

Beta bootcamp:

The Ultimate Guide to IBM Cloud Virtual Servers for VPC with 4th Gen Intel® Xeon® Scalable processors.

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Today's topics

- **1. IBM Cloud history:** Our Intel-based processor progression
- 2. The opportunity: Where does this beta program fit in your world?
- 3. IBM Cloud VPC + 4th Gen Intel® Xeon®
 The best of both worlds
- 4. What will your beta experience look like?
- 5. Looking ahead: What's next for 4th Gen Intel® Xeon® on IBM Cloud VPC
- 6. Q&A, IBM Cloud Resources





IBM Cloud becomes the 1st hyperscale cloud to on-board and deliver 4th Gen Intel® Xeon® Scalable **processors** onto truly dedicated, raw-performance, bare metal servers.

3 Things to Know: January 10, 2023



IBM Cloud + Intel: Next-generation processing technology



Perfectly timed and custom-made

IBM Cloud and Intel's compute technology partnership – from leadership to engineers in the data centers – released 4th Gen on Day 1. This is our 10th timed-to-market processor generation release together.

Unique performance upgrades unmatched for HPC, AI, and beyond

Built-in accelerators and design ideal for AI, analytics, networking, security, storage and high-performance computing (HPC).

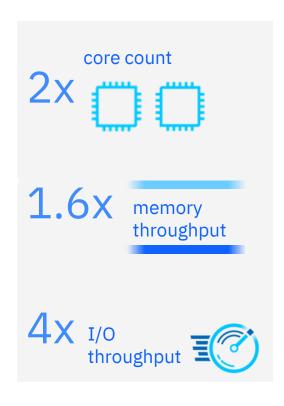
IBM Cloud Infrastructure Core compute processor progression



"Sapphire Rapids" – INTEL XEON 8474C-C 4th Gen - 2023

"Cascade Lake" – INTEL XEON 8260 2nd Gen - 2019

"Broadwell" – INTEL XEON E5 2690 V4 2015



An infrastructure-wide upgrade for heavy workloads



4th Gen Intel® Xeon® Scalable processors on IBM Cloud IaaS

IBM Cloud Bare Metal Servers (classic)



- Currently Dallas, TX
- Key MZRs 2023
- Enhanced hardware additions into 2023

IBM Cloud Virtual Servers for VPC



- Dallas, TX
- Balanced, memory profiles

xeon

- Intel® Crypto Accelerations
- Intel® AMX

IBM Cloud Bare Metal Servers for VPC



- 1H-2024
- Key MZRs into 2024
- Enhanced hardware additions into 2024









The opportunity: A compute-powered upgrade by Intel® while simultaneously test-driving the premier IBM Cloud VPC network.

Where does this fit in your world?

- New, premium workload that requires heavy, fast output?
- Dev/test now, run your production gains later?
- Explore performance compatibility points for 3rd party apps or legacy data systems?
- New to IBM Cloud, curious about the latest and greatest?
- Budget conscious, looking for no-cost entry points on premium hosting hardware?



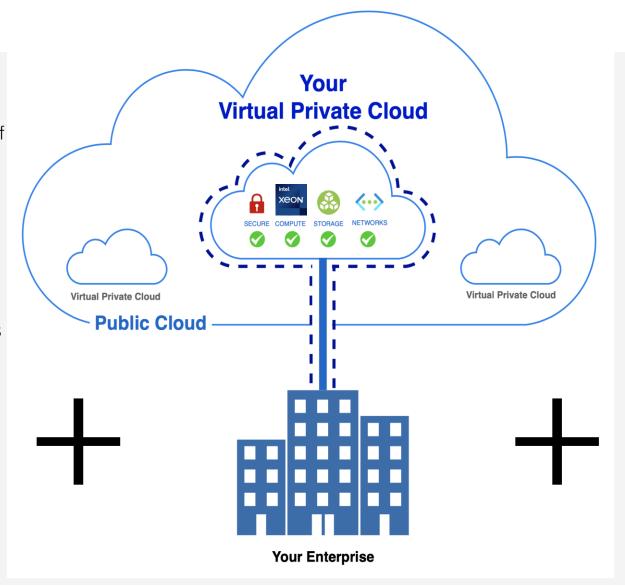
👸 IBM **Cloud**

IBM Cloud VPC + 4th Gen Intel Xeon

A private network in the public cloud combined with the industry's newest compute architecture.

