



Google Cloud Migration With ValueOps

How to Maximize Your Digital Transformation



The Vast Potential—Massive Implications—of Google Cloud Migrations

Many organizations are moving critical workloads and IT services into Google Cloud, and it's easy to see why. Cloud models have long powered Google's operations, and now the company's cloud offerings represent an increasingly integral part of the technology ecosystems of leading enterprises around the world. By migrating workloads to the Google Cloud, enterprises can break down technology silos, leverage robust infrastructure, and do more powerful analysis, while also seeing significant cost savings.

However, while it's easy to see the upside, it's also important to be cognizant of the potential obstacles. Moving to the cloud represents a change that has fundamental implications, not only for the organization's technology, but for people and processes as well. The more business critical a workload, the bigger the stakes and challenges. These challenges are particularly pronounced when teams look to migrate workloads that have enterprise scale, governance, and compliance requirements. In these scenarios, cloud migration is anything but simple.

We will examine the key implications to consider in a cloud migration. Here we will also find three pillars that must be in place for teams to capitalize fully on the potential of Google Cloud.

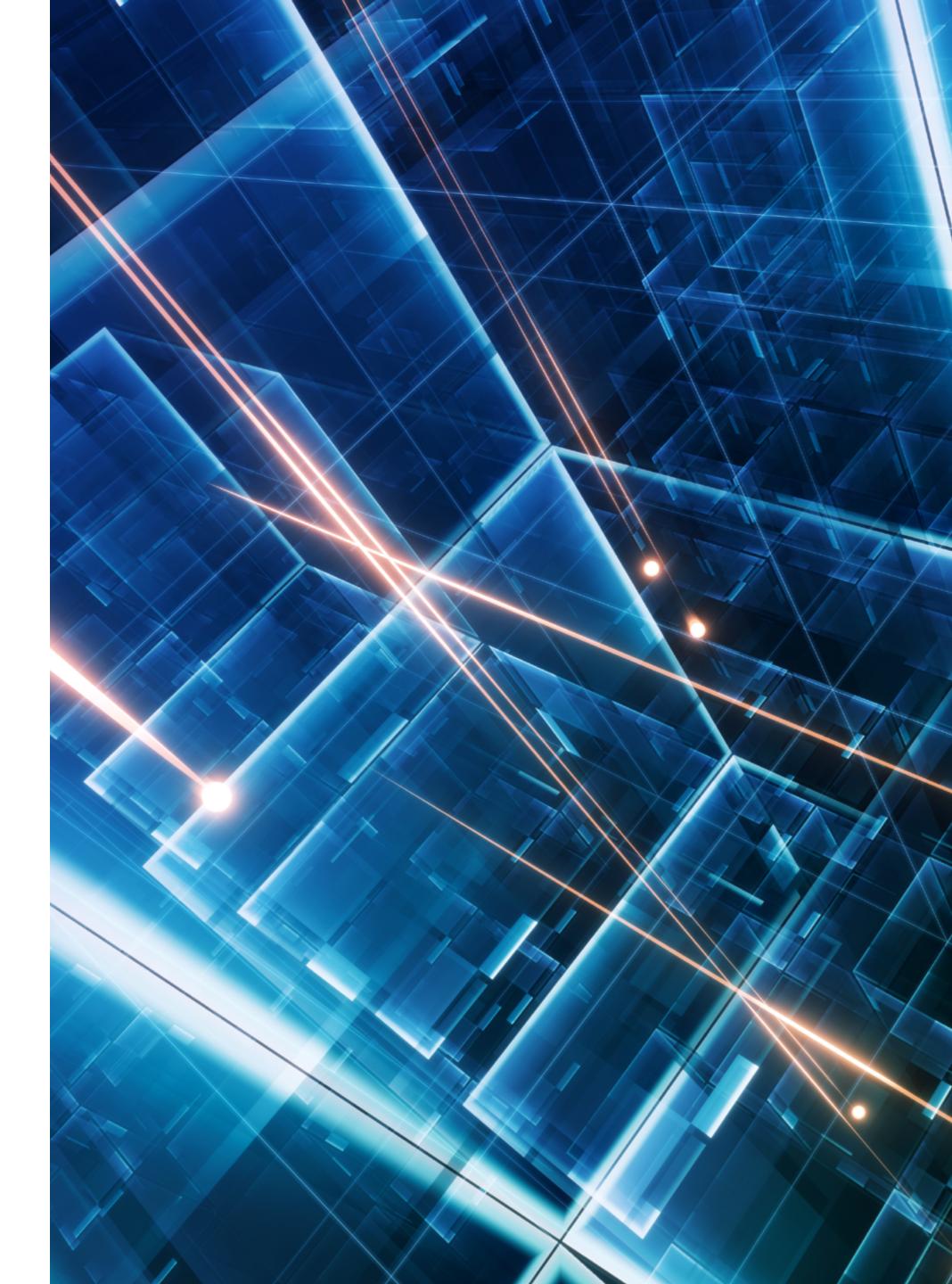


Google Cloud 101

Google Cloud brings together a broad range of innovative offerings that help customers digitally transform. Through this cloud service, customers can access tools in a range of areas, including AI, security, data, infrastructure, and collaboration. The Google Cloud features a pay-as-you-go pricing structure, meaning customers only pay for the services they use. Google Cloud offers a complete data foundation to unify all workloads and manage the entire data life cycle. The Google Cloud features more than 100 offerings with more than 900 partners and integrations in its data and AI ecosystem.

Table of Contents

The Vast Potential—Massive Implications—of Google Cloud Migrations	02
Table of Contents	03
Implication #1: Cloud Migration Demands a New Level of Business-IT Collaboration	04
Implication #2: The Array of Routes to "the Cloud"	05
Pillar #1. Establishing Visibility Across Teams and Value Streams	06
