



# HPE Performance Analysis Service for HPE Disk Arrays

## HPE Lifecycle Event Services

HPE Performance Analysis Service for HPE Disk Arrays provides data collection, detailed I/O analysis, and enhancement recommendations for your HPE disk array. Through this service, you will receive a report detailing the performance of your HPE disk array and a briefing session highlighting Hewlett Packard Enterprise's findings and recommendations.

Potential benefits of the service include gaining a better understanding of the performance characteristics of your HPE disk arrays, such as load imbalance and oversubscription. Current performance is compared to the maximum calculated throughput and bandwidth for your specific configuration. Documented best practices are used to identify areas for potential improvement, which may include making configuration changes, adjusting application loads during peak periods, physically rebalancing the workload, and adding additional capacity or performance boosters (for example, additional cache). This allows you to make informed decisions based on actual performance during typical and/or peak workloads.

The following products are covered by HPE Performance Analysis Service for HPE Disk Arrays:

- HPE 3PAR storage systems
- HPE P9000/XP disk arrays
- HPE XP disk arrays
- HPE P6000/EVA disk arrays
- HPE 4x00, 6x00, and 8x00 EVA disk arrays

### Service benefits

- Improve disk array performance, stability, and availability by identifying potential problems and understanding the possible solutions that may help you avoid them
- Establish a baseline as a reference for future performance analysis and change management
- Receive help making informed, proactive decisions on your HPE disk array system's capacity planning and avoid unnecessary and costly reactive upgrades

### Service feature highlights

- Data collection and analysis
- Performance report
- Briefing session

**Table 1. Service features**

Feature	Delivery specifications
<b>Data collection and analysis</b>	<p>This service provides data collection and analysis of HPE disk array performance data retrieved by the appropriate analysis tool.</p> <p>Service activities include:</p> <ul style="list-style-type: none"> <li>• Review the engagement with the Customer using the predelivery checklist</li> <li>• Review the service with the Customer to verify compatibility with the Customer's environment</li> <li>• Perform data collection activities and analyze the data collected</li> </ul>
<b>Performance report</b>	<p>Hewlett Packard Enterprise develops a disk array performance report for the Customer, which includes the HPE disk array performance specialist's findings and recommendations, a graphical representation of detailed performance data, and array configuration information.</p>
<b>Briefing session</b>	<p>Hewlett Packard Enterprise provides the Customer's IT storage administrator, database administrator, and storage infrastructure management with a briefing session lasting up to 3 hours' duration, which is to be scheduled during HPE standard business hours shortly after the completion of the service, to review the performance report highlighting findings and recommendations.</p>

## Service limitations

The HPE Performance Analysis Service for HPE Disk Arrays is limited to one disk array.

This service focuses on HPE disk array performance. It does not include detailed SAN or connectivity topology analysis, or analysis of the Customer's computing system, applications, clustering, high availability, or other complex configurations. Review and analysis of these topics is a separate service that is subject to additional charges.

The service does not provide for the implementation of recommended tuning activities. These considerations can be quoted separately from this one-time service. Please contact a Hewlett Packard Enterprise storage specialist for more information.

External storage on HPE P9000/XP disk arrays is not included in this service.

Activities such as, but not limited to, the following are excluded from this service:

- Any installations of new or existing hardware
- Any hardware reconfigurations of existing environments, such as removal or movement of host adapters, disk drives, and adapter cards, or conversion and reformatting of existing storage devices
- For P6000/EVA and P9000/XP disk arrays, installation of the data collection software; this service does not provide the software or installation of the software; the software is available for purchase separately, and installation is available as a separate service
- Planning, design, implementation, or assessment of the Customer's overall SAN or fabric architecture
- Migration of Customer data
- Any documentation other than that specified in this data sheet

Only one briefing session is included; additional sessions are available for purchase

## Service eligibility

The purchase of HPE Performance Analysis Service for HPE Disk Arrays includes a single engagement providing data collection, analysis, report creation, and a briefing session detailing the performance of a single HPE disk array. This service is available for any HPE disk array platform supported by the service, except P9000/XP disk arrays when connected to a mainframe computer only.

The Customer must meet all of the following prerequisites for delivery of this service:

- Ensure the disk array on which the service is being delivered, as well as any associated host systems, Ethernet networks, and storage area networks (SANs), are implemented and fully operational.
- For HPE 3PAR storage systems, ensure that Hewlett Packard Enterprise is provided with access to the 3PAR Service Processor for the storage system on which the service is being delivered.
- For P6000/EVA disk arrays, ensure that HPE Command View software is installed and that HPE Command View EVAPerf is available with access to the disk array. This service does not provide the software or installation of the software. The software is available for purchase separately, and installation is available as a separate service.
- For P9000/XP disk arrays, ensure that the data collection software is installed and collecting data from the disk array; this service does not provide the software or installation of the software; the software is available for purchase separately, and installation is available as a separate service.
- All supported hosts must be at supported OS revision and patch levels.
- Customer host applications must be installed and operating normally prior to the delivery of this service.

