Overview

The cloud has brought virtually unlimited computing power to anyone, anywhere, leading to remarkable innovations and advances that have enabled high-performance compute tools to model extreme weather patterns; the ability to design AI/ML-enabled chips to accelerate virus research; and the capacity to run enormously complex software applications. Utilizing the power of the cloud for chip design and verification, designers can solve the biggest challenges of today and invent the new possibilities for tomorrow.

The proliferation of cloud technology affords more significant opportunities than a simple offload of compute from a traditional tool workflow. Synopsys has been working with leading customers and foundries for over a decade. Synopsys Cloud reimagines the future of EDA on cloud enablement for over a decade on cloud enablement with cloud-optimized native tools and hardware platforms, flexible business models, and a modern user experience, ready for the future, without disrupting proven foundry accepted workflows.

With Synopsys Cloud, all the tools, flows and compute needed are available when needed. This helps to eliminate time spent forecasting needs and making compromises due to limited resources that may jeopardize design capabilities. Need answers faster, the best quality of results that optimize design, verification, and software development while managing budget? Synopsys Cloud with FlexEDA addresses these challenges. Synopsys is leading the EDA cloud transformation that provides flexible solutions for every innovator at all stages of the cloud journey.

Key Benefits

- Achieve better results faster and optimize infrastructure and tool spend
- Run EDA jobs at scale utilizing flexible hourly or per-minute pricing
- Utilize limitless CPU and GPU compute power for demanding EDA workloads
- Run practically limitless parallel jobs without software license constraints
- Gain on-demand access to industry-leading EDA tools and flows
- Leverage detailed EDA tool usage and consumption analytics to drive business insights and efficiency
- Access to dedicated emulation capacity monthly—the highest performance emulation for complex software applications
- Highest performance emulation for complex software applications
- Enjoy enhanced security, 24x7 live active monitoring, threat hunting, and intelligence forensics
Flexible Pay Per Use License Model and Hardware Infrastructure Options

**FlexEDA:** Provides extreme flexibility with unlimited on-demand access to the entire Synopsys Cloud portfolio of tools on a pay-per-use basis. This innovative solution is pre-configured and enabled to run multiple regression jobs in parallel, provide answers in hours instead of weeks, and test new tools to validate new designs.

**Software as a Service (SaaS):** Quickly begin exploring ideas through a SaaS model without the time and overhead of building and maintaining infrastructure. Start designing with a single contract that provides access to all the required software, hardware, and standardized flows required.

**Bring Your Own Cloud (BYOC):** Work with Microsoft Azure, Amazon Web Services, or Google Cloud directly and maintain control of the cloud compute environment while taking advantage of the FlexEDA model in a BYOC mode. Run the same tools, scripts and flows as you are used to on-premises, with no change to your core workload.

**Instant Emulation:** Access emulation solution that delivers flexible, turnkey, and secure emulation to accelerate software bring-up, performance validation, power analysis, and system validation for IP and SoCs. Instant dedicated access on a monthly basis to the industry's highest emulation performance and most comprehensive portfolio of virtual solutions.

**Turnkey Cloud Optimized Flows**

Setup and configuration of new EDA software and emulation hardware can be some of the most tedious steps in the development process. Designing on the Synopsys Cloud alleviates these challenges and unleashes the full potential of design and software teams in a productive environment quickly.

Synopsys Cloud delivers tool access using an innovative preconfigured and optimized environment including EDA software, configuration scripts, design kits, IP, optimized high-performance compute (HPC), and emulation infrastructure tailored to the current design task. Synopsys Cloud-enabled EDA tools are built on proprietary Synopsys common distributed processing and data storage technology to deliver a cost-optimized HPC infrastructure.
Security by Design

Trusted by governments and highly security-conscious agencies worldwide, Synopsys and cloud service providers have proven infrastructure security systems to protect the physical environment, including network, computer hypervisors, and data in a multi-tenant environment. The Synopsys Software Integrity Group has been recognized by Gartner as the leader in application security testing for five years based on completeness of vision and ability to execute. Synopsys has taken advantage of this complete suite of security tools and services to ensure the highest level of security in Synopsys Cloud.

With application and API security, threat and vulnerability management, security incident response, compliance and governance protocols, active threat hunting, and intelligence forensics combined with 24x7 monitoring and logging, Synopsys Cloud removes the challenges to EDA tools and infrastructures and provides flexible design options making it easy for innovators to design efficiently and effectively in a safe and secure environment within the cloud.

Try Synopsys Cloud Today

Contact your Synopsys account representative, email cloud@synopsys.com or visit https://www.synopsys.com/cloud to learn about and experience the benefits that Synopsys Cloud has to offer.