Pillar #2. Creating Business and IT Alignment	07
Pillar #3. Optimizing Operational, Organizational, and Outcome Efficiency	08
Getting Started: Key Considerations	09
Tool Requirements	10
How ValueOps Can Help	11
Maximize the Potential of Your Google Cloud Migration	12



Implication #1: Cloud Migration Demands a New Level of Business-IT Collaboration

The business-IT disconnect: While an age-old problem, it's one that gets magnified when teams pursue cloud migrations, which require unparalleled levels of collaboration.

Business Leaders Play a Critical Role

Business leaders can't take an arms-length approach to critical technology decisions. Technology today is simply too critical to any business' fortunes. As part of a migration, it's vital to go through a rationalization process, assessing which apps to migrate and how. Business leaders and users need to be integrally involved in this rationalization. They need to partner with lines of business, technical teams, and corporate services, such as vendor management.

Business Needs to Partner with IT

While their involvement is critical, business leaders typically won't have the focus, expertise, or insight to intelligently rationalize an application portfolio on their own. Business users may not know about technical interdependencies, for example. For these reasons, business stakeholders need to rely on the visibility and expertise of IT to manage interdependencies, as they navigate migrations.

IT Needs to Become a Strategic Partner

In years past, technology was largely viewed as a utility, and IT was effectively chartered with a keep-the-lights-on mandate. Now technology is a business enabler. In this new paradigm, IT needs to move from being a utility provider to being a strategic partner. If this transition hasn't already started, this lack of progress will grow increasingly conspicuous in an age of cloud computing.

Application and Product Management Skills are More Critical Than Ever

These business and IT interdependencies are serving to create increased demand for application and product management experts within organizations. These experts play an increasingly important role in facilitating effective communication between IT and the business. During a migration, for example, the product manager can provide critical business context in terms of the timing and risks of the transition to corporate growth objectives.

