

---

**Messaging  
Architecture and Migration  
Statement of Work  
for  
Large ISP**

---

Project: Messaging Architecture and Migration  
Revision: Final Version For Release to Customer  
Date: December 3, 20xx  
Validity Period: 30 Days after release to customer  
Submitted by: Vendor Account Team

## Table of Contents

<b>1.</b>	<b><i>Scope: Sun ONE Architecture and Migration</i></b> .....	<b>1</b>
<b>2.</b>	<b><i>Current Environment</i></b> .....	<b>5</b>
<b>3.</b>	<b><i>Summary Timeline</i></b> .....	<b>7</b>
<b>4.</b>	<b><i>Service Phase Activities</i></b> .....	<b>7</b>
<b>4.1.</b>	<b>Service Kickoff</b> .....	<b>7</b>
<b>4.2.</b>	<b>Inception Phase</b> .....	<b>8</b>
4.2.1.	Functional and Technical Requirements Gathering and Review .....	8
<b>4.3.</b>	<b>Solution Architecture Phase</b> .....	<b>10</b>
4.3.1.	Test Plans .....	11
<b>4.4.</b>	<b>Migration Architecture and Planning Phase</b> .....	<b>12</b>
<b>4.5.</b>	<b>Deployment Phase</b> .....	<b>14</b>
4.5.1.	Deployment and Configuration.....	14
4.5.2.	“Swing Hardware” .....	15
4.5.3.	Provisioning Gateway Development.....	15
<b>4.6.</b>	<b>Testing Phase</b> .....	<b>17</b>
<b>4.7.</b>	<b>Transfer of Information and Transition Phase</b> .....	<b>19</b>
<b>4.8.</b>	<b>Mailbox Migration Phase</b> .....	<b>20</b>
<b>4.9.</b>	<b>Service Completion Criteria</b> .....	<b>21</b>
<b>5.</b>	<b><i>Sun Onsite Team Roles and Responsibilities</i></b> .....	<b>22</b>
<b>6.</b>	<b><i>Sun Responsibilities</i></b> .....	<b>24</b>
<b>6.1.</b>	<b>Project Plan</b> .....	<b>24</b>
<b>6.2.</b>	<b>Weekly Status Reports</b> .....	<b>24</b>
<b>7.</b>	<b><i>Large ISP Responsibilities</i></b> .....	<b>25</b>
<b>8.</b>	<b><i>Assumptions</i></b> .....	<b>25</b>
<b>9.</b>	<b><i>Change Control</i></b> .....	<b>29</b>
<b>10.</b>	<b><i>Acceptance Process</i></b> .....	<b>30</b>
<b>11.</b>	<b><i>Schedule of Fees and Expenses</i></b> .....	<b>32</b>
<b>11.1.</b>	<b>Fees and Expenses</b> .....	<b>32</b>
<b>11.2.</b>	<b>Milestone Payments</b> .....	<b>32</b>
<b>11.3.</b>	<b>Payment Milestone Definitions</b> .....	<b>33</b>
11.3.1.	Service Initiation.....	33
11.3.2.	Completion of Solution Architecture Phase.....	33
11.3.3.	Completion of Testing Phase .....	33
11.3.4.	Completion of Mailbox Migration Phase.....	33
<b>11.4.</b>	<b>Service Initiation Requirements</b> .....	<b>33</b>

**12. Signatures..... 34**

**13. Attachment A – Change Request Form ..... 35**

**14. Attachment B – Performance Acceptance Test Definition..... 36**

**15. Attachment C - Definitions ..... 37**

**16. Attachment D – Phase Completion Form ..... 39**

**17. Attachment E Software and Deliverable Licensing..... 41**

**18. Attachment F Applicable Documentation and Pre-existing Intellectual Property for the Execution and Operation of the Sun ONE Messaging Environment..... 43**

**19. Attachment G: Pre-Existing Sun Microsystems’ Intellectual Property to be Configured or Modified for Specific Requirements of the LARGE ISP Messaging Migration Software..... 44**

## 1. Scope: Sun ONE Architecture and Migration

This Statement of Work (“SOW”) describes a Fixed Price engagement (“Service”) to convert the Large ISP business and consumer email service from Openwave Intermail to Sun ONE software technology. This Large ISP business and consumer email service belongs to Large ISP Internet Services Inc., a Delaware corporation having a place of business at xxx Street, AnyTown, USA 55555 (“XXX”) and LISP LLC d/b/a Large ISP Internet Solutions, a Delaware limited liability company having a place of business at Main Street, Somewhere, USA 55551 (“YYY.Net”). XXX and YYY.Net are collectively referred to herein as “Large ISP”.

The terms and conditions of the Sun -Large ISP Agreement No. Cddddd will govern the provision of Service (“Agreement”).

In this Fixed Price engagement, Sun Microsystems, Inc. (“Sun”) will design an architecture for email messaging for business and consumer email services based on Sun’s Sun ONE Messaging Server (“Sun ONE Messaging Architecture”). Sun will install, configure, and test the Sun software, that includes Sun ONE Messaging Server and Sun ONE Directory Server as licensed by Large ISP under separate agreement (“Software”), to operate with the Large ISP software and hardware components (“LARGE ISP Mail System”), as detailed in this SOW, to implement this architecture (“Sun ONE Messaging Environment”). Sun will move the mutually agreed upon number of Large ISP’s active user accounts (“Mailboxes”) from Large ISP’s current, Openwave-based email messaging platform (“Openwave messaging Environment”) to the Sun ONE Messaging Environment. Movement of Mailboxes from Openwave to Sun ONE is hereafter defined as the “Migration”. The version of Sun ONE Messaging Software installed in the Sun ONE Messaging Architecture hereunder shall be licensed by Large ISP under separate agreement at the start of the Service under this SOW.

Throughout this SOW defined terms are indicated by capitalization (e.g., “Sun ONE Messaging Environment”). These terms are either defined in this SOW when used or are defined in Attachment C, “Definitions”.

Large ISP will make available to Sun its current Openwave Messaging Environment, supplemented by additional hardware and software, that is mutually agreed upon in writing by the parties, to implement the Sun ONE Messaging Environment and to support the Migration. It is Large ISP’s sole responsibility to procure, install and manage any additional hardware and software. Should Large ISP not wish to purchase any additional hardware and software identified by Sun, any resulting changes to the Sun ONE Messaging Architecture will be subject to the Change Control provision within this SOW.

The Service includes:

- Gathering business functional and technical requirements for the Sun ONE Messaging Architecture.
- Creation of the Sun ONE Messaging Architecture and planning for the deployment of the Sun ONE Messaging Environment.
- Architecture and planning of the migration of the business and consumer mailboxes from the Openwave Messaging Environment to the Sun ONE Messaging Environment.
- Applicable Documentation for the execution and operation of the Sun ONE Messaging Environment as defined in Attachment F.

- Deployment of the Sun ONE Messaging Architecture as the Sun ONE Messaging Environment.
- Integration of the Sun ONE Messaging Environment with Large ISP's Provisioning Application. Large ISP will provide personnel knowledgeable in the current Provisioning Application to assist in defining the integration touch points. Large ISP will be required to provide the provisioning scripts and data that currently populate the Openwave database. This integration is described in Section 4.5.3 of this SOW.
- Testing of the Sun ONE Messaging Environment.
- Transfer of information from the Sun staff to Large ISP personnel.
- Migration of the business and consumer mailboxes from the Openwave Messaging Environment to the Sun ONE Messaging Environment.
- Delivery of the Service will be at Large ISP's two (2) Large City Metroplex datacenter facilities: XYZ and NewDataCenter.
- The tasks of the hardware installation and configuration will be performed in parallel with this Service
- This Service will deliver a Sun ONE Messaging Environment that will replace the current Openwave Messaging Environment. When complete, the Sun ONE Messaging Environment will meet the following requirements: Support the current Large ISP end user population of a maximum of two six hundred fifty thousand (2,650,000) mailboxes.
- Support Provisioning via the current Large ISP Provisioning application.
- Will be capable of supporting web access.
- Configuration of up to ten (10) nodes under Veritas cluster control. Large ISP will provide the Veritas licenses required to implement the clusters.
- Achieve Performance Acceptance Test results, at the end of the Deployment Phase, as defined in Attachment B of this SOW.
  - This testing showed that a single Sun ONE Messaging Server Message Transfer Agent ("MTA"), running on a Sun E 450 server, can achieve throughput of 19.88 messages per second, with an average message size of 150K bytes
  - The Benchmark results were achieved in a lab environment with no external customer message load and no load balancing, as detailed in Attachment B of this SOW. The actual results achieved in the Large ISP production environment for the Sun ONE Messaging Environment will be subject to one or more of the following potential factors that may limit the Benchmark results :
    - Configuration and quantity of available hardware.
    - Capacity of Load Balancers.
    - Capacity of network.
    - Capacity of the message store hardware.

The Service will include the following components:

- Design assistance and analysis of the shared storage required for the Message Stores.

- A Test Plan to provide procedures which Sun will use to test the Sun ONE Messaging Environment.
- Consultation on, and implementation of, selectable (non-customized) security features of the Clusters.
- Configuration, verification, and testing to the written, mutually agreed-upon design.
- Installation, delivery, demonstration of the server Runbook for the cluster and operating system. The “Runbook” is defined in the Definitions section of this document.
- Customization of the Runbook including specific contact information and up to a maximum of five (5) additional Large ISP-provided procedures for Large ISP’s management of the Large ISP servers.
- Review of the Veritas cluster configuration for Large ISP to understand the cluster build specifications and operations (“Configuration Management Review”).
- Migration of two million six hundred fifty thousand (2,650,000) mailboxes, which includes up to two million four hundred fifty thousand (2,450,000) Consumer Mailboxes and up to two hundred thousand (200,000) Business user mailboxes, from the Openwave Messaging Environment to the Sun ONE Messaging Environment.
- Sun can provide Migration services for additional Consumer mailboxes that exceed the total of two million four hundred fifty thousand (2,450,000) Mailboxes for a cost of x thousand US Dollars (\$x) per two hundred thousand (200,000) Consumer mailboxes. This cost does not include Migration of Business user mailboxes. This cost will be authorized through the Change Control process outlined in Section 10 of this SOW. Sun assumes that the Migration of additional mailboxes will continue without interruption, other wise the cost may increase at Sun’s discretion. Once the migration process begins, Sun will continue to Migrate mailboxes until the mutually agreed upon number of Business and Consumer Mailboxes has been migrated.

