



# Managed Operating Systems

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) 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 Managed Operating System 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, 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 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 Operating System (OS) is a fully managed service allowing customers to focus on additional aspects of their business. Managed OS includes the licensing, installation, configuration, administration, monitoring, maintenance and support for the Deft-provided OS and AntiVirus (AV) software. Managed OS is delivered from Deft Data Centers in multiple geographies, giving Customers the option to deploy utilize this service in the most appropriate locations. The Service can be used for servers deployed as part of a Deft Managed Infrastructure service including, but not limited to, VMware Cloud, Amazon Web Services MSP, Dedicated Servers, or customer-owned servers installed in a Deft-managed Data Center.

Deft's Managed OS service that allows customers to move the tiresome, but important, work of maintaining and patching Operating Systems (OS) and maintaining AntiVirus (AV) Software to a trusted partner. With the high number of vulnerabilities and changes in operating systems, a competent approach to OS, patch management and AntiVirus protection is required to insure the safety and integrity of physical and virtual servers. Subsequently, the Managed OS and AV services are offered as a bundle as both are necessary to provide a comprehensive service and the best level of protection for your organization.

For OS Management, operating system updates and patches are managed and deployed through a centralized platform, insuring uniform, repeatable deployments. We will work with the Customer to collect information about their server environment and develop a custom plan for their requirements. We will implement an update and patching schedule based on the customer requirements/timelines and record this plan in a "runbook", which documents the Customer's preferred procedures and schedules for normal patching activities.

We will follow the mutually agreed-upon release schedule for patches and follow all reboot/maintenance procedures as outlined by customer, providing pre- and post-maintenance notifications for each server.

Supported Operating Systems include:

- Microsoft Windows Server
- Red Hat Enterprise
- AmazonLinux
- Ubuntu
- CentOS

For additional operating systems, please contact a Deft sales executive at [sales@deft.com](mailto:sales@deft.com) or your account manager.

As part of the Managed OS service, we include an AntiVirus Management Service to protect critical servers from infection. Deft's AV Management provides a guest-based AntiVirus service with a central management & configuration, operated by our staff of trained engineers. The Service protects servers by scanning for and remediating viruses, malware, dangerous programs, spyware and many other threats. The Service includes regular signature updates and options for regular reporting. Supported Operating Systems for AV Management include Microsoft Windows Server and AmazonLinux, Ubuntu and CentOS when deployed on AWS.

For protection of other operating systems, please contact a Deft sales executive at [sales@deft.com](mailto:sales@deft.com) or your account manager.

## Day-to-Day Management

Deft's Managed Operating System Service delivers consistent operations management and predictable results by following industry-standard and proven, internal best-practices. The specific services / management functions offered by Deft as part of the Service include:

### Licensing

For the Managed OS Service, Deft provides all OS and AV licenses. Customers agree to use these licenses and the related software in accordance with all applicable licensing terms and conditions as set forth by the Manufacturer. Any violation by the customer of the licensing terms and conditions set for by the Manufacturer and Deft may result in immediate termination of the service..

### Installation

For the Managed OS Service, Deft provides the installation of all OS and AV software, updates and patches. This includes, but is not limited to, OS validation, OS functionality confirmation, OS image creation with AV software and ongoing AV signature updates from AV and OS vendors.

### Configuration

For the Managed OS Service, Deft provides the configuration of all OS and AV software. This includes, but is not limited to, administrator creation, defining user policy, password policy / OS and AV governance policy creation and environment variable definitions.

### Administration

For the Managed OS Service, Deft provides the Administration of all OS and AV software. This includes, but is not limited to, maintaining sole access to OS-level software and AV software configurations, executing requests for new OS-level users and issuing required updates to password policy / OS and AV governance policy.

### Monitoring

For the Managed OS Service, Deft provides the Monitoring of all OS and AV software. This includes, but is not limited to, 24x7x365 real-time monitors and alerts for the OS and AV deployments, 24x7x365 notification and engagement of customer contact(s) should issues arise.