The Risk: Siloed Approaches Limit the Potential Benefits

While the disconnect between IT and business has been a long-standing issue, it grows increasingly problematic in cloud migrations. Without effective collaboration, cloud migrations get stuck or delayed. With resources the new currency, cloud migration efforts need to be part of prioritization decisions not handled in siloed piecemeal fashion. This means the potential benefits of moving to Google Cloud and other cloud environments may not be fully realized.



Implication #2: The Array of Routes to "the Cloud"

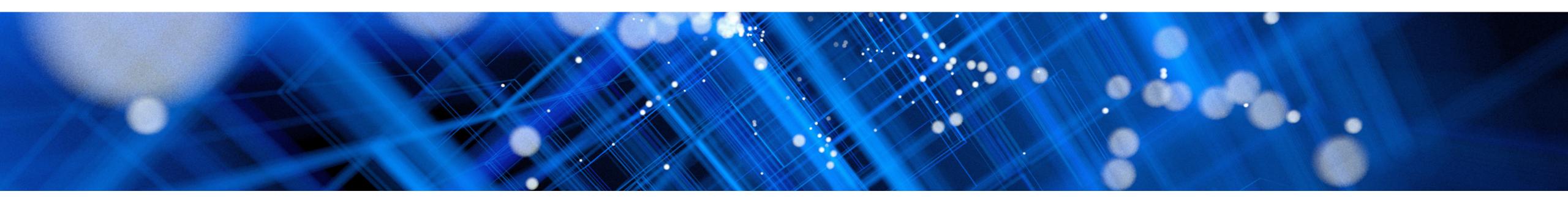
While you'll hear the phrase mentioned often, the reality is there's no such thing as "the move" to "the cloud." Following are some of the key factors that need to be considered:

- → What to move. Teams need to start by determining which workloads and applications get moved and when. Requirements of various teams, workloads, and apps can vary substantially. Demands around scale, compliance, and performance need to be considered.
- → Where to move. Where apps get moved is another complex decision. Google Cloud features more than 100 distinct services. In addition to Google Cloud, teams can choose from an exceedingly broad and constantly expanding and evolving list of vendors and cloud services. Within each cloud environment, there will be different operational interfaces, data center locations, tools, and more.
- How to move. Finally, how apps are migrated is another area of complexity. Deciding on an approach, managing interdependencies, ensuring quality service levels during the transition, are just a few of the considerations.

Among all these options, there will be a range of advantages and disadvantages. Making an informed investment, with a clear understanding of the relative pros and cons, features and capabilities, and so on, is a significant undertaking. There won't be a single right answer for any organization. Plus, because offerings, models, and technologies keep evolving, the right choice today may be very different than the one that's optimal tomorrow.

To make these decisions, teams must start with an effective rationalization of their current application portfolio. Ultimately, teams need to decide among the different options available in terms of whether and how to migrate apps. This can include taking such tacks as completely refactoring an application, rehosting an application, or replacing it altogether.

In the following pages, we examine the three pillars of a successful, cross-enterprise cloud migration.



Pillar #1

Establishing Visibility Across Teams and Value Streams

Lack of Visibility

In many organizations, teams are contending with limited visibility into the diverse technologies employed. This lack of visibility is stalling many cloud migration initiatives.

Compounding matters is that the type and volume of distinct technologies, platforms, protocols, and standards continues to proliferate. The technology sprawl makes it difficult for teams to gain the visibility they need, when they need it. Challenges are exacerbated by the fact that lines of business are making independent technology investments, further diminishing visibility and control.