Large ISP is responsible for training the Large ISP staff on the Sun ONE software to be prepared to participate in the design, implementation and operation of the Sun ONE Messaging Environment. Cost of Sun Educational Service’s classroom training is not included in this SOW.

In addition to the specific requirements and responsibilities detailed in this SOW, Large ISP shall provide Sun with an individual to provide direction and guidance to Large ISP’s personnel as required by Sun to maintain project momentum (“Large ISP Project Manager”). This Large ISP Project Manager will have signature authority to accept Service deliverables as defined in the Acceptance Process detailed in Section 11 of this SOW, and will have authority to sign and issue the Phase Completion Form as shown in Attachment D that completes each Service phase as defined in Section 4 of this SOW. At the completion of the Migration Phase, Sun will prepare a letter to denote project completion. This letter will list all Deliverables and the dates when these Deliverables were Accepted by Large ISP (“Letter”). This Letter will state that the Service delivered by Sun fulfills the requirements specified in the summary of requirements agreed to in the Inception and Solution Architecture Phases (“Requirements Document”). Large ISP will follow the Acceptance Process in Section 11 prior to providing final Acceptance of the Service. This Letter will be signed by the appropriate authorized Large ISP manager who has both overall responsibility for operation of the Sun ONE Messaging Environment,

and signature authority for project completion (“Large ISP Director of Operations”). Signature by the Large ISP Director of Operations on the Letter will denote completion of the Service described in this SOW.

The price of the Service described in this SOW is one million seven hundred seventy-five thousand U.S. dollars (\$1,775,000). This cost includes all Professional Services labor and travel expenses. Sun estimates the Service duration to be approximately thirty-two (32) weeks

Milestone payments will occur at the initiation of the Service and completion of specific Phases, as described in Section 12.

Sun will complete the Service by performing the following activities (“Phase”). Each of these Phases is defined in the indicated section of this document:

- Inception Phase (Section 4.2)
- Solution Architecture Phase (Section 4.3)
- Migration Planning and Architecture Phase (Section 4.4)
- Deployment Phase (Section 4.5)
- Testing Phase (Section 4.6)
- Transfer of Information and Transition Phase (Section 4.7)
- Migration Phase (Section 4.8)

After completion of the Transfer of Information and Transition phase, all new users for Large ISP’s messaging system will be provisioned into the Sun ONE Messaging Environment. Changes and deletions of existing users will be propagated to both the Openwave and Sun ONE Messaging Environments until the Migration phase is complete.

The Service does not include the following components:

- Integration with Large ISP’s Email Notification System (“ENS”), Digital Companion (“DC”), Single Sign On (“SSO”), and application health monitoring and alerting software. Sun will provide architectural consulting services to Large ISP on integration strategies for ENS, DC, SSO and monitoring and alerting under a separate SOW.
- The installation of the Sun ONE Calendar and the Sun ONE Mobile Access Pack components of the Sun ONE Portal Server. Installation of Sun ONE Calendar and the Sun ONE Mobile Access Pack component of Sun ONE Portal Server is specified in the SOW Integration Architecture Assistance.
- The breakdown, packaging, move, re-assembly, installation and connection of cabling, rack, server and network components that will be relocated from the Large ISP DFW datacenter to the Vallwood datacenter.
- Installation or configuration of EMC or Sun 9980 Array disk storage systems.
- Customization of the Sun ONE WebMail Reader.

## 2. Current Environment

The current Large ISP Openwave Messaging Environment offers email services to Business and Consumer class customers. Each class has a distinct and self-contained environment. The general characteristics of the class of customers are:

### Business Users

- Approximately 170,000 mailboxes
- Storage capacity based ranging from 10MB to 100MB per mailbox
- Retention is based on mailbox capacity, not time
- Business domain contains approximately 50,000 domains
- Support for POP, WebMail and IMAP
- Sub folder creation is allowed
- Server side anti-virus scanning services
- Delegated Administration support
- Email warnings for nearing or exceeding capacity threshold
- Support for SSL
- Currently operating on two(2) Sun 880 servers with two (2) message stores in an active-active Veritas Cluster configuration
- Server side address book support per mailbox

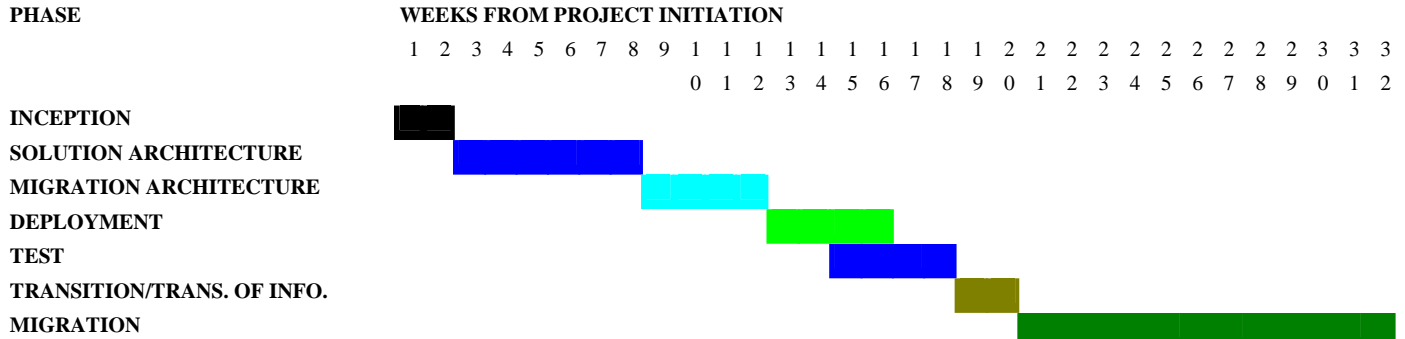
### Consumer Users

- Approximately 2,450,000 mailboxes
- Storage quota is either 10 MB or 30MB per mailbox
- Retention is based on 30 day expiration
- Support for Large ISP.net domain as well as up to four legacy domains, i.e. gte.net
- Support for POP and WebMail
- Sub folder creation is allowed via WebMail
- Server side anti-spam services
- No Delegated Administration support
- Email warnings for nearing or exceeding storage capacity threshold
- No support for SSL
- Currently operating on twenty four (24) Sun 420 servers and four (4) Sun 880 servers with twenty eight (28) message stores in an active-active Veritas Cluster configuration
- No server side address book support per mailbox. Address books are either client side or housed in Digital Companion

- Calendar services are not currently offered in either environment.
- EMC storage is used for the both environments.

### 3. Summary Timeline

Below is a graph depicting the flow of the Service phases and the estimated duration of the phases.



### 4. Service Phase Activities

The following sections describe the details of the Service. The Service has been divided into phases of related activities. Each phase will produce certain work outputs. Throughout this SOW, these work outputs will be called “Deliverables”, using the definition of Deliverables in this SOW.

Sun estimates the total duration of the Service to be approximately thirty-two (32) weeks.

#### 4.1. Service Kickoff

Sun will conduct a Service kick-off meeting for up to two (2) days with key Large ISP contacts to finalize the Service approach and discuss roles, responsibilities and the work schedule for the Functional and Technical Requirements Gathering (defined below in Section 4.2.1). The technical section of the meeting will begin the on-going knowledge transfer activity with a presentation by the Sun Messaging Services Architect to review the features, capabilities and functions of the Sun ONE Messaging Server with Large ISP.

Sun and Large ISP will review resource matters such as available workspace, access to systems, telephones, copiers, faxes, Local Area Network connections, conference rooms, and printing facilities required to deliver the Service.

## 4.2. Inception Phase

During the Inception Phase, scope, risks and deliverables are reviewed and refined. Inception formalizes the vision and verifies the scope, business and technical requirements. This phase establishes initial Use Cases and organization of the team that will carry out the Service. At the conclusion of the Inception Phase the joint Sun/Large ISP team will review the results of the phase and adjust final Service scope and timelines as mutually agreed upon in writing.

### 4.2.1. Functional and Technical Requirements Gathering and Review

Sun and the Large ISP team members will assess and analyze the functional and technical requirements of the Large ISP email service, and its supporting computer systems infrastructure. These requirements will act as the basis for architecture and configuration of the Sun ONE Messaging Environment. A technical review of the production environment for the existing implementation will also be conducted to determine potential issues with scalability, performance, and reliability of the proposed hardware and network environment.

Sun will work with Large ISP to identify appropriate Large ISP resources and to identify data to be gathered. The combined Sun and Large ISP team will review the results at the end of this phase. A final Service scope and timeline will be incorporated into the Project Plan document based on that review.

Sun's analysis of the Functional and Technical Requirements will focus on:

- Content – Reviewing the types and size of messages, and the overall amount data that will meet Large ISP's requirements.
- Security - Reviewing access controls, content encryption and validity, authentication, non-repudiation, and confidentiality for maintaining security of solution.
  - Large ISP will reconfigure existing virus-scanning and spam-filter software to support the Sun ONE Messaging Architecture.
  - SSL encryption capabilities are provided by client software (e.g., by a web browser), and are supported by the server for Business customers.
  - End User – Reviewing the number of end users, the number and location of the end-user geographic distribution, expected usage requirements of the end user, and the access to be given to categories of end users.
  - Administrative – Determining the centralized and distributed management and administration requirements.
  - Migration - Reviewing the existing Large ISP's Openwave Messaging Environment and requirements for migrating it to the Sun ONE Messaging Environment.
  - System Integration - Reviewing the systems and/or databases that will need to be integrated with the Sun ONE Messaging Environment.
  - Provisioning Application – Reviewing and defining interactions and functional requirements for script interaction with the Provisioning Application. This area includes the requirements for custom data services for provisioning users. Large

ISP will support this effort by providing the assistance of personnel who are knowledgeable in the current Large ISP Provisioning Application.

- Systems - Reviewing and defining implementation requirements for the systems, clustering, storage, Storage Area Network (“SAN”) and operational documentation.
- Delegated Administration – architecture and configuration for business users only.

**Phase Deliverables:**

1. A Project Plan that identifies the schedule, assignments, and key milestones for all subsequent Service phases. The Project Plan is defined in Section 6.3.
2. A mutually agreed upon list of requirements (“Requirements Document”) that will contain the requirements that the Sun ONE Messaging Infrastructure will meet.
3. Initial risk assessment summary documenting potential hurdles.
4. Phase Completion Form for this Phase for signature by Large ISP Project Manager.

