

Google Cloud Next '23 Roundup

16th September, 10 AM at Lucent Innovation



Mehul Patel
Cloud Consultant
@nomadicmehul



Kaivalya Shah
Cloud Consultant



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'nomadicmehul' : true
    const matchStatus = filterByStatus ? study.status === 'PUBLISHED' : true
    if (matchOrg & matchStatus) {
      return true
    }
    return false
  })
}
```



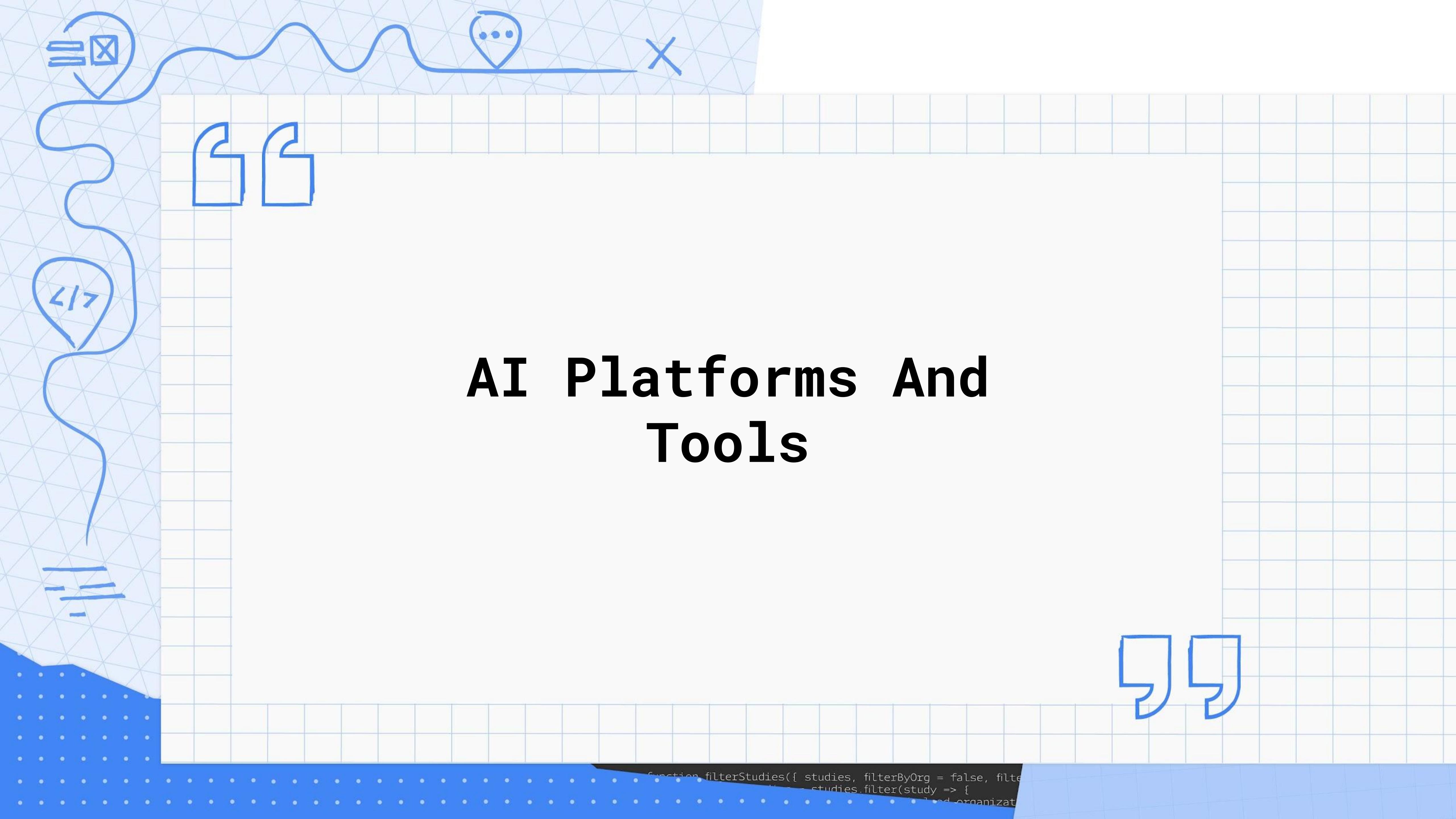
The
new  way
to cloud.

Google Cloud

Next '23

Google Cloud: The New Way to Cloud (in 4min)



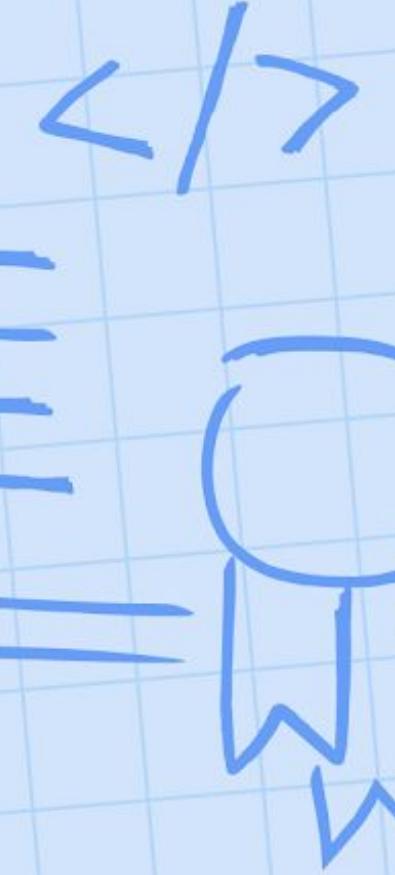
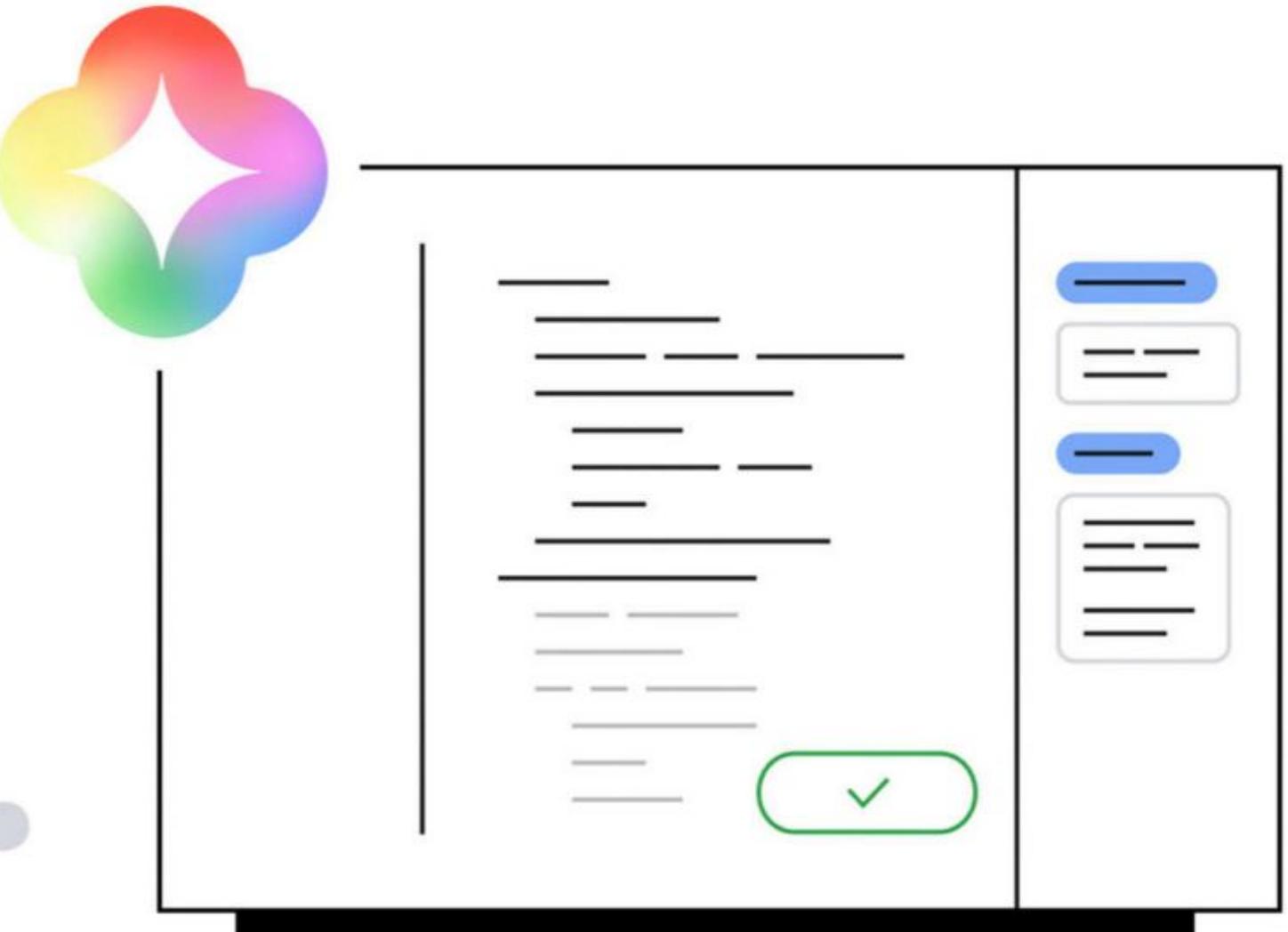


AI Platforms And Tools

```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization === filterByOrg);
    }
    return true;
  });
}
```

Expanding Duet AI, an AI-powered collaborator, across Google Cloud

August 30, 2023



```
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```

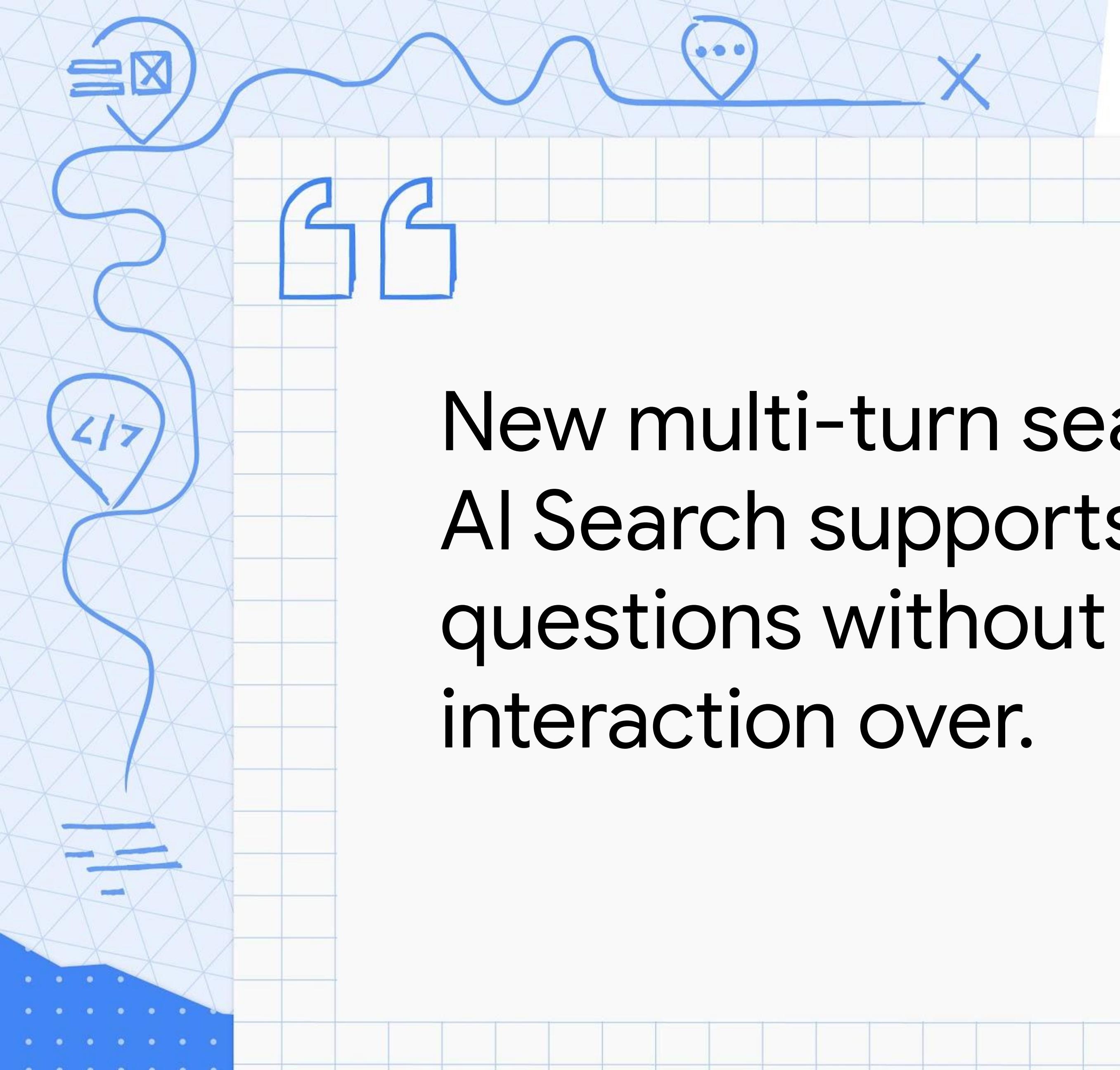
Vertex AI Search and Conversation is now generally available

August 30, 2023



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
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```



New multi-turn search in Vertex
AI Search supports follow-up
questions without starting the
interaction over.





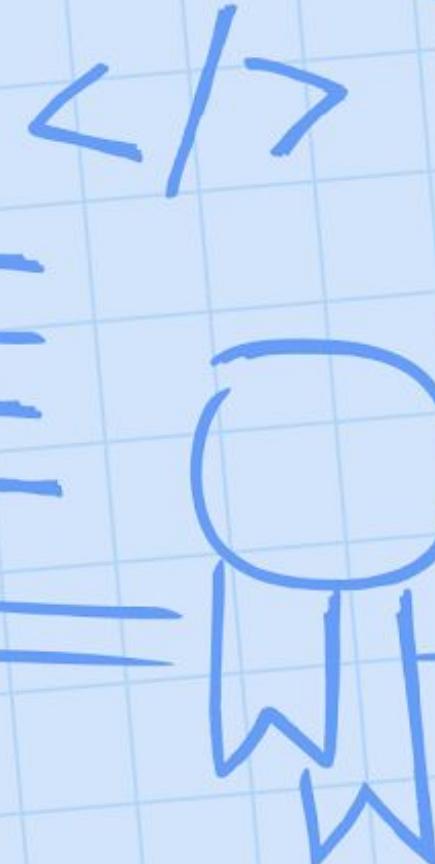
AI ACROSS GOOGLE:

PaLM 2

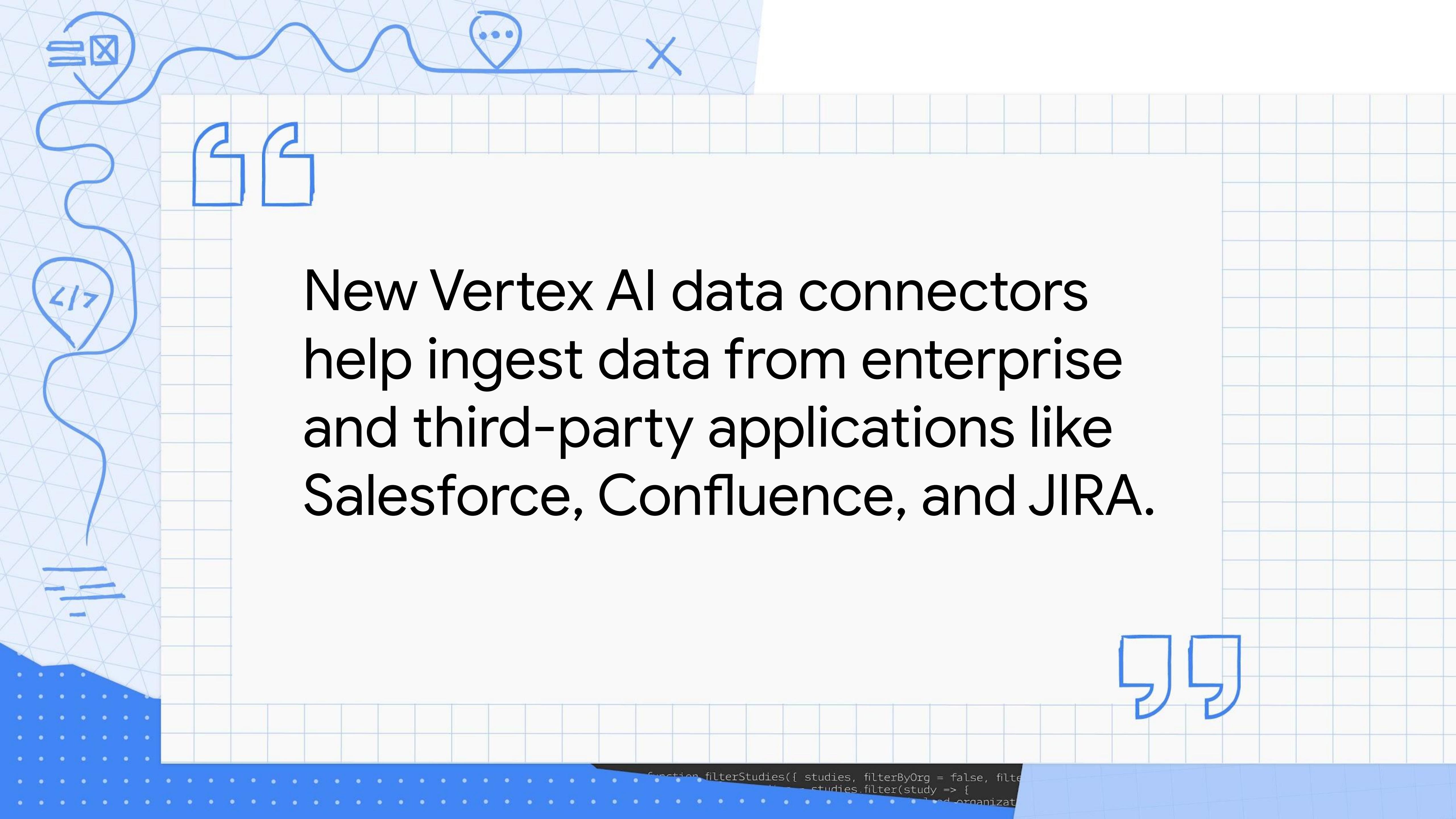
PaLM 2 is our next generation large language model that builds on Google's legacy of breakthrough research in machine learning and responsible AI.

It excels at advanced reasoning tasks, including code and math, classification and question answering, translation and multilingual proficiency, and natural language generation better than our previous state-of-the-art LLMs, including PaLM. It can accomplish these tasks because of the way it was built – bringing together compute-optimal scaling, an improved dataset mixture, and model architecture improvements.

PaLM 2 is grounded in Google's approach to building and deploying AI responsibly. All versions of PaLM 2 are evaluated rigorously for potential harms and biases, capabilities and downstream uses in research and in-product applications. PaLM 2 is used in other state-of-the-art models, like [Sec-PaLM](#). We continue to implement the latest versions of PaLM 2 in generative AI tools like the PaLM API and Bard.



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true;
    const matchStatus = filterByStatus ? study.status === filterByStatus : true;
    return matchOrg && matchStatus;
  });
  if (!filterByStatus) {
    return filteredStudies;
  }
  return filteredStudies.filter(study => study.status === filterByStatus);
}
```



New Vertex AI data connectors
help ingest data from enterprise
and third-party applications like
Salesforce, Confluence, and JIRA.



Vertex AI Embeddings for Text: Grounding LLMs made easy

May 26, 2023



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[Facebook](#)
[Email](#)



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'vertex' : true;
    const matchStatus = filterByStatus ? study.status === 'active' : true;
    return matchOrg & matchStatus;
  });
  return filteredStudies;
}
```

```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'vertex' : true;
    const matchStatus = filterByStatus ? study.status === 'active' : true;
    return matchOrg & matchStatus;
  });
  return filteredStudies;
}
```

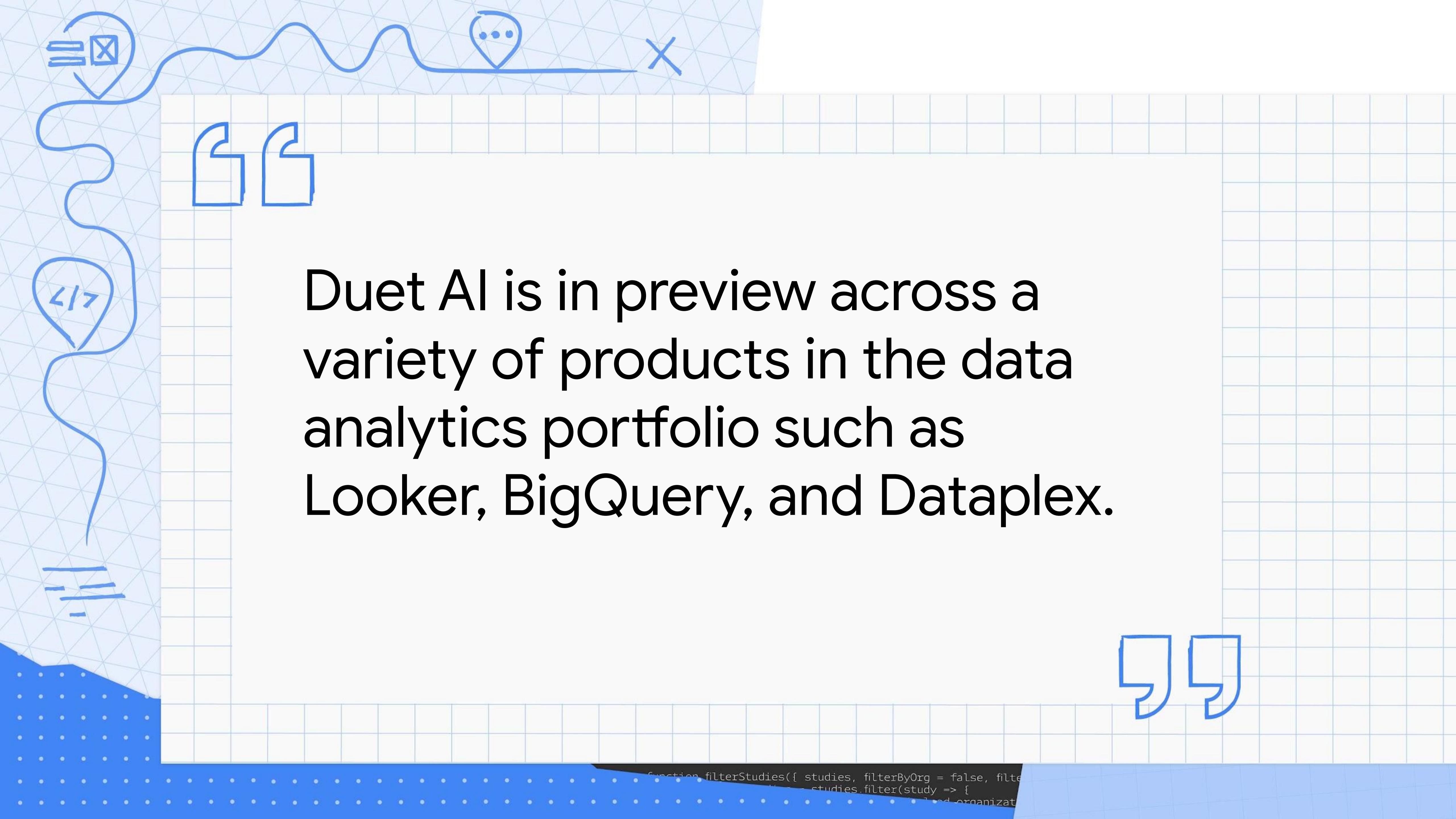
Vertex AI now supports Ray, an open-source unified compute framework to scale AI and Python workloads.

