HP Performance Analysis Service for HP Disk Arrays

HP Care Pack Services

Technical data

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

Potential benefits of the service include gaining a better understanding of the performance characteristics of your HP 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 HP Performance Analysis Service for HP Disk Arrays:

- HP 3PAR storage systems
- HP P9000/XP disk arrays
- HP XP disk arrays
- HP P6000/EVA disk arrays
- HP 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 HP disk array system’s capacity planning and avoid unnecessary and costly reactive upgrades

Service feature highlights

- Data collection and analysis
- Performance report
- Briefing session

Specifications

Table 1. Service features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Delivery specifications</th>
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<tr>
<td>Data collection and</td>
<td>This service provides data collection and analysis of HP disk array performance data retrieved by the appropriate analysis tool.</td>
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<td>analysis</td>
<td>Service activities include:</td>
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<td>• Review the engagement with the Customer using the predelivery checklist</td>
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<td>• Review the service with the Customer to verify compatibility with the Customer’s environment</td>
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<td>• Perform data collection activities and analyze the data collected</td>
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<td>Performance report</td>
<td>HP develops a disk array performance report for the Customer, which includes the HP disk array performance specialist’s findings and recommendations, a graphical representation of detailed performance data, and array configuration information.</td>
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<td>Briefing session</td>
<td>HP 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 HP standard business hours shortly after the completion of the service, to review the performance report highlighting findings and recommendations.</td>
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Customer responsibilities

The Customer will:

- Contact an HP service specialist within 90 days of date of purchase to schedule the delivery of the service
- Provide documentation of the existing storage system
- For HP 3PAR storage systems, ensure that HP is provided with access to the 3PAR Service Processor for the storage system on which the service is being delivered
- For HP P6000/EVA disk arrays, ensure that HP Command View software is installed and that HP 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 HP 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 HP 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 HP service tools used to facilitate the delivery of this service, if applicable
• Collect the data (fixed frequency and duration) and send it to HP according to instructions from the HP 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 HP 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 HP disk array
• Allow HP 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 HP identify or resolve problems, as requested by HP

Service limitations

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

This service focuses on HP 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 an HP storage specialist for more information.

External storage on HP 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 HP Performance Analysis Service for HP Disk Arrays includes a single engagement providing data collection, analysis, report creation, and a briefing session detailing the performance of a single HP disk array. This service is available for any HP 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 HP 3PAR storage systems, ensure that HP 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 HP Command View software is installed and that HP 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.

General provisions/Other exclusions

• HP 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.
• HP 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 HP standard business hours. Service delivery outside these hours is available at additional cost.
• Portions of the service are delivered remotely or onsite, at HP’s discretion.
• Travel charges may apply; please consult your local office.
• The ability of the HP certified service specialist to deliver this service is dependent upon the Customer’s full and timely cooperation with the HP certified service specialist, as well as the accuracy and completeness of any information and data the Customer provides to HP.
• Activities such as, but not limited to, the following are excluded from this service:
  - Service deployment on hardware not covered by an HP warranty or service maintenance contract
  - Service deployment on hardware covered by a third-party maintenance contract
  - Services that, in the opinion of HP, are required due to unauthorized attempts by non-HP personnel to install, repair, maintain, or modify hardware, firmware, or software
  - Service required due to causes external to the HP 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 HP Performance Analysis Service for HP Disk Arrays, contact a local HP sales representative or authorized HP channel partner and reference the following product numbers:
• HA208A1 for HP Performance Analysis Service for HP Disk Arrays Care Pack Service
• HA208AC for HP Performance Analysis Service for HP Disk Arrays Contractual Service
• HA208AE for HP Performance Analysis Service for HP Disk Arrays Per Event Service

For more information

For more information on HP Services, contact any of our worldwide sales offices or visit one of the following websites:

HP support services: www.hp.com/services/alwayson
HP Care Pack services: www.hp.com/services/carepack