SOLVIXE

CASE STUDY · Powered by AWS

AI-Coding Cost Analytics Platform on AWS

How Solvixe built a private, production-grade telemetry and cost-attribution platform for PlanckSpace

CLIENT	INDUSTRY	SERVICE
PlanckSpace	**Developer Tools / SaaS**	**Data Platform on AWS**

KEY OUTCOMES AT A GLANCE

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To first synced session	Cost resolution / session	Leak detectors live	Of customer code read	Metadata-only ingestion

SOLUTION AT A GLANCE

PlanckSpace partnered with Solvixe to build a secure, scalable and fully private telemetry-ingestion and cost-attribution platform on AWS. By leveraging a segmented VPC architecture, Amazon Cognito, API Gateway, Lambda, S3, Glue, DynamoDB, EventBridge, Athena and QuickSight, PlanckSpace now ingests AI-coding telemetry from every developer machine, attributes spend per developer, repo, team and model, prices the waste its detectors find and verifies savings from customers' own telemetry, all while ingesting metadata only, so customer source code and prompts never leave the machine.

ABOUT THE CLIENT

PlanckSpace is the management layer for AI coding. Its product measures what a team's AI coding costs across Claude Code, Cursor, Windsurf and Antigravity, attributes that spend per developer, repository and team, prices the waste it finds and verifies the savings from the team's own telemetry. A lightweight local agent parses only the metadata AI tools already write to disk (token counts, models and costs), so source code and prompts never leave the developer's machine. With rapidly growing ingestion volumes and strict privacy expectations, PlanckSpace needed a backend platform that stays secure, fast, accurate and fully governed.

BUSINESS CHALLENGES

The Hurdles PlanckSpace Needed to Clear

To turn raw AI-coding telemetry into engineering decisions teams can defend, PlanckSpace faced several critical requirements:

- **High-volume telemetry ingestion:** Session metadata streams continuously from every developer machine and must be ingested, validated and attributed in near real time.
- **Accurate attribution:** Every session, token and dollar has to be tied back to the exact developer, repository, team and model that generated it. Attribution, not invoices.
- **Privacy by architecture:** The platform had to guarantee that only metadata is ever ingested, never source code or prompts, with encrypted, auditable processing and zero public exposure of pipelines or storage.
- **Bursty, unpredictable load:** Sync activity spikes with the working day and across time zones, creating surges the platform must absorb reliably.
- **Verifiable savings:** Every recommendation had to be re-measured from the customer's own telemetry after a fix, so savings are booked from data rather than claimed from an estimate.

SOLUTION DELIVERED

Solution Delivered by Solvixe

Solvixe designed and implemented a private, event-driven data platform built entirely on AWS, taking end-to-end ownership of PlanckSpace's ingestion, attribution and analytics pipeline:

- **Private, multi-AZ architecture:** A custom VPC with private subnets, NAT gateways and restrictive routing ensures no processing or storage service is publicly exposed.
- **Metadata-only ingestion edge:** Agent syncs authenticate through Amazon Cognito and route via API Gateway to VPC-enabled Lambda that validates and normalizes each session record, landing raw telemetry in an append-only S3 lake.
- **Attribution engine:** AWS Glue ETL attributes every session to the developer, repo, team and model that generated it, with attributed spend and detector state held in DynamoDB.
- **Six detectors, each priced:** A detection layer prices context re-reads, premium-model misrouting, cache misses, marathon sessions and idle seats, surfacing each as a dollar-valued line item.
- **Verification loop:** EventBridge-scheduled jobs re-measure each recommendation from the customer's own telemetry after a fix, booking only the savings that actually landed.
- **Reconciliation and reporting:** Athena reconciles attributed usage against provider invoices and QuickSight turns it into finance-ready dashboards, with cost per shipped session alongside.
- **Observability and governance:** CloudWatch dashboards, logs and alerts plus CloudTrail auditability, backed by least-privilege IAM and end-to-end KMS encryption.