Your VPC environment

- logical isolation and security of private cloud
- availability and cost effectiveness of public cloud
- elasticity for scaling/bursting
- hyperscale provisioning at 40s per 100 VMs
- fully virtualized
- fine-grain network traffic, services, and topology control
- Developer-friendly API, CLI,



Your 4th Gen virtual server

- purposefully designed for highperformance output
- 2x the core count
- 1.6x the memory bandwidth
- 4x the I/O throughput
- up to 400 Gbps network bandwidth
- accelerating AI training and inferencing
- data-protection for HPC workload demands

4th Gen Intel Xeon comparisons to 2nd Gen Intel Xeon compute

Closed beta Dallas, TX data center

IBM Cloud Virtual Servers for VPC with 4th Gen Intel® Xeon® Scalable processors

Pre-set, NUMA-aligned profiles

Define your performance requirements with over 11 preconfigured virtual server sizes to choose from (vCPUs, RAM, and bandwidth – with instance storage). Dynamically resize as you go.

Balanced profiles

- performance and scalability
- common workloads
- 1 vCPU: 5 GiB of memory

Memory profiles

- memory intensive workloads
 - large caching
 - intense database applications
 - in-memory analytics
- 1vCPU: 10 GiB of Memory

Integrated Intel® accelerations

Build applications and help secure your workloads with security essentials without the performance penalty.

No-cost entry point, hands-on experience

Host demanding applications on premium hardware without the upfront cost. Our beta program team will be with you every step of the way.

Intel® Crypto Acceleration

- reduce penalty when implementing pervasive data encryption
- improve throughput for SSL web server and VPN/firewalls

Intel® Advanced Matrix Extensions (Intel® AMX)

- accelerated training and interference
- attacks latency when running one or a handful of AI tasks

Program access

- evaluation and feedback
- private team of IBM developers and product managers
- full customer and service support
- access to full documentation and learning guides

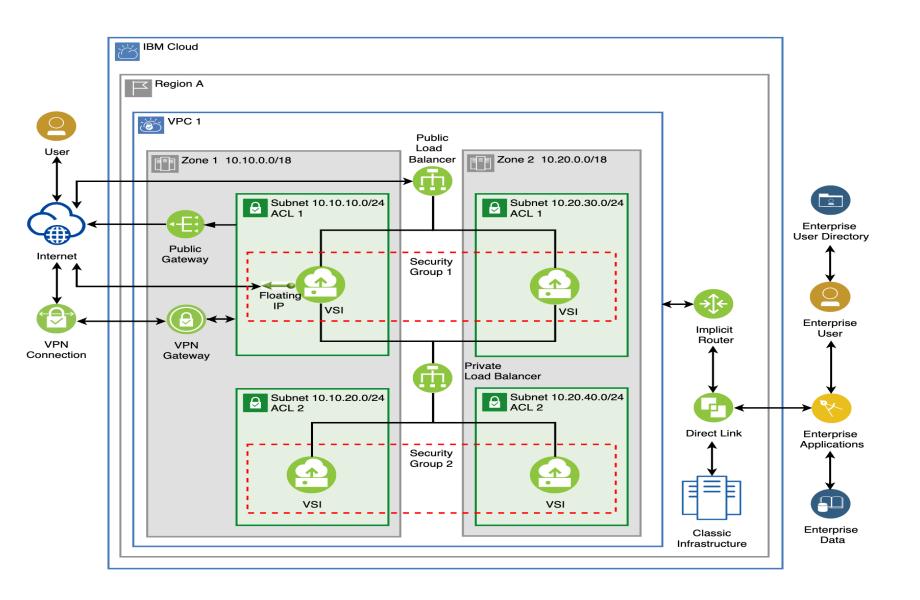
30-day program, cost-free

Over \$11,000 in compute savings



Sample IBM Cloud Virtual Servers for VPC deployment





Access the full suite of IBM Cloud VPC offerings inside your beta program environment*

IBM Cloud Virtual Servers (VSI)

IBM Cloud Bare Metal Servers

IBM Cloud Block Storage

IBM Cloud Object Storage

IBM Cloud Backup

IBM Cloud Services

IBM Cloud Public Gateway

IBM Cloud Load Balancers

IBM Cloud Transit Gateway

IBM Cloud Internet Services

Floating IP

Virtual Private endpoints

VPN

Next steps – Beta: IBM Cloud Virtual Servers for VPC with 4th Gen Intel® Xeon® Scalable processors



1 create

Create an IBM Cloud account if you don't already have one. You'll need this to continue onto our Beta site and sign in.

