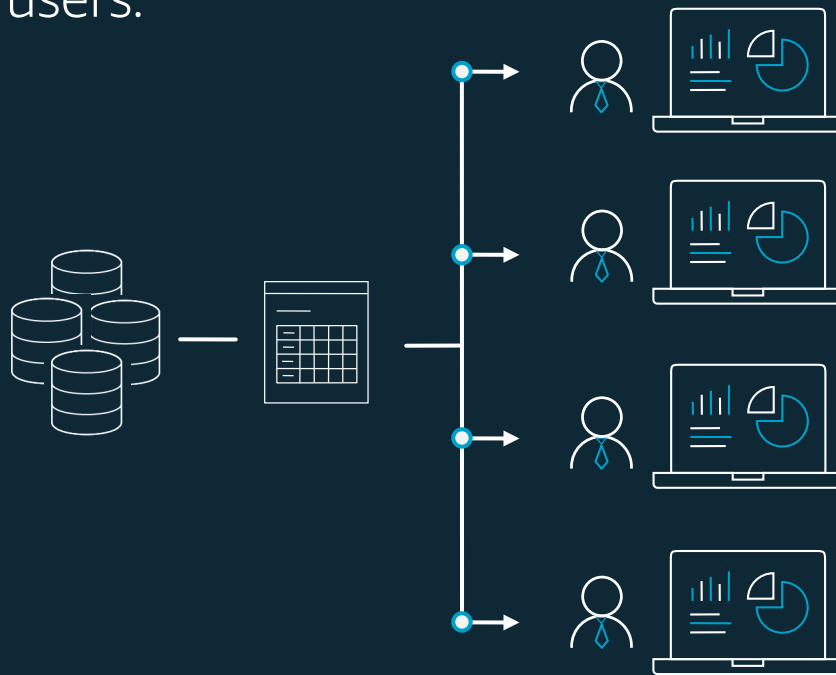
Reader users



Row Level Security

Row level security allows you to create dashboards and reports that display different data for different users.

- Create a single dashboard for multiple users with different roles or data access
- Centrally govern access at the dataset level
- Works with email reports!



QuickSight + AWS Data



Connect to your data, wherever it is

QuickSight is natively integrated with AWS data sources, as well as on-premises and hosted databases and third party business applications

On-premises

Securely connect to on-premises databases and flat files like Excel and CSV



- Excel
- CSV
- Teradata
- MySQL
- SQL Server
- PostgreSQL
- Oracle*



In the cloud

Connect to hosted database, big data formats, and secure VPCs



- Redshift
- RDS
- S3
- Athena
- Aurora
- Teradata
- MySQL
- Presto
- Spark
- SQL Server
- PostgreSQL
- MariaDB
- Snowflake
- Oracle*
- SAP Hana
- IoT Analytics
- Timestream
- Elasticsearch



Applications

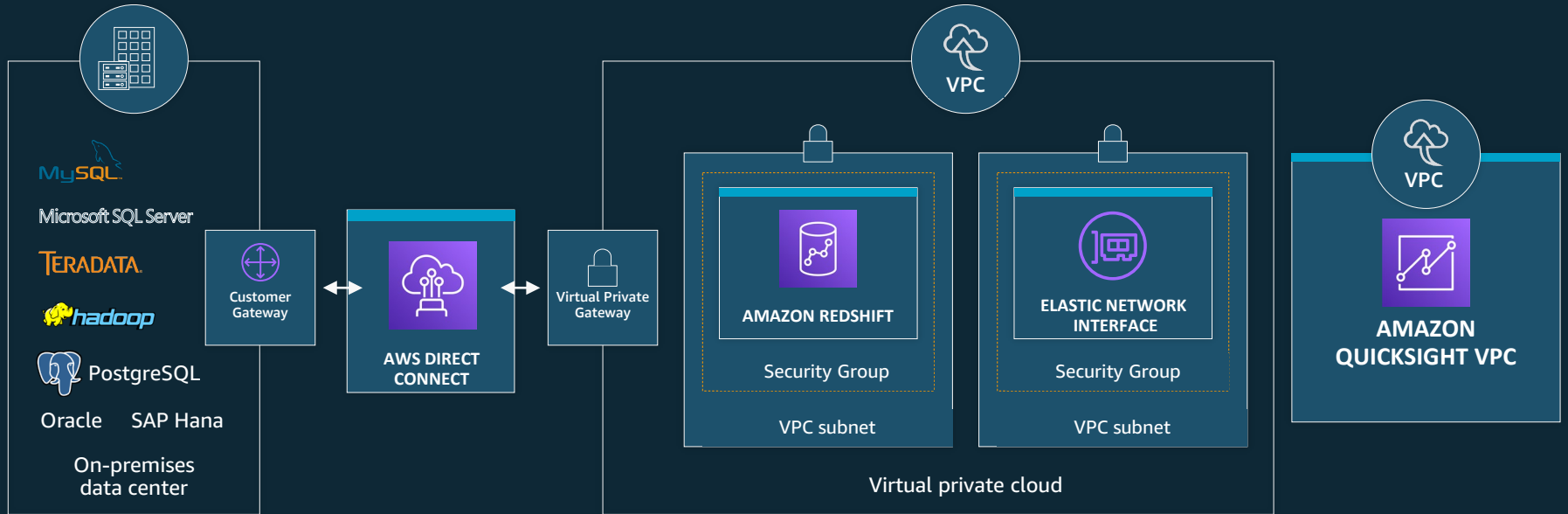
Connect directly to third party business applications



