

# 5 BIG Reasons to Directly Connect Your Hybrid Cloud

In a world of swelling customer expectations and an explosion of business models in entertainment, companies must strive to deliver fast, simple, enthralling experiences. And that means direct interconnection. But what advantages do you get from direct connect compared to the public Internet? **Take a look.**



## REASON #1

# SECURITY

- Point-to-point connectivity through a colocation provider reduces the number of access points hackers can attack.
- Applying industry regulations, like HIPAA, ISO 27001, PCI DSS, and SOC 1 Type 2 & Type 2 compliance, is faster, easier and more efficient.
- Colocation offers trained and dedicated personnel, security cameras, biometric scanners, and physical restrictions that form a physical/technical security combo to secure data and maintain equipment.



It's more difficult to keep private information private with a public Internet connection.

## REASON #2

# PERFORMANCE

- Large volumes of data transfer faster from the low latency gained by connecting directly.
- The nodes used in direct connect are closer to the cloud regions of premier providers—which means fewer network hops and no packet loss.
- A colocation center that's in a cloud provider's region can be as fast as under one millisecond of latency—that's guaranteed throughput.
- Developers get the agility and flexibility they need to consume resources without degrading the performance of apps and data.

# 44%

Average Latency Reduced

In a head-to-head speed test between direct connection and the public Internet, we found that the average latency was reduced by 44%, and that a private connection also reduced variability by more than 60%.

Moving infrastructure offsite cuts costs associated with:

**Aging equipment** | **Limited scalability** | **High-risk outages** | **Power and cooling**

The bottom line is that a cross-connect fee is far lower than the cost for redundant WAN connections or scaling your ISP to support your cloud connectivity requirements.

## REASON #3

# COST SAVINGS

**Connecting directly can reduce egress rates as well. Cloud providers often incentivize cloud interconnection.**

**Example: AWS offers 60-70% reduced data egress rates for those leveraging AWS Direct Connect. And the consistent MRC is much easier to manage.**

Egress Volume	Public Internet	Direct Connect
Up to 10TB / Month	\$900	\$200
Up to 50TB / Month	\$4,500	\$1,000
Up to 150TB / Month	\$13,500	\$3,000
Up to 500TB / Month	\$45,000	\$10,000