## Customer responsibilities

The Customer will:

- Contact a Hewlett Packard Enterprise service specialist within 90 days of date of purchase to schedule the delivery of the service
- Provide documentation of the existing storage system
- For HPE 3PAR storage systems, ensure that Hewlett Packard Enterprise is provided with access to the 3PAR Service Processor for the storage system on which the service is being delivered
- For HPE P6000/EVA disk arrays, ensure that HPE Command View software is installed and that HPE Command View EVAPerf is available with access to the disk array; this service does not provide the software or installation of the software; the software is available for purchase separately, and installation is available as a separate service
- For HPE P9000/XP disk arrays, ensure that the data collection software is installed and collecting data from the disk array; this service does not provide the software or installation of the software; the software is available for purchase separately, and installation is available as a separate service
- Ensure participation of the Customer's IT storage administrator, database administrator, storage infrastructure management, and selected other staff to discuss needs and objectives and to review results
- Assign a designated person from the Customer's staff who, on behalf of the Customer, will grant all approvals, provide information, and otherwise be available to assist Hewlett Packard Enterprise in facilitating the delivery of this service
- Ensure that all service prerequisites identified in this document during the Data Collection and Analysis activity have been met
- Adhere to licensing terms and conditions regarding the use of any HPE service tools used to facilitate the delivery of this service, if applicable
- Collect the data (fixed frequency and duration) and send it to Hewlett Packard Enterprise according to instructions from the Hewlett Packard Enterprise storage specialist
- Be responsible for de-installing customer-developed software applications or any third-party software that may impact the service delivery
- Ensure that all hardware, firmware, and software that the Hewlett Packard Enterprise service specialist will need in order to deliver this service are available and, for software products, are properly licensed

- Define business/operational objectives and any special requirements
- Be responsible for all data backup and restore operations on the involved HPE disk array
- Allow Hewlett Packard Enterprise full and unrestricted access to all locations where the service is to be performed
- Provide a suitable work area for delivery of the service, including access to an outside telephone line, power, and any network connections required
- Perform other reasonable activities to help Hewlett Packard Enterprise identify or resolve problems, as requested by HPE

## General provisions/Other exclusions

- Hewlett Packard Enterprise reserves the right to re-price this service if the Customer does not schedule and provide for subsequent delivery within 90 days of purchase.
- The service will be delivered as a single, contiguous event. Environments requiring multiple engagements or phases over longer periods of time are not included with this service but can be accommodated at additional cost. The performance data sample is limited to a fixed duration and sample frequency.
- Hewlett Packard Enterprise reserves the right to charge, on a time and materials basis, for any additional work over and above the service package pricing that may result from work required to address service prerequisites or other requirements that are not met by the Customer.
- The service is delivered during HPE standard business hours. Service delivery outside these hours is available at additional cost.
- Portions of the service are delivered remotely or onsite, at Hewlett Packard Enterprise's discretion.
- Travel charges may apply; please consult your local office.
- The ability of the Hewlett Packard Enterprise certified service specialist to deliver this service is dependent upon the Customer's full and timely cooperation with the Hewlett Packard Enterprise certified service specialist, as well as the accuracy and completeness of any information and data the Customer provides to HPE.
- Activities such as, but not limited to, the following are excluded from this service:
  - Service deployment on hardware not covered by an HPE warranty or service maintenance contract
  - Service deployment on hardware covered by a third-party maintenance contract
  - Services that, in the opinion of Hewlett Packard Enterprise, are required due to unauthorized attempts by non-HPE personnel to install, repair, maintain, or modify hardware, firmware, or software
  - Service required due to causes external to the Hewlett Packard Enterprise maintained hardware or software
  - Any services not clearly specified in this document

## Ordering information

Availability of the service is restricted to eligible products and may vary according to local resources. To obtain further information or to order HPE Performance Analysis Service for HPE Disk Arrays, contact a local Hewlett Packard Enterprise sales representative or authorized Hewlett Packard Enterprise channel partner and reference the following product numbers:

- HA208A1 for HPE Performance Analysis Service for HPE Disk Arrays Support Service
- HA208AC for HPE Performance Analysis Service for HPE Disk Arrays Contractual Service
- HA208AE for HPE Performance Analysis Service for HPE Disk Arrays Per Event Service

## **For more information**

For more information on Hewlett Packard Enterprise support services, contact any of our worldwide sales offices or visit the following website:

[www.hpe.com/services/support](http://www.hpe.com/services/support)

[www.hpe.com/services/lifecycleevent](http://www.hpe.com/services/lifecycleevent)

