

# NETAPP MANAGED SERVICES FOR DATA INFRASTRUCTURE INSIGHTS

## Service background and overview

NetApp® Managed Services help to optimize the performance and efficiency of Customers' hybrid cloud environments. With NetApp experts managing the Data Infrastructure Insights environment using our proven methodology and best practices, the Customer's IT team is free to proactively focus on enabling the IT transformation required to move their business forward.

Managed Services for Data Infrastructure Insights is a remotely delivered service to help integrate Data Infrastructure Insights into Customer's IT and business process environment, providing specialized resources to allow them to take full advantage of this infrastructure monitoring platform.

## Key benefits

NetApp Managed Services for Data Infrastructure Insights focuses on maximizing the benefits of the Customer's Data Infrastructure Insights software through regular monitoring and remediation of operational issues to reduce risk and maximize use of the technology.

## Scope of Managed Services

NetApp will provide a qualified team to deliver the Managed Services for Data Infrastructure Insights. If this service description does not meet the Customer's requirements, a statement of work (SOW) is necessary. The Managed Upgrade Service will be delivered remotely, unless the Customer specifies otherwise. NetApp will assign a Service Delivery Manager (SDM) who, together with the Managed Services team, is responsible for delivering the Managed Services to the Customer. Delivery includes adherence to the Customer's standards and procedures, if agreed upon, including Customer site operational procedures relating to access, security, safety, and environmental management. The SDM will be responsible for managing the process and will be the primary contact for the Customer and for the NetApp account teams.

## Service delivery

Before assuming administrative responsibility for Data Infrastructure Insights, NetApp reviews the Customer's cloud and on-premises infrastructure to assess current conformance to supportability and best practices. NetApp provides the Customer with a list of remediations required before initiating the Managed Services, and the Customer is responsible for performing these tasks.

To confirm that the new system is compatible with the Customer's environment and can be easily integrated, the service begins with a review of all relevant parts of the environment. A transition meeting is held at the start of the engagement. The result of this meeting is a complete list of all the information required for the Implementation and Configuration phase.

When performing the tasks defined by this service, NetApp may detect errors or malfunctions in the Managed or Supporting Elements. In that case:

- NetApp will not apply changes to these elements, but will inform the Customer of status, recommended changes, or required changes to these elements.
- The Customer is responsible for implementing the changes.

## Architectural elements

The elements to be monitored for health and operational best practices are listed below. In addition, NetApp can assist in report generation for Pre-Defined Reports. Any of the following elements that require change to meet the Data Infrastructure Insights best practices operation will need remediation before the service begins.

### Data Infrastructure Insights elements

- Data Infrastructure Insights Instance
- Data Infrastructure Insights Acquisition Units (AU). Data Infrastructure Insights collects device data using one or more Acquisition Units installed on local servers. Each Acquisition Unit can host multiple Data Collectors, which send device metrics to Data Infrastructure Insights for analysis.
- Data Infrastructure Insights Pre-Defined Reports: The Pre-Defined Reports show the Customer's inventory, storage capacity, chargeback, performance, storage efficiency, and cloud cost data as defined in the Data Infrastructure Insights Reports Catalog.

### Data Infrastructure Insights Data Collectors

There are two types of Data Collectors:

- **Infrastructure.** Acquired from vendor devices such as storage arrays, switches, hypervisors, and backup devices.
- **Service.** Acquired from services such as Kubernetes, Docker, and other third-party services.

During the Project Closeout phase, NetApp reviews Deliverables and begins the final acceptance process.

## Service tasks

NetApp and the Customer agree on the terms of the Managed Services Implementation Details document before the order is placed and before the purchase order is issued.

Managed Services for Data Infrastructure Insights performs the following activities and tasks.

### Design phase

This section describes the Design phase of Managed Services for Data Infrastructure Insights.

The engagement commences with a kickoff call to onboard the NetApp Managed Services team to set expectations and define the services. The goal of this meeting and any follow-on discussions is to make sure that proper data gathering and planning has taken place for service activation.