**Large ISP obligations include:**

1. Large ISP will provide staff familiar with the functional and technical requirements for the Sun ONE Messaging Environment, qualified system administrators and network engineers for the computer and network requirements
2. Large ISP will assign one (1) to two (2) full-time Messaging skilled resources to this phase to work together with Sun to facilitate information sharing.
3. All pertinent functional and technical requirements documentation. In particular, Large ISP must provide a copy of the Service Level Agreement(s) (“SLA”) offered to each class of user.
4. Documentation of current Provisioning Application, including LDAP schema, details of inputs and outputs, and Application Programming Interface (“API”) calls.
5. Documentation of current hardware and network configurations.
6. Facilities access and working space, to include desk or cubicle with network access to the Large ISP work environment, firewall or analog phone lines for remote access to Sun’s virtual private network from inside Large ISP, telephones for normal day to day communication, and access badges for access (24x7) to the work space.
7. Timely access to Large ISP personnel for interviews
8. Review and acceptance of all Deliverables per the Acceptance Process defined in Section 11 of this SOW.
9. Phase Completion Form signed by Large ISP Project Manager.

**Phase Completion:**

**The phase will be complete upon signature of the phase’s Phase Completion Form by Large ISP per the Acceptance Process described in Section 11 of this SOW. The next phase will not commence until Acceptance of all Phase Deliverables from this phase.**

### 4.3. Solution Architecture Phase

In this phase the Sun ONE Messaging Architecture is designed through an iterative design/review process to refine and detail the requirements from the Inception Phase. The Sun ONE Messaging Architecture will be based on the business requirements and Use Cases from the Inception phase. The architecture will include:

Sun and Large ISP team members will develop and refine the high-level architecture and Test Plans. The Test Plans are described separately below. The architectural decisions will cover these areas:

- Configuration requirements of shared storage to be used by the clustering software.
- Configuration requirements of Veritas Cluster Large ISPume Management and Sun ONE data services (as part of the software configuration).
- Storage architecture analysis, design and configuration.
- Sizing recommendation for server hardware and storage components.
- Design of software resource groups.
- The configuration of High Availability (“HA”) for data services.
- Definition of Test Plan(s), as noted below, to provide procedures which Sun will use to test the data service(s).
- Basic security measures for Solaris 8, Sun ONE and Veritas cluster.
- The configuration implemented will not allow the MTAs to be used to relay email to other message servers (“Open Relay”) for the Sun ONE Messaging Server,
- Message store configuration, covering the number of stores, software parameter settings, allocation of storage.
- Message Transfer Agents (“MTA”).
- Directory schema design to support the messaging solution and legacy Openwave schema.
- Integration touch points for the interface between the Sun ONE Messaging Environment and Large ISP’s current Provisioning Application.

Sun will record the completed design of the software and hardware configuration in the design document (“Design Specification”). Large ISP will approve in writing the Design Specification that will serve as the basis for all of the software and hardware configuration processes. The Design Specification will include:

1. Messaging design specification.
2. Directory server design specification.
3. Directory schema.
4. Cluster design specification.
5. Storage design specification.

Changes to the agreed upon Design Specification shall be governed by the Change Process in the Change Control Process, Section 10.

### 4.3.1. Test Plans

Sun will work with Large ISP to develop Test Plans for hardware and software for performance metrics. The areas that will be covered by these Test Plans are described in this section.

#### Hardware Test Plan

A Hardware Test Plan will be developed that tests the following components compliance with the requirements that were developed in the Inception Phase:

- Computer systems performance.
- Storage, including RAID level and capacity.
- Network capacity.

#### Software Test Plan

A Software Test Plan will be developed that tests the following components' compliance with the requirements that were developed in the Inception Phase:

- Software services fail-over.
- Computer systems functionality and fail-over.
- Provisioning: create account, delete account, and change account.
- Message receive, send, store.

#### Performance Test Plan

A Performance Acceptance Test Plan will be developed that will test the capability of the Sun ONE Messaging Environment to achieve performance comparable to the Relaytest Benchmark testing conducted in November 2002, under like conditions, and will be conducted by Sun in cooperation with Large ISP. This Performance Acceptance Test is defined in Attachment B.

#### Phase Deliverable(s)

1. Design specification.
2. Revised Project Plan.
3. Risk assessment summary.
4. Test Plans described above in this Section.
5. Phase Completion Form for this phase for signature by Large ISP Project Manager.

**Large ISP obligations include:**

1. Large ISP project staff members as needed.
2. If EMC storage is used, Large ISP must provide EMC-certified resources to perform configuration and trouble shooting according to the Service schedule.
3. One (1) to two (2) full-time resources skilled in Messaging technology in order to facilitate information sharing.
4. Large ISP is responsible for re-configuring any existing anti-spam or virus-checking software in order to provide compatibility between these software products and the Sun ONE Messaging Architecture.
5. Review and acceptance of all Deliverables per the Acceptance Process defined in Section 11 of this SOW.
6. Phase Completion Form signed by Large ISP Project Manager.

**Phase Completion:**

**The phase will be complete upon signature of the phase's Phase Completion Form by Large ISP per the Acceptance Process described in Section 11 of this SOW. The next phase will not commence until Acceptance of all Phase Deliverables from this phase.**

#### **4.4. Migration Architecture and Planning Phase**

This phase includes the architecture and design of the Migration Plan, tools and environment. This Phase will address the following:

- Design both the mailbox migration process and hardware deployment strategy.
- Define the interim architecture to perform the mailbox migration.
- Design scripts and tools to facilitate the mailbox migration process.
- Design scripts and tools for address book migration for the business users.
- Development and test of migration tools.
- Scheduling and operational support of the actual migration.

The Migration Architecture and Planning Phase will focus on developing the tools, processes and procedures to support the four key migration tasks:

- Add existing users from Openwave to Sun's Sun ONE Directory Server.
- Move existing mailboxes from the Openwave to the Sun ONE Messaging Environment.
- Redirect incoming mail for the mailboxes to the Sun ONE Messaging Environment.
- Enable outgoing mail handling through the Sun ONE MTAs.

Empty mailboxes will be provisioned on the new system. Mailboxes that contain data will be migrated to the new system.

A certain number of Consumer users will not log in within the thirty (30) day email retention period for Consumers. The percentage of such users will not exceed thirty percent (30%) of the total user population. These users will be migrated

programmatically. Sun will start migrating those accounts that have not been accessed within the past thirty (30) days on the first day of the Migration Phase. Thereafter, Consumer mailboxes that have not been accessed within the past thirty (30) days will be migrated on a rolling basis.

Business and Consumer users will be migrated in separate but parallel efforts using separate hardware environments. The Migration Architecture and Planning Phase will consist of the following tasks:

- Define the migration process in consultation with Large ISP. The migration process will be documented in the Migration Process Plan.
- Large ISP's review and acceptance, per the Acceptance Process described in Section 11 of this SOW, will form the base on which all migration planning is built.
- The Migration Process Plan will address both automated and manual processes required to perform the migration.
- Update the Project Plan's Work Breakdown Structure with the detailed Migration Process information developed in this plan.
- Define and create the scripts that will be used to implement the automated tasks identified in the Migration Process Plan.
- Develop the Test Plan and procedures to test the process in the Migration Process Plan.
- Define test accounts in the Openwave data store.
- Migrate these accounts from the Openwave environment using the process in the Migration Process Plan.
- Verify that this test migration succeeded.
- Success criteria for the test migration will be when email can be sent from, and received by, these test accounts.

**Phase Deliverables:**

1. Migration Process Plan
2. Revised Project Plan.
3. Scripts or computer programs to implement the tasks identified as "automated" in the Migration Plan.
4. Test Plan for testing the Migration process as detailed in the Migration Process Plan.
5. Test results certified by Large ISP as conforming to the expected results for each test case as detailed in the Test Plan.
6. Phase Completion Form for this phase for signature by Large ISP Project Manager.

**Large ISP obligations include:**

1. Large ISP project staff members will be assigned as needed. Large ISP will assign one (1) to two (2) resources skilled in messaging technology in order to work together with Sun to facilitate information sharing. These individuals will be available to assist the Sun Onsite Team as needed so that the Service timelines are not impacted by waiting for response from these resources.
2. Access to the testing environment and to System Administration support.
3. Review and acceptance of all Deliverables per the Acceptance Process defined in Section 11 of this SOW.
4. Participation in performing the tests that are detailed in the Test Plan (“Test Cases”), and timely certification of the results of these tests.
5. Phase Completion Form signed by Large ISP Project Manager.

**Phase Completion:**

**The phase will be complete upon signature of the phase’s Phase Completion Form by Large ISP per the Acceptance Process described in Section 11 of this SOW. The next phase will not commence until Acceptance of all Phase Deliverables from this phase.**

## 4.5. Deployment Phase

In this phase Sun and Large ISP will deploy the Sun ONE Messaging Architecture as an actual environment to support email messaging. This phase includes:

- Hardware installation and configuration services.
- Sun ONE Directory Server and Sun ONE Messaging server software deployment.
- Component testing.
- Development and test of the scripts required for interaction with the Provisioning Application.

### 4.5.1. Deployment and Configuration

The Sun Onsite Team will deploy the Sun ONE Messaging Environment according to the Sun ONE Messaging Architecture. The Deployment will include installation of the servers, Sun ONE products and configurations.

The Deployment will include the following steps

1. Sun ONE Directory Server will be installed and configured.
2. The Directory schema developed in the Solution Architecture phase will be applied to the migrated directory. The schema will include the necessary attributes needed to control the migration of user mailboxes.
3. An instance of the Lightweight Directory Access Protocol (“LDAP”) directory currently used by the Openwave environment will be migrated to the Sun ONE Directory.

4. The Sun ONE Messaging Server's MTAs, and Messaging Multiplexers ("MMP") and Message Stores will be installed.
5. Unit test of the components deployed.

#### **4.5.2. "Swing Hardware"**

The migration of user accounts to the Sun ONE Messaging Environment will be performed on Large ISP's existing production email environment, supplemented by additional servers. These additional servers will allow the Sun Onsite Team to configure the MTAs, MMPs and initial Message Stores to support the migration. The additional servers will be referred to as the "Swing Hardware" in the balance of this SOW.

Large ISP will provide this Swing Hardware for the Consumer users. The cost of this Swing Hardware, if any, is not included in the cost of the Service outlined in this SOW.

Sun assumes that Large ISP will supply separate Swing Hardware to support migration of the Business users.

