



Managed Data Centers

Service Description

Introduction

Technology promises the world—streamlined infrastructure, instant scalability, seamless cloud migrations, and much more. But technology doesn't live up to its promise without a trusted advisor.

The Deft team humanizes technology. We actively listen to our clients, learning and collaborating to develop tailored proposals that perfectly fit your company's needs. We then design, build, operate, secure, and scale unique technology solutions with a singular purpose: to deftly deliver on the promise of technology for you and your customers.

We make a difference for our clients daily. We anticipate your needs, and consistently bring thought leadership and expertise to every encounter.

We push our potential to maximize yours. Growing our skill sets, embracing change, innovating, optimizing, and setting new standards: these are Deft's core operating principles.

We always find a way forward. Creativity is fundamental to our problem-solving process. Strong, well-informed perspectives guide our strategic decisions and define our products and services.

We care, and we show up. We're the right partner. We believe in your business and in your ability to succeed. Your issues and needs drive our mission every day.

Deft: the most trusted technology partner since 2000.

Managed Services Partnerships

At Deft, we approach Managed Services Partnerships (MSP), especially those involving the Data Center, in a unique way.

You'll see that we use the term Partner instead of Provider. This is because we see Managed Services as a true partnership — and successful MSPs are that — partnerships.

The foundations of success are planning and collaboration. With regular, constructive conversations about business continuity, and its requirements for your business, we can and will deliver success.

Our MSPs focus on delivering tangible value in four distinct phases:

Consult

- We begin with a detailed assessment of your current strategy and environment.
- Everything that can impact your business success is accounted for, including physical infrastructure, individual workloads, server configurations, network architecture, databases, data lakes, security concerns, compliance requirements, and application and business process interdependencies.

Plan, Design and Build

- We then build out a detailed strategy that aligns specifically with your desired business outcomes.
- After agreement on the Plan and Design, we begin building your Data Center environment. We work with your team so you are fully prepared for operating in your new environment.
- Once aligned, we work with your team to migrate to

your environment.

- We apply guidance and best practices gained through our operating experience and supported by our partners (AWS, Microsoft Azure, Dell, Ciena, Cloudian, Juniper, Nimble, Rubrik, Veeam, VMware, Zerto and more).

Run and Operate

- Now that your environment is successfully migrated and verified as ready for production, we perform proactive management, administration, monitoring, and support in line with our Data Center MSP Management Matrix.

Optimize and Evolve

- The final step in a Deft MSP is the ongoing optimization and evolution of your environment.
- As we manage your environment on a day-to-day basis, we will identify opportunities for improvement and continue to make sure your environment still aligns with your business objectives.
- Any opportunities are shared directly with your IT and leadership teams to inform strategy and decisions.

Each phase uniquely supports your business, providing exactly the management you need to ensure success.

We are a trusted partner that is constantly being prescriptive and proactive about changes to your solution based on your needs and the ever-evolving technology landscape.

Service Overview

Deft's Managed Data Center Services provide organizations with premium data center space, power, cooling, network connectivity, and security services necessary for the operation of IT infrastructure requiring maximum uptime and availability. This service is provided within Deft-operated data centers and can be used with a variety of complimentary services, including remote hands, enhanced security, advanced monitoring, infrastructure migrations, managed connectivity to customer-operated on-premise infrastructure, and managed links to third-party cloud platforms including, but not limited to, Amazon Web Services, Google and Microsoft Azure.

Data Center Space

Data Center space is allocated by the cabinet or by the cage at each data center. Cabinet options include 1/4 Cabinets, 1/2 Cabinets, and full-size Cabinets. Cabinets are delivered with front and rear combination/key locks. Biometric authentication for Cabinets is also available for an additional fee.

Cage space is offered at each Deft Data Center. A Cage is a specific area of floor space separated from other customers by a fence or a wall. A typical cage consists of cage walls, and one door with an electrical lock. Physical security can be enhanced by adding below-floor extensions, cage roofing, higher walls, various lock options (proximity card, keypads, or biometric scanner with single or multi-factor authentication), surveillance cameras, and other optional features.

