

FinOps-Optimized Informatica Advanced Cloud Data Integration

Optimize Cloud Costs With AI-Powered, FinOps-Enabled Data Integration

Organizations across multiple industries have made massive investments in cloud computing to drive their digital transformation initiatives to stay relevant in a competitive market. For example, banks have deployed new cloud-based mobile applications. Retailers have launched cloud commerce platforms. And healthcare organizations have moved records management to the cloud.

However, according to recent research from McKinsey & Company, only 15% of organizations can establish a clear relationship between their cloud investments and business value delivery.¹ Instead of saving costs by moving to the cloud – as expected – organizations are experiencing cost overruns. Plus, there is a lack of visibility into and predictability of what cloud resources are being consumed. The absence of governance and controls can lead to cost overages for data and analytics leaders using **cloud data management** solutions.

Not to mention, **data democratization** has empowered data consumers to purchase cloud resources without checking with IT or procurement. This can result in wasted resources that can add up to tens of thousands — or even millions — of dollars every year. This is not a path to success, especially in today's budget-constrained culture. We can help.

Cloud financial operations, or **FinOps**, is a financial management practice that helps organizations get more business value from cloud investments, particularly for data management. FinOps helps organizations avoid cost overruns and govern the total cost of ownership (TCO) across the entire software development lifecycle, from development to production.

Let's explore how our FinOps-powered data management can help organizations optimize costs.

¹ https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-finops-way-how-to-avoid-the-pitfalls-to-realizing-clouds-value

Key Benefits

- Reduce TCO by providing insights on data integration workloads
- Get visibility into advanced cloud data integration clusters
- Improve developer productivity with a simple code-free development experience
- Scale data engineering workloads in a cost performant manner
- Build virtually any data engineering pipeline with access to 300+ out-ofthe-box connectors

Key Features

Optimize, Govern and Control Cloud Data Management Costs with Informatica FinOps-Enabled Data Management Cloud

Informatica Intelligent Data Management Cloud[™] (IDMC) is the industry's first and most comprehensive data management solution, powered by **CLAIRE**[®], our AI engine. We have integrated FinOps capabilities into IDMC in each phase of the software development lifecycle established by The FinOps Foundation: inform, optimize and operate. By phase, let's walk through the FinOps features Informatica brings to the table.

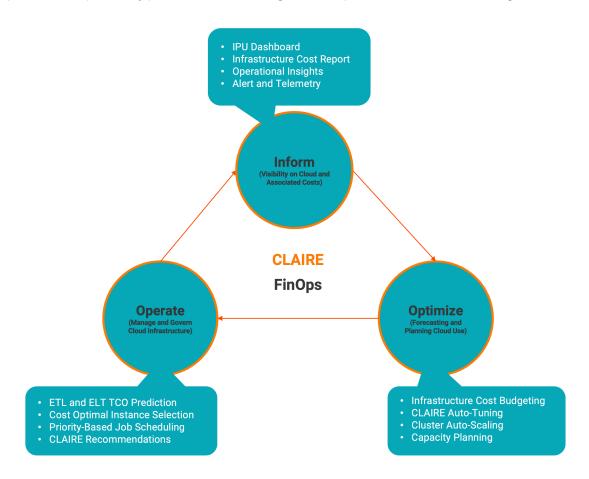


Figure 1. Informatica offers FinOps capabilities in IDMC.

Inform Phase: The inform phase centers on providing visibility for all stakeholders on what kind of workloads are running in the cloud and their associated costs. Transparency into how cloud resources are being consumed is foundational to business value realization. Below are the inform phase capabilities built into IDMC that provide visibility for creating shared accountability:

- Summary of flexible, consumption-based pricing on a per-service basis in IDMC
- Summary of the overall cloud infrastructure cost saved due to intelligent optimizations provided by our CLAIRE AI engine
- Ability to view and monitor individual cluster cost graphs over a period of time
- Ability to set alerts and obtain telemetry data in production using our Operational Insights for services used on IDMC

Optimize Phase: The optimize phase revolves around forecasting and planning cloud use to reduce costs and maximize business value. This includes reducing both over- and under-utilization of current resources, as well as modeling the need for new resources based on business projections. Below are the optimize phase capabilities built into IDMC that identify opportunities to improve efficiency and the associated value:

- Ability to set a budget so that the overall cloud infrastructure cost incurred due to advanced clusters does not exceed budget
- Ability for data engineers to fine-tune data pipelines for cost and performance using CLAIRE's active auto-tuning
- Access to the dynamic scale out and scale in of nodes in the cluster based on workload characteristics with advanced cluster auto-scaling

Operate Phase: The operate phase focuses on the day-to-day activities required to manage and govern cloud infrastructure. This helps you better understand how to utilize various levers like scheduling, auto scaling, reservations and spot instances, as well as reducing data transfer and exchange.