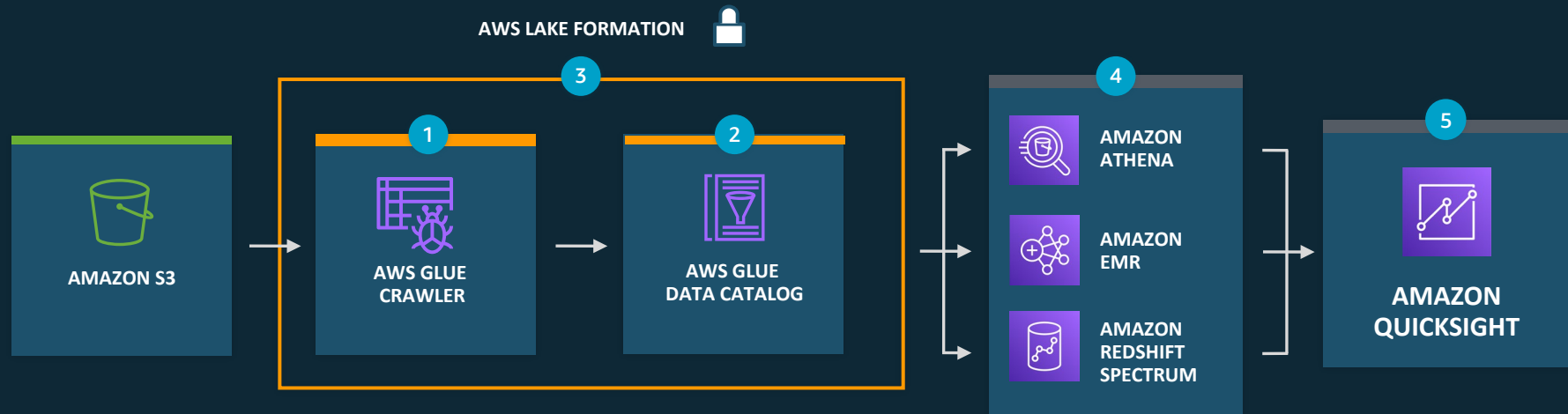
- Salesforce
- Square
- Adobe Analytics
- Jira
- ServiceNow
- Twitter
- Github