Data Center Power

Critical power for Cabinets or Cages can be configured with a variety of power circuits, with options for amperage, voltage, and overall power draw measured in kilowatts (kW). We will tailor the power circuit characteristics based on the Customer's needs and power delivery available in the selected data center.

Customers pay an all-in price for the power, cooling, and management of the Cabinets or Cages. Customers can also choose to leverage a Draw Cap, where Customers pay for a portion of the provisioned power, allowing for growth without the need for future downtime to re-circuit the Cabinet or Cage. Draw Caps can be applied to single or multiple Cabinets. Metered power is not available.

By default, critical power is delivered in a redundant configuration, with primary and redundant paths connected to physically separate power infrastructure, including separate power distribution panels, separate physical electrical cables, separate uninterruptible power supplies (UPS), and redundant on-site power generators. Customers can provide their own power distribution units (PDUs), or PDUs can be included with a Cabinet for an additional fee. With advance approval, critical power can be provided with a primary/primary path configuration.

Data Center Locations

Deft Data Centers are offered in a variety of geographies, most located in (or connected to) major network Peering Points to minimize latency. Each data center includes multiple layers of secure access, including restricted entrances staffed 24x7 by professional security, visitor screening & logging, dual-factor authentication via biometric & proximity scanners, multiple points of authentication throughout the data center, monitored and recorded video surveillance, and isolated shipping and receiving areas with package receipt & screening. Deft monitors for temperature, humidity, and smoke & particulate matter to ensure rapid response to changes in the data center environments.

Current Deft Data Center locations include:

Chicago Area

- Elk Grove Village, IL – Deft's flagship facility with the highest power density and deepest on-site services, including an on-site Service Desk and equipment depot. Elk Grove Village is a Deft Managed VMware Cloud Availability Zone for flexible hybrid Data Center - Cloud Environments.
- Chicago, IL – We maintain multiple independent spaces within 350 E. Cermak, one of the core networking interconnection points in North America. Chicago is a Deft Managed VMware Cloud Availability Zone for flexible hybrid Data Center - Cloud Environments.

United States

- San Jose, CA – Multiple facilities in the heart of Silicon Valley for the best proximity to the technology sector and Asia-Pacific peering points. San Jose is a Deft Managed VMware Cloud Availability Zone for flexible hybrid Data Center - Cloud Environments.
- Ashburn, VA – Multiple facilities in the largest data center hub in the world, with close proximity to financial markets, Europe, and major cloud providers. Ashburn is a Deft Managed VMware Cloud Availability Zone for flexible hybrid Data Center - Cloud Environments.

International

- Amsterdam, The Netherlands – Located within the European Union, ideal for access to the common market and businesses with data sovereignty requirements.

- Frankfurt, Germany – Located within the European Union, ideal for access to the common market and businesses with data sovereignty requirements.
- London, UK – Close proximity to major European financial markets and technology centers.
- Sydney, Australia – Supporting rapidly growing APAC markets.
- Tokyo, Japan – Supporting rapidly growing APAC markets.

Carrier Neutral Data Centers

All Deft-operated data centers are carrier neutral. This ensures customers will be able to connect to any carrier in the facility and take advantage of changes in the carrier marketplace, as it evolves. Termination & demarcation points for carriers are generally installed in a common “meet-me room” (MMR) in each facility. For security, consistent management, and operational stability, Customers are not allowed to install direct connections into MMRs. We offer services to extend the demarcation point from the MMR to Customer equipment installed in Cabinets and Cages, giving Customers access to the various carrier services.

Deft Private Network Services

Deft maintains a separate, private network core at each data center. Each core contains redundant sets of network equipment to provide core routing for the data center network and internet-facing routing infrastructure. This is the demarcation point for our Global Network, a multi-gigabit private backbone enabling Colocation customers to connect to services and infrastructure in every other Deft data center. The services delivered from the network core are 100Gigabit-enabled, offer disparate physical paths to each location, and are built using resilient, standards-based protocols.

The network core allows us to offer its CloudLink service in each facility. CloudLink is managed by Deft and leverages multi-gigabit, carrier class infrastructure to connect Customer infrastructure to third-party cloud platforms including Amazon, Google, Microsoft, and Deft's Managed VMware Cloud offerings.

