Helping healthcare secure the cloud

Ensure the confidentiality of your most sensitive data in the cloud with Confidential VMs.

For the healthcare industry—from medicine to life sciences to genomics—data is the key to delivering exciting innovations that can change the world. Because the security of your data is paramount, Google Cloud and AMD collaborated closely to develop Confidential Virtual Machines (VMs) that ensure your sensitive data in the cloud is safe—even while it's being processed—without sacrificing performance. Confidential VMs also offer memory encryption so you can even isolate your workloads in the cloud.

Breakthrough confidentiality

Confidential VMs leverage the Secure Encrypted Virtualization (SEV) feature of 2nd Gen AMD EPYC™ CPUs. That means your data stays encrypted while it is used, indexed, queried, or employed for training.

Enhanced innovation

Confidential Computing unlocks previously impossible computing scenarios so you can share confidential data sets and collaborate on research in the cloud—without sacrificing confidentiality.

Lift and shift: Simple for everyone

We've made moving to Confidential Computing easy because the transition to Confidential VMs is seamless: All GCP workloads you run in a VM today can run as a Confidential VM with a click on a checkbox.

Advanced threat protection

Confidential Computing helps ensure the integrity of the operating system you choose to run in your Confidential VM by building on the protections Shielded VMs offer against rootkits and bootkits.

World-class performance

Built on Google's resilient, scalable global infrastructure, and powered by 2nd Gen AMD EPYC processors, Confidential VMs deliver high performance for a wide variety of workloads, including running enterprise applications with databases with a minimal impact on performance.

Optimized deployment

Google Cloud offers comprehensive management tools that help you streamline rollout and troubleshoot issues within the console. Confidential VM is designed to fit your needs with pricing based on your usage of the machine types, persistent disks, and other resources you choose for your VMs.

Google Cloud and AMD EPYC:
Benefits that transform every area of healthcare

Medicine
Deliver a new level of
patient care anywhere.

Genomics
Accelerate your research.
Discover new treatments faster.

With GCP's N2D instances running on
2nd Gen AMD EPYC processors

Google Cloud delivers...

Better performance

Lower costs

Up to

39%

better processing performance
and memory bandwidth for
intensive workloads, comparing
N1 vs. N2D[1]

Up to

13%

cost savings vs. N1 and N2D
non-confidential VMs[1]

1. Source: Vallejo C, New AMD EPYC-based Compute Engine family, now in beta, February 2020
(N2D-standard-32 performed 39% better than N1-standard-32 when evaluated using Coremark.)