The screenshot shows the Ray website homepage. At the top, there's a navigation bar with links for "Get started", "Use cases", "Libraries", "Docs", and "Resources". To the right of the navigation is a button labeled "Managed Ray on Anyscale →". Below the navigation, a large blue banner features the text "Effortlessly scale your most complex workloads" in white. To the right of the banner is a video player window with the text "Why Ray? Watch It" and a play button icon. Below the banner, there's a paragraph of text describing Ray as an open-source unified compute framework. At the bottom of the page are two buttons: "Read the AWS blog on Why Ray?" and "Ray Overview".



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'ray' : true;
    const matchStatus = filterByStatus ? study.status === 'active' : true;
    if (matchOrg && matchStatus) {
      return true
    }
    return false
  })
}
```

```
use
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'ray' : true;
    const matchStatus = filterByStatus ? study.status === 'active' : true;
    if (matchOrg && matchStatus) {
      return true
    }
    return false
  })
}
```



Duet AI is in preview across a variety of products in the data analytics portfolio such as Looker, BigQuery, and Dataplex.



```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization === filterByOrg);
    }
    return true;
  });
}
```

DATA ANALYTICS



Data Analytics

Announcing BigQuery Studio — a collaborative analytics workspace to accelerate data-to-AI workflows

August 31, 2023



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  const filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
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    return matchOrg && matchStatus
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```



Data Analytics

Announcing Apache Iceberg support for BigLake

October 22, 2022

Gaurav Saxena
Group Product Manager

Yuri Volobuev
Principal Engineer, Google Cloud



Apache Iceberg is a popular open source table format for customers looking to build data lakes. It provides many features found in enterprise data warehouses, such as transactional DML, time travel, schema evolution, and advanced metadata that unlocks performance optimization. Iceberg's open specification allows customers to run multiple query engines on a single copy of data stored in an object store. Backed by a growing community of contributors, Apache Iceberg is becoming the de facto open standard for data lakes, bringing interoperability across clouds for hybrid analytical workloads and systems to exchange data.

Earlier this year, we announced [BigLake](#), a storage engine that enables customers to store data in open file formats (such as Parquet) on Google Cloud Storage and run GCP and open source query engines on it in a secure, governed, and performant manner. BigLake unifies data warehouses and lakes by enabling BigQuery and open source frameworks like Spark to access data with fine-grained access control. Today, we are excited to announce that this support now extends to the Apache Iceberg format, enabling customers to take advantage of Iceberg's capabilities to build an open format data lake while benefiting from native GCP integration using BigLake.

```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true;
    const matchStatus = filterByStatus ? study.status === filterByStatus : true;
    return matchOrg & matchStatus;
  });
  if (!filterByStatus) {
    return filteredStudies;
  }
  return filteredStudies.filter(study => study.status === filterByStatus);
}
```

Infrastructure Modernization

Run data and AI anywhere with new Google Distributed Cloud services

August 30, 2023



[Twitter](#)
[LinkedIn](#)
[Facebook](#)
[Email](#)



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
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}
```

New governance capabilities in Dataplex for data lineage, quality, and metadata management help users understand what data to analyze, and train ML models on trusted data sources to help improve accuracy.

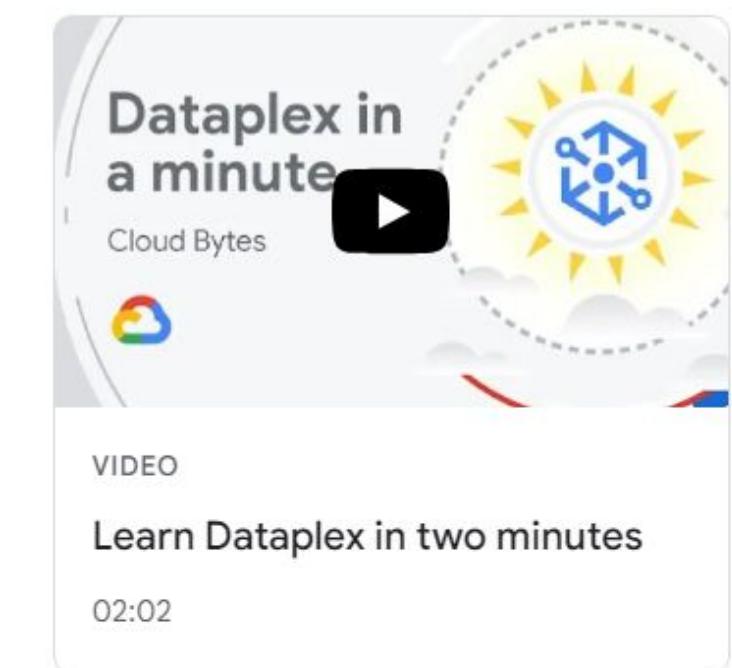
Dataplex

Break free from data silos with Dataplex's intelligent data fabric that enables organizations to centrally discover, manage, monitor, and govern data across data lakes, data warehouses, and data marts with consistent controls, providing access to trusted data and powering analytics and AI at scale.

[Get started](#)

[Contact sales](#)

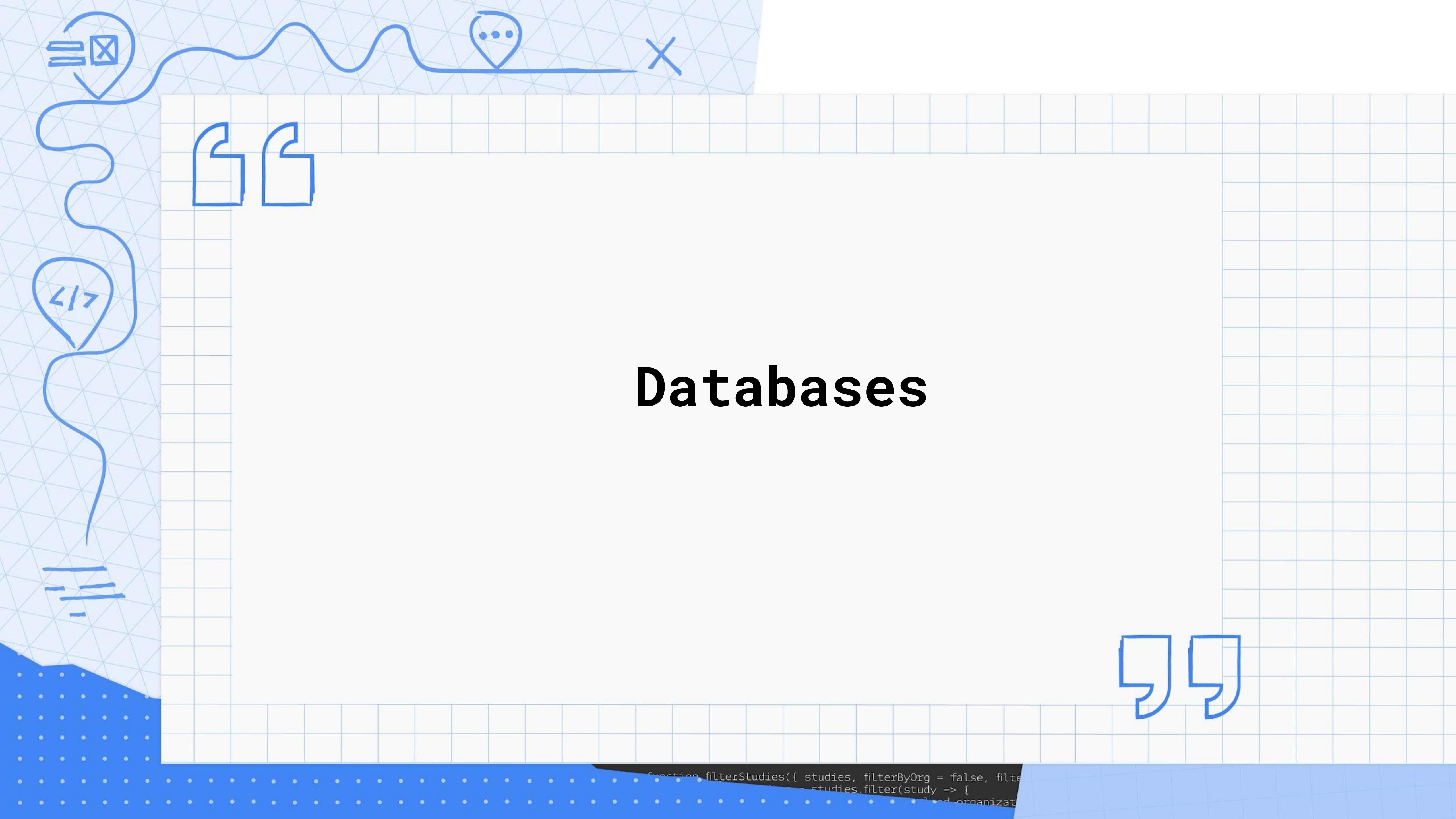
- ✓ Single pane of glass for data management across data silos
- ✓ Centralized security and governance enabling distributed ownership of data with global control
- ✓ Unified search and data discovery, based on business context, across distributed data
- ✓ Built-in data intelligence to enable trust in data and accelerate time to insights



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  let filteredStudies = studies.filter(study => {  
    const matchOrg = filterByOrg ? study.org === filterByOrg : true  
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    return matchOrg & matchStatus  
  })  
  return filteredStudies  
}
```



```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category.id === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization.id === filterByOrg);
    }
    return true;
  });
}
```

Databases

Announcing AlloyDB AI for building generative AI applications with PostgreSQL. [Read the blog.](#)

AlloyDB AI

Benefits

Key features

Pricing

Take the next step

AlloyDB AI PREVIEW

Build enterprise generative AI apps with AlloyDB for PostgreSQL.

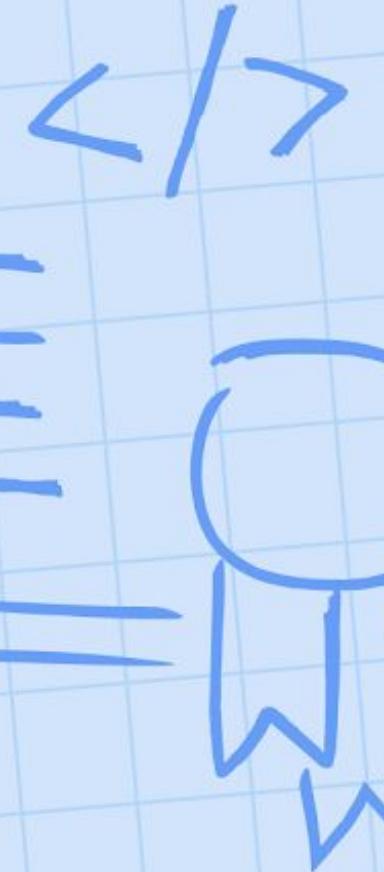
[Try it free](#)

- ✓ Familiar PostgreSQL interface for working with vectors, models, and data
- ✓ Provides up-to-date data and contextual experiences for gen AI apps
- ✓ Built into [AlloyDB](#) for superior performance and availability and simplified management
- ✓ Available in AlloyDB on Google Cloud and in [AlloyDB Omni](#), so you can run it anywhere



Sign up to try AlloyDB AI
within the AlloyDB Omni
preview

[Get access](#)



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  let filteredStudies = studies.filter(study => {  
    const matchOrg = filterByOrg ? study.org === filterByOrg : true;  
    const matchStatus = filterByStatus ? study.status === filterByStatus : true;  
  
    if (matchOrg & matchStatus) {  
      return true  
    }  
    return false  
  })  
  
  if (!filterByStatus) {  
    return filteredStudies  
  }  
  
  return filteredStudies.filter(study => !study.status)  
}
```

Build new gen AI capabilities with AlloyDB Omni, now in preview

August 31, 2023



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  let filteredStudies = studies.filter(study => {  
    const matchOrg = filterByOrg ? study.org === filterByOrg : true  
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function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
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      return true  
    }  
    return false  
  })  
  return filteredStudies  
}
```

AlloyDB Omni PREVIEW

Downloadable edition of AlloyDB, designed to run anywhere—in your data center, on your laptop, at the edge, and in any cloud.

[Try it free](#)

- ✓ Superior performance, more than 2x faster than standard PostgreSQL for transactional workloads*
- ✓ Integrated columnar engine for up to 100x faster analytical queries than standard PostgreSQL*
- ✓ Full compatibility with PostgreSQL and with open source Gen AI tools
- ✓ Available at a fraction of the cost of legacy databases, with a free developer edition
- ✓ Enterprise support from Google Cloud, including 24/7 technical support and software updates



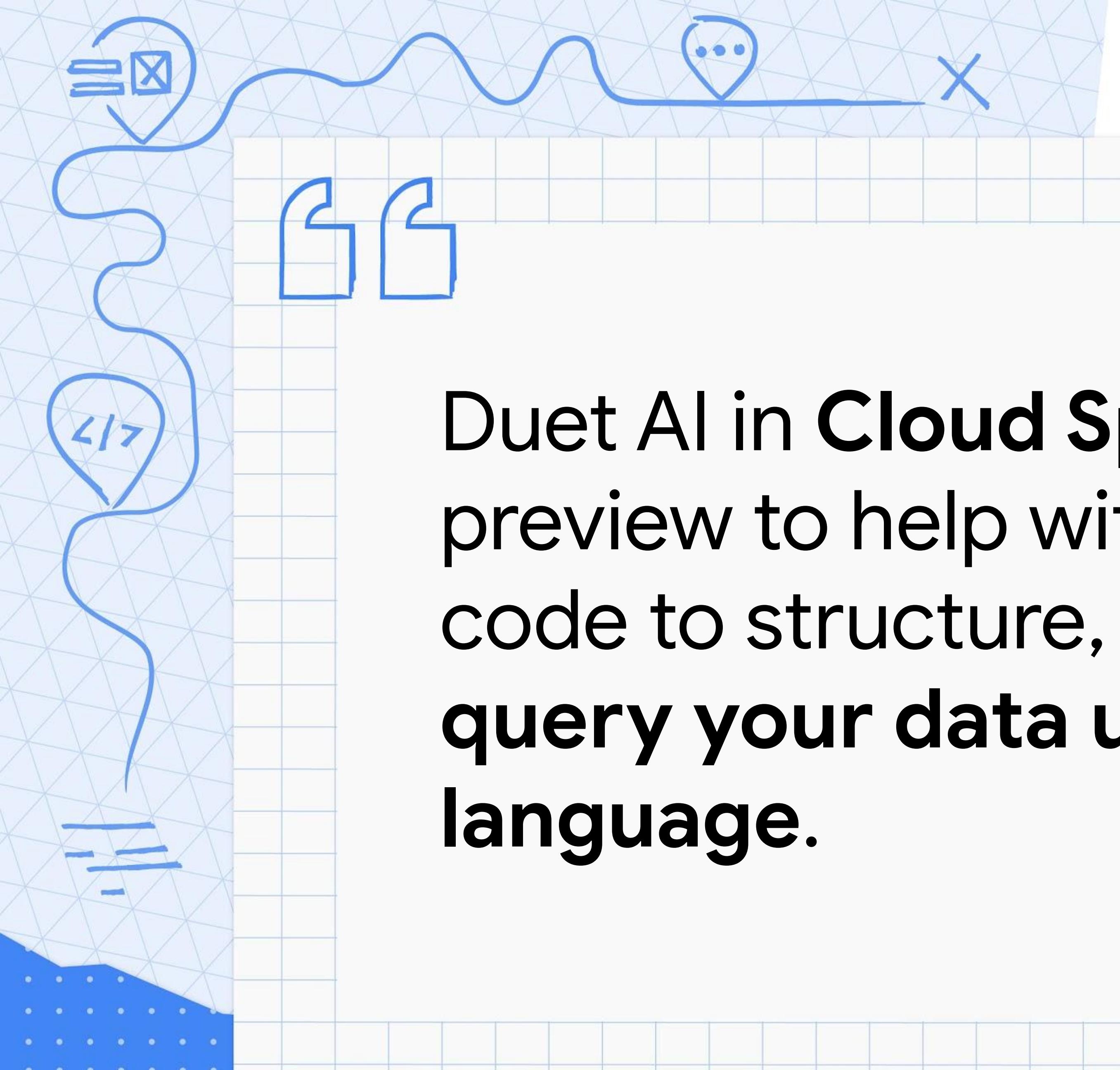
Sign up to try the
AlloyDB Omni preview

[Get access](#)



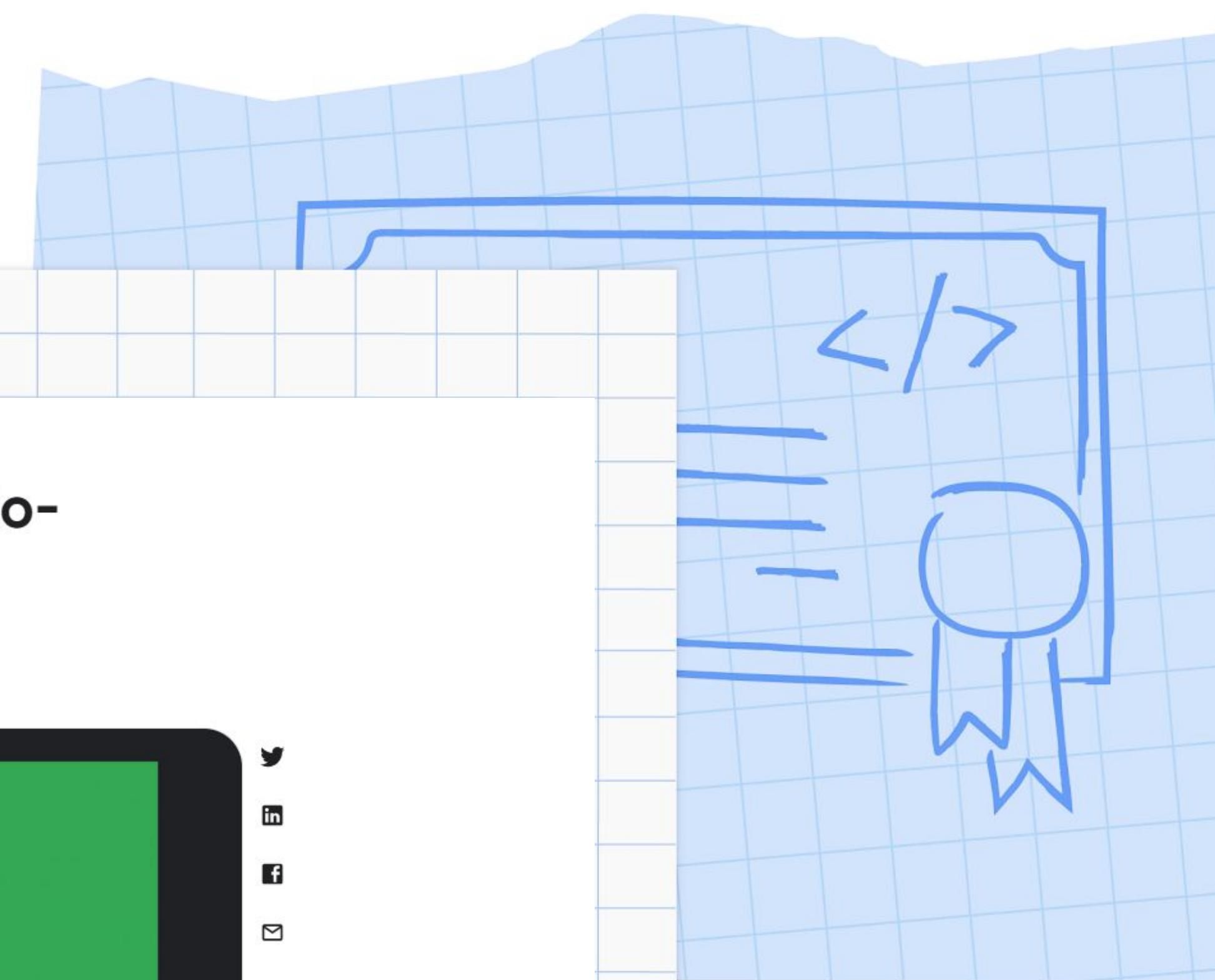
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}
```



Duet AI in **Cloud Spanner** is in preview to help with generating code to structure, modify, or query your data using natural language.

