
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549**

**FORM 8-K
CURRENT REPORT**

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

August 21, 2023
(Date of earliest event reported)

APPLIED DIGITAL CORPORATION
(Exact name of registrant as specified in its charter)

Nevada
(State or other jurisdiction
of incorporation)

001-31968
(Commission File Number)

95-4863690
(IRS Employer
Identification No.)

3811 Turtle Creek Blvd., Suite 2100,
(Address of principal executive offices)

Dallas, TX

75219
(Zip Code)

214-427-1704
(Registrant's telephone number, including area code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

- Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	APLD	Nasdaq Global Select Market

Item 7.01 Regulation FD Disclosure

On August 21, 2023, Applied Digital Corporation (the "Company") posted to the Company's website at www.applieddigital.com an updated investor presentation to be used from time to time in meetings with investors and analysts. A copy of the investor presentation is furnished as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated by reference herein.

The information included in this Item 7.01 of this Current Report on Form 8-K, including the attached Exhibit 99.1, shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or incorporated by reference in any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except as shall be expressly set forth by specific reference in such filing.

Item 9.01 Financial Statements and Exhibits

EXHIBIT INDEX

Exhibit No.	Description
99.1	Investor Presentation August 2023
104	Cover Page Interactive Data File (embedded within the Inline XBRL document).

SIGNATURE

Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: August 21, 2023

By: /s/ David Rench
Name: David Rench
Title: Chief Financial Officer



APPLIED DIGITAL

Company Overview

August 2023



Applied Digital



APPLIED DIGITAL

WHO WE ARE

Applied Digital (NASDAQ: APLD) is a U.S. based operator of next-generation digital infrastructure, providing cost-competitive solutions to High-Performance Compute (HPC) and Artificial Intelligence (AI).



EXPERIENCED LEADERSHIP TEAM



Wes Cummins

CHAIRMAN & CEO

- Holds a BSBA from Washington University in St. Louis where he majored in Finance and Accounting
- B. Riley Asset Management, 2021 – Present, President
- 272 Capital LP, 2020 – Present, Founder and CEO
- Nokomis Capital, 2012 – 2020, Technology Lead
- B. Riley & Co, 2002 – 2011, President
- Current Board Member at Vishay Precision Group, Inc. (NYSE: VPC), and Sequans Communications (NYSE: SQNS)
- Former Board Member at Telenav (NASDAQ:TNAV)



Jason Zhang

CO-FOUNDER

- Holds a bachelor's degree in Economics from Harvard College
- Angel Investor, Startup Advisor, Serial Entrepreneur
- Sequoia Capital, 2017 – 2019, Investment analyst
- MSD Capital (Michael Dell family office), 2015 – 2017, Investment analyst



David Rench

CFO

- Holds a BBA from the Neeley School of Business at Texas Christian University in Fort Worth, Texas, and an MBA from the Cox School of Business at Southern Methodist University.
- Hirzel Capital, 2017 – 2020, CFO
- Ihiji (acquired by Control4 – NASDAQ: CTRL), 2010 – 2017, Co-founder, VP of Finance and Operations



