

AWS COST · SAMPLE DELIVERABLE

Spend Baseline and Inventory

Week 1 of 6: Baseline and inventory · prepared for Seatlark, Inc.

Prepared by Charles Sieg · charles.sieg@vantalect.com · vantalect.com

May 15, 2026 · AWS Cost Analysis & Optimization: The Optimization (six weeks)

SAMPLE DELIVERABLE

This is a sample deliverable. Seatlark, Inc. is a fictional company: every account, resource, finding, figure, and person in this report is simulated to show the form and depth of a Vantalect engagement. AWS prices are list prices from the AWS Price List API retrieved on October 13 and 16, 2026, and AWS Business Support+ pricing is from the AWS Support pricing page on October 16, 2026.

Contents

Executive summary	2
This week	4
Access and data sources	4
What the numbers come from	5
The read-only role	5
Cost and Usage Report 2.0 and Compute Optimizer	7
What the data cannot tell us	8
Twelve months of spend	8
Seatlark's plan, with no action	10
Spend by account	11
Which repository builds what	11
All 16 accounts	12
Spend by service group	13
Spend by environment	14
Attribution: who owns the bill	15
Where the untagged spend sits	16
Resource inventory	17
The lines that drive the findings	18
Utilization profile	19
Commitments in place	20
The hybrid path to the colo	21
What week 2 will do	22

Executive summary

Seatlark's AWS bill is **\$51,660 a month** at the May run rate, or **\$619,914 a year**, across 16 accounts. Those are list prices. Seatlark has no private pricing agreement, no Savings Plans, and no reservations, and the figure includes \$3,567 a month of AWS Business Support+.

That number is the wrong one to judge, and this report spends its first pages saying why. Seatlark is in month 11 of a 24-month move out of a colocation data center. The bill rose from \$3,900 in May 2025 to \$49,600 in April 2026, and it rose every month because workloads moved in, not because anyone spent carelessly. For a migrating company, month-over-month growth tells you nothing. What tells you something is the cost of each migrated workload against its colo allocation: what it cost to run in the data center, and what it costs on AWS now that it has moved. [Attribution: who owns the bill](#) puts the AWS half of that comparison on one table, and asks Finance for the other half.

What you most need to know from week 1:

- 1. Most of the final bill has not arrived yet.** Seatlark's own plan takes the bill from \$51,700 to \$125,300 a month at colo exit on June 30, 2027, which is \$1.50 million a year. \$71,000 a month of that growth, 57% of the end-state bill, comes from the 5 waves after wave 6 ([Seatlark's plan, with no action](#)).
- 2. Everything landed at the size it had in the colo, on On-Demand prices.** 67 instances, 5 Multi-AZ databases, 18 NAT gateways, and 85 TB of S3 Standard, with 0 commitments of any kind ([Resource inventory](#), [Commitments in place](#)).
- 3. 24% of the bill has no Team tag and no owner Finance can name.** That is \$12,280 a month, and 78% of it is networking and CloudFront. AWS Support, which cannot carry a tag, is another 7%, and 8 teams account for the rest ([Attribution: who owns the bill](#)).
- 4. Most of the workload fleet is lightly used.** Of 53 workload instances, 38 (72%) never exceeded 20% CPU at the 95th percentile, and 28 never exceeded 10% ([Utilization profile](#)).
- 5. The hybrid path costs \$6,135 a month.** Every page view still calls the orders database in the colo across Direct Connect. \$2,047 of that is priced by the byte and moves with traffic ([The hybrid path to the colo](#)).
- 6. 30 instances run every hour of every month on On-Demand prices.** They cost \$10,174 a month and will still be there after the remaining waves. Deferring commitments was reasonable while the estate was changing; the question for week 2 is how much of it has stopped changing ([Commitments in place](#)).

How to read the dollar figures

Every figure is U.S. dollars per month unless it says "a year." The May run rate is the estate as it stood on May 11, 2026, priced for a 730-hour month at AWS list prices for US East (N. Virginia). Seatlark has no discounts to net out, so net, list, and amortized cost are the same number. Support is included in totals and shown as its own line. Savings are not ranked in week 1; we rank them in week 2, against the price list, and show the arithmetic.

The baseline at a glance.

Measure	Value
May 2026 run rate, per month	\$51,660
Annualized	\$619,914
Last twelve complete months, May 2025 through April 2026	\$304,000
Seatlark's plan at colo exit, per month	\$125,300
Spend with a Team tag	69.3%
Workload instances under 20% CPU at the 95th percentile	38 of 53
Hybrid path (Direct Connect, Transit Gateway, cross-AZ), per month	\$6,135

This week

- **Monday, May 11, 2026.** Kickoff with Renee Castellano (Chief Technology Officer) and Owen Pradhan (Vice President, Infrastructure), and the architecture walkthrough: the 16 accounts, the 6 waves that have landed, and the change calendar.
- **Tuesday, May 12, 2026.** View-only and billing roles live in all 16 accounts, deployed from the management account as a StackSet through seatlark-landing-zone. Compute Optimizer enrolled for the whole organization.
- **Wednesday, May 13, 2026.** Inventory of every resource type in both Regions, CPU for 14 days and agent memory for 93 days on every instance.
- **Thursday, May 14, 2026.** Each month of the Cost and Usage Report tied to the invoice; untagged spend traced to its account and service.
- **Friday, May 15, 2026.** This report.

Access and data sources

Roles reached all 16 accounts on May 12, 2026, the second day of the engagement. This section records what we read, so that the numbers in the rest of this report can be reproduced and challenged.

What the numbers come from

The sources behind the baseline.