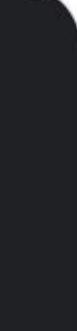




Databases

Simplifying best practices at scale with auto-generated keys in Cloud Spanner

August 31, 2023



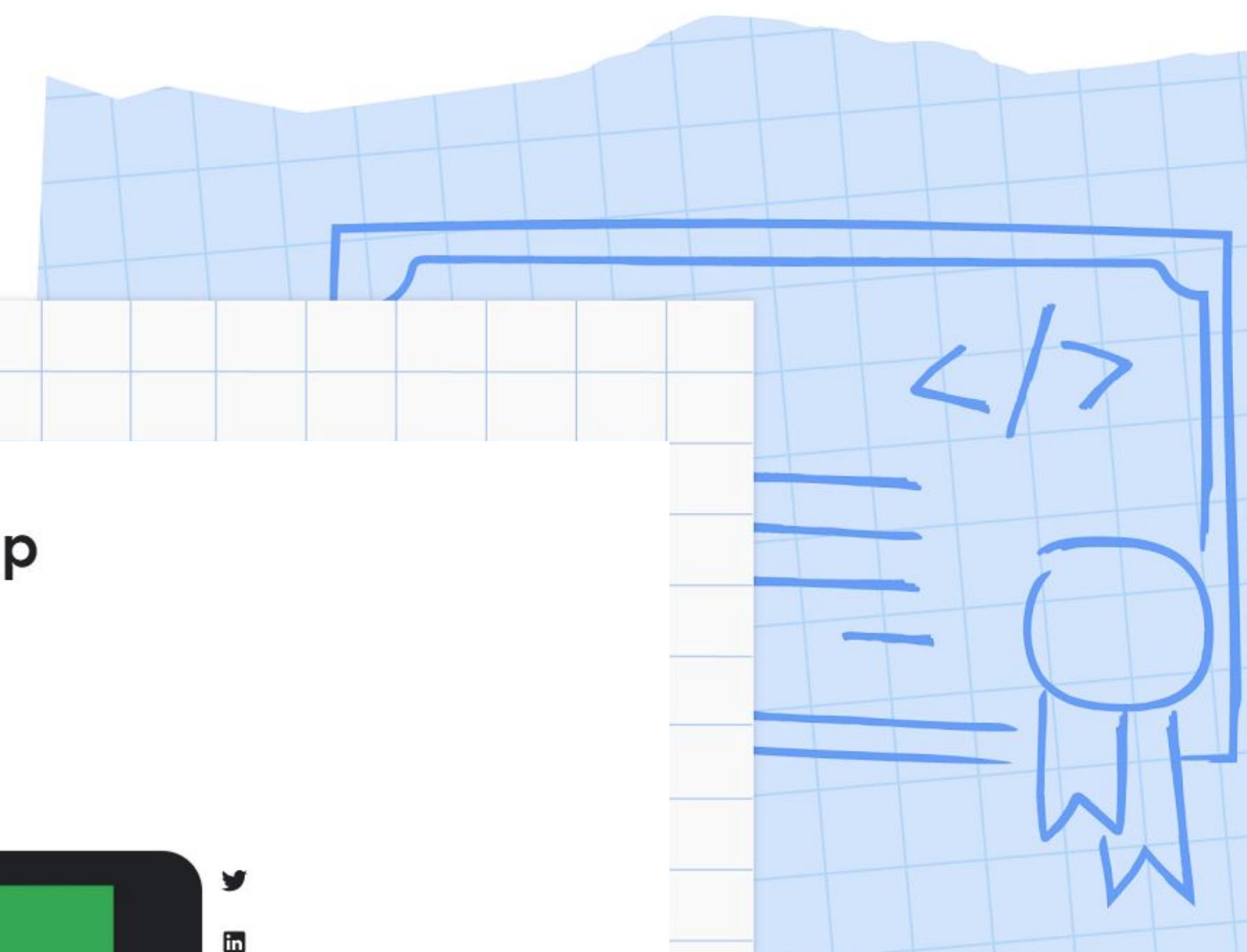
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```



Announcing Memorystore for Redis Cluster: Up to 60x more throughput, with microseconds latencies

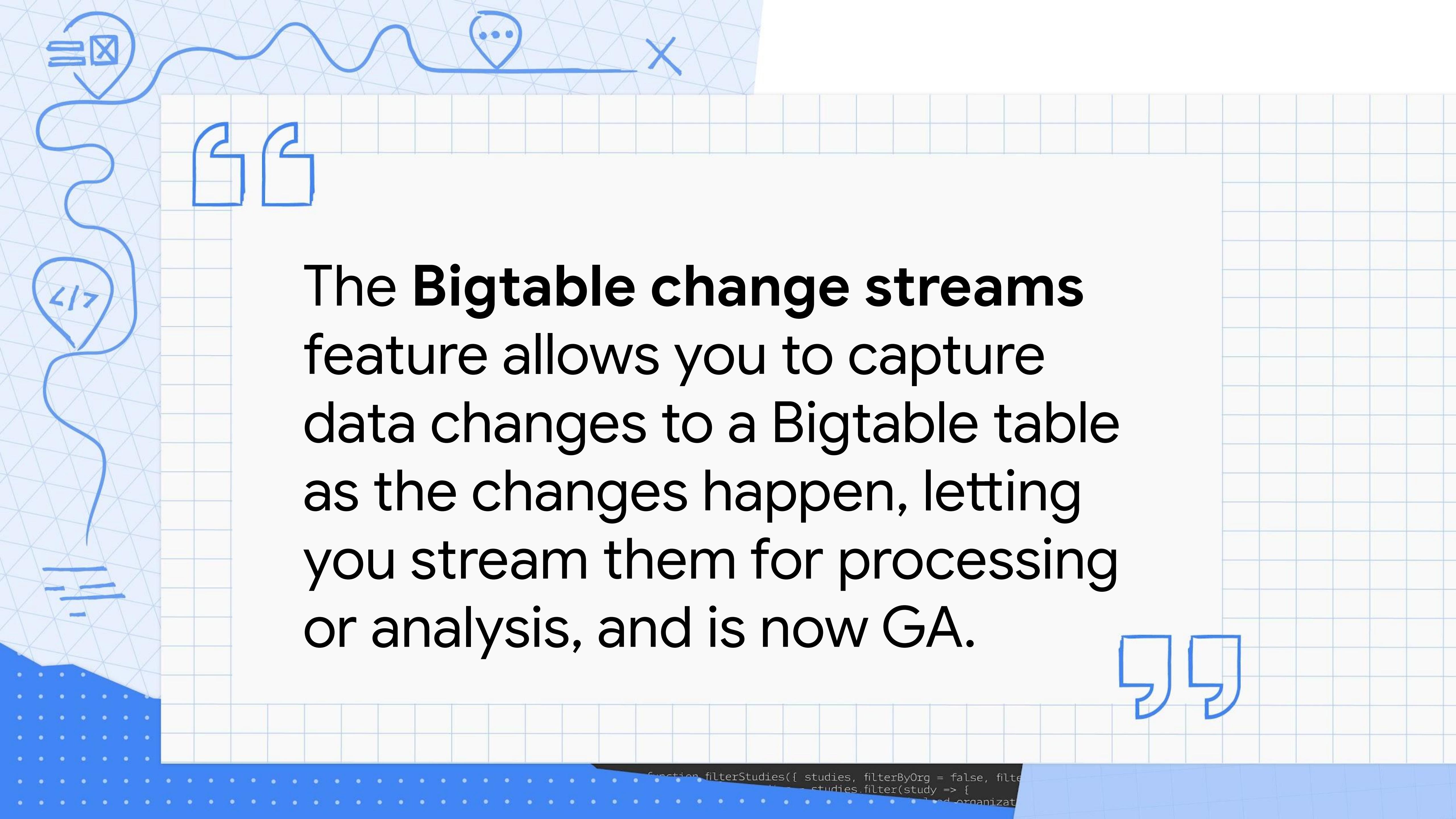
August 31, 2023

Databases



```
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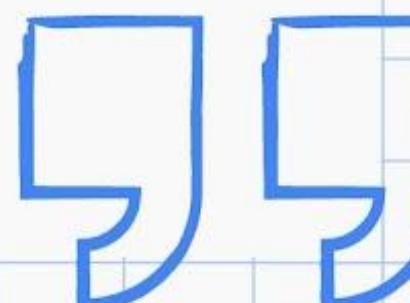
use



The **Bigtable change streams** feature allows you to capture data changes to a Bigtable table as the changes happen, letting you stream them for processing or analysis, and is now GA.



Infrastructure for AI workloads



```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization === filterByOrg);
    }
    return true;
  });
}
```

Compute

Announcing A3 supercomputers with NVIDIA H100 GPUs, purpose-built for AI

May 11, 2023



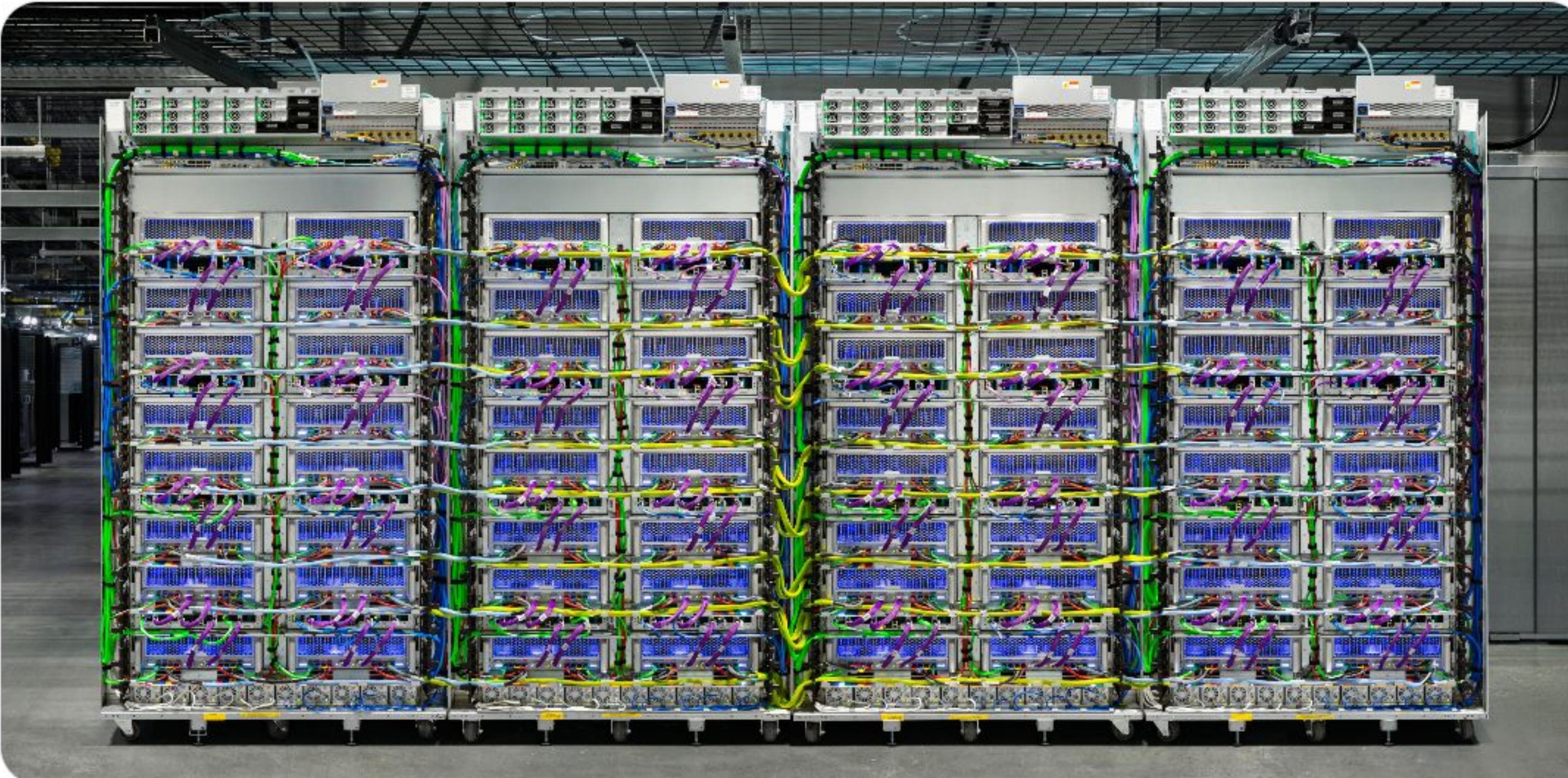
```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'NVIDIA' : true;
    const matchStatus = filterByStatus ? study.status === 'Active' : true;
    return matchOrg && matchStatus;
  });
  return filteredStudies;
}
```

```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'NVIDIA' : true;
    const matchStatus = filterByStatus ? study.status === 'Active' : true;
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  });
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}
```

Compute

Cloud TPU v5e accelerates large-scale AI inference

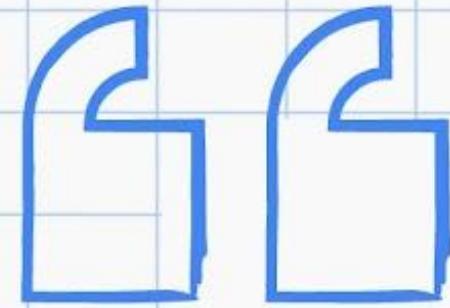
September 1, 2023



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  let filteredStudies = studies.filter(study => {
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}
```



The new Google Cloud **TPU v5e**,
in preview, has up to 2x higher
training performance per dollar
and up to 2.5x inference
performance per dollar for LLMs
and generative AI models
compared to Cloud TPU v4.



Containers & Kubernetes

Introducing the next evolution of container platforms

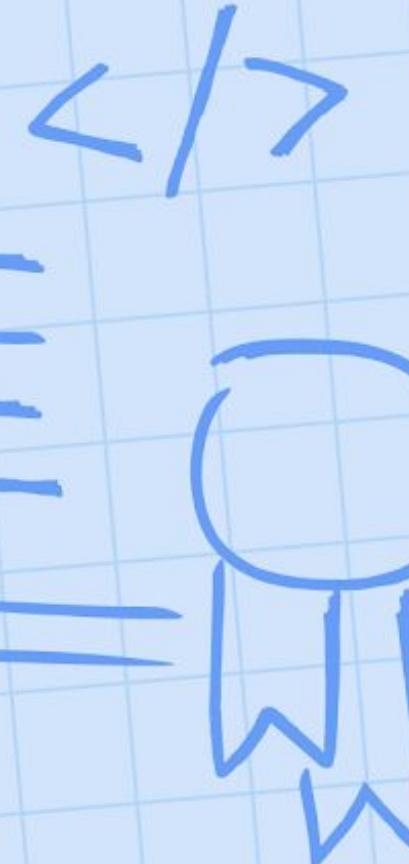
August 30, 2023



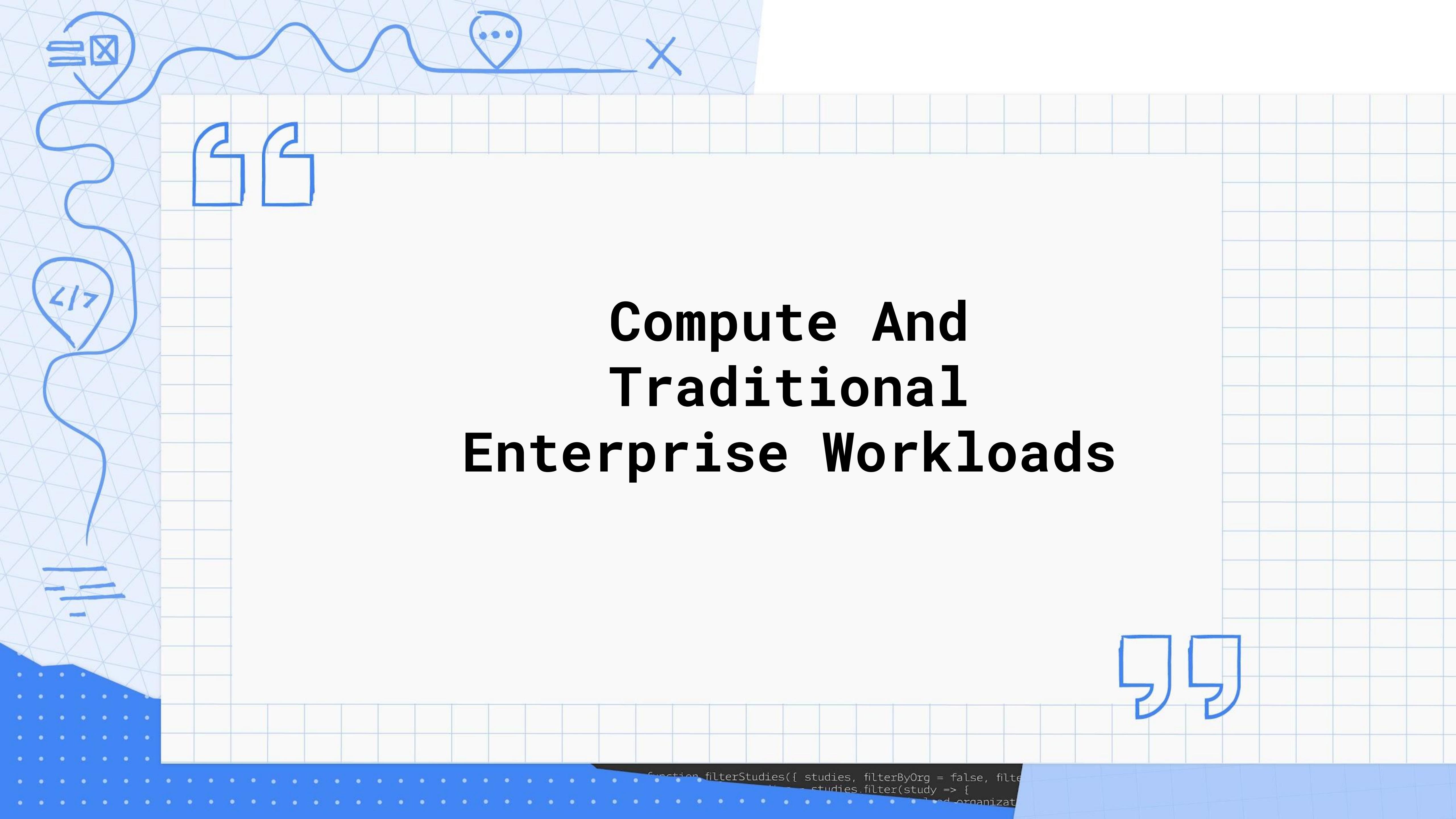
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[LinkedIn](#)
[Facebook](#)
[Email](#)

