Helping manufacturers secure the cloud

Innovate with data and adapt to evolving industry market forces without sacrificing security and compliance.

Innovations in manufacturing demand high performance and memory bandwidth for advanced operations like predictive analytics and anomaly detection. Confidential Computing powered by 2nd Generation AMD EPYC™ processors meets these demands while offering Google Cloud's flexible resource and technology options. Those options include AutoML Vision—embedded in manufacturing and business workflows to automate quality control processes—and Anthos to support application modernization across on-prem and cloud infrastructures.

**Breakthrough confidentiality**
Confidential Virtual Machines (VMs) leverage the Secure Encrypted Virtualization (SEV) feature of 2nd Gen AMD EPYC processors. 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: Benefits that drive manufacturing innovation

High performance
Leverage high performance for advanced operations.

Enhanced insights
Use AI and machine learning for deeper customer insights and experiences.

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

Google Cloud delivers...

Better performance
Up to 39% better processing performance and memory bandwidth for intensive workloads, comparing N1 vs. N2D

Lower costs
Up to 13% cost savings vs. N1 and N2D non-confidential VMs

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.)

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