

**Sun StorageTek Implementation and Integration for Mid Range Disk
Part Number: WW-PS-INTG-MIDDSK
Korea**

1. Scope

In this fixed price service , Sun will provide services to integrate one Sun StorageTek 6140 or 6540 array into Customer's environment and transfer knowledge to Customer as described below (the "Service"). This Service includes the implementation of host connectivity to the disk subsystems, installation and configuration of disk management software and configuration of volumes, and design validation, testing, documentation, project management and knowledge transfer as defined in this Service Listing.

Sun will use commercially reasonable efforts to complete this Service in eight business days.

This Service includes the following tasks:

- Service Initiation
- Solution Implementation
- Solution Testing
- Knowledge Transfer
- Service Closure

This Service will include:

- Attachment of up to 20 Host Ports (Single-path or Multi-path Hosts)
- Configuration of LUNS (Up to 20 Volumes)

Implementation of additional controller based software functionality (one of the following for 2 volumes)

- Local mirroring (if applicable), or
- Snapshot (if applicable)

2. Sun's Tasks and Deliverables

Service Initiation

Sun will meet with Customer to review conditions and prerequisites for the Service delivery. Additionally, Sun will conduct a project kick-off meeting with key Customer contacts to finalize the project approach, discuss roles, responsibilities, and the work schedule. At the kick-off meeting, Sun and Customer will review resource matters such as available workspace, access to telephones, copiers, faxes, LAN connections, tape drives, conference rooms, and printing facilities required to deliver the Service. To facilitate the delivery of the Service, Sun and Customer will agree to a project schedule and general time frames for Service delivery, which may include additional meetings and identification of specific milestones as necessary.

- Activity Deliverable: Service Project Schedule

Implementation

Sun will consult with Customer representatives to perform an array of implementation services to meet the needs of Customer's applications and as applicable to Customer's environment. The design and implementation is limited to 1 StorageTek Mid-Range Storage Array, up to 20

logical volumes, and up to 20 Host Ports (Single-path or Multi-path Hosts).

The tasks for the implementation will include:

- Storage Management Software Configuration
 - Install storage management software on no more than 2 of Customer's servers.
 - Configure storage management software
- Disk Configuration
 - Configure up to 20 logical disk volumes based on pre-sales design documentation
- Host Configuration
 - Attach up to 20 Host Ports (Single-path or multi-path hosts)
 - Configure host HBA setting
 - Map storage to host (optional)
- Implementation of additional controller based software functionality (one of the following for 2 volumes)
 - Local mirroring (if applicable), or
 - Snapshot (if applicable)
- Solution Testing. The testing will provide baseline functionality, availability, and performance results.
 - Disk functionality testing
 - Disk availability testing
 - Disk performance testing
- Knowledge Transfer
 - On-site training
 - On-the-job training and product manual review
 - Basic storage management software administration
 - Basic troubleshooting and event log management
 - MEL (Major Event Log) and profile reporting and submission
 - Product functionality review
 - Documentation review
- Activity Input(s): Presales Qualification Information
- Activity Deliverable(s):
 - Technical Configuration Document
 - The document will provide a detailed system configuration (firmware, OS level, HBA settings, etc)
 - Detailed Configuration Diagram
 - The diagram will document current implementation configurations for use in future support and troubleshooting.
 - Detailed Test Plan
 - The test plan will be approved by both Sun and Customer.

- Test Results Report
 - Documentation of test results One hard copy or print-ready copy of each report, which must be used as set forth in the license provision of the Assumptions section of this Service Listing.

Service Closure – Implementation

Sun will conduct a formal meeting with Customer to:

- Review the tasks and deliverables for this Service which Sun completed
- Review any applicable support arrangements and obligations of Sun and Customer
- Obtain Customer sign-off on Service Completion Form ("Completion Form"). Customer will sign Sun's Service Completion Form provided Sun has completed all tasks and provided all deliverables set forth in this Service Listing. Customer's failure to sign the Service Completion Form has no bearing on acceptance of the Service.

Any outstanding issues will be reviewed at this time.

Activity Deliverable(s): Service Completion Form

3. Customer Responsibilities

Customer shall provide Sun with the following:

- A project manager ("Project Manager") who is able to:
 - Provide direction and guidance to Customer's personnel as required by Sun to maintain project timelines and momentum
 - Provide information and resources in a timely manner as needed by Sun to enable Sun to complete the tasks described in this Service Listing
 - Be readily available and on-site as and when required by Sun for the duration of the Service
 - Receive any deliverables created as a result of this Service; and
 - Provide any needed approvals for Customer under the escalation procedure provision below.
- Adequate workspace for each of Sun's consultants, as well as access to telephones, copiers, faxes, conference rooms, and printing facilities as reasonably necessary.
- A summary or list of Customer's relevant business requirements and service-level agreements.
- Access to key Customer personnel, including business, IT and operational staff.
- Parking and access passes as required by Sun as necessary for Service delivery.
- A timely response (i.e., provided to Sun within a time period that will not adversely affect Sun's scheduled delivery of the Service) to all requests for

information by Sun.

- Timely delivery of information and support (i.e., provided to Sun within a time period that will not adversely affect Sun's scheduled delivery of the Service) from suppliers of non-Sun equipment and services as requested.
- Any relevant operational performance standards in use by Customer related to Service delivery.
- A timely response (i.e., provided to Sun within a time period that will not adversely affect Sun's scheduled delivery of the Service) to the review of all Service-related documentation.
- Copies of relevant business, organizational, configuration and process documentation.
- Facilities access and access to relevant internal and external systems as required by Service.
- Access to Customer's existing IT infrastructure.
- Customer will ensure system down time will be available upon reasonable notice to allow implementation of hardware and software components required for completion of this Service.
- Customer will ensure all host systems are at an OS patch level supported by Sun, host bus adaptor vendors, disk controller vendors, and switch vendors.
- Customer will ensure enough fiber channel and/or internet protocol ports are installed and available on all switch(s)/router(s) to support this solution if applicable.
- Customer will provide a copy of the network configuration for host server and storage systems.
- Customer is responsible for the performance of all attached hardware, software and operating systems running on attached hardware, cable and connections, terminals, data integrity and security.
- Customer will notifying Sun of any system, application, or equipment modifications known to be potential problems, or deviations from industry standard practices.
- If necessary, Customer will designate a project coordinator who will interface with the Project Manager and be empowered to facilitate project activities or action when requested as agreed to in the kick-off meeting.
- Customer will provide a copy of the current tape SAN configuration, if applicable.
- An escalation procedure with contact information for use in the event that timely responses are not provided to Sun or the event that any other non-compliance by Customer is adversely affecting the delivery of the Service within the established time frames.

4. Special Provisions

The Service does not include:

- Switch or router implementation
 - Switch or router configuration
 - Data migration
 - Client solutions assessment and/or design
 - Scripting
 - File system and volume manager implementation
 - Remote replication implementation
- Assessment and design services or any other services or deliverables not described above.

This Service is subject to Customer's existing services agreement with Sun that governs the delivery of Services. If Customer does not have a services agreement with Sun that would govern the delivery of Services, then Sun's delivery of Services shall be subject to the terms located at www.sun.com/sales/salesterms. This Service Listing does not constitute an offer by Sun. The Services described above are subject to availability and unless otherwise stated, are only available within the above-referenced country. Any reference to "Customer" in this Service Listing refers to the party entitled to receive the Services. All other defined terms in this Service Listing correspond to the definitions found in Customer's existing services agreement with Sun or the sales terms located at www.sun.com/sales/salesterms, whichever applies.

Last Revised: September, 2009