use

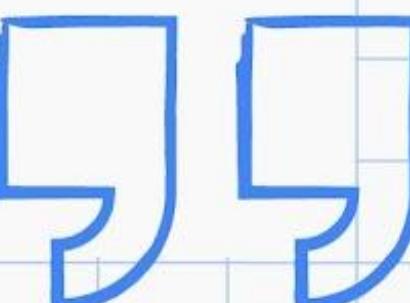
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function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  const filterByOrgFn = filterByOrg ? study => study.org === filterByOrg : true;  
  const filterByStatusFn = filterByStatus ? study => study.status === filterByStatus : true;  
  return studies.filter(filterByOrgFn).filter(filterByStatusFn);  
}
```



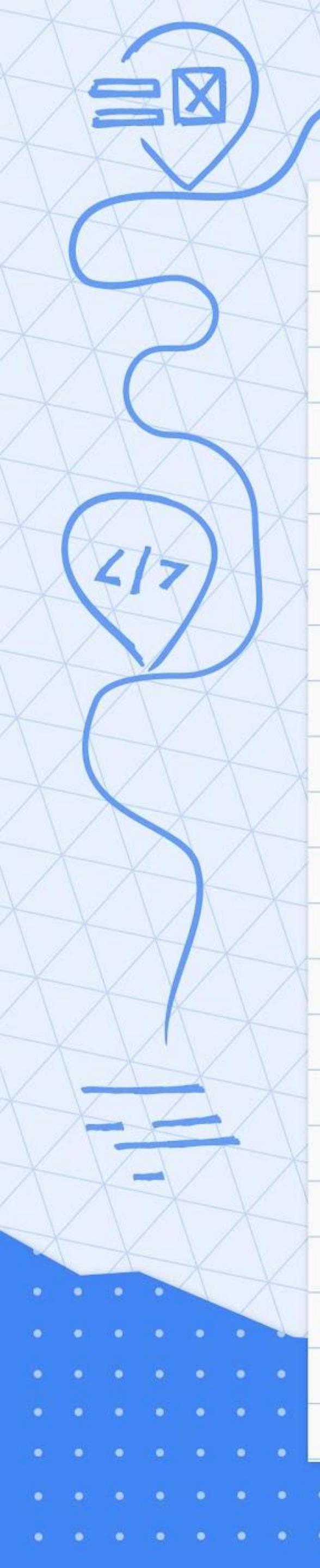
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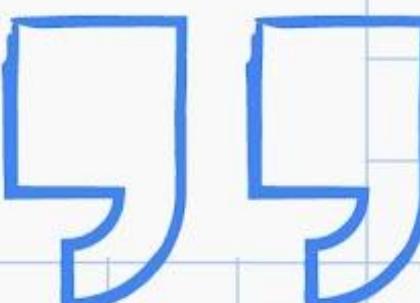
Compute And Traditional Enterprise Workloads

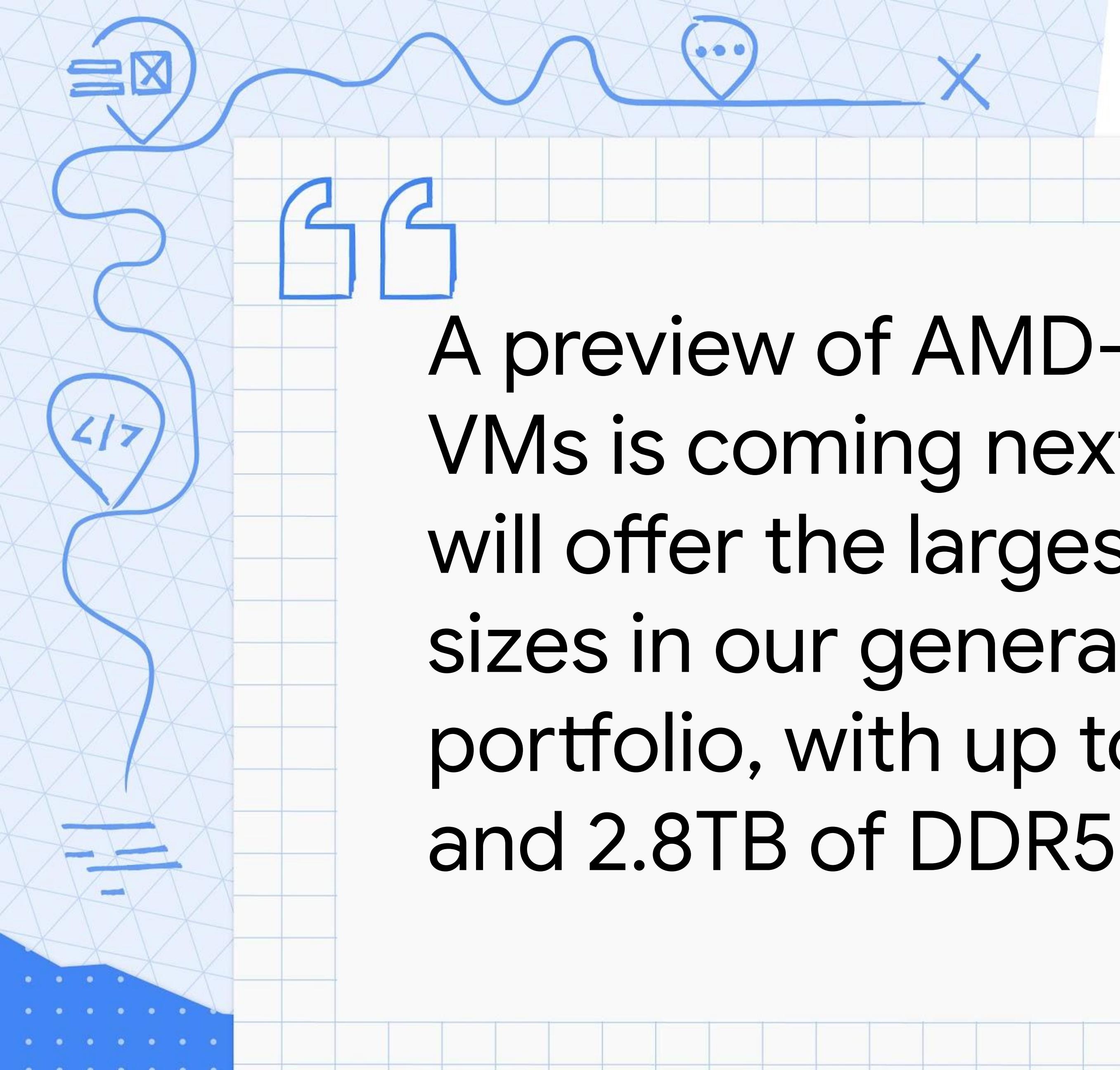


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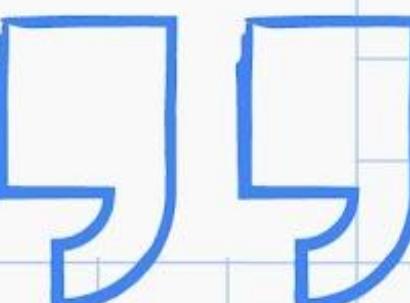


The Arm-based C3A, powered by AmpereOne processors will be in preview next month.





A preview of AMD-based C3D VMs is coming next month, and will offer the largest instance sizes in our general-purpose portfolio, with up to 360 vCPUs and 2.8TB of DDR5 memory.



Compute

Titanium: A robust foundation for workload-optimized cloud computing

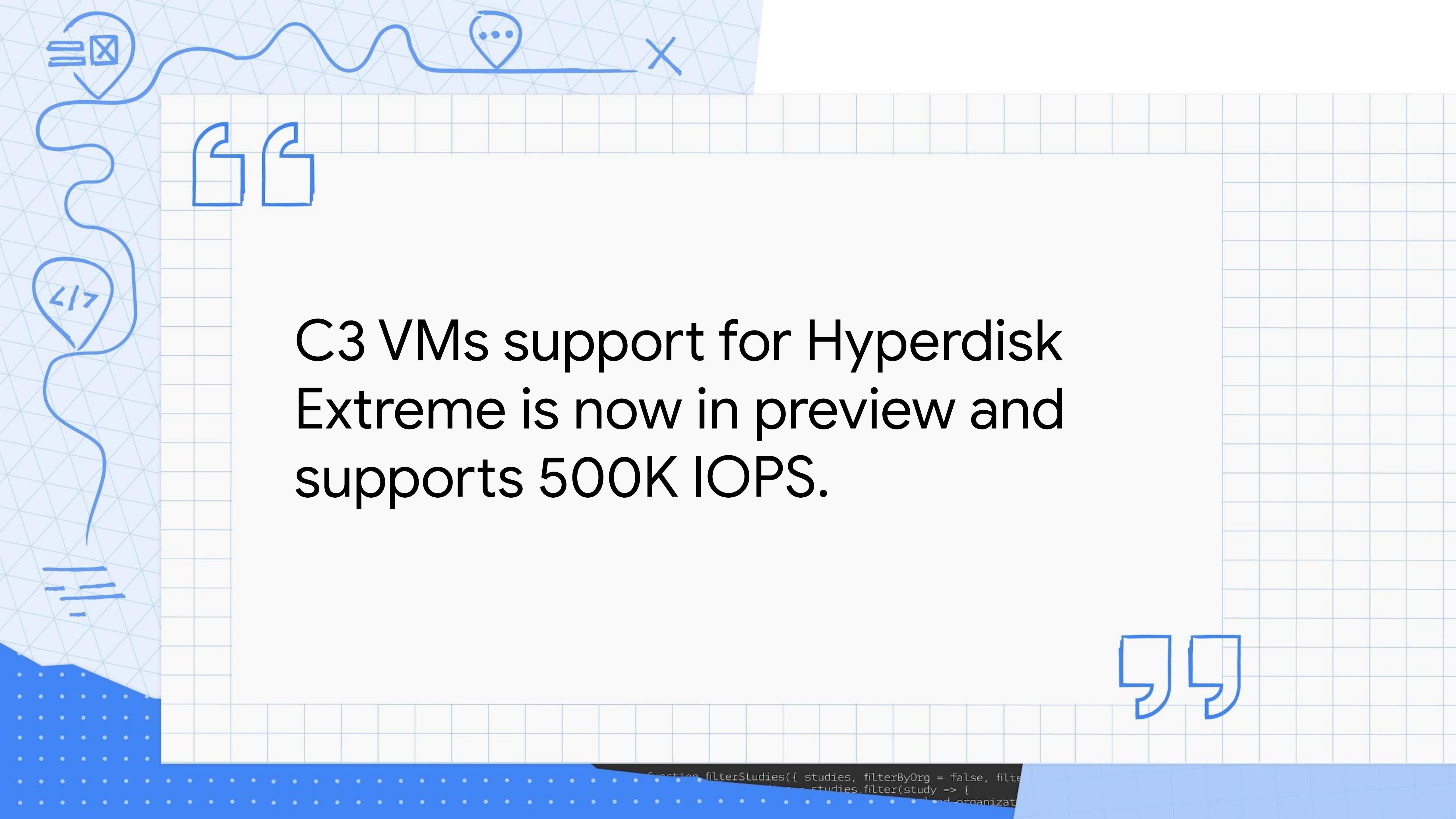
August 30, 2023



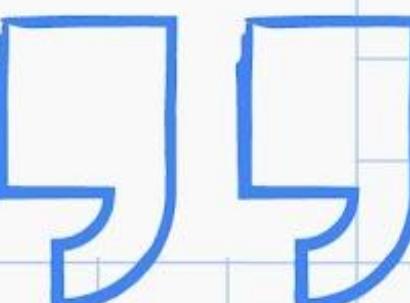
```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  const filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg & matchStatus
  })
  return filteredStudies
}
```

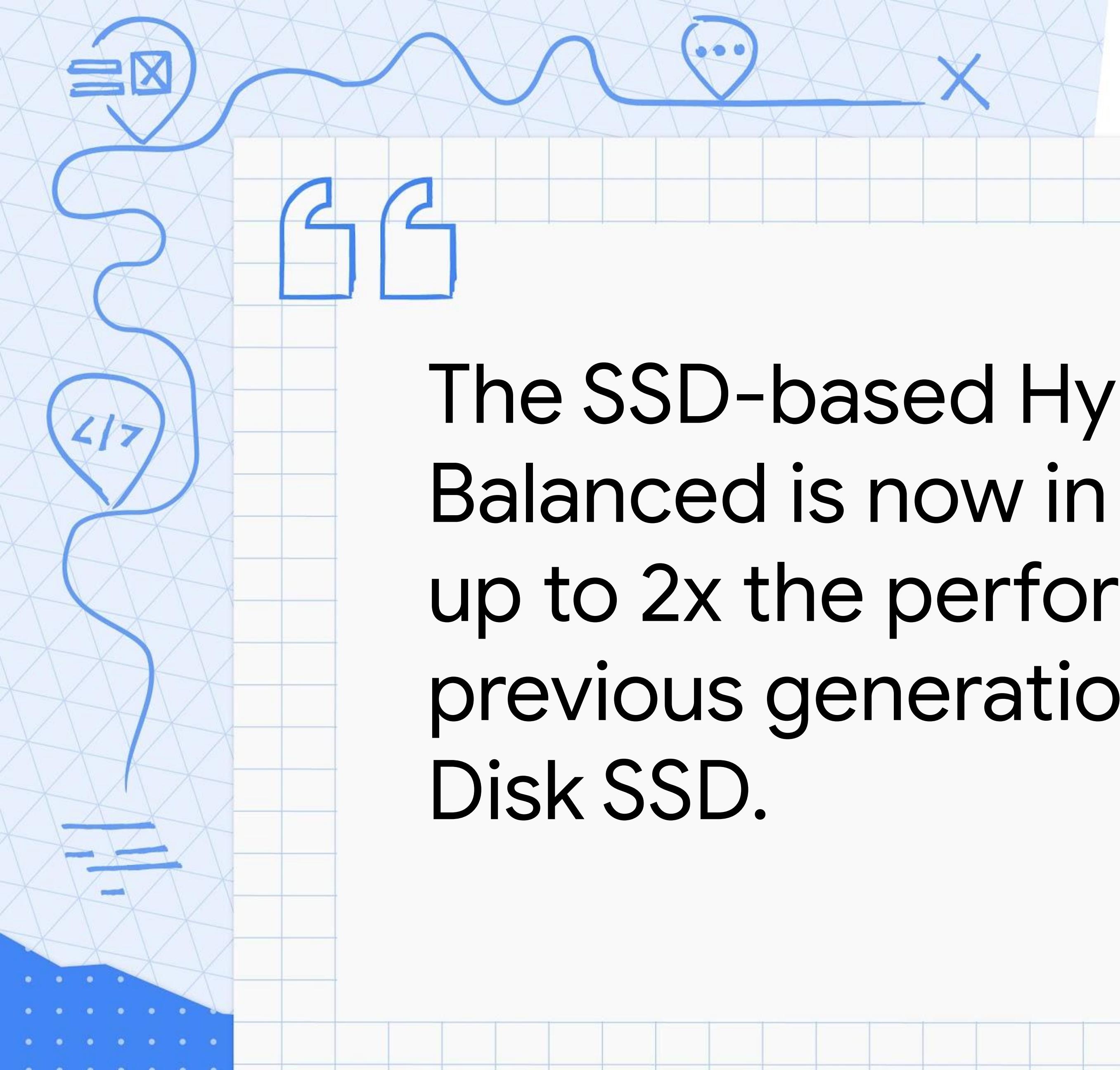
```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg & matchStatus
  })
  return filteredStudies
}
```

use

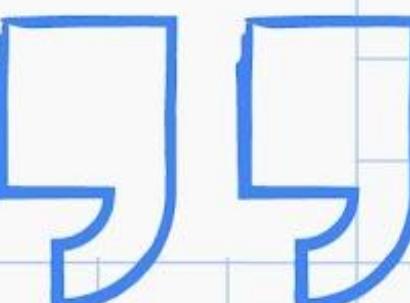


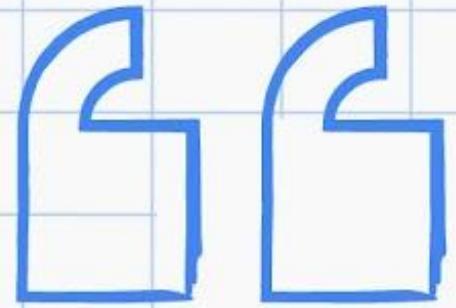
C3 VMs support for Hyperdisk
Extreme is now in preview and
supports 500K IOPS.





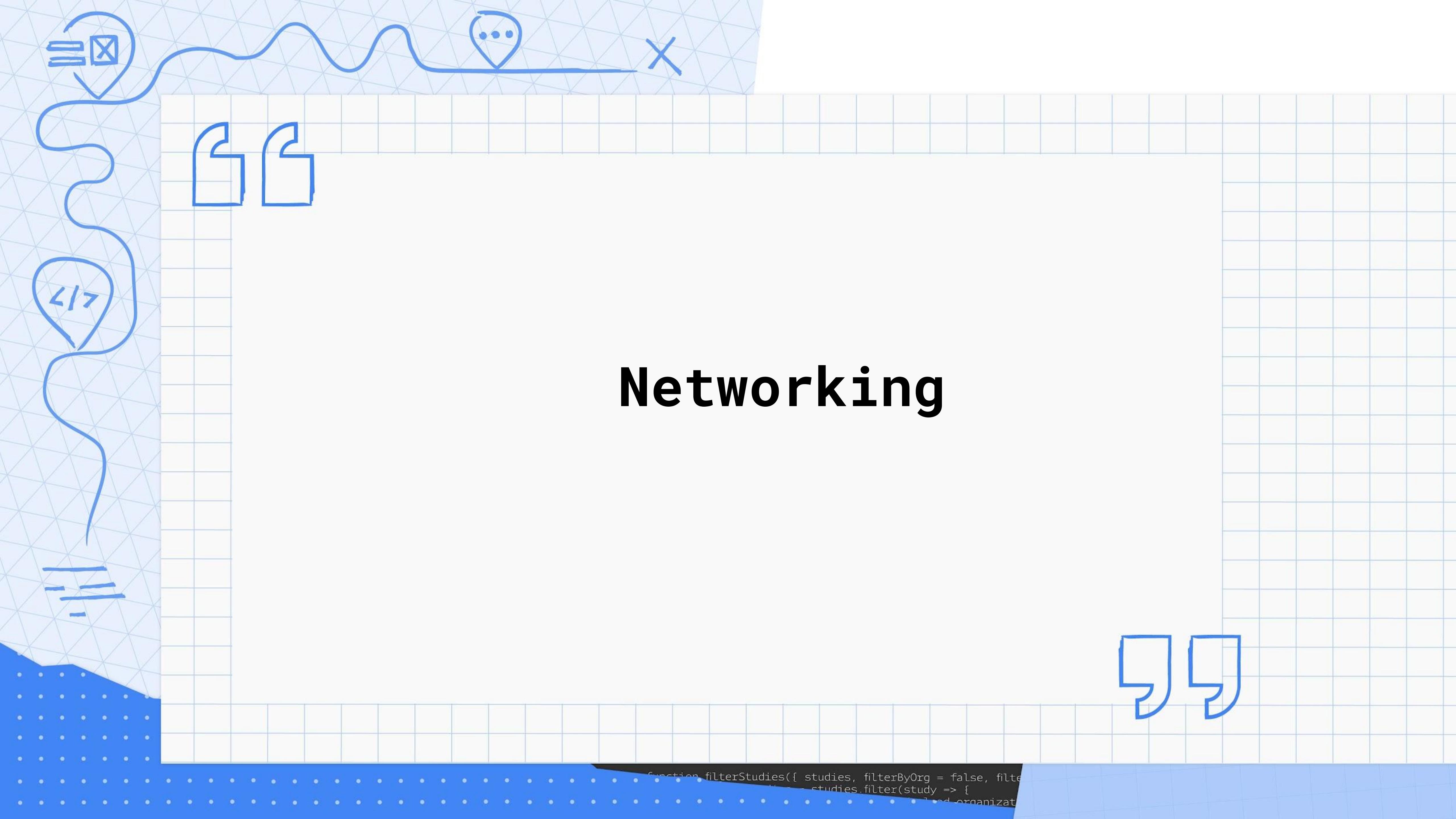
The SSD-based Hyperdisk
Balanced is now in preview, with
up to 2x the performance of
previous generation Persistent
Disk SSD.





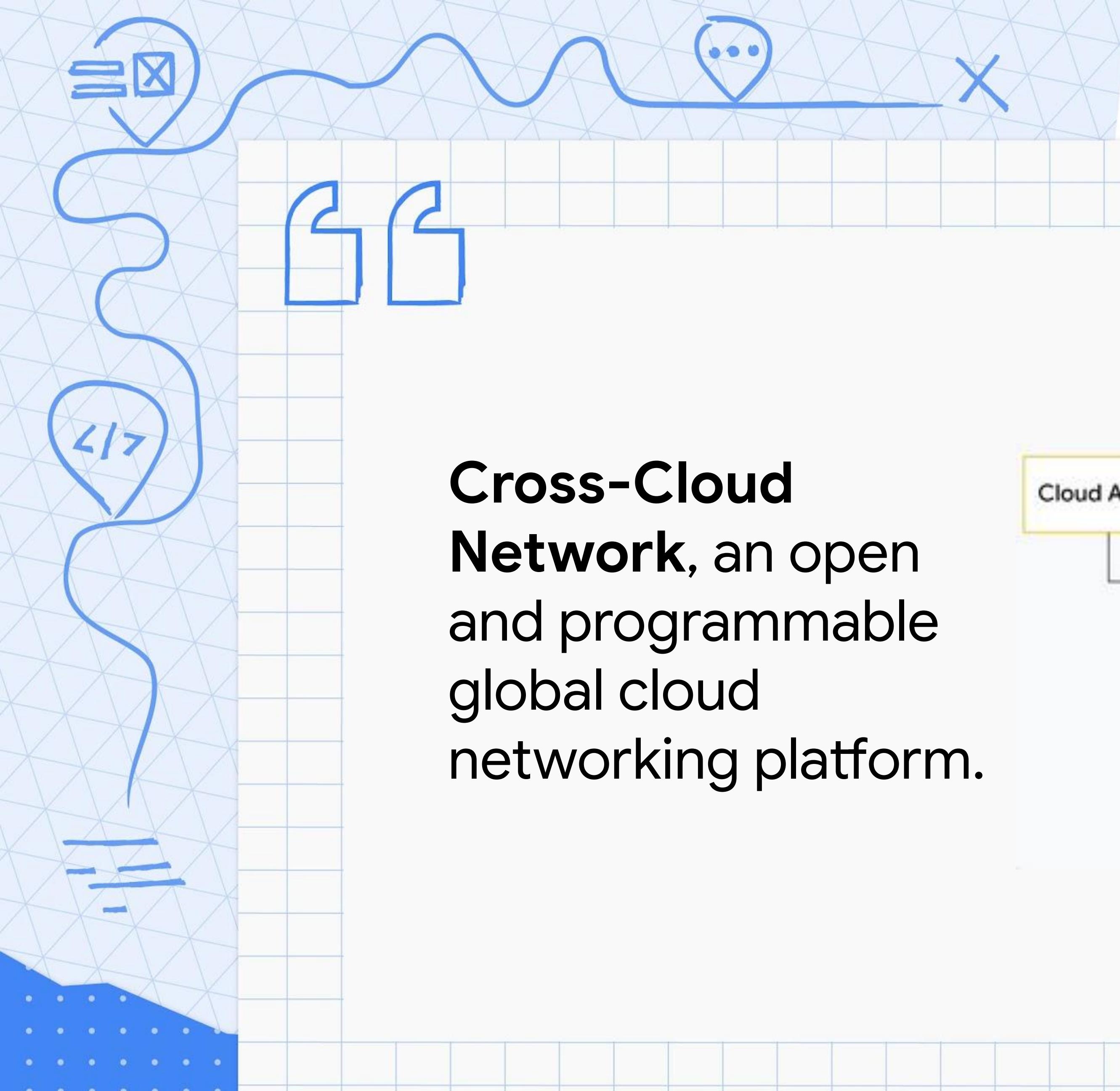
Hyperdisk Storage Pools is now in preview, allowing customers to provision capacity and performance in aggregate Pools, and then thinly provision Hyperdisk volumes from those pools.



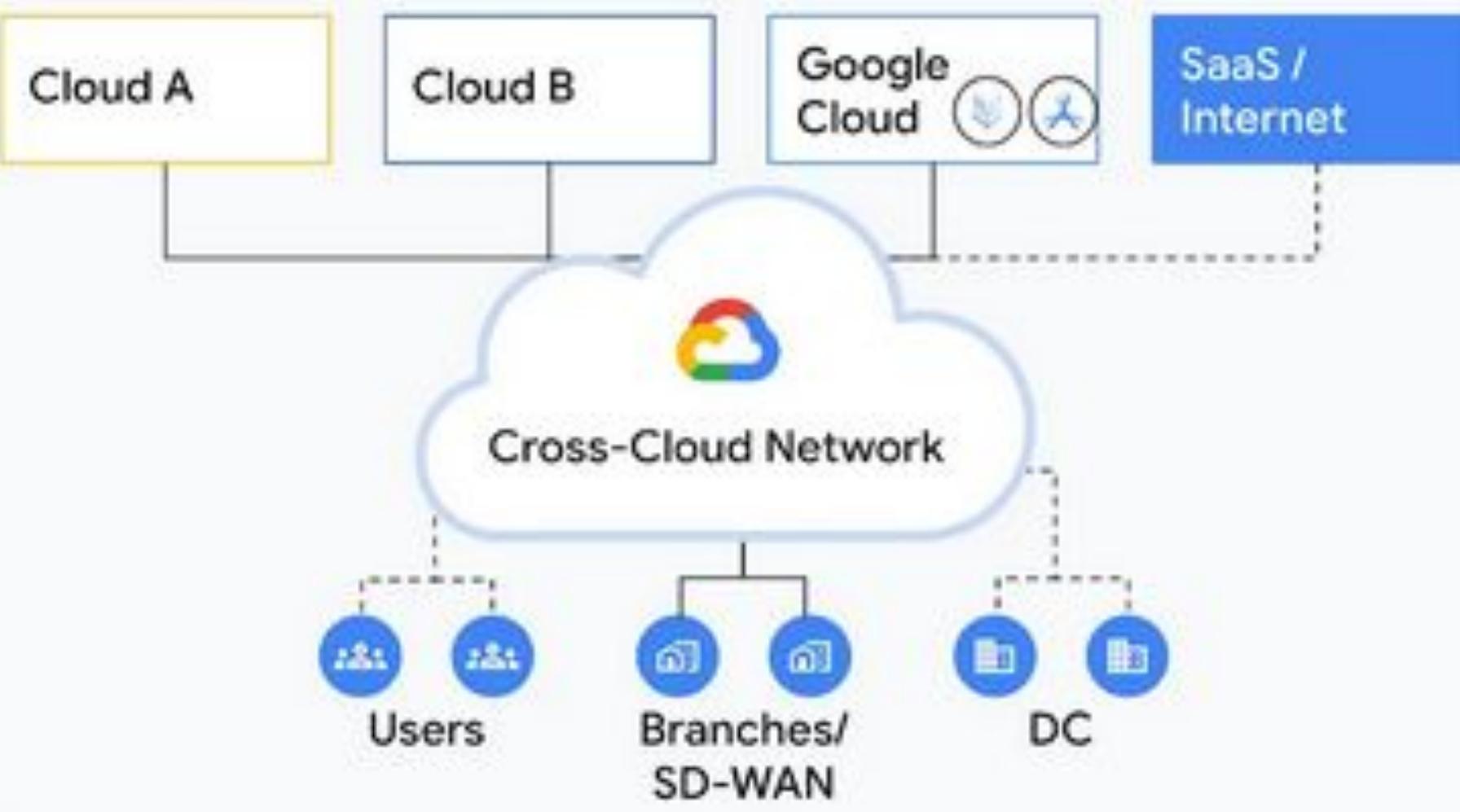


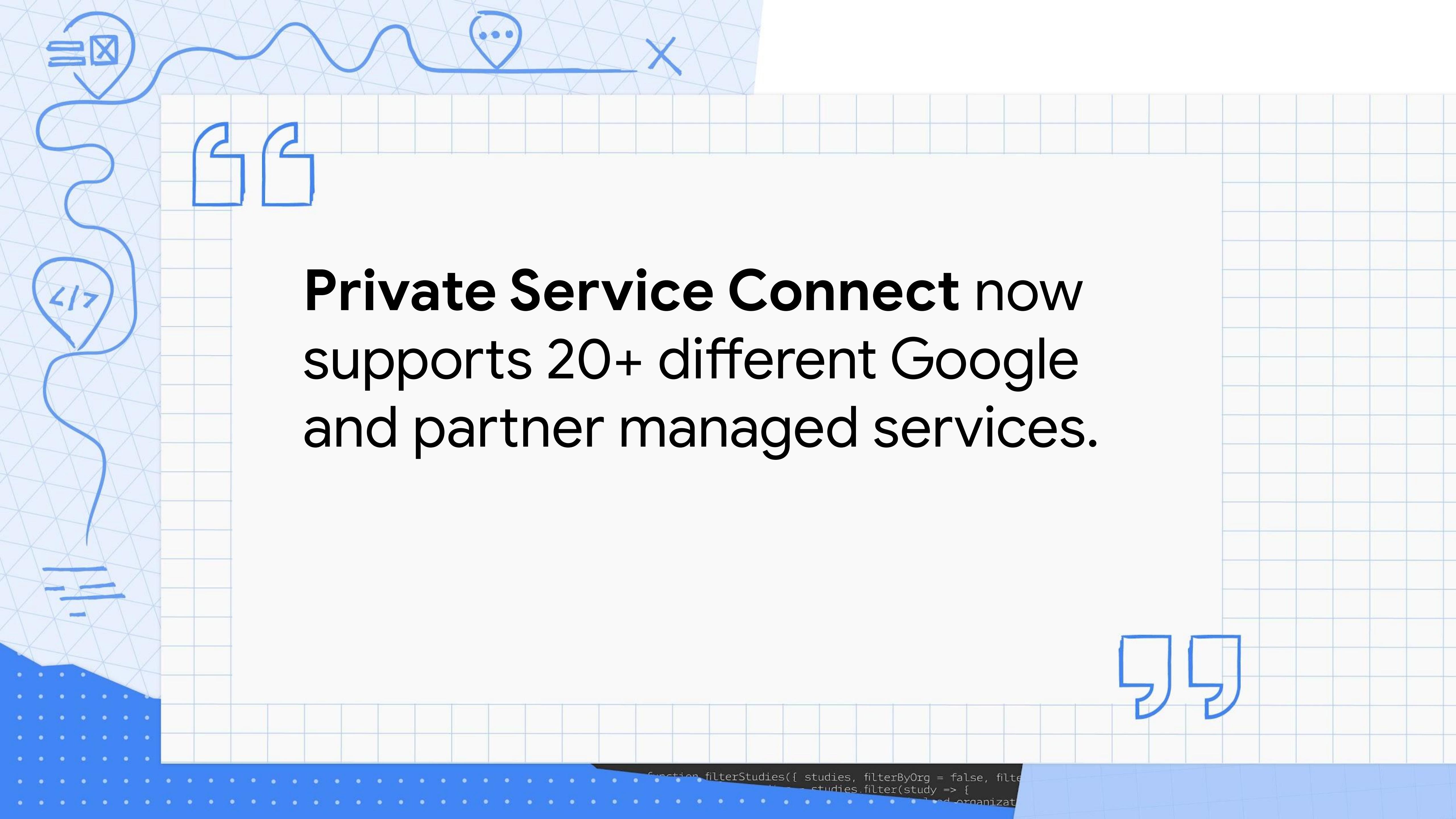
```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization === filterByOrg);
    }
    return true;
  });
}
```

Networking



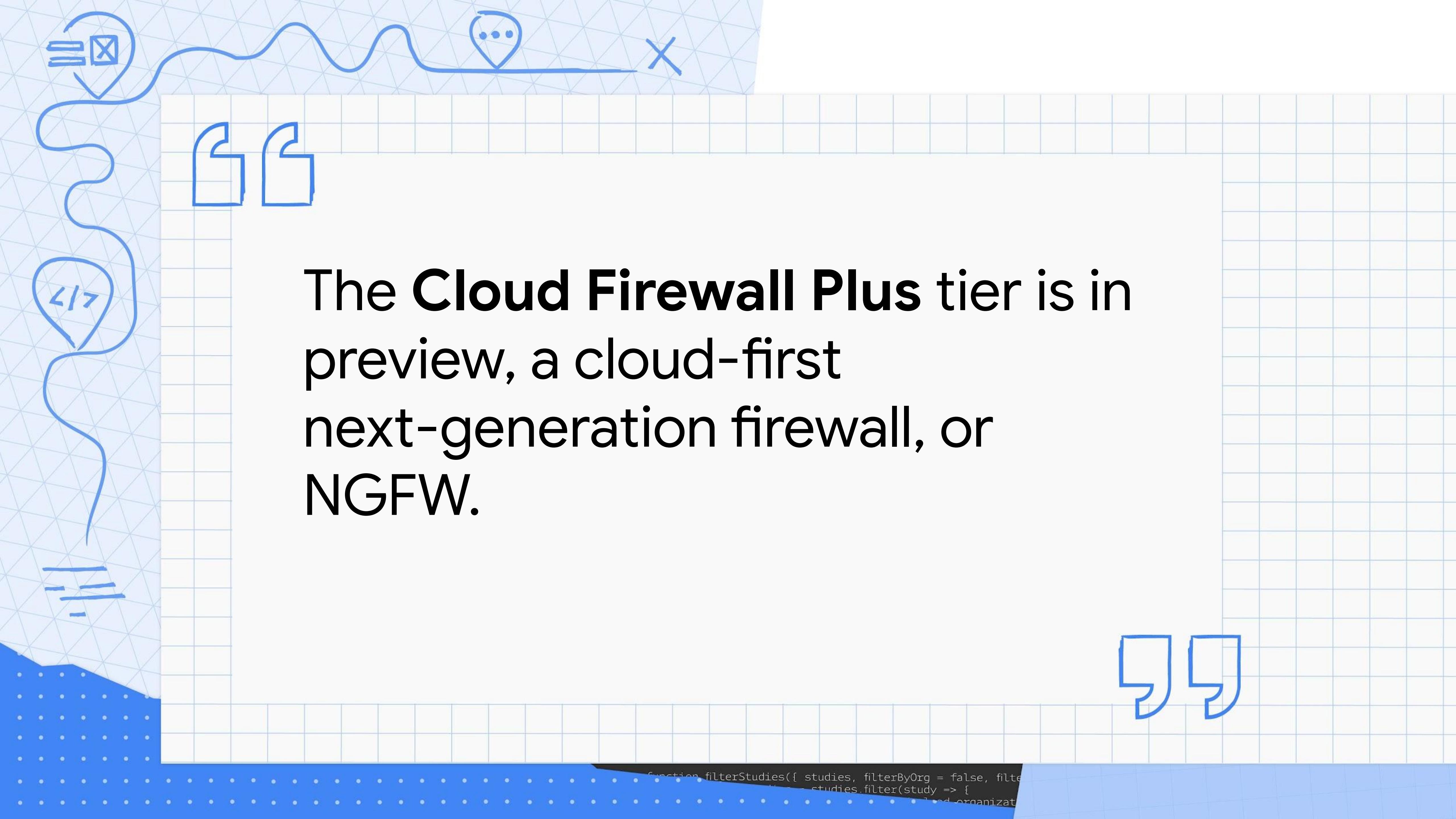
Cross-Cloud Network, an open and programmable global cloud networking platform.



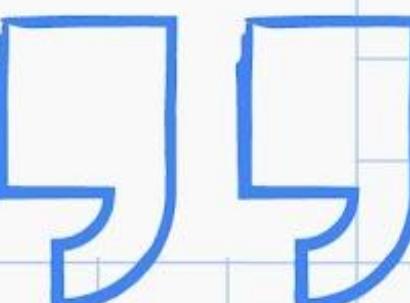


Private Service Connect now
supports 20+ different Google
and partner managed services.

