1. Executive Summary

The purpose of this availability plan is to ensure that existing and future availability requirements for CA.mail services offered by the Office of Technology Services (OTech) can be provided cost effectively and meet the vital business function (VBF) needs of its customers. Availability is a foundational factor in the formation of Service Level Agreements (SLA) and upon which SLA warranties and penalties are calculated.

1.1. Description of Service Area

The CA.mail service provides customers with email and related messaging services that are reliable and secure. This service is based on client-server architecture. The servers contain all mailboxes (in-boxes, calendars, contacts, deleted items, sent items and tasks) and public folders. This service provides virus protection, spam filtering, data backup and recovery, connectivity to other email systems (including Internet email), and the statewide global address list.
2. Introduction

2.1 Purpose
This plan is intended to ensure that existing and future availability objectives for CA.mail IT services can be cost effectively provided and meet customer VBF requirements.

2.2 Objectives
The following objectives shall be met with this plan:

i) Define availability level requirements for future CA.mail services
ii) Document the activities of monitoring and reporting service availability
iii) Improve the availability of current CA.mail services

2.3 Scope
This plan applies to the following IT service: Email services.

2.4 Deliverables
As a result of executing this plan, the following deliverables will be produced:

i) A monthly Service Availability Report (see Section 3.5)
ii) A Service Interruption Analysis (SIA) report, upon the conclusion of each service interruption. This report will document the timeline, cause(s), and restoration efforts that took place to restore the interrupted service. In addition, the report will suggest lessons learned and opportunities for service improvement.
3. **Plan Content**

3.1 **Background**

Availability has an immediate impact on the way the business and the users perceive the quality of the services they receive. This plan addresses the service warranty of availability, and sets the operational activities to monitor and report on service quality.

3.2 **Service Operations**

3.2.1 **Service Hours**

Service hours provide a timeframe for the availability of a service and support functions. The CA.mail service has established preventative maintenance (PM) windows that will not be factored into the service hours.

3.2.2 **Operations Center**

The OTech Operations Center is available twenty-four hours a day, seven days a week, and 365 days a year (24x7x365). Any customer requiring service assistance can contact the Operations Center at (916) 464-4311.

Operations Center staff will:

i) Serve as the single point-of-contact for service-related incidents  
ii) Log and manage service-related incidents  
iii) Monitor service operation and availability  
iv) Communicate service interruption, degradations and restorations to impacted customer(s)

3.2.3 **Technical Support Resources**

Technical support resources are available and on-site during primary business hours from 8:00 a.m. to 5:00 p.m. Pacific Standard Time, Monday through Friday, excluding holidays and non-State work days.

On-site technical support resource availability is not guaranteed outside of primary business hours.

3.2.4 **Maintenance Schedule**

*Table 1: Planned Maintenance Schedule – CA.mail and Network Services*, shown below, documents the planned maintenance schedule (scheduled downtime) for the CA.mail service resources. Service may be available and operational during the indicated timeframes, but it is not guaranteed.
Table 1: Planned Maintenance Schedule – CA.mail and Network Services

<table>
<thead>
<tr>
<th>Maintenance</th>
<th>Day</th>
<th>Start</th>
<th>End</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA.mail Service Maintenance</td>
<td>Friday</td>
<td>7:00pm</td>
<td>2:00am</td>
</tr>
<tr>
<td>Network Service Maintenance</td>
<td>Sunday</td>
<td>4:00am</td>
<td>7:00am</td>
</tr>
</tbody>
</table>

3.2.5 Service Incident Management

The OTech Operations Center is the single point-of-contact for all CA.mail customers to report service incidents. The OTech Operations Center will record, track, and manage service incident resolution for the CA.mail Service on a 24x7x365 basis. The OTech Operations Center will acknowledge each reported service incident by providing the customer with a unique service incident reference number (INC #) when a service incident is reported via telephone. The OTech Operations Center will provide service incident resolution progress updates via email to all impacted customers.

Upon receipt, the OTech Operations Center will assess and classify service incidents using the criteria illustrated in Table 2: Service Incident Classification, shown below. All service incidents that cannot be resolved by the OTech Operations Center will be automatically escalated to an OTech technical service group for troubleshooting and resolution.

Service incident resolution efforts by OTech technical service groups will occur based on the service incident priority. With the agreement of the customer, the priority of a service incident may be lowered before a service incident is resolved. This typically occurs when circumvention (work around) is available. Table 2: Service Incident Classification depicts how OTech will apply technical team efforts to resolve service incidents based on the service incident priority.

Table 2: Service Incident Classification

<table>
<thead>
<tr>
<th>SEVERITY</th>
<th>IMPACT</th>
<th>RESOLUTION APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical</td>
<td>Extensive/Widespread</td>
<td>Effort is applied continuously until the service incident is resolved or the customer lowers the priority.</td>
</tr>
<tr>
<td></td>
<td>• Major system or network outage;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Multiple sites or organizations down; or</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Service incident affects one or more customer resources (designated by the customer in advance) that require an expedited service incident response due to their role within the Customer organization.</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>Significant/Large</td>
<td>Effort is applied continuously until the service incident is resolved or the customer lowers the priority.</td>
</tr>
<tr>
<td></td>
<td>A single site or organization is down, or significantly degraded.</td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>Moderate/Limited</td>
<td>Effort is applied during primary business hours. Effort may be delayed or interrupted by allocation of resources to higher priority service incidents.</td>
</tr>
<tr>
<td></td>
<td>A single user is down, or service is degraded, but operational.</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>Minor/Localized</td>
<td>Effort is applied during primary business hours. Effort may be delayed or interrupted by allocation of resources to higher priority service incidents.</td>
</tr>
<tr>
<td></td>
<td>No immediate significant impact on service performance.</td>
<td></td>
</tr>
</tbody>
</table>
When the service incident is resolved, the OTech Operations Center will contact the customer to report the repair is complete and will request the customer validate the service restoration was successful. The status of a service incident is then changed to closed, but only after the customer agrees that the repair was successful or after several documented, unsuccessful attempts to contact the customer for verification. Table 3: Service Incident Resolution Service Objective, shown below, lists the resolution timeframe service objective.

Table 3 Service Incident Resolution Service Objective

<table>
<thead>
<tr>
<th>Service</th>
<th>Priority</th>
<th>Interval</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Initiate Repair 1st</td>
<td>Status Update</td>
<td>ESCALATION</td>
<td>Service Incident</td>
</tr>
<tr>
<td>Hours</td>
<td></td>
<td>Notification Update</td>
<td></td>
<td>NOTIFICATIONS</td>
<td>Acceptance Service</td>
</tr>
<tr>
<td>Primary Hours</td>
<td>1</td>
<td>20 min 30 min 60 min</td>
<td></td>
<td>Every 15 minutes</td>
<td>Every 4 hours</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>25 min 60 min 60 min</td>
<td></td>
<td>Every 30 minutes</td>
<td>Every 4 hours</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>1 hour 12 hours 12 hours</td>
<td></td>
<td>Every 2 hours</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>1.5 hours 24 hours 24 hours</td>
<td></td>
<td>Every 4 hours</td>
<td>None</td>
</tr>
<tr>
<td>Extended Hours</td>
<td>1</td>
<td>Best Effort 30 min 60 min</td>
<td></td>
<td>Every 15 minutes</td>
<td>Every 4 hours</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Best Effort 60 min 60 min</td>
<td></td>
<td>Every 30 minutes</td>
<td>Every 4 hours</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Best Effort 12 hours 12 hours</td>
<td></td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

3.3 Service Objectives

3.3.1 Service Availability

The CA.mail Service Availability Objective is 99.9% of 24x7x365 with exclusions as identified below.

3.3.2 Exclusions

The CA.mail Service Objective and any applicable Service Levels do not apply to any performance or availability interruptions or degradations in the following:

i) Any factors outside OTech’s reasonable control;
ii) Caused by a customer’s or third party application code, hardware, software, or network;
iii) Caused by actions or inactions of the customer, their agents, or third parties;
iv) Caused by customer’s use of the service after OTech advised customer to modify its use of the service, if customer did not modify its use as advised;
v) During scheduled downtime and maintenance.
3.4 Service Measurement Details

For service measurement purposes, the primary source for monitoring the targets in this Service Availability Plan is the information collected into the Service Management tool (Remedy). In the case of measuring elapsed times (resolution time which is pivotal for rating the service), the value is calculated from the time the service incident is created in the system until the time the service is restored and logged in the system.

3.4.1 Downtime

Defined as any period of time when a customer application is scheduled to be available but is unavailable. Downtime does not include the exclusions listed in Section 3.3.2 – Exclusions.

3.4.2 Scheduled Downtime

Defined as those times where OTech notifies customers of periods of downtime or it falls within predefined OTech PM windows.

3.4.3 Monthly Uptime Percentage

Calculated for a specific customer by taking the total number of minutes in a calendar month multiplied by the total number of customer applications minus the total number of minutes of downtime experienced by all customer applications in a given calendar month, all divided by the total number of minutes in that calendar month multiplied by the total number of customer applications. This is reflected in the following formula:

\[
\frac{\text{Total number of minutes in a month} \times \text{Total number of customer applications} - \text{Total minutes of downtime experienced by all customer applications in that month}}{\text{Total number of minutes in a month} \times \text{Total number of customer applications}}
\]

3.5 Service Availability Report

A service availability report will be produced 15 business days following the close of the reporting period. Reporting periods begin the first day of the month and concludes on the last day of the month.
Service availability reports will be published after they are reviewed and approved by service managers, in scope for this plan, and the OTech Deputy Directors.

The approved availability report will be made available to subscribing customers through their Customer Delivery Division Account Lead and published on the OTech website: [http://www.otech.ca.gov/services/SLM_Availability.asp](http://www.otech.ca.gov/services/SLM_Availability.asp).

### 3.6 Schedule of Planned Service Interruption Analysis (SIA) Assignments

Service Interruption Analysis (SIA) is produced to improve the overall availability of the services. A detailed SIA shall be completed within 15 business days of a documented CA.mail service interruption. The objectives of SIAs are to identify:

- i) Underlying causes of service interruptions
- ii) Service restoration efforts conducted
- iii) Opportunities to enhance the reliability of service availability

The SIA is developed for internal service and process improvements and is provided to impacted CA.mail customers.