Gain Visibility into Current Portfolio to Drive Rationalization

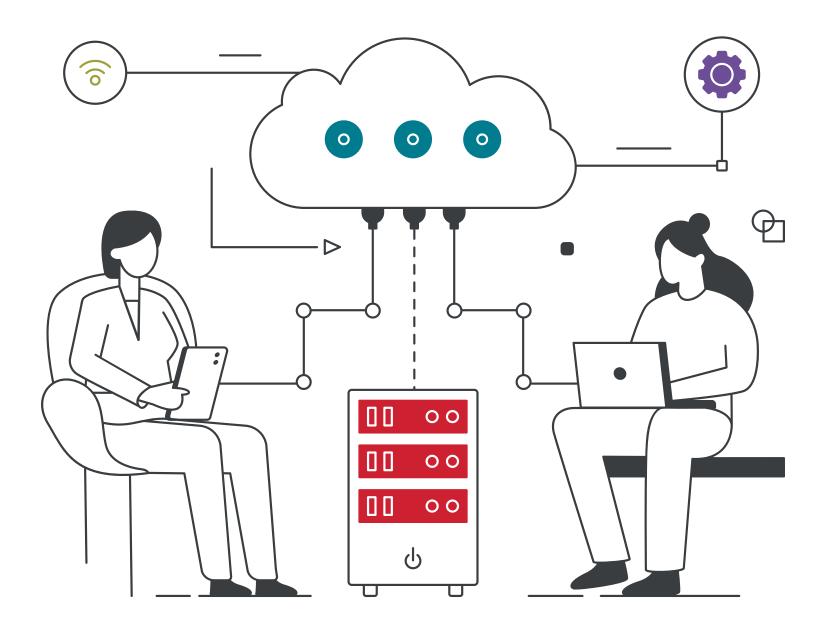
To manage migration, it's vital to start with a clear, current, and complete picture of the organization's existing application portfolio, including apps running in on-premises data centers, Google Cloud, and other cloud vendor environments.

Teams must establish a view that spans traditional silos, whether different departments, business units, or technology domains. Visibility is critical in enabling complete and effective rationalization decisions. For example, it may be that different lines of business are using multiple document storage services. Decision-makers must understand all the apps that are running and how they're being used in order to identify potential consolidation opportunities.

Teams need detailed visibility into such aspects as renewal dates, application health and performance, usage, and more. It's important to enable business and technology leadership to gain a full understanding of aspects like total cost of ownership, risk factors, customer value, and more.

Gain the Spend Management Visibility to Drive Change

For many decision-makers, it is a struggle to gain a holistic view of spending. Many firms have a good grasp on their capital investments, for example, but little visibility into what they're spending on the operational side. It's vital to establish a complete and fully automated view of spending, including operational expense, to effectively guide migration decisions.



Pillar #2

Creating Business and IT Alignment

Align Around Key Business Outcomes

Teams must start with clear definitions of the key outcomes they're looking to achieve with the migration. In defining these objectives, it is essential to take a top-level business perspective. For example, the end goal is ultimately not to complete a lift-and-shift of all apps and services—the ultimate business goal is to reduce cost, boost agility, speed time to market, deliver more value to customers, and so on. These are the key objectives that teams must align around.

Teams across the organization should be focused on the same metrics, and those measurements that matter most are ultimately business metrics. If the goal is to speed delivery to market, this will prioritize migration differently, and that's what everyone should be working toward and be held accountable for supporting.

Standardize and Unify Processes

Technology and business teams must be able to collaborate based on shared visibility and unified data. To keep disparate functions and groups focused on consistent metrics, it's important to establish common, coordinated processes around such efforts as program management, benefit realization, and continuous improvement. This standardization should apply across the delivery lifecycle, technology and cloud domains, and organizational layers. For example, even if a unified approach is not in place for underlying initiatives, the cloud migration program can centralize and coordinate the efforts through automation.

Through these programs, teams are looking to achieve a shared, top-level goal, while directing multiple projects intended to drive the attainment of that goal. Teams should have a common platform for managing and tracking project resources, costs, and activities. This unified approach is essential in helping stakeholders, managers, and teams stay informed and aligned.

Establish Common Incentives

It's also important to incent teams based on the same outcomes, and ensure incentive structures aren't working at cross-purposes. For example, it is counterproductive to have business compensated on time to market while having IT's performance gauged by quality. Leaders also need to make clear who's responsible, and gain the visibility needed to hold teams accountable.