```
function filterStudies({ studies, filterByOrg = false, filter }) {  
  if (!filter) return studies;  
  return studies.filter(study => {  
    const org = study[filterByOrg] ? study[filterByOrg].id : null;  
    return filter === org || filter === 'all';  
  });  
}
```



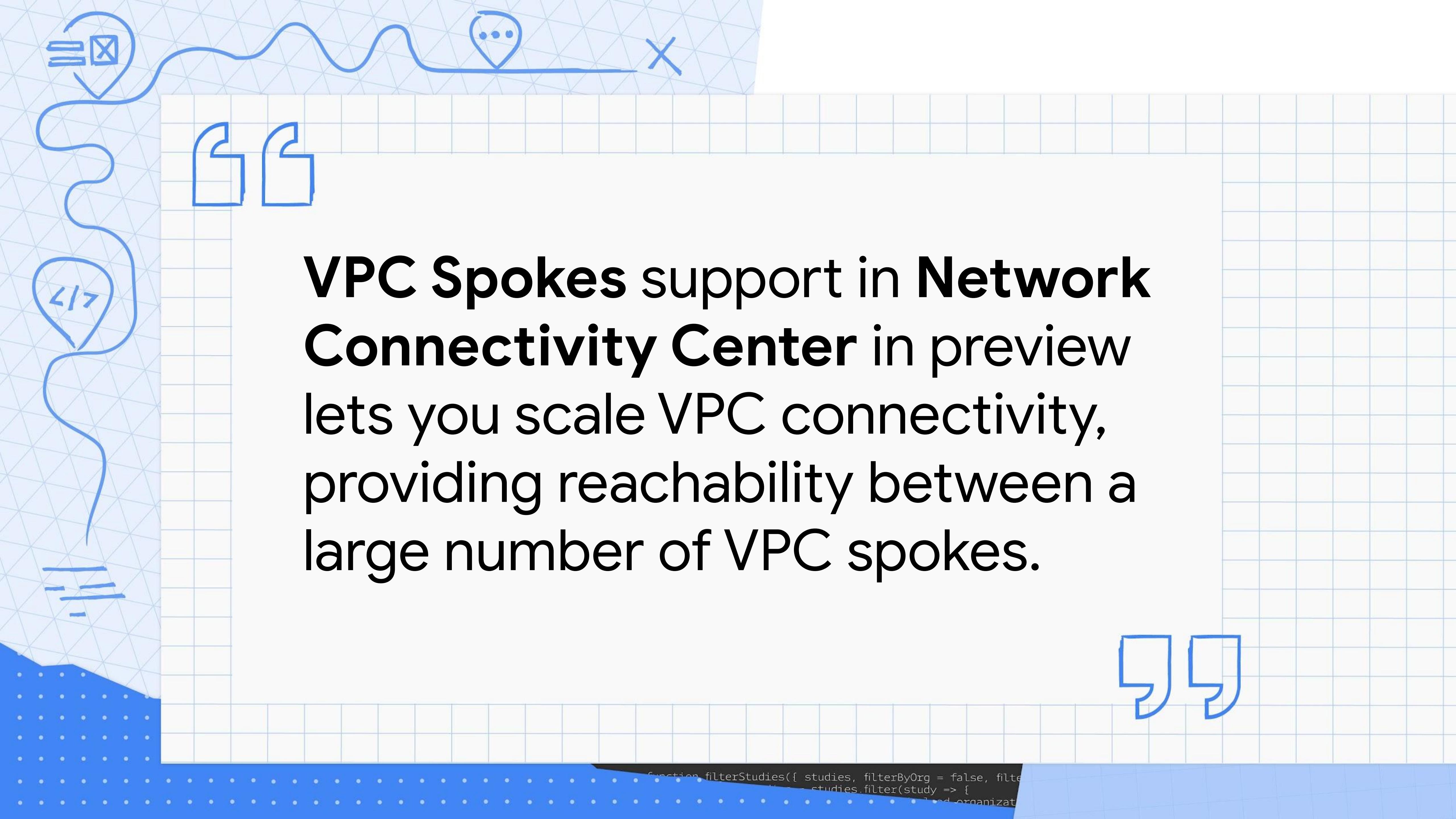
The **Cloud Firewall Plus** tier is in preview, a cloud-first next-generation firewall, or NGFW.





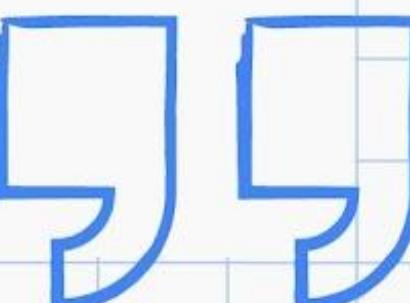
The new **Network Service Integration Manager** simplifies the setup and operation of partner NGFWs from Checkpoint, Cisco, Fortinet, and Palo Alto Networks.

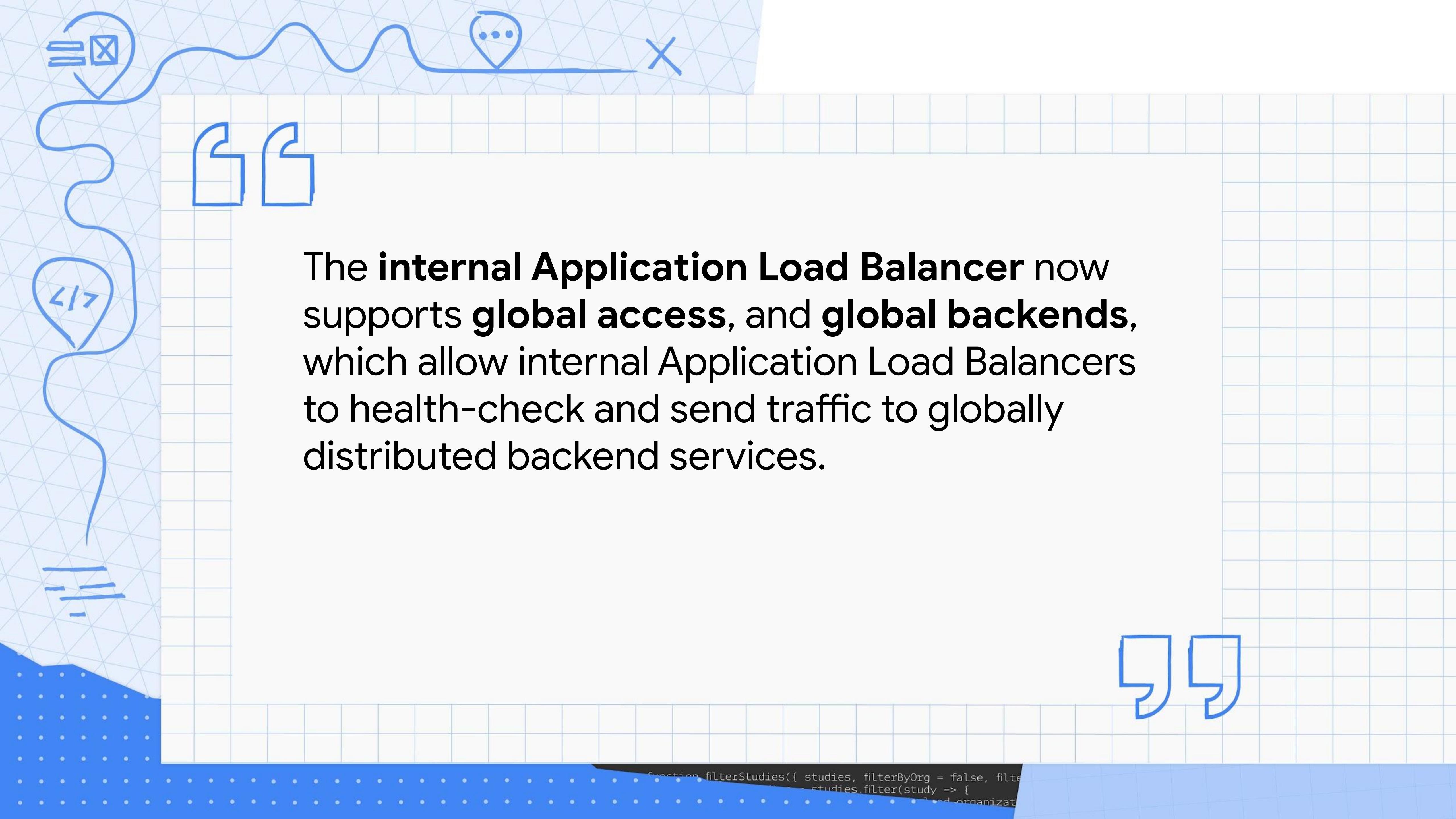




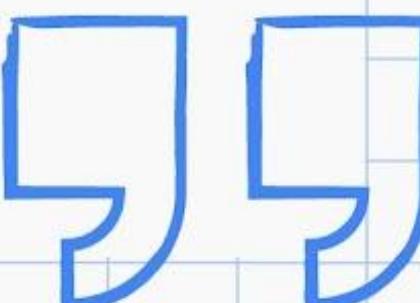
VPC Spokes support in Network Connectivity Center in preview

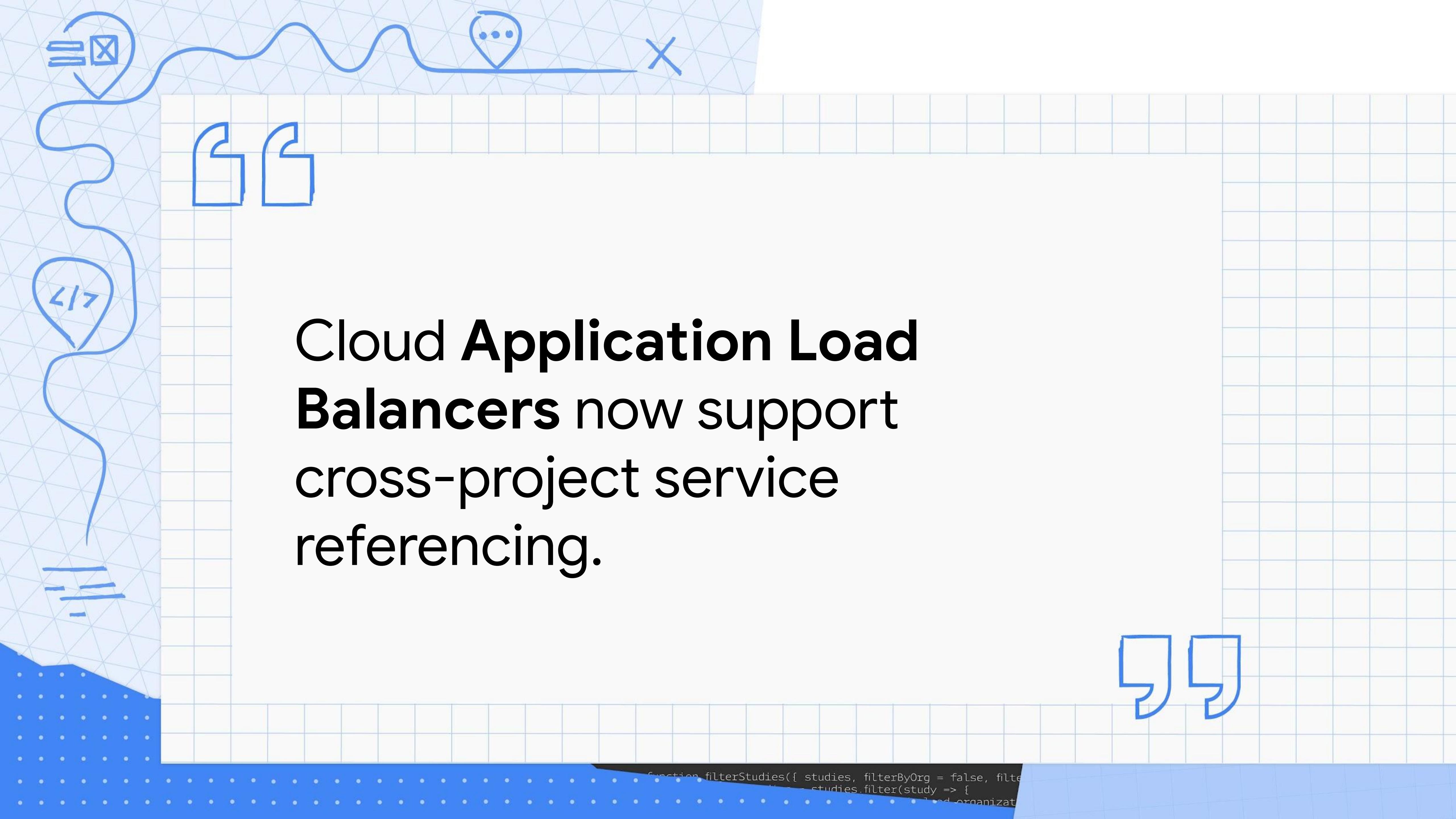
lets you scale VPC connectivity,
providing reachability between a
large number of VPC spokes.





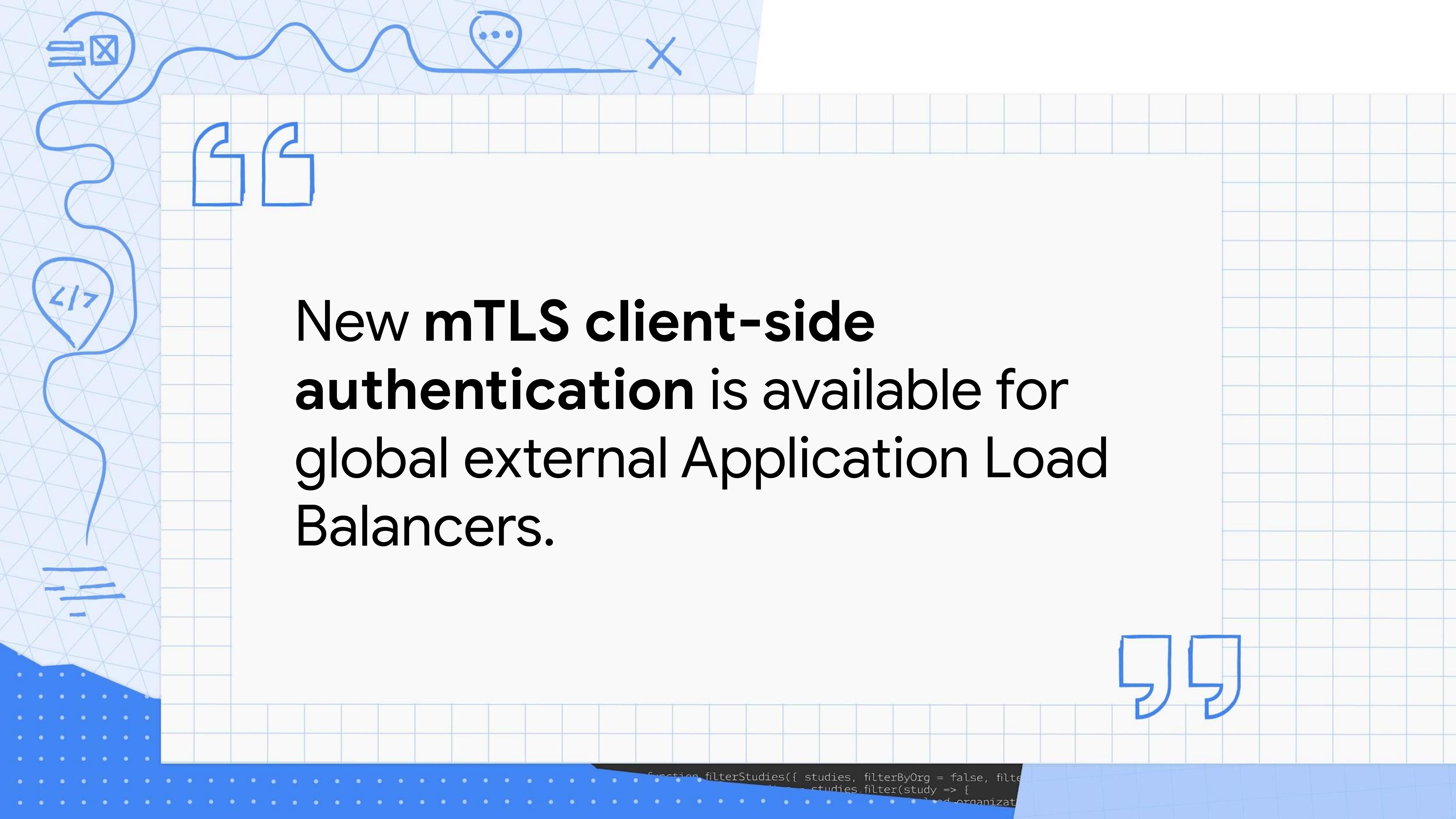
The **internal Application Load Balancer** now supports **global access**, and **global backends**, which allow internal Application Load Balancers to health-check and send traffic to globally distributed backend services.



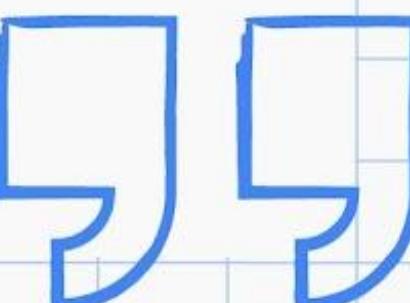


Cloud Application Load Balancers now support cross-project service referencing.





New mTLS client-side
authentication is available for
global external Application Load
Balancers.





Auto-deployment for Cloud Armor Adaptive Protection is now generally available.