Mike Maniscalco

CTO

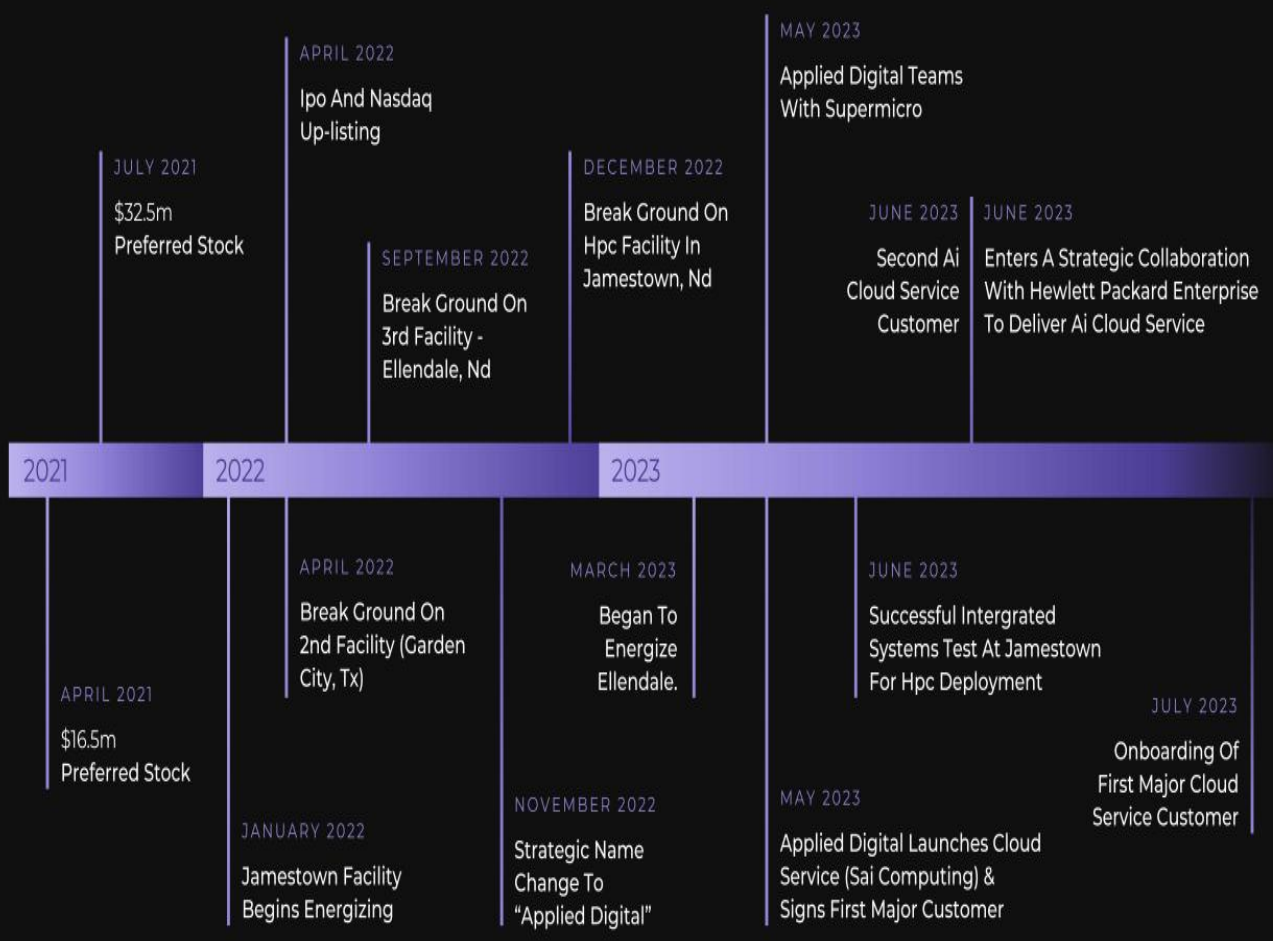
- Holds a degree in Computer Science from the Georgia Institute of Technology.
- A serial entrepreneur with multiple startups and exits, and prior experience with StanleyX and Fortune 1000 companies.
- Over 20 years of experience in web3, IoT, financial, telecommunications, and healthcare industries.



ORGANIZATIONAL CHART



CORPORATE TIMELINE



WHAT WE PROVIDE

Industry Leading Infrastructure Solutions

We offer a wide range of solutions and services for compute intensive applications



1 AI BASED CLOUD SERVICES

Providing Graphics Processing Unit (GPU) Cloud Services Applicable to Artificial Intelligence under Sai Computing