Source	What it gives us	Window and limits
Cost and Usage Report 2.0 (Data Exports)	Hourly cost by account, service, resource ID, and tag	July 1, 2025 onward, 10 complete months through April 2026 plus May to date. May 2025 and June 2025, before the export, come from the invoices and Cost Explorer
AWS Cost Explorer and Cost Optimization Hub	A cross-check of service totals	Last twelve months; Hub estimates ignore dependencies between recommendations
AWS Compute Optimizer	Rightsizing and Graviton findings	14-day lookback by default, which cannot see a seasonal peak; the April on-sale is outside it
Amazon CloudWatch and its agent	Percentile CPU, memory, network, connections, and IOPS	93 days of agent metrics, because the agent was installed in each wave; memory on 53 of 67 instances, not the 14 MGN servers
Resource inventory	A describe call for every resource type in 16 accounts and 2 Regions	Taken on May 13, 2026; us-east-2 holds backup copies only
Your four repositories	Which repository builds each account	Default branches on May 11, 2026; sandbox-eng is built by hand

We tied each month’s Cost and Usage Report total to the invoice before using it. Bucket contents, database rows, secrets, and log events were never read; the role cannot read them.

The read-only role

Vantalect assumes one IAM role in each account, deployed from your management account as a CloudFormation StackSet through seat lark-landing-zone. It reads configuration and metrics. It also reads billing and the Data Exports files. It cannot change a resource, and an explicit Deny blocks the calls that read the contents of buckets, tables, secrets, parameters, and logs.

```
YAML
AWSTemplateFormatVersion: "2010-09-09"
Description: Read-only analysis role for the Vantalect cost engagement. Delete the stack set when the engagement ends.
Parameters:
  VantalectAccountId:
    Type: String
    AllowedPattern: "^[0-9]{12}$"
  ExternalId:
```

```

    Type: String
    NoEcho: true
    MinLength: 16
    CurBucketName:
      Type: String
Resources:
  AnalysisRole:
    Type: AWS::IAM::Role
    Properties:
      RoleName: VantalectAnalysisReadOnly
      MaxSessionDuration: 3600
      AssumeRolePolicyDocument:
        Version: "2012-10-17"
        Statement:
          - Effect: Allow
            Principal:
              AWS: !Sub "arn:${AWS::Partition}:iam::${VantalectAccountId}:root"
            Action: sts:AssumeRole
            Condition:
              StringEquals:
                sts:ExternalId: !Ref ExternalId
  ManagedPolicyArns:
    - !Sub "arn:${AWS::Partition}:iam::aws:policy/job-function/ViewOnlyAccess"
    - !Sub "arn:${AWS::Partition}:iam::aws:policy/AWSBillingReadOnlyAccess"
    - !Sub "arn:${AWS::Partition}:iam::aws:policy/ComputeOptimizerReadOnlyAccess"
  Policies:
    - PolicyName: MetricsAndCostExport
      PolicyDocument:
        Version: "2012-10-17"
        Statement:
          - Effect: Allow
            Action: [cloudwatch:GetMetricData, cloudwatch:GetMetricStatistics,
athena:StartQueryExecution, athena:GetQueryExecution, athena:GetQueryResults, glue:GetTable,
glue:GetPartitions]
            Resource: "*"
          - Effect: Allow
            Action: [s3:GetObject, s3:ListBucket]
            Resource:
              - !Sub "arn:${AWS::Partition}:s3:::${CurBucketName}"
              - !Sub "arn:${AWS::Partition}:s3:::${CurBucketName}/*"
          - Effect: Allow # Athena must write its query results somewhere: one prefix,
nothing else
            Action: [s3:PutObject, s3:GetBucketLocation, s3:AbortMultipartUpload]
            Resource:
              - !Sub "arn:${AWS::Partition}:s3:::${CurBucketName}"
              - !Sub "arn:${AWS::Partition}:s3:::${CurBucketName}/athena-results/vantalect/*"
    - PolicyName: NoDataPlaneReads
      PolicyDocument:
        Version: "2012-10-17"
        Statement:
          - Effect: Deny
            Action: [s3:GetObject, s3:GetObjectVersion]
            NotResource: !Sub "arn:${AWS::Partition}:s3:::${CurBucketName}/*"
          - Effect: Deny
            Action: [dynamodb:GetItem, dynamodb:Query, dynamodb:Scan,
secretsmanager:GetSecretValue, ssm:GetParameter*, kms:Decrypt, logs:GetLogEvents,

```

```
logs:FilterLogEvents, sqs:ReceiveMessage]
Resource: "*"
```

The role writes one thing: Athena's query results, to the athena-results/vantalect/ prefix of the export bucket, because Athena cannot return a result without writing it to S3. Everything else it can only read.

Service-managed StackSets skip the management account, so create the same template there as an ordinary stack with `aws cloudformation create-stack`, using the same parameters.

BASH

```
aws cloudformation create-stack-set --stack-set-name vantalect-analysis-readonly \
  --template-body file://vantalect-analysis-role.yaml \
  --parameters ParameterKey=VantalectAccountId,ParameterValue=<vantalect-account-id> \
    ParameterKey=ExternalId,ParameterValue=<external-id> \
    ParameterKey=CurBucketName,ParameterValue=<cur-bucket> \
  --capabilities CAPABILITY_NAMED_IAM --permission-model SERVICE_MANAGED \
  --auto-deployment Enabled=true,RetainStacksOnAccountRemoval=false
aws cloudformation create-stack-instances --stack-set-name vantalect-analysis-readonly \
  --deployment-targets OrganizationalUnitIds=<root-ou-id> --regions us-east-1
```

The Cost and Usage Report is the one data-plane read the engagement needs, so the role gets exactly that and nothing more: Athena queries, the table definitions, and the export files. In member accounts the bucket does not exist, so those statements do nothing. The Deny statements exempt only the export bucket, so the role still cannot read any other object, secret, parameter, or log event. To remove access at the end of the engagement, delete the stack instances, then the stack set, then the management-account stack. Nothing else was installed.