Pillar #3

Optimizing Operational, Organizational, and Outcome Efficiency

No matter where organizations are in their cloud transformation journeys, executives must continue to manage their technology portfolio and people portfolio. Effective governance is always an imperative, including before, during, and after any cloud migration. Operationalizing that planning and management effort is a big part of successful transformation.

Decision-makers need to be able to define portfolio elements, whether associated with people, technologies, or workstreams. When it comes to the technology portfolio, leaders should understand costs, which cloud a workload is running in, which teams are using which services, and so on. Leaders should leverage unified models for managing people, including those in different roles and lines of business. Finally, decision-makers from across the organization need to be able to view and manage assets, track both planned and actual spending, and compare forecast versus actual savings.



Getting Started: Key Considerations

Start with Objectives

To start, it is vital to establish clear objectives and to have them be defined and understood among both business and IT groups. These objectives need to inform work, orchestration, and prioritization.

Identify Early Targets

Start with low-hanging fruit, that is those workloads or applications that may be easy to migrate or provide the most significant near-term savings. Remaining apps can be analyzed and included in subsequent plans.

Recognize Successes

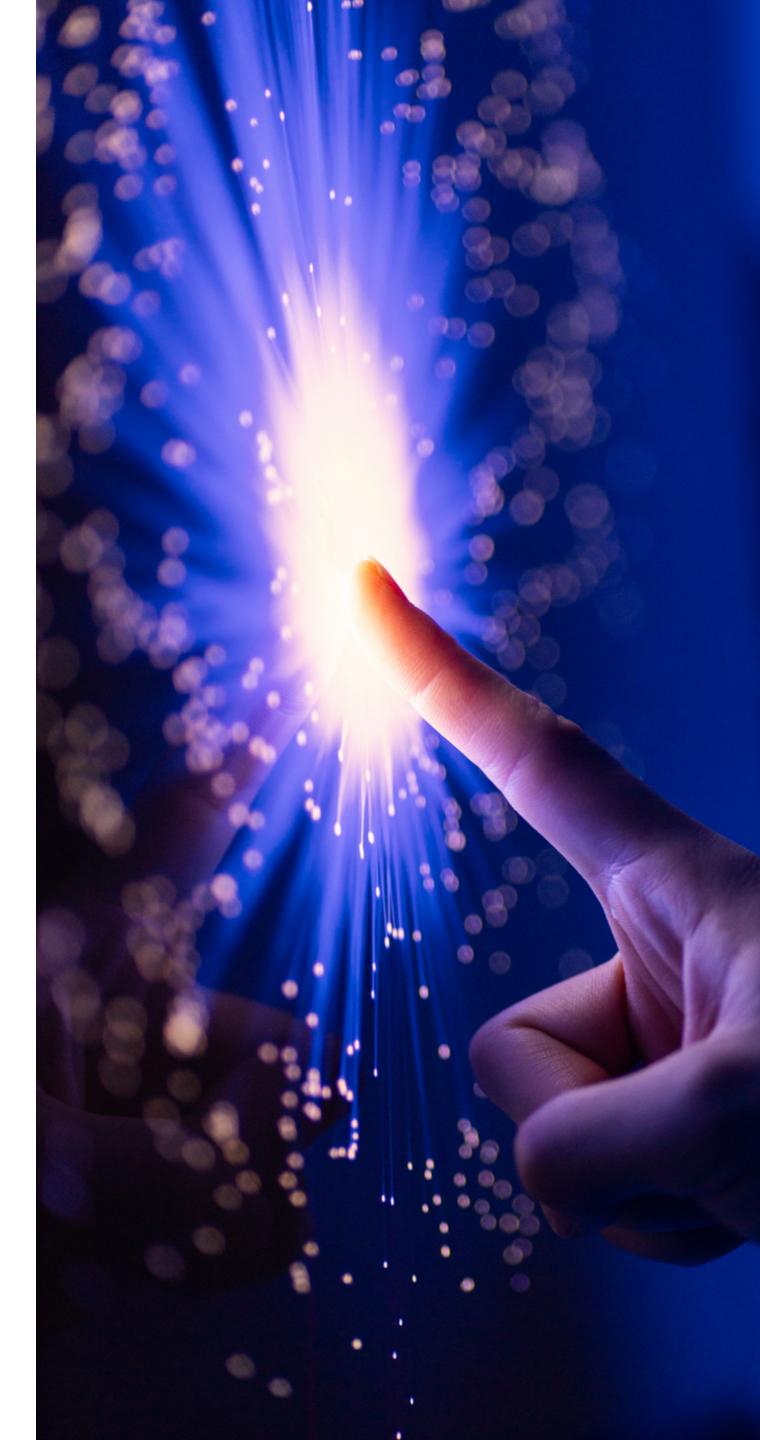
Through cloud migration efforts, line-of-business leaders will be working in partnership with technology leaders to realize key objectives, such as agility improvements and cost savings. As these efforts start to yield dividends, it is important to recognize successes and provide positive reinforcement. This can help teams create repeatable, culturally aligned practices that guide change across the organization.