These levers, combined with guardrails for lean and automated provisioning, can help you improve the value realized from your cloud resources. Below are the operate phase capabilities built into IDMC that define and implement processes to achieve these needs:

- Ability for data engineers to schedule jobs based on priority and expected overall execution time so cloud resources are utilized for the most business-critical workloads at virtually any given point in time
- Design time insights and recommendations based on CLAIRE's intelligence to help decide the best engine to schedule jobs for cost and performance needs (i.e., extract, transform, load [ETL] vs. extract, load, transform [ELT])
- Cost and performance-based CLAIRE recommendations during runtime to fine-tune clusters to ensure the highest ROI from cloud infrastructure

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Key Benefits

How Informatica Advanced Cloud Data Integration Supports FinOps

With FinOps-optimized Informatica Advanced Cloud Data Integration, a service of IDMC, data engineers and developers can use a single, simple, unified no-code canvas for virtually all their **data integration** and data engineering needs in a cost-performant manner. Let's walk through the benefits of Informatica Advanced Cloud Data Integration, which can help organizations optimize data engineering costs and improve developer productivity.

1. Informatica Advanced Cloud Data Integration spins up advanced clusters for handling data engineering pipelines and workloads. With the FinOps feature, infrastructure cost budgeting for these clusters is provided upfront. This helps ensure that the clusters used for data integration jobs do not exceed your infrastructure cost quotas.

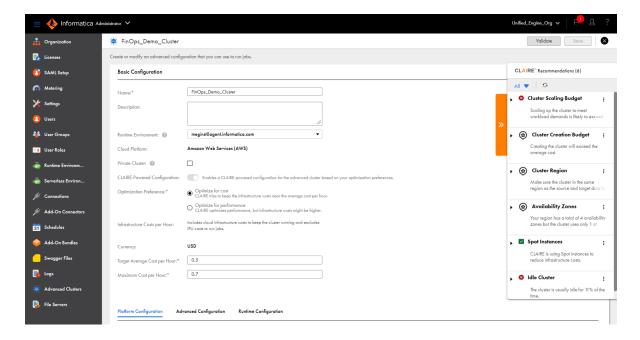


Figure 2. Cloud infrastructure cost budgeting helps ensure data engineering workloads run efficiently.

2. The Infrastructure Administrator is provided with a FinOps report powered by CLAIRE, our AI-powered metadata engine. Based on CLAIRE intelligence, it captures a clear breakdown of how Informatica Advanced Cloud Data Integration can help save on cloud infrastructure costs.

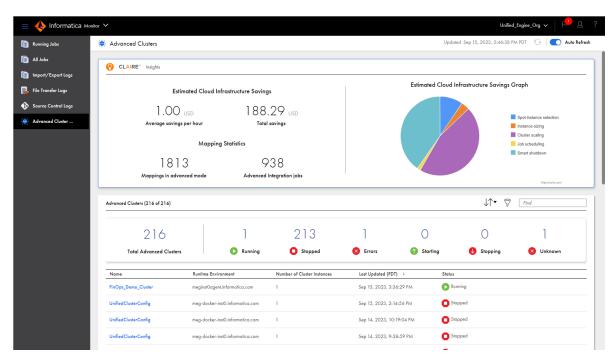


Figure 3. Optimize cloud infrastructure costs with CLAIRE-powered FinOps reporting.

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3. With the FinOps feature, your priority and desired SLAs are supported for individual Informatica Advanced Cloud Data Integration jobs. This is based on business criticality and helps ensure intelligent scheduling of jobs to meet SLAs.

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Figure 4. Smart scheduling of jobs based on priority helps ensure workloads meet business outcomes.

4. As part of the FinOps feature, CLAIRE-based recommendations on runtime engines are provided to enable data engineers to schedule an Informatica Advanced Cloud Data Integration job in a cost-performant manner.