## REASON #4

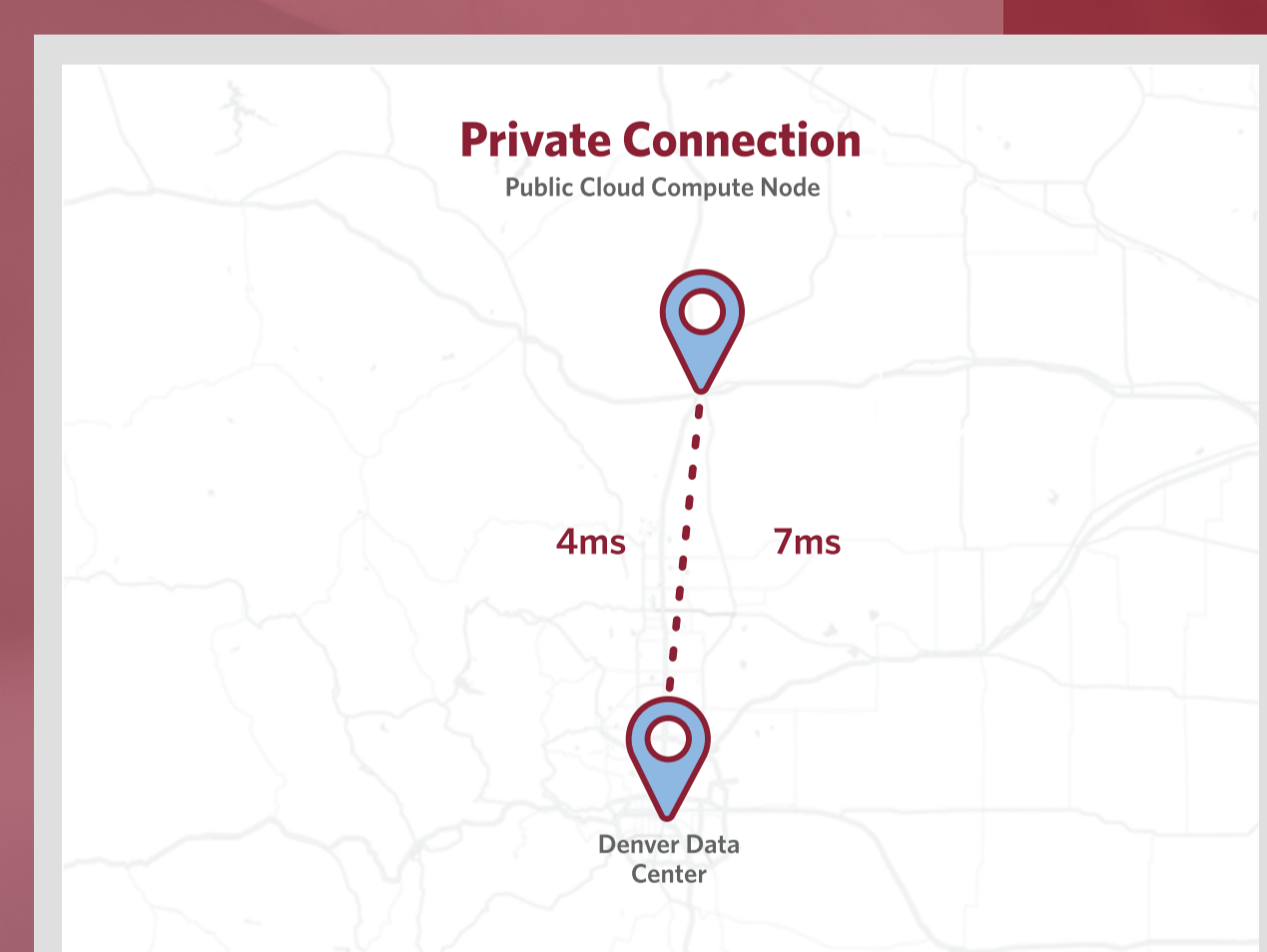
