

Smaller design nodes



From 7 to 3 nm Ever smaller process nodes

drive massive growth in design data volumes

Bigger problems 4-6X



Increase in compute and

data storage requirementsoutstripping on-prem expansion

of chip design economics

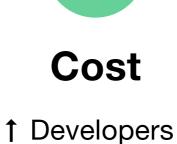
Untangling the complex calculus



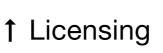
1 Project data

and metadata

- † Range of file sizes and counts
- † Deep and broad directories
- 1 >100TB to petabyte volumes



\$



- 1 Infrastructure







workloads move to cloud Resource utility: Use just what you need, when you need it

Top 5 reasons EDA

- **Increased productivity:** Leverage massive compute and
- Access to a global infrastructure: Keep more frequent EDA tooling
 - Fault tolerance: Cloud providers have redundant servers and data centers across locations

Security: Public cloud will

experience 60% fewer security

incidents compared to typical data centers this year²

storage to achieve results faster

upgrades in sync with infrastructure¹

Fast deployment and configuration Advanced data caching and synchronization for mirroring, caching, in minutes, not days or migrating data

Place & Route

Powering chip design teams with on-demand

compute and data resources as needed

Google Cloud and NetApp provide a truly seamless hybrid cloud experience

On-Premises

Emulation

Maximum configuration flexibility for

compute and storage, with high

built just for EDA workflows:

availability options

Simulation

TEAMS: Design, Simulation, Validation, Physical Verification

Physical

Verification

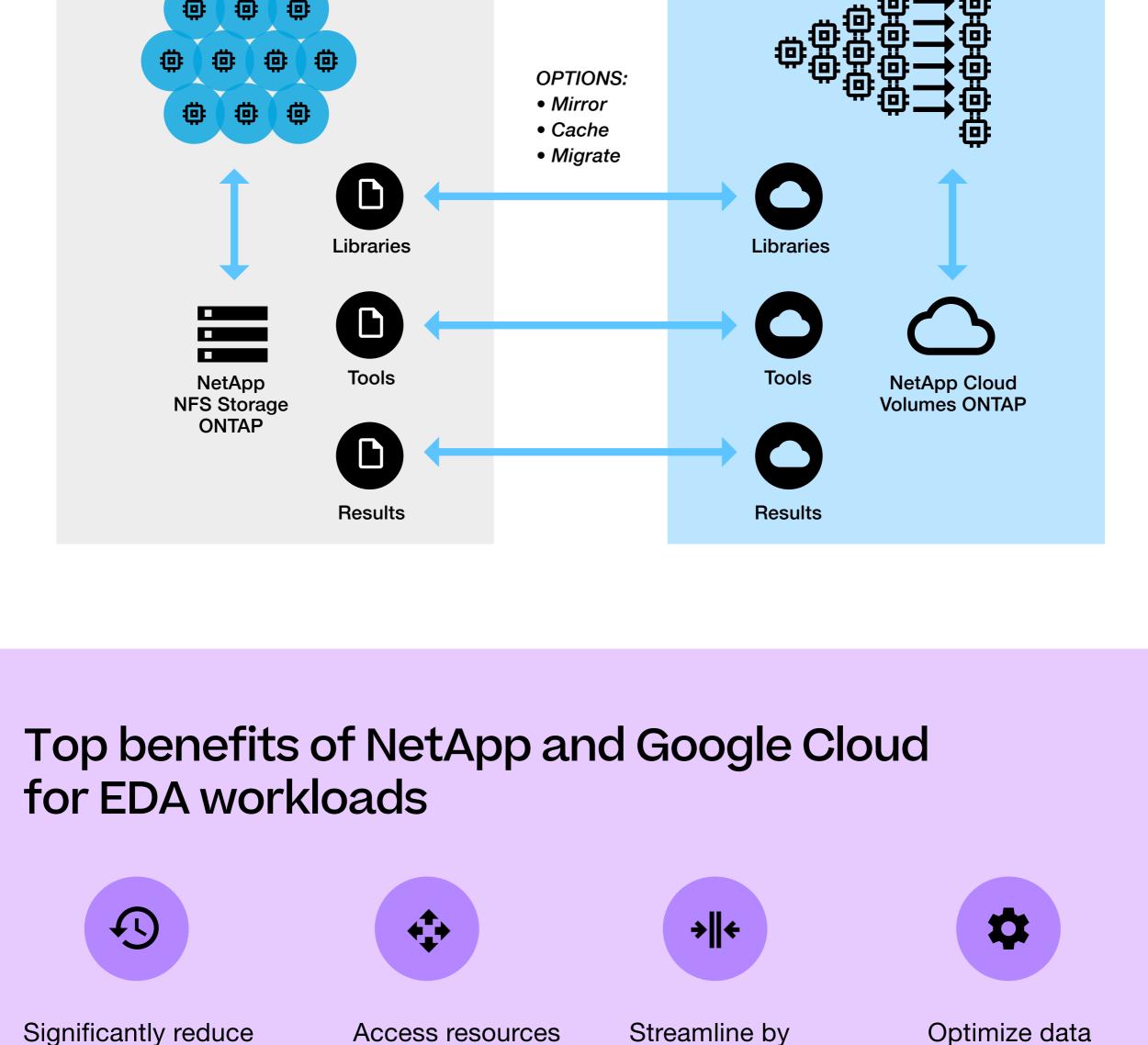
Static Timing

Analysis

Google Cloud

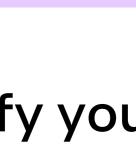
• Faster migrations, with no workflow

changes required



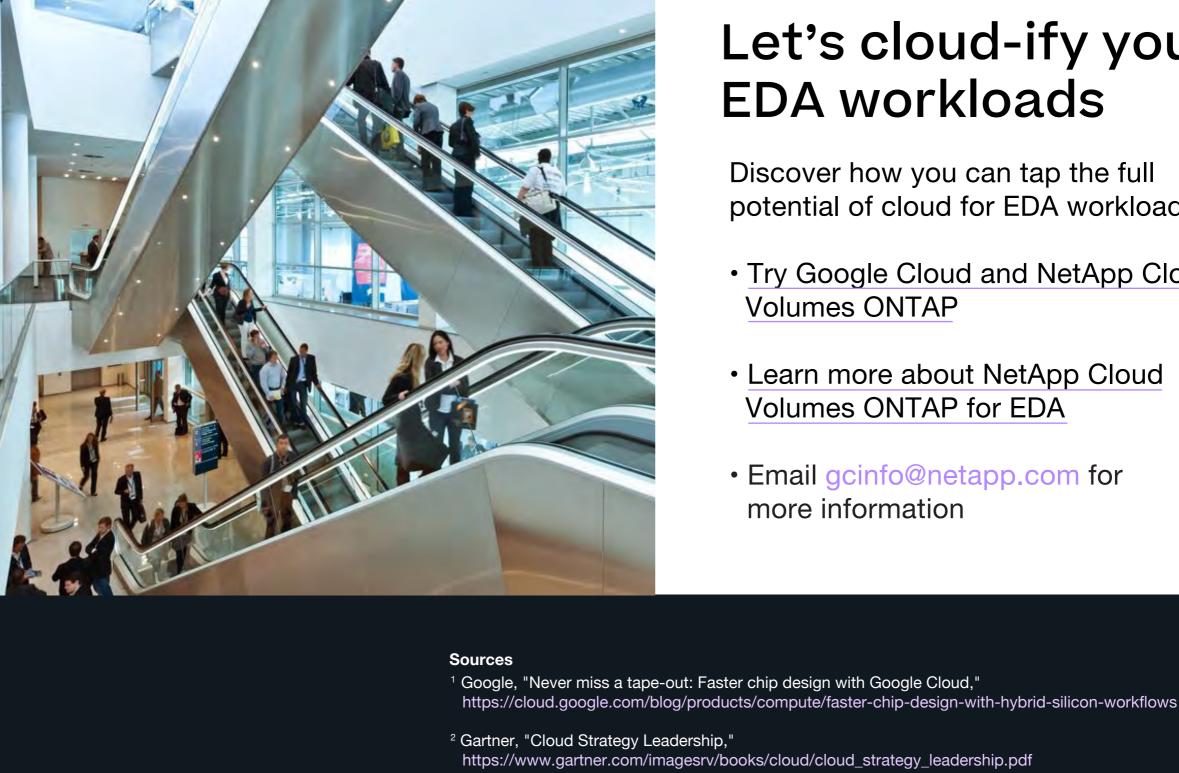
time to move data to when and where caching and scaling and from HPC read-only tool and needed library environments environment

Let's cloud-ify your **EDA** workloads



movement costs

for hybrid cloud



Try Google Cloud and NetApp Cloud **Volumes ONTAP**

 Learn more about NetApp Cloud Volumes ONTAP for EDA

Discover how you can tap the full

potential of cloud for EDA workloads:

- Email gcinfo@netapp.com for more information

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most out of your data. NetApp brings the enterprise-grade data services you rely on into the cloud, and the simple flexibility of cloud into the data center. Our industry-leading solutions work across diverse customer environments and the world's biggest public clouds. As a cloud-led, data-centric software company, only NetApp can help build your unique data fabric, simplify and connect your cloud, and securely deliver the right data,

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