Large ISP will provide a minimum of two (2) servers for the Business environment as a parallel environment to support the migration.

#### **4.5.3. Provisioning Gateway Development**

A tool for the integration of the Sun ONE Messaging Environment with the Large ISP Provisioning Application will be developed. Sun's approach, based on information available at the date of this SOW, will be to create a separate tool that intercepts provisioning data output intended for the Openwave Messaging Environment ("Provisioning Gateway"). The Provisioning Gateway will forward the provisioning data to the Openwave Messaging Environment. The Provisioning Gateway will also package and deliver the same data to the Sun ONE Messaging Environment. The intent of the Provisioning Gateway is to maintain synchronization between the two messaging environments without having to change the program and interface used by the Large ISP Customer Service Representatives ("CSR"s). At the end of the migration the portion of the tool that forwards information to the Openwave Messaging Environment will be disabled, leaving only the portion of the Provisioning Gateway that communicates with the Sun ONE Messaging Environment.

The development of the Provisioning Gateway is based on the following approach and information made available by Large ISP. Should this information be incomplete or incorrect Sun reserves the right to modify the approach, scope or price of the Service

- There is a front end-script or program, written in either the C language or in Perl, that formats and sends all information to the Openwave Messaging Environment (“Input Stream”).
- Large ISP will provide Sun with the assistance of personnel knowledgeable in the details of the implementation of the current Provisioning Application and the documentation that specifies the details of the Input Stream.
- This Input Stream can be redirected to the Provisioning Gateway.
- It is technically feasible for this Provisioning Gateway to route the Input Stream to the existing Openwave Messaging Environment so that this environment can receive all provisioning changes until it is decommissioned.
- With commercially reasonable effort Sun can enable the Provisioning Gateway to translate a copy of this same Input Stream into the appropriate data and calls that will update the directory instance used by the Sun ONE Messaging Environment.
- The scope of this SOW does not include additional software products (e.g., Sun ONE MetaDirectory) to translate a copy of this same Input Stream into the appropriate data and calls that will update the directory instance used by the Sun ONE Messaging Environment.

The Cluster software will be installed and configured as per the Design Specification.

Activities include:

- The configuration of shared storage to be used by Cluster services based on the Design Specification.
- Installation and configuration of Veritas CVM and Sun ONE data services is part of the software configuration in an N+1 configuration.
- Storage configuration.
- Implementation of software resource groups.
- Implementation of data services.
- Implementation of Cluster HA data services.
- Runbook customization.

**Phase Deliverables:**

1. The production deployment of the systems and software
2. Software configuration as described in the Design Specification.
3. Provisioning Gateway
4. System operational documentation and Runbooks for the cluster.
5. Phase Completion Form for this phase for signature by Large ISP Project Manager.

**Large ISP obligations include:**

1. Access to Swing Hardware and to system administration support from Large ISP's system administrators.
2. Assistance of personnel who are knowledgeable in the details of the current Large ISP Provisioning Application.
3. Provide detailed documentation, Application Program Interface ("API") calls and data layout for the current Large ISP Provisioning Application.
4. A mutually agreed upon Sun server for installation of the Provisioning Gateway
5. Review and acceptance of all Deliverables per the Acceptance Process described in Section 11 of this SOW.
6. Large ISP project staff members as needed. Large ISP will assign one (1) to two (2) resources skilled in email and messaging technology to this phase to work together with Sun to facilitate information sharing. These individuals will be available to assist the Sun Onsite Team as needed so that the Service timelines are not impacted by waiting for response from these resources.
7. Phase Completion Form signed by Large ISP Project Manager.

**Phase Completion:**

**The phase will be complete upon signature of the phase's Phase Completion Form by Large ISP per the Acceptance Process described in Section 11 of this SOW. The next phase will not commence until Acceptance of all Phase Deliverables from this phase.**

## 4.6. Testing Phase

Sun will perform a series of functional tests by executing the Test Plans developed previously during the Inception and Solution Architecture phase to confirm that the hardware and software operates in conformance with the Design Specification. The Test Plans to be executed are specified in Section 4.3 of this SOW.

If test results indicate adjustments to the configuration of the hardware or software components, Sun will make necessary configuration changes. Large ISP will be responsible for procurement of any additional technology infrastructure (e.g., networks; hardware) that the test results indicate to be necessary.

Sun and Large ISP will conduct the Performance Acceptance Test defined in Attachment B.

It is normal practice for a Large ISP representative ("Test Coordinator") to observe the tests while the tests are carried out by Sun. The Test Coordinator will observe the tests and will sign off on the test document ("Test Plan") to indicate completion of tests.

After completion of the testing, the Sun ONE Messaging infrastructure will be in operation in the following mode:

- All new users will be provisioned on the Sun ONE Messaging Environment, and their mailboxes will exist within the Sun ONE Message Store.
- The Sun ONE MTAs and MMPs will be fully operational, handling all message routing and multiplexer functions.
- Sun's Sun ONE Directory Server will provide all directory functions needed by the Sun ONE Messaging Environment.

**Phase Deliverable(s)**

1. Test Plan execution.
2. Phase Completion Form for this phase for signature by Large ISP Project Manager.

**Large ISP obligations include:**

1. Network fail-over testing
2. Network and systems staff support
3. Large ISP will assign a Test Coordinator. This individual will participate in the Testing Phase on a full-time basis to observe all testing conducted.
4. Use of existing Large ISP stress test tools
5. Customer Service Representative assistance in testing the integration with the Provisioning Application .
6. Review and acceptance of all Deliverables per the Acceptance Process defined in Section 11 of this SOW.
7. Phase Completion Form signed by Large ISP Project Manager.

**Phase Completion:**

**The phase will be complete upon signature of the phase's Phase Completion Form by Large ISP per the Acceptance Process described in Section 11 of this SOW. The next phase will not commence until Acceptance of all Phase Deliverables from this phase.**

#### 4.7. Transfer of Information and Transition Phase

After successful completion of the Testing Phase, Sun will work with Large ISP to transfer information about the integrated Sun ONE Messaging Environment specific to Large ISP solution.

- A, A two to five day knowledge transfer seminar conducted by the Sun Onsite Team.
- Review Service documentation to enable Large ISP to maintain and support the Sun ONE Messaging Environment.
- The Service documentation referred to above will include a Sun ONE Messaging Environment operations guide (“Sun ONE Messaging Operations Guide”). This document is intended to supplement the standard Sun ONE documentation. It will be written by Sun Onsite Team personnel and will contain the following:
  - Architectural overview of the Sun ONE Messaging Environment
  - The instructions needed to start and stop Sun’s Sun ONE Messaging Server and Sun’s Sun ONE Directory as installed in the Sun ONE Messaging Environment.
  - Frequently asked questions (“FAQ”) to give some trouble-shooting information to supplement the support available from the Sun Technical Support Center.
- Sun will install and demonstrate a cluster operations guide ("Runbook") on Large ISP's designated system capable of hosting the Runbook. The Runbook will contain sections covering the technical procedures for maintaining and configuring the Cluster software.
- Sun will conduct a Cluster management review addressing key Cluster management issues and best practice approaches in the Cluster environment.

At the completion of the Transfer of Information and Transition phase the Sun ONE Messaging Environment will be ready to accept migrated mailboxes and provisioning of new users as a production environment. Large ISP staff members must be prepared at the completion of this phase to operate the environment on a daily basis in parallel to the Openwave environment.

##### **Phase Deliverables:**

1. Information Transfer session (s) of a two (2) to five (5) day duration with appropriate Sun Onsite team and from two (2) to four (4) Large ISP staff members.
2. Sun ONE Messaging Operations Guide.
3. Cluster Management Review Guide.
4. Cluster Runbook.
5. Phase Completion Form for this phase for signature by Large ISP Project Manager.

##### **Large ISP obligations include:**

1. Network and Systems staff support for the Sun ONE Messaging Environment
2. Day to day operation of the Sun ONE Messaging Environment
3. Review and acceptance of all Deliverables per the Acceptance Process described in Section 11 of this SOW.

4. Phase Completion Form signed by Large ISP Project Manager.

**Phase Completion:**

**The phase will be complete upon signature of the phase's Phase Completion Form by Large ISP per the Acceptance Process described in Section 11 of this SOW. The next phase will not commence until Acceptance of all Phase Deliverables from this phase.**

## 4.8. Mailbox Migration Phase

This phase will initiate and complete the mailbox migration to the new environments. Sun estimates that the duration of this phase will be twelve (12) weeks. At the end of the phase, cutover to the new environment will be complete.

The following information is the basis for the estimated duration of this phase:

- Maximum number of mailboxes is two million six hundred fifty thousand (2,650,000).
- All mailboxes are POP and Webmail.
- The ratio of POP to Webmail mail boxes is 9:1.
- In the existing system, folder creation under web mail is not disabled.
- The Openwave Messaging Environment currently used for production will be made available for a reasonable period each day for the migration of mailboxes ("Outage Window"). This Outage Window may have a duration of two (2) to four (4) hours of off-peak time per day and will make one or more message stores unavailable to customers during the window. During this Outage Window incoming mail will be queued for later delivery. Outgoing mail would still be transmitted.
- Large ISP is deleting data older than thirty (30) days ("Expired Data") from its existing Consumer Openwave Message Stores. Expired Data will not be migrated.
- Business users and Consumer users will be migrated separately, in parallel, and in separate hardware environments.

Large ISP will provide Sun with a document that contains the name and login for each user to be migrated ("Migration Plan"). Large ISP will also provide a representative to observe and verify the migration process ("Migration Coordinator"). At successful completion of migration, the Large ISP Migration Coordinator will sign the Migration Plan to verify that migration is complete.

Sun will design the migration of the mailboxes as an automated process, to the extent practicable, using the scripts and tools developed in the Migration Planning and Architecture Phase.

Migration of the Business and Consumer environments will be conducted in parallel, using separate hardware environments for Business and for Consumer. Large ISP will provide the mutually agreed to Swing Hardware necessary to perform the Migration.

A certain number of Consumer users will not log in within the thirty (30) day email retention period for Consumers. The percentage of such users will not exceed thirty percent (30%) of the total user population. These users will be migrated programmatically. Sun will start migrating those accounts that have not been accessed

within the past thirty (30) days on the first day of the Migration Phase. Thereafter, Consumer mailboxes that have not been accessed within the past thirty (30) days will be migrated on a rolling basis.