The design activity begins with validation of the following topics:

- Identification of Data Infrastructure Insights technologies in the scope of the Managed Service
- Credentials necessary for monitoring
- Alert settings (Capacity and Performance Thresholds)
- Identification of Management Information reports
- Roles and Responsibilities matrix

### Implementation and Configuration phase

The Implementation phase involves the following tasks.

### Data Infrastructure Insights Instance

NetApp performs the following operational tasks on the Data Infrastructure Insights Instance.

Daily tasks may include:

- Monitor the health of data sources
- Isolate and/or remediate data source errors upon occurrence

Upon submission, NetApp performs Data Infrastructure Insights Instance Service Requests in scope. The following list applies to the logging and fulfillment of a Service Request:

- Customer submits Service Requests related to the Data Infrastructure Insights Instance via the communication protocols defined during the Engagement Initiation phase.
- The NetApp SDM reviews the request and, if the request is in scope, assigns resources to fulfill the request and coordinates activity with the Customer.
- Data Infrastructure Insights Instance Service Requests are limited to configuration changes on the Data Infrastructure Insights Operational Server.

- Example Data Infrastructure Insights Instance Service Requests include:
  - New Data Collector request. New Data Collectors will be created solely at the request of the Customer. Customer requests for new Data Collectors must be made in writing (via email). If new Data Collectors are required, the Customer prepares any dependent software packages that may be required to enable non NetApp devices. The Customer must provide these third-party tools.
  - Verifying that a Data Collector that is changed by Customer is still operational.
  - Removing a Data Collector from Data Infrastructure Insights Instance scope.
  - Updating configuration information for Analyzed Elements or Supporting Elements (for example, credentials, server name, etc.) monitored by Data Infrastructure Insights.

### **Data Infrastructure Insights Acquisition Unit (AU)**

NetApp performs the following operational tasks on the AU.

Weekly tasks may include:

- Monitor AU platform usage (for example, CPU, RAM, disk utilization, metrics, and verify in tolerance).
- Install, delete, or test AUs on virtual machines upon occurrence.

Upon submission, NetApp performs Data Infrastructure Insights Instance Service Requests in scope. The following list applies to the logging and fulfillment of a Service Request:

- The Customer submits a Service Request related to the Data Infrastructure Insights Instance via the communication protocols defined during the Engagement Initiation phase.
- The NetApp SDM reviews the request and, if the request is in scope, assigns resources to fulfill the request and coordinates activity with the Customer.
- Data Infrastructure Insights Instance Service Requests are limited to configuration changes on the Data Infrastructure Insights Operational Server.
- Example Data Infrastructure Insights Instance Service Requests include:
  - New Data Collector request. New Data Collectors are created solely at the request of the Customer. Customer requests for new Data Collectors must be made in writing (via email). Customers can access the list of Data Collectors from the Admin menu in the left pane of the Data Infrastructure Insights UI. If new Data Collectors are required, the Customer must prepare any dependent software packages that may be required to enable non NetApp devices, such as Dell EMC Solutions Enabler, CLARiiON CLI, etc. The Customer must provide these third-party tools.
  - Verifying that a Data Collector that is changed by the Customer is still operational.
  - Removing a Data Collector from Data Infrastructure Insights Instance scope.
  - Updating configuration information for analyzed elements or supporting Elements, such as credentials, server name, etc.) monitored by Data Infrastructure Insights.

### **Reporting and meetings**

The NetApp SDM will attend quarterly Customer meetings with the following scope:

- Ensure that reporting is delivered within agreed time frames and in agreed formats.
- Review service delivery and Customer's feedback specific to the Managed Service.
- Make recommendations for enhancement of identified key performance indicators and Managed Service scope.
- Analyze the Data Infrastructure Insights Acquisition Unit hosting platform performance, analyze software currency, and provide recommendations to the Customer.
- Plan for the Customer's on-demand periods "sprint delivery" requirements.