2 NEXT-GEN HPC DATACENTERS

Providing Power-Efficient HPC Datacenters and Cost-Effective Colocation Services

3 BLOCKCHAIN DATACENTERS

Providing Infrastructure and Colocation Services to Blockchain Network Operators

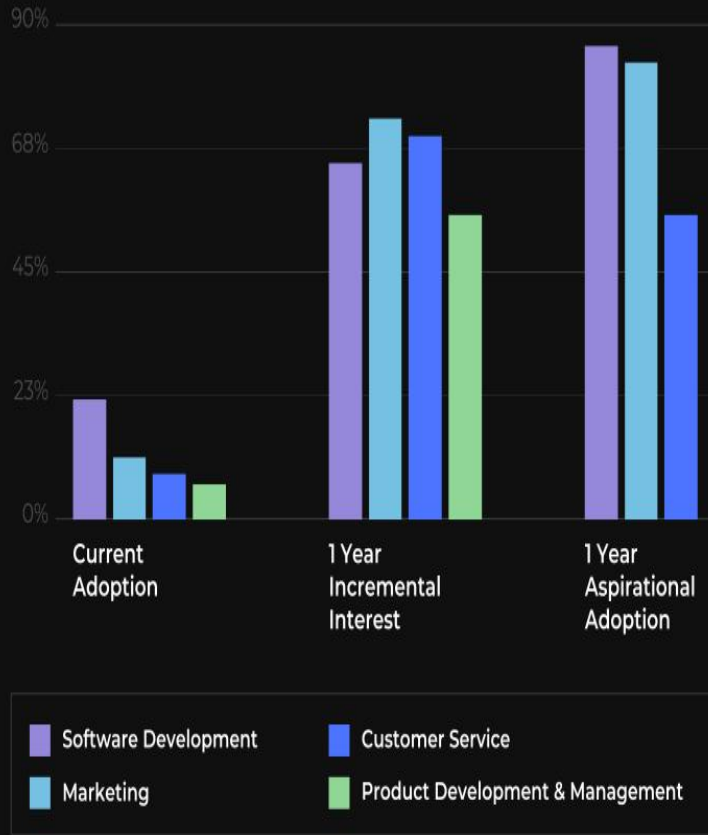


MARKET OVERVIEW

Generative AI is experiencing an explosive growth globally.

This widespread adoption can be attributed from these applications increasing the speed, accuracy and quality of key processes and enhancing creativity and innovation across multiple industries.

Generative AI Use Case Adoption Summary



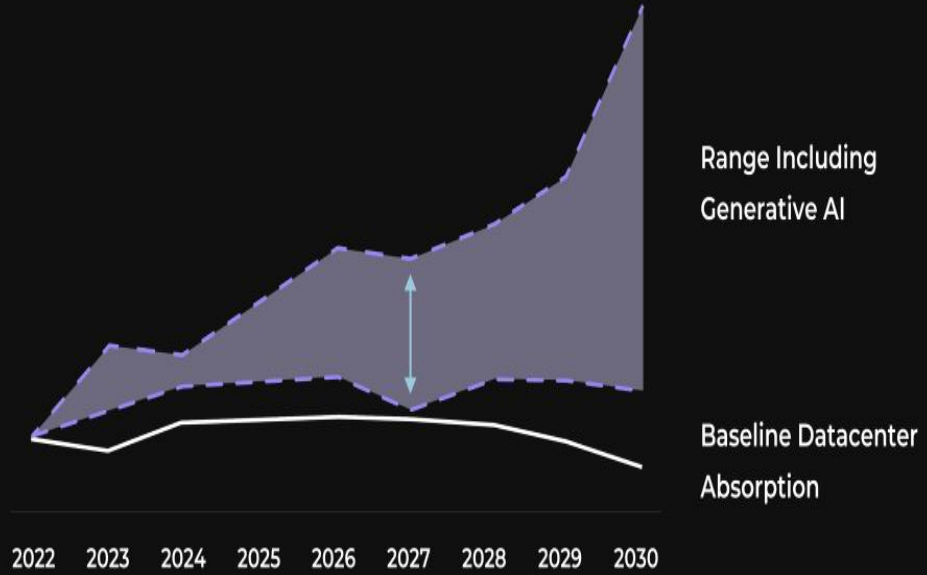
Source: Altman Solon



MARKET OVERVIEW

Global Data Center Net-New Absorption Forecast
2022-2030; GW

Consequently, this exponential growth of adoption is driving demand for compatible datacenters and computational resources to train these models and run inferences.






