

ADAPTIVE DATA REDUCTION STARTER PACK FROM HITACHI VANTARA

Hitachi Vantara (“Hitachi”) will perform the Professional Services for the End User (“Customer”) identified within the Quote on the terms of this Exhibit, (the “Service” for the purposes of this SOW) which the Parties agree constitutes a Statement of Work (“SOW”), as defined in the Master Agreement (“Agreement”) with Hitachi. Upon issuing a Purchase Order to Hitachi, in pursuance of the Quote and this Exhibit, this Exhibit shall be deemed executed regardless of the requirements for execution in the Agreement, which the Parties expressly agree shall not apply to this Exhibit. This Exhibit is governed by and incorporates by reference, the terms and conditions of the Agreement listed within the Quote. Except for the execution requirement, the terms of the Agreement will govern in the event of any conflict with the terms of this Exhibit.

I. SCOPE. Hitachi will, as more fully described herein, implement an Adaptive Data Reduction Starter Pack and/or Accelerated Compression and configure it according to Customer-supplied technical parameters. As part of the Service, Hitachi will:

- a) Conduct performance data analysis to determine devices that are Adaptive Data Reduction-capable.
- b) If applicable, configure Accelerated Compression on RAID groups that meet guidelines.
- c) Calculate expanded/virtual capacity if savings is over twenty (20) percent.
- d) Expand pool with expanded/virtual capacity.
- e) Explain savings for Flash Module Compressed FMC and or FMD
- f) Gather baseline performance data of microprocessor utilization, Cache Write Pending and pool utilization utilizing Hitachi Ops Center Analyzer prior to configuring Adaptive Data Reduction.
- g) Configure Adaptive Data Reduction.
- h) Enable compression or compression and deduplication for up to fifteen (15) existing devices.
- i) Explain savings for Adaptive Data Reduction devices.
- j) Evaluate array performance during implementation of Adaptive Data Reduction.

The Service is limited as follows:

In terms of	Adaptive Data Reduction Data Analysis	this Service includes	Up to one (1) Hitachi Array
In terms of	Accelerated Compression and/or Controller based Capacity saving	this Service includes	Up to one (1) pool with (FMC) and/or (FMD) devices or up to fifteen (15) DP-VOLs

The following items are outside the scope of this Service:

For the avoidance of doubt, this Service does not include installation or configuration of hardware components such as server operating system install, Hitachi Ops Center Administrator, Hitachi Ops Center Analyzer installation or upgrade.

The Service provides design and implementation of Customer’s Accelerated Compression and/or Adaptive Data Reduction environment only and does not include any form of pool creation, data migration to Dynamic Provisioning software virtual volumes, or the physical installation of any hardware components. Examples of hardware include, but are not limited to, cables, storage systems, servers, host bus adapters (HBAs), and storage area network (SAN) components. Detailed SAN design elements, such as SAN topology, SAN re-engineering, or design for a new SAN environment, are also out of the Scope of the Service. Hitachi offers separate services to accomplish these objectives.

The only tasks that Hitachi will undertake in providing the Service are those specifically set forth in this Exhibit.

For the avoidance of doubt, this Service is distinct from, and does not incorporate, the Effective Capacity Warranty which is subject to additional terms and conditions. Please contact your Hitachi sales representative for details.

II. APPROACH. Hitachi will deliver the Service in the following Phases:

<p>Pre-engagement Tasks</p>	<ul style="list-style-type: none"> At least one (1) week prior to commencing Service at the Service Location, Hitachi will provide Customer with a pre-engagement checklist to complete. Hitachi will verify if the necessary prerequisites listed in the pre-engagement checklist have been completed by Customer. Prerequisites in the pre-engagement checklist include an inventory of Customer’s environment included in the Scope of the Service. Hitachi will meet with Customer to review Customer Responsibilities (as set out below), assess the environmental readiness for the Service, and identify any modifications to Customer’s inventory in the pre-engagement checklist. Hitachi will work with Customer to identify all prerequisites and potentially required upgrades prior to commencement of the Service. When the pre-engagement checklist is completed and verified by Hitachi and when all prerequisites have been identified, Hitachi and Customer will schedule the Service to commence at the Service Location. <p><u>The following Work Product will be provided to Customer during the Pre-engagement Tasks Phase:</u></p> <ul style="list-style-type: none"> Pre-engagement Checklist
<p>Kickoff Meeting</p>	<p>Hitachi will:</p> <ul style="list-style-type: none"> Conduct a kickoff meeting with key Customer stakeholders to review the project Scope, Approach, Work Products, and responsibilities of both Parties. During the kickoff meeting, Hitachi will exchange contact, procedural, and schedule information with Customer.
<p>Planning and Design</p>	<p>Hitachi will:</p> <ul style="list-style-type: none"> Conduct interviews with Customer as required to validate the technical details gathered in the pre-engagement checklist as needed to perform the Service. Gather performance data from Hitachi Ops Center Analyzer for a recommended period of thirty (30) days to determine potential candidates for Adaptive Data Reduction. Conduct performance data analysis to determine devices that are Adaptive Data Reduction-capable. Provide Customer a detailed list of devices that are Adaptive Data Reduction-capable that can be used in implementation. <p><u>The following Work Product will be provided to Customer during the Planning and Design Phase:</u></p> <ul style="list-style-type: none"> List of Adaptive Data Reduction-Capable Devices
<p>Implementation</p>	<p>Hitachi will:</p> <ul style="list-style-type: none"> If applicable, configure Accelerated Compression on RAID groups that meet guidelines. <ul style="list-style-type: none"> Calculate expanded/virtual capacity if savings is over twenty (20) percent. Expand pool with expanded/virtual capacity. Explain savings for Flash Module Compressed, Flash Module Drives and/or NVMe Gather baseline performance data of microprocessor utilization, Cache Write Pending and pool utilization utilizing Hitachi Ops Center Analyzer prior to configuring Adaptive Data Reduction. Configure Adaptive Data Reduction. <ul style="list-style-type: none"> Enable compression or compression and deduplication for up to fifteen (15) existing devices. Explain savings for Adaptive Data Reduction devices. Evaluate array performance during implementation of Adaptive Data Reduction.
<p>Testing and Validation</p>	<p>Hitachi will validate:</p> <ul style="list-style-type: none"> Compression savings from Accelerated Compression, if included in the Service. Verify Adaptive Data Reduction savings from devices enabled with Adaptive Data Reduction functionality.
<p>Knowledge Transfer</p>	<p>Hitachi will:</p> <ul style="list-style-type: none"> Provide knowledge transfer to a limited number of Customer’s technical staff, which includes one (1) four (4) hour session for Accelerated Compression, Adaptive Data Reduction and Quality of Service, if applicable, and a basic overview of the implementation and configuration parameters and features and functionality. <p><u>The following Work Products will be provided to Customer during the Knowledge Transfer Phase:</u></p> <ul style="list-style-type: none"> Knowledge Transfer and Technology Overview Presentations
<p>Project Closure</p>	<p>Hitachi will:</p> <ul style="list-style-type: none"> Make recommendations to Customer for follow-up activities and services. Review the final implementation and Work Products with Customer. Review Service-related documents with Customer. Review troubleshooting, support, and escalation procedures with Customer.