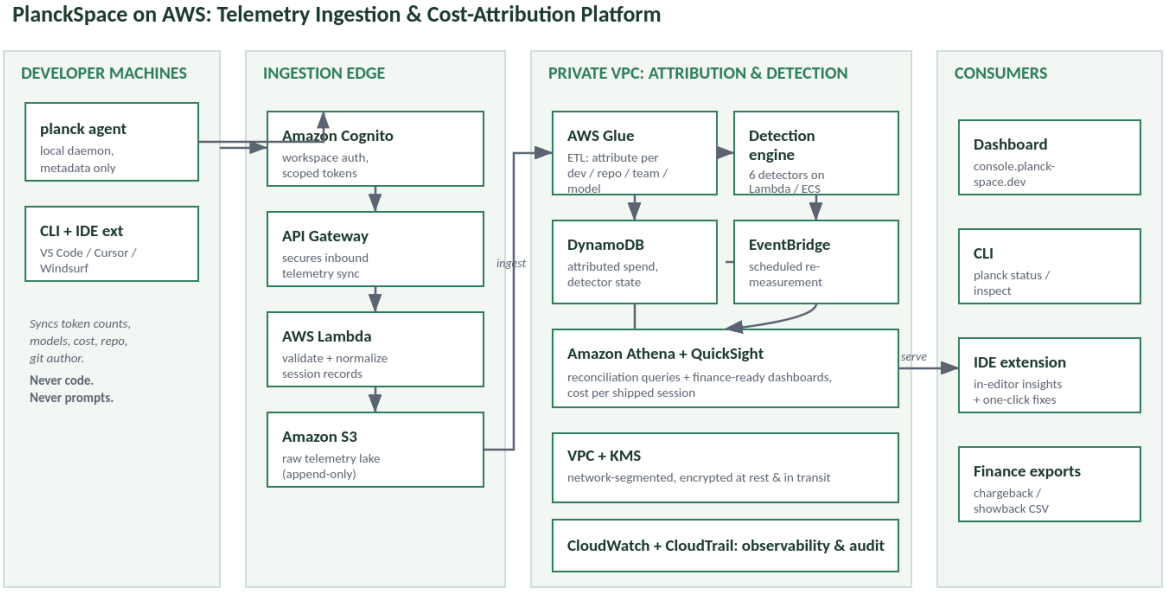

Figure 1: PlanckSpace telemetry-ingestion and cost-attribution architecture on AWS, delivered by Solvixe.

AWS SERVICES USED

The engagement was delivered as a T+6 week program covering planning, infrastructure setup, ingestion and detection integration, and monitoring, security and handover.

AWS Service	Role in the Solution
Amazon Cognito	Authenticates each workspace and developer agent before any telemetry is accepted, issuing scoped, temporary credentials.
Amazon API Gateway	Routes and secures inbound telemetry syncs into the VPC-enabled ingestion layer.
AWS Lambda	Serverless validation and normalization of incoming session records, plus the priced detection jobs, with no infrastructure to manage.
Amazon S3	Append-only telemetry lake storing raw, processed and reporting datasets, plus interaction logs for auditing.
AWS Glue	ETL jobs attribute each session to developer, repo, team and model, and refresh datasets for reporting.
Amazon DynamoDB	Stores attributed spend, per-session records and detector state for fast, reliable retrieval.
Amazon EventBridge	Schedules automated re-measurement and dataset-refresh workflows for the verification loop.
Amazon Athena	Runs serverless SQL to reconcile attributed usage against provider invoices directly over S3.
Amazon QuickSight	Turns reconciled data into finance-ready dashboards, chargeback exports and cost-per-shipped-session reporting.
AWS VPC + KMS	Private, network-segmented architecture with end-to-end encryption of data at rest and in transit.
CloudWatch + CloudTrail	Full observability, alerting and API-level audit logging across the ingestion and analytics layers.

WHY AWS

The Decision to Use Amazon Services

For a product whose entire promise rests on trust (metadata only, never customer code or prompts), accuracy, security and privacy are non-negotiable. PlanckSpace needed a cloud platform that could ingest high-volume telemetry and attribute spend precisely without compromising on governance. AWS was selected because it offered every layer of the solution natively. Cognito and API Gateway secured the ingestion edge, Lambda and Glue delivered serverless ingestion and attribution, S3, DynamoDB and Athena stored and reconciled the data, and QuickSight surfaced it for finance. VPC segmentation and KMS-backed encryption kept the pipeline private, while serverless and event-driven services meant PlanckSpace could absorb bursty sync load without managing capacity manually. CloudTrail and CloudWatch delivered the audit trail and observability the product's privacy guarantees demand. As an AWS Select Tier Partner, Solvixe brought this native toolset together with a proven delivery methodology to stand up the full solution end-to-end.

RESULTS AND IMPACT

Measurable Impact Delivered by Solvixe

- **Privacy-first by architecture:** Metadata-only ingestion inside a fully private VPC with KMS encryption across all data stores and comprehensive CloudTrail traceability, so no customer source or prompts ever touch the platform.
- **Real-time attribution:** The Cognito, API Gateway, Lambda and Glue pipeline, backed by S3 and DynamoDB, attributes every session to its developer, repo, team and model within minutes of a sync.
- **Scalable, event-driven architecture:** Multi-AZ, serverless and event-driven components absorb bursty sync load and scale automatically to demand.
- **Verified, not estimated, savings:** Automated EventBridge re-measurement and Glue ETL re-check every recommendation against the customer's own telemetry, so savings are booked from data.
- **Operational excellence:** 24x7 CloudWatch monitoring with defined SLAs, with critical failures addressed proactively.
- **Cost-efficient and Well-Architected:** A serverless-first approach reduces over-provisioning and adheres to all six Well-Architected pillars.

CONCLUSION

By partnering with Solvixe, PlanckSpace stood up the private, high-volume data backend its product depends on, ingesting AI-coding telemetry, attributing spend precisely and verifying savings, all while guaranteeing that customer code and prompts never leave the machine. Built entirely on scalable, serverless-first AWS services, the platform gives PlanckSpace a secure and observable foundation that grows with its ingestion volumes and evolving detection engine.

About Solvixe

Solvixe is a Select Tier AWS Partner dedicated to delivering end-to-end cloud and technology solutions that empower businesses to innovate and scale with confidence. Our expertise spans software development, cloud infrastructure, CI/CD and DevOps, Generative AI, managed services, and cloud migrations, enabling organizations to build secure, reliable, and high-performing digital ecosystems.

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