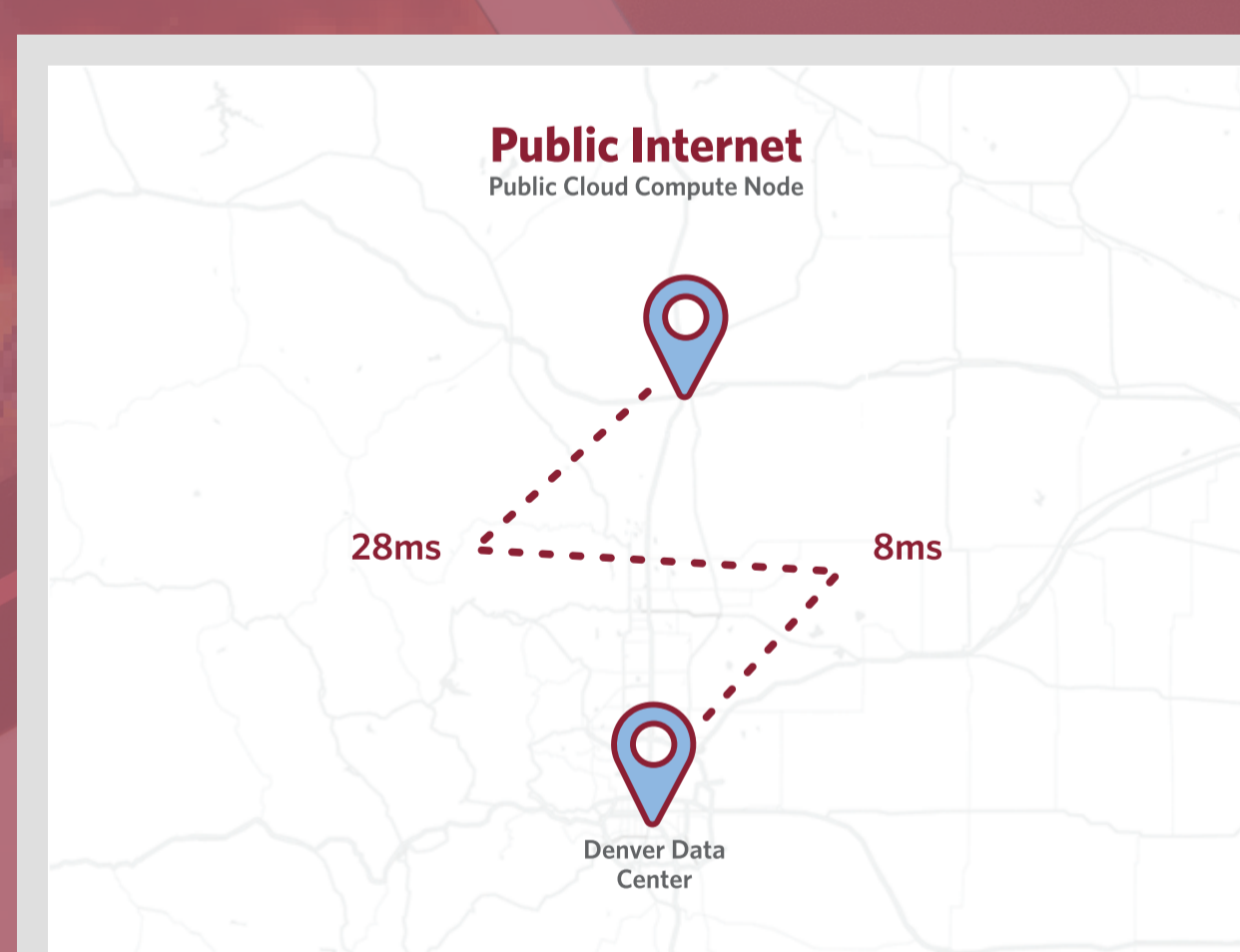
# RELIABILITY