Cost and Usage Report 2.0 and Compute Optimizer

The export already existed. Seatlark's landing zone created it in wave 0, in the management account, and it has written Parquet files since July 1, 2025. Because Seatlark holds no Savings Plans or reservations, unblended cost and amortized cost are the same number, and a plain sum of `line_item_unblended_cost` ties to the invoice. This query produces the monthly ramp by service:

SQL

```
SELECT date_format(bill_billing_period_start_date, '%Y-%m') AS month,
       line_item_product_code AS service,
       round(sum(line_item_unblended_cost), 2) AS cost
FROM seatlark_cur.cur2
WHERE bill_billing_period_start_date >= TIMESTAMP '2025-07-01 00:00:00'
GROUP BY 1, 2
ORDER BY 1, 3 DESC;
```

The Team tag appears in the export only because it is active as a cost allocation tag; `aws ce list-cost-allocation-tags --status Active --region us-east-1` lists the active keys. A tag key in a Data Exports map carries a `user_` prefix, so the Team share of a month is `element_at(resource_tags, 'user_team')` in the same query.

Cost Explorer was already enabled. Compute Optimizer was enrolled for the whole organization on May 12, 2026. Where Compute Optimizer and our own measurements disagree in week 2, the report says which one we followed and why.

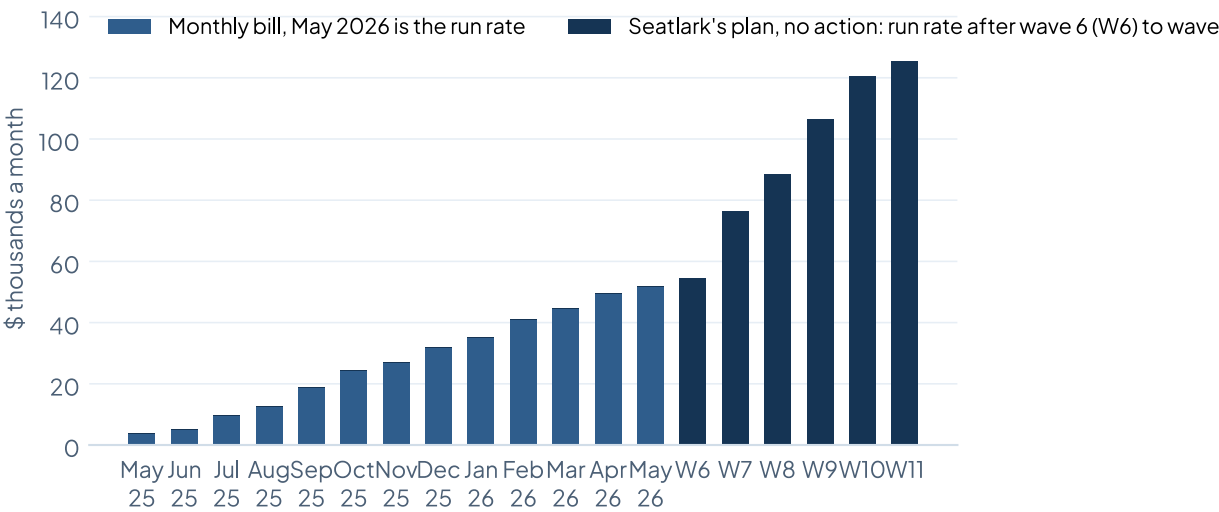
What the data cannot tell us

- **Anything still in the colo.** 57% of the end-state bill has not moved. AWS data cannot say what the orders and checkout services, the PCI zone, or the data warehouse will cost there; only Seatlark's plan can, and the plan prices them at their colo allocation.
- **A seasonal peak.** The 14-day window missed the April on-sale. For production we use the 93 days of agent metrics, and we label a recommendation that rests on the shorter window "medium confidence."
- **Memory on the replication servers.** The CloudWatch agent is not installed on the 14 MGN replication servers.
- **The MGN service fee.** AWS Application Migration Service charges per source server for each hour it replicates after a free period. Seatlark's Cost and Usage Report shows no such charge in April or May: the source servers of the finished waves stopped replicating when their colo hosts were powered off. Their replication servers and staging disks are still on the bill, and week 2 prices them.
- **Charges not on the bill yet.** The Cost and Usage Report shows what has billed. Amazon RDS ends standard support for MySQL 8.0 on July 31, 2026, and from August 1, 2026 RDS Extended Support bills \$0.10 a vCPU-hour on any 8.0 instance left, both copies of a Multi-AZ one. Both partner databases run MySQL 8.0; week 2 prices the charge and plans the upgrade.
- **The colo side of the comparison.** The colo allocation for each landed workload is in Seatlark's migration business case. We have asked for it ([What week 2 will do](#)).

Twelve months of spend

Spend rose from \$3,900 in May 2025 to \$49,600 in April 2026, **12.7 times** in 11 months, and the May run rate is \$51,660. It rose in every month. The largest step, \$6,300, came in September 2025 (Wave 1: development and staging); the most recent, \$4,900 in April 2026, was Wave 5: marketplace production (cutover March 28). Over the last twelve complete months Seatlark paid AWS \$304,000.

Monthly AWS bill to date and the plan's run rate after each wave



Monthly AWS bill, May 2025 through April 2026, the May run rate, and the run rate after each wave of Seatlark’s plan, in thousands of dollars a month.

The bill by month, with the wave that landed each step.