2 sign in

Sign in to our Beta program site and have a look around.

3 fill out

Fill out our simple form, and let us know more about you, your team, and your workload requirements. IBM Cloud Virtual Servers for VPC with 4th Gen Intel® Xeon® Scalable processors is a closed beta. We want to ensure this a successful match for us both.

4 talk

We get it. Nothing beats human interaction. Go ahead and reach out to our Beta program team leads.

- carterc@us.ibm.com
- aspence@us.ibm.com
- Chat now

Your beta program experience

Selection

- Beta program site and form
- 5-7 days selection process
- Based on workload and location

Access

- Formal acceptance email
- Allow list

Provisioning

- Full IBM Cloud Catalog access
- Full beta location deployment access
- Production-level code
- Full IBM Cloud VPC services access

Support

- IBM Cloud Support Team (24/7 chat)
- IBM Cloud Ticket System
- Beta program leads

Feedback

- Survey option
- Formal review option
- 1-on-1 interview option



After your beta program

Continue

- No action required
- Billing will initiative after program, billed by usage
- Continue provisioning through catalog

Reclaim

Cancel through the customer portal

Pause

- "Stop" your virtual server through the customer portal
- No billing will occur
- Turn on at any time



Why join the beta preview now?

A low-touch entry that provides several modernization opportunities.



Business need	Е	Business opportunity
Cloud strategy		Develop and implement high-performance workload strategy through beta preview
Infrastructure demand and cost	2	No-cost entry point, premiere network and hardware inside a full suite of IBM Cloud VPC
Security and resiliency	3	Inherent security benefits and resiliency options for public and hybrid cloud from IBM and Intel®
Advanced compute provisioning and performance	4	Balance between flexible, rapid scaling and HPC deployment management
Innovation to compete	5	How does a Compute-powered upgrade enable your cloud modernization goals?

Join our no-cost program now, test your operations in a new environment, and be in a stabilized position to quickly evolve with new IBM Cloud and 4th Gen Intel® Xeon® Scalable processors down the road.

Looking ahead

IBM Cloud Virtual Servers for VPC with 4th Gen Intel® Xeon® Scalable processors







1H'23

IBM Cloud Data Center – Dallas, TX

Balanced and Memory profiles

Intel® AMX

Intel® Crypto Acceleration

2H '23

Key multizone regions

All major OS support

All general purpose VPC profiles, including Compute

Intel® SGX integration for advanced, Confidential Computing security support 1H '24

Intel® TDX integration for advanced, Confidential Computing security support

High-memory profiles for large in-memory databases, like SAP

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Start now and save.

Save \$1,000 on IBM Cloud VPC

Get USD 1,000 in IBM Cloud credits to use toward any of your new IBM Cloud VPC resources when you join the beta program — including all other compute, network, and storage components.

Ask your IBM team for more details.

Learn more about IBM Cloud Virtual Servers for VPC

Get started

Create an IBM
Cloud account
and get USD 200
in free cloud
credits to use
across IBM
Cloud – just for
joining.

Create an account

IBM Cloud Virtual Servers for VPC catalog

Explore profiles and pricing

Join beta

Sign up for exclusive early access to 4th Gen Intel® Xeon® Scalable processors running on IBM's premiere VPC network. Choose from Memory or Balanced virtual servers with up to 11 GB of memory for every 1 vCPU. Get hands-on provisioning and workload support while shaping the future of IBM Cloud technology for HPC, AI and data analytics workloads.

Sign up

Resources



Read the full 4th Gen announcement blog

Read the blog

Bare metal and 4thh Gen infographic

See infographic

Learn about 4th
Gen on IBM
Cloud Virtual
Servers for VPC

Learn more

Virtual Servers and 4th Gen infographic

See infographic

Intel Solutions on ibm.com

Learn more

VPC Solutions on ibm.com

<u>Learn more</u>



Let's answer your questions.