For more information, please see the CloudLink Service Description.

Cross-connect services are offered in each data center. Cross-connects can be delivered using different media types, including twisted-pair copper cables, multi-mode fiber optic cables, or single-mode fiber optic cables. Cross-connects can connect Customer-operated equipment in different Cabinets or Cages. Cross-connects can also be used to connect to Deft's network core, allowing access to other Deft data centers or services, such as IP Transit, Deft-managed transport services, or Managed Services like Managed Backup, Managed Storage, Managed Firewalls, and more.

We offer a host of additional services in each data center. Remote hands can be used to engage our experienced administrators and technicians to perform tasks for Customers at the data center. Other services include drive destruction, media wiping, equipment recycling, cardboard recycling, shipping & receiving, storage cabinets, free access to public Wi-Fi, customer break rooms, and more. At the Elk Grove Village, IL data center, Deft maintains an Onsite Parts Depot with an extensive inventory of servers, firewalls, routers, switches, load balancers, storage appliances, data cabling, PDUs, and accessories, all available 24x7x365. For details and pricing information on these services, please contact sales@deft.com.

Data Center customers have the option of migrating existing infrastructure to a Deft facility or working with us to provide a fully managed data center migration. We provide comprehensive physical datacenter migrations

leveraging internal staff and resources. Migration services generally include physical inventory & documentation, written assessments of the work to be performed, project management, planning & execution of the migration, and knowledge transfer for the Customer. Customers can also opt to have our Managed Services Team support the final environment. For details and pricing information on migration services, please contact sales@deft.com.

The data centers, network cores, environmental systems, and security systems are all monitored 24x7x365 by our Service Desk. Reporting and documentation on these services is provided through our secure Customer Portal.

Key Features Summary

- 20+ year track record of 100% uptime SLA on power and network services in data centers
- Delivered in premier, carrier-neutral data centers across the globe
- Purchase 1/4 Cabinet, 1/2 Cabinet, full Cabinet, multiple cabinets, or cage space
- Access to multi-carrier meet-me rooms via carrier cross-connects
- Access to our multi-gigabit, private global backbone
- Cross-connect to other Deft services & public clouds
- 24x7 monitoring of power, cooling, security by our Service Desk
- Add-on services include remote hands, equipment receiving & storage
- Onsite Parts Depot with immediate access to servers, firewalls, routers, switches, load balancers, storage appliances, data cabling, PDUs, and accessories.
- Option for managed migration services
- Complete facility management by our Data Center Operations experts
- Secure customer portal for monitoring, documentation, ticketing, and other deliverables

Roles, Responsibilities and Process

Successful Managed Services are the result of transparency and collaboration. Clearly defined processes and a detailed outline of roles and responsibilities are where this collaboration begins.

Our Managed Data Center Services are preceded by defined Consult and Plan, Design and Build processes. These critical steps establish the foundation for the execution of the Service and align these critical processes with your unique business needs.

Consult

We follow a proven, structured process of automated data collection and personal interviews with key business stakeholders, IT infrastructure, and application teams to successfully complete the Discovery process.

The outcome of these efforts includes identification of identification of business drivers and the discovery / analysis of your existing environment including Business and IT Governance processes, Infrastructure configurations and Networking and Security policies.

Discovery sessions are conducted with your company's subject matter experts (SMEs) and our Managed Services team. This collaboration helps us prioritize your goals and ensure that all critical success factors are met.

Plan, Design and Build

The data gathered and objectives defined in Consult inform the configuration and process requirements for your Service. Plan, Design and Build brings these to life.

During this phase we will deliver the official, comprehensive analysis of the current environment. This documentation includes, but is not limited to, Infrastructure Diagrams and network connectivity requirements – identifying how is accessed, used and managed today – and where risks are present.

We will also develop and deliver a Remediation Plan for the current environment or a Development Plan for a

net-new environment to ensure industry and Deft best practices are in place to support your business today and tomorrow.

Once the recommended Remediation Plan / Development Plan has been vetted and approved, we will move on to complete the Remediation / Development Process using the documentation and decisions identified, and agreed upon, by both parties.