```
function filterStudies({ studies, filterByOrg = false, filter }) {
    return filter ? studies.filter(study => {
        if (filterByOrg) {
            return study.organizer === filter;
        }
        return true;
    }) : studies;
}
```

Palo Alto Networks is integrating its Prisma Access natively in Google Cloud

The screenshot shows the official website for Palo Alto Networks' Prisma Access product. At the top, there's a navigation bar with links for PRISMA, Why Prisma SASE, Use Cases, Products, Blog, and Resources. A prominent blue button labeled "Get Started" is located in the top right. Below the navigation, a large banner features the text "GARTNER REPORT" and "The Only Leader in Single-Vendor SASE. Period." in white on a dark background. To the right of this text is a "Figure 1: Magic Quadrant for Single-Vendor SASE" chart. The chart is a 2x2 matrix with "ABILITY TO EXECUTE" on the vertical axis and "COMPLETENESS OF VISION" on the horizontal axis. It includes four quadrants: CHALLENGERS (top-left), LEADERS (top-right), NIQUE PLAYERS (bottom-left), and VISIONARIES (bottom-right). Several vendor names are plotted: Palo Alto Networks (LEADERS), Cato Networks, Fortinet, VMware, Juniper Networks, Cisco, and Forescout. A "Read the report →" button is located at the bottom left of the banner. The word "Gartner" is visible at the bottom center.

```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  let filteredStudies = studies.filter(study => {  
    const matchOrg = filterByOrg ? study.org === org : true;  
    const matchStatus = filterByStatus ? study.status === status : true;  
    return matchOrg & matchStatus;  
  });  
  if (filterByStatus) {  
    filteredStudies = filteredStudies.filter(study => study.status === status);  
  }  
  return filteredStudies;  
}
```



Broadcom is integrating its Secure Web Gateway natively in Google Cloud.

The screenshot shows the Broadcom website for the Edge Secure Web Gateway. At the top, there's a navigation bar with links for Support Portal, English, Search, Print, and Share Page. The main headline reads: "Protect against increasingly sophisticated threats with a secure web gateway solution". Below this is a large image of a modern building at night, with three devices (laptop, tablet, smartphone) displaying cloud security icons floating in front of it. A call-to-action button says "Read the White Paper". At the bottom, there's a "Buy via Partner" button and a "Contact Us" button. The footer contains links for Radicati Report, Why Edge SWG, Use Cases, Recognition, Built-In Integrations, Related Products, Stay Informed, Services and Support, and Resources. A small red circular icon with a white question mark is located in the bottom left corner of the page area.



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true;
    const matchStatus = filterByStatus ? study.status === filterByStatus : true;
    return matchOrg & matchStatus;
  });
  return filteredStudies;
}
```

```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true;
    const matchStatus = filterByStatus ? study.status === filterByStatus : true;
    return matchOrg & matchStatus;
  });
  return filteredStudies;
}
```

Compute

Titanium: A robust foundation for workload-optimized cloud computing

August 30, 2023

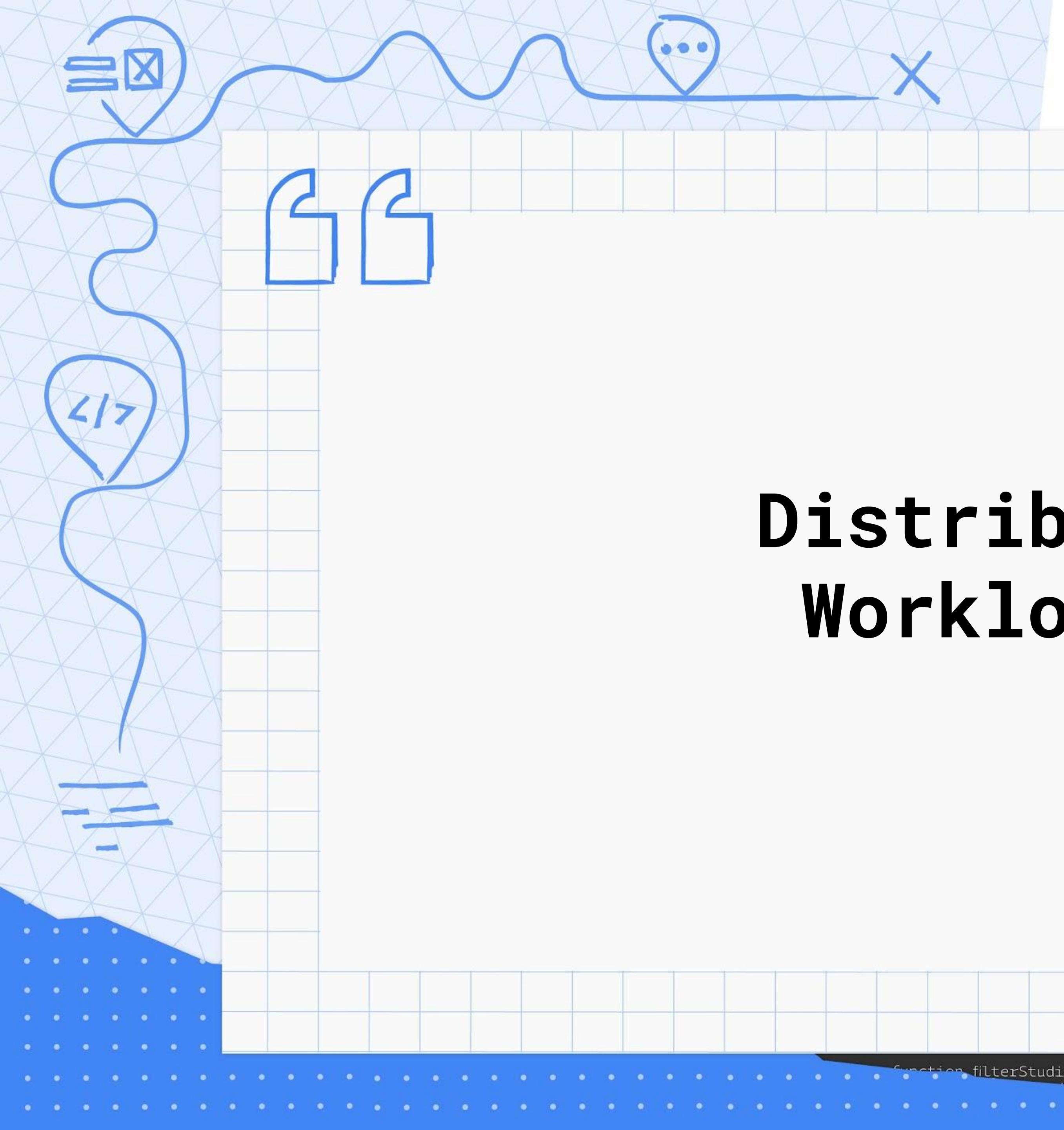


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[LinkedIn](#)
[Facebook](#)
[Email](#)

use
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
 let filteredStudies = studies.filter(study => {
 const matchOrg = filterByOrg ? study.org === filterByOrg : true
 const matchStatus = filterByStatus ? study.status === filterByStatus : true
 return matchOrg & matchStatus
 })
 return filteredStudies
}



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  let filteredStudies = studies.filter(study => {  
    const matchOrg = filterByOrg ? study.org === filterByOrg : true  
    const matchStatus = filterByStatus ? study.status === filterByStatus : true  
    return matchOrg & matchStatus  
  })  
  return filteredStudies  
}
```



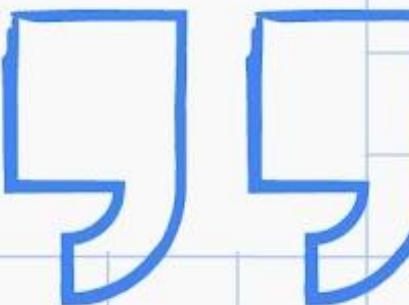
```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category.id === filterByCategory)
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization.id === filterByOrg)
    }
    return true
  })
}
```

Distributed Workloads



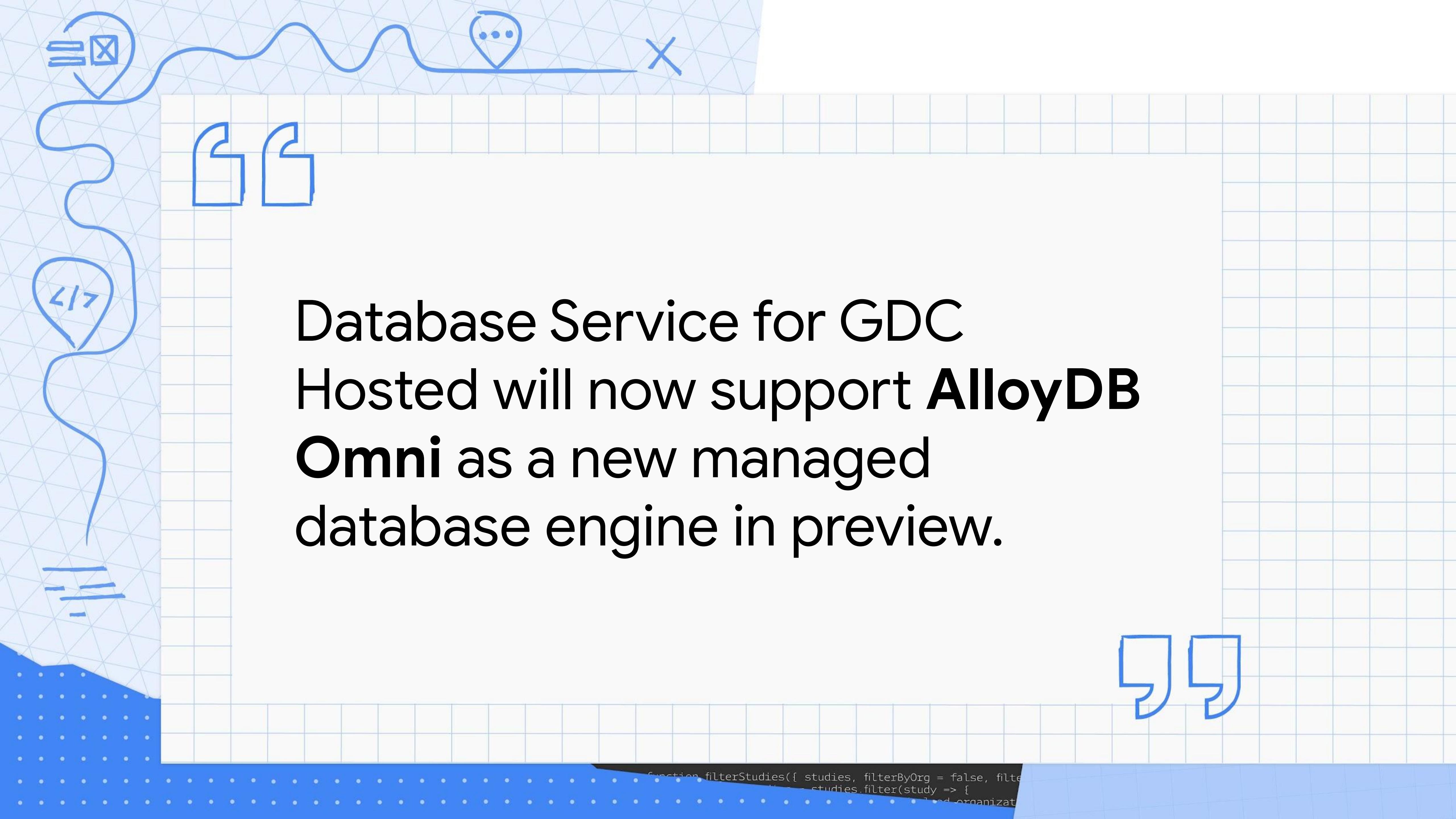


GDC Hosted now offers
pre-trained models for speech,
translation, optical character
recognition (OCR), and
Workbench.

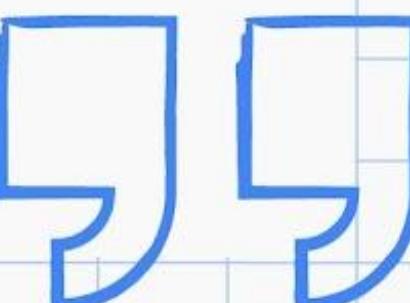




Vertex Prediction and Vertex Pipelines are coming to GDC Hosted in preview in Q2 2024,

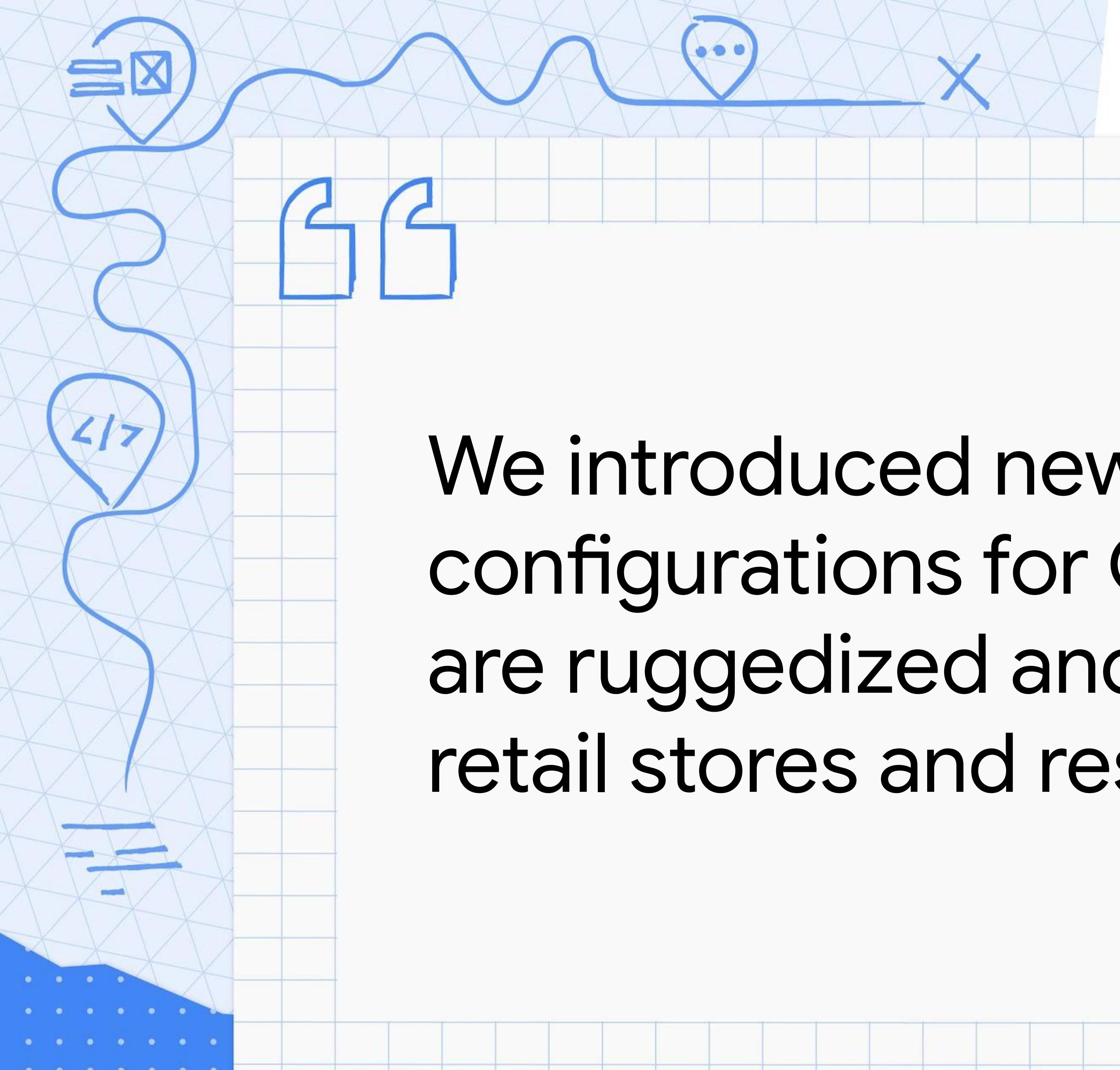


Database Service for GDC
Hosted will now support **AlloyDB**
Omni as a new managed
database engine in preview.

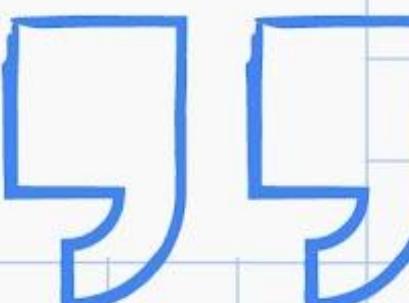


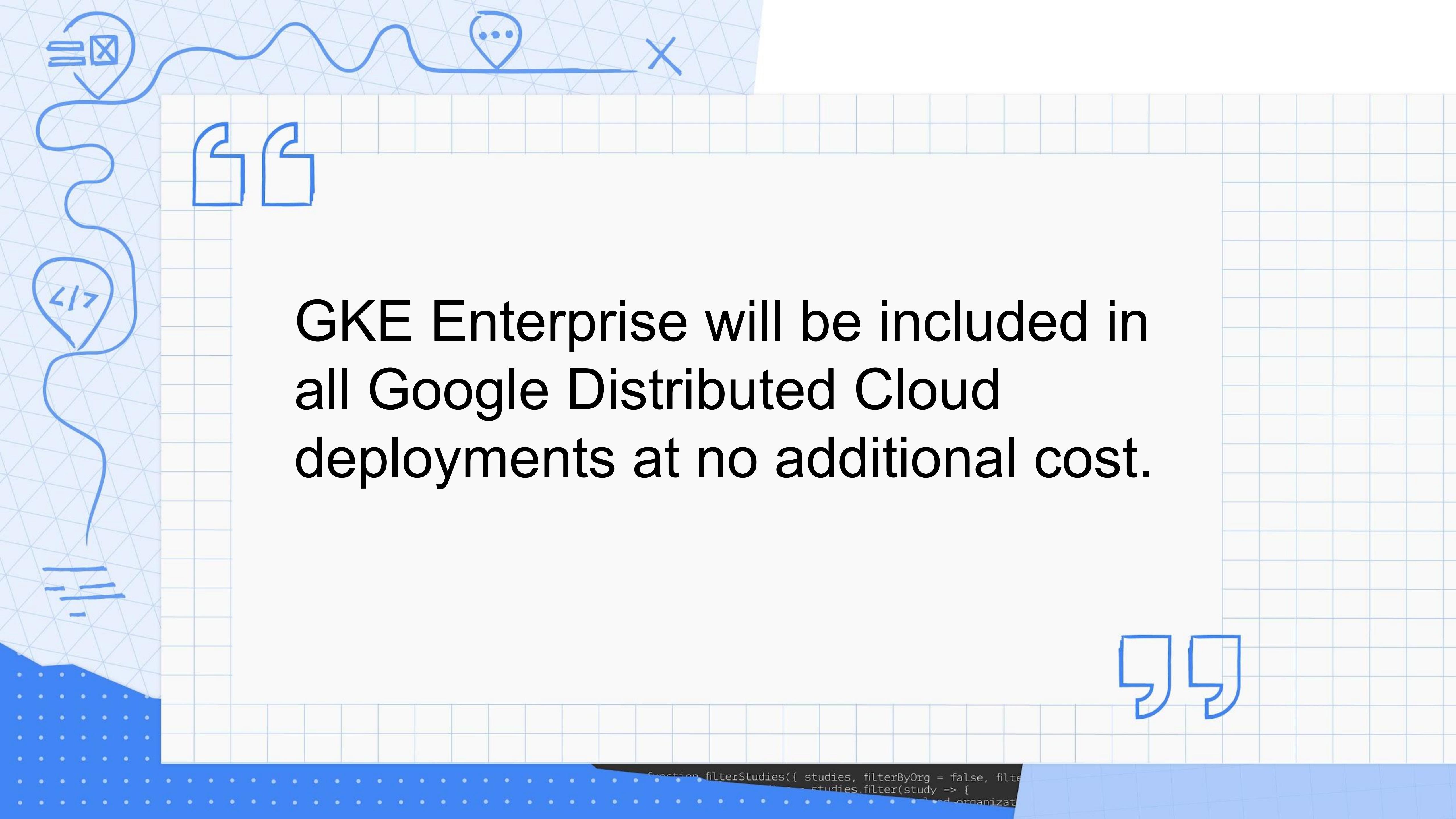


GDC Edge will support Dataproc
in preview in Q4 2023.



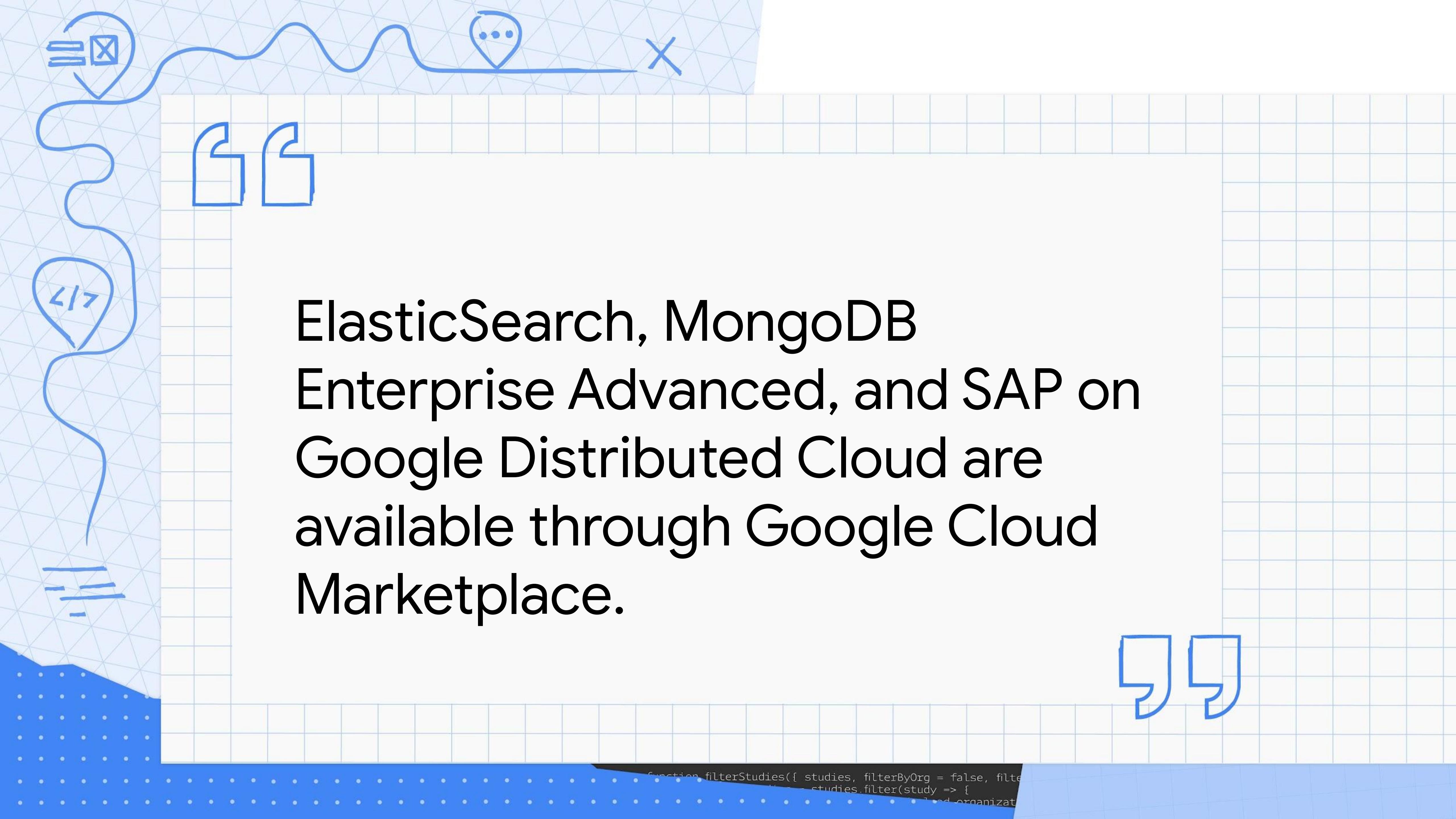
We introduced new hardware configurations for GDC Edge that are ruggedized and optimized for retail stores and restaurants.





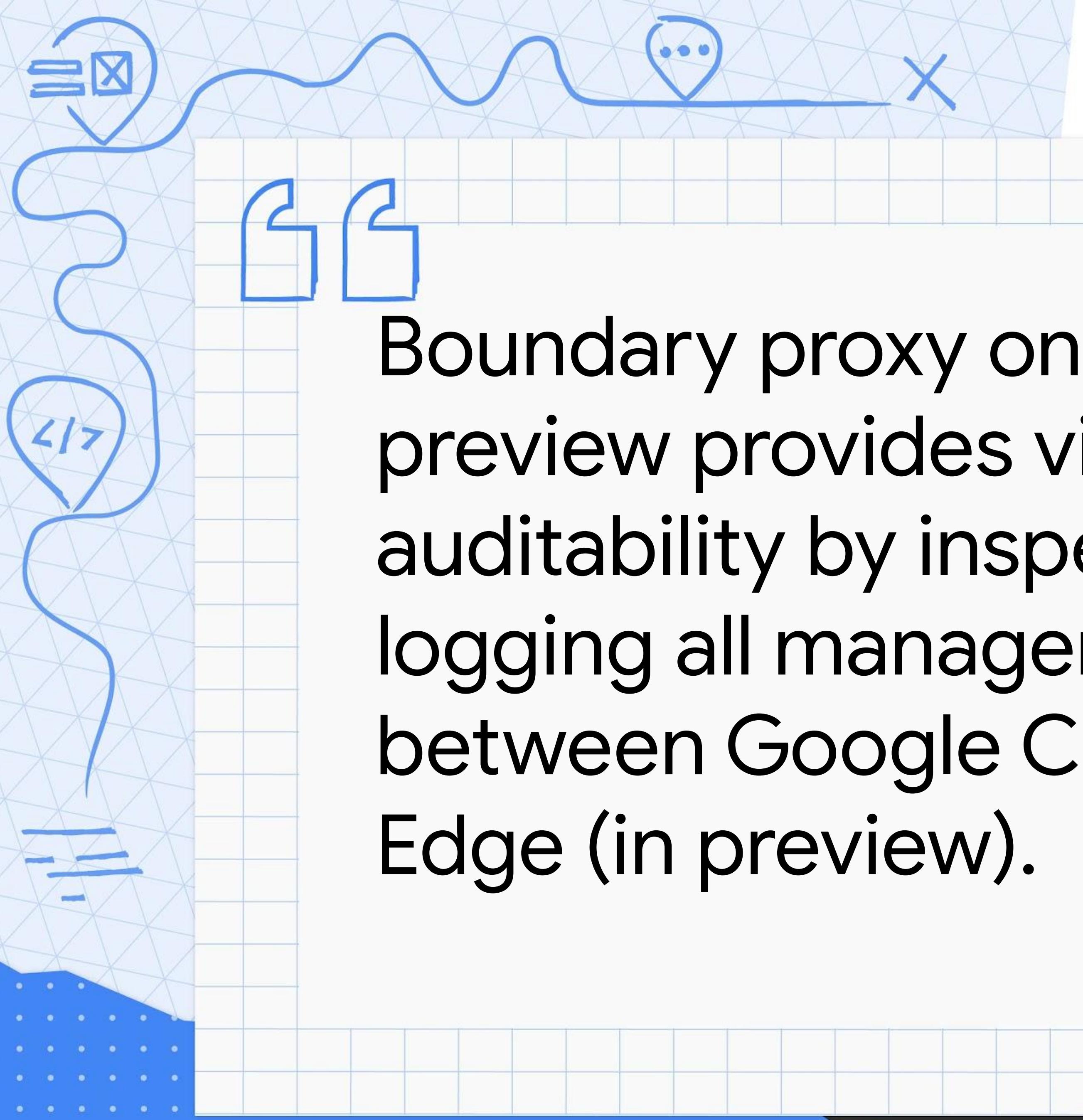
GKE Enterprise will be included in
all Google Distributed Cloud
deployments at no additional cost.





ElasticSearch, MongoDB
Enterprise Advanced, and SAP on
Google Distributed Cloud are
available through Google Cloud
Marketplace.





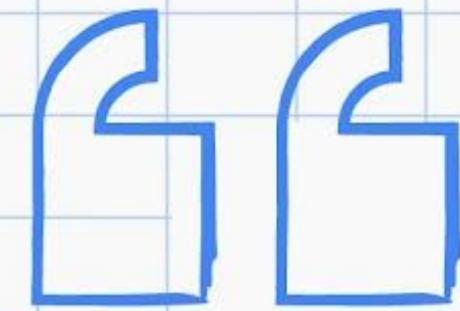
Boundary proxy on GDC Edge in preview provides visibility and auditability by inspecting and logging all management traffic between Google Cloud and GDC Edge (in preview).



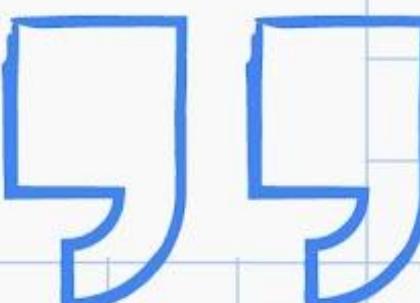


New Bastion host on GDC Edge, in preview, enables you to easily view and control Google Cloud's access to GDC Edge for troubleshooting purposes, supporting you with operational sovereignty and compliance requirements.





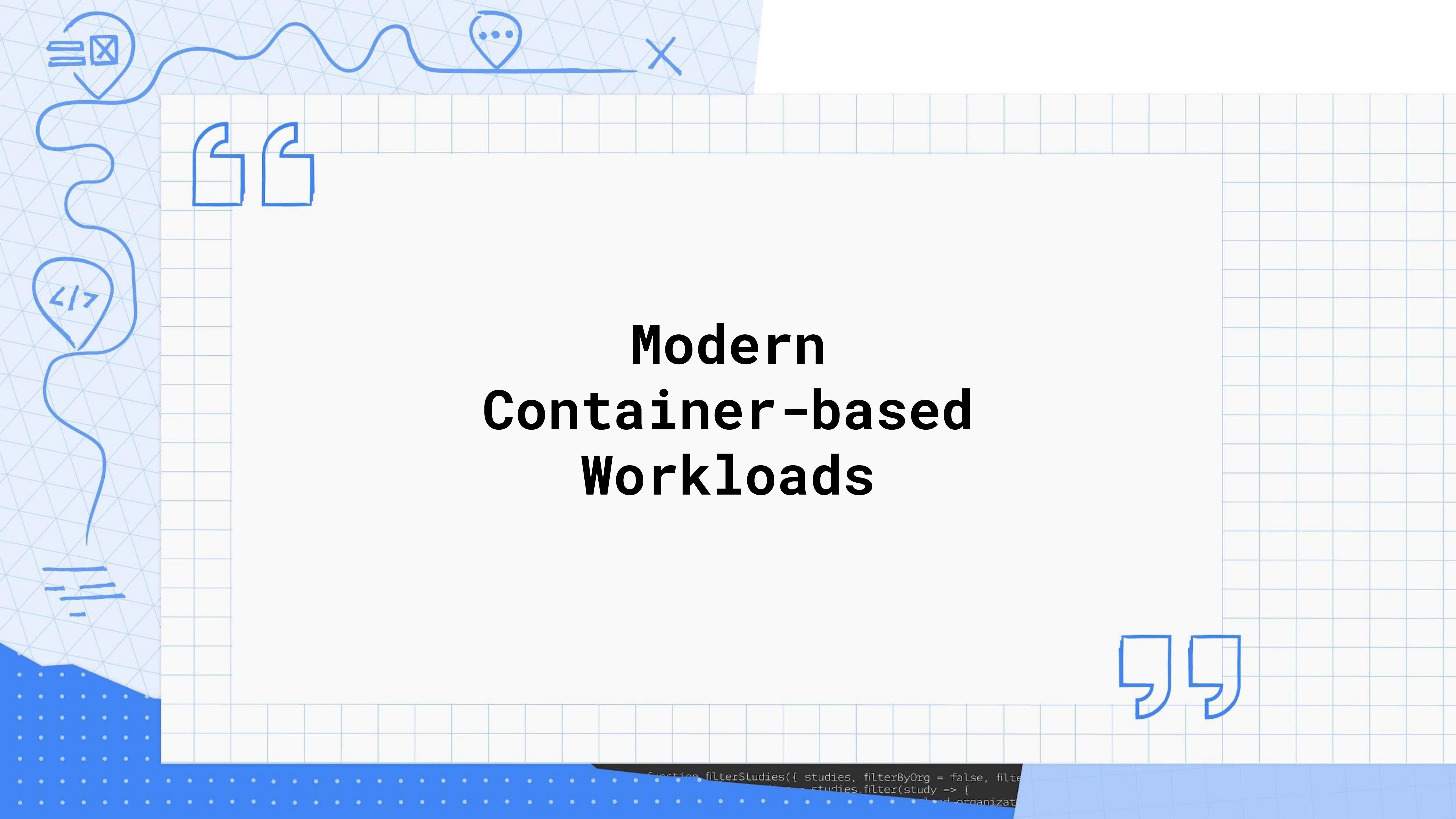
Now you can automatically create
and provide the resource mapping
for all your managed keys with key
tracking on GDC Hosted, in
preview.





With new survivability mode on
GDC Edge, you can continue
on-prem operations on GDC Edge
even if you lose connectivity to
Google Cloud, now in preview.





Modern Container-based Workloads