“ We estimate lower bound of generative AI impact could increase global DC absorption by 44% in 2027. A “bull” case could see DC absorption more than double (+120%) by 2027.”

Source: Altman Solon Research & Analysis



AI WORKLOADS WILL BE LOCATION AGNOSTIC WITH EXTREMELY LATENCY SENSITIVE INFERENCE DEPLOYED IN DENSE POPULATION CENTERS

Applied Digital works as the foundation for providing the infrastructural layer that is needed to stay ahead of the changing demands of GPU clusters and power consumption by continuously investing in research and development, enabling us to offer cutting-edge solutions that meet state of the art industry requirements.

	LOCATION SPECIFIC		LOCATION-AGNOSTIC
	Infrastructure-driven DCs	End-user-driven DCs	
Demand Overview	Public cloud deployments	Small public cloud nodes Set up specific metro areas to serve specific use cases	Large storage/mining farms Deployed to serve use cases that do not require end-user proximity
Key Considerations	Adjacency to existing large scale cloud infrastructure	Proximity to end-user demand in a well-connected DC	Low cost of power subject to "baseline" infrastructure req's
Examples	<ul style="list-style-type: none"> Public Cloud Regions 	<ul style="list-style-type: none"> AWS, MSFT single A-Z regions in major metros CDNs across major metros 	<ul style="list-style-type: none"> Blockchain Network Colocation 
Generative AI Workload Type	Inference and Training started in markets with abundant cloud infrastructure	Training: Location Agnostic	
		Inference: Long-Term, Location-Agnostic Core + Edge	

Sources: Market Participant Interviews, Altman Solon Research & Analysis



WORKLOAD REQUIREMENTS: INFRASTRUCTURE DIFFERENCES

Accommodating AI will require large-scale high-density computing, potentially even at the edge, in well-connected facilities.

	Typical Cloud Core Cluster	Model Training	Large Model Inference	Small Model Inference
Cluster Location	Cloud Region	Cloud Region or Low-Cost Market	Cloud Region or Edge Market	Cloud Region or Edge Market
Typical Size	6 - 24MW	50MW+	5MW - 10MW	1MW - 3MW
Typical Density	6 - 12kW	50MW+	5MW - 10MW	1MW - 3MW
Rack Set-up	~ 20 Servers	~ 4 - 7 Servers	~ 4- 12 Servers	~ 15 Servers
Server Configuration	· 1x or 2x CPU · 2x 600W CPRS	· 2x CPU (~1,200W) · 8x GPU (~6,200W)	· 2x CPU (~1,200W) · 2-4x GPU (~3,000W)	· 1x CPU (~600W) · 1-2x GPU (~1,000W)
Interconnects	Limited	Photonic-based Server-Server Interconnection	Photonic-based Server-Server + Carrier IX	Carrier IX
Bandwidth	800 GB / Rack	12.8 Tbps / Rack	< 12.8 Tbps / Rack	6 TB / Rack

COMMENTARY

Cluster Sizes Suggest Significant Near-term "Training" Demand For New Mega Deployments, And Significant "Edge" Impact Once Inference Picks Up.

Training And Large Inference Will Require Significant Retrofitting, Mostly To Accommodate Liquid Or Immersion Cooling.

Still, Subset Of Demand May Operate At Lower Densities And Require Standard Cooling, Limited Retrofitting.

On-site IX Requirements At Scale Mean Large Sized Well-connected Facilities Are The Primary Ones In Contention To Capture This Demand

Source: Altman Solon Research & Analysis



AI Cloud Services



Applied Digital



Sai Computing

Sai Computing, a wholly-owned subsidiary of Applied Digital, offers cloud services that provide high-performance computing power for AI applications, including large language model training, inference, graphics rendering, and more.

CLOUD SERVICES TEAM

Michael Maniscalco

CHIEF TECHNOLOGY OFFICER

- A serial entrepreneur with multiple startups and exits, and prior experience with StanleyX and Fortune 1000 companies.
- Over 20 years of experience in web3, IoT, financial, telecommunications, and healthcare industries.
- Holds a degree in Computer Science from the Georgia Institute of Technology.