Run and Operate

Now that your environment is successfully configured and verified as ready for production, the official Manage Data Center Service can begin. This is where we begin delivery of proactive day-to-day management, administration, monitoring, and support for your environment.

Optimize and Evolve

The final component of our Managed Data Center Services is the ongoing optimization and evolution of your environment. This phase has us focused on infrastructure performance and cost management. Monthly or quarterly reviews provide updates and opportunities for additional environment optimizations, and Investment Flexibility, based upon changing business requirements and environment performance. Any opportunities identified are shared directly with your IT and leadership teams to inform strategy and decisions.

Customer Success and Service Operations

The foundation of every Deft Managed Data Center Service is collaboration. All customer success and service operations workflows have been designed to minimize response time, mitigate risk and optimize collaboration so knowledge transfer occurs when and where necessary.

We recognize your business, and your customers, operate 24x7x365. We have designed and operate our business to be here for you, whenever and however necessary to ensure your success.

Customer Success Team

Deft provides each customer with comprehensive resources to deliver ongoing service and support for your cloud environment. From sales, solution architecture and certified engineer support on our Service Desk, to customer success and executive management sponsorship, you will have experts with you every step of the way.

How to Contact Deft Support

Deft uses cases to identify incidents and provide support to our clients until the incident is resolved. Case identification and review is conducted using the Deft Customer Portal. Each Deft client is supplied with accounts that are permissioned to create, update and view their cases.

Case Creation – Customer Portal

Support cases submitted to Deft are submitted using the Deft Customer Portal. The portal is accessible at: <https://portal.deft.com>

To create a support case:

- Log into the Deft Customer Portal.
- Select “Create Case”.
- You receive an automatic confirmation of the successful case creation, including the case number.
- Deft Service Desk staff review the case for accuracy, confirm the Severity Level, and send acknowledgment of case receipt to you.
- Deft Service Desk agent & Cloud Services Engineer work to resolve the support case.
- Case updates are provided at set intervals as determined by the Severity Level.
- Case is Resolved & Marked for Closure.

Case Creation – Telephone

We recognize there may be times when a support case required the immediacy only a phone call can provide. Support cases may be created by calling the Deft Service Desk at +1 312-829-1111, Ext. 2. Telephone submitted support cases utilize a similar support operation, with a few modifications.

To create a support case:

- Call the Deft Service Desk at +1 312-829-1111, Ext. 2.
- Deft Service Desk Agent verifies caller identity, captures relevant information, creates the support case, and assigns a Severity Level.
- Deft Service Desk agent & Cloud Services Engineer work to resolve the support case.
- Case updates are provided at set intervals as determined by the Severity Level.
- Case is Resolved & Marked for Closure.

Case Escalation Paths

Deft provides several, formal options for support case escalation. Escalations occur to set a support case to a desired Severity Level, as outlined below.

Primary Escalation Path - This method is preferred as it is the most efficient method for raising the Severity Level of a case. To create a support case, you will:

- Log into the Deft Customer Portal.
- Navigate to the appropriate case.
- Click the “Escalate Case” link.
- Select the desired Severity Level and submit.

Alternate Case Escalation Path(s) - Additional Case Escalation paths are also available. However, it is important to note that Alternate Case Escalation Paths will not be as expedient as the Preferred Escalation Path.

Alternate Escalation – Case Response

You may submit a response to an existing case and simply request an escalation to the desired Severity Level. The Severity Level will be raised once a Service Desk Agent has reviewed and processed the request.

Alternate Escalation – Phone Support

- You may call the Deft Service Desk at +1 312-829-1111, Ext. 2.
- The Deft Service Desk Agent will verify the caller’s identity and the support case number. You verbally request escalation to the desired Severity Level.
- The Deft Service Desk Agent updates the case accordingly.