Month	What landed	Net bill	Added over prior month
May 2025	A pilot account	\$3,900	n/a
June 2025		\$5,200	\$1,300
July 2025	Wave 0: landing zone and Direct Connect	\$9,800	\$4,600
August 2025		\$12,600	\$2,800
September 2025	Wave 1: development and staging	\$18,900	\$6,300
October 2025	Wave 2: event media and ticket scans to S3	\$24,300	\$5,400
November 2025		\$27,100	\$2,800
December 2025	Wave 3: the partner platform	\$31,800	\$4,700
January 2026		\$35,200	\$3,400
February 2026	Wave 4: the catalog database and listing ingestion	\$40,900	\$5,700
March 2026	Wave 5 begins	\$44,700	\$3,800

Month	What landed	Net bill	Added over prior month
April 2026	Wave 5: marketplace production (cutover March 28)	\$49,600	\$4,900
May 2026 run rate	The estate on May 11, 2026, priced for a 730-hour month	\$51,660	\$2,060

A growth rate computed from this table would be wrong in both directions: the bill is a step function of what has moved, and each step is a decision made on a date. The useful question about any step is what the workload cost before it moved and what it costs now. [Attribution: who owns the bill](#) sets out the AWS half of that.

Seatlark's plan, with no action

The trajectory is Seatlark's own plan, not ours: each remaining wave is priced the way the first 6 were sized, at its colo allocation, and stacked on the May run rate. The forecast adds no new commitments, no new accounts, and no savings.

Seatlark's migration plan, wave by wave, from its own estimates.

Wave	When	What moves	Adds per month	Run rate after
Start	May 11, 2026	The estate on the day the engagement began	n/a	\$51,700
6	May 30, 2026 (during the engagement)	Partner reporting and the affiliate feed generator	\$2,600	\$54,300
7	July to August 2026	Orders and checkout, and the SQL Server Enterprise database (9 TB)	\$22,000	\$76,300
8	October to November 2026	Broker Desk and the remaining SSIS hosts	\$12,000	\$88,300
9	January to March 2027	Payments and fulfillment (the PCI zone)	\$18,000	\$106,300
10	March to May 2027	The data warehouse (14 TB)	\$14,000	\$120,300
11	May to June 2027	Corporate IT; colo exit June 30, 2027	\$5,000	\$125,300

At colo exit the plan reaches \$125,300 a month, \$1,503,600 a year. The plan starts from \$51,700; the May run rate is \$51,660, within \$40 of it. \$71,000 a month of growth, 57% of the end-state bill, lands in the 5 waves after wave 6. Anything the guardrails and the wave runbook later prevent on those waves is cost avoidance: not measured, not counted toward the gate, and not a saving on the bill.

Assumption A1: what \$1.5 million means

We read the board's figure of \$1.5 million a year as the **end-state annual run rate**, what the bill costs when the colo is gone. Seatlark's plan agrees with that reading to within \$3,600. If \$1.5 million is instead the **total spend over the next twelve months**, the plan understates the remaining waves, and the end-state run rate is nearer \$168,000 to \$203,000 a month.

Under the other reading the remaining waves are larger; the baseline in this report is not, because the May bill, the inventory, and the commitments in place are facts that do not depend on A1. Please confirm which reading is right on Monday, May 18, 2026, so that week 2 sizes the remaining waves against the right number.

Spend by account

Seatlark's 16 accounts sit in one organization with one bill. marketplace-prod is the largest at \$14,844 a month (29%), followed by sl-network at \$8,111 and partner-prod at \$4,550. The three together are 53% of the bill. sl-management holds \$3,567 a month, all of it AWS Support, which AWS bills in the management account.

Which repository builds what

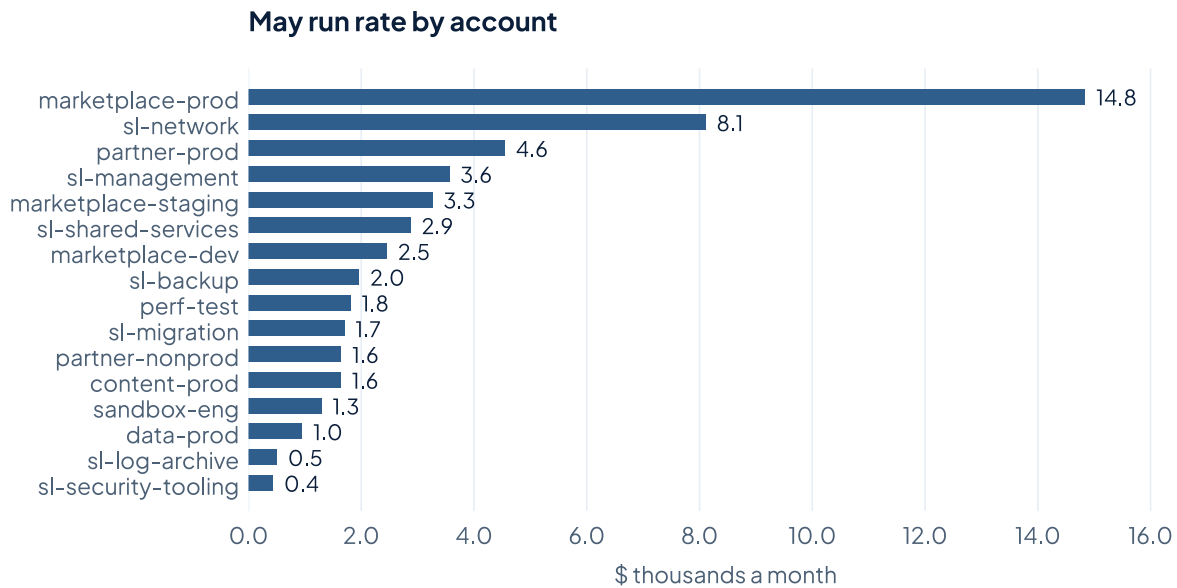
Every change goes through a pull request in one of 4 repositories, or through a change ticket and a scripted runbook for the account outside code. The last column of [the accounts table](#) is the map we use. marketplace-infra builds 4 accounts (\$22,388 a month), seatlark-landing-zone builds 7 accounts (\$19,181 a month), partner-infra builds 2 accounts (\$6,196 a month), data-content-infra builds 2 accounts (\$2,595 a month); the sandbox account, built by hand, costs \$1,299 a month and is the only one without a repository.