- Direct connections provide the high reliability of private networks
- Spikes in demand and variations in networks slow or disrupt performance in public networks

We measured the latency and variability by pinging a public cloud compute center in Cheyenne, Wyoming from the CoreSite Denver data center.

- The maximum latency on the public Internet was **28ms**, and minimum latency was **8ms**.
- For a private connection, the maximum latency was **7ms**, and the minimum latency was **4ms**.

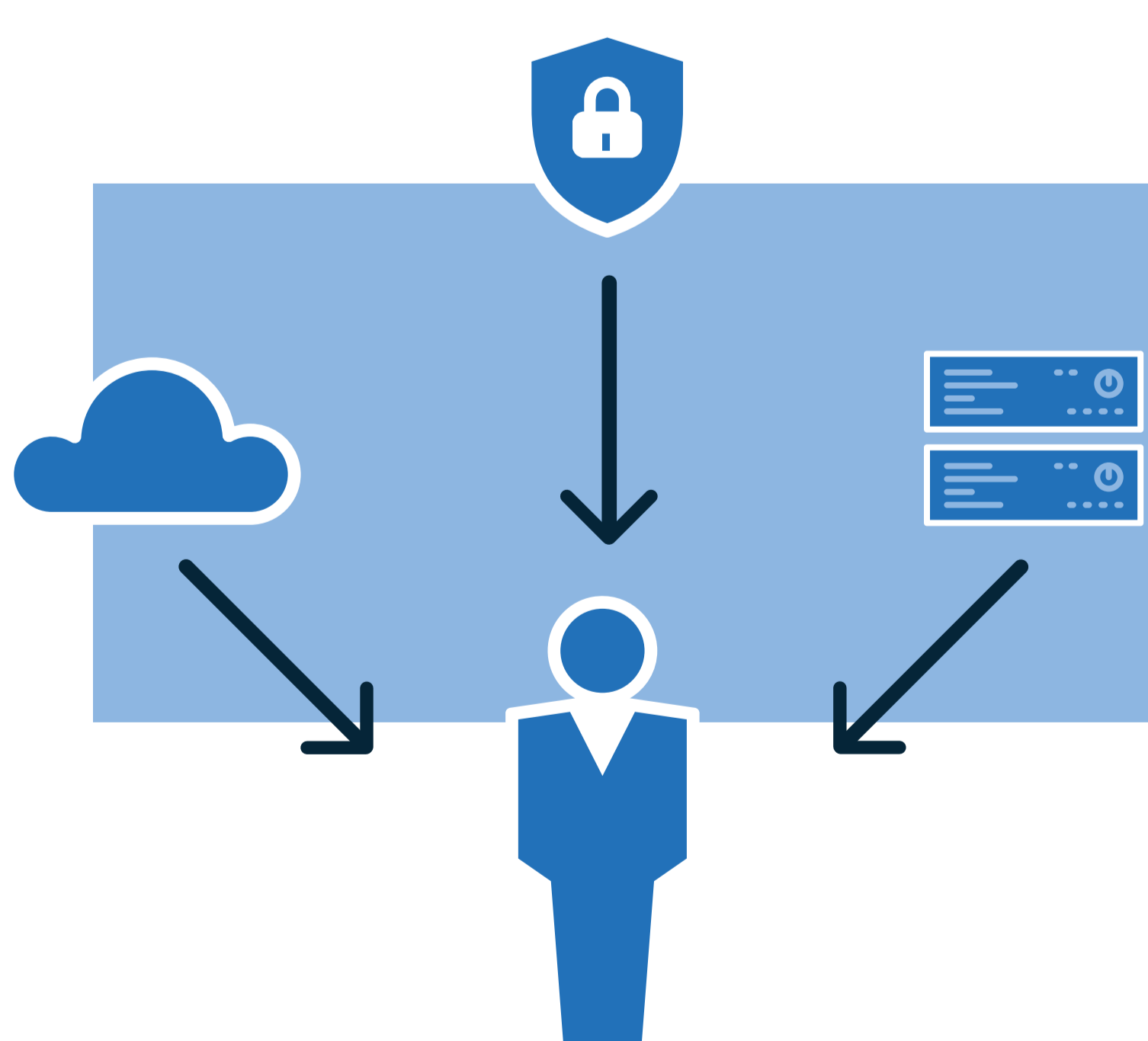
That's a 4X reduction in maximum latency and a 2X reduction in minimum latency—creating a positive impact on app performance and the end-user experience.



## REASON #5

# EASE OF USE

- You have access to a more diverse supplier ecosystem and centralized utilities that support rapid access to the public cloud.
- You no longer need to manage private WAN connections for each cloud provider, reducing the number of vendors you work with.
- You get greater visibility into operations and apps so teams can respond to requests and streamline the development process.
- Connecting directly helps improve communication and collaboration—including for remote workers.



Direct connection technology is emerging as an answer to hybrid IT complexity, setting new standards for agility, performance and reliability.

## CONCLUSION

When you align your tech investments to your business strategy, think about how a dedicated connection between your company and your clouds will push you forward in your digital transformation.

### ABOUT CORESITE

CoreSite builds and operates data centers across eight major communication markets in the U.S. Customers choose CoreSite when they need a secure, reliable place to house their IT infrastructure, and need access to networks and major cloud providers to build low-latency hybrid cloud environments.

CoreSite data centers cover 75% of U.S. businesses with latency of five milliseconds or less and provide direct connect solutions to AWS, Microsoft, Google, Alibaba, Oracle and IBM, as well as access to hundreds of cloud and network providers. CoreSite owns and operates the Open Cloud Exchange®, a one-to-many platform that establishes a single connection to multiple clouds.