Establish Repeatable Processes

While early wins can yield significant benefits, it is important to establish a consistent, repeatable process for evaluating existing apps and migration alternatives, communicating with stakeholders, making decisions, and tracking progress.

Align with Culture

In migrating to the cloud, people, processes, and technologies all have to change. This takes time, training, and buy-in. Given this, the enthusiasm around the potential of the move to the cloud can be a great thing to harness. Capitalize on the collective motivation around cloud migration to try to get teams to work together on the same goals. Leadership has to be intentional and prioritize long-term objectives around cloud transformation and innovation delivery.



Tool Requirements

To establish the visibility, alignment, and efficiency required, teams need solutions that provide these key capabilities.

Automation

To manage migrations effectively, decision-makers need to be able to intelligently determine what to do with each workload and service, choosing among various options. In addition, teams need to be able to efficiently track whether they're making progress against key outcomes.

If teams have to manually collect and maintain data to support these efforts, it will be too costly, time consuming, and inefficient. Further, in today's dynamic environments, these manual approaches will quickly become inaccurate. Ultimately, this means leaders will be acting on subpar data.

That's why organizations need automated intelligence gathering. They must be able to leverage unified capabilities that include application discovery solutions, so they can more efficiently and automatically identify the apps in the environment and their characteristics. Rather than relying on time consuming, error-prone, manually created status reports, coordinators and operational teams need on-demand intelligence that offers current, real-time visibility.

Unified Portfolio Visibility

Teams must be able to establish a unified solution that connects intelligence from various systems. For example, teams should be able to assess all the apps in place from an ERP vendor, including who is using them, when contracts are expiring, and so on. They then should be able to compare this information with other ERP offerings in place, so they can intelligently assess their portfolio, identify redundancies, and so on.

Holistic Visibility into Key Metrics

Teams need to establish holistic visibility and access metrics that can guide continuous improvement. They must be able to define outcomes, understand the anticipated efforts needed to

achieve those outcomes, and then concretely track the attainment of those outcomes. They need visibility into spending, including planned costs and actual expenditures, as well as anticipated and actual cost savings. In addition, while financial metrics are critical, this visibility should also encompass other metrics, such as flow throughput.

Support for All Stakeholders

A range of different leaders and team members need to stay informed and track progress in order for cloud migrations to be successful. Therefore, it is vital to establish unified capabilities, while ensuring they work for disparate users:

- -> Engineering leads need technical details for making informed rationalization decisions.
- Managers should be able to centrally assign work, and gain visibility into the resources available so they can balance various resources and priorities.
- → Leaders should be able to set up queues for transitioning applications, modifying contracts, and so on.
- Procurement staff should gain insights to execute efforts like terminating or renewing a contract for a given application.