All 16 accounts

Every account, with its owner and the repository that builds it.

Account	Environment	Owner	Built in	Monthly	Share
marketplace-prod	Production	Aaron Feld	marketplace-infra	\$14,844	28.7%
sl-network	Shared services	Owen Pradhan	seatlark-landing-zone	\$8,111	15.7%
partner-prod	Production	Diego Saldana	partner-infra	\$4,550	8.8%
sl-management	Management	Owen Pradhan	seatlark-landing-zone	\$3,567	6.9%
marketplace-staging	Non-production	Aaron Feld	marketplace-infra	\$3,269	6.3%
sl-shared-services	Shared services	Beth Morrow	seatlark-landing-zone	\$2,881	5.6%
marketplace-dev	Non-production	Aaron Feld	marketplace-infra	\$2,462	4.8%
sl-backup	Shared services	Beth Morrow	seatlark-landing-zone	\$1,969	3.8%
perf-test	Non-production	Aaron Feld	marketplace-infra	\$1,814	3.5%
sl-migration	Shared services	Owen Pradhan	seatlark-landing-zone	\$1,704	3.3%
partner-nonprod	Non-production	Diego Saldana	partner-infra	\$1,646	3.2%
content-prod	Production	Kara Lindqvist	data-content-infra	\$1,640	3.2%
sandbox-eng	Sandbox	Beth Morrow	No repository	\$1,299	2.5%
data-prod	Production	Sanjay Iyer	data-content-infra	\$955	1.8%
sl-log-archive	Security	Beth Morrow	seatlark-landing-zone	\$509	1.0%
sl-security-tooling	Security	Beth Morrow	seatlark-landing-zone	\$440	0.9%
Total				\$51,660	100%

At colo exit the organization grows from 16 to 20 accounts when pci-prod, pci-nonprod, broker-prod, and warehouse-prod arrive. Both counts are well inside the engagement's 50-account scope.



The May run rate for each account, in thousands of dollars a month.

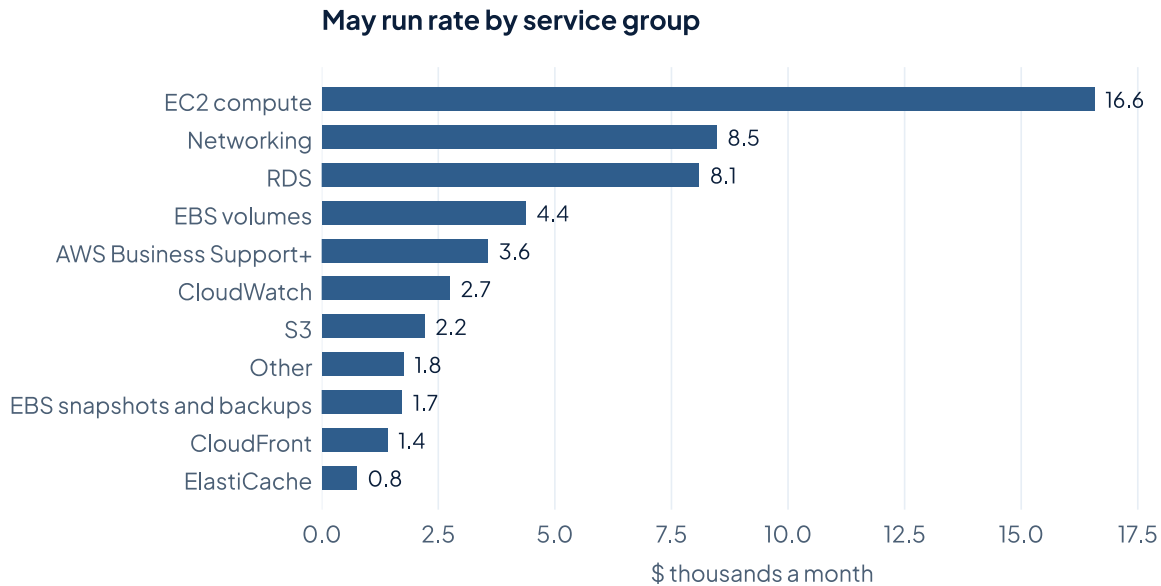
Spend by service group

EC2 compute is 32% of the bill, Networking is 16%, and RDS is 16%. Networking is larger than the database bill, and it is the clearest sign of a migration: Direct Connect, Transit Gateway, and the hybrid transfer exist only because much of the company is still somewhere else.

The bill by service group.

Service group	What is in it	Monthly	Share
EC2 compute	67 instances, all On-Demand, including 14 MGN replication servers	\$16,568	32.1%
Networking	18 NAT gateways, Transit Gateway, two 10 Gbps Direct Connect ports, 12 load balancers, cross-AZ and internet transfer, and 20 public IPv4 addresses	\$8,468	16.4%
RDS	5 instances, all Multi-AZ, sized from the colo hardware	\$8,093	15.7%
EBS volumes	17,600 GB of attached gp2, 5,000 GB unattached, io1 on the search clusters, and the MGN staging disks	\$4,373	8.5%
AWS Business Support+	A percentage of everything else on the bill	\$3,567	6.9%
CloudWatch	5 log groups that never expire (22 TB stored), debug logging, flow logs, and 2,400 agent metrics	\$2,749	5.3%

Service group	What is in it	Monthly	Share
S3	85 TB in 4 buckets, all S3 Standard, and the requests on them	\$2,206	4.3%
Other	DMS replication instances, the security services, KMS, Route 53, and Secrets Manager	\$1,757	3.4%
EBS snapshots and backups	28,200 GB of EBS snapshots and AMIs billed, manual RDS snapshots, and AWS Backup copies in us-east-2	\$1,721	3.3%
CloudFront	14 TB a month of delivery	\$1,408	2.7%
ElastiCache	Sessions: 3 Redis nodes (2 x cache.r6g.xlarge, 1 x cache.r6g.large)	\$750	1.5%
Total		\$51,660	100%



The May run rate by service group, in thousands of dollars a month.