**Phase Deliverables:**

1. Users migrated to the Sun ONE Messaging Environment.
2. Acceptance Letter submitted to Large ISP Director of Operations for signature.

**Large ISP obligations include:**

1. Network and Systems staff support for the Sun ONE Messaging Infrastructure.
2. Day to day operation of the Sun ONE Messaging Infrastructure.
3. Provide Sun Onsite Team with list of all users to be migrated. For each user, provide login name and password. Password must be in one of the following formats: SHA, clear text or crypt. The list of all users to be migrated will be provided in an electronic file whose format is mutually agreed upon, in writing, by Large ISP and Sun.
4. Provide Sun Onsite Team a daily list of users that have not logged in within the past thirty (30) days.
5. Large ISP will assign a Migration Coordinator. This individual will participate in the Migration Phase on a full-time basis to observe all migration conducted.
6. Review and acceptance of all Deliverables, including the Acceptance Letter, per the Acceptance Process defined in Section 11 of this SOW.

**Phase Completion:**

**The phase, and the Service described in this SOW, will be complete upon signature of the Acceptance Letter, per the Acceptance Process defined in Section 11 of this SOW, by the Large ISP Director of Operations. The next phase will not commence until Acceptance of all Phase Deliverables from this phase.**

#### 4.9. Service Completion Criteria

There are two criteria that, when met, will constitute the completion of the Service described in this SOW:

- Verify that the Sun ONE Messaging Environment complies with identified Large ISP requirements for the messaging system as defined and mutually agreed upon Design Requirements document.
- Migration of the mutually agreed upon number of Mailboxes from the Openwave Messaging Environment to the Sun ONE Messaging Environment.

## 5. Sun Onsite Team Roles and Responsibilities

### ENGAGEMENT MANAGER

The Engagement Manager is responsible for the overall Service success, offers business leadership and direction, resource management, and communication with Large ISP Executives.

Sun will assign an experienced Engagement Manager to assume responsibilities for the overall direction of the Sun Onsite Team. This Sun Engagement Manager will be Large ISP's sole point of contact for business and financial issues throughout the delivery of the Service as defined within this document.

The Sun Engagement Manager will perform the duties necessary for this role, primarily, from an off-site location. He or she will make a monthly site visit to meet with Large ISP management as well as the Sun Onsite Team. The appropriate Large ISP personnel, including the Large ISP Project Manager and the Large ISP Director of Operations will attend these monthly meetings.

These meetings will be conducted at Large ISP's Dallas/Fort Worth Metroplex facility at times and durations that are mutually agreeable to Large ISP and to Sun.

### PROJECT MANAGER

Sun will assign an experienced individual to assume the day-to-day management and direction of the Sun Onsite Team, ("Sun Project Manager"). The Sun Project Manager will carry out the responsibilities and duties as set forth below. The Sun Project Manager will be Large ISP's sole point of contact for Service delivery and scheduling issues throughout the delivery of the Service as defined within this document.

The Sun Project Manager will perform the duties necessarily for this role, primarily, at the Large ISP Dallas/Fort Worth Metroplex facilities.

The Sun Project Manager will

- Work with the Large ISP Project Manager to finalize the detailed task-level work plan and internal and external review and/or quality assurance points will be identified and documented in the work plan.
- In collaboration with the Large ISP Project Manager, manage the execution of the work plan;
- Communicate project status and other information regularly with Large ISP and Sun stakeholders. The format for the weekly status reports, specific documentation of results will be mutually agreed upon.
- Be responsible for managing resources, Service schedule, and coordinating third party consulting activities as they pertain to specific Deliverables, and interface between technical and business consultants in the day-to-day activities of the Sun Onsite team.

**SOLUTION ARCHITECTS**

The Solution Architects have technical responsibility for the Service. They develop the solution design, technical specifications and design documents and provide communication and direction to others during the Service. The Solution Architects will be responsible for the Messaging, Directory, Systems, Storage and Cluster design.

**TECHNICAL CONSULTANT/SPECIALISTS**

The Technical Consultants and Specialists are responsible for working with the Solution Architects for the design implementation and testing the work at the direction of the Solution Architects and the Sun Project Manager. They will be responsible for specific aspects of the Service, e.g. Server, Cluster, Storage, Software configuration, Solaris.

**TECHNICAL WRITER**

A Technical Writer will be responsible for coordinating, drafting and editing the Service documentation and Deliverables for the Service.

## 6. Sun Responsibilities

In addition to the Phase Deliverables defined in Section 4, the Sun Onsite Team will have the following responsibilities:

### 6.1. Project Plan

The Sun Project Manager and Solution Architects will prepare a mutually agreed upon Project Plan during the Inception Phase. The Sun Project Manager and Solution Architects will maintain the Project Plan as the project progresses. This Project Plan will contain:

- Work Breakdown Structure: the major identified tasks required to deliver the Service in conformity with the Requirements Document. As the work progresses in the Inception, Solution Architecture and Migration Architecture Phases (as described in Sections 5.2, 5.3 and 5.4), these major tasks will be further defined and elaborated into sub-tasks and intermediate milestones. The definition and elaboration process will be conducted by the Sun Onsite Team in consultation with Large ISP's Project Manager and technical personnel.
- Project Schedule and resource allocation for implementing the Work Breakdown Structure
- Milestones for review/signoff of key Deliverables for the Service phases as defined in the phase descriptions in Sections 5.2 – 5.8 of this SOW.

### 6.2. Weekly Status Reports

The Sun Project Manager will submit a weekly Status Report to the Large ISP Project Manager. This Status Report will contain the following information:

- Service activities and tasks.
- Milestones and Deliverables scheduled to be completed during the time period that were/were not completed.
- Tasks that were not scheduled but that were completed by Sun in order to add value to the Service.
- Outstanding issues affecting Service progress and/or completion, plus timeframe and plan for resolution.
- Any changes or revisions to the agreed upon work plan.
- Planned tasks, milestones, and deliverables for the following week.
- Updated Project Plan and variance analysis.

## 7. Large ISP Responsibilities

The Large ISP Project Manager will perform and provide the following tasks and resources:

1. Provide information and resources in a timely manner as needed by Sun to enable Sun to complete the tasks described in this SOW.
2. Be readily available and on-site as and when required by Sun for the duration of the Service.
3. Receive any Deliverables created as a result of this Service.
4. Respond (i.e., in a time period that does not affect Sun's scheduled delivery of the Service) to all Service-related Deliverables per the Acceptance Process described in Section 11 of this SOW.
5. Provide any needed approvals for Large ISP under the Change Control provision.
6. Provide adequate workspace for each of Sun's consultants, as well as access to telephones, copiers, faxes, conference rooms, and printing facilities as reasonably necessary.
7. Provide Large ISP's relevant business requirements and service level agreements.
8. Provide access to key Large ISP personnel, including business, IT and operational staff.
9. Parking and access passes as necessarily required by Sun for Service delivery.
10. Respond (i.e. in a time period that does not affect Sun's scheduled delivery of the Service) to all requests for information by Sun.
11. Delivery of information and support (i.e. in a time period that does not affect Sun's scheduled delivery of the Service ) from suppliers of non-Sun equipment and services as requested by Sun.
12. Any relevant operational performance standards in use by Large ISP related to Service delivery
13. An escalation procedure in the event that timely responses are not provided to Sun to ensure that the Service can be completed within the estimated time-frames
14. Provision of an appropriate target hardware system for product install, with functional current operating system and associated patches, root access, network connectivity, and adequate disk space, ready for use starting on the first day of the Service.

## 8. Assumptions

Sun has developed the following assumptions based on the information that Sun requested from Large ISP and Large ISP provided to Sun. If the information that was provided by Large ISP has substantially changed, is incorrect or incomplete, Sun reserves the right to modify the price, scope or schedule of the Services. In executing this SOW Large ISP agrees that these Assumptions are valid, correct and complete.

1. Large ISP has valid licenses for all software and Large ISP-provided tools covered by the Service, and all licenses will cover Sun's use, and, if required, modification, of the software and Large ISP-provided tools as well.
2. No hardware or software licenses are included in this Service other than those explicitly stated in this SOW.
3. The Sun One Messaging Environment will be deployed on a combination of Large ISP supplied existing hardware and new Swing Hardware procured under a separate order.
4. Sun will perform the Service at the Dallas/Fort Worth Metroplex unless otherwise stated in this SOW. Site visits to locations other than the Dallas/Fort Worth Metroplex location may entail additional travel and labor costs at Sun's then current Time and Materials ("T&M") rates.
5. Any Service schedule estimates represent Sun's best technical judgment based on information available. The actual duration of the Service may vary.
6. Sun will provide architectural consulting services to Large ISP for integration strategies for ENS, DC, SSO and monitoring and alerting under a separate SOW. Large ISP will be responsible for the integration of the technologies stated above. The implementation of any integration to other Large ISP and Large ISP products and services (including but not limited to "Launch Pad" and "Digital Companion") is outside the scope of the Service.
7. Large ISP is responsible, with assistance from Sun under a separate SOW, to integrate the new messaging platform with ENS, DC, SSO and any other Large ISP and Large ISP products and services (including but not limited to "Launch Pad" and "Digital Companion") to complete the functional requirements of the new platform. These integration will be completed by Large ISP in consistence with the timeline outlined in this SOW to assure the timely delivery of a fully functional messaging services.
8. Sun will provide installation services for Sun ONE Calendar Server and the Mobile Access Pack component of Sun ONE Portal Server under a separate SOW.
9. Large ISP will expunge non-active mailboxes prior to the start of the Migration.
10. Sun will assign a Project Manager to this engagement and will coordinate activities with Large ISP's Project Manager. Sun's Project Manager will have primary responsibility for coordinating all activities for this Service, including scheduling resources, confirming Service activities and Deliverables. Sun's Project Manager will serve as Sun's single point of contact for scheduling any Sun personnel to deliver this Service. A Sun Consultant or Engagement Manager may perform the Project Manager function as appropriate.
11. Large ISP will assign a management employee with signature authority to this Service to act as Large ISP Project Manager. This individual will be available full-time to accept deliverables. This management employee will have signature authority for Large ISP to accept Service deliverables and to sign the Phase Completion Form that completes each Service phase.
12. Large ISP will assign staff to support Sun that are properly skilled in their area of responsibility (e.g., properly skilled as a Solaris Systems Administrator).

