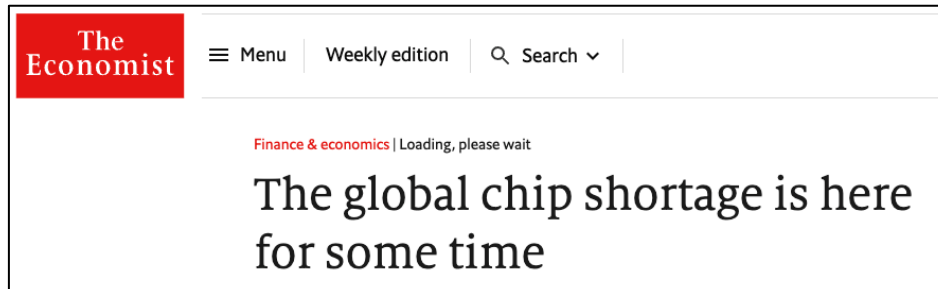# STAC Update:
Fast Data

Peter Nabicht
President, STAC

peter.nabicht@STACresearch.com

Audits update

- Multiple SUTs were under development

- Supply chain disruptions impacted readiness timelines
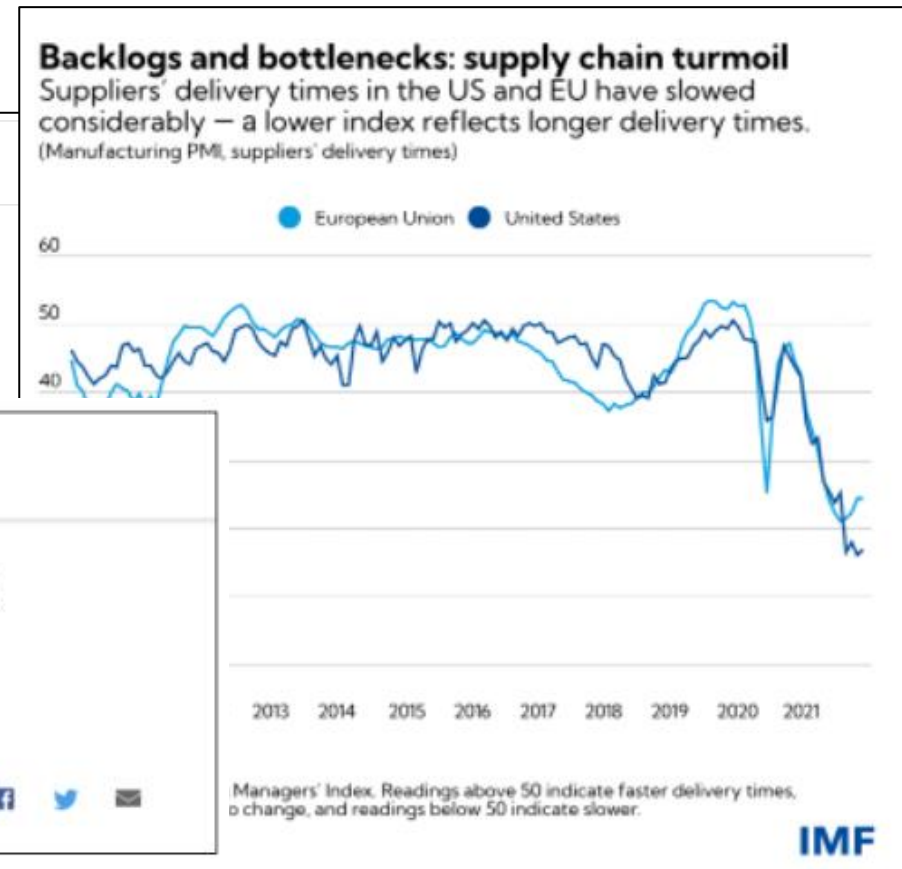
FPGA SIG update

- Vendors and financial firms meeting
  - Exploring ways to collaborate on tool chain and development workflows

- Next meeting scheduled for next week

- Not too late to join us

http://www.STACresearch.com/fpga

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Adding STAC-ML Markets (Inference)

- ## STAC-ML Markets (Inference)

  - Benchmark solutions that may be used to run inference on realtime market data
  - Reports performance, resource, efficiency, and quality

  - Benefits derived from FPGA (latency vs throughput vs determinism)
  - Broad categories of use

- ## Premium subscribers have access to:

  - Benchmark specifications
  - Configuration Disclosures
  - Extensive, deeper visualizations of audited and un-audited report
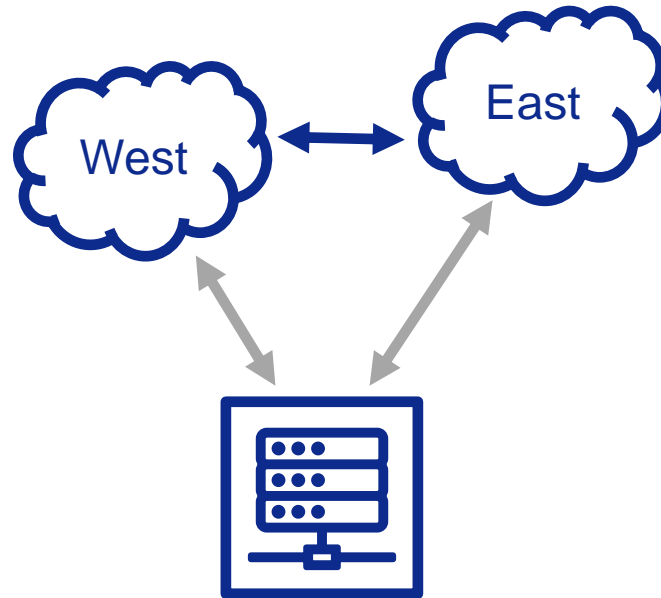 - Vault Reports
  - Research notes

www.STACresearch.com/ml

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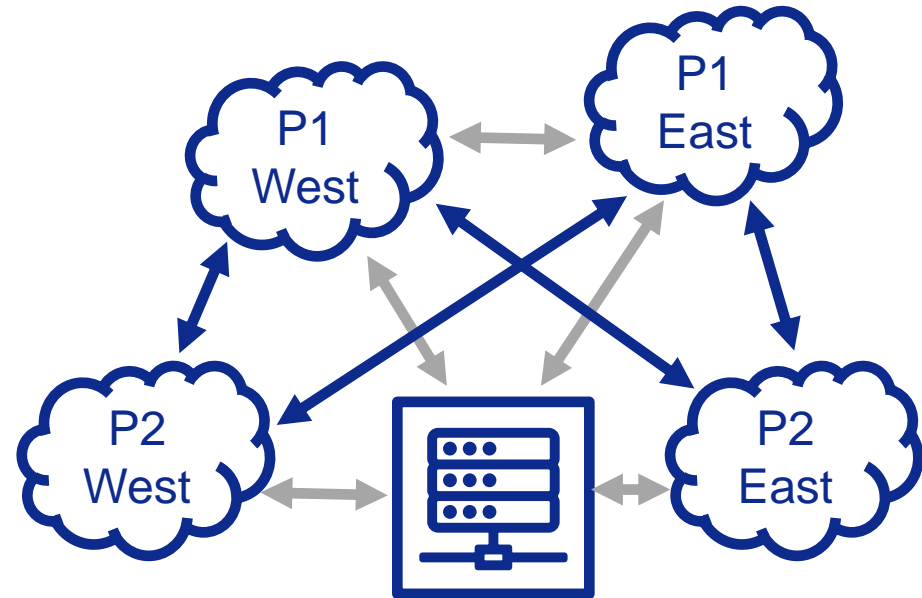# Cloud connectivity latencies

- Have had increasing interest in understanding:
  - Latency
  - Determinism
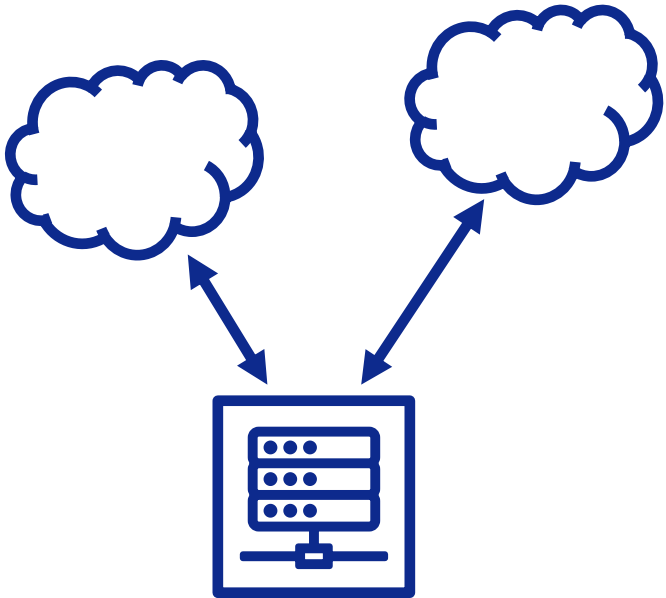
On-prem to Cloud

Cloud Region to Cloud Region

Cloud Provider to Cloud Provider

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Details: What are we measuring?

- User-space to user-space?
  - Full cloud network stack (including hypervisor)
  - But on-prem we have network capture

- What instance(s) in the cloud?
  - Multiple zones within a cloud region
  - Different times to different instances

- Time of day / week / month?
  - Different loads outside of test impact performance
  - When should tests occur? Multiple times?

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Details: How are we measuring?

- Line capture?
  - Doesn't sufficiently exist in clouds
  - But we do have it on prem

- Time sync?
  - Need to sync multiple clouds and on-prem

- Round trip?
  - Would remove the time sync problem
  - But not enough insight into cloud infrastructure know know symmetry of paths

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Help the definition of specifications

- If interested in helping define requirements:

council@STACresearch.com