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+ New	- MappingTask63 🗹 Vold	8
🏠 Home	O General Runtime Options 3 Runtime Strategy	
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🔶 Bundles	Enables CLAIRE-powered runtime strategies.	
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🕞 MappingTaskó3-1 🛞	Mapping Image	
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Figure 5. Experience CLAIRE-based runtime engine recommendations for scheduling data engineering jobs.

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5. Runtime CLAIRE-based recommendations for the clusters help ensure that the cluster is optimized for cost and performance at virtually all times to handle just about any workload.

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📩 Organization	🜞 FinOps_Demo_Cluster	Validate Save	
🌄 Licenses	Create or modify an advanced config	uration that you can use to run jobs.	
👩 SAML Setup	Basic Configuration	CLAIRE ⁻ Recommendations (6)	
n Metering	Name:*	FinOps_Demo_Cluster	All 🔻 🖸
🄀 Settings	Description:		• S Cluster Scaling Budget
Users			Scaling up the cluster to meet workload demands is likely to exceed
4 User Groups	Runtime Environment: 🔞	meginst0agent.informatica.com 💌	Cluster Creation Budget :
User Roles	Cloud Platform:	Amazon Web Services (AWS)	Creating the cluster will exceed the average cost.
👼 Runtime Environm	Private Cluster: 💿		▶ (✿) Cluster Region :
👼 Serverless Environ	CLAIRE-Powered Configuration:	Enables a CIAIRE-powered configuration for the advanced cluster based on your optimization preferences.	Make sure the cluster in the same
🗯 Connections	Optimization Preference:*	Optimize for cost CLAIRE tries to keep the infrastructure costs near the average cost per hour.	region as the source and target data to
🗯 Add-On Connectors		O Optimize for performance CLAIRE optimizes performance, but infrastructure costs might be higher.	Availability Zones :
31 Schedules	Infrastructure Costs per Hour:	Includes cloud Infrastructure costs to keep the cluster running and excludes IPU costs to run jobs.	Your region has a total of 4 availability zones but the cluster uses only 1 of
🧼 Add-On Bundles	Currency:	USD	🖌 🗹 Spot Instances 🔅
Swagger Files	Target Average Cost per Hour:*	0.5	CLAIRE is using Spot instances to reduce infrastructure costs.
🛃 Logs	Maximum Cost per Hour:*	0.7	▶ 😵 Idle Cluster :
👾 Advanced Clusters			The cluster is usually idle for 11% of the time.
File Servers	Platform Configuration Ad	vanced Configuration Runtime Configuration	
	Region:*	US West (Oregon)	

Figure 6. Improve performance and optimize costs with CLAIRE-based recommendations for jobs and clusters.

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Job Properties				Results —			CLAIRE [®] Recommendations (1)	
Task Name:	MappingTask63			Status:	 Success 			All 🔻 🖸 🖸
Instance ID:	1			Session Log	: Download			Run Initial CLAIRE Tur
Task Type:	📑 Mapping Task							Use CLAIRE Tuning to run o tuning job to create a tunin
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Start Time:	Sep 15, 2023, 3:28:58 PM							
End Time:	Sep 15, 2023, 3:39:52 PM							
Duration (HH:MM:SS):	00:10:54						_	
Runtime Environment:	meginst0agent.informatica.co	m						
Job Priority:	High							
Target Duration Status:	Exceeded							
 Individual Task 	Results							
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Runtime Plan	Advanced Cluster	Sep 15, 2023, 3:37:	Sep 15, 2023, 3:39:				V Succe	

Figure 7. Example of a recommendation for the individual Informatica Advanced Cloud Data Integration job.

Uncover Deep Savings With FinOps-Optimized Informatica Advanced Cloud Data Integration

Identify cost savings, improve productivity and scale data engineering projects by infusing AI-powered FinOps into the data engineering and data integration process.

Start building your data engineering pipelines in a cost-performant manner with a **free, 60-day trial of Informatica Advanced Cloud Data Integration**.



Informatica (NYSE: INFA) brings data and AI to life by empowering businesses to realize the transformative power of their most critical assets. When properly unlocked, data becomes a living and trusted resource that is democratized across your organization, turning chaos into clarity. Through the Informatica Intelligent Data Management Cloud[™], companies are breathing life into their data to drive bigger ideas, create improved processes, and reduce costs. Powered by CLAIRE[®], our AI engine, it's the only cloud dedicated to managing data of any type, pattern, complexity, or workload across any location — all on a single platform.

IN06-4665-1023

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