

# HyperSDK

## Cloud Cost Optimization

Interactive cost estimation, multi-cloud pricing comparison, on-prem savings analysis, and carbon-aware scheduling. Make data-driven infrastructure decisions.

93% Cost Reduction — Multi-Cloud Comparison — Carbon-Aware — TCO Calculator

# Cost Estimator UI

Interactive sliders and multi-cloud comparison in a single view.



## Interactive Sliders

Adjust vCPUs, memory, storage, and bandwidth with sliders. Cost estimates update in real-time across all providers simultaneously.



## Multi-Cloud Comparison

Side-by-side pricing for AWS, Azure, GCP, and on-prem KVM. See hourly, monthly, and annual costs at a glance.



## Savings Visualization

Bar charts and percentage badges show exactly how much you save by migrating to on-prem KVM vs. each cloud provider.



## Export Reports

Download cost comparison reports as PDF or CSV for executive review, procurement justification, or compliance documentation.

**4**

Providers compared

**Real-time**

Price updates

**1-click**

Report export

# Provider Pricing

AWS S3 vs. Azure Blob vs. GCS — storage cost comparison for VM backups.

## Compute Pricing (4 vCPU, 16 GB RAM)

Provider	Instance Type	Hourly	Monthly	Annual
AWS EC2	m5.xlarge	\$0.192	\$140.16	\$1,681.92
Azure	D4s v3	\$0.192	\$140.16	\$1,681.92
GCP	e2-standard-4	\$0.134	\$97.82	\$1,173.84
<b>On-Prem KVM</b>	Bare metal	<b>\$0.008</b>	<b>\$5.84</b>	<b>\$70.08</b>

## Storage Pricing (1 TB)

Provider	Service	Monthly	Egress (100 GB)
AWS	S3 Standard	\$23.00	\$9.00
Azure	Blob Hot	\$18.40	\$8.70
GCP	Cloud Storage	\$20.00	\$12.00
<b>On-Prem</b>	Local SSD	<b>\$1.50</b>	<b>\$0.00</b>

# On-Prem vs Cloud Savings

93% cost reduction by migrating workloads from public cloud to on-prem KVM.

**93%**

Cost reduction vs. AWS

**\$19K**

Annual savings per server

**6 mo**

Hardware payback period

## Example: 10-Server Fleet Migration

Cost Category	AWS (Annual)	On-Prem KVM (Annual)	Savings
Compute (40 vCPU, 160 GB RAM)	\$16,819	\$700	<b>\$16,119 (96%)</b>
Storage (10 TB)	\$2,760	\$180	<b>\$2,580 (93%)</b>
Network (1 TB egress/mo)	\$1,080	\$0	<b>\$1,080 (100%)</b>
Licensing	\$0	\$0	\$0
<b>Total</b>	<b>\$20,659</b>	<b>\$880</b>	<b>\$19,779 (96%)</b>

*"A single server migration from AWS EC2 to on-prem KVM saves enough in 6 months to pay for the physical hardware — and then keeps saving year after year."*

# Carbon-Aware Scheduling

30-50% CO2 reduction through intelligent workload scheduling and ESG compliance.



## Grid Carbon Intensity

Real-time carbon intensity data from electricity grid APIs. Schedule heavy workloads when the grid is cleanest (wind, solar peaks).



## 30-50% CO2 Reduction

Shifting migration jobs to low-carbon hours reduces emissions by 30-50% with zero impact on SLAs for non-urgent workloads.



## ESG Compliance

Generate carbon reports for ESG (Environmental, Social, Governance) compliance. Track CO2 per VM, per job, and per team.



## Smart Scheduling

The scheduler considers carbon intensity alongside cost and performance. Migrations happen at the optimal intersection of all three.

Check Grid Carbon



Find Low-Carbon Window



Schedule Migration



Report CO2 Saved

# TCO Calculator

3-year total cost of ownership projection for cloud vs. on-prem.

Cost Category	Year 1	Year 2	Year 3	3-Year Total
<b>AWS EC2 (10 servers)</b>				
Compute	\$16,819	\$16,819	\$16,819	\$50,457
Storage	\$2,760	\$2,760	\$2,760	\$8,280
Network	\$1,080	\$1,080	\$1,080	\$3,240
<b>AWS Total</b>	<b>\$20,659</b>	<b>\$20,659</b>	<b>\$20,659</b>	<b>\$61,977</b>
<b>On-Prem KVM (10 servers)</b>				
Hardware (amortized)	\$4,000	\$0	\$0	\$4,000
Power & Cooling	\$600	\$600	\$600	\$1,800
Management (HyperSDK)	\$0	\$0	\$0	\$0
<b>On-Prem Total</b>	<b>\$4,600</b>	<b>\$600</b>	<b>\$600</b>	<b>\$5,800</b>

**\$56K**

3-year savings (10 servers)

**91%**

TCO reduction

**3 mo**

Break-even point

[See Your Savings](#)

Run the cost estimator with your actual workload parameters. Export the TCO report and share it with your finance team. The numbers speak for themselves.

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