### **Reports and estimated frequency**

The following reports are provided to the Customer at the estimated frequency listed below, They may include:

- Weekly:
  - Host Annotations report—contains hosts that do not have annotations
  - Generic Device report—contains generic (unknown) devices
- Monthly:
  - Alerts and Support Case report
  - Service Requests report

## Dashboard and report implementation

The following list describes high-level scope for a single Pre-Defined Dashboard or Catalog report:

- Review service offering details and project scope with the Customer.
- Discuss and schedule activities; identify the Customer's single point of contact for data gathering.
- Complete the Data Infrastructure Insights Analytics and Dashboard/Report Development Service Discovery Questionnaire.
- Review the Data Infrastructure Insights Reports Catalog and predefined dashboards with the Customer.
- Configure predefined XML to generate reports, if required.
- Generate required reports or import predefined dashboards.
- Create Data Infrastructure Insights Data Dictionary for reporting, if required.
- Review with Customer the project's findings and Deliverables.
- Distribute final documentation and Deliverables.

## Service Requests

If issues are detected during delivery, NetApp will work to isolate the source of the error during the problem and/or incident management process and, when appropriate, perform the following steps:

- NetApp technical support case management
- Data Infrastructure Insights configuration verification
- Initial case creation with problem description
- Initial data collection required for troubleshooting
- Data Infrastructure Insights configuration change as necessary to resolve the issue
- Notify the Customer Project Lead and advise on a request for change to the Customer's environment.
- Notify the Customer Project Lead of the problem and provide any supporting documentation.
- SDM notifies the Customer Project Lead of the problem and inability to isolate the source, and coordinates with the Customer to jointly identify the source of the issue.
- NetApp informs the Customer when changes to Data Infrastructure Insights Elements are required.
- NetApp applies approved changes in compliance with the Customer's change management protocols.
- Any changes by the Customer to Supporting Elements, Analyzed Elements, or Data Infrastructure Insights Elements are communicated to the NetApp SDM via the communication protocols defined during the service initiation.

## Project Closeout

- Review project Deliverables with the Customer.
- Obtain a Certificate of Completion for Customer's acceptance.

## Deliverables

In connection with the Managed Services, NetApp will provide the following tangible materials (the Deliverables) to the Customer in a format or method mutually agreed upon between the parties:

### Managed Service: Administer Data Infrastructure Insights

- Weekly reports
- Monthly reports

### Managed Service: Closeout

- Certificate of Completion

## Exclusions

NetApp will use commercially reasonable efforts, such as Clouds Insights Supporting Elements or Analyzed Elements, to isolate sources of error when Data Infrastructure Insights interfaces with Customer environments.

The following activities are not expressly included:

- Remediating identified issues during architectural and implementation review at program commencement.
- Integrating Data Infrastructure Insights Elements with third-party applications or databases, including but not limited to configuration management databases (CMDBs), ticket systems, network managers, LDAP servers, etc.
- Installing or initially configuring Data Infrastructure Insights Elements in lab or production environments.
- Remediating issues related to Data Infrastructure Insights reports to include issues that may arise due to a system patch or software upgrade.

- Remediating issues with Analyzed Elements and Supporting Elements, including but not limited to NetApp Active IQ® Unified Manager, Hitachi Command Suite, EMC Solutions Enabler, backup servers, and email servers.
- Upgrades and patches of server host and guest operating systems.
- Migration of the Customer's data between Data Infrastructure Insights implementations.

## Schedule of Performance

The estimated Managed Services for Data Infrastructure Insights start date is approximately 2 weeks from the date of the Customer's approved purchase order. If performance of the service does not begin within 1 year of the purchase order date, and there is no written change request, the order is automatically terminated. Services must be delivered during consecutive months after the actual start date. The number of consecutive months is identified in the Managed Services Implementation Details document that NetApp provides.