Hitachi will designate a “Project Coordinator” who is responsible for the overall project and coordination of project management activities with Customer’s Project Manager. The Project Coordinator will have responsibility for coordinating all activities on this engagement, scheduling resources, and will be the single point of contact for Hitachi for this Service.

III. CUSTOMER RESPONSIBILITIES

- A. For the duration of the Service, Customer will provide the following staff:
- A designated project manager (“Project Manager”) to whom all Hitachi communications shall be addressed. The Project Manager will provide (a) information and resources in a timely manner as needed by Hitachi to enable Hitachi to complete the Service described in this document; and (b) will be readily available offsite and onsite as and when required by Hitachi for the duration of the Service. The Project Manager will be responsible for receiving any Work Products and has full authority to provide any needed approvals on behalf of Customer.
 - Database, Systems and Storage Administrators and subject matter experts who will respond promptly to Hitachi requests, especially concerning data, documentation and attendance.
- B. For the duration of the Service, Customer will provide Hitachi with the following:
- A work area and access to any facilities and systems necessary for completion of the Service.
 - Access to host systems and networks involved, including user access and passwords as necessary.
 - A Service Location that is prepared for the Service. Customer will ensure that all required power, air conditioning, cabling, and environmental and telecommunication requirements have been addressed and will be provided for the duration of the Service.
- C. For the duration of the Service, Customer will:
- Assume all responsibility for its network including connectivity, performance, and configuration issues.
 - Have valid licenses for all software covered by this Service, and that all such licenses will cover Hitachi’s use of the software.
 - Complete all prerequisites and documentation detailing its current storage system(s), server(s), number of hosts of each operating system, etc. prior to the scheduling of the Service.
 - Identify and assign personnel to required roles
- D. Customer acknowledges that any Tool(s) utilized by Hitachi in connection with this Service is the exclusive property of Hitachi or its licensors, and that use of the Tool(s) is limited exclusively to Hitachi personnel. Hitachi will remove the Tool(s) from Customer’s devices prior to Project Completion.
- E. Customer to provide performance monitoring software such as Hitachi Ops Center Analyzer. This Service does not cover the installation of either product.

IV. WORK PRODUCTS AND OUTCOMES

Work Products

The following Work Products will be provided to Customer in either hard or soft copy depending on Customer requirements:

- Pre-engagement Checklist
- List of Adaptive Data Reduction Capable Devices
- Knowledge Transfer and Technology Overview Presentations

Outcomes

Upon completion of the Service, Customer will have Adaptive Data Reduction and/or Accelerated Compression implemented and configured according to Customer-supplied technical parameters. Customer will have also received one (1) four (4) hour knowledge transfer session for Adaptive Data Reduction and/or Accelerated Compression and Quality of Service.

V. CONDITIONS

- A. Service(s) purchased under this Exhibit that have not been completed within one hundred twenty (120) days of the date on the Quote associated with this service will be deemed null and void. Any remaining payments are non-refundable, and credits shall not be granted.
- B. Hitachi reserves the right to use subcontractors in those roles it deems appropriate.
- C. Hitachi will perform the Service remotely.
- D. All prerequisites will have been completed by Customer prior to commencement of the Service.
- E. Customer’s IP environment is ready for the Service commencement. Technical details must be received by Hitachi prior to the Implementation Phase in regard to Customer’s IP environment including, but not limited to, IP addresses of cluster nodes, domain names services assignments, Gateways, Subnet Masks, Gateway Addresses and firewall restrictions.

VI. COMPLETION CRITERIA AND ACCEPTANCE

Upon Service Completion, Hitachi will notify the contracting party ("Contracting Party") via Email that Hitachi has successfully completed the Service. If the Contracting Party does not provide Hitachi with a written description of any perceived deficiencies in the Service within five (5) business days after receipt of the Service Completion notification, then the Service will be deemed complete and accepted by the Contracting Party.