AWS Business Support+ is 9% of the first \$10,000 of monthly usage and 7% of the next \$70,000. On \$48,093 of usage, that is \$3,567, 6.9% of the bill. It rises and falls with everything else, and it will keep rising with each wave.

Spend by environment

Production accounts are 43% of the bill and shared services are 35%. Non-production is 18%, and sandbox another 2.5%.

EC2 shows the split most clearly. \$11,118 of the \$16,568 spent on EC2 (67%) is production and shared services. The other \$5,450 (33%) is non-production and sandbox, and all 20 of them run 730 hours a month. Nothing in the estate stops at night or on weekends.

The bill and EC2 spend by the environment of the account that incurs them.

Environment	Monthly	Share of bill	EC2 instances	EC2 monthly
Production	\$21,989	42.6%	28	\$9,123
Shared services	\$18,232	35.3%	19	\$1,995
Non-production	\$9,190	17.8%	17	\$4,241
Sandbox	\$1,299	2.5%	3	\$1,209
Security	\$949	1.8%	0	\$0
Total	\$51,660	100%	67	\$16,568

Attribution: who owns the bill

69.3% of the bill carries a Team tag. MGN carried the VMware tags over when the hosts were lifted, so most of the compute is tagged. AWS Support, \$3,567 a month (6.9%), cannot carry a tag at all; Finance allocates it to platform-sre with a cost category rule. The other 23.8%, \$12,280 a month, belongs to no team that Finance can name. The AWS cost of each workload, by the team that owns it:

The May run rate by Team tag.

Team tag	What it runs	Owner	May run rate	Share
inventory-search	The search cluster, the catalog database, and their staging and development copies	Imani Brooks	\$9,361	18.1%
platform-sre	Shared services, CI runners, load balancers, and backups	Beth Morrow	\$7,670	14.8%
partner-api	Seatlark Connect and the Affiliate API, the partner database, and partner non-production	Diego Saldana	\$5,568	10.8%
marketplace-api	The exchange API, development, staging, and the performance-test fleet	Aaron Feld	\$5,359	10.4%
inventory-ingest	Listing ingestion workers	Imani Brooks	\$2,817	5.5%

Team tag	What it runs	Owner	May run rate	Share
marketplace-web	The exchange web tier and the sessions cache	Aaron Feld	\$2,679	5.2%
fulfillment-content	Ticket-scan uploads and event media	Kara Lindqvist	\$1,405	2.7%
data-etl	The data lake and its ETL workers	Sanjay Iyer	\$955	1.8%
AWS Support (no tag possible)	Business Support+, allocated to platform-sre by a cost category rule	Beth Morrow	\$3,567	6.9%
(untagged)	Networking, the migration account, security tooling, CloudFront, and some storage	Owen Pradhan, Beth Morrow	\$12,280	23.8%
Total			\$51,660	100%

This is the AWS half of cost per migrated workload. The other half is each workload's colo allocation, the share of the data center's cost that Seatlark's migration business case assigned to it. Until we have it, no one can say whether the exchange's web tier and its sessions cache, which cost \$2,679 a month together, are a good number or a bad one. Lydia Brandt, Vice President, Finance, has it, and it is the first item in [What week 2 will do](#).

Where the untagged spend sits

78% of the untagged spend is networking and CloudFront. s1-network alone holds \$7,482 a month (61% of the untagged total): Direct Connect, Transit Gateway, and the transfer between zones carry cost that belongs to many teams, and a tag cannot split it. The migration account is \$1,304 a month (11%), and the security services and the log archive hold most of what is left.

By service group, the Networking group is \$8,144 a month of it, the Other group is \$1,757, and the CloudFront group is \$1,408.

The gap closes with an allocation rule for shared networking and a tag policy for what is left; week 5 builds both. Until then, the showback report keeps "untagged" as its own line against each account's owner, so that no team can say the number is not theirs.

Resource inventory

The resource inventory across 16 accounts, taken on May 13, 2026.

Resource type	Count	What the inventory found
EC2 instances	67	53 workload instances (28 production, 5 shared services, 17 non-production, 3 sandbox) and 14 MGN replication servers; every one On-Demand, running 730 hours a month, and none stopped
EBS volumes	119	90 attached gp2 volumes (17,600 GB), 10 unattached gp2 volumes left by test cutovers (5,000 GB), 5 io1 volumes on the search clusters (5,000 GB, provisioned for up to 4,000 IOPS against a measured 30-day peak of 1,900), and 14 gp3 MGN staging disks (5,600 GB)
EBS snapshots	4,564	28,200 GB billed in 6 chains; 12,000 GB belongs to volumes that no longer exist, and 12,200 GB sits under daily policies with no expiry. Snapshots are incremental, so a chain's billed size is not what deleting one snapshot frees
S3 buckets	4	85 TB, all S3 Standard, no lifecycle rules, no versioning; the ticket-scan bucket alone holds 40 TB in 239 million objects averaging 175 KB
RDS databases	5	All Multi-AZ, all on gp2 storage (8,524 GB across the five), PostgreSQL 16.4 and MySQL 8.0.40; 2 in production, 3 in staging and development; none in Extended Support yet, though MySQL 8.0 leaves standard support on July 31, 2026
ElastiCache clusters	2	3 Redis 7.1 nodes for sessions (2 x cache.r6g.xlarge, 1 x cache.r6g.large), encrypted in transit and at rest
NAT gateways	18	Three in each of the 6 VPCs with their own internet egress, production or not (the other Transit Gateway attachments have none); 28 TB processed a month, of which 13 TB is traffic to S3; no VPC has an S3 gateway endpoint
Load balancers	12	Application Load Balancers; 2 have no targets and no traffic (on-sale rehearsals left them)
CloudWatch log groups	5	22 TB stored, 2,704 GB ingested a month; 5 of 5 groups have no retention, so nothing ever expires
CloudWatch custom metrics	2,400	From the CloudWatch agent on every lifted host: disk metrics per mount point and per-process metrics (the CWAgent namespace)
Direct Connect ports	2	Dedicated 10 Gbps ports with a VPN backup, sized for the bulk copy of wave 2; 28,000 GB a month leaves toward the colo