### Maintenance

For the Managed OS Service, Deft provides the Maintenance of all OS and AV software. This includes, but is not limited to, regularly scheduled updates to OS and AV software, ad-hoc updates to OS and AV software should emergency updates be necessary, communication of regularly scheduled maintenance and coordination of emergency maintenance.

Regular maintenance schedule:

- Production: Declared Saturday of Every Month:  
4:00am - 8:00am CST/CDT
- Other Environments: Remaining Saturdays: 4:00am  
- 8:00am CST/CDT

Based on the Managed OS configuration, Deft will perform scheduled maintenance activities on the infrastructure, OS and AV software included as part of the service in accordance with the schedule noted above. 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, Deft will use commercially reasonable efforts to notify Customer upon execution of the maintenance.

### Support

For the Managed OS Service, Deft provides support for all OS and AV software. This includes, but is not limited to, testing of OS and AV updates and patches provided by OS and AV vendors to create official, customer-approved images, 24x7x365 response to customer support inquiries, and provides confirmation of all successful OS and AV software updates.

Customers may also view real time and historical information regarding the Service via the Deft Customer Portal located at <https://portal.deft.com>.

## 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 Operating System Service is 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 Managed OS 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 OS Service for 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 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 Operating System 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

The Managed OS Service is governed by Deft's Service Cloud Application Management Service Level Agreement

Within this, we provide two Availability SLAs for Managed Operating System customers:

### *Availability SLA, Standard Cloud Application Management*

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The SLAs for your Managed Operating System Service will be dependent upon the configuration(s) selected by Deft and you. You can find current version of the Managed Operation System 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 you 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 Operating System 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 Operating System Service, including all Deft-operated hardware and software, 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 sections define the roles and responsibilities for the Service:

### Deft

- Deft is responsible for all Operating System and AntiVirus software licensing including OS License Keys, SPLA License Management with OS vendor and maintaining OS and AV licensing in good standing with the software manufacturer.
- Deft is responsible for Installation of all Operating System and AntiVirus software including OS and AV installation, OS and AV functionality validation, creation of master (hardened) OS images with AV software.
- Deft is responsible for Monitoring of all Operating System and AntiVirus software including 24x7x365 alert management, real-time customer notification of issues and issue resolution.
- Deft is responsible for Configuration of all Operating System and AntiVirus software including administrator creation, defining user policy, password policy / OS and AV governance policy creation and environment variable definitions
- Deft is responsible for the Administration of all Operating System and AntiVirus software including maintaining OS patches and updates, maintaining ongoing virus signature updates and execution of requests for new OS users.
- Deft is responsible for the Maintenance of all Operating System and AntiVirus software including monitoring and testing of OS patches and AV patches and the update of hardened, coordination of OS and AV updates and maintenance windows, providing confirmation of successful testing and deployment OS and AV updates.
- Deft is responsible for the Support of all Operating System and AntiVirus software including completion of all break/fix services required to repair and/or replace OS and AV versions and master (hardened) images, provides real-time 24x7x365 issue management and resolution services and responses to customer support inquiries.

## Customer

- Customer is responsible for providing Deft with a list of active OS administrator users and maintaining this list.
- Customer will designate and maintain a Technical Contact who can be made available to Deft for troubleshooting or questions.
- Customer is responsible for reporting service disruptions or changes to Deft using the Deft Customer Portal.
- Customer is responsible for the installation, configuration, administration, management and support of all applications loaded onto the master (hardened) OS-enabled servers.
- Customer is responsible for requesting OS patches when known to be applicable to or required by customer's core applications. Customer is responsible for maintaining the list of authorized personnel on the Deft Customer Portal.

### Additional Questions

For more information, visit [www.deft.com](http://www.deft.com) or contact us at (312) 829-1111 and [sales@deft.com](mailto:sales@deft.com)

### About Deft

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