Securely connect to data in VPCs & on-premises

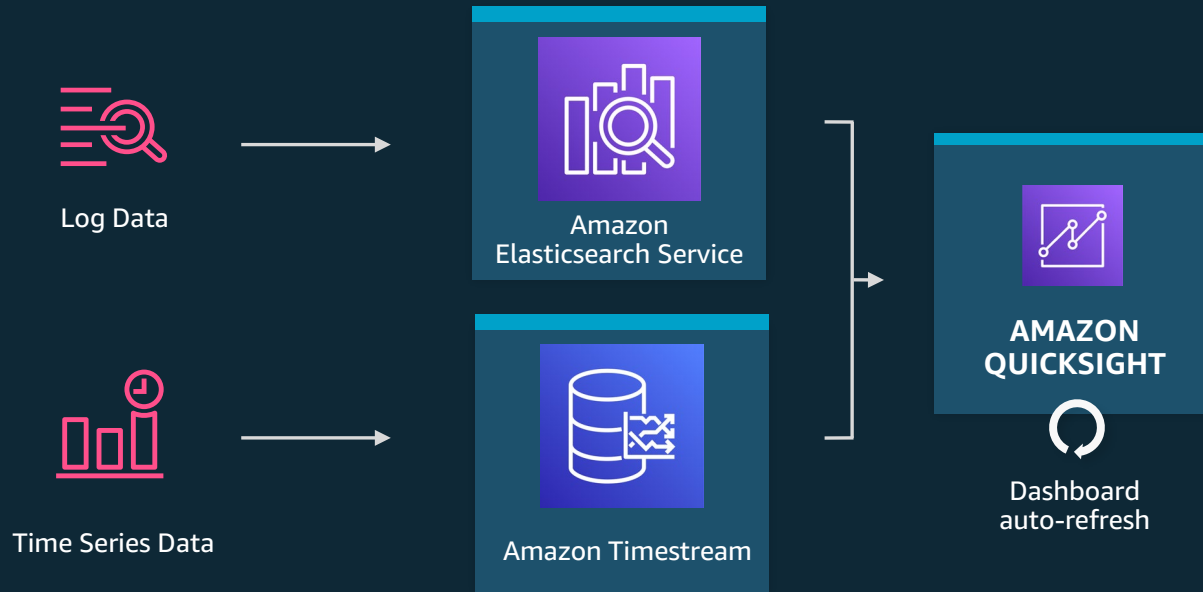


Serverless data lake & analytics with AWS



- 1** Crawlers scan your data sets and populate the Data Catalog
- 2** The Data Catalog serves as a central metadata repository
- 3** Once catalogued, apply security and permissions
- 4** Query your data immediately for analytics
- 5** Visualize with QuickSight

Real time analytics & visualization with AWS



Pricing at scale

Introducing Capacity Pricing

Readers

User pricing

Up to **\$5** /reader/mo.

\$0.30/session* up to \$5

Predictable BI spend for organizations

Capacity pricing

From **\$4,800** /mo.

(billed annually)
for 200K sessions* valid yearly

*Ideal for embedded applications, ISVs
and OEMs*

New!

Authors

Create and publish interactive
dashboards

\$18 /author/mo.

w/annual commitment

\$24/user/mo. paying month to month

New: Capacity Pricing

Capacity (# sessions / 12 months) *	Monthly price \$\$ (billed annually)	Total Annual Commitment \$\$	Overage \$/session
200,000	\$4,800	\$57,600	\$0.30
400,000	\$8,000	\$96,000	\$0.24
800,000	\$13,500	\$162,000	\$0.20
1,600,000	\$21,500	\$258,000	\$0.16
3,000,000+		Contact Us	

All capacities offer no-touch scaling: QuickSight automatically scales to # of sessions requested with no infrastructure management.

* Total sessions available over 12 month period and maybe be consumed anytime during this period.

Customers



Customer name:

Capital One

Company description:

Capital One is a leading information-based technology company that is on a mission to help its customers succeed by bringing ingenuity, simplicity, and humanity to banking.

Data source:

Redshift, RDS, Snowflake
S3 Data Lake, Athena

Size:

2K Authors, 20K+ Readers

Previous Tools:

Tableau, Qlik, Birst

Use case:

- Self service analytics on One Lake data lake
- Embedded Analytics in dozens of internal and external facing applications
- Examples include: Spend and risk analysis, market research, monitoring and governance, fraud and anomaly detection, operational reporting, performance analysis and forecasting

Why QuickSight?

- Heterogeneous data ecosystem support – data lake EDW, RDS, etc.
- Secure embedding capabilities with SSO – we have thousands of internal and external facing application and at least 50% of them have BI component needs
- Fully managed service = no downtime (no re-hydrations, no long software/capacity upgrade cycles, auto-scaling)
- Pay for usage – cost effective charge back model
- Built-in machine learning & anomaly detection

Customers



Customer name:

Best Western Hotels & Resorts

Company description:

Global Hospitality

Data source:

Redshift

Size:

24k Readers

Previous tools:

IBM Cognos, Tableau

Auth:

SAML SSO from ADFS

Challenge:

- Old, dated-looking software, reports, dashboards
- 7,312 work hours (18 months) spent upgrading the IBM Cognos environment from 10 to 11 (not adding value to the business)

Solution:

- Migrate underlying Oracle DB to Redshift and IBM Cognos to QuickSight
- Rolled out operational dashboards and reporting across corporate users and all hotel managers (20k+ users)

Benefit:

- 0 work hours spent maintaining or upgrading QuickSight
- 52 features across 16 releases automatically rolled out in 2019

Thank You!

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