The lines that drive the findings

These are the lines week 2 prices in detail. The prices are AWS list prices for us-east-1 from the AWS Price List API, and each monthly figure comes from Seatlark's Cost and Usage Report, not from a rounded estimate.

The lines that drive the findings, with the list prices behind them.

Line	Quantity	List price	Per month
Marketplace web and API	12 x m5.2xlarge	\$0.384 an hour	\$3,364
Listing ingestion workers	4 x m5.4xlarge	\$0.768 an hour	\$2,243
Partner APIs	6 x m5.2xlarge	\$0.384 an hour	\$1,682
Search cluster, production	3 x r5.2xlarge	\$0.504 an hour	\$1,104
Search volumes, production	3 x io1, 1,000 GB, 4,000 IOPS	\$0.125 a GB-month, \$0.065 an IOPS-month	\$1,155
Performance-test fleet, always on	3 x c5.4xlarge	\$0.68 an hour	\$1,489
Catalog database	db.r5.4xlarge PostgreSQL, Multi-AZ, 3,500 GB	\$4.00 an hour, plus storage for both copies	\$3,725
Partner database	db.r5.2xlarge MySQL, Multi-AZ, 1,600 GB	\$1.92 an hour, plus storage for both copies	\$1,770
NAT gateways	18, 28 TB processed	\$0.045 an hour and \$0.045 a GB	\$1,882
Direct Connect ports	2 x 10 Gbps dedicated	\$2.25 an hour a port (AWS Price List API)	\$3,285
Attached gp2	17,600 GB	\$0.10 a GB-month	\$1,760
Unattached gp2	10 volumes, 5,000 GB	\$0.10 a GB-month	\$500
EBS snapshots	28,200 GB billed	\$0.05 a GB-month	\$1,410
S3 Standard storage	85 TB	\$0.023 a GB-month for the first 50 TB, \$0.022 after	\$1,966
S3 requests	GET, PUT, and LIST requests on the four buckets	S3 Standard request prices	\$240

Line	Quantity	List price	Per month
CloudWatch Logs storage	22 TB, never expiring	\$0.03 a GB-month	\$676

The Direct Connect port price comes from the AWS Price List API.

Utilization profile

For every running instance we pulled the 95th percentile of CPU utilization over 14 days. The 95th percentile answers the question a rightsizing decision turns on: how busy does this machine get on a busy day, not on an average one. The 14 MGN replication servers are shown in their own column, because they sit at the bottom of the table for a reason that has nothing to do with sizing.

Running EC2 instances by 95th-percentile CPU utilization.

p95 CPU, 14 days	Workload instances	MGN servers	All instances	Share of workload instances
Under 10%	28	14	42	52.8%
10 to 20%	10	0	10	18.9%
20 to 40%	4	0	4	7.5%
40 to 60%	8	0	8	15.1%
60% or more	3	0	3	5.7%
Total	53	14	67	100%

28 workload instances never passed 10% at the 95th percentile, and only 3 (6%) ran at 60% or more. CPU alone does not prove an instance is oversized: a search node can sit at moderate CPU and use most of its memory, and a build host can idle for 20 hours and need every core in the other four. Week 2 therefore weighs CPU, memory, and network together, and sets different thresholds for production, where an on-sale multiplies traffic 8 to 15 times in ten minutes, and for non-production.

Memory tells a similar story: of the 53 instances that report it, 29 use under 25% at the 95th percentile and 0 use 75% or more.

This is the query behind each instance's CPU figure. Run it against any instance ID to check our work. Set `--end-time` exactly 14 days after `--start-time`: the period is the whole window (1,209,600 seconds), so CloudWatch returns one 95th-percentile value instead of one per hour.

BASH

```
aws cloudwatch get-metric-statistics \
  --namespace AWS/EC2 --metric-name CPUUtilization \
  --dimensions Name=InstanceId,Value=<instance-id> \
  --start-time <start-time> --end-time <end-time> \
  --period 1209600 --extended-statistics p95 --region us-east-1
```

Commitments in place

Seatlark holds **0 commitments**: no Compute Savings Plans, no EC2 or RDS reservations, and no ElastiCache reserved nodes. Every hour of compute, database, and cache usage is billed at the On-Demand rate, and Seatlark has no private pricing agreement on top, so it pays list on all of it. The team deferred every commitment "until the migration completes," because the estate keeps changing. That was a sound instinct for the first waves, when a new account arrived every few weeks, and it has a price that grows with each wave.

Here is that price, in plain terms. It is not a saving, and week 1 ranks none.

Usage billed at On-Demand prices, none of it under a commitment.