Simplicity

Decision-makers need multi-layer, end-to-end visibility, but their tools also need to be simple to use. Fundamentally, it is vital to find a platform that works for all key stakeholders, and doesn't require teams to compromise between ease of use and intelligence.

How ValueOps Can Help

ValueOps by Broadcom solutions have a long track record of fueling successful cloud migrations for leading enterprises. Today, ValueOps is available on the Google Cloud Marketplace, including Clarity and Rally. With these solutions, teams can gain key advantages:

Gain Cross-Team, Cross-Value-Stream Visibility

Business and IT leaders can gain the unified, cross-team, cross-value-stream visibility they need to effectively coordinate and collaborate. The solution enables them to manage cloud migration in an intelligent, holistic way.

ValueOps enables users to bring together data from the entire tool ecosystem, including business data, flow metrics, project and portfolio management (PPM) data, development tool intelligence, and more. The solution can collect and normalize data and deliver holistic, unified intelligence from across value streams.

Foster Innovation, Cross-Team Alignment

To fully capitalize on the agility benefits of the cloud, it takes the engagement of the organization, not just development. With ValueOps, business and IT leaders can establish unified visibility so various business lines, engineering teams, and service lines can all work together.

Broadcom and VMware: Complete Solutions for Migration to Google Cloud

VMware is now part of Broadcom. This means that, for the first time, customers will be able to work with a single vendor that offers complete solutions for migrating to Google Cloud. Combined, Broadcom and VMware deliver solutions that support both the technology and the people and process sides of cloud migration. These combined solutions deliver rich, complete, end-to-end visibility and control. These offerings can provide automated, real-time visibility across cloud and on-premises estates, eliminating the challenge of manually gathering this inventory data to facilitate rationalization. These solutions enable organizations to build, deliver, and manage cloud applications that propel their businesses.

ValueOps can bring together data from end to end, create a unified data warehouse, and provide that unified data for analysis and reporting. The solution enables all IT and business teams to work from the same data, track the same metrics, and successfully achieve the desired results.

Maximize Operational, Organizational, and Outcome Efficiency

ValueOps can automatically collect data on an enterprise's evolving technology portfolio, offering both unparalleled visibility and efficiency. With centralized portfolio intelligence, business leadership and application managers can quickly gain insights on infrastructure spending and migration progress. ValueOps offers these powerful capabilities:

→ Cloud program management. ValueOps offers intelligent cloud program management capabilities. Users can set program objectives, provide oversight on prioritized initiatives, and orchestrate efforts across various business and engineering teams. With this visibility, leaders can set and monitor agreements, and track and amplify success.

- Collaboration. The solution enables users from diverse teams to collaborate and view delivery status. Users can view flow metrics and insights from across value streams and various delivery solutions. Decision-makers can assign and manage development work, track and change dependencies, and coordinate cloud infrastructure deployments. Without leaving the application, teams can ask questions, provide updates, and more.
- → Staff allocation. ValueOps offers complete support for intelligent staff allocation. Managers can find the right person or team, and allocate specific percentages of their workload to ideas, projects, or custom investments—with the click of a button.