Response Time

All Deft MSP customers can set the severity level of their support cases. The severity level you select will determine the response time. You can select the following severity levels when submitting a support case:

Infrastructure Administration (Proactive Services)

Severity Level	Description	Response Time SLA
Critical / Level 1	Critical Issues include business-critical system outages or issues causing extreme business impact.	15-minute response time
High / Level 2	High Severity Level issues include the impairment of production systems, impaired application performance, and moderate business impact.	30-minute response time
Normal / Level 3	Normal Severity Level issues include standard service issue requests and minimal business impact.	1-hour response time
Low / Level 4	Low Severity Level issues include general information requests, questions and guidance from Deft MSP team members, arranging prescheduled maintenance activities.	4-hour response time
Informational / Level 5	Informational Issues include general questions, how-to style requests, or reports.	24-hour response time

As standard business practice, Deft's Service Desk acknowledges all support cases within 15 minutes of case creation. The response times identified in the table above represent the average time required to remediate such issues. Please note the response time to resolution of your issue may vary based upon circumstances and configurations unique to your business and your cloud architecture. Any support cases created without a severity level selected will be set to "Level 3 – Normal" by default.

Service Level Agreements

Deft provides multiple Availability SLAs for Managed Data Center customers including:

- Temperature SLA
- Humidity SLA
- Power SLA
- Network SLA
- Media Conversion SLA
- Support SLA

The SLAs for the Managed Data Center Service will be dependent upon the configuration(s) and location(s) selected by Deft and you.

You can find current version of the Managed Data Center Services SLA on our website at <https://www.deft.com>.

Account Reviews

Deft offers quarterly and annual Account Reviews for all Managed Service Partnerships. These collaborative sessions aim to provide greater visibility into the technical, operational, financial and business aspects of your company and your Cloud. Account Reviews also provide you with a way to offer direct feedback, including areas of improvement, on the status of your Partnership with Deft.

An Account Review agenda includes:

- Introductions
- Technical, Operational, Business Updates
- Service & Performance Metrics/Dashboard Review
Optimization Recommendations
- SLA Adherence & Support Ticket Review
- Access Control List (ACL) Review Q&A/Discussion

Upon completion of each account review, you should be confident that we are flexing our services and approach to meet you where you are and have a plan to take you where want to go so that you can focus on what matters most for your customers and your business.

Responsibility Matrix

We are committed to solving your Managed Data Center challenges so you can focus on what matters most.

Each Deft Managed Services Partnership operates with the understanding that there are two parties involved in supporting your environment: your in-house experts and ours.

The Managed Data Center Service, including all Deft-operated hardware and software utilized in providing the service, is monitored by our Managed Services Team and Service Desk. Should any issues or anomalies be detected with the Service, a member of the Deft Managed Services Team or Service Desk team will take corrective action as planned and notify the customer.

From time to time, we will perform scheduled maintenance activities on the infrastructure supporting the service. Customers will be notified in advance for all scheduled maintenance. Emergency maintenance may be required and performed without advance notice. Should a service-impacting emergency maintenance be required, we will use commercially reasonable efforts to notify Customer upon execution of the maintenance.

The following responsibility matrix defines the roles and responsibilities for each phase:

Consult Responsibilities		
Managed Service	Deft	Customer
Identify Business Drivers	Y	Y
Align Business Drivers with Project	Y	Y
Current Infrastructure	Y	Y
Current Applications	Y	Y
Application and Infrastructure Dependency Mapping	Y	Y

Plan, Design and Build Responsibilities

Plan and Design Managed Service	Deft	Customer
Greenfield Architecture	Y	N
Total Cost of Ownership	Y	N
Migration Planning	Y	N
Compliance Requirements	Y	N
Hardware Selection Requirements	Y	N
Hardware Procurement	Y	N
Power Planning	Y	N
Floorspace Planning	Y	N
Scale Requirements	Y	N
Build Managed Service	Deft	Customer
Proof of Concept / Pilot Environment	Y	N
Environment Build-Out	Y	N
Environment Migration	Y	N
Production Cutover	Y	Y