13. Sun's provision of the Service presumes that Large ISP is performing backups on a regular basis prior to Sun providing the Service. Sun has no responsibility in any way with respect to Large ISP's data in providing the Service.
14. As of now we are agreeing to this in the MCA Sun reserves the right to use subcontractors in those roles it deems appropriate.
15. Sun may request permission from Large ISP, from time to time, to assign additional personnel to the Service to shadow the Sun Onsite Team for training purposes. Although these shadow resources will contribute their knowledge, skills and labor to the Service, Sun will not bill their time to the Service. However, Sun expects that Large ISP will provide these shadow resources with the required building, network and system access, as well as working space, that it provides the members of the Sun Onsite team.
16. The engagement will begin on a mutually acceptable date.
17. Unless otherwise specified by Sun, all Service-related documentation requested by Sun must be provided one week prior to Sun's initial on-site visit.
18. The only tasks and Deliverables Sun will undertake or deliver in providing the Service are those specifically set forth in this SOW.
19. Sun will conduct the Service during normal business hours unless otherwise agreed to by parties.
20. Sun will make commercially reasonable efforts to meet those critical time frames identified by Large ISP and agreed to by Sun in writing.
21. Upon acceptance and completion of the Transfer of Information and Transition Phase described in this SOW, responsibility for administering the Service components (including hardware and software) passes to Large ISP..
22. Concerning Service Level Agreements by Large ISP for its business and consumer users: Sun makes no statement concerning the percent availability of any application installed or configured under this Service. The use of the term "highly-available" does not imply any fixed percent availability
23. Large ISP will be responsible for firewall, network security and operating system security related configuration.
24. Large ISP will be responsible for the installation configuration and maintenance of the Domain Name System (DNS) Services.
25. Maximum number of Consumer and Business mailboxes to be migrated to new architecture is two million six hundred fifty thousand (2,650,000) unless otherwise agreed to by Large ISP and Sun.
26. Outage windows of four (4) hours per day, at off-peak time, will be provided to enable migration of mailboxes. The definition of "Off-Peak" will be determined by mutual agreement during the Inception Phase. During outage window user incoming email will be held at the MTA. Outgoing email will not be impacted by the outage window.
27. Large ISP will have permanent and valid software licenses for all third-party software it supplies, including Veritas Cluster.
28. Large ISP is enforcing retention policies so that data older than thirty (30) days does not have to be migrated for Consumer mail.

29. Adequate floor space, air conditioning, power, lighting, and network connections to Large ISP's network and to the Internet will be provided by Large ISP for the hardware required to implement and maintain the Service schedule. Failure to have this environment ready may delay the Service schedule.
30. Sun assumes that Large ISP will provide sufficient data storage for the Business and Consumer mailboxes.
31. Existing Large ISP Sun computer systems are running Solaris 8 operating system.
32. The intention of the Migration approach is to move one complete message store at a time from Openwave Messaging Environment to the Sun ONE Messaging Environment. This procedure is intended to facilitate reuse of existing Large ISP servers effectively when they are no longer needed to support the Openwave message stores.
33. Large ISP will be responsible for re-configuring existing servers so that they are completely ready for re-use to support the migration from Openwave Messaging Environment to the Sun ONE Messaging Environment.
34. The throughput and performance requirements for the Sun ONE Messaging Environment are the message throughput and response results achieved during testing performed by Sun on Large ISP's behalf, noted in Attachment B.
35. Delegated administration will only be supported for Business users of Large ISP's Sun ONE Messaging Environment .
36. Kerberos infrastructure and implementation is out of scope of this SOW.
37. Large ISP is responsible for providing to Sun an accurate list of user account names to be migrated under this SOW. This list must include the valid password for each user. The password must be in either clear text or MD5.
38. Large ISP is responsible for re-configuring any existing anti-spam or virus-checking software in order to provide compatibility between these software products and the Sun ONE Messaging Environment.
39. Sun will configure no more than ten (10) nodes under Veritas cluster control.
40. Large ISP will be responsible to provide EMC-certified technicians for installation, configuration and trouble-shooting this storage. These technicians will be available at the times specified in the Service schedule, and will provide a timely response to technical issues. Sun will not be responsible for performance of EMC personnel or product.
41. SSL capability will be provided by Sun's Sun ONE or Solaris OE software products. Sun assumes that Large ISP already has the necessary server certificates to support SSL

## **9. Change Control**

Should either party desire a change to the Service, the Sun Project Manager will follow standard change control procedures described in this section. Sun will complete all work authorized under change control. The objectives of change control ("Change Control") are to:

1. Assess the impact of scope changes on Service schedules, resources, and pricing.
2. Provide a formal vehicle for approval to proceed with any changes for this SOW.
3. Establish the impact of any changes.
4. Provide a Service audit record of all material changes to the original SOW.

When Sun determines a change is material, impacting the cost of or time for performance, as determined by Sun ("Change"), Sun and Large ISP will review the Change through the change control process set forth in this Section ("Change Control Process") as follows:

1. For each change, Sun will complete a change request form as set forth in Attachment A (the "Form") and provide the completed Form to Large ISP.
2. Both Sun and Large ISP will approve the Change detailed in the Form, including the impact of the Change on the schedule, resources, and the price of the Service, before Sun will make the Change.
3. When Large ISP accepts the Change set forth in the Form, Large ISP will modify its Purchase Order ("P.O.") and such other documents as requested by Sun.
4. If Large ISP does not accept the Change as set forth in the Form (including the impact on the schedule, resources, or price), the Parties will complete their obligations with respect to this Service as set forth in this SOW.

## 10. Acceptance Process

The following details the Acceptance Process for all Document Deliverables and Work Product Deliverables (collectively “Deliverables”) for the Service as defined below.

Document Deliverables are those documents specified as the deliverable output of each phase in Section 4 of this SOW. Work Product Deliverables are the outcomes specified as deliverable output of each phase in Section 4 of this SOW. Work Product Deliverables may include computer programs and scripts, and the data output of these computer programs and scripts. Parties will agree in advance to the Acceptance criteria for each of the Deliverables.

All Deliverables for each phase of the Service will be provided to Large ISP for review. The following Acceptance Process shall apply:

1. When Deliverables are complete and ready for review, the Sun Project Manager will issue a copy of the Phase Completion Form shown in Attachment D of this SOW. The Phase Completion Form will list, in Part II of the form, each Deliverable to be accepted by Large ISP. Both the Sun Project Manager and the Large ISP Project Manager will sign in Part I to indicate that the Deliverables are ready for the Acceptance Process to begin as described in sections 2, 3, 4 and 5 immediately below.
2. Large ISP will review the Deliverables provided by Sun and listed on the Phase Completion Form. Within three (3) business days of receipt of the Deliverables, (“Acceptance Period”), the Large ISP Project Manager, or other designated representative with signature authority, will:
  - accept the Deliverables or
  - reject the Deliverables in written form describing the defects or deficiencies causing the rejection or
  - Large ISP may notify Sun during the three (3) day Acceptance Period requesting an extension of the Acceptance Period. One extension will be granted for each set of Deliverables. Sun will not unreasonably withhold the extension.

Acceptance of each Deliverable by Large ISP will be indicated by the initials of the Large ISP Project Manager next to the Deliverable name in Part II of the Phase Completion Form. The notice of rejection by Large ISP, will be listed on the Phase Completion Form by the Large ISP Project Manager.

3. If Large ISP rejects the Deliverable, Sun shall modify the Deliverable until the Deliverable meets the Acceptance criteria. Sun will then resubmit the Deliverable and follow the Deliverable Acceptance process described above.
4. If Sun does not receive an acceptance or rejection notice from Large ISP within such three (3) business day period of receipt of the Deliverables, the Deliverables will be deemed accepted by Large ISP. Sun's obligations regarding such Deliverables will be deemed completed.
5. No phase of the Service will begin until the previous phase is complete. To complete each phase the Large ISP Project Manager will sign the Phase Completion Form, Part III. The signed Phase Completion Form will be delivered by the Large ISP Project Manager to the Sun Project Manager within three (3) business days of acceptance of the last Deliverable for that phase.

The acceptance of Deliverables provided by Large ISP to Sun will also be governed by this process.

## 11. Schedule of Fees and Expenses

### 11.1. Fees and Expenses

This is a Fixed Price Engagement with Milestone Payments. The total fee which Large ISP will pay Sun for the Service (including expenses) is x million yyy thousand U.S. dollars (\$x,yyy,000) ("Fee").

Sun's standard work-week consists of forty (40) hours. Sun and Large ISP will determine the hours during which the Service will be provided. Large ISP will provide access to its facilities and computer systems during the hours Sun will provide the Service.

### 11.2. Milestone Payments

The table below specifies the Milestone Payments that the parties have agreed to under this SOW. Upon the acceptance by Large ISP of the Deliverable, Sun will invoice Large ISP for that Deliverable. Definitions of each milestone are specified in Section 12.3

Milestone	Payment
At Service Initiation	35%
Completion of Solution Architecture Phase	25%
Completion of Testing Phase	30%
Completion of Mailbox Migration Phase	10%
Total Fee	100%

### 11.3. Payment Milestone Definitions

#### 11.3.1. Service Initiation

Receipt by Sun Microsystems, Inc. of signed SOW and Purchase Order from Large ISP for the Service “Sun ONE Messaging Architecture and Migration” will trigger Sun Microsystems’ invoice for 35% of FEE.

#### 11.3.2. Completion of Solution Architecture Phase

Receipt by Sun Microsystems, Inc. of signed Phase Completion Form from Large ISP, per the Acceptance Process described in Section 11 of this SOW, for the Solution Architecture phase as described in Section 4.3 of this SOW. Receipt by Sun Microsystems, Inc. of this signed letter of acceptance will trigger Sun Microsystems’ invoice for 25% of FEE. .

#### 11.3.3. Completion of Testing Phase

Receipt by Sun Microsystems, Inc. of signed Phase Completion Form from Large ISP, per the Acceptance Process described in Section 11 of this SOW, for the Testing phase as described in Section 4.6 of this SOW. Receipt by Sun Microsystems, Inc. of this signed letter of acceptance will trigger Sun Microsystems’ invoice for 30% of FEE.

#### 11.3.4. Completion of Mailbox Migration Phase

Receipt by Sun Microsystems, Inc. of the signed Acceptance Letter from Large ISP, per the Acceptance Process described in Section 11 of this SOW, for the Mailbox Migration phase as described in Section 4.8 of this SOW. Receipt by Sun Microsystems, Inc. of this signed letter of acceptance will trigger Sun Microsystems’ invoice for 10% of FEE.