Erik Grundstrom

VP OF HPC INFRASTRUCTURE

- Over 20 years of experience HPC and Datacenters
- Formerly Director FAE & Business Development at Supermicro
- Delivered diverse workloads such as deep learning, seismic analysis, high-frequency trading, computational fluid dynamics, electron microscopy, etc.

Terry Koenn

VP CYBERSECURITY & COMPLIANCE

- Formerly Director Information Security & Compliance at Experian
- Nearly 30 years in security, compliance and networking
- US Marine Corps Veteran

16 ENGINEERS - HPC, SYSTEMS, NETWORK, SOFTWARE
 81 DATACENTER EMPLOYEES - DATACENTER OPERATIONS TEAM

Our team has worked for or on HPC Systems for companies including:



Bare Metal GPU Cloud Services

SUMMARY

The Bare Metal Service model gives a gold standard to a deployment as a purpose-built dedicated physical infrastructure to a client's on-site server room. This service offers a full stack of network, storage, compute in one deployment with a cloud-like capability to deliver hardware at the speed of software.

Bare Metal Advantages:

1. Dedicated Systems Resources
2. Reduction of the Noisy Neighbor effect in Datacenter deployments
3. Faster Deployments and Scalability
4. Ability to interchange between Training > Inference Models
5. Ability to switch hardware – more dynamic
6. Custom Access – Direct IP, API



Performance and Reliability

APLD Infrastructure and Sai Services Designed for Performance, High Availability, Security and Reliability.

- **Unparalleled Processing Power:** Our GPU Cloud boasts state-of-the-art Graphics Processing Units (GPUs) that deliver unmatched computational power. With thousands of cores and high memory bandwidth, these GPUs can handle massive parallel processing tasks, enabling swift execution of data-intensive operations.
- **Reliability and Uptime:** We understand that mission-critical applications cannot afford downtime. That is the reason why our GPU Cloud is built on a robust and fault-tolerant architecture. Redundancy measures, load balancing, and failover mechanisms ensure high availability, minimizing the risk of service disruptions.
- **Data Security and Privacy:** We prioritize the security and privacy of your data. Our GPU Cloud employs industry-leading encryption standards and follows strict compliance protocols to safeguard sensitive information from unauthorized access or breaches.
- **Optimized for AI and ML Workloads:** AI and machine learning tasks often require iterative training processes that demand significant computing resources. Our GPU Cloud is tuned to efficiently handle such workloads, reducing training times and improving the accuracy of models.
- **Expert Support and Monitoring:** Our team of experienced professionals is dedicated to providing high standard support and monitoring services. From initial setup to ongoing maintenance, we are committed to assisting you throughout your journey on our GPU Cloud.



GPUs Offered



NVIDIA Ampere GPUs

- A40
- A6000
- A100
- H100 80GB SXM
- H100 80GB PCIE



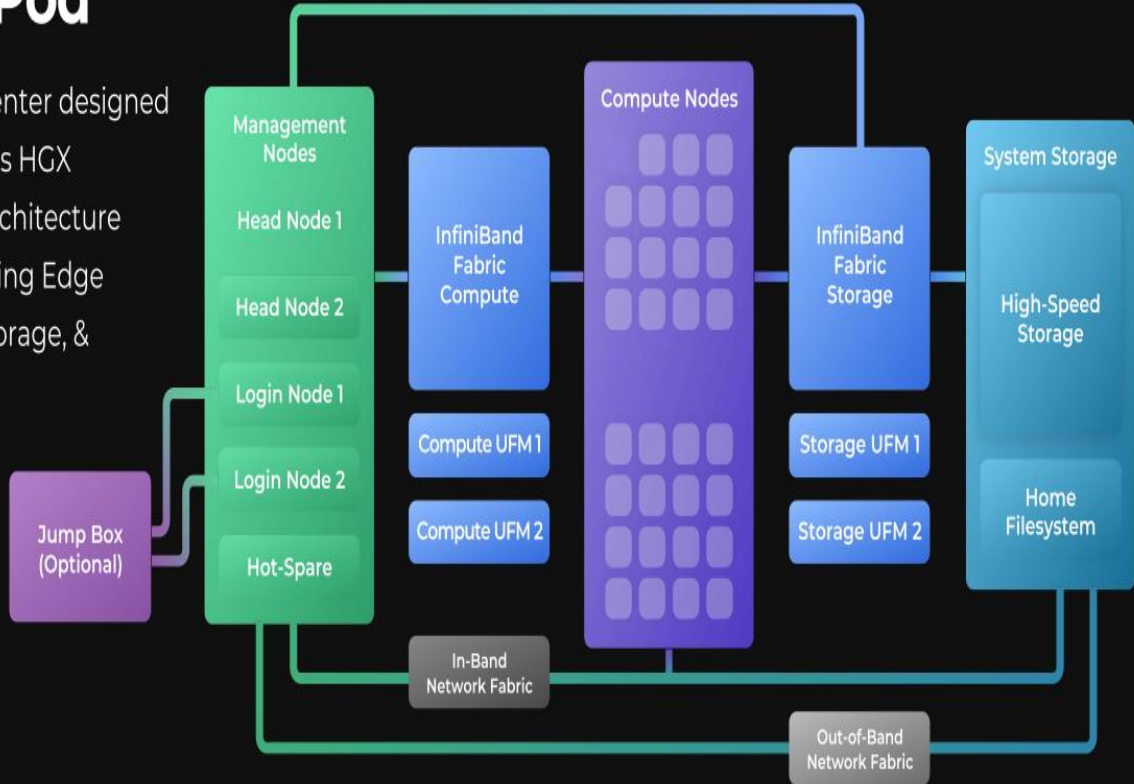
Future Offerings

- L40S
- Grace Hopper GH200



HGX H100 SuperPod

APLD Datacenter designed using NVidia's HGX Reference Architecture offering Cutting Edge Compute, Storage, & Networking



APLD's OEM Equipment Partners

PARTNER AGNOSTIC ENGINEERED SOLUTIONS



Key areas that differentiate our GPU Cloud services from competitors

NVidia H100

Highly Competitive AI Teams require access to state-of-the-art GPU Clusters. Sai was one of the first large scale cloud providers in the World to bring NVidia H100 online for customers.

Bare Metal

For highest levels of performance and flexibility, Sai offers customers server bare metal access. Sai and its partners have alternatives for customers who need CLI or Web UI access.

Support

The team comes from a background of hyperscalers, world class HPC centers, and innovative tech startups enabling strong support for sophisticated users of compute.



Cloud Service Offering Overview



Reserved Compute

STANDARD CLUSTER
DEPLOYMENT 1024X GPUS

- 6 Month Minimum Term
- Upto 72 Month Term Contracts
- Fixed Price
- Support + NVidia Architecture



Burst Compute

SMALL TO MEDIUM CLUSTERS

- Immediate Bulk Compute Needs
- Short Term Reserve for Hourly Compute
- Variable Pricing based on Availability



Short Term

MARKET PLACE

- Per GPU per Hour
- Per Server Per Hour



OVERVIEW

Product Roadmap



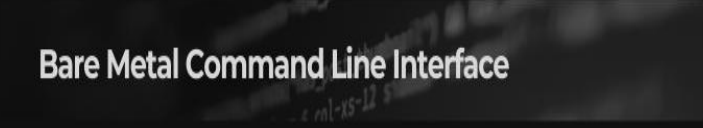
Bare Metal GPU Clusters



Visualization, Containerization, Orchestration



Data Science Solution Based Partnerships



Bare Metal Command Line Interface



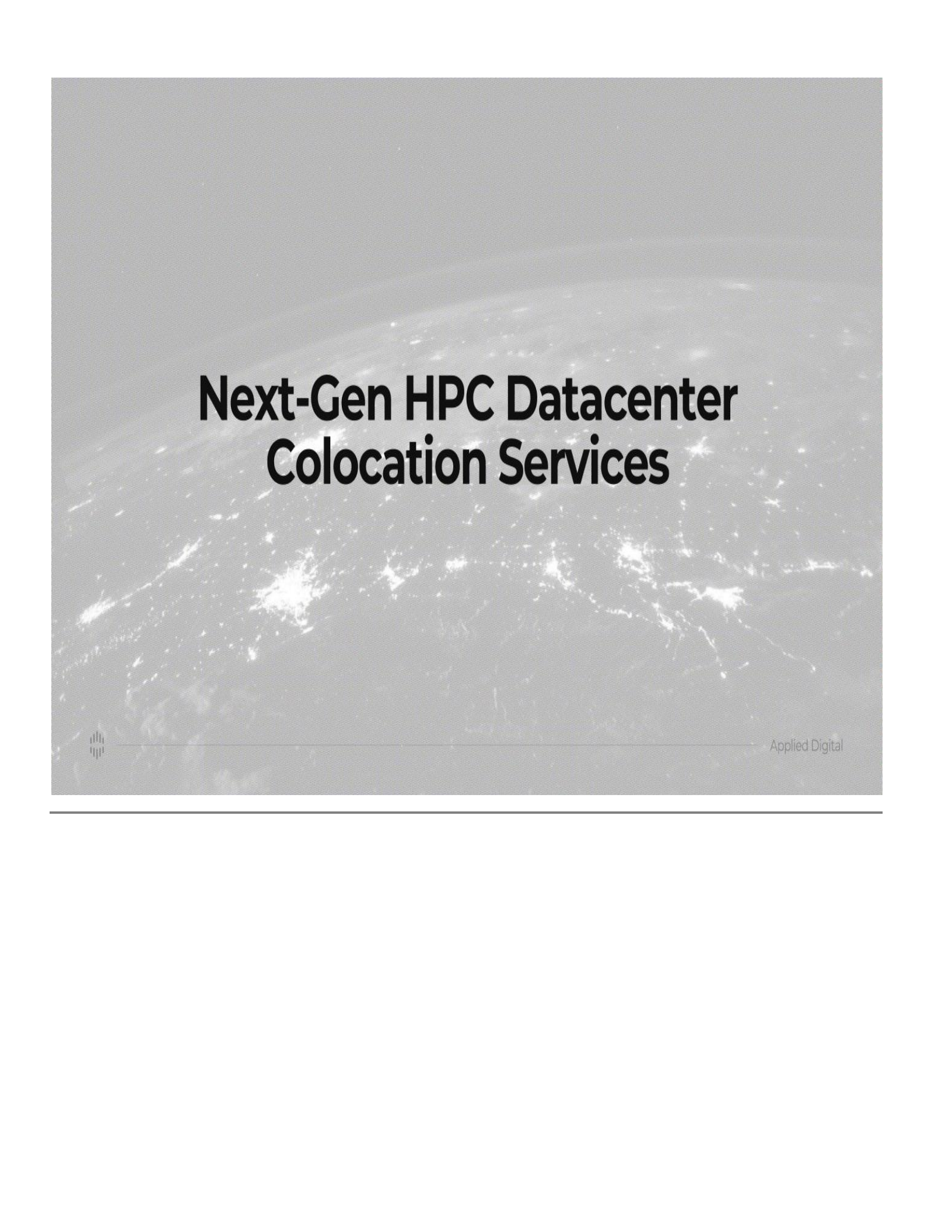
Web Management Interface

Partnerships

Partnerships with several companies for simplified interfaces

- For Data Science & ML Teams (Small & Lean)
- Location Agnostic or Specific Requirements
- Doesn't Require System Engineers or Admins
- GPUs by the Hour
- Command Line Interfaces
- Web Interfaces





Next-Gen HPC Datacenter Colocation Services



Applied Digital

COLOCATION SERVICES TEAM

Brad Barton

EVP OF RE DEVELOPMENT

- Has executed over \$2.5 billion in mission critical datacenter projects in the US and Mexico
- More recently, he delivered multiple hyperscale, wholesale, and collocation datacenters totaling over 150 megawatts for large REITs, social media clients and financial institutions

Nick Phillips

EVP OF DC OPERATIONS

- Core Scientific, 2017-2018, Chief Operating Officer
- Led the buildout of the first sites, including locating power sites, finding contractors, sourcing equipment, building the team, working with local and state governments, etc

Etienne Snyman

EVP OF POWER

- ATOC Power Canada Ltd, 2012 – 2017, developer builder, and operator of power generation facilities
- Leadership roles at China National Offshore Oil Corporation, and ENMAX Energy Corporation
- Hut 8 Mining Corp (NASDAQ: HUT), Head of Power

Roland Davidson

EVP OF ENGINEERING

- Spent the last 4 years designing and building HPC facilities, including for HUT 8 Mining Corp (NASDAQ: HUT)
- Specializes in commissioning, procuring, testing of power system components

Head of Procurement

Power Engineering Lead

Sr. Project Manager

Design Lead

Site Managers

Logistics Coordinator

Purchasing Agent

Construction Project Manager

VP of Datacenter Ops

Operational Control Center Manager

Our team has worked for or on datacenter projects for companies including:



Applied Digital

Applied Digital HPC-Centric Datacenters Solutions

PROBLEM

- Nvidia HGX Servers Require 10kW+ per server and 40kW+ per rack for large clusters
- Traditional Datacenter "High-Density" is <15kw/rack
- Traditional air-cooled datacenters are inefficient and hit scale points at 45-50kw/rack
- Cutting edge supercomputing centers are pushing 200kw/rack today
- Large training clusters need close physical proximity and greater density

SOLUTION

- Design higher density racks and datacenters to maximize space and minimize cabling distances, thereby expanding the cluster sizing
- Higher density requires specialized facilities, equipment and design
- Highest density clusters require liquid cooling. Applied's datacenters are engineered to support advanced liquid cooled infrastructure for the most demanding future density requirements



STATE-OF-THE-ART INFRASTRUCTURE

Applied Digital Datacenters focus on massive compute loads, high-density deployments and efficiency.

APLD'S CAMPUS INCLUDE:

- Dedicated Substation
- Custom Office Space
- Dedicated 24/7 Security Team
- Customizable Access Controls
- Cutting Edge Video Monitoring leveraging AI and Edge Analytics
- Loading dock with Burn-In
- Customer Storage Area
- Centralized Operations Command Center



AI Generated Image

DATA HALL FLOORS
DESIGNED FOR FLEXIBILITY

- Tailored to customer requirements for InfiniBand friendly deployments
- Rack Densities from 45KW to 120KW can be deployed in a contiguous space
- Cost effective electrical and mechanical fit out models
- Data halls can be securely subdivided
- Industry leading Power Utilization Efficiency



Regions

Utah UT

Datcenter Region
Salt Lake City
Datcenter Code
SLC

Nevada NV

Datcenter Region
Las Vegas
Datcenter Code
LV

Colorado CO

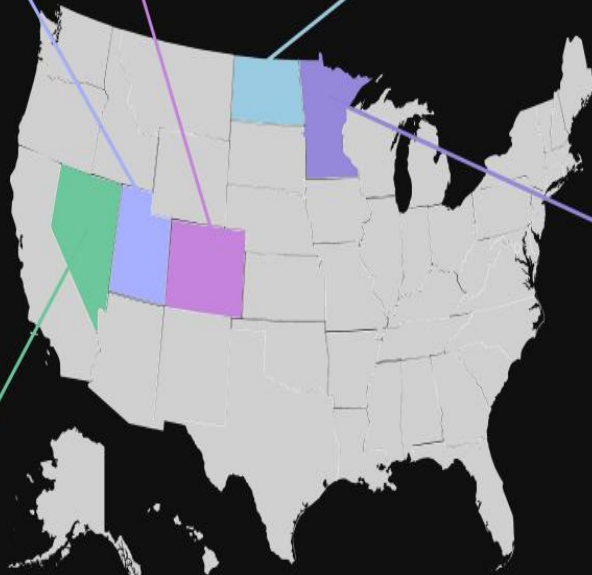
Datcenter Region
Denver
Datcenter Code
DEN

North Dakota ND

Datcenter Region
Fargo
Datcenter Code
FAR

Minnesota MN

Datcenter Region
Minneapolis-Saint Paul
Datcenter Code
MSP





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