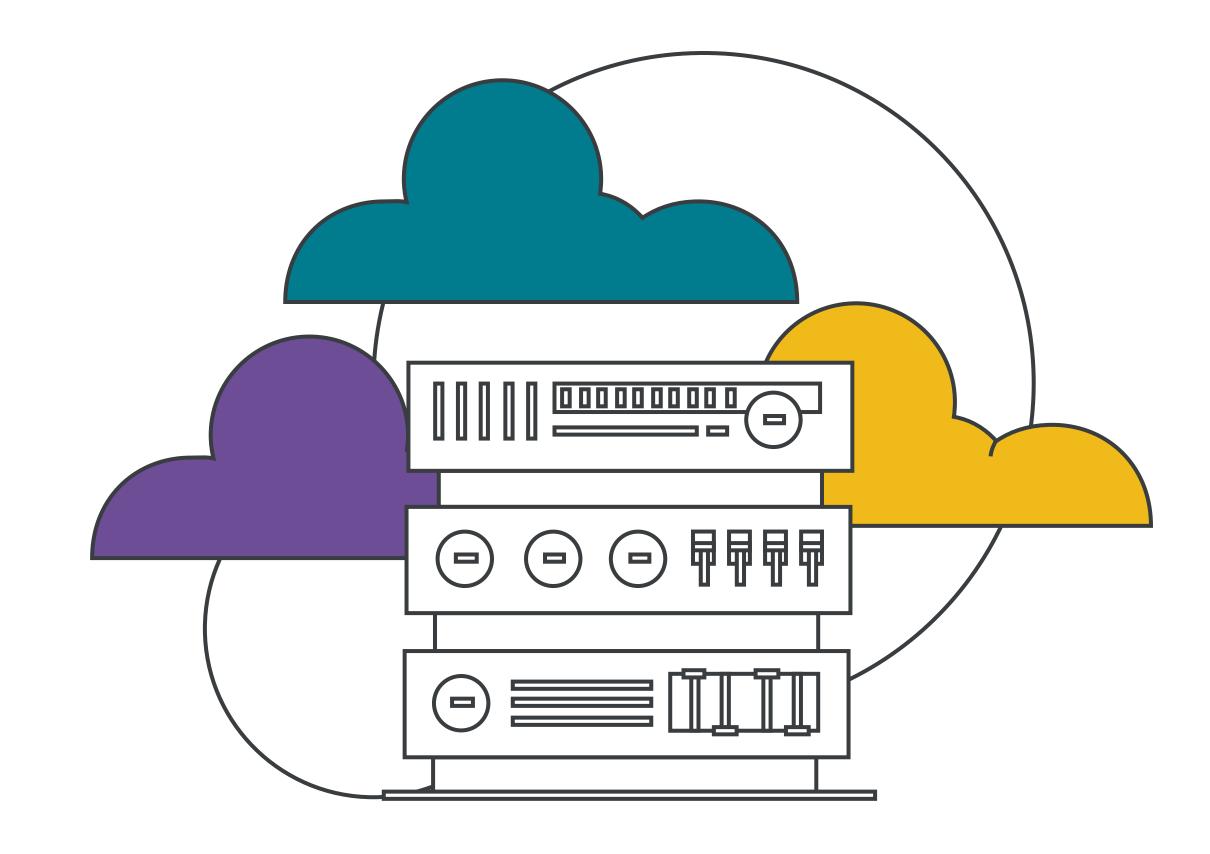
Clarity and Rally: Available on Google Cloud Marketplace

ValueOps, including Rally and Clarity, is available directly on the Google Cloud Marketplace. This makes it even easier for you to optimize your Google Cloud migration and use your Google Cloud commit agreement, while streamlining procurement and billing. To learn more, visit the enterprise-software.broadcom.com page.

Maximize the Potential of Your Google Cloud Migration

The benefits of migration to Google Cloud are virtually limitless, but they're not assured. With ValueOps, organizations can establish the visibility, alignment, and efficiency that are required to fully capitalize on the advantages of Google Cloud.

To learn more about how ValueOps by Broadcom can help maximize the success of your cloud migration and your business, please visit us here.





About Broadcom

Broadcom Inc. (NASDAQ: AVGO) is a global technology leader that designs, develops, and supplies a broad range of semiconductor, enterprise software and security solutions. Broadcom's category-leading product portfolio serves critical markets including cloud, data center, networking, broadband, wireless, storage, industrial, and enterprise software. Our solutions include service provider and enterprise networking and storage, mobile device and broadband connectivity, mainframe, cybersecurity, and private and hybrid cloud infrastructure. For more information, go to www.broadcom.com.