### 11.4. Service Initiation Requirements

To initiate Service activities, Large ISP will issue a Purchase Order which:

- Authorizes payment of an amount sufficient to cover the Fee in the amount of one million seven hundred seventy-five thousand US Dollars (\$1,775,000.00), which will be invoiced according the Payment Milestone Definitions and Acceptance Criteria, and contains the following language:
  - "This Purchase Order is issued pursuant to the terms and conditions of Sun - Large ISP Agreement Cddddddddd".

## 12. Signatures

*This SOW and the Agreement constitute the entire agreement of the Parties and supersede all prior or contemporaneous oral or written communications, proposals and representations with respect to their subject matter and prevail over any conflicting or additional terms of any quote, invoice, acknowledgment, pre-printed P.O. terms, or similar communication between the Parties during the term of the Agreement. No modification to the Agreement or this Exhibit will be binding unless in writing and signed by an authorized representative of each Party.*

THIS STATEMENT OF WORK IS EFFECTIVE AS OF ____/____/____. THE PARTIES HAVE READ THIS STATEMENT OF WORK AND AGREE TO BE BOUND HEREBY.	
SUN MICROSYSTEMS, INC.	Large ISP:
By: _____	By: _____
Print: _____	Print: _____
Title: _____	Title: _____

### 13. Attachment A – Change Request Form

Customer: \_\_\_\_\_ Project: \_\_\_\_\_ Project No: \_\_\_\_\_

Created By: \_\_\_\_\_ Date: \_\_\_\_\_

---

---

### Change Request Form

---

---

Change Request Number: \_\_\_\_\_ Initiated by: \_\_\_\_\_ Date: \_\_\_\_\_

Description of Change: \_\_\_\_\_ More details attached:  Yes  No

Impact if Change is not Incorporated: \_\_\_\_\_ More details attached:  Yes  No

Alternatives: \_\_\_\_\_ More details attached:  Yes  No

Proposed Change Type (Check one:)

- Problem/Not following plan       Improvement       Change in Environment
- Scope       Other (Explain:)

Documents and Deliverables (Check all that apply:)

- Contract Agreement       Payment Schedule       Delivery Schedule
- Project Plan       Quality Plan       Work Plan
- Functional Spec       Acceptance Spec       Purchase Order
- Solution Component: \_\_\_\_\_
- Other: \_\_\_\_\_

Estimate of Impact (Check one:)

- Minimal       Moderate       Major      Full Evaluation Required:  Yes  No

For Full Evaluation:

Cost to Evaluate: \_\_\_\_\_ hours      \_\_\_\_\_ (local currency)      Approved for Evaluation: \_\_\_\_\_

Recommended Evaluator: \_\_\_\_\_  Notified (When?)

Cost to Implement: \_\_\_\_\_ hours      \_\_\_\_\_ (local currency)      Estimate prepared by: \_\_\_\_\_

Impact Summary: (Baseline, Functionality, Cost, Resource, Schedule)      More details attached:  Yes  No

Decision:  Approved       Rejected       Deferred Until (Date:)

Customer Project Manager: \_\_\_\_\_ Signed: \_\_\_\_\_

SunPS Consultant: \_\_\_\_\_ Signed: \_\_\_\_\_

Apply to Project Plan Revision: \_\_\_\_\_ Applied by: \_\_\_\_\_ Completion Date: \_\_\_\_\_

Close Date: \_\_\_\_\_

---

---

## 14. Attachment B – Performance Acceptance Test Definition

The purpose of this test will be to confirm that the Sun ONE Messaging Environment provides the throughput witnessed during the relaytest testing conducted during the Proof of Concept testing. The Proof of Concept testing was conducted at Large ISP's facilities in November 2002 to compare relative performance of the Openwave Intermail MTA versus the Sun ONE Messaging Server MTA for message throughput.

The Performance Acceptance test will be conducted in the Testing Phase of this engagement. The purpose is to evaluate the throughput performance of the Sun ONE MTAs individually. To ensure equivalency to the November 2002 testing, this test is not an end-to-end throughput test, but a test of MTA performance. The test will be conducted as follows:

- Performance Acceptance Test Setup
  - The test will be conducted in the Sun ONE Messaging Environment prior to its deployment in Production
  - The relaytest tool, provided in the Sun ONE Messaging Server code tree, will be used to perform the test.
  - The relaytest Driver Script previously used during Proof of Concept Testing in November 2002 will be used to generate load for this test
- Performance Acceptance Test Methodology
  - The test will consist of using the relaytest Driver Script to generate and send email messages as fast as possible to each MTA that is configured in the Sun ONE Messaging Environment.
  - Each email message used in this test will have a body that is 150K bytes in size.
  - All email messages are sent to one (1) user mailbox
  - Each MTA will be tested when it has been inserted into the Sun ONE Messaging Environment.
  - Each MTA will be tested with one (1) instance of the relaytest Driver Script.
  - The relaytest Driver Script will be located on, and executed by, a computer that is separate from the computer on which the MTA is located.
  - The computer on which the relaytest Driver Script is located will be connected to the computer on which the MTA is located by a 100 megabit-per second (at least) Local Area Network. No other user or production activity will be allowed on this Local Area Network while the test is being conducted.
- Performance Acceptance Test Success Criteria
  - The Performance Acceptance Test will be considered successful if each MTA demonstrates 19.88 messages/second throughput, under the Methodology defined immediately above, as measured by the relaytest tool.
- The basis on which the Performance Acceptance Test Success Criteria have been established is the proof of concept testing performed by Sun and Large ISP in November 2002. To duplicate these results in the Performance Acceptance Test, Sun assumes that the hardware, software and network environment will be at least comparable to that used for the proof of concept testing. The assumed hardware, software and network environment includes: Sun E450
  - 4x480 mHz Ultra Sparc-II CPU
  - 2 GB RAM
  - 2x36 GB Internal Disk Drives
    - Boot/Swap
  - 16x18 GB Internal Disk Drives
    - Application
  - 2x18 GB Internal Disk Drives
    - Hot Spares
  - Sun ONE Messaging Server, v. 5.2
  - Solaris 8
  - Load generation computer connected to MTA by 100 megabit per second Local Area Network

## 15.Attachment C - Definitions

The following Definitions are used in this SOW. These Definitions are indicated in the text by capitalization, and have not been previously defined. For the purposes of this SOW, these Definitions include:

1. **Architecture Plan:** The Architecture Plan is a document that defines the logical and physical architecture, the necessary components, and their configuration to implement the Messaging Architecture
2. **Business Day:** A Business Day is defined to be one of the following: Monday, Tuesday, Wednesday, Thursday or Friday.
3. **Cluster:** The software product that enables two or more computer systems to share the same storage components.
4. **Configuration:** The software parameter settings needed in order for a software product to perform its function.
5. **Deployment:** Installation of hardware and/or software products per a specific architecture plan.
6. **Design Specification:** A document that details the type, number and interrelationships of software and/or hardware components of a data service.
7. **Directory Schema:** The attributes and structure of the database used to support an implementation of the Lightweight Directory Access Protocol (“LDAP”).
8. **Fail-over Testing:** The process of executing a Test Plan (see below) to test and validate that a system continues to perform its designed function by switching to redundant standby component(s), within reasonable time, in the case of a component failure.
9. **Functional Test:** The process of executing a Test Plan (see below) to test and validate that a software or hardware component functions in compliance with the requirements defined in the Requirements Document.
10. **End-To-End Test:** For the purposes of this SOW, the following will be the End-To-End Test:
  - Origination of a message (SMTP) outside the Sun ONE Messaging environment, for delivery through the load balanced inbound MTAs to be saved in the Message store.
  - Origination of a message (SMTP) inside the Sun ONE Messaging environment, for delivery through the load balanced outbound MTAs to be saved on a message store outside Large ISP control.
  - Retrieval of a message (POP/webmail) via connection though load balanced MMP/MEM (messaging multiplexer) servers connecting to the Message store.
  - The above tests validate LDAP functionality though inbound message routing authentication performed for message retrieval.
  - In addition, to test integration of the Sun ONE Messaging Environment with the Large ISP Provisioning Application:
    - A new account would be created. This creation can be validated via an LDAP search.
    - An existing account would be modified. LDAP searches before and after the modification will validate the record has changed.
    - An existing account would be deleted. LDAP searches after the account is deleted will fail or return an empty response, validating that the account has been removed.
11. **Hardware Environment:** A complete set of hardware to provide a data service.
12. **High Availability (“HA”):** High Availability refers to the ability of a hardware/software system to meet defined criteria for availability for service
13. **IMAP:** Internet Message Access Protocol.
14. **Integration:** The process of enabling software or hardware products to interact with existing Large ISP hardware or software systems according to the requirements as defined in the Requirements Document.
15. **LDAP:** Lightweight Directory Access Protocol.
16. **Load Balancing:** Hardware or software that distributes service requests across multiple servers.
17. **MailHost attribute:** An attribute within an email user’s LDAP directory record that indicates the mail server that receives and sends that user’s email.
18. **Mentoring:** Informal tutoring in technical processes, Sun product knowledge, and procedures conducted in the workplace by members of the Sun On Site Team for the benefit of Large ISP personnel. This mentoring is not conducted as formal classroom training by a Sun Educational Services instructor.

19. **Messaging Server:** The Sun ONE Messaging Server is a software product that provides a centralized location for the exchange of information through the sending and receiving of messages.
20. **Message Store:** The component of a Messaging Server that stores email messages.
21. **Message Transfer Agent (“MTA”):** The component of a Messaging Server that transfers messages in compliance with the POP and SMTP standards.
22. **Messaging Infrastructure:** The complete set of hardware and software components required to send, receive and store email messages
23. **Migration:** The process of converting a Messaging Infrastructure from one vendor’s products to another.
24. **Performance Test:** The process of executing a Test Plan to test and validate that a combined software and hardware system meets the performance requirements defined in the Requirements Document.
25. **POP:** Post Office Protocol.
26. **Project Plan:** Defined in Section 6.3 above.
27. **Provisioning:** To add, modify or remove user accounts from Large ISP’s email service.
28. **Provisioning Application:** A software system used by Large ISP to add, modify or remove user accounts from its Messaging Infrastructure.
29. **RAID:** Redundant Array of Inexpensive Disks.
30. **Runbook:** a document that details the procedures and commands required to start, stop, maintain and operate a software or hardware product as deployed at a particular customer site.
31. **Scripts:** computer programs that implement algorithms using an interpreted language such as Unix shell or Perl, rather than a compiled language like Java or C++.
32. **Single Sign-On (“SSO”):** the capability provided by a software system to allow a user to authenticate himself/herself once in order to access all services of that system.
33. **Sun On Site Team:** Sun’s technical personnel and Sun Project Manager who are assigned to this engagement.
34. **Test Case:** An individual test scenario.
35. **Test Plan:** a document that consists of individual test scenarios (“Test Cases”) that tests a software and/or hardware system to ensure compliance with a set of requirements that are specified in the Requirements Document. Each Test Case contains specific “Expected Results”. When the Test Case is executed, its results are checked against the Expected Results. If the results match the Expected Results the Test Case is deemed to be successful.
36. **Use Case:** A description of set of sequences of actions, including variants, that a system performs that yield an observable result of value to an actor. Use Cases are commonly used to gather and define system requirements.
37. **Web Access:** the software authentication method used by Large ISP to verify the credentials of users of its Messaging Infrastructure.
38. **Webmail:** A service that allows an email user to retrieve email by means of a web browser, as opposed to a dedicated email client.