```
function filterStudies({ studies, filterByOrg = false, filterFn }) {  
  if (!filterFn) return studies;  
  return studies.filter(study => {  
    const orgs = study.organizations || [];  
    if (filterByOrg) {  
      return orgs.some(org => org.id === filterFn);  
    } else {  
      return orgs.length === filterFn.length  
        && orgs.every(org => filterFn.includes(org.id));  
    }  
  });  
}
```

Compute

Cloud TPU support in GKE under the hood

September 1, 2023



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  const filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg && matchStatus
  })
  return filteredStudies
}
```

```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg && matchStatus
  })
  return filteredStudies
}
```



Duet AI in GKE (preview) provides generative AI assistance specifically trained on GKE documentation to help platform teams cut down on time it takes to learn and operate Kubernetes.





```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category.id === filterByCategory)
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization.id === filterByOrg)
    }
    return true
  })
}
```

Developer Experience



Application Development

Shifting down: a new way to cloud for developers

August 30, 2023



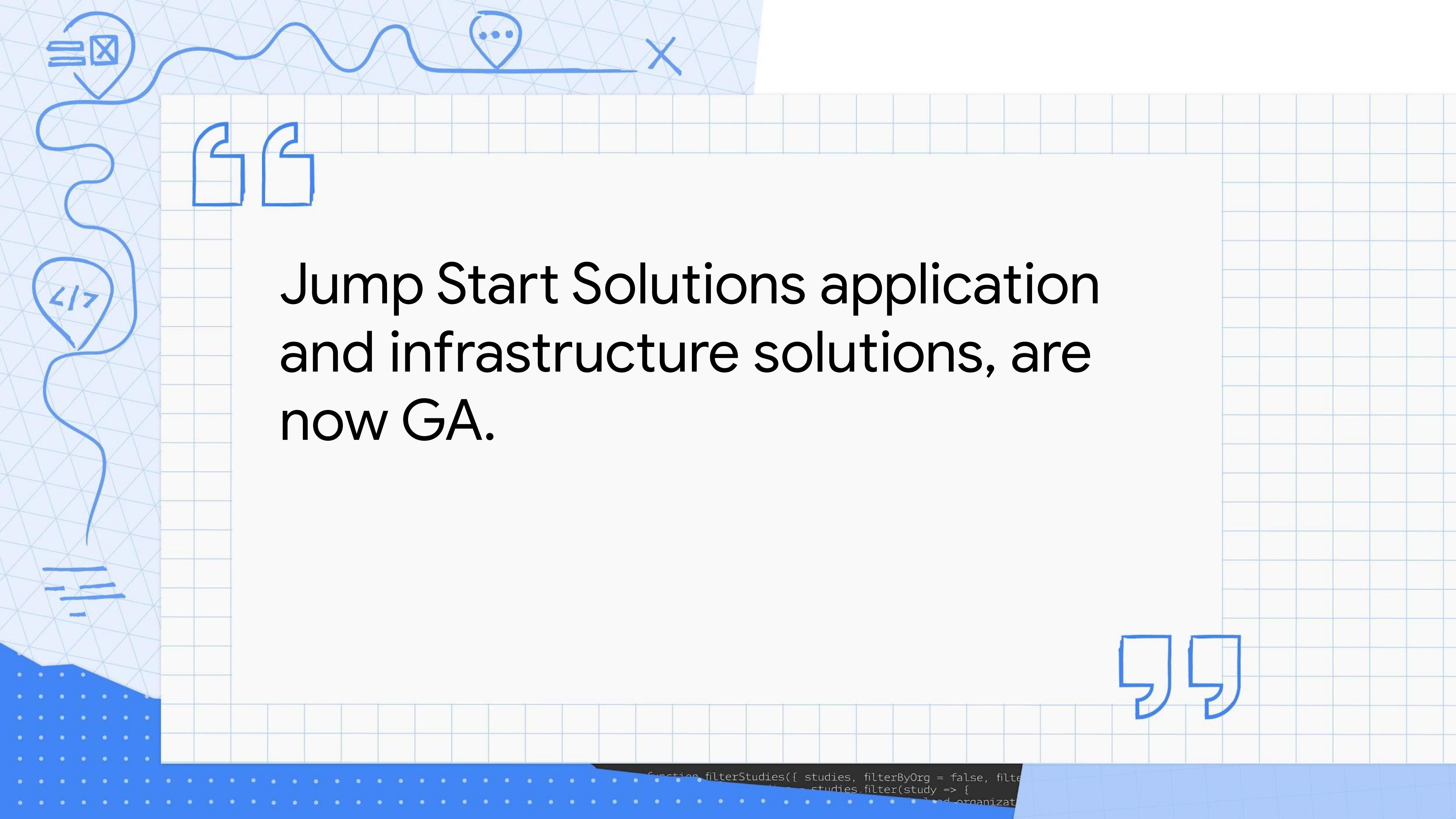
[Twitter](#)
[LinkedIn](#)
[Facebook](#)
[Email](#)

use

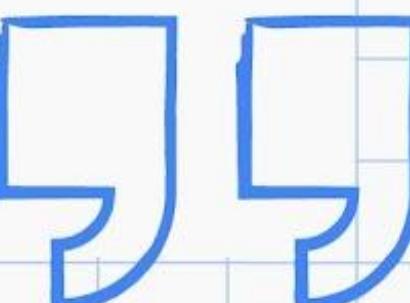


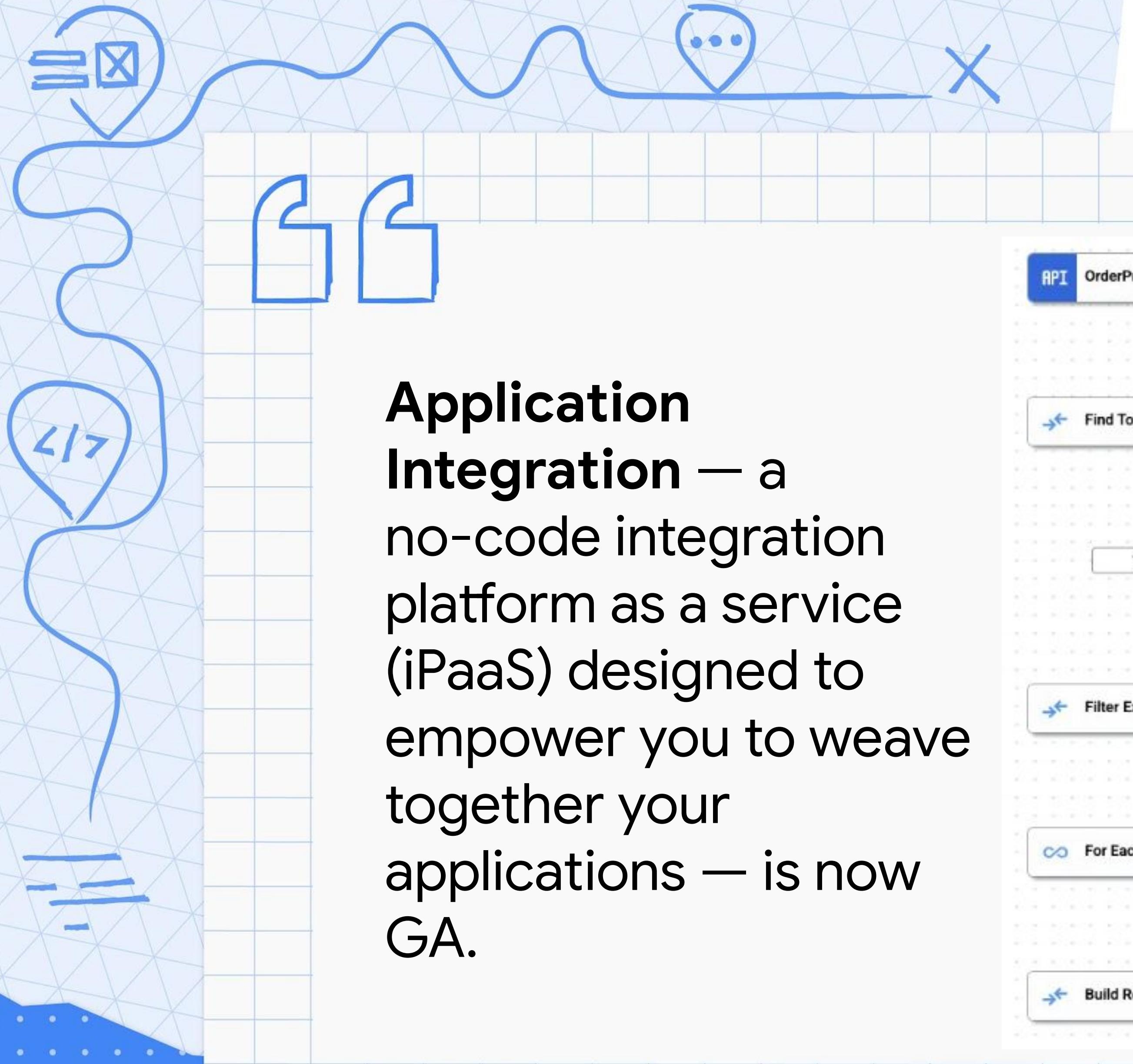
```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  const matchOrg = filterByOrg ? true : false
  const matchStatus = filterByStatus ? true : false
  return studies.filter(study => {
    if (matchOrg && matchStatus) {
      return true
    }
    return false
  })
}
```

function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
 let filteredStudies = studies.filter(study => {
 const matchOrg = filterByOrg ? true : false
 const matchStatus = filterByStatus ? true : false
 if (matchOrg && matchStatus) {
 return true
 }
 return false
 })
}

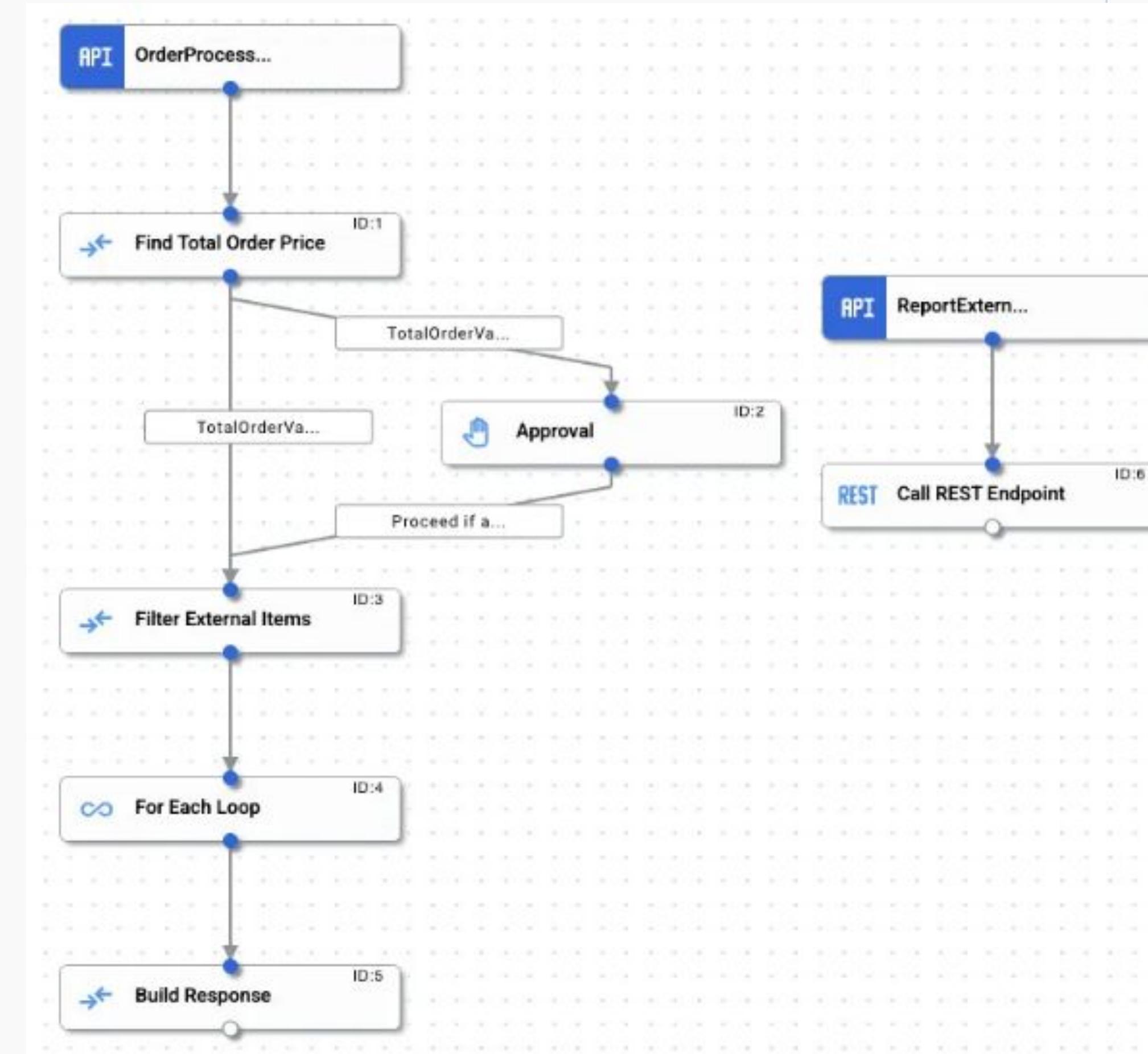


Jump Start Solutions application
and infrastructure solutions, are
now GA.