## Assumptions and responsibilities

### Communications plans, change management, and escalation

- Customer will provide NetApp with operational requirements for service delivery that may include:
  - Organizational structure
  - Alerting systems and protocols, trouble ticket submission, and clearing access and procedure
  - Change management protocols and systems
  - Path location of custom reports or other nonstandard data, and review current backup processes and configurations

### Customer responsibilities

- Customer has purchased Data Infrastructure Insights prior to commencement of delivery of the Managed Administer service.
- Customer will maintain a valid Data Infrastructure Insights license throughout the duration of the defined Schedule of Performance.
- Customer will provide remote access to the Data Infrastructure Insights environment for NetApp Managed Services personnel who are identified as project participants.
- Customer will provide NetApp with necessary virtual hosts to run Data Infrastructure Insights management and administration tools, if any.
- Customer will maintain operating systems for required Data Infrastructure Insights Elements.
- Customer will open support incidents with third-party vendors if necessary to troubleshoot Data Collector acquisition issues. NetApp may provide relevant data points to Customer before requesting that such a case be opened and will support Customer during problem resolution with the identified third party
- Customer is required to maintain active support agreements on the third-party products that are within the Analyzed Elements and Supporting Elements throughout the Schedule of Performance.
- If the manual identification of devices requires on-site activity, NetApp will require an admin or other Customer-designated resource to perform the on-site tasks needed to complete the manual identification of the device.
- All Data Collector devices are required to be in alignment with the NetApp Interoperability Compatibility Matrix. If devices are not found in the Interoperability Compatibility Matrix, the Customer may be required to update hardware and software to bring the device into compliance.

## Information and expertise

The Customer will make available to NetApp staff:

- Accurate, complete, and up-to-date documentation and information.
- Knowledgeable staff and system administrators who can be contacted by pager, telephone, or cellphone. These contacts will provide background information and clarify information that is required to perform the Managed Services for Data Infrastructure Insights.

## Communication

The Customer is responsible for all communication to their internal users, including notification of maintenance and migration windows, as required.

## Licenses

The Customer must obtain from third parties any and all permissions and licenses that are necessary for NetApp or a NetApp subcontractor to successfully perform the Managed Services for Data Infrastructure Insights. The Customer hereby grants these licenses to NetApp and its subcontractors.

## Fee description and payment

Before performing the Managed Services for Data Infrastructure Insights, NetApp requires an approved purchase order from the Customer or from an authorized reseller that is acceptable to NetApp. NetApp will invoice upon receipt of an approved purchase order. Payments are nonrefundable, with no right to refund or credit. If the Customer requires any additional time, a new NetApp sales quote and purchase order will be required.

## Change process

Changes to this service description will be documented in a change request.

Any renewals or scheduling adjustments that affect the fees will require a new NetApp sales quote.

Implementation of any additional services that affect the pricing will require either an approved Customer change order to the Customer's existing purchase order or an additional purchase order.

## Acceptance

Upon completion of the engagement, the Customer will receive a Certificate of Completion form to sign.

If the Certificate of Completion form is not signed within 5 business days from the Customer's receipt, the work will be deemed accepted unless the Customer submits a written notification of a service performance issue.

## Incorporated terms

In the absence of an effective written agreement between the parties, expressly governing the Managed Services, this service is governed by the standard NetApp Professional Services terms, posted at [www.netapp.com/us/how-to-buy/stc.html](http://www.netapp.com/us/how-to-buy/stc.html), as of the sales quotation date. The standard NetApp Professional Services terms are incorporated herein by reference. If the Customer wants to negotiate any of the terms herein, a NetApp SOW is required.



Contact Us

### About NetApp

NetApp is the intelligent data infrastructure company, combining unified data storage, integrated data services, and CloudOps solutions to turn a world of disruption into opportunity for every customer. NetApp creates silo-free infrastructure, harnessing observability and AI to enable the industry's best data management. As the only enterprise-grade storage service natively embedded in the world's biggest clouds, our data storage delivers seamless flexibility. In addition, our data services create a data advantage through superior cyber resilience, governance, and application agility. Our CloudOps solutions provide continuous optimization of performance and efficiency through observability and AI. No matter the data type, workload, or environment, with NetApp you can transform your data infrastructure to realize your business possibilities. [www.netapp.com](http://www.netapp.com)

