CenturyLink® Data Access Accelerator:
Pharmaceuticals

Stay agile with seamless access to large remote data sets

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CenturyLink Data Access Accelerator (DAA) empowers pharmaceutical companies with geographically dispersed operations to rapidly access, analyze and act upon complex data up to 20x faster for greater business agility. Ideal for improving operations across the enterprise, helping to reduce operating costs and increasing revenue potential.

A recent ESG survey of IT storage decision makers indicates that over the next three years:

- 25% expect to grow on-premises data >50% annually
- 23% expect to grow off-premises data >50% annually[1]

Access geographically dispersed data virtually anywhere, anytime

- Applications perform as if the file were local
- Teams can execute functions while data remains in the cloud, vastly reducing egress fees
- Access full genome data without moving files
- Ease data sovereignty complexities by keeping data in country of origin

Transfer data quickly and without disruption

- Transfer large data/files up to 20x faster than existing communication architecture
- Maintain existing access control lists and other in-place governance systems

Improve BC/DR Strategy

- Applications and users can continue to work at high productivity levels, even when accessing data at a secondary location that is hundreds, thousands or tens of thousands of miles away
- Accelerated data transfer can significantly improve Recovery Point Objective (RPO) across any geographic distance

Integrate into your existing systems

- Users access applications and data via standard Server Message Block/Network File System (SMB/NFS) protocols
- No special software on the client side

Keep your data secure and organized

- DAA does not manipulate data at any point, so sensitive files stay encrypted end-to-end
- Prevents data sprawl, which reduces costs associated with storing multiple copies of the same data

Delivering on the top IT directives

When transitioning to adaptive networking, pharmaceutical IT leaders are most concerned with agility, growth, security and innovation.[2] Here's how CenturyLink DAA can help your organization deliver on those goals:

Boost agility and response times: Optimize productivity with fast access to data and intelligence across the value chain and innovative tools that scale up or down on demand.

Support profitable growth: Empower teams to be more effective and help achieve cost efficiencies with agile, scalable data-on-demand technologies.

Enable security and compliance: Optimize access to remote files and rapidly transfer data on demand to meet time sensitive and data sovereignty compliance requirements.

Empower research and development: Harness the intelligence of data throughout the value chain (operationally and within R&D) to help deliver sustainable and profitable growth.

Service architecture details

CenturyLink provisions DAA as a dedicated or multi-tenant service based on customer location and requirements. This flexibility allows any customer, at any location, on any network to take advantage of DAA capabilities. The solution is presented as a physical or virtual node at each customer location—this node acts as a gateway to data at the other sites on the customer's DAA fabric. DAA integrates easily with existing customer compute and storage infrastructure, and can be implemented with existing or new wide-area network services.

Driving greater business agility

DAA is leveraged by global customers who realize the benefits of seamless, efficient access to large remote data sets. Teams are empowered to carry out business critical operations as if remote data were local.

- When data was loaded into a modeling application to operate on large, multi-dimensional imagery, users experienced a 16x improvement when accessing a data set that was 2,405 miles away. Data was fully loaded in 29 seconds—down from 7 minutes and 42 seconds—and nearly as fast as accessing the data stored locally

DAA standard configurations

≤ 1 Gbps

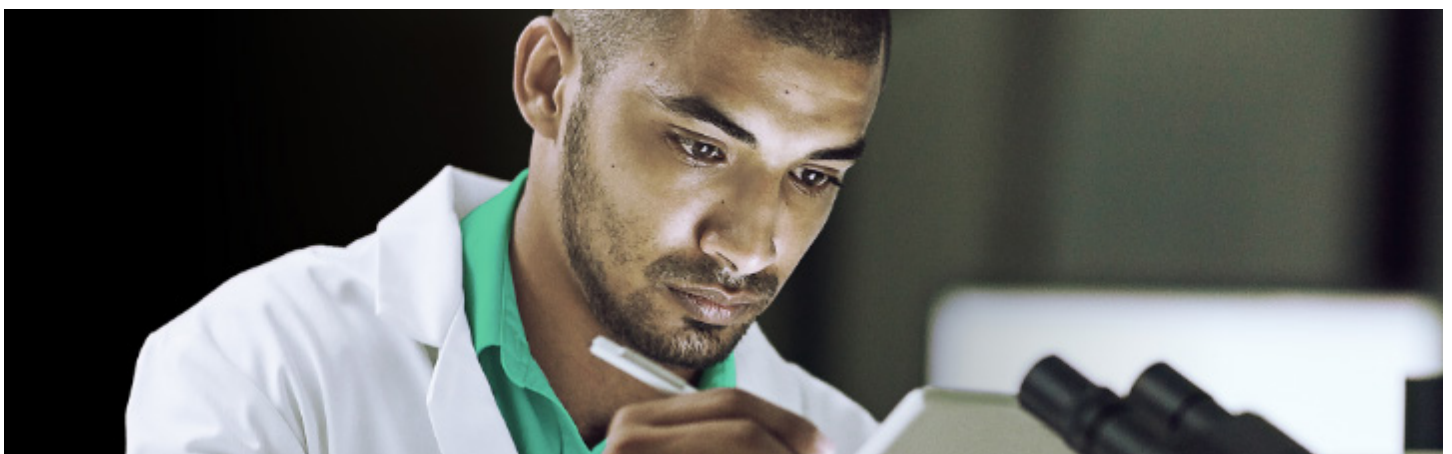- Software only KVM which requires an x86 Linux server

