

# Authenticate Faster in the Cloud with Intel

Use fewer resources in the Amazon Web Services (AWS) cloud to process the same amount of data. Establish more encrypted network connections quickly for your content delivery networks (CDNs) and web servers with Intel.



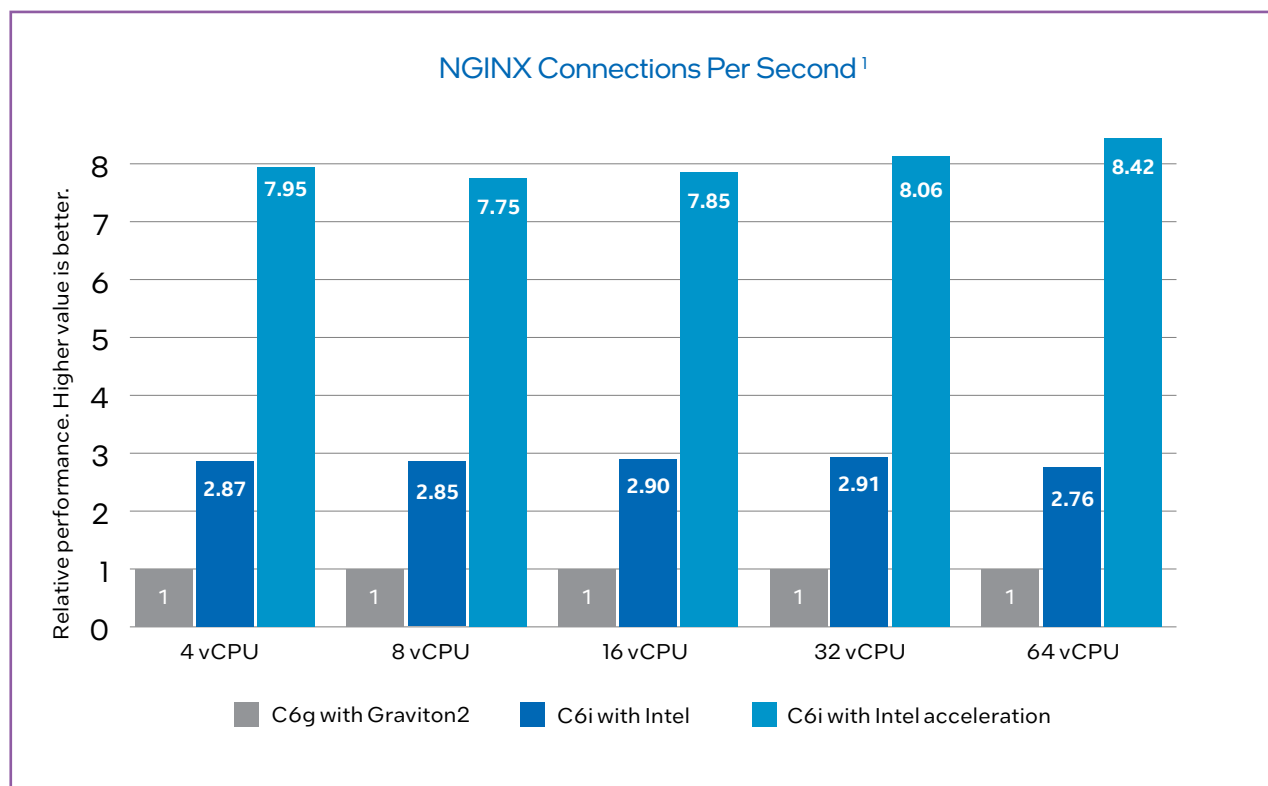
## Solve Common Problems

- Respond to thousands of simultaneous requests
- Speed up encrypted traffic
- Reduce application abandonment
- Improve customer service by reducing latency
- Lower overhead

## Ideal Uses

- Application load balancing
- Application delivery
- Content caching
- Transport Layer Security (TLS) communication
- Media streaming

## C6i with Intel Outperforms C6g with Graviton2



Measured in connections per second (CPS). Intel acceleration delivered by configuring software for RSA2K handshakes with Intel® QuickAssist Technology Engine for OpenSSL.<sup>2</sup>

# Cloud Performance Advantages



Up to  
**2.36x**

better price performance  
on NGINX CPS in C6i than C6g<sup>3</sup>



Up to  
**6.75x**

better price performance  
on NGINX CPS in C6i with  
acceleration than C6g<sup>4</sup>



Let's work together. [Contact us.](#)

## Get Results

Learn how to configure NGINX workloads in C6i with [step-by-step instructions](#).

## Employ Powerful Tools

Visit the [cloud development](#) site. Everything DevOps teams and cloud architects need is there. Gain insights into how to build, scale, and transform from edge to cloud.

## Place Workloads Intentionally

HTTP servers and reverse proxy servers like NGINX move easily to any architecture, but portability might not translate into optimal performance. Learn about AWS [C6i](#), [M6i](#), and [R6i](#) instances for your workloads.

1. See [intel.com/3gen-xeon-config](https://intel.com/3gen-xeon-config) [140] and [139] for configuration and test information.

2. For more information about Intel QAT Engine, see [https://github.com/intel/QAT\\_Engine/](https://github.com/intel/QAT_Engine/). To take advantage of Intel QAT Engine acceleration, see: Intel. "Building Software Acceleration Features in the Intel® QuickAssist Technology (Intel® QAT) Engine for OpenSSL\* 1.1.1." [intel.com/content/www/us/en/developer/articles/guide/building-software-acceleration-features-in-the-intel-qat-engine-for-openssl.html](https://intel.com/content/www/us/en/developer/articles/guide/building-software-acceleration-features-in-the-intel-qat-engine-for-openssl.html).

3. See [intel.com/3gen-xeon-config](https://intel.com/3gen-xeon-config) [140] for configuration and test information. AWS C6i with Intel delivers up to 2.36x better price performance and delivers up to 2.91x higher NGINX connection rate than C6g with Graviton2. Pricing information from US-West-2b region as of February 7, 2023. <https://aws.amazon.com/ec2/pricing/on-demand/>.

4. See [intel.com/3gen-xeon-config](https://intel.com/3gen-xeon-config) [139] and 2 above for configuration and test information. AWS C6i with Intel acceleration delivers up to 6.75x better price performance and delivers up to 8.42x higher NGINX connection rate than C6g with Graviton2. Pricing information from US-West-2b region as of February 7, 2023. <https://aws.amazon.com/ec2/pricing/on-demand/>.

Note: One benchmark does not fit all workloads. Select meaningful measurements to inform your purchasing decisions. For more information, see [intel.com/3gen-xeon-config](https://intel.com/3gen-xeon-config) [101] and [102] and <https://www.intel.com/content/www/us/en/content-details/752333/active-benchmarking-for-better-performance-predictions.html>.

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