What runs at On-Demand rates	Detail	Per month	Share of bill
EC2 instances	All 67, each running 730 hours a month	\$16,568	32.1%
of which: the always-on floor	30 instances in production, shared services, and the search cluster, launched between July 21, 2025 and March 28, 2026	\$10,174	19.7%
RDS instance hours	5 Multi-AZ instances, before storage	\$6,132	11.9%
ElastiCache nodes	3 Redis nodes	\$750	1.5%
Usage a commitment could cover		\$23,451	45.4%

The floor is the part to watch. These 30 instances (45% of the fleet, 61% of EC2 spend) are the exchange's web and API tiers, listing ingestion, the partner APIs, the production search cluster, the CI runners, and the shared tooling. They run every hour and the remaining waves do not remove them. At On-Demand prices they cost \$122,093 a year. Whether that is the right price for those hours is a week-2 calculation: it depends on which of those instances are the right size, because a commitment sized before the sizing is settled risks buying hours Seatlark will no longer use.

The order matters. Decide what the floor looks like first, then size a commitment to it, and not to the estate as it stands today. Lydia Brandt, Vice President, Finance, owns the purchase decision and approves it; Vantalect does not buy commitments. Until the week-2 recommendation and the readout on May 22, 2026, do not buy or reserve anything.

The hybrid path to the colo

Every page view on the exchange still calls the orders database in the colo, which holds order status and held inventory, across Direct Connect. The orders and checkout services and their database move in wave 7 (July to August 2026). Until then, every request that renders an order pays to cross the wire. AWS meters that wire in five places:

The hybrid path to the colo, from Seatlark’s Cost and Usage Report and the AWS list prices.

Charge	What drives it	Quantity	Rate	Kind	Per month
Direct Connect ports	2 dedicated 10 Gbps ports, every hour	2 x 730 hours	\$2.25 an hour	Fixed	\$3,285
Direct Connect data out	Bytes sent toward the colo: order status, held inventory, and the nightly backup copy (DMS replication runs inbound, which is free)	28,000 GB	\$0.02 a GB	Usage	\$560
Transit Gateway attachments	Each VPC, the Direct Connect gateway, and the VPN attach by the hour	22 x 730 hours	\$0.05 an hour	Fixed	\$803
Transit Gateway data processed	Every byte that crosses the gateway, in either direction	40,000 GB	\$0.02 a GB	Usage	\$800
Cross-AZ transfer	The calls land in a different Availability Zone from the instance that made them	34,350 GB	\$0.01 a GB each way	Usage	\$687
Total					\$6,135

The path costs \$6,135 a month, 11.9% of the bill. \$4,088 of that is fixed: the two ports and the Transit Gateway attachments are billed by the hour whether anyone calls the database or not. The other \$2,047 (4.0% of the bill) is priced by the byte, and it grows with every on-sale. The transfer line’s own notes attribute the cross-AZ traffic to "hybrid order-status and held-inventory calls to the colo (cross-AZ)."

Not every byte is a page view. The ports were sized at 10 Gbps for the wave-2 bulk copy of ticket scans and media, and they carry the database replication that wave 7 depends on, and the bill cannot split the usage-priced charges by purpose; week 2 uses the flow logs to do that. The ports stay until the last workload leaves the colo, at \$3,285 a month.

What week 2 will do

Week 2 runs from Monday, May 18, 2026, through the sponsor readout on Friday, May 22, 2026. The Analysis report is due Thursday, May 21, 2026. It produces six more deliverables:

The deliverables of the Analysis, in order.

Deliverable	What it contains
2. The waste register	Every idle and orphaned resource with its ID, owner, monthly cost, and the runbook to remove it
3. The rightsizing plan	Compute, databases, and caches sized to measured use, with Graviton where it fits
4. The commitment plan	A Savings Plan sized to the floor that will survive the remaining waves, tested at smaller sizes and against a three-year term
5. The architecture review	Data transfer, NAT, storage tiers, logging, and metrics, with the code for each change
6. The savings roadmap	Every opportunity ranked by annual savings, effort, and risk
7. The sponsor readout	The identified savings, the planning range, the decisions, and the risks, in one short document

We need five things from you this week:

1. **The colo allocation for each landed workload**, from Lydia Brandt’s migration business case, so that the table in [Attribution: who owns the bill](#) gets its other half.
2. **An owner for every account and every untagged line** in [the accounts table](#). Owen Pradhan has the network and migration accounts, and Beth Morrow has the shared services, the sandbox, and the backup account.
3. **The change calendar**, from Aaron Feld: the on-sale dates, the production freeze from June 4, 2026 through June 14, 2026, and any notice period that partner contracts require for a maintenance window, from Diego Saldana.
4. **A walkthrough of wave 7** with Owen Pradhan: when the orders traffic stops crossing Direct Connect, and what moves first.

- 5. Confirmation that all 14 MGN replication servers belong to completed cutovers**, and that nothing is still replicating through them, so that the waste register never proposes removing a server in use.

The finance session and office hours are on the calendar in Pavilion. Owen Pradhan remains the day-to-day contact, and Renee Castellano receives the readout.

© 2026 Vantalect, LLC. Sample deliverable; Seatlark, Inc. is fictional.

AWS, Amazon Web Services, AWS Graviton, and the AWS service names are trademarks of Amazon.com, Inc. or its affiliates. Ansible is a trademark of Red Hat, Inc. Elasticsearch is a trademark of Elasticsearch B.V. PostgreSQL is a registered trademark of the PostgreSQL Community Association of Canada. MySQL is a trademark of Oracle Corporation and its affiliates. Redis is a trademark of Redis Ltd. Microsoft and SQL Server are trademarks of the Microsoft group of companies. VMware and vCenter are trademarks of Broadcom Inc. NetApp is a trademark of NetApp, Inc. Java is a trademark of Oracle Corporation and its affiliates. Vantalect is not affiliated with or endorsed by any of them. Seatlark, Inc. is fictional.