1-10 Gbps

- x86 Linux server with Vcinity™ software and PCIe RAD X-1010 card

≤ 20 Gbps

- x86 Linux server with Vcinity software and RAD X-1040 appliance

20 Gbps system upgrade

- x86 Linux server with 3 TB cache and Vcinity software
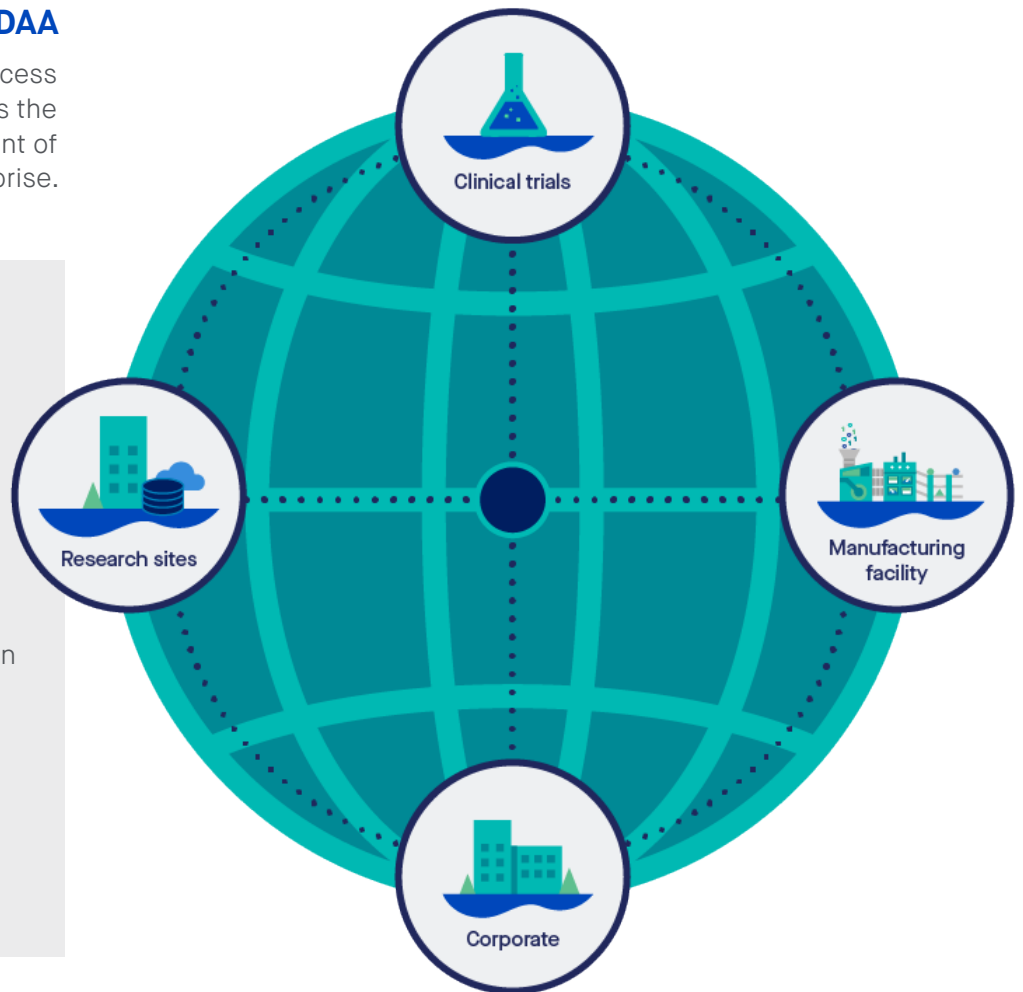- Uses additional 2-10 Gbps ports on RAD X-1040 appliance/server drives the additional 20 Gbps data flow

Why CenturyLink?

Pharmaceutical companies have access to data from more sources and more powerful analytics tools than ever before, which enables them to innovate across the value chain based on intelligence derived from that data. With a growing network of approximately 450,000 route miles of fiber, CenturyLink delivers the infrastructure, technology and people to provide the secure, seamless and timely movement and analysis of data across the globe—innovating how you acquire, analyze and act on data to propel your business forward.

CenturyLink DAA

Figure 1: CenturyLink Data Access Accelerator (DAA) enables the secure, seamless movement of data across your enterprise.

- Cloud-based applications can operate on data that resides within a traditional data center

- Data created by users and devices is immediately available to other users and applications across the enterprise

- Users can operate on data at any location on the DAA architecture, regardless of the distance between the application and the data

- Quickly move data between any DAA enterprise location at enhanced speed to enable DR/CooP operations

Clinical trials

Research sites

Manufacturing facility

Corporate

1. Enterprise Strategy Group, *ESG Master Survey Results: 2019 Data Storage Trends,* November 2019
2. Ovum Study of 48 Pharmaceutical IT leaders, "Pharmaceutical enterprises realize the benefits of adaptive networking" August 2019; Adaptative Networking Primary Research Study.

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