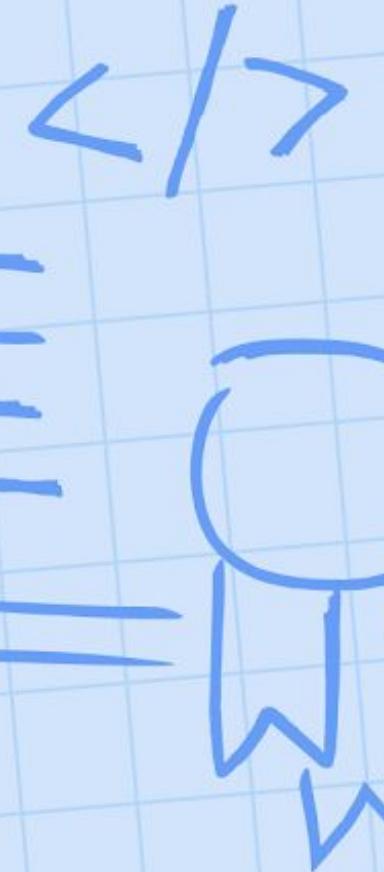


Application Integration — a no-code integration platform as a service (iPaaS) designed to empower you to weave together your applications — is now GA.



```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    const studyOrg = study.organizations[0];
    const studyCategory = study.categories[0];
```

We partnered with GitLab to offer a secure DevOps solution with integrated source management, artifact management, CI/CD, and enhanced security features.



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg & matchStatus
  })
  return filteredStudies
}
```

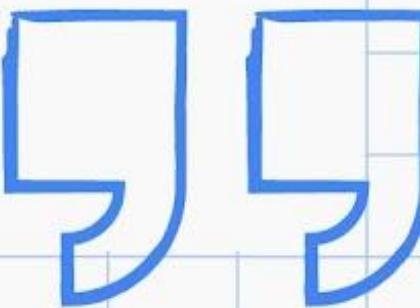
```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg & matchStatus
  })
  return filteredStudies
}
```



Duet AI is available console-wide, including in GKE, Cloud Run, and Cloud operations suite. It will also be available in Apigee API Management and Application Integration in preview for trusted testers here.



Migration and Management



```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization === filterByOrg);
    }
    return true;
  });
}
```

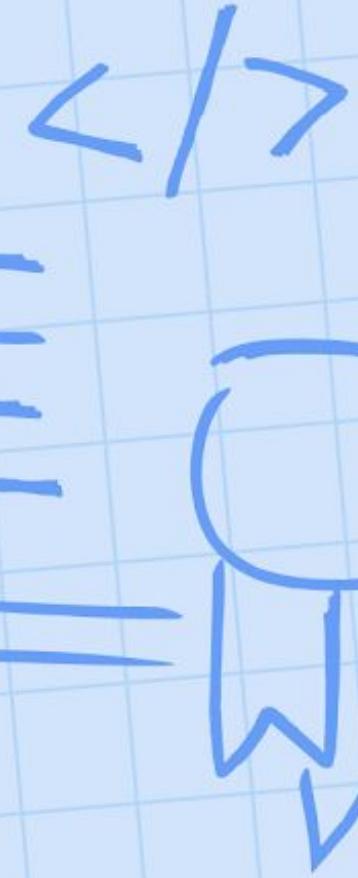
Infrastructure Modernization

Migration on your mind? Here's the biggest migration news from Next '23

September 1, 2023



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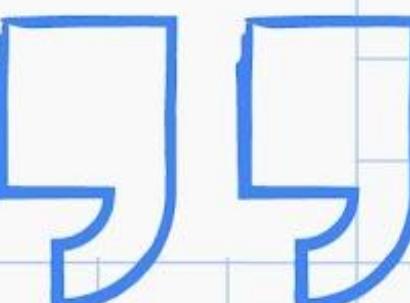


```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg && matchStatus
  })
  return filteredStudies
}
```

```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === filterByOrg : true
    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg && matchStatus
  })
  return filteredStudies
}
```



Migration Center, a unified migration service within Google Cloud console, is now GA, and includes the new SAP Cost Estimator.





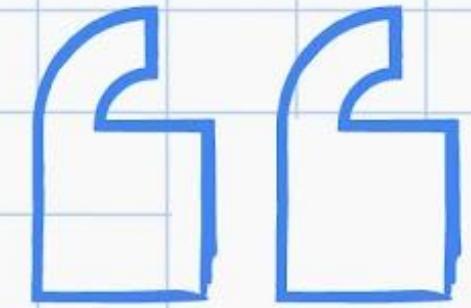
Google Cloud VMware Engine is now available in 18 regions, most recently in Turin, Italy (europe-wst12), Santiago (southamerica-west1), and Delhi (asia-south2).





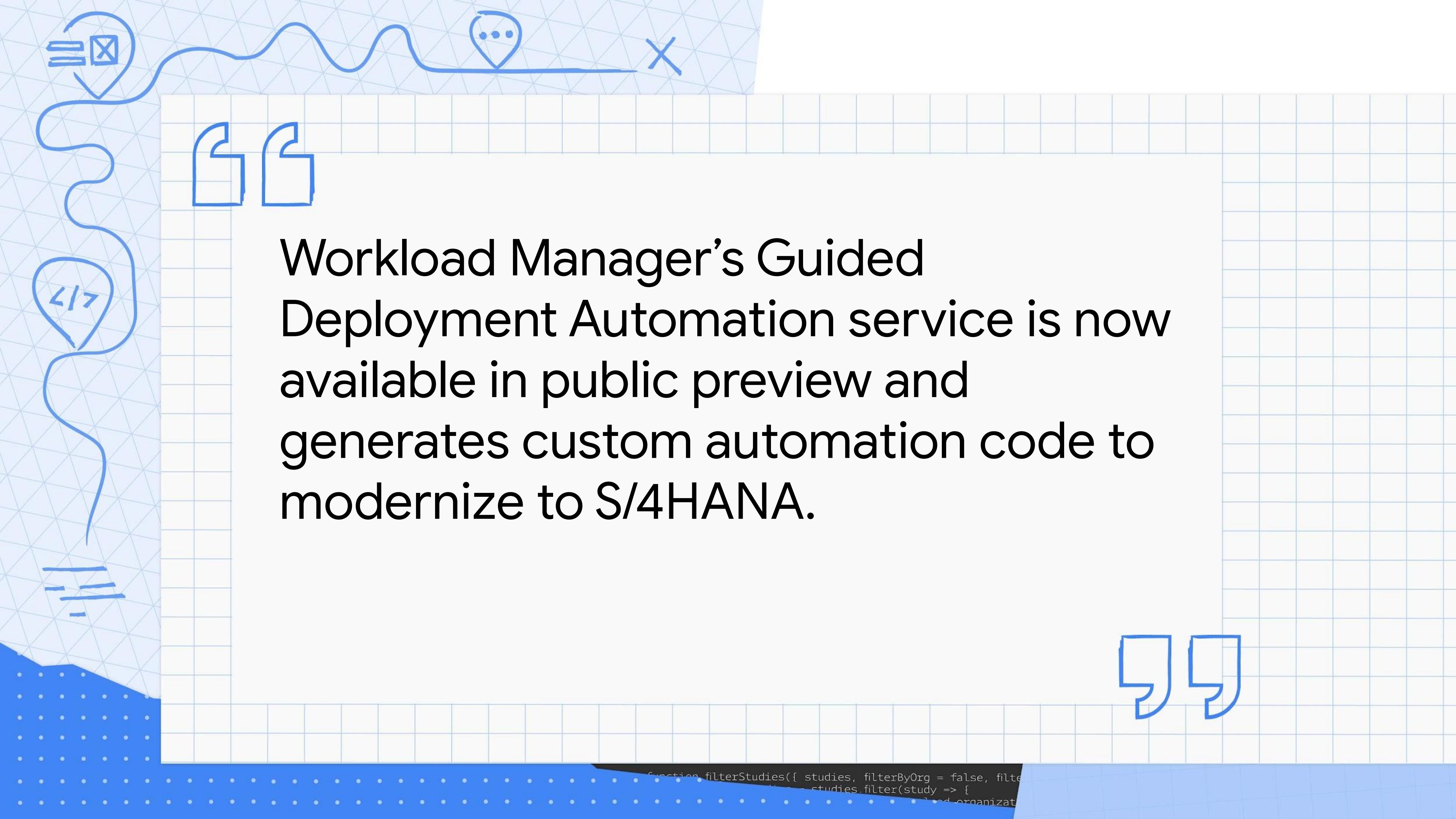
The new flexible ve2 node platform
powered by 3rd Generation Intel®
Xeon® Scalable Processors (formerly
named Ice Lake) and next-generation
VMware Engine networking are now
available for Google Cloud VMware
Engine.





Storage Transfer Service now offers support for transferring data from on-premises Hadoop Distributed File Systems (HDFS) sources to Cloud Storage, currently available to trusted testers.





Workload Manager's Guided Deployment Automation service is now available in public preview and generates custom automation code to modernize to S/4HANA.





```
function filterStudies({ studies, filterByOrg = false, filterByCategory = false }) {
  return studies.filter(study => {
    if (filterByCategory) {
      return study.categories.some(category => category === filterByCategory);
    }
    if (filterByOrg) {
      return study.organizations.some(organization => organization === filterByOrg);
    }
    return true;
  });
}
```

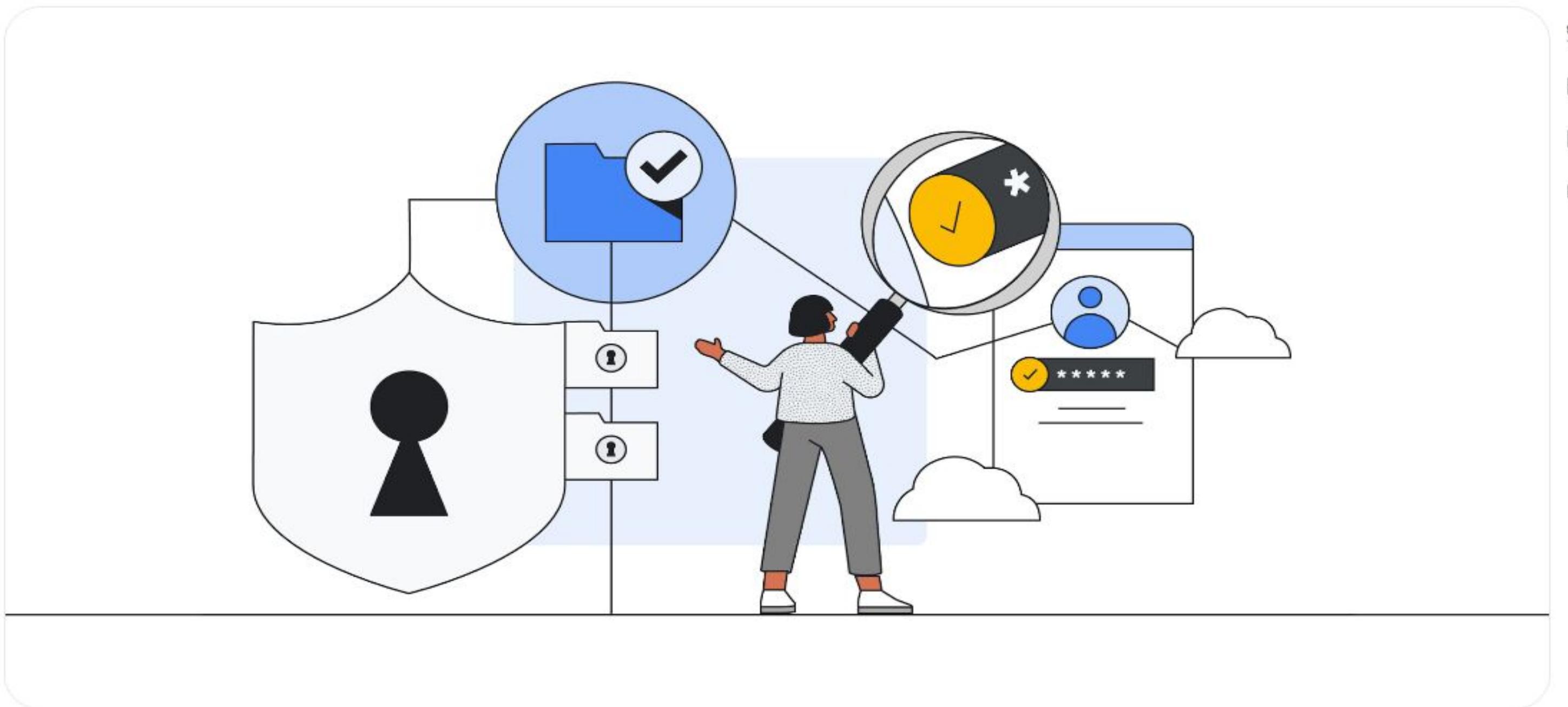
Security cloud



Security & Identity

Introducing AI-powered insights in Threat Intelligence

April 25, 2023



```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  let filteredStudies = studies.filter(study => {  
    const matchOrg = filterByOrg ? study.org === filterByOrg : true  
    const matchStatus = filterByStatus ? study.status === filterByStatus : true  
    return matchOrg & matchStatus  
  })  
  return filteredStudies  
}
```

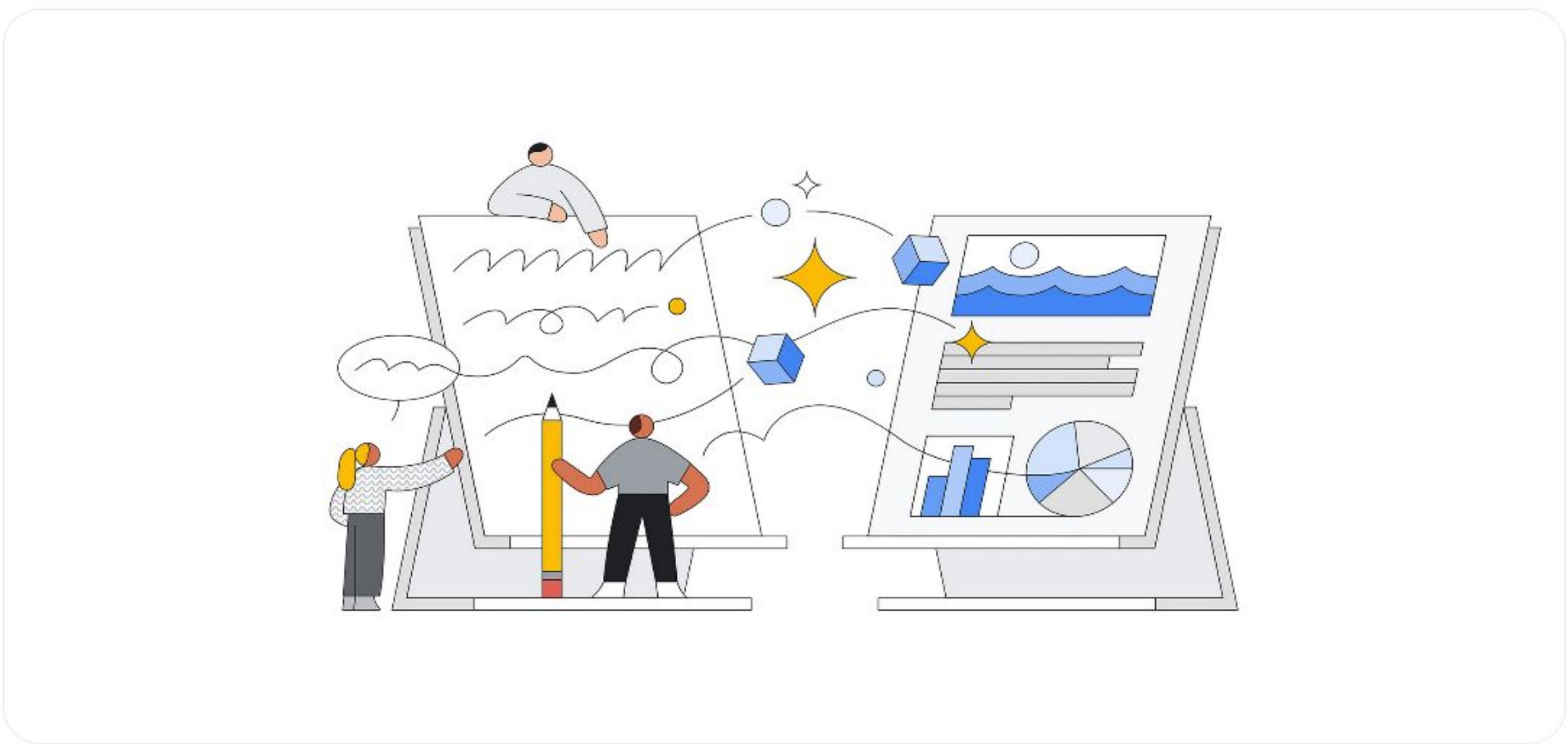
```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {  
  let filteredStudies = studies.filter(study => {  
    const matchOrg = filterByOrg ? study.org === filterByOrg : true  
    const matchStatus = filterByStatus ? study.status === filterByStatus : true  
    return matchOrg & matchStatus  
  })  
  return filteredStudies  
}
```



Security & Identity

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April 25, 2023



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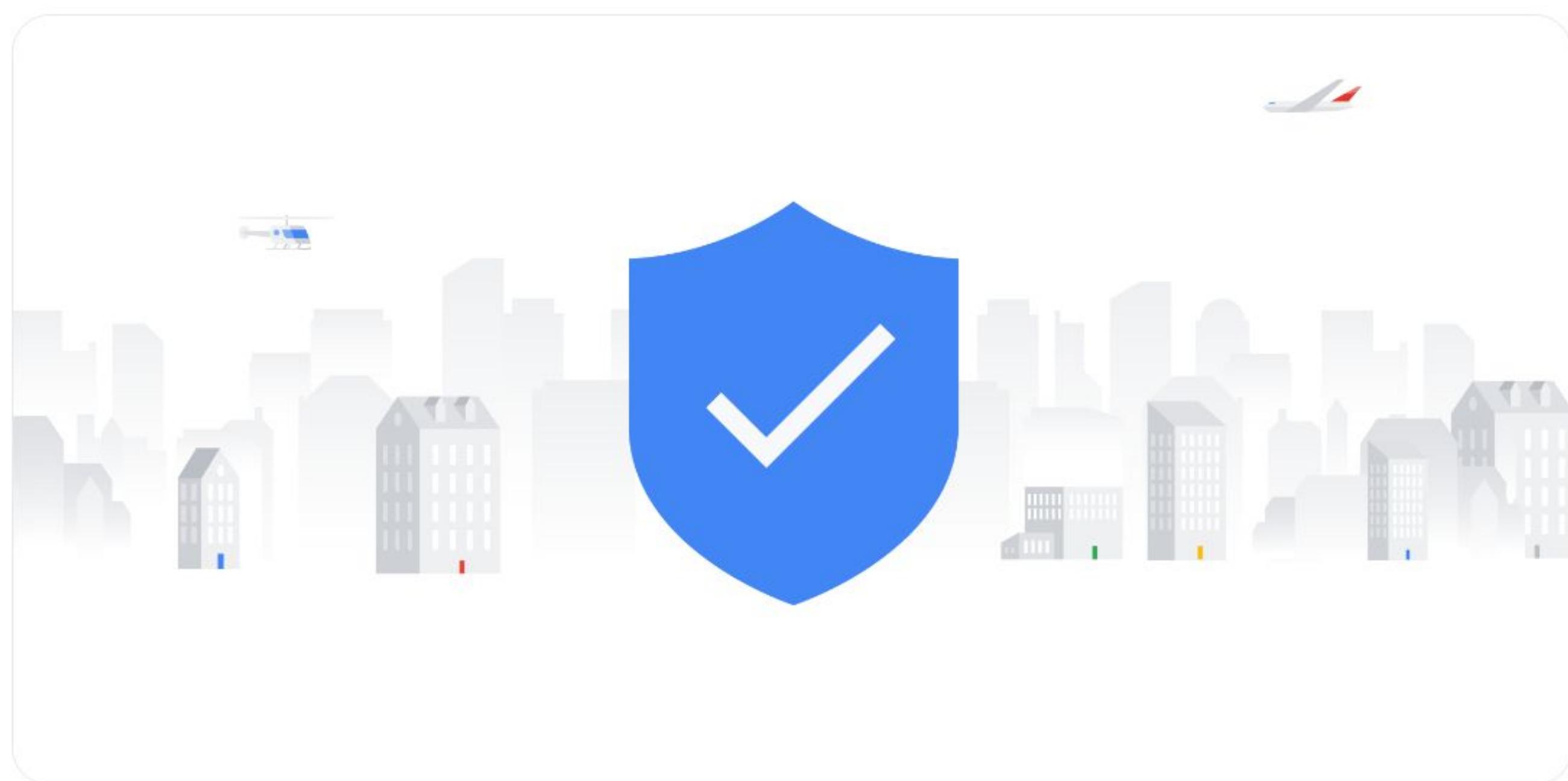
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    const matchStatus = filterByStatus ? study.status === filterByStatus : true;  
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  });  
  return filteredStudies;  
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```

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```



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Startups And Public Sector

```
function filterStudies({ studies, filterByOrg = false, filter }) {
  return studies.filter(study => {
    if (filterByOrg) {
      return study.org === filter;
    }
    return true;
  });
}
```

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```
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  let filteredStudies = studies.filter(study => {
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    const matchStatus = filterByStatus ? study.status === filterByStatus : true
    return matchOrg && matchStatus
  })
  return filteredStudies
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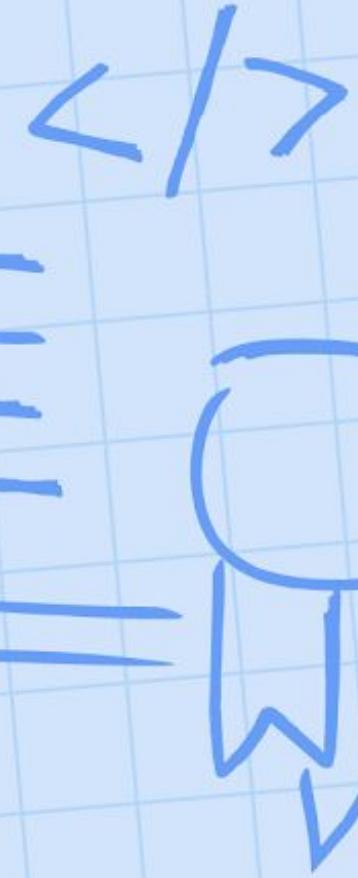
Startups

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August 30, 2023

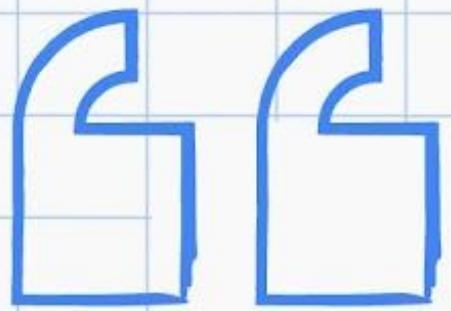


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CoRover, a gen AI startup in India, has developed BharatGPT, a conversational AI platform supporting more than 18 Indian languages.

CoRover now runs its BharatGPT on Google Cloud and utilizes LLMs via Vertex AI.



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```
function filterStudies({ studies, filterByOrg = false, filterByStatus = false }) {
  let filteredStudies = studies.filter(study => {
    const matchOrg = filterByOrg ? study.org === 'VC' : true;
    const matchStatus = filterByStatus ? study.status === 'Active' : true;
    if (matchOrg & matchStatus) {
      return true
    }
    return false
  })
  if (!filterByStatus) {
    return filteredStudies
  }
  return filteredStudies.filter(study => !study.status)
}
```

lse

```
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    const matchOrg = filterByOrg ? study.org === 'VC' : true;
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