### 16. Attachment D – Phase Completion Form

Customer: \_\_\_\_\_ Project: \_\_\_\_\_ Sun Project Number \_\_\_\_\_  
 Created By: \_\_\_\_\_ Date: \_\_\_\_\_

### Sun Professional Services Phase Completion Form

#### PART I: NOTIFICATION THAT CONTRACT DELIVERABLES ARE READY FOR ACCEPTANCE BY Large ISP

Sun Professional Services hereby notifies Large ISP that the deliverable(s) named below in PART II: ACCEPTANCE OF CONTRACT DELIVERABLES is/are ready for Large ISP’s acceptance, as described in *Sun ONE Messaging Architecture and Migration Statement of Work for Large ISP*, dated *month-day-2003*, pursuant to the terms and conditions of the Sun - Large ISP Agreement No. C951101B0003

**BY SIGNING IMMEDIATELY BELOW, Large ISP ACKNOWLEDGES ONLY RECEIPT OF NOTIFICATION THAT THE NAMED CONTRACT DELIVERABLES IS READY FOR ACCEPTANCE.**

Notification Tendered by Sun:	Notification Acknowledged by Large ISP
Name: _____	Name: _____
Title: _____	Title: _____
Date: _____	Date: _____

#### PART II: Large ISP ACCEPTANCE OF CONTRACT DELIVERABLES

Large ISP hereby indicates to Sun Professional Services that the deliverable(s) named below are accepted by Large ISP as described in *Sun ONE Messaging Architecture and Migration Statement of Work for Large ISP*, dated *month-day-2003*, pursuant to the terms and conditions of the Sun -Large ISP Agreement No. C951101B0003

**INDICATE ACCEPTANCE OF EACH DELIVERABLE BY PLACING INITIALS IN THE "ACCEPTED" BOX BELOW AND SIGNING IN THE SIGNATURE BLOCK.**

<i>Description of Contract Deliverable as it appears in Exhibit A: Statement of Work</i>	<b>ACCEPTED</b> <i>(Initial below)</i>	<b><u>NOT</u> ACCEPTED</b> <i>(Initial below)</i>
1. _____		
2. _____		
3. _____		
4. _____		

The above-numbered item(s) was/were NOT ACCEPTED because (be specific):

---



---



---



---

**PART III: PHASE COMPLETION SIGNATURE**

The signature of Large ISP in Part III indicates that all deliverables for the phase have been accepted and that the phase is complete

ALL PHASE DELIVERABLES LISTED IN PART II ABOVE HAVE BEEN ACCEPTED BY Large ISP:

Name:

Title:

Date:

---

---

---

## 17.Attachment E Software and Deliverable Licensing

Need to add license terms for deliverable and software such as runbooks, istatus, operations guides, tools, scripts, etc as defined in this SOW or referred to in the MCA. Need to clarify what is covered by what.

Large ISP wants clarification of this licensing and have all software licensing of deliverable listed in a separate section or follow the MCA

Any i-Status software and accompanying documentation , build specifications, design specifications, Runbooks, operations guides, architecture study reports, solution design reports, custom scripts, and Test Plans (collectively, "Service Items") provided to Large ISP include Sun intellectual property and Sun confidential information, especially trade secrets and are subject to the following:

- (a) The Software and Runbook are copyrighted and title to all copies is retained by Sun and/or its licensors. Sun will also hold all right, title, and interest, including but not limited to all intellectual property rights, in and to any and all ideas, concepts, expertise, programs, systems, methodologies, data, or other materials embodied in, underlying or reduced to practice in all Service Items. Large ISP will not sublicense, distribute, assign or transfer any Service Items.
- (b) The Software and Runbook are copyrighted and title to all copies is retained by Sun and/or its licensors. Sun will also hold all right, title, and interest, including but not limited to all intellectual property rights, in and to any and all ideas, concepts, expertise, programs, systems, methodologies, data, or other materials embodied in, underlying or reduced to practice in all Service Items. Large ISP will not sublicense, distribute, assign or transfer any Service Items.

Support, including but not limited to upgrades or updates, for the Service Items is outside the scope of this SOW.

No license is granted for use of any Service Items on third-party sites, unless explicitly granted in writing by Sun.

Sun grants to Large ISP a non-exclusive and non-transferable license to use the deliverables from this Service internally and to use and modify the application-specific start, stop and monitor methods of the Service, produced by Sun Professional Services as part of this Service, for internal purposes only. Large ISP will reproduce and apply all proprietary rights notices of Sun and/or its licensees on all copies of the Service in an unmodified form.

The deliverables from this Service are copyrighted and title to all copies is retained by Sun and/or its licensors. Sun will also hold all right, title, and interest, including but not limited to all intellectual property rights, in and to any and all ideas, concepts, expertise, programs, systems, methodologies, data, or other materials embodied in, underlying or reduced to practice in the Service, the Service documentation, and the Test Plan. Large ISP will not sublicense, distribute, assign or transfer the Service, the Service documentation, or the Test Plan. Nothing in this provision modifies any other license agreement between the parties or grants Large ISP any right or license to any Sun product. Any breach of this provision will be deemed a material breach of the Agreement.

The Work Product Deliverables created by Sun under this SOW may cease to function properly due to changes in the application environment, including but not limited to, changes in the name or location of application executables, changes in the name or number of running processes which compose the application, and changes in the start, stop, or monitoring methods of the application. Large ISP is responsible for the maintenance of the Service as required to support the application in Large ISP's environment, and Large ISP understands that changes in the application environment, including but not limited to those described above may cause the application to perform in an undesirable manner or substandard manner within the software environment.

## **18. Attachment F Applicable Documentation and Pre-existing Intellectual Property for the Execution and Operation of the Sun ONE Messaging Environment**

Documentation to be delivered under this SOW for the execution and operation of the Sun ONE Messaging Environment is detailed in this Attachment.

This list includes documentation templates from Sun's SunTone Architecture Methodology™ and Sun's SET for Success™ project management methodology. Since these documentation templates are pre-existing intellectual property of Sun Microsystems, licensing for the following Documentation is given in Attachment E of this SOW:

- System Operational Documentation, Configuration and Runbooks as described in Section 4.5 above.
- Project Documentation based on templates from Sun's SunTone Architecture Methodology™ and Sun's SET for Success™ project management methodology:
  - Requirements Document: Described in Section 4.2.1 of this SOW
  - Risk Analysis: Described in Section 4.2.1 of this SOW
  - Project Plan: Described in Section 4.2.1 of this SOW
  - Design Specification: Described in Section 4.2.1 of this SOW
  - Test Plans: Described in Section 4.3 and Section 4.4 of this SOW.
  - Migration Process Plan: Described in Section 4.4 of this SOW.
  - Software Configuration Documentation for Sun ONE Messaging and Directory Servers: Described in Section 4.5 of this SOW.
  - Phase Completion Forms: Described in Section 11 and Attachment D of this SOW.
  - Acceptance Letter for Migration Completion: Described in Section 4.8 of this SOW.

## **19. Attachment G: Pre-Existing Sun Microsystems' Intellectual Property to be Configured or Modified for Specific Requirements of the LARGE ISP Messaging Migration Software**

Licensing for the following is defined in Attachment E of this SOW.

- “Provisioning Gateway”: The Provisioning Gateway will consist of programs to channel data from Large ISP’s provisioning system to both the existing Openwave Intermail environment and the Sun ONE Messaging Environment. The Provisioning Gateway is described in Section 5.5.3 of “Large ISP Messaging Migration Statement of Work”, version 10.8.
- “Logfile Monitoring Scripts”: These scripts will monitor Openwave Intermail log files to detect when a user has POPed his/her mailbox. as described in Section 5.8 of “Large ISP Messaging Migration Statement of Work”, version 10.8.
- “IMAP Tools”: Many common knowledge protocol commands for the Internet Message Access Protocol (“IMAP”) that are used in sequence may be wrapped into computer software for use in the Large ISP environment. An example of this will be the commands required to migrate Webmail users.
- “Load Generation and Performance Analysis Tools”: This category includes computer software for load generation and performance analysis previously developed by Sun. Examples of such tools are Application Load and Performance Simulator (“ALPS”), “Mailstone”, “Relaytest”, “Relaytest Driver Script” and “Directory Mark”. Additional tools may be identified or developed as necessary.
- “Open Source Tools”: This category includes computer software that are open source or modified from open source to generate user, group, and address book, mail, and calendar data for use with the load and functionality testing. The same or similar existing tools will be used for cleanup of the test data to use the system for production. These tools are covered by the GNU license. In addition, Sun may use and/or modify existing open source tools/scripts to monitor/analyze log files to trigger certain migration functions.
- “Sun Proprietary Tools”: These are computer software products developed and copyrighted by Sun and used for monitoring operating system, disk, cpu, memory, I/O, and network activity.
- “System Utility Tools”: Operating system commands will frequently be combined into computer software to automate repeated tasks.
- “Messaging Utility Tools”: Computer software used to debug, diagnose and analyze functions specific to Messaging protocols, including Simple Message Transfer Protocol (“SMTP”), Post Office Protocol (“POP”) and IMAP. This category also includes computer software used to import and export data from message stores, as well as software used to format such data.
- “Directory Utility Tools”: Computer software used to debug, diagnose and analyze functions specific to software directory protocols, including the Lightweight Directory Access Protocol (“LDAP”). This category also includes computer software used to import and export data from LDAP databases , as well as software used to format such data.