Run and Operate Responsibilities		
Configuration Managed Service	Deft	Client
Change Management Controls	Y	N
Change Management Coordination with Client	Y	Y
Configuration Changes per Client Request	Y	Y
Monitoring and Alerting Managed Service	Deft	Client
Environmental Controls	Y	N
Power Delivery Health (Branch Circuit Monitoring Systems)	Y	N
Power Circuit Capacity Monitoring	Y	N
Data Center-Specific Power Redundance Infrastructure	Y	N
Visual Display and Recording of Surveillance Video	Y	N
Infrastructure Alert Response and Triage	Y	N
Security Managed Service	Deft	Client
Network Configuration and Security Protection	Y	N
Data Center Physical Security	Y	N
Compliance Support	N	Y
Support / Incident Portal	Y	N
Incident Response	Y	N
Request Response	Y	N

Run and Operate Responsibilities Continued

Support Managed Service	Deft	Client
Onsite Sparing of Identical Hardware (U.S. Locations)	Y	N
Hardware Troubleshooting, Replacement, Maintenance	Y	N
Power Infrastructure Troubleshooting, Replacement, Maintenance	Y	N
24x7x365 Service Desk (Phone, Web, Email, Slack, Video)	Y	N
24x7x365 Secure Customer Portal with Client-Defined Roles	Y	N

Optimize and Evolve Responsibilities

Change Management Managed Service	Deft	Customer
Data Center Critical Resource Requirements	Y	N
Data Center Configuration and Optimization	Y	N
Audit Trails Managed Service	Deft	Customer
Infrastructure Logs	Y	N
Platform Compliance Initiatives	Y	N

Key Assumptions

Deft

- Will monitor the power infrastructure for uptime and availability, including hardware systems, software tools, and operating systems.
- Will monitor the temperature and humidity in each Data Center and alert Customers if minimum or maximum thresholds have been exceeded.
- Will manage, operate, and maintain the Data Center based on accepted industry best practices. We will be responsible for infrastructure support, including return-to-service and vendor escalation.
- Will provide, in writing, any special rules or regulations for the Data Center facility where Managed Data Center Services are delivered. Customer will also receive a Data Center Handbook with general information about Data Center access and features.
- Will perform facility updates, including maintenance & security updates, per the manufacturers recommendations and industry best practices. Updates will occur during declared maintenance windows, with advance notification for the Customer.

Customer

- Customer is responsible for installing, configuring, and maintaining all equipment and applications inside the Cabinet or Cage. We can offer installation and configuration assistance for an additional fee.
- Customer must arrange equipment in the Colocation facility in a hot/cold aisle configuration, as designated by Deft. Customer is prohibited from installing any equipment that exhausts hot air into the cold aisle of any Data Center facility, as doing so may affect the temperature in the Cabinet or Cage, or that of an adjacent Customer's space, or violate the SLA. Special cabinet or equipment venting configurations must be pre-approved by Deft.
- Customer shall not exceed, or install equipment in a manner which could cause Customer to exceed, the Rated Capacity of any power circuit in the Colocation Space, or the Power Cap assigned to the Colocation Space.
- Customer is prohibited from installing power distribution equipment in a daisy-chain configuration.
- Customer is prohibited from powering any of the following equipment from a power circuit in the Data Center Space without prior written consent: power tools, vacuum cleaners, DC power conversion equipment, and battery backup systems.
- Customer is required to notify Deft of all shipments through our Customer Portal or by opening a Support Ticket, in accordance with the rules and regulations of each Data Center facility.
- Customer is responsible for obtaining any desired insurance on any shipment into or out of a Data Center facility.
- Customers are not permitted to move any Cross-Connect from its initial point of demarcation. All connections to Customer equipment must be made using patch cables to the front of the patch panel in Customer's Colocation Space.
- Customers are not permitted to run any cabling on or in Data Center facility cable runways, ladders, trays, or other cable management systems, without our prior written consent.
- Customer will work with us to verify the Data Center Service is delivering the expected services to the Customer owned equipment attached to our power or networking infrastructure.

Additional Questions

For more information, visit www.deft.com or contact us at (312) 829-1111 and sales@deft.com

About Deft

At Deft, we are our clients' most Trusted Advisor.

The Deft team humanizes technology. We actively listen to our clients, learning and collaborating to develop tailored proposals that perfectly fit your company's needs.

We then design, build, operate, secure, and scale unique technology solutions with a singular purpose: to deftly deliver on the promise of technology for you and your customers.

Learn more at www.deft.com or contact us at (312) 829-1111.