

# Federal Government & Public Agencies: Secure, Flexible and Sustainable Data Center Solutions

Aligned delivers ultra-efficient, rapidly deployable and scalable infrastructure that lowers costs, mitigates risk, and responds to continuously changing requirements. Aligned combines strong and stable capital with a standardized supply chain that includes a 50MW auto-replenished pool of Vendor Managed Inventory (VMI) comprised of prefabricated, factory-built and tested power and cooling equipment. This ensures our government customers are able to meet aggressive speed-to-mission targets while remaining unaffected by market fluctuations or supply chain obstacles. Aligned is also able to build to Sensitive Compartment Information Facilities (SCIF) standards either through a retrofit of current space or a greenfield deployment.



### Lower Cost TCO

Aligned's patented and award-winning cooling technology, Delta<sup>3</sup>, reduces mechanical infrastructure requirements by as much as 40% compared to competitors, lowering operational and energy costs without stranding space or capacity.



### Flexible & Modular Design

We employ a modular approach to design and construction. Our mechanical, electrical and plumbing (MEP) design decouples space from power and can support density increases vertically within the rack or horizontally with additional rack positions.



### Efficient & Sustainable

Aligned's cooling technology requires up to 80% less energy and consumes up to 85% less water with the ability to run waterless as required, upholding the policies of the Federal Energy Management Program (FEMP) to optimize data center efficiency and sustainability.



### Secure & Compliant

Our state-of-the-art data centers provide multi-layered physical security and meet stringent compliance standards to safeguard infrastructure, ensure maximum availability, and protect government data and systems. Built to FISMA moderate standards (which can be increased as needed). A number of our employees hold security clearances with the Federal Government.

## Security Overview | Five Layer Approach

LAYER 1	LAYER 2	LAYER 3	LAYER 4	LAYER 5
Perimeter Fence & Gate Badge reader access	Lobby & Security Desk Badge reader access	Reception & Admin Space Badge + biometric reader access; Mantrap entrance	Data Hall Buffer & Corridor Badge reader access	Private Data Hall Suite Badge + biometric reader access
				
<b>LAYER 1</b> Care gate with 8 ft tall perimeter fence	<b>LAYER 2</b> Secure door entrance to building	<b>LAYER 3</b> Security reception and mantrap entrance		



# Case Study: Cooling the Supercomputers of Our Environmental Stewards

A government agency with thousands of engineers and scientists who use high-density supercomputing to predict and respond to climate change and other environmental challenges selected Aligned as its data center provider.

## Challenge

The customer was looking for a provider with an ability to understand their needs and work with different technology partners to provide an optimal solution that addressed its cooling and scalability challenges. The agency previously used rear-door heat exchangers to cool their environment.

## Solution

Aligned integrated our patented and award-winning Delta3 cooling technology with the agency's water-cooled infrastructure to accommodate the high temperatures associated with supercomputing. Aligned's cooling systems are designed to be easily, efficiently and cost-effectively configured for supercomputing.

## Results

Aligned ultimately saved the government agency millions of dollars in upfront capital expenditures and provided it with the ability to scale their solution quickly, seamlessly and cost-effectively, as needed. In fact, Aligned gave the agency the scalability and flexibility to double their operations in the same space, along with the ability to grow into the solution over time, which will provide additional significant savings.

## Reliability and Industry-leading PUE

We provide a 100% uptime service level agreement (SLA) in Tier III designed and built data centers. The Aligned solution is designed to achieve one of the lowest PUE's in the industry—as low as 1.15.

## Geographically Diverse

Aligned's adaptive data centers are sited in geographically diverse locations, enhancing mission resiliency and survivability. Our flagship data center in Ashburn, Virginia, is located approximately 30 minutes from Washington, D.C. and less than 800 feet from the original UUNET-managed MAE East Exchange.

## CONNECTIVITY

All Aligned data center campuses offer network-neutral connectivity to a robust portfolio of top-tier carriers and telecommunications providers by way of multiple diverse Meet-Me Rooms (MMRs) and fiber entrances with lit and dark fiber services. PacketFabric, the leading Network-as-a-Service (NaaS) platform, provides Aligned government customers with private, direct access to major cloud service providers such as Amazon Web Services (AWS), Microsoft Azure and Google Cloud.

## CLIENT PORTAL

Aligned's client portal features a fully integrated user experience that spans asset monitoring, ticketing, business intelligence, and capacity forecasting. Our solution offers broad transparency and control from a convenient and singular entry point.

## CUSTOMER FOCUSED

Aligned's client-centric culture has resulted in a 100% customer retention rate. 68% of our existing customers elect to expand their capacity with Aligned.

## ALIGNED PROUDLY EMPLOYS MILITARY VETERANS

Aligned employs military veterans throughout our facilities and 25% of our Critical Facilities Technicians are Navy-trained nuclear technicians.

For more information, please contact: **Michael Chai, Senior Vice President of Sales**  
michael.chai@